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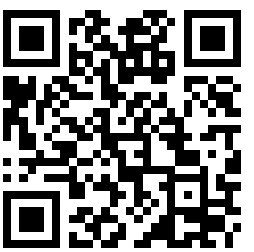
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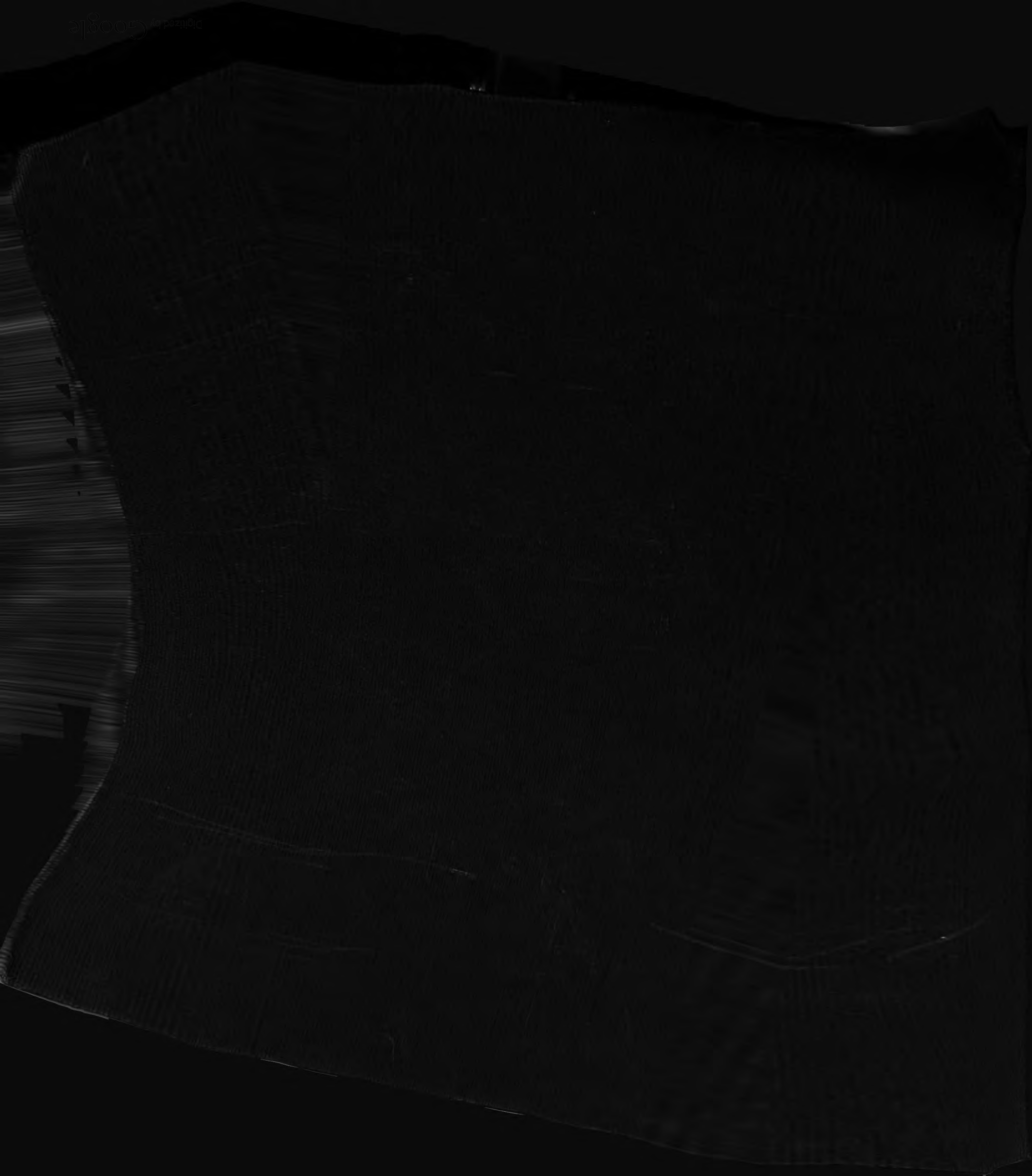
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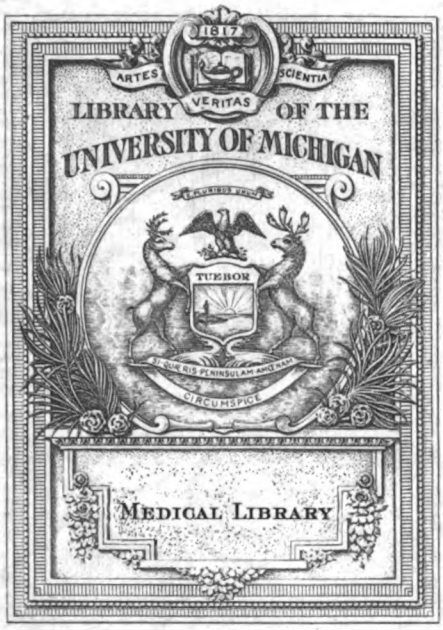
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Clinical Lecture
ON
ATAXIC PARAPLEGIA.

Delivered at University College Hospital, Feb. 23rd, 1886,

BY W. R. GOWERS, M.D., F.R.C.P.,
ASSISTANT PROFESSOR OF CLINICAL MEDICINE.

GENTLEMEN,—As a definite name for a definite disease the term "ataxic paraplegia" is doubtless unfamiliar to you. It is probable, however, that in the course of your clinical work, especially in the out-patient room, you have met with examples of the malady, and it is not improbable that you have been puzzled by its somewhat anomalous features. The disease is, indeed, by no means rare. It is a somewhat common form of chronic palsy of the legs. We have now in the wards two well-marked cases, which afford us a good illustration of its characters and course. Although it is not a rare disease, you will find little about it in text-books. In text-books of general medicine you will probably find nothing; in works on diseases of the nervous system you may find some mention of it as the manifestation of combined sclerosis of the lateral and posterior columns, perhaps as a variety of locomotor ataxy or of spastic paraplegia. But the manifestations of the disease are so definite that it deserves separate description. The account I am about to give you is founded chiefly on a series of cases that have come under my own observation, of which the symptoms were uniform and characteristic. We shall see that there are reasons which make it desirable to call it by a name that is founded on its clinical characters, rather than on the pathological lesion that underlies these characters.

Of the two cases that are before you one is a man and the other is a woman. Thus the disease occurs in each sex, but it is much more frequent in men than in women. It is a disease chiefly of the middle period of adult life, beginning commonly between the ages of thirty and forty-five; the first symptoms occurred in the man at forty-one, in the woman at thirty-two. The earliest case I have known commenced at nineteen, the latest at fifty-five. Neurotic heredity is rare; it is to be traced only in a tenth of the cases, and is absent in both the patients before you. In neither of them is there a history of syphilis, and in this respect also they illustrate the common rule. It is as rare to have a history of constitutional syphilis in the subjects of ataxic paraplegia as it is common to have such a history in the subjects of pure locomotor ataxy. Among exciting causes, exposure to cold can be traced in some as a probable influence. In one young lady the first symptoms succeeded a season of balls, at which, when heated, she was in the habit of cooling herself at open windows, and, on reaching home, would often throw herself on the bed and sleep through the night or the morning in clothes saturated with perspiration. Mental distress and anxiety, especially coupled with over-exertion, have been the apparent cause in some cases. This woman noticed the first symptoms after the death of her mistress, whom she had nursed through a long and anxious illness. Rarely, a severe concussion of the spine has occurred some months before the onset. A concussion may induce paraplegia by actual injury, probably by causing minute extravasations, from which secondary inflammation spreads. But such paraplegia comes on in a few weeks, whereas, in the cases we are considering, the symptoms succeeded the injury after a long interval and then developed very slowly. The same sequence is seen in other degenerations of the spine, and it therefore seems probable that a concussion may cause derangement of the process of nutrition of the nerve elements, the effects of which are manifested only after it has slowly attained a considerable degree. In many cases, as in this man, no cause can be traced. A cause there must be, but its nature is such as to elude research.

The onset of the symptoms is always gradual, and their progress is commonly slow. Even when it is steadily progressing, and no time stationary, years may pass before the power of walking is lost. This man can still walk, although with difficulty, and it is now eleven years since he could last say that he was well. The woman's symptoms commenced seven years ago, but it was only at Christmas last that she took to her bed. In very rare cases the onset has been less chronic, almost subacute, and the symptoms have attained a considerable degree of intensity in a few months. The first manifestation of the disease in almost all cases is in the legs, and the symptoms may remain limited to them throughout, or, as in these patients, may afterwards invade the arms in various degrees. The characteristic feature of the disease is a slow and simultaneous development of two symptoms — defect of power and defect of coördination, weakness and ataxy. The patient at first finds that he tires more readily than before; he is glad to ride distances which before it was a pleasure to him to walk. The clinical clerk who took this man's history has recognised the fact by noting as the earliest symptom "a tendency to frequent use of twopenny 'busses." As soon as the patient is conscious of weakness, he is conscious also of some unsteadiness. He notices it when he turns suddenly, when he walks in the dark or on an uneven pavement, or when, in order to wash his face, he shuts his eyes and bends forward. There are no pains in the legs. They may ache a little after walking, but there are scarcely ever the sharp pains which, as you know, are so common in tabes. There is sometimes a little dull pain in the back, and not unfrequently there is a good deal of aching pain in the sacral region, but that is all. The motor symptoms slowly increase. If you then see the patient, you will find distinct loss of power in the legs. You may, indeed, not discover it at first, for the patient as he sits may extend his legs with force; but if you carefully examine, as you should do, the power of each set of muscles, you will find that the flexors are distinctly weak, the flexors of the hip especially, the flexors of the knee in less degree. The fact of the defect is often, as it were, emphasised by being greater in one leg than in the other. But if you have often to search for the weakness, it is not so with the incoördination which usually obtrudes itself upon your notice. The patient's gait is distinctly unsteady; if he turns quickly he reels, and has to bring his foot suddenly to the ground to maintain his equilibrium and to save himself from falling. It may be impossible for him to stand with his feet together and eyes closed, and even with open eyes he oscillates, and the irregularity of the muscular contractions is shown, if the feet are bare, by the quick movement of the tendons on the dorsum of the foot. The incoördination may resemble perfectly that of many cases of tabes, although there is not the "high action" of the legs sometimes present in the latter disease. I have admitted this man into the hospital as an illustrative case, because he has been under my observation for many years, and I have been able to watch the slow course of his symptoms. It is now eight years since I first saw him, and at that time his gait was exactly like that of most tabetic patients. I remember often asking a student from what the man appeared to be suffering, and the answer always was "locomotor ataxy." This ataxy is not confined to locomotion. It is equally evident in the irregular movement of the leg, if, as the patient lies, he attempts to touch some object when his eyes are closed. If you should come to the conclusion that such a patient is suffering from locomotor ataxy, and proceed to confirm your diagnosis by testing the knee-jerk, you will discover at once the anomalous feature of the case. Instead of being lost, the knee-jerk is increased, and you are able without difficulty to obtain a foot clonus. Indeed, you can often obtain also a rectus clonus by suddenly depressing the patella, as the patient lies, and thus extending the rectus—always a proof of a great excess of the peculiar "myotatic" irritability on which these phenomena depend. You can obtain, as you see, both rectus and foot clonus in each of the patients before you. Thus, an increase of this irritability, attends, in this disease, as it so often does, weakness of the legs, and it attends the weakness in spite of the existence of a symptom commonly associated with entire loss of these phenomena.

I told you that lightning pains are absent. I have, indeed, met with them in one case, but they were transient and ceased after a few months, not again to return. In harmony with the absence of these pains is the general integrity of sensation, which is not impaired upon either limbs or trunk. Sometimes the patient complains of subjective feelings of "numbness" or "tingling" in the

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extremities, but there is no corresponding loss of sensation, or only a very slight and doubtful impairment of tactile sensibility on the fingers and toes, scarcely ever amounting to actual loss. Here, again, is another marked difference from tabes. Reflex action from the sole is also perfect and is commonly excessive. The arms are often free, but they sometimes present symptoms similar to those of the legs—incoördination of movement of the fingers, weakness, and increased myotatic irritability. Often, indeed, there is this increased irritability when the patient is conscious of no weakness, but you will then find, if you test power, that it is below the average. If the arms suffer, one is often affected in greater degree. In this woman there is very marked incoördination of movement of the right hand, and none of the left. In the man there is some incoördination of both hands. Sexual power is often lost early in the disease. The sphincters are frequently impaired, sometimes early, but the impairment rarely reaches a considerable degree. In the woman, when first admitted, there was well-marked reflex incontinence of urine. There was no persistent dribbling and no persistent distension of the bladder, but as soon as a certain quantity of urine had accumulated in it, the bladder was emptied involuntarily. The iris usually acts to light. It does so perfectly in each of the patients before you. I have seen loss of the light-reflex in two or three cases, and have once known accommodation to be lost, the action to light being normal. Optic nerve atrophy occurs only in very rare cases, less frequently than in tabes; I have seen one case in which there were indications of a retro-ocular axial neuritis. The external ocular muscles are usually normal, and there is no nystagmus. Slight impairment of articulation is not uncommon; sometimes there are irregular tremulous movements of the face resembling those of general paralysis, and this in cases in which there is no mental change. Westphal has observed marked ataxy of the facial muscles. As a rule the mental state is either normal or there is merely slight failure of memory. Undue frequency of the pulse is occasionally present, but is less common than in tabes.

As the disease increases the muscular power becomes more and more impaired, usually without much increase in the incoördination, which sinks into the background as the paralysis increases, and the patient has to have recourse to supports which at the same time afford him guidance. The increased myotatic irritability continues; stiffness and rigidity develop as its consequence. Thus the aspect of the patient comes to be that of spastic paraplegia, the feet drag as the patient walks, shake from clonus when he stops, and the legs are hauled forwards with visible effort at each step. Indications of unsteadiness may still be observed in isolated movements. This condition has been reached in each of these patients. In the woman the loss of power is so great that she can scarcely move her legs as she lies in bed; nevertheless, she can walk with assistance, because extensor spasm comes on and gives the legs the rigidity and firmness which the will cannot produce. The reflex mechanism on which this extensor spasm depends is probably that which is naturally involved in the act of standing, and it thus enables the patient to stand when voluntary power is insufficient for the purpose. But the unsteadiness still exists: if she closes her eyes she would fall at once were she not firmly held. In the man the palsy and rigidity have reached a much higher degree in the left leg than in the right. He can only walk with the help of crutches and by suspending the left foot in a sling from his shoulders, by the aid of which he can haul the leg forward, and then its rigidity enables it to bear some of the weight of the body; but if he shuts his eyes he falls at once. The spasm in the leg is very inconvenient to him, for it sometimes comes on while he is sitting, and the involuntary extension of the hip is so forcible that it is apt to make him slip off the chair on to the ground. In spite of the progress of the weakness, sensation usually continues normal: it is so in this woman; in the man there is the very trifling impairment of sensation I have just mentioned. There is no loss to pain or to temperature, and there is no absolute loss of tactile sensibility, but when he is touched on the toes he is not quite certain which toe is touched. The arms, if previously free, may suffer in the later stage of the disease, or they may remain throughout free from any symptoms of palsy or incoördination. Often, as in these two patients, there is slight ataxy in the arms, but no considerable impairment of power, even in the later stage of the disease. The reflex action of the pupils, unless early lost, continues normal throughout. There is, as a rule, no wasting of the muscles and no change in their electrical excitability. The symptoms present, in some cases, variations from this type. Sensation in the legs may be impaired and the knee-jerk may be lost. These cases are intermediate between the form now under consideration and pure tabes; they are, however, very rare, and do not constitute more than 5 per cent. of the cases in which ataxy and weakness come on together.

The disease has little tendency to cause death; indeed, the fatal cases have, for the most part, been untypical, and do not convey an accurate idea of the characters of the disease. The chief danger to life is from the accidents common to all chronic spinal affections, and especially from kidney disease secondary to retention. Among complications, the most important are mental changes resembling those of general paralysis of the insane, of which, indeed, this combined sclerosis may form part. Slight muscular atrophy sometimes occurs. Arthritis of doubtful significance has been once observed. A patient of Westphal's, who presented derangement of the sympathetic, died from peculiar spasm of the muscles of respiration. Visceral crises, however, are practically unknown.

What is the lesion that underlies these symptoms, thus complex and progressive? Our knowledge of the pathological anatomy of the disease is meagre, being limited to a few observations[1] on cases that have been, for the most part, more acute than the disease generally is, and also in some other respects untypical. Of the lesion in the common form of the disease, the course of which is very chronic, we possess scarcely any account. This is sufficiently explained by the fact that the disease has so little tendency to cause death. "Nec silet mors," the apt motto of the Pathological Society, is true chiefly of disease that kills. But the facts of fatal cases are sufficient to show us clearly the general character of the lesion. In all cases the spinal cord has presented sclerosis of both posterior and lateral columns; but the precise extent and degree of the degeneration seem subject to considerable variations. As a general rule, the sclerosis of the posterior columns differs from that of tabes in two particulars. First, it is not more intense, and often is less intense, in the lumbar than in the dorsal region of the cord. Sometimes, indeed, in the middle and lower parts of the lumbar region the posterior columns may be free from sclerosis, although it is considerable in the dorsal region and at the junction of this with the lumbar enlargement. The second difference is that the sclerosis has rarely the special intensity in the root-zone of the postero-external column that characterises the lesion of tabes. The part of the external column near the commissure and near the neck of the posterior horn usually remains free everywhere. Sometimes the degeneration does not extend up to the posterior surface of the cord; it may affect chiefly the middle three-fifths of the posterior columns. When the degeneration is considerable, the posterior median columns in the upper part of the cord may present the usual ascending degeneration of secondary origin. When the lesion is slight in degree in the lower half of the cord, there may be only a slight diffuse degeneration of these columns in the cervical region, similar to that elsewhere, and not the more intense limited affection of the median part that occurs when there is a considerable lesion of the column lower down. The degeneration in the lateral columns is also variable in extent and position, and is not often "systemic" in character—at least, it does not correspond to a single system of fibres. In one or two cases, indeed, the whole pyramidal tract, and this alone, has been degenerated; but more often the sclerosis, while intense in the pyramidal tract, also extends in front of this into the mixed zone of the lateral columns. A similar extension, I may remind you, is met with in the sclerosis that attends degeneration of the anterior cornua. The "lateral limiting layer," between the pyramidal tract and the grey matter, may be also invaded. The direct cerebellar tract often escapes. But in some cases there is a zone of sclerosis round the periphery of the cord, involving the cerebellar tract where this exists, and extending deeply into the lateral column in the position of the pyramidal tract. The latter has been found diseased, in some degree, in all cases; in several the extent of its degeneration has been greater in the lower part of the cord than in the upper, but

[1] By Prevost, Arch. de Physiologie, t. iv.; Pierret, ib.; Babesieu, Virchow's Archiv, Bd. lxxvi.; Kahler and Pick, Arch. f. Psychiatrie, Bd. viii.; and Westphal, ib., Bd. viii. and x.,—the last being the most important.

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in some it has been but slightly damaged. As in most other degenerative diseases of the cord, there may be some increase of connective tissue in the unaffected columns, and it may be so intense at some spots as to constitute areas of distinct sclerosis. As a rule, no morbid change has been recognised in the grey matter or in the membranes. In one case only was there slight meningitis. Disease of the ascending root of the fifth was found in a case in which there were corresponding symptoms. The peripheral nerves seem not to have been examined in any case. It is not likely that they are diseased. The muscles have been found normal.

(To be concluded.)

Remarks
ON
TREPHINING FOR EVACUATION OF INTRA-CRANIAL ABSCESS OCCURRING IN CONNEXION WITH SUPPURATIONS IN THE EAR;

WITH THREE CASES IN WHICH IT WAS PRACTISED.

BY J. W. HULKE, F.R.C.S., F.R.S.,
SURGEON TO THE MIDDLESEX AND ROYAL LONDON OPHTHALMIC HOSPITALS.

THE subject to which I invite attention is the question of trephining in cases of intra-cranial abscess occurring in connexion with suppurations in the middle and internal ear. That these contribute a large proportion to the total number of intra-cranial abscesses from all causes, and that they nearly always end in death, are facts so familiar to all that it has seemed to me unnecessary to illustrate them by statistics. So far as I know, the only exception to a fatal termination is where a sufficiently free outlet has been formed by carious perforation or absorption permitting the escape of pus from the abscess into the external auditory meatus, or through the mastoid or squamosal, at the outer surface of the skull. Instances of such fortunate termination are so extremely infrequent, so absolutely exceptional, that their occurrence affords no excuse for inactivity, no encouragement to trust to an expectant treatment. The silence respecting trephining in such cases observed by the text-books in current use here, on the European continent, and in America, is probably referable in part to existing uncertainty of diagnosis, and in part to too high an estimate of the dangers incidental to the operation. It must be frankly avowed that whilst the pathological anatomist can demonstrate the several conditions known as *meningitis*, in its two forms limited and diffuse, *thrombosis* of the cerebral sinuses, and *abscess* in the cerebrum or cerebellum, the clinicist, notwithstanding the recent advance in cerebral physiology and pathology, cannot yet with like certainty distinguish between these disorders. Moreover, his difficulties are not infrequently increased by their concurrence, as when thrombosis of sinuses coexists with meningitis, and either or both of the foregoing with cerebral or cerebellar abscess; and the task of discrimination is occasionally rendered yet more difficult when the symptoms of the local are overlaid by those expressive of the general disorder summed up under pyæmia and septicæmia. However, the fact that the clinicist is not yet in the position to form a certain judgment concerning the precise nature of the local disorder in a given case does not, in presence of the almost certainly fatal termination of otitic intra-cranial abscess when left to take its natural course, exonerate him from further efforts; when his judgment attains to a high degree of probability, the propriety of a surgical operation for the evacuation of the abscess should be fairly faced. It is obvious that against diffuse meningitis, thrombosis of sinuses, and nearly as certainly where pyæmia or septicæmia is present, the resources of surgery cannot avail; and that operative measures can only hold out promise of relief in instances of localised suppuration—in abscess. An attempt to formulate schemata for the differential diagnosis of the cranial disorders just mentioned is beyond the scope of this communication, and I will now only say that the formation of abscess is usually more insidious and its course more chronic than that of diffuse inflammation. Two symptoms especially characteristic of otitic intra-cranial abscess are an abnormally slow pulse and low temperature. These have also been on several occasions noticed by me in intra-cranial abscesses of traumatic origin.

In discussing with others the question of trephining, it has been objected that the diagnosis is too uncertain to justify it; the risk of setting up septic inflammation, of doing irreparable mechanical injury to the brain, and of causing serious hæmorrhage in an inaccessible locality where bleeding vessels cannot be secured, are so great and so evident that trephining can only be expected to hasten the fatal end. Some risk must be encountered, but this is greatly reduced by the observance of strict antisepsis and by a cautious method of operating. The bloodvessels in the dura mater will generally avoid injury by the trephine when this is worked with a light hand; and as they are immediately apparent when the dura mater is uncovered, they can be avoided when this membrane is incised, or, if cut, easily secured. Vessels more deeply placed, in pia mater or in brain, will also be usually pressed aside and remain unwounded where these latter parts are pierced with a trocar or a blunt-ended director—an instrument to be preferred to the aspirator, unless this is worked with a very slight degree of exhaustion. A high degree of exhaustion is unnecessary, for the pus within the skull stands under a much greater pressure than might be supposed; and it may even be injurious, since the consistence of the brain tissue allows it to be sucked through a tube of even moderate calibre; moreover, rapid and complete evacuation of an abscess may induce hæmorrhage. In the first of the following cases, where the lower part of the temporo-sphenoidal lobe, and in the second, where the cerebellum was deeply punctured, the tracks of the instrument were marked by only a little blood, and they were free from all signs of inflammation.

The presence of an intra-cranial abscess being suspected, the question of its situation next follows. Is it above or below the tentorium, in the temporo-sphenoidal lobe, or in the cerebellum? The want of leisure and opportunity have prevented me from testing by the statistics of recorded cases the relative frequency of the occurrence of abscess in these situations, and whether this is influenced by age. The impression left on my mind by the recollection of several dissections is that in the young abscess in the temporo-sphenoidal lobe is more frequent, whereas in adults the opposite occurs. Where hemiplegia or hemispasm are present, the presumption is in favour of the abscess being above rather than below the plane of the tentorium. Pain, and even tenderness, are of less value as localising symptoms. They may even lead to a mistake in diagnosis, as in the first of the following cases, where the pain was referred to a very tender spot above the ear, whilst the abscess was situated in the cerebellum; and in the second case, where pain was felt acutely in the occiput and the nape, whilst the abscess was in the temporo-sphenoidal lobe, over the tegmen tympani.

CASE 1. *Chronic Otorrhœa; Caries of the Petrosal; Abscess in the Cerebellum, erroneously supposed to be in the Temporo-sphenoidal Lobe; Puncture of the Lobe.*—B. A——, aged forty-five, a tall well-grown man, of good muscular development, a baker, was admitted into the Middlesex Hospital on Oct. 30th, 1885, under the care of Dr. Cayley. He complained of severe pain in the left half of his head, most intense in the occiput, radiating over the temporal and frontal regions. Immediately above the pinna of the left ear was a spot extremely tender on pressure. He said that firm pressure here caused increased pain in the head, which continued for two hours or more. There was also distinct but less acute tenderness above and behind the mastoid process. A fetid, fusiform discharge oozed from the left auditory meatus. The ticking of a watch, in contact, was inaudible by this ear. His face seemed to be slightly drawn towards the right, and the furrows in the left appeared less deep than those in the right side of the face. A slight deviation of the tongue towards the left was thought to be present, but respecting this there was some doubt. He could not close the left eyelid as tightly as the right. Mastication caused so much pain, referred to the temporo-maxillary joint, that for the last three weeks he had been obliged to abstain from solid food. Otorrhœa was present also on the right side; the hearing of this ear was impaired, but it still perceived the tick of a watch.

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History.—The patient said he had had a purulent discharge from both ears since childhood, oozing constantly from the right and occasionally from the left ear. He had had scarlatina in childhood, but he did not know whether the affection of the ears followed or preceded this. Twenty years ago he had a polypus extracted from the left ear, and another was removed from it six years later. About three weeks previously he began to have severe aching in the left ear, and a few days later pain in the back of the head. This at first was accompanied by vomiting, which continued two days. The earache and headache were extremely severe, and at night so intense as to prevent sleep. The otorrhœa continued during this time, and it was sometimes tinged with blood.

From the time of the patient's admission into the hospital his condition continued to grow worse. His temperature on only one day touched 100° F. On Nov. 5th and 6th it was 97·6° and 97·2°; the pulse on these days being 52 and 54. On Nov. 7th, when I saw him in consultation with Dr. Cayley, he was unconscious to external impressions, but restless, often lifting his left hand to the same side of his head, as if he felt pain there. He swallowed with difficulty, and had lost control over his sphincters. Intra-cranial abscess was diagnosed; and in the absence of other localising symptoms the extreme tenderness *above* the ear was taken as an indication that the abscess was probably above the level of the attachment of the tentorium in the middle fossa. The squamosal was therefore perforated with a small trephine, the pin of which was set at the distance of one centimetre above the external auditory meatus. The dura mater was divided, and a blunt-ended director was passed through the opening towards the tegmen tympani until its end impinged upon the upper surface of the petrosal. No pus escaped. It was evident that the operation had failed of its purpose. The coma deepened. At 10 P.M. his lips were blue; his breathing slightly stertorous, with tracheal râles; pulse 140. Death occurred at 2.15 P.M. next day.

The following extracts are taken from the record of the post-mortem examination made by Dr. Fowler: "There was a little hæmorrhage at the parts around the wound, but no inflammatory changes.....In the left cerebellar hemisphere, about the centre of its anterior border, where this is in contact with the petrous part of the temporal bone, there was an abscess the size of a walnut, containing thick greenish-yellow pus. This was in contact with a small aperture in the dura mater through which pus had burrowed from a carious portion of the temporal bone in connexion with disease of the internal ear. The walls of the abscess were almost smooth and fairly well defined. The left cerebellar hemisphere was considerably swollen, and it had evidently compressed the pons and medulla. There were no other marked changes in the brain."

The post-mortem inspection left no doubt in my mind that this abscess could have been tapped by trephining the occipital bone below the level of the attachment of the tentorium; so it has ever since been to me a subject of regret that this was not done immediately upon the failure of the puncture of the temporo-sphenoidal lobe. Whilst it failed to accomplish the purpose for which it was undertaken, the operation was not wholly without value, tending, as it did, to show its relatively slight dangers.

CASE 2. *Chronic Otorrhœa; Polypus; Carious Perforation of the Tegmen Tympani, and Abscess in the Temporo-sphenoidal Lobe.*—R. M——, aged nineteen, a maid-of-all-work, was admitted into the Middlesex Hospital, under Dr. Cayley, on March 24th last.

Present state.—A well-grown brunette. She has a dull apathetic expression, and complains of headache, most intense at the vertex and in the right side of the head. Her right ear is absolutely deaf. The orifice of the meatus externus is full of fetid pus, on removing which a polypus is apparent. At the bottom of the meatus bare bone is felt with a probe. There is great tenderness over the mastoid process, and in a less degree over other parts of the right side of the head. The right side of the face appears slightly wanting in expression. Temperature in the right axilla, 98°; in the left, 97·8°. Pulse 50, small, and slightly irregular. Her left ear is also very deaf.

History.—Her mother states that four years ago she attended the Throat and Ear Hospital in Golden-square for a discharge from both ears. There were syringed and her tonsils cut out. Four weeks ago she fell, striking the back of her head against a table. Her scalp was not cut, but she seemed dazed and stupid for a day or two after. During the past three weeks she had complained on and off of headache, and she had occasionally vomited. On March 18th, one week prior to her admission into the hospital, the headache became more intense, and she vomited more frequently, and the urgency of these symptoms continuing to increase, she was brought to the hospital.

At a consultation with Dr. Cayley on March 24th, the history and symptoms were considered to indicate with much probability an intra-cranial abscess, and the question of trephining was discussed. The extreme tenderness of the mastoid process, and the known fact that pus pent up in the antrum mastoideum does occasionally give rise to symptoms closely simulating those of intra-cranial abscess suggested the propriety of first exploring this process. Bearing in mind the great variation in the course of the lateral sinus, its occasional advance in front of its usual position, and its approach sometimes towards the outer shell of the process, which is exceptionally found defective over it, the perforation was made with a small gouge, in preference to the drill recommended by some authors. After chipping away the outer shell at a small circular spot limited in front by the posterior margin of the auditory meatus and above by the "supra-mastoid ridge," diploëtic tissue was exposed; it appeared healthy. The antrum mastoideum not coming into view, the excavation was cautiously continued until exposure of the dura mater forming the outer wall of the lateral sinus barred further advance. It was now demonstrated that the symptoms were not due to mastoid suppuration.

Two days later (March 26th), her condition having become more grave, it was decided to trephine the skull in search of abscess. Influenced by the history of a fall on the occiput, and by the recollection of the position of the abscess in the preceding case, in the absence of definite localising symptoms we decided to explore for abscess in the cerebellum. The spot chosen for perforating the occipital bone was situated about two centimetres behind and inwards from the mastoid process, the crown of the trephine encroaching on the inferior curved line. This spot was selected as being sufficiently beneath the lowest level of the horizontal part of the lateral sinus, and also sufficiently removed inwards from the descending part of the sinus. The dependent position of the spot was also thought advantageous for the drainage of the abscess, if found. The spot was easily uncovered by raising the scalp by a horseshoe incision, the ends of which lay slightly above the level of the external occipital tuberosity, and the bend slightly below the level of a line joining the apices of the mastoid processes. The muscles were divided by a cut down to the bone parallel to the "superior curved line," and, together with the periosteum, peeled down to a sufficient extent with a raspatory. The "inferior curved line," easily felt, proved a good guide to the selected spot. The severed occipital artery was easily secured with a pressure-forceps and afterwards tied. The bone, in this girl extremely thin, was easily perforated with a gouge. On dividing the dura mater a small quantity of colourless limpid cerebro-spinal fluid welled out. A grooved blunt director was then passed through the opening in the direction of the internal auditory meatus until it touched the posterior surface of the petrosal, and no pus escaping, the director was passed twice again in directions approximately parallel to the surface of the petrosal at slightly increasing distances from this. I was induced to do this by the recollection that in some instances a small band of seemingly unchanged cerebellar tissue has been found between the abscess and the petrosal. It was too evident that the exploration had failed. The flap was laid down, and the wound closed, provision being made for drainage. It was particularly noticed that no change in the pulse or respiration occurred during the operation.

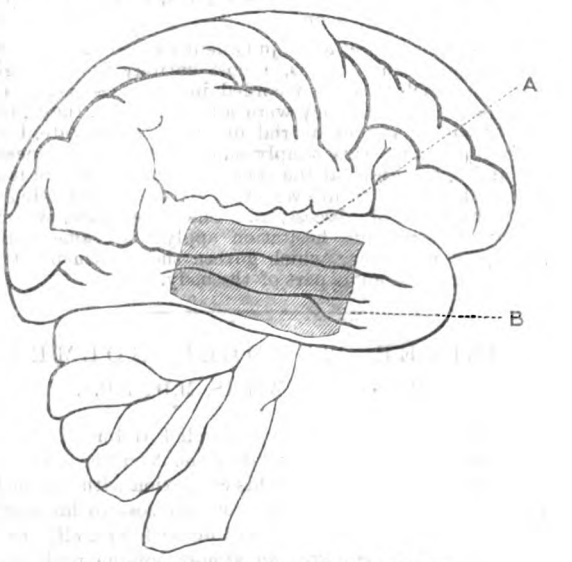
March 27th: Temperature 97·2°; pulse 54. She vomited frequently in the course of the evening, and was in a drowsy condition through the night, but not asleep. She still complained of severe headache, but did not refer it particularly to any one part of the head. At 8 P.M., temperature 97·4°; pulse 58.—28th: At 10 P.M., temperature 97·4°; pulse 56. She passed the night without vomiting, and is now asking for food. She seems very drowsy, and says that her head is not so painful. Evening temperature 97·2°; pulse 54.—29th: At 10 A.M., temperature 97·2°; pulse 56. Vomited once yesterday. Passed a quiet night, and is now sleeping. At 8 P.M., temperature 97·4°; pulse 50.—31st: At 10 A.M., temperature 97·4°; pulse 56; respiration 16.

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passed a quiet night, sleeping. At 8 P.M., temperature 98·4°; pulse 52.

April 1st.—At 10 A.M., temperature 99·4°, pulse 54, small, irregular, and respiration 19. During the greater part of the last twenty-four hours she has been lying as if asleep, and now no longer answers when questioned. The right pupil is dilated and the left contracted. When the arms, usually semi-flexed, are laid in full extension, she moves the right arm better than the left, which latter is distinctly weaker. The eyelids twitch when the eyelashes or cheek are touched. Epigastric, abdominal, and plantar reflexes normal. No ankle clonus. During this examination the face became flushed and the breathing slightly stertorous. The left forearm was convulsively pronated, and both hands and the feet were spastically flexed. This attack quickly passed off, but was repeated four times in the course of the next hour, and whilst the wounds were being dressed. The ear still discharged fetid pus. The mastoid and occipital wounds are free from inflammatory swelling; about an ounce of laudable pus has escaped from the occipital drainage-tube. At the midday visit it was noticed that, whereas she moved spontaneously the right arm and withdrew it when it was slightly pinched, she moved the left arm only when firmly pinched, and this movement was feebly executed; paresis of this arm was present. She does not notice, even when very loudly addressed. Reluctant to abandon her without a further attempt for her relief, at 3.30 P.M. the squamosal was trephined above the external auditory meatus, the dura mater divided, and a grooved director passed in the direction of the tegmen tympani; about half an ounce of thick, fetid, dark greenish-yellow pus escaped. The opening in the dura mater was enlarged sufficiently to permit the insertion of a drainage-tube, and the wound was dressed. Owing to the greater thickness of the bone at the lower part of the circle, a thin scale of the inner table escaped division by the trephine and remained when the disc was lifted out. This was left *in situ*, as there seemed sufficient space for the drainage-tube above it, and because it was bordered by a branch of the middle meningeal artery, the division of which, not appearing necessary for the operation, was to be avoided. Shortly after the operation, when the patient had been returned to bed, the pulse was found to have risen to 100, and an hour later it had reached 128. At 7 P.M., temperature 100·2°; at 9.30 P.M., temperature 124°, respiration 22; restless, insensible; pupils dilated, equal; slight and very transient convulsions affecting the whole body. Death occurred at 5 A.M. on the 2nd.

The following extracts are from the record of the post-mortem examination, made twelve hours after death, on April 2nd, by Dr. Fowler: "Cerebral convolutions extremely flattened, and sulci effused. Flattening almost equal, and not more marked on the right than on the left side of the brain.....No evidence of meningitis except about the centre of the right middle temporo-sphenoidal convolutions, where over an area apparently about the size of a shilling the brain was adherent to the parietal layer of the arachnoid. This lobe (right temporo-sphenoidal) was very soft, and, in attempting to remove it, it broke down and some pus escaped. The left half of the brain was then removed, and subsequently the right half and the membranes. The upper surface of the right petrous bone close to the juncture with the squamous showed several areas where perforation had occurred, and where the pus was evidently present in the bone beneath and was welling through the perforations. There was another perforation at the junction of the squamosal and petrous bone in the posterior fossa of the skull where the lateral sinus grooves this latter. This had caused thrombosis of the sinus and complete obstruction of its lumen for a distance of nearly an inch. In the operation on the mastoid cells the inner table had been perforated exactly at the spot where it is covered by the lateral sinus, but the sinus had not been opened. The opening into the cerebellum was seen about the centre of the right lower fossa of the occipital bone, nearly equal to the calibre of a quill pen. The dura mater had been perforated through a smaller opening, and the cerebellum pierced in a forward direction. There was no sign of inflammation in the neighbourhood of the cerebellar wound, nor was there any abscess in the cerebellum. After hardening in spirit of wine the abscess in the temporo-sphenoidal lobe was opened, and found to be a well-defined cavity, the size of a walnut. It contained some creamy greenish-yellow pus, which had a fetid odour. This cavity had been punctured in the operation, but owing to the rent made in the brain substance in removing the brain from the skull, and also to the drainage-tube having been removed, the exact line of the puncture could not be seen. The trephine wound in the skull was incomplete, both tables having been removed in the upper half of the area, whilst over the lower half only the outer table had been taken away. The incision in the dura mater was much smaller than the opening in the bone, and across the part of the membrane exposed a vessel ran obliquely.



Schema of situation and magnitude of abscess.

A, Half an inch from fissure. B, One inch and a half from tip of temporo-sphenoidal lobe. Roughly, two inches square. "It measured about two inches square, and extended to within an inch and a half of the tip of the temporo-sphenoidal lobe, and half an inch from the Sylvian fissure."

CASE 3. *Chronic Otorrhœa; Abscess in Cerebellum, evacuated by Trephining the Occipital Bone.*—On April 14th last I saw in consultation with Mr. J. A. Bloxam, and her medical attendants, Messrs. Montgomery and Plumbe, a lady, aged about fifty-five years, who had long been the subject of a purulent discharge from the right ear. She was comatose, her cheeks and lips were bluish, and she breathed heavily, but without stertor. She occasionally lifted her left hand to her mouth and left cheek and held it there; this was said to be an old habit. The mouth appeared to be slightly drawn to the left; this also had been observed long prior to the present illness. Shortly before we saw her she had tried to leave her bed, moving both legs. Pulse slow and temperature low.

Dr. Montgomery informed us that the present illness dated from a journey to London, sixteen days previously. On her return home she complained of aching in the right ear and right side of the head, with stiffness and uneasiness in the nape. These symptoms continued without notable variation until three or four days before we saw her, when a slight drowsiness was noticed, and she was advised to stay in bed, which she did reluctantly. The day before we met the drowsiness was less, and she wished to get up. On the morning of our consultation the drowsiness had again increased; it continued to deepen throughout the day, and had taken the form of coma before we saw her at 5.30 P.M. She had for many years had otorrhœa, and the ear had long been absolutely deaf.

It appeared to me that the history and present symptoms indicated abscess in the cerebellum—the depth of the coma, unattended with any evidence of left hemiplegia, was unfavourable to the supposition of abscess in the temporo-sphenoidal lobe,—and that in the presence of this its evacuation by trephining the occipital bone offered the only prospect, slender as it was, of saving life. This view was also that taken by Mr. Bloxam and the patient's medical attendants. It is unnecessary to detail the steps of the operation, as they differed in no essential from those practised in Case 2, except that the bone, unusually thick, was perforated with a trephine. The immediate effects of opening the abscess were striking. The pulse, when noted minutes after, was 72. The breathing, previously

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had become easy; the cyanosis of the face disappeared; the coma was less deep. The patient moved, and, when disturbed by some mucus in the throat, rose on her elbows and made efforts to expel it. Dr. Montgomery wrote me that consciousness did not return, and that death took place in the following forenoon.

A desire not to prejudice judgment has led me to present these cases, without gloss, almost entirely in the original words in which they are recorded in my case-books. If it be objected that, as they were all three fatal, they fail to justify the treatment a trial of which I advocate, I may fairly rejoin that this simply shows the powerlessness of trephining to relieve at the very late stage at which it was practised. In the future we must strive at perfecting the early diagnosis of abscess, and this once made, we must boldly and without hesitation apply the same general principles of surgery which govern the treatment of abscess in any less noble part of the body.

OLIVER WENDELL HOLMES.

By SAMUEL WILKS, M.D., F.R.S.

THE literary fame of Oliver Wendell Holmes is too well established to require any enforcement on the occasion of his visit to this country, but his connexion with the medical profession gives especial interest and zest to his writings for those who are of a like calling with himself. In this respect our author takes an almost unique position, for although it is true that literature has numbered amongst its devotees men who had been students of medicine, yet in most cases one profession has been discarded for the other, as in the examples of Smollett, Goldsmith, Keats, and others, where the doctor's craft was scarcely seen to gild their writings. With Wendell Holmes it is very different, for although he had long retired from the active pursuits of his profession he had retained until lately the professorial chair, and therefore ever had before him whatever the anatomy and physiology of the human body could teach, and their lessons are evident in every page of his writings. It is from this point of view I venture to give a few extracts from his works which come ready to hand as samples of his method. When it is remembered how intimately associated is the material structure of our frames with all those characteristics of men and women which we call mental, moral, or religious, it is obvious how much deeper and clearer must be the insight into human nature by one who has a profound knowledge of the sources from which many of them spring. How intimately states of health, forms of disease, or inherited temperaments affect the mental and moral qualities every medical man knows, but how often do we see them entirely overlooked or ignored by those who are regarded as our leading novelists or poets. At least this was so with many writers of the last generation, where the material basis and all the coarser functions of the body were hidden to give place to the more refined and elevated passions of the mind. A severance of this kind of natural phenomena has led to a reaction in the production of the realistic school, and we see the result in much of our modern literature, painting, and the drama. It has already reached its climax in certain French and English novels, in which the loathsomeness of the descriptions is usually sufficient to cause the reader to close their pages. Some of those who have protested against the modern realistic school have very unfairly dragged some of our profession into the mire, and have associated distinguished scientific men, whom they have been good enough to style materialists and vivisectionists, with those who can depict the horrible details of a murder on an immense canvas in the *salon*, or describe minutely the filthy particulars of the animal functions in a French novel. Wendell Holmes is a living protest against so gross a charge. These critics fall into the error of confounding the act of dissection with its exposure to the public eye. It need not here be said that those who wish to learn the intimate structure of the human body must remove the outer skin to enable them to discover the mechanism within, but the sight is not a pleasant one to the uninitiated eye, and the investigation is considerately kept from the public gaze. In a similar way, in order to obtain a perfect knowledge of all that pertains to the faculties, feelings, desires, and passions of the human being, the whole nature of men and women must be dissected or unravelled, so that those who have discovered the intimate connexion between the influences of a material kind and such passions as love and hatred are in the best position to portray human nature in all its attitudes. It by no means, however, follows that Zola need describe with the most minute details all the lower animal functions which the instincts command us to keep secret. Let him make the analysis if he pleases, and even use it in furtherance of his object, but he need not expose the details to public view. Balzac had no need to do this, and yet no writer shows a deeper insight into character as expressed in the ever-varying form and features.

Wendell Holmes has such a knowledge of the human frame as none but a good anatomist, physiologist, and pathologist could possess. His knowledge is apparent in every page of his writings, and gives to them their special value; yet a true artist's aim can be accomplished, and he no more ruffles the sensibilities than does Dickens in describing the very scum of our streets. In his last novel, "Mortal Antipathy," it is evident that he is cognisant, and has indeed a very large experience, of those animal and sexual instincts which go to make or mar much human happiness. That his mind is quite alive to the subject we see in his "Life of Emerson," where he says, "When Zola and his tribe cross the borders of science into its infected districts, leaving behind them the reserve and delicacy which the genuine scientific observer never forgets to carry with him, they disgust even those to whom the worst scenes they describe are too wretchedly familiar. The true realist is such a man as Parent du Chatelet, exploring all that most tries the senses and the sentiments, and reporting all truthfully, but soberly and chastely, without needless circumstance or picturesque embellishment, for a useful end, and not for a mere sensational effect." Although on the authority of our hero the dissection need not be exposed to public gaze, it does enable the investigator to understand more thoroughly the beings with which he is dealing, and to see how all mankind are one, and how "one touch of nature makes the whole world kin." With Wendell Holmes this has produced a sympathy with his fellow-creatures which is one of the most characteristic features of his writings. "I do not know," he says, "what special gifts have been granted or denied me, but this I know, that I am like so many other of my fellow-creatures that when I smile I feel as if they must; when I cry, I think their eyes fill; and it always seems to me that when I am most truly myself I come nearest to them, and am sure of being listened to by the brothers and sisters of the larger family into which I was born so long ago. I have often feared they might be tired of me and what I tell them. But then, perhaps, would come a letter from some quiet body in some out-of-the-way place which showed me that I had said something which another had often felt but never said; or told the secret of another's heart in unburdening my own." In another place he says: "A writer is like a lover; and a talk with the right listener is so like an arm-and-arm walk in the moonlight, with the soft heart-beat just felt through the folds of muslin and broadcloth. I have no doubt each one of us has somewhere our own facsimile, so like in all things except the accidents of condition, that we should love each other like a pair of twins if our nature could once fairly meet. I know I have my counterpart in some state of this Union. I feel sure that there is an Englishman somewhere precisely like myself (I hope he does not drop his H's)." In "The Poet," also, he says: "Self-revelation from unknown and sometimes nameless friends, who write from strange corners, where the winds have wafted some stray words of theirs, which have lighted in the minds and reached the hearts of those to whom they were as the angel that stirred Bethesda. This is the best reward of authorship; it may not imply much talent and literary excellence, but it means that your way of thinking and feeling is just what some of your fellow-creatures needed."

His general scientific culture, enabling him to take into his regard the whole organic world, gives a much wider range to his vision, so that he has a truer grasp of human character than most writers. It is for this special reason I have taken up my pen, for it has not been sufficiently appreciated by most of his literary critics. In an early page of "The Autocrat" he describes how he had seen singers and pianoforte players making such strange motions that he laughed at them, and asked himself where they picked up these fine ecstatic airs: but when he went home he found

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[illegible] bird piping its little tunes and swimming and [illegible] with all the droopings and liftings and lan[illegible]-turning of head that he had been laughing at. [illegible] asked himself who taught all this, and found that [illegible] found in passing a judgment upon a creature made of [illegible] than himself. Wendell Holmes sees that all [illegible] is one, and the same laws are operating through [illegible] the animal but the vegetable world. The following [illegible] I have more than once read to mothers who had not [illegible] that a time comes when their daughters are [illegible] to leave the nest: "You may know that from the [illegible] stages of development of almost any vegetable you [illegible] air, water, light, and warmth. But by and by, [illegible] to have special complex principles as a part of its [illegible], they must be supplied by the soil: your [illegible] will crack if the root of the tree gets no iron; your [illegible] head wants salt as much as you do. Just at the [illegible] of adolescence the mind often suddenly begins to come [illegible] and to set its fruit. Then it is that many [illegible], having exhausted the spiritual soil around [illegible] it contains of the elements they demand, wither [illegible] developed and uncoloured unless they are trans[illegible]. In another place he says men often remind him [illegible] coming to maturity: "Some are ripe at twenty, [illegible] jargonelles, and must be made the most of, for [illegible] soon over; some come into their perfect con[illegible] like the autumn kinds, and they last better [illegible] winter fruit; and some, like the winter Nelis, [illegible] and uninviting until all the rest have had [illegible], yet their glow and perfume last long after the [illegible] have done their worst with the orchards." [illegible] of evolution is before him when he describes an [illegible] man, "bent up, wrinkled, yellow-eyed, with [illegible], projecting jaws, retreating chin, still, meek [illegible] arms, large flat hands, with uncoloured [illegible] slightly webbed fingers; it was impossible [illegible] this old creature a hint of the gradation [illegible] climbs up through the lower natures [illegible] human developments." In "The Poet" [illegible] the scientific study of man is the most [illegible] branches of knowledge. It requires in the [illegible] entirely new terminology, to get rid of that [illegible] of prejudices with which every term applied [illegible] function, the functional disturbances, and the [illegible] of the moral nature is at present burdened. [illegible] word 'sin,' for instance: all those who have [illegible] subject from nature and not from books, know [illegible] that a certain fraction of what is so called is [illegible] less than a symptom of hysteria; that another [illegible] index of a limited degree of insanity; that [illegible] the result of a congenital tendency which [illegible] we sit in judgment upon from the sphere [illegible] mination, if not entirely, at least to such an [illegible] the subject of the tendency cannot be judged [illegible] standard." In another place he says: "You [illegible] comparative theology as well as comparative [illegible] what would you make of a cat's little good-for[illegible]-bone if you did not know that the same bone [illegible] dead in other creatures. You cannot know [illegible] your race and its beliefs, if you want to know [illegible] your Maker. I never found but one sect [illegible] to hold the whole of me." "And may I ask [illegible]?" "The human sect, including cannibals [illegible] running through all his writings is the horror ex[illegible] the idea of responsibility being attached to us for [illegible] sins of our forefathers. "Elsie Venner" was written with a [illegible]logical moral to show his disbelief in a new-born infant [illegible] responsible for other people's acts, and suggests that [illegible]'s fable of the "Wolf and the Lamb" may have been [illegible] to denounce such a doctrine. Speaking of his [illegible] in the "Guardian Angel," he says: "The instincts [illegible] qualities belonging to the ancestral traits which pre[illegible]nated in the conflicts of mingled lives lay in the child [illegible]mbryo waiting to come to maturity. It was as when [illegible]al grafts bearing fruit that ripens at different times [illegible] growing upon the same stock. Her earlier impulses [illegible] have been derived directly from her father and mother, [illegible] the ancestors who have been mentioned, and more or [illegible] obscurely many others, came uppermost in their time [illegible]e the absolute and total result of their several forces [illegible] found its equilibrium in the character by which she [illegible] to be known as an individual. These inherited im[illegible]es were therefore many, conflicting, some of them [illegible]erous: the World, the Flesh, and the Devil had mort[illegible]gages on her life before its deed was put into her hands." In the same train of thought, he says: "So much are our minds alike, and yet you and I think we are peculiar, and that Nature broke her jelly-mould after shaping our cerebral convolutions."

Not only does Wendell Holmes make use of his professional knowledge in the portrayal of character, but he prominently brings forward the medical man in his various writings as one of the most important elements in the social community. He makes him honest, kind-hearted, and possessed of more than ordinary worldly wisdom. The following is from "Elsie Venner": "I have heard it said that the art of healing makes men hard-hearted and indifferent to human suffering. I am willing to own that there is often a professional hardness in surgeons, just as there is in theologians, only much less in degree than in these last. While I am writing this paragraph there passes by my window on his daily errand of duty, not seeing me, though I catch a glimpse of his manly features through the oval glass of his chaise as he rides by, a surgeon of skill and standing, so friendly, so modest, so tender-hearted in all his ways, that if he had not approved himself at once adroit and firm, one would have said that he was of too kindly a mould to be the minister of pain, even if it were saving pain. You may be sure that some men, even amongst those who have chosen the task of pruning their fellow-creatures, grow more and more thoughtful and truly compassionate in the midst of their cruel experience. They become less nervous, but more sympathetic. They have a truer sensibility for others' pain, the more they study pain and disease by the light of science." His remarks about medical men are always to the point. He says: "If you are to make choice of a physician, be sure you get one, if possible, with a cheerful and serene countenance. A physician is not, at least ought not to be, an executioner; and a sentence of death on his face is as bad as a warrant of execution signed by the governor. As a general rule, no man has a right to tell another by word or look that he is going to die. If you will only let nature and the God of nature alone, persons will commonly learn their condition as early as they ought to know it, and not to be cheated out of their natural birthright of hope and recovery." This advice by no means prevents his perceiving the moment when the doctor's presence may give place to that of others, for he says: "Do not overlook the desire for spiritual advice and consolation which patients sometimes feel, for as part of medical treatment it is the physician's business to detect the hidden longing for the food of the soul as much as for any form of bodily nourishment." In speaking of the different features of persons, he says: "It is the same thing with a patient: his disease has features of its own; there never was, and never will be, another case in all respects exactly like it. If a doctor has science without common sense, he treats a fever, but not this man's fever; if he has common sense without science, he treats this man's fever without knowing the general laws that govern all fevers and all vital movements. The men who have science only begin too far back, and before they get as far as the case in hand the patient has very likely gone to visit his deceased relatives." In one of his novels he describes the doctor as "sixty-three years old, a bald crown, as every doctor should have; a consulting practitioner's mouth—that is, movable round the corners while the case is under examination, but both corners well drawn down and kept so when the final opinion is made up. ..... Some very silly people thought the old doctor did not believe in medicine because he gave less than certain poor half-taught creatures in the smaller neighbouring towns, who took advantage of people's sickness to disgust and disturb them with all manner of ill-smelling and ill-behaving drugs. To tell the truth, he hated to give anything noxious or loathsome to those who were uncomfortable enough already, unless he was very sure it would do good; in which case he never played with drugs, but gave good, honest, efficient doses." His medical or physiological knowledge is constantly cropping up in his descriptions of persons and their doings: "Ah! it is the pale passions which are the fiercest; it is the violence of the chill that gives the measure of the fever. The fighting boy of our school always turned white when he went out to a pitched battle with the bully of some neighbouring village; but we know what his bloodless cheeks meant: the blood was all in his stout heart; he was a slight boy, and there was not enough to redden his face and fill his heart both at once." A poor fellow who is ill and full of pain is not in a con-

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dition to judge fairly, and his friends cannot accept his verdict: "Many an honest ignorant man has given us pathology when he thought he was giving us psychology. It is a remark which I have heard from the wise patriarch of the medical profession among us, that the moral condition of patients with disease *above* the great breathing muscle—the diaphragm—is much more hopeful than that of patients with disease *below* it—in the digestive organs." In speaking of poor little children, who are often made the subjects of persecution by well-meaning religious people, Holmes says of one of them who had escaped: "The child would have died, no doubt; and if properly managed, might have added another to the long catalogue of wasting children who have been so cruelly played upon by spiritual physiologists, often with the best intentions, as ever the subjects of a rare disease by the curious students of science. ..... I have no doubt that disgust is implanted in the minds of many healthy children by early surfeits of pathological piety. I do verily believe that He who took children in His arms and blessed them, loved the healthiest and most playful of them just as well as those who were richest in the tuberculous virtues." He uses similar medical expressions in speaking of a girl who was in a prolonged hysterical state: "The poor little soul had been in one of those trances that belong to the spiritual pathology of higher natures, mostly those of women." That he knows, however, what hysteria is the following will prove: "The young girl looks innocent enough; but what does a blush prove, and what does its absence prove, on one of those innocent faces? There is nothing in all this world that can lie and cheat like the face and the tongue of a young girl. Just give her a little touch of hysteria—I don't mean enough of it to make her friends call the doctor in, but a slight hint of it in the nervous system,—and Machiavelli might take lessons of her."

The study of women in all their nervous vagaries has been a favourite one with Holmes, and he has a humorous and telling way of exemplifying great truths as few other writers have. Everyone knows how in emotional conditions laughing and crying are associated, or that allied movements of the chest are the manifestations of both of them. Holmes puts it thus: "Laughter and tears are meant to turn the wheels of the same machinery of sensibility—one is wind power and the other water power, that is all." He is very fond of likening the human form to a machine, thus: "Our brains are seventy year clocks. The Angel of Life winds them up once for all, then closes the case and gives the key into the hand of the Angel of the Resurrection. Tic-tac! tic-tac! go the wheels of thought; our will cannot stop them; they cannot stop themselves; sleep cannot still them; madness only makes them go faster; death alone can break into the case, and, seizing the even-swinging pendulum which we call the heart, silence at last the clicking of the terrible escapement we have carried so long beneath our wrinkled foreheads."

> "Then mark the coiled sphere that holds
> All thought in its mysterious folds,
> That feels sensation's faintest thrill,
> And flashes forth the sovereign will;
> Think on the stormy world that dwells,
> Locked in its dim and clustering cells,
> The lightning gleams of power it sheds
> Along its hollow glassy threads."

The expressions gained from medicine are often very applicable and amusing. Holmes says when he was young he always avoided a story with a moral, and yet in his later years he had written a couple of "medicated novels": "Now take a poet like Cowper; he had a mental neuralgia a great deal worse in many respects than tic douloureux, confined to the face.....Many women die worried out of life by the perpetual teasing of an inflamed neuralgic conscience." At an entertainment he speaks of the first laugh which "broke out as premature; it was a sporadic laugh, and did not become epidemic." He is too polite and too loyal to the profession to make a coarse joke at its expense, but in speaking of a lady in one of his works he says, "Her daughter had also married well, to a member of what we may call the post-medical profession—that, namely, which deals with the mortal frame after the practitioners of the healing art have done with it and taken their leave." His allusions are often like this, merely suggestive, but consequently the more humorous, as when speaking of the old hall "with the sculptured unpunishable cherubs over its portal." Wendell Holmes has written very little which can be called purely medical. Some years ago he contributed to journals papers on puerperal fever and on the microscope. He coined, I believe, the term *cutis ænea* for Addison's disease. His other writings were of a literary kind, but many tinctured by, if not founded on, his physiological reflections; as, for example, a very interesting article on the "Physiology of Versification and the Harmonies of Organic and Animal Life," showing how rhythm, metre, accent, &c., depend on respiration and the circulation.

As the subject of wine-drinking is always under discussion, we will hear what our author says in its favour in one respect—that is, its use at dinner in equalising divergent tempers and rubbing off asperities: "Whatever may be the hygienic advantages or disadvantages of wine, I, for one, except for particular ends, believe in water, and, I blush to say it, in black tea; there is no doubt about its being the grand specific against dull dinners. A score of people come together in all moods of mind and body. The problem is, in the space of one hour, more or less, to bring them all into the same condition of slightly exalted life. Food alone is enough for one person, perhaps talk alone for another; but the grand equaliser and fraterniser which works up the radiators to their maximum radiation, and the absorbents to their maximum receptivity, is now just where it was when when six great vessels containing water were changed into the best of wine."

Wendell Holmes has been called poet, litterateur, and scientist, and this combination of talents in the same man proves that science and letters need not be divorced. It is a melancholy thing to observe with what distaste many literary men regard what they call science, and how they associate with it all that is degrading and unrefined. Goethe stands out a grand example that there is no necessary antagonism between the two; and now we have Holmes, a living man, who possesses to a large extent a knowledge of all the material facts belonging to man's nature, whilst he, nevertheless, can carry them into the higher regions of poetry and religion. He himself is aware of this feeling which exists amongst men of letters and poets, for in his "Life of Emerson" he speaks of poets looking askance at science, and how Emerson contrasts learned men with their glasses with the sons of nature, much to the disadvantage of the microscopic observers. Holmes says that he notices the poet is curious and asks all manner of questions, but never thinks of waiting for the answer, still less of torturing nature to get at it. Emerson wonders, for instance, when looking at flowers, "why nature loves the number five," but leaves his note of interrogation without troubling himself any further. Wendell Holmes shows that this might have been answered without any loss to his poetical mood, for, speaking of a character in "The Guardian Angel," he says: "It seemed as if nothing of all that he met in his daily life was uncommon or unclean to him, for there was no mordant in his nature for what was coarse or vile, and all else he could not help idealising into its own conception of itself, so to speak. He loved the leaf after its kind as well as the flower, and the root as well as the leaf, and did not exhaust his capacity of affection or admiration on the blossom, upon which his friend the poet lavished the wealth of his verse." No writer that I am acquainted with can combine like Wendell Holmes the real facts of nature with all which religion or poetry is craving after. He can describe the burial of the young girl under the tree, together with the decomposition of the body, and the further chemical changes which tend to the growth of the plant; and with this he does not hide ideas which might suit the believer in metempsychosis or the Christian:—

> "At last the rootlets of the trees,
> Shall find the prison where she lies,
> And bear the buried dust they seize
> In leaves and blossoms to the skies:
> So may the soul that warm'd it rise."

Probably all that I have said and all the quotations which I have given are known to the admirers of Wendell Holmes, but there are many I find in our profession who are less acquainted with his works, and are ready to applaud because one amongst their number has distinguished himself outside medicine in the walks of literature. It is, however, because he has combined two professions, or rather made use of his medical learning in the portraiture of character, and thus in my opinion elevated the standpoint of the novel writer, that his superexcellence is seen. In this respect Dr. Oliver Wendell Holmes stands unique. I have no hesitation in stating my belief that the raciness of his writings with the subtlety of thought comparable

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...Tristram Shandy," as being ever true to nature, ...them always live. The man himself has ever ...bject of love and affection. The words of the ...ght well apply to him:—

"A life that all the muses deck'd
With gifts of grace, that might express
All-comprehensive tenderness,
All-subtilising intellect."

...S IN A CHILD, REMOVED BY ...PUBIC CYSTOTOMY, FOLLOWED BY PRIMARY UNION.

...BY ROBERT WILLIAM PARKER,
...TO THE EAST LONDON HOSPITAL FOR CHILDREN.

...ing case seems worthy of record at a time ...pubic cystotomy is again on its trial. The little ...came under my observation at the hospital in ...: he was then suffering from severe whooping-...ugh his stone symptoms were very marked ...s painful, I thought it wise, nevertheless, to ...peration until the cough was better. In part ...g to the long cold winter, little or no improve-...ough took place until towards May; then it ...nish, and on June 1st he was admitted. At ...was a small, rickety, undergrown, anæmic child, ...ne years of age, and could hardly walk. He ...of the neighbourhood. For ten months past he ...ced to pull at the prepuce a good deal; for ...there had been increased frequency in mictu-...me straining during the act, but never any ...in the flow. The urine was said to get "thick ...be often offensive, and never to have con-...ed." After his admission the urine was found ...tral reaction, and on standing threw down a ...ediment of urate of ammonium. There was no ...the urine was not offensive.

...th, the usual preliminary enemata having been ...ed out, I performed supra-pubic cystotomy. ...was inflated with an indiarubber bag, the ...ded with a warm solution of boric acid and ...n elastic ligature placed round the root of the ...l bladder was quickly reached and exposed ...dian incision; a curved needle was passed ...ents on each side of the median line armed ...ch was then used to raise and steady the ...some measure to retract the orifice of the ...was now made into it with a small scalpel. ...quickly withdrawn by means of a small ...ps. After this, the cavity of the bladder ...l with the finger to make sure that it was ...theter was passed through the urethra, and a ...boracic solution injected in order to wash ...-clots and for the purpose of thoroughly ...wound. My next care was to carefully close ...to the bladder; this I did by several sutures ...gut, after which the silk threads (temporarily ...and steady the bladder) were withdrawn. ...new gradually contracted; the edges of the ...were brought together, and finally those of ...through the external abdominal wall. A ...me iodoform was applied to complete the ...tions, over this a pad of lint and a quantity ...absorbent wool were fastened on with a flannel ...bandage, given tincture of opium and kept very ...warm after the operation. The dressing, ...ained quite dry, was not changed for forty-eight ...hours. Passed urine per urethram in natural ...amount, without pain. On the fourth day after ...dressing was again changed. The wound ...perfectly healed, the external sutures were removed, ...and collodion-cantharidal strapping was applied. ...Urine neutral reaction, and did not contain any ...albumen; temperature remained normal throughout; ...the bladder fistula was fully cicatrised in a ...few days' discharge small on June 20th, sixteen ...days after operation.

...Cases of primary union after supra-pubic ...are a solitary class—I might almost say ...thought of what is possible, and what therefore we should endeavour to strive after; while I feel, nevertheless, that this standard is rather too high a one for the generality of cases. In a former case, operated upon two or three months ago, I carefully closed the external incisions, putting a soft catheter through the urethra into the bladder with the intention of keeping the bladder quite empty and contracted, in the hope that thus the wound into its walls would close spontaneously. But I was disappointed; the vesical wound did not close, as urine began to dribble through it within a few hours. Besides this, the temperature rose to 102° F., and remained high, and the boy was very restless and uncomfortable. I attributed all this to the presence of the catheter, their disappearance on its withdrawal confirming this view. The case subsequently did very well; the incisions healed by granulation, but upwards of a month elapsed before they were quite repaired.

It appears to me, in the light of these cases, that when the tissues are healthy, as in these young subjects, an attempt to secure primary union should be made by carefully suturing the bladder, by a judicious use of sedatives, and by abstaining from all interference with the urethra. A catheter in the urethra causes as much irritation in a child as in an adult (a fact I had not sufficiently considered in my first case), and brings about those conditions, fever and restlessness, which are almost incompatible with primary union. Moreover, the mechanism of micturition seems to be interfered with. The boy, in whose case I left a catheter in the urethra, did not pass any urine per urethram for many days after the catheter had been finally discarded. Whereas in the case now under notice, thanks to the closed bladder and the absence of irritation, urine was voided normally from the first.

It may be asked why I discarded the old-established operation in favour of a new one, still on its trial. I can only reply that, in my judgment, the new operation has very much in its favour to recommend its general adoption: the high operation can be performed without danger to any important structures, whereas lateral lithotomy, even when done with anatomical accuracy, is a "leap in the dark," and cannot be performed without cutting in the close proximity of very important physiological structures one or other of which may possibly be wounded. I am not aware that primary union after lateral lithotomy has ever occurred, even by chance. If this case of mine proves to be a solitary one, it nevertheless shows what is possible after supra-pubic cystotomy. I was ably assisted at the operation by the resident medical officer, Mr. Battams; and I am indebted also to Dr. Richards, resident clinical assistant, for anæsthetising the patient and for his careful record of the case.

Old Cavendish-street, W.

A CASE OF

TRAUMATIC STRICTURE OF THE URETHRA, TREATED BY INTERNAL URETHROTOMY AND CONTINUOUS DILATATION.

BY C. YELVERTON PEARSON, M.D., F.R.C.S.E.,
PROFESSOR OF MATERIA MEDICA IN QUEEN'S COLLEGE, CORK; ASSISTANT-SURGEON TO THE NORTH CHARITABLE INFIRMARY AND CITY OF CORK HOSPITAL, ETC.

OWING to the few cases recorded in which the operation of internal urethrotomy has been undertaken for the relief of traumatic stricture, and the remarkably successful result which followed its performance under what I think may be regarded as rather unfavourable circumstances, I am induced to believe that the following case is one which will be read with attention by those who take an interest in urethral surgery.

C. T——, aged twenty-six, boiler-maker, presented himself on Aug. 17th, 1885, at the out-patient department of the North Charitable Infirmary. On the afternoon of the previous day he had fallen from a plank a distance of over four feet and came astride an iron bar. Immediately after the injury blood flowed freely from the urethra, and continued to do so for some time afterwards; he also passed very bloody urine each time he micturated. On examining the perineum, it was found to be slightly ecchymosed, as was also the back portion of the scrotum. There was no tume-

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faction or other evidence of urinary extravasation. Since the accident occurred there had been no difficulty in passing urine, but the act of micturition was attended with considerable pain, and was both preceded and followed by urethral hæmorrhage. I arrived at the conclusion that the patient was suffering from partial laceration of the urethra. I ordered him to be immediately admitted into hospital, and (as the surgeon for the day had left) gave instructions for him to have a warm bath, and a draught containing twenty minims of sedative solution of opium and ten minims of tincture of belladonna, to be repeated every six hours; also, in case retention occurred, to have a No. 10 gum-elastic catheter (with stilet) passed, and tied in.

On arriving at the hospital the following morning, the clinical clerk informed me that on the previous evening, owing to retention, the instrument had been passed, but was removed when the bladder had been emptied; its use had not been attended with any difficulty or hæmorrhage, and the patient, finding himself subsequently able to pass urine free from blood, had (much to my astonishment) left the hospital early that morning. I naturally anticipated that he would reappear on some future occasion. In this I was not mistaken, as he came to my house on Sept 22nd, complaining of great difficulty in passing urine, and said there was much diminution in the size of the stream, which conditions were becoming rapidly more marked during the past week. On endeavouring to pass a No. 6 English gum-elastic instrument, it was abruptly arrested at the bulbous portion of the urethra. I now tried various instruments of smaller size, and ultimately succeeded in passing a No. 4 French bougie (about No. 1 English), and this was tightly grasped. I now informed the patient that his condition required prompt and careful treatment, and strongly urged him to go into hospital and submit to an operation; this he refused to do, as he said he was engaged at some special work, which he would lose if he did not return to it immediately; he, however, promised to come to me twice a week to have instruments passed, but could not do so more frequently, owing to his business being at a considerable distance. He continued to attend for a few weeks, and I succeeded in increasing the calibre of the stricture to No. 7 French (between 2 and 3 English), but could not get beyond this. I also noticed that the instrument passed with great difficulty through the membranous portion of the urethra. He now said that he had much inconvenience in attending, but could continue to do so once a week. I told him that I did not think the occasional passage of instruments would improve his condition any further, and that he must ultimately submit to an operation. I also gave him Nos. 5 and 6 French bougies, which I instructed him how to pass for himself every other day. He continued this mode of treatment up to the middle of November, when, owing to his contract being fulfilled, he "went on the spree," and came to me on the evening of Nov. 26th, suffering from retention, great pain, and an overdistended bladder. I endeavoured to pass an instrument of the smallest size, but was unable to do so. I then gave him a note to the house-surgeon of the North Infirmary, ordering a warm bath and full opiate, and saying that, if he failed in relieving him, I should be sent for. The house-surgeon, not finding the above measures succeed, tried to pass a fine catheter, but could not do so, and, not wishing to disturb me at such a late hour, tried a second bath; this proved successful, but the patient, finding himself able to pass urine in the morning, left the hospital. He again took drink and reappeared in the afternoon suffering from retention, when he had a warm bath, and while in it a fine catheter was passed and tied in; the patient, however, removed it himself in the morning and again left the hospital. He came to my study in the afternoon and inquired into the nature of the operation that I had recommended. I strongly urged him to have Syme's operation performed, but he strongly objected to any such severe measure. I then explained to him that an *internal* operation might be done, but I could not guarantee such a successful result as I anticipated from the former. He consented to submit to internal urethrotomy, but disliked so much remaining in hospital that I undertook to perform it at his own home. Being anxious, if possible, to divide the stricture from behind forwards, I determined to first try continuous dilatation for a few days. On Nov. 30th I accordingly tied in a No. 3 French catheter, which was the largest I could pass. As the urine did not flow freely enough through this, the patient had to remove it during the night. On the following day I passed a No. 1 English gum-elastic; on Dec. 2nd I changed this for a No. 3; on Dec. 3rd I got in a No. 5, and promised to operate the following day, as the subject of my treatment was getting highly impatient at the delay.

Operation.—On the morning of Dec. 4th, the patient being fully under the influence of chloroform, I first tried to pass a No. 6 catheter, but could not, showing that the No. 5 had effected little or no dilatation since the previous day. I then introduced Sir H. Thompson's modification of Civiale's urethrotome, and passed it through a short stricture situated in the anterior part of the bulb, but was unable to get it through a second one, commencing probably at the junction of the membranous with the bulbous urethra. On withdrawing the instrument one-third of an inch, it was arrested by the anterior stricture; this I freely divided from behind forwards. I now introduced the staff of a Teevan's urethrotome, and then, as urine appeared from the groove, passed down the concealed blade to the seat of stricture. This I attempted to divide, but at first failed to do so, the stricture apparently being pushed backwards by the instrument, notwithstanding that the penis was kept on the stretch. I then directed my assistant to extend it still more forcibly, and after another trial succeeded, though great force had to be employed, the stricture cutting like cartilage. On withdrawing the instrument there was a moderate amount of hæmorrhage, which soon ceased. Finding the meatus congenitally contracted, I incised it, and then tried to pass a large curved metalic sound, but failed to get it through the membranous portion. I again introduced Thompson's urethrotome, and this time it passed readily through the second stricture, which I now divided on the floor from behind forwards. I again attempted to pass the large metallic sound, but could not do so. I also failed to pass a large-sized elastic catheter. Not having intermediate instruments at hand, I introduced a No. 6 English gum-elastic catheter, and tied it in. A half-grain morphia suppository being placed in the rectum, the patient was put to bed, and ordered a draught containing fifteen minims of sedative solution of opium, to be given in six hours after, and to be repeated every sixth hour if necessary.

The following day (Dec. 5th), finding the patient in a most satisfactory condition, able to urinate easily through the catheter, and that no urine flowed by the side of it, I determined to leave it undisturbed.—Dec. 6th: Withdrew the No. 6, and introduced a No. 8, without encountering the slightest difficulty or obstruction.—7th: Removed the No. 8, and passed a No. 10 with great ease.—9th: Removed the No. 10, and passed a No. 12 quite easily.—11th: Removed the No. 12 catheter. I now passed in succession three conical metallic sounds, Nos. 14, 15, and 17, English size; these all passed quite readily, and with neither of them was the slightest obstruction felt at the seat of stricture; No. 17 was, however, a tight fit at the meatus. The patient was now left, for the first time since the operation, without a catheter, and was permitted to get up the following day; the metallic sounds being again passed; these were also used for the next few days. He was then provided with Nos. 23 and 25 French gum-silk bougies, which he was instructed to pass daily for a time, then on alternate days, and gradually to increase the interval to two or three days; he was also strongly warned of the evil of the intemperate habits to which he had been previously addicted. I should mention that the progress of the case was not attended with any constitutional disturbance, the temperature never having risen above 99° F.

Subsequent history.—The patient came to me a few times during the few weeks following the operation to report favourable progress, but was not again seen by me since the end of last December until the eve of writing this paper—viz., March 23rd, 1886,—when he came at my request, so that I might ascertain his condition. He then informed me that he had continued to pass the instrument at intervals varying from two to four days, that he had not experienced the slightest difficulty in micturition, although he had on several occasions partaken very freely of stimulants. I passed a No. 23 French bougie without difficulty, though it was slightly grasped during withdrawal. I also passed a No. 20 metallic bulbous exploring instrument, with which I was able to detect the previous sites of both the strictures. I made no further examination.

Observations.—I have described the foregoing case, not with the object of advocating the operation of internal urethrotomy in cases of *traumatic* stricture, but rather as an illustration of the amount of good that may be derived

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...d also because it has been so rarely undertaken in ... Although I am pretty extensively acquainted ...literature of urethral surgery, I can only at this ...recall a single recorded instance where internal ...y has been performed for traumatic stricture. ...was one related by Mr. Teevan and reported in ...dings of the Clinical Society of London, in which ...d-standing traumatic stricture and several penile ...re cured by the operation. In the case I have ... I the option of choosing, I should have preferred ... either Syme's operation or a *combination of ...nal urethrotomy*, such as advocated for ... of stricture by Dr. Otis, and also by Mr. ...Harrison. It may be asked why I did not ...after the operation succeed in introducing a ...rument. To this I can only answer by offering ...nation which presented itself to my mind at ...viz., that although I had divided the stricture, ...ial ring still remained in such an unexpanded ...that it would not admit the end of a large ..., just as would occur with a metallic ring ...at one place. Having formed this opinion, I deter... on the process of *continuous dilatation*, and ...en the divided ends what has been aptly termed ..." a cicatricial splice," as a jeweller would enlarge ...g by the introduction of a new piece of metal, ...in both cases being to permanently enlarge the ... the circle. In conclusion, I may point out ...ient's habits, inclinations, and dislike to remain... were serious obstacles to the course of treat... on the whole, it is rather surprising that such ... result has been attained.

...the time of correcting the proof of this paper—...0th, 1886—I find upon inquiry that the patient ...in the same satisfactory condition as when last ...y me.

...ATIONS WITH REFERENCE TO THE ...ORY OF THE RESPIRATORY MURMUR,

...EAT OF ORIGIN OF THE SO-CALLED VESICULAR ..., IN A CASE IN WHICH THE LARYNX WAS EXTIRPATED BY DR. NEWMAN.[1]

By JOSEPH COATS, M.D.

...indness of Dr. Newman I have had the oppor... making some observations on a patient of his, ...regard to the origin and propagation of the ... and pulmonary auscultatory phenomena. In the ...it may be well to state the points which these ..., were intended to bear on.

...cellent summary of the principal facts bearing ...ation and mode of production of cardiac and ...murmurs is given by Hilton Fagge, first in an ...the *Medico-Chirurgical Review* for July, 1878, ...his book on "Practice of Medicine," recently ... It is now generally believed that the various ...vesicular murmurs are produced by what is ... called a *veine fluide*. When a jet of fluid, ...quid or gas, issues from a narrow space into a ..., blowing sound is produced, the form which the ...under such circumstances constituting the *veine ...*. As the larynx and trachea are concerned, the ...for a blowing sound are fulfilled at the glottis, ...in inspiration and expiration, the air issues ...rrow aperture into a wider space. We have ... at the glottis a loud blowing sound both with ...and expiration. In regard to the more remote ...respiratory tract, there is only one place where ...conditions are present, according to the theory, for ...tion of a *veine fluide*, and that is where each ...bronchial opens into the somewhat wider infundi... ...of air-vesicles. During inspiration the ...issues from a narrower tube into a somewhat wider ...space, but during expiration it does not do so. The obvious conclusion that the normal respiratory murmur, which is essentially a sound of inspiration, has origin in a *veine fluide* occurring in the multitudinous infundibula, has not remained unchallenged. It has even been asserted that the sound does not originate in the lung at all, but is propagated from the larynx. This view seems to have been first asserted by M. Beau, and since his day the controversy has ranged around that point, with a general result unfavourable to his views. It seems to be a law of the *veine fluide* that the sound produced is most easily propagated in the direction in which the fluid is moving. According to this law, the expiratory glottic sound should not be audible over the trachea, whereas, as a matter of fact, it is usually louder than the inspiratory. Bergeon explains this on the ground that the false cords and the base of the epiglottis form a kind of lip or rim, under which circumstances, as experiment has shown, the sound may be projected backwards against the current, just as a regurgitant aortic murmur is propagated against the current, and is audible over the aorta. It will appear from our observations that this explanation hardly holds.

Turning now to these observations, I may describe briefly the local conditions. The larynx had been removed, and in its place there was a tube formed of vulcanite. This tube is about half an inch in diameter, being nearly that of the trachea, and it forms, in fact, a direct continuation upwards of the trachea, its lower orifice being embedded in the mucous membrane, so that there is no sudden alteration of calibre. The tube fixed in the upper end of the trachea is bent forward and emerges from the wound in the neck with an open mouth, retaining its full diameter throughout. By this means the trachea is continued outwards without the interposition of the larynx or the parts above it, and continued virtually in its full calibre. From the upper side of this tube a shorter and narrower one proceeds into the pharynx, and the patient can breathe through this tube when the large outer one is closed. This smaller tube I shall call the pharyngeal tube, the larger being the tracheal. By slight alterations in this apparatus I was able to obtain three different conditions, and to study the changes in the auscultatory phenomena produced thereby. These were—(1) The tracheal tube wide open with the pharyngeal tube open or closed, so that breathing was carried on essentially by the wide tracheal tube; (2) the tracheal tube closed and the pharyngeal one open, so that breathing was carried on through the narrow pharyngeal tube; (3) the tracheal tube partially closed by a stopper, through which was passed a much narrower tube, so that breathing was carried on through this narrower tube.

1. The tracheal tube open, and breathing carried on through it—a condition equivalent to the elimination of the larynx and buccal cavity. In Hilton Fagge's paper already alluded to experiments are referred to by Bergeon and Boudet in which the trachea of a horse was cut across and drawn forward out of the body, so as to eliminate the larynx, as in our observations. They assert that as a result the glottic murmurs disappeared entirely, this being quite consistent with the view that they originate in *veines fluides* at the glottis. My observation scarcely agrees with this, however. A loud expiratory blowing sound was produced at the external orifice of the tube, so loud as to be audible at some distance from the patient. There was here obviously the precise condition for the development of the *veine fluide*—namely, a tube opening into a wide space, the sound being similar to that produced when we form with the lips a round aperture and blow through it, and having obviously a similar mode of origin. This loud expiratory sound was propagated down the trachea and apparently to the larger bronchi. Auscultation in the supra-sternal notch and directly over the trachea revealed a loud blowing expiratory sound and a very feeble inspiratory one. The results of auscultation over the root of the lung behind were very interesting. It was found that the difference in intensity between the expiratory and inspiratory sounds had become much less, so that the conditions resembled those of ordinary bronchial breathing, the expiratory being as loud or almost as loud as the inspiratory sound. There was, however, a marked difference in quality in the two sounds, the expiratory retaining the blowing tubular character, while the inspiratory partook rather of the quality of the vesicular murmur. It may be inferred, I think, that the equalisation of the two sounds as regards intensity was largely due to the inspiratory becoming reinforced by the normal vesicular murmur, and

[1] ...read at the Pathological and Clinical Society on ... the observations seemed to be of importance in ... the respiratory murmurs, a committee was ... with me, and to report. The committee ... Gairdner, Dr. Newman, Dr. J. Lindsay Steven, ... has been added to the original paper.

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this would already indicate that the vesicular murmur originates in the pulmonary parenchyma. This was confirmed by auscultation over other parts of the lung, particularly in places where the respiratory murmur is normally well heard and characteristic, such as the lateral region beneath the axilla. The sound had the usual characters of the vesicular murmur, the inspiratory phase being distinct and prolonged, while the expiratory was scarcely audible. It seemed obvious that the expiratory sound produced at the orifice of the tube, although conducted freely to the parts of the chest most nearly in contact with the root of the lungs, was damped by the pulmonary parenchyma, and therefore inaudible over the periphery of the lungs.

2. The tracheal tube plugged and the pharyngeal one open, so that breathing was carried on through the narrow pharyngeal tube. We have here almost the precise conditions of laryngeal breathing. The lower orifice of the pharyngeal tube opening into the wider tracheal tube affords the conditions for a *veine fluide* during inspiration, while the upper orifice of this tube opening into the pharynx gives the conditions for a similar sound during expiration. Auscultation of the trachea gave the usual characters of tracheal breathing—namely, loud expiratory and inspiratory murmurs, nearly equal in intensity and duration. At the root of the lungs behind there was the usual bronchial breathing, and over the rest of the lungs the regular vesicular murmur.

3. A narrower tube inserted into the orifice of the wide tracheal tube. Here we have again the conditions for a *veine fluide* at the internal orifice during inspiration, and at the external orifice during expiration. Auscultation over the trachea showed that the inspiratory sound was much louder than the expiratory, the sound originating at the inner orifice of the tube being better carried than that originating at its outer orifice. The sounds in this experiment were nearly the converse of those with the tracheal tube wide open, in which case, as already mentioned, the expiratory sound was much louder than the inspiratory. A very striking contrast was produced when during auscultation with open tube the latter was suddenly stopped by the plug bearing the smaller tube, the inspiratory sound in the one case closely resembling the expiratory sound in the other, both in quality and intensity. The results over the root of the lung and elsewhere were somewhat similar to those in No. 2.

Looking to these observations as a whole, we seem to be led to the following conclusions. First, the sounds produced at the glottis or larynx are freely conducted by the dense tissues comprising the trachea and bronchi, and are thus audible wherever these hard structures are in such a position as to carry the sound to the surface. In this way they may be communicated in the opposite direction to the current of air, so that the expiratory sound is audible down the trachea and at the back, where the root of the lung is nearest to the surface. It may be inferred that bronchial breathing generally is due to conduction by more or less solid tissue. Second, the vesicular murmur takes origin in the extreme distal part of the respiratory apparatus. In all the forms of the experiment the characters of the respiratory murmur proper remained unchanged, and even when at the root of the lungs there was a loud expiratory sound, this was not communicated over the general surface of the lungs. It does not lie within the scope of our subject to consider the exact mode of origin of the vesicular murmur, whether by the *veine fluide* in the multitudinous infundibula or by some other method, but the seat of origin seems sufficiently indicated by these observations.

I made also some observations as to the propagation of the voice produced in the artificial larynx, but without any result worthy of note. I would only remark that when the patient breathed with the voice-reed in position without vocalisation the respiratory murmur was exceedingly feeble or absent, evidently because little air could obtain passage by the sides of the reed. Indeed, so little passes that he can only wear the reed about ten or fifteen minutes continuously.

Report by a Committee of the Glasgow Pathological and Clinical Society.

"The committee having considered and carefully gone over the whole of the facts set forth in Dr. Coats' report, agree to adopt it as their report. In particular, the committee are quite satisfied as to the bearing of these facts on what is by far the most important question involved—viz., the origin of the so-called vesicular murmur, and that it must be considered to be perfectly well established that the presence or absence of a glottis or of any corresponding arrangement causing a *veine fluide* at the anatomical site of the larynx has no influence whatever in the production of the normal vesicular murmur.

"W. T. GAIRDNER, JOHN LINDSAY STEVEN,
DAVID NEWMAN, JOSEPH COATS.

"May 26th, 1886."

ON A CASE OF IMPERFORATE ANUS.

By SIR WILLIAM MAC CORMAC.

THE particulars of this case may be worthy of record, as illustrating a practice somewhat different from that usually adopted.

On March 21st, 1886, I was requested by Dr. Duncan, of Henrietta-street, to see a child born two days previously. The anus was well formed, but almost immediately terminated in a pouch about half an inch beneath the surface. On careful and repeated examination, no trace of impulse or proximity of the bowel could be made out. We decided, therefore, that it was preferable to perform colotomy in the left groin, rather than undertake what promised to be a hopeless search for the bowel in the natural situation. A small incision was made in the usual place, and after the structures had been divided in succession, the intestine at once presented in the wound; it was sutured to the skin, and afterwards opened. Meconium escaped, and the abdominal distension, which before was very considerable, shortly subsided. The operation created no disturbance; the child took its food eagerly, slept well, and there was no sickness. The intention was at a later period to pass a probe or blunt instrument from the opening in the sigmoid flexure downwards towards the anus, and in this way ascertain the condition of the rectum, to what extent it might be deficient, and how far distant it terminated from the external cul-de-sac. On April 12th this was accordingly done, and, contrary to expectation, only a quite thin septum was found to exist between the rectum and the anus. It was divided with great ease upon the rounded extremity of a director, which was caused to project, and a free opening established, a well-perforated drainage-tube being subsequently passed from one opening to the other to facilitate the bowel being washed out, and to prevent the opening into the groin closing, which it showed a disposition to do. The child made an equally good recovery from this operation, and continued perfectly well for some days; then symptoms of acute peritonitis suddenly set in, and it died on April 17th.

On examination after death, there was a considerable amount of lymph and fluid in the abdominal cavity. The upper portion of the sigmoid flexure had been opened, and was firmly attached to the abdominal wall. The rectum was found full of a semi-solid mass of fæcal matter, evidently of some duration, and this condition no doubt accounted for the total absence of impulse in the region of the anus. The rectum was found to be complete, with the exception of the septum already spoken of; and there was nothing found in the region of either operation to account for the fatal result. After removing and slitting open the intestine, a small perforation was found in it about mid-way between the opening in the groin and the anus, and resting against this a small scybalous mass of fæces. It was as the result of the ulceration and perforation of the bowel at this point that peritonitis took place.

In those cases which are frequently met with where the bowel terminates at an unknown distance from the anus, the performance of Littré's operation gives the child immediate relief, and is attended by comparatively little danger: time is gained for considering what the next step should be at a time when the child is older and better fitted to bear a further operation; and from the opening in the groin the condition of the extremity of the bowel can be ascertained with tolerable accuracy. When practicable, the natural channel can be re-established, with the great advantage of having an exact guide to the position of the extremity of the gut, an advantage which all will appreciate who have ever had to make the difficult and often fruitless search for the blind extremity of the bowel in cases of imperforate anus.

Harley-street, W.

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CASE OF POISONING BY CHLOROFORM.

By J. G. U. WEST, L.R.C.P. LOND., M.R.C.S.,
HON. MEDICAL OFFICER TO THE NORTH STAFFORDSHIRE INFIRMARY.

On April 6th, at 7 P.M., I was hurriedly summoned to a man aged fifty, a cab-driver, who had been found in his bedroom in an unconscious state. His wife had recently drowned herself, and at the inquest the jury had severely censured him for alleged ill-treatment of her. I found him lying on a bed in a state of deep coma; pupils slightly contracted, and not acting to light; breathing stertorous; complete muscular relaxation; conjunctivæ insensible to touch; pulse 96, regular, but very small. On smelling his breath I detected a very strong odour of chloroform. There was no empty bottle in the room. I at once used the stomach-pump, obtaining four ounces of dark-brown fluid, which did not smell of chloroform. Up to this time I could get no history, but I now discovered that three hours before I saw him he came home from the direction of his stable, and went straight upstairs. I sent a policeman to the stable, where he found an empty bottle, labelled chloroform. The coma deepening, the breathing becoming shallower and more stertorous, and the pulse weaker and more frequent, I thought an antidote was essential, but I could find no allusion to poisoning by chloroform in any book in my possession. Assuming that the great danger was from failure of the heart's action, I thought that atropine would most probably prevent the cardio-inhibitory effect of the chloroform. As he was quite unable to swallow, I injected three quarters of a grain of sulphate of atropia under the skin of the arm at 9 P.M. In twenty minutes the pupils began to dilate, and he moved his arms. The pulse improved, and the breathing lost its stertor. About midnight the conjunctivæ were sensible to the touch, and at 3 A.M. on the following morning he became conscious, and spoke. From this time he continued to improve, though for a few days he suffered from gastro-intestinal catarrh. He confessed that he bought two ounces of chloroform, saying that he wanted it to clean some clothes, that he drank it at the stable without diluting it, and then walked home, a distance of about 250 yards.

Whilst anxious to avoid the *post hoc propter hoc* fallacy, I think the case worthy of record as showing the probability of atropine and chloroform being antagonistic, and the fact of the patient exhibiting no sign of belladonna-poisoning after the injection appears to strengthen this hypothesis.

Stoke-on-Trent.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certa noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum propriis collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

CHARING-CROSS HOSPITAL.

SURGICAL CASES.

(Under the care of Mr. J. ASTLEY BLOXAM.)

THE following cases present points of interest. The first case is one in which the result of successful suturing of the patella for recent transverse fracture was noted a long time after the operation, and the result was very satisfactory. In the second, a large tumour resembling a new growth was successfully treated by iodide of potassium, the diagnosis that it was due to syphilis being thus confirmed. In the third the new growth is recorded as scirrhus, but as this is a very rare growth, adenoid or cylindrical epithelium being the usual form of cancer met with in the rectum, we must wait for the further evidence afforded by microscopical examination before agreeing with the diagnosis.

CASE 1. *Transverse Fracture of Patella from Muscular Violence.*—Henry E——, aged twenty-seven, a labourer was brought to the hospital on Jan. 24th, 1883, having fallen downstairs. He says he felt the patella break as he was falling, and did not strike it anywhere. The fragments were widely separated.

Feb. 1st: This afternoon Mr. Bloxam cut down on the joint and wired the two fragments together under antiseptic precautions. 2nd: The patient has passed a good night; there is no elevation of temperature.—9th: The patient appears to be getting on well, and has no pain.—24th: The dressing was removed to-day, and the wound has almost completely healed.—March 6th: The wound is now quite healed. Patient can flex the joint without difficulty. He was discharged on the 20th, with a caution to be careful for some time to come. There was perfect apposition of the fragments. The patient has been seen and examined during the last few days, and the apposition of the fragments is still perfect after an interval of more than three years. Flexion and extension of the knee-joint are quite perfect.

This is an example of the excellent results which have been obtained in a great number of cases by securing that close contact of the fragments which is necessary to osseous union, and which is rarely obtainable by any other method.

CASE 2. *Osseous Tumour of Tibia.*—Margaret H——, aged twenty-nine, housewife, was admitted on August 22nd on account of a hard, dense, pear-shaped swelling on the upper and anterior part of the tibia, situated just below the knee-joint. It was very painful, and in about a fortnight the pain had extended down the leg to the foot. The anterior border of the tibia is very rough in its whole course. There are one or two old scars, said to be the marks of blows or falls. The tumour measures 3¼ inches in length and 3½ in width at the upper part. The circumference of the limb over the tubercle is 11¾ inches, as against 11 inches round the other leg: and one inch and a half below it measures 12 inches. The patient says that three years ago she noticed a small hard painful swelling on the left leg, just below the knee. She did not at first pay much attention to it, and ascribed it to the effect of a fall she had had a few days previously. It, however, rapidly increased in size and became more painful, until three months ago, when the pain became very great, the tumour taking on at the same time a further rapid growth. She was obliged to lay up for a few days, during which time the swelling subsided somewhat, and she then applied to the hospital for relief, and was admitted. Her father died of "paralysis of the brain" and her mother of dropsy. One of her brothers died of blood-poisoning. She has four brothers and sisters alive and well. She had a miscarriage at fourteen years of age, and a child a year later, the latter being still living and healthy. She then had another miscarriage, and after that a child, which died when three months old. She has had one child since, still living. The patient says she has never had any illness, nor has her husband. She was ordered a mixture containing ten grains of iodide of potassium three times a day. The swelling to be painted daily with liniment of iodine.

Sept. 3rd: The patient still complains of pain in her leg. The dose of iodide of potassium was increased to fifteen grains. The swelling is a trifle smaller.—7th: The iodide of potassium was raised to twenty-five grain doses to-day. The patient is decidedly improving, but complains that the painting hurts her a good deal.—16th: The application of the iodine liniment is to be discontinued. The tumour is now markedly diminished in size, and the pain is nothing like so severe.—24th: The patient left the hospital at her own urgent request, although she acknowledged that she was rapidly improving.

This case offered an example of the efficacy of large doses of the iodide where smaller doses had failed to afford relief. There is no reason to doubt that had the patient continued under treatment absorption might have been brought about and the tumour dispersed.

CASE 3. *Scirrhous Cancer of the Rectum; Colotomy; Recovery.*—Joseph D——, aged fifty-three, a publican, applied for relief on account of passing blood with unformed motions, together with an aching and heaviness in the rectum after defecation, which, moreover, does not relieve the desire. He was admitted on Jan. 8th, and on examining the rectum healthy mucous membrane and a normal calibre were felt for about four inches; at that point some thickening and induration were present, chiefly of the posterior and left walls. On passing the finger beyond this, an abrupt edge can be felt, followed by an irregular excavation, which seems to become lost in the gut higher up. The

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patient says that three months ago he first passed small clots of blood mixed with slime, unaccompanied by a motion proper; when he did succeed in passing a motion, he noticed that it was flat, tape-like, generally with a smear of blood down one side. For the last two months, however, the motions have been without form. He has lost flesh markedly for the last two months. He had inflammation of the lungs nine years ago, and kidney trouble six years since, which lasted a week. Six months ago he was troubled with rheumatic pains in the right shoulder, which have not left him. His father died at seventy-five years of age, and his mother at seventy-eight, having had twenty-three children. No history of carcinoma anywhere. On the 24th Mr. Bloxam performed colotomy by means of an incision four inches long, the centre of which corresponded to the centre of a line drawn vertically from the crest of the ilium to the last rib, half an inch behind the middle point of a line connecting the anterior, superior, and posterior spines of the ilium. The direction of the incision was obliquely transverse. A search with the fingers in the abdominal fat readily brought the colon to the orifice of the wound, and it was then secured and opened in the usual manner. Drainage-tubes were inserted above and below, and the ends of the wound sewn up and dressed with a simple pad of antiseptic tow and a bandage. The operation was followed by a good deal of collapse. A considerable amount of fæces escaped during the night.—29th: The temperature has been at 100° yesterday and to-day, and the patient looks weak and exhausted.—Feb. 4th: The patient looks much better to-day, but his temperature is still about 100°. The wound has a healthy appearance, but the mucous membrane shows a tendency to protrude.—20th: He has no pain at present, and sleeps well. Appetite improving. The patient was discharged on the 25th, very much better in health and comfort.

SUSSEX COUNTY HOSPITAL.

CASE OF RECOVERY AFTER SWALLOWING A FLUID OUNCE AND A HALF OF COMMERCIAL HYDROCHLORIC ACID.

(Under the care of Dr. H. Ross.)

FOR the following notes we are indebted to Dr. Robert Black, house-surgeon.

George B——, a man, aged thirty-nine, was brought to the hospital reported to have swallowed a dose of hydrochloric acid. It appeared that he had lately become melancholic, and had attempted suicide by laudanum four days previously, but was fortunately discovered and the poison taken from him. On the day of admission he purchased an ounce and a half of "spirits of salt," which he sent for in a small gallipot; he then filled an ounce and a half bottle with the acid and drank the whole of it. He was seen about ten minutes afterwards by Dr. Harris Ross, who at once administered some calcined magnesia and recommended his removal to the hospital.

On admission he was very pale and much collapsed. There was much retching, and he vomited a quantity of dark, blood-stained fluid with a peculiar almost aromatic smell. There was a well-marked red line at the back of the hard palate, where the acid had first come in contact with it. He complained of no pain and no tenderness at the epigastrium. He was ordered some carbonate of potash and borax with Battley's solution of opium, but continued to vomit dark blood-stained fluid with small shreds of membrane.

May 4th.—The man has been quite free from pain and can swallow well, but is still sick from time to time. The bowels have acted without aperient, and the motions contain a little blood. A white membrane has formed on the dorsum of the tongue, and is slowly peeling off. He has now a good healthy colour in his cheeks, and presents a tranquil, comfortable appearance, and sleeps well all night. The temperature has been 99·5° until to-day, and is now normal.

10th.—The patient has been up for two days, and appears perfectly well. There is no pain, no difficulty in deglutition, and the evacuations contain no blood. There has never been any marked constipation.

On the 12th he left the hospital quite well. Dr. Ross ascertained from the chemist that the acid supplied was of the ordinary strength of the commercial crude hydrochloric acid; and it was conclusively proved that the full amount above mentioned was taken.

CARDIFF INFIRMARY.

A CASE OF CYSTIC GOITRE TREATED BY "SHELLING OUT."

(Under the care of Dr. C. T. VACHELL.)

WE are indebted for the following notes to Mr. William Duff.

Annie Z——, aged twenty-three, married, was admitted on July 23rd, 1885, suffering from a tumour on the right side of the neck. She had enjoyed good health until five years ago, shortly after marriage, when a swelling commenced to form over the right side of the thyroid gland, and continued slowly and persistently to enlarge. She had one child a year and a half ago, but neither pregnancy nor lactation seemed to influence the growth. On admission a tumour about the size of a cocoa-nut occupied the position of the right lobe of the thyroid gland, and passed somewhat over to the left of the middle line of the neck. The skin, with a few enlarged subcutaneous veins, was freely movable over the swelling, which moved with the trachea in the act of swallowing. Fluctuation could be felt all over it, more distinct in some parts than others. Neither breathing nor swallowing was seriously interfered with. About three weeks before admission a teacupful of bloody serous fluid was withdrawn by a trocar and cannula, and the tumour was considerably reduced in size, but reaccumulation took place in a day or two. By August 11th the tumour had attained a larger size than ever, the circumference of the neck being 17¾ in. The patient was informed that if the tumour remained serious results might ensue, and she consented to an operation.

Ether having been administered, Dr. Vachell proceeded, on Aug. 12th, to remove the tumour under the carbolic spray. A vertical incision measuring about 2½ in. long was made through the skin over the most prominent part, and at once the surface of the tumour came into view, the capsule of the gland, if present, having been so thinned by pressure as to present no difficulty. Up to this point very little hæmorrhage had occurred. Without much difficulty the tumour was now shelled out, but the hæmorrhage which commenced with this process, and continued throughout, was very profuse. Firm pressure was maintained by an assistant, the surface was mopped with very hot water mixed with tincture of iodine (1 in 20), and as bit by bit the surface was exposed all the bleeding points were ligatured. The edges were then brought together, and a drainage-tube inserted.

After the operation the progress was satisfactory. Some sickness in the afternoon and a troublesome cough led to considerable oozing, necessitating the dressing of the wound in the evening. The dressing was repeated the next day. On the 14th the tube was shortened, and on the 16th the stitches were removed. On the 19th boric dressing was substituted, and on the 24th the patient left the infirmary.

The temperature rose on the evening of the day of the operation to 103·8°, and remained more or less febrile till the 19th. Probably this was due to an attack of bronchitis, from which she then suffered.

The tumour, which was irregularly ovoid in shape, measured 13 in. by 9 in., and weighed 20 oz. On being cut into, 9 oz. of dark sanguineous fluid escaped, similar to what had been removed by tapping, but darker. The walls varied from one-sixth of an inch to rather over half an inch in thickness, and consisted of material resembling heart muscular fibre in naked-eye appearance. The internal surface was much and deeply corrugated.

A MUNIFICENT RUSSIAN NOBLEMAN.—Count Orloff Davidoff appears to be a most munificent benefactor to the sick poor of Russia. He recently gave £24,000 for the purpose of endowing a children's hospital dedicated to St. Olgar, in Moscow, which he had built at his own expense, besides buying a house for the purposes of the administration of the hospital, costing £4000. This noble foundation he has now further enriched with a gift of another £24,000. Dr. Chernoff, privat docent for children's diseases in the St. Petersburg Military Medical Academy, has been appointed medical officer to the new institution, which is considered by the Russian medical press as an excellent choice. How much more satisfactory will it be to the munificent donor to be able to watch the success of his hospital than merely to leave part of his money in his will to be devoted to charity after his death.

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Medical Societies.

...TON AND SUSSEX MEDICO-CHIRURGICAL SOCIETY.

...TING of the above Society was held on May 6th, ...Ross, Vice-President, in the chair.

...ction of Parotid.—Mr. N. P. BLAKER brought for... woman of over middle age, in whom both parotid ... submaxillary glands had sloughed away after ...ammation that resembled ordinary "mumps"; there ... dryness of mouth, but no marked inconvenience.

...in, or Reflex Paraplegia (?).—Dr. BLACK showed ...ithers Moore, a man of fifty-three, admitted into the ...Hospital with partial loss of motor power in the ... of control over the bladder and rectum; most of ...es were exaggerated, the gait was stiff and spastic, ... was no marked wasting, and no rigidity; the urine ...ine, and free from albumen; there was much vesical ...re was no stricture, but chronic dysuria, and reten... ...iring the catheter, had occurred seven weeks before; ...e same time he rather suddenly lost power in the ... the other hand, in favour of the syphilitic origin ...mptoms (from a disseminated myelitis) was the ...of chancre and secondary symptoms two years ...y. He was ordered one grain of mercury with chalk ...s a day, and from five to ten grains of iodide of ...; the bladder to be washed out daily with boracic ...ion; and under this treatment all the symptoms ...oved in a few weeks.

...ital Dislocation of both Thighs.—Dr. BLACK also ...r Dr. Withers Moore a boy of ten years with this ... He was born by the breech after protracted ...d never walked properly. His pelvis seemed broad ...ale type; the thighs approximated and were shorter ...gs below the knee; the trochanters were near the ...uperior spines of the ilium and two inches above ...ne; the gait was waddling, and there was much ... Sayre's jacket had been applied four years before ... hospital without benefit.

...Ruber Planus.—Dr. MACKEY brought forward a ...istic case of this kind in an adult male, with red ...les, some umbilicated, confluent over face, body, ...ighs, and outer aspect of arms, discrete in other ...pecially on wrists and hands; most, if not all, ...e site of the hair follicles, and some resembled lichen ...hilst sufficient scaling appeared near the large ... justify Mr. Hutchinson's term of lichen psoriasis, ...s papules the term lichen pilaris would apply. The ... acute and of a few weeks' duration, and accom...ich much pruritus and nerve depression, but was ...g better with rest, alkaline baths, and carbolised ...ternally arsenic.

...ffuse Peritonitis.—Mr. WILLOUGHBY FURNER ...e pelvic organs removed post mortem from a case ...tive peritonitis; there was a small cyst in one ... other had been removed eighteen months before ...decease, the stump having been tied with thick silk, ...f which was found.

...DS AND WEST RIDING MEDICO-CHIRURGICAL SOCIETY.

...inary meeting was held on May 7th, Dr. Clifford ... the chair.

...e Inoculations.—Dr. BARRS reopened the adjourned ... on Dr. C. Chadwick's paper on Pasteur's treat... ...ubies. He pointed out that corroboration was ... certain points, especially as to the real state of ...the dogs bitten the patients.—Dr. DOLAN said that, ...ongst maintaining Pasteur's work, he was not pre... ...his method as proved until control experi... ...performed by a commission. There was ... show that in certain cases the dogs which ... the patients treated were not rabid, ... was required. What place was to be ... in these cases? Were there any ..., such a number had been previously ... hydrophobia subsequently developing? He ... these points. He dwelt on the difficulties of the statistical side of the question. The explanation of the deaths was not scientific. It was said that they came too late. If the Russians who died came too late, then all the Russians came too late. We could not accept a theory which worked two ways—one way for failures, another for recoveries. M. Pasteur limited the time to fifteen days. What was the use of taking over cases where the bites had been inflicted before that time. The microbe theory was the basis of treatment; but here, again, a difficulty arose—how to reconcile this theory with the quantity theory. The rabbits were treated in one way, men in another. On man the injections produced not even an abscess or phlegmon, and were to all appearance innocuous. Inject this virus into the brain of a man—we then have a different result no doubt. The state of the rabbits required confirmation.—Dr. HIME, who had recently returned from Paris, referred to the report of a Commission appointed by the French Government for the purpose, who found that of five ordinary dogs injected in the brain with virus all died of rabies, but of those presented by M. Pasteur as protected none died when treated similarly. The strength of the final injection of virus given to the persons treated was sufficient to cause rabies in a dog in half the ordinary time. With regard to the state of the large numbers of persons presenting themselves for treatment, he remarked that if one person who would have suffered was protected, the practice would be justified.—Dr. FARQUHAR, for personal reasons, had made much inquiry as to the incubation period of hydrophobia, and found that in some cases it amounted to five years.—Mr. MAYO said that of fifteen cases treated in the Leeds Infirmary during the past twelve years, the incubation period had varied from seventeen days to five months, the average being about seven weeks.—Dr. CHURTON said he had found caustic of great use in preventing injury from post-mortem wounds, if applied immediately.—Dr. JACOB thought that on general principles it was advisable that M. Pasteur's experiments should be repeated by an independent authority, and that at present there were great difficulties in the way of accepting the matter as proved. If of the 600 or more patients treated at Paris 100 had really been bitten by rabid dogs, we should expect about six to become affected, and if these escaped a great deal would be proved towards accepting the method.

Static Electricity as seen in M. Charcot's Clinique.—Mr. ROBERTS read a paper on this subject. He described the machine there used and the one he himself adopted, which was by Carré, worked by a hydraulic motor. The patient was insulated and charged, and sparks drawn by suitable conductors from the affected parts. He had found it useful in various rheumatic and neuralgic affections.

Mr. MAYO ROBSON showed a child, three months old, on whom he had operated for Lumbar Spina Bifida by excision of the sac three weeks previously. The child was in good health, with all its movements perfect.

NOTTINGHAM MEDICO-CHIRURGICAL SOCIETY.

A MEETING of this Society was held on Friday, May 7th, Mr. Joseph White, President, in the chair.

Dr. HANDFORD showed a fœtus (dissected), recently presented to the Society by Dr. Mutch, as an illustration of Maternal Impressions. Dr. Handford also brought forward the following pathological specimens:—1. Hydro-Salpynx, Granular Kidneys, and Hypertrophied Heart, from a woman aged fifty-five. 2. Tumour of the Base of the Bladder from a man aged forty-eight, who had suffered during life from Hæmaturia. 3. Aneurysm of the first part of the Aorta, from a man who had suffered during life from a pulsating tumour in the left third intercostal space. 4. Spleen, Abdominal Glands, and Thyroid Body of a patient who had died of Hodgkin's Disease. 5. Abscess of Liver (one large and numerous small ones), probably septic, following gonorrhœa and pelvic inflammation. 6. Secondary Abscesses of Brain in the above case.

Dr. ELDER showed the parts removed by Hysterectomy, in a case of Uterine Fibroid and Hæmorrhage.

Poisoning by Syrup of Squills.—Dr. MUTCH read a paper on this subject. After a brief review of the chemical properties of squills, he proceeded to relate the symptoms produced in the four cases which had come under his observation:—Isaac B——, aged three and a half, suffered from pains in the legs, difficulty in breathing, and prostration. His face was pinched and pale, eyes sunken, lips, fingers, and nails livid,

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respiration quick, and pulse irregular. He died on the same day as first visited by Dr. Mutch—i.e., Feb. 18th, 1886. The boy had suffered from whooping-cough, and had been taking a mixture composed of syrup of squills, syrup of violets, ipecacuanha wine, and oil of almonds, for about ten weeks. Ethel B——, aged five, had taken the same mixture for the same period as the foregoing, and some days subsequent to the death above mentioned complained of her legs giving way, of falling several times, and of vomiting. Her eyes were sunken, respiration and temperature normal, face pale and livid; her pulse was irregular and intermittent (one in every four beats); pupils normal. She died suddenly five days after the onset of these symptoms, on Feb. 26th. A post-mortem examination was made forty-eight hours after death, when the chief signs were found to be—fluidity of the blood, arrest of the heart's action in systole, and lividity. The two remaining cases, L. B.——, aged eight, and T. B.——, aged six and a half, presented the above symptoms in a lesser degree. Both these cases recovered. The mixture had been analysed by Dr. Trueman, who attributed the symptoms to an especially strong preparation of squills in the mixture which had been administered.

Poisoning by Sewer Air.—Dr. HAYDON WHITE read a paper on this subject, in the course of which he discussed its effects upon the human subject, instancing gastro-intestinal, nervous, anæmic, and other affections which may arise therefrom.

Gravel and Calculus.—In some notes on this subject Mr. ALFRED SCOTT related a case of severe persistent urethritis occurring in a man of twenty-five, simulating and taken for gonorrhœa, but really dependent on oxaluria rebellious to treatment, but ceasing after passage of an oxalate of lime calculus. In the course of his two years' affliction the man married, and the wife suffered from vaginitis, apparently corroborating for a time the diagnosis of specific disorder. Another case reported was that of a woman who passed small oxalic calculi at intervals of a few months, whatever diet or treatment was adopted. Almost her only relief was from chloroform, or from full doses (half a grain) of morphia during the paroxysm; Mr. Scott strongly advised copious draughts of water during this medication to obviate ill effects. He further noted how often gravel or calculus was formed in *one* kidney only. Too exclusive a diet did not answer, and he only refused such food as "turned acid"—e.g., beer, tea, cheese, pastry, and meat—when taken oftener than once daily.—Dr. UHTHOFF referred to nephritic and gouty cases benefited by copious draughts of hot water taken regularly two or three times a day.—Mr. EDWARDS considered diet made little or no difference. The urine of later life, containing uric acid, was often of low specific gravity from "kidney inability."—a condition benefited by strychnia.—Mr. WILLOUGHBY FURNER explained the low specific gravity of some gouty urines by the crystallising and sinking of solid constituents; he also found little effect from diet except from lessening meat, and emphasised the fact as to Hindoos being subject to calculus.—Dr. BLACK quoted cases of oxaluria in which nitrogenous, diabetic, and non-nitrogenous dieting had been successively tried without effecting any alteration in the excretion.—Dr. EWART said calculus was rare in Bengal, where rice was more consumed; but frequent in the N.W. provinces, where the heat was more intense and the skin drier: the chief food there was wheat-flour.—Dr. MACKEY considered that the drinking-water should be taken into account when judging of causation of calculus. It was noteworthy that at Bath the waters were taken at 115° F., though they did not seem so hot to the taste.—Dr. WHITTLE referred to the hepatic and neurotic origin of rheumatic and gouty disorder.

THE COVENTRY PROVIDENT DISPENSARY.—This is one of the sound and old-fashioned Provident Dispensaries which prospers, and seems to deserve to prosper. It has 16,000 members, of whom no less than 1198 joined during last year. The mortality of the members was 14·6 per 1000, while that of Coventry was 16·2 per 1000. The four medical men received respectively £324, £333 6*s.* 6*d.*, £360 18*s.* 9*d.*, £332 5*s.* 3*d.* Members' payments amounted to £1820 18*s.* 3*d.*; of midwifery cases, 287 were attended by midwives, and 76 by the surgeons, whose fees on this account brought up their respective receipts to £350 or over. When this is the case a rule of the dispensary requires the appointment of another surgeon. Accordingly one was appointed—Mr. Littlewood.

Notices of Books.

Regional Surgery, including Surgical Diagnosis: A Manual for the use of Students. Part III., the Abdomen and Lower Extremity. By F. A. SOUTHAM, M.A., M.B. Oxon, F.R.C.S., Assistant-Surgeon to the Manchester Royal Infirmary, Assistant-Lecturer on Surgery in the Owens College School of Medicine. London: J. and A. Churchill, 1886.—Having already noticed at some length the previous parts of Mr. Southam's work, it is only necessary to record the issue of this the final section of it. The character of the book is fully maintained in this part, the same method and style have been preserved throughout, and those who have found the earlier volumes helpful will welcome this concluding section. There is no reference to the special forms of treatment required in different regions, but brief descriptions of the affections of various parts are given, together with some tables of comparative symptoms of diseases liable to be mistaken one for the other. Mr. Southam has not attempted to make his work thoroughly exhaustive, but rather such as may be useful to the student. We do not find in this volume any mention of abscess in the sheath of the rectus abdominis muscle. And the little vascular growth met with at the umbilicus of infants is described as composed of granulation tissue. We have noticed a few other points that might be made the subject of criticism, but, as we have said, that might seem out of place in a notice of a book which is evidently not intended to be a full, but only a brief outline of Regional Surgery.

Select Extra-tropical Plants. By Baron FERD. VON MUELLER. Melbourne: J. Ferris, 1885. New Victorian Edition, revised and enlarged. 8vo, pp. 466.—This work first appeared in the form of separate contributions to the volumes of the Victorian Acclimatisation Society, with the view of promoting the introduction and distribution of useful plants. As these papers met an actual want, there soon arose a demand for copies, which led to a rearrangement and enlargement of them, and to a subsequent publication of the work in a separate form in Victoria, and afterwards in India, New South Wales, in Germany, and in the United States. The present edition is the second that has been published in Victoria. There is therefore sufficient evidence that the work is considered a most useful one by those for whom it is intended. The greater portion of the volume consists of an alphabetical list of plants eligible for industrial culture in extra-tropical countries. Under each plant is given its botanical and vernacular names, its height and character, whether tree, shrub, or herb, the climate and temperature most suitable for its cultivation, the elevation at which it grows naturally, the economic and medicinal uses of its products, and in many cases its commercial value. The last fifty pages are devoted to most useful and complete tables and indexes. One of these classifies the plants under various heads—e.g., plants yielding cork, dyes, and fodder; fibrous, insecticidal, medicinal, oil-yielding plants, and tanning and seacoast plants, &c. Another, which must be invaluable to planters who have not access to botanical works, gives the botanical synonyms commonly used; and yet another classifies the plants in groups according to the return they are likely to make to the cultivator—i.e., whether the crop will be obtainable the first, second, or third year, or only after several years. These are details which are useful to farming emigrants and intending planters. A dip into the contents of this volume will show that Baron Mueller must keep a systematic record of current literature, since his book affords the latest information concerning the uses and properties of plants. Thus the anæsthetic action of cocaine, and the uses of jaborandi and pilocarpine are mentioned. Although chiefly

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intended for those engaged in agriculture, horticulture, forestry, and acclimatisation generally, the work will probably afford the medical practitioner who may have leisure to glance through its pages some useful suggestions. As a dictionary of economic and medicinal plants it will be widely useful. One can only feel surprise that such a work should not have issued from Kew rather than from the colonies, seeing that the former is, or should be, the centre of botanical information. Australia may be congratulated on the possession of a botanist who not only has thoroughly at heart the interests of the colony in which he resides, but who is anxious to benefit the whole world by the distribution of botanical knowledge of sound practical value.

The Sale of Food and Drugs Acts, 1875 and 1879, with Notes and Cases, also Practical Observations bearing upon Legal and Chemical Questions which have arisen in the Working of the Acts. By WILLIAM JAMES BELL, Esq., B.A., LL.M., of the Inner Temple, Barrister-at-Law, and Fellow of the Chemical Society. London: Shaw and Sons. 1886.—The Anti-Adulteration Acts, with all their imperfections, have been, on the whole, very successful. The annual returns show a great improvement, and in some articles almost a cessation in regard to adulteration. But much fraud which might easily be stopped still exists, and local authorities, even when they are energetic, which unfortunately is not always the case, are still thwarted by unnecessary difficulties in their attempts to suppress the evil. Among these difficulties the interpretation of the law is foremost. It is not surprising that Acts framed after keen contention, and embodying the compromises which generally come of such contentions, are in some places obscure, or, at any rate, indefinite. No book which has hitherto appeared has afforded nearly as much help for the judicious application of the Acts as the little volume before us, which we may say at once is absolutely essential to all who are concerned in the matter. Mr. Bell has given the Acts as they stand, and against the clauses has appended notes describing cases in which they have received legal illustration, with the grounds on which the decisions have been given. Unfortunately, these decisions have not been very uniform, and many of them are merely those of magistrates, and do not carry great weight. Even the precedents created by the higher courts do not always accord with scientific sense, and perhaps the best that can be said for the present legal position is that it seems to afford a sufficient basis for a new Act. When Parliament, or if Parliament—we hardly know which conjunction to employ—finds time to attend to domestic business, such an Act will, no doubt, be passed. Meantime, Mr. Bell's book will prevent the trouble and expense of many hopeless prosecutions, and will assist many proper ones; and it has an additional value in the evidence that it supplies of the unsatisfactory state of the present law.

Report on Water-supply and Sewage-disposal. By W. F. TAYLOR, M.D. Brisbane: James C. Beal.—This report is the result of an inquiry made by Dr. Taylor into matters relating to water-supply, disposal of sewage and house refuse, and house sanitation. The inquiry was conducted on behalf of the Government of Queensland, who had under consideration a Bill for making better provision for securing and maintaining the public health, and Dr. Taylor, who was about to proceed to England, was requested to undertake this duty. The writer has certainly made excellent use of the seven months which he devoted to studying these questions, and his report shows that he has made himself well acquainted with all the important facts concerning each. A condensed, but sufficient, account is given of the different methods of conservancy, and the chief points in house sanitation are touched upon. Dr. Taylor has not discussed the applicability of one method or another specially to Brisbane or other Queensland towns; we presume this is beyond the limit of his instructions; but his visit to England will be useful in enabling the Queensland Government to frame a general law on sound principles.

Solutions of the Questions on Electricity and Magnetism set at the Intermediate Science and Preliminary Scientific Pass Examinations of the University of London, from 1860 to 1884. By F. W. LEVANDER, F.R.A.S., Assistant Master at University College School, London. Second Edition. London: Lewis. 1885.—A cram-book, but a good one of the kind. Such books cannot, we suppose, be dispensed with while examinations are what they are.

Year-book of the Scientific and Learned Societies of Great Britain and Ireland. London: C. Griffin and Co.—The first issue of the Year-book of the Societies (for 1884) contained a concise review of the history, organisation, and conditions of membership of the various societies, compiled from official sources. The present issue (the third) gives a chronicle of the scientific work done during the past year, and aims at affording an account of such work carried out in the various departments during the past year, a record of progress, and a convenient handbook of reference. It is a thoroughly useful compilation.

Analytical Records.

BYNIN (LIQUID MALT).

(ALLEN & HANDBURY, LONDON.)

THIS is a highly diastatic malt extract, slightly alcoholic and of very agreeable taste. We find that at a temperature of 100° F. one part of the liquid acting for three hours will convert sixteen parts of starch into malt sugar and dextrin so completely that no blue colour is produced with iodine, so that one ounce will digest perfectly one pound of starch. This is a most satisfactory result, and, coupled with the fluidity and pleasant flavour, renders this preparation a most valuable one.

KINDER-MILCH (INFANT'S MILK).

(LOEFLUND & Co., FENCHURCH-STREET.)

This is described as condensed milk with malted wheat extract, but without cane sugar. The analysis of Professor Soxhlet of Munich represents it as consisting entirely of maltose, lactose, dextrin, albumenoids, milk, fat, ash, and about 20 per cent. of water. Our own partial analysis is in agreement with this, but in the sample we examined there was a certain quantity of soluble starch. No granules were, however, visible under the microscope, so that for practical purposes the conversion is complete. The preparation is of uniform buttery consistency, and fat globules separate easily on addition of water, as they do from milk. We have, therefore, nothing but praise to bestow. The "Kinder-milch" is certainly most nutritious and easy to digest, and is an excellent substitute for mother's milk.

PRESERVED MILK, FROM THE BAVARIAN MOUNTAINS.

(LOEFLUND & Co., FENCHURCH-STREET.)

A pure concentrated milk, unsweetened and without antiseptic. Following the directions on the label, we added 2½ parts of water, and obtained a milk which could not be distinguished from the ordinary produce of the dairy, and which proved on analysis to be of good quality. The analysis agreed with that performed by Professor Soxhlet of Munich, except that he found a slightly higher percentage of butter fat. Such slight variations must, however, occur from time to time. It will be seen that our opinion of this article of food is highly favourable.

SOLUBLE ESSENCE OF JAMAICA GINGER, GUARANTEED FREE FROM CAPSICUMS.

(STEVENSON & HOWELL, SOUTHWARK-STREET.)

According to our analysis and examination this is a perfect ginger essence. We have searched most carefully for the active principle of capsicum, and have not found the slightest trace. No less than 98·8 per cent. of the essence is volatilised by heat, including of course the fragrant essential oil, and of the residue only one-half is soluble in ether, so that the fixed resin in the essences only amounts to 0·6 per cent. As might be expected from its composition, the flavour of this essence is more delicate than that of the finest root

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THE LANCET.

LONDON: SATURDAY, JULY 3, 1886.

THE Parliament which has just come to such a premature termination may be remembered by the medical profession as the Parliament which passed the Medical Act of 1886. The profession had wellnigh lost faith in the power of Parliament to pass any Bill dealing thoroughly with the questions involved in any adequate scheme of medical reform. This loss of faith is not repaired by the Bill which has just become an Act, and which we print *in extenso* to-day. Judged either by what it does, or by what it leaves undone, the Medical Act is a very imperfect measure. It does not give a One Portal in each division of the kingdom; it does not equalise the severity or the cost of what should be equivalent examinations in different divisions of the kingdom; it does not secure that examinations which purport to be something above the common examinations shall be what they purport to be; it does not deal with questions of unqualified practice, or with the powers and duties of the medical bodies or the Medical Council, in regard to cases of unprofessional conduct in registered medical men; it does not give the Medical Council more efficient powers than it possessed in 1858, or reduce its size by abolishing the principle of separate representation of medical authorities in the Council; on the contrary, it abolishes the principle of *grouping* or combined representation, which we have always recommended, and which was recommended by the Royal Commission, nearly all of whose recommendations have been disregarded. This is a grave list of things not done by the new Act, which we regret to have to frame, and which greatly moderates our satisfaction with it, the more so when we consider that Parliament has no relish for Medical Bills, and will think that it has now discharged its duty on this score for many years to come.

Let us come now to things done by the Bill, and see if we can rise to a feeling of approval, if not of gratitude. Briefly, the Bill secures the following objects.

I. It enacts that after a certain day no person shall be registered under the Medical Acts who has not passed a qualifying examination in Medicine, Surgery, and Midwifery. The Act recognises that all universities acting singly may grant such treble diplomas, but that corporations must act in combination for this purpose. With the view of securing standards that shall guarantee sufficient knowledge and skill in candidates for diplomas, it is made the duty (Clause III., page 2, Subsection 2) of the Medical Council to appoint a number of inspectors to attend all or any of the qualifying examinations. This scheme may prove one of the most important in the Bill. But everything will depend on the way in which it is worked, on the number and character of the inspectors, and the instructions given to them by the Council. The Medical Council may represent to the Privy Council that the standard of proficiency of any body is not maintained, and the Privy Council may, "*if they think fit*," withdraw from the body the right to hold qualifying examinations. Here we may say that the action of the Privy Council is often required in this Act. The frequency has been somewhat abated, in deference to our own representation, but its powers are still considerable.

II. The Act contains a very novel clause (V.), which enables the Medical Council to enter into co-operation with a corporation that has tried and failed to enter into combination with another corporation to grant qualifying diplomas. This clause is understood to contemplate and facilitate the resuscitation of the Apothecaries' Societies, or, perhaps, to put a gentle pressure on other corporations to admit them into a combination scheme.

III. The Act enlarges and modifies the constitution of the Medical Council, by giving a whole member to certain bodies that have hitherto not been represented in the Council, or only so jointly with another similar body, and by conceding for the first time direct representatives of the profession, five in number. This is the part of the measure for which the profession will feel most grateful to Sir LYON PLAYFAIR. True, the five direct members will be confronted by about twenty members sent to represent the "interests" of examining bodies or universities, to say nothing of five Crown members, who have generally been men prominently *official* in the universities or corporations. But we must be thankful for small mercies—for the five members,—thankful to Sir LYON PLAYFAIR for four, and to Dr. FOSTER for inducing him to concede another at the expense of the Crown representation. The President of the Council is to be the returning officer for the election of Direct Representatives; he is to issue his order to the Branch Council for their election not later than Nov. 15th, and they are to come into office on Jan. 1st, 1887. The direct representatives are to be chosen by registered medical practitioners in the several parts of the United Kingdom. They must themselves be registered medical practitioners. The regulations for the conduct of the election are to be made by the Privy Council. The candidates must be nominated by at least twelve registered medical practitioners. The election is to be conducted by voting papers to be issued by the Branch Council in each division. Clause IX. provides that on the occurrence of a vacancy in the chair, the President shall be chosen from the members of the Council. An important clause (X.) provides for the revision of the constitution of the Medical Council at any time by the Privy Council, on the suggestion of the Medical Council. A Body that is diminishing in importance may, under such a revision—brought about by a representation of the Medical Council to the Privy Council,—be deprived of its representative in the Council. On the other hand, a new Body, with the power of granting the treble qualification, may by the same process be admitted to representation.

Clause VI. has a rather pretentious title: "Privileges of Registered Persons." The clause, however adds nothing to the existing privileges of registered persons, and detracts in no degree from the existing and excessive liberty of unregistered persons. The Bill, in fact, deals incourageously with the question of illegal practice, and shows a tenderness to quacks, or a fear of their friends in Parliament, which is not magnanimous or for the public good.

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The Second part of the Act has reference to the registration of colonial and foreign practitioners. It was right to take powers for the recognition and registration of such degrees; but we objected to a power reserved for the Privy Council to "order" the registration of such degrees by the Medical Council, after it had refused to recognise them. (Clause XIII., Subclause II.) It is strange, and not very creditable, that the Council took no objection to this provision, which might place it in a humbling and undignified position. We expressed ourselves strongly on the subject, and the clause has been somewhat softened in tone and process; but the power still remains. Holders of Foreign Degrees, who are also registered medical practitioners, will be able to cause a description of such degrees to be added to their name in the Medical Register, provided they satisfy the Medical Council that the degrees were obtained after examination and prior to the passing of the Act.

The Third part of the Act contains miscellaneous provisions. One of these has in view default of duty by the Medical Council, in maintaining standards of examination, in appointing inspectors of examinations, or in any other way; and enacts that the Privy Council may, of their own motion, take up the neglected duty of the Council. There are also sundry provisions for the registration of qualifications in midwifery, in sanitary science, &c.

Such is the Medical Act, 1886, representing the conceptive and parturient powers of three or four Parliaments and as many Ministries. We cannot affect enthusiasm for such a piece of legislation. Possibly the system of Inspectorships may work more effectively and even more economically than the system of Visitation hitherto followed. The introduction of the Privy Council as an authority to check and control the Medical Council, if anything more than a form, is a painful proof that the Medical Council cannot be trusted to act independently. We are glad to acknowledge that, somewhat in deference to our own representations, the frequency of such introduction has been materially diminished. The most boasted feature of the Act is the requirement of the triple examination in Medicine, Surgery, and Midwifery as henceforth a condition of *qualification*. But there is now scarcely an examination in which the three branches are not already included, and the Bill adds to the cost of qualifications by requiring the combination of corporations. The concession of direct representation has been long a foregone conclusion. But nevertheless, as those who have long laboured for it, we are thankful for it, and comment in another column on some of its aspects. In fine, we accept the Act of 1886 with some satisfaction, but with a painful feeling that the evils revealed by the Royal Commission remain unremedied.

SEA-VOYAGING has in recent years greatly advanced in favour as a therapeutic agent. Few vessels now start on any of the longer voyages without one or more passengers whose chief object is health, and the few fine Australian clippers which still hold the seas against the encroachments of steam frequently reckon on their list as many as a score of invalids for a single voyage. We see overtaxed statesmen and weary brain-workers of every class resorting to it for the resuscitation of health; and regular announcements now appear in the press of "invalid ships" advertised to sail the summer seas, and fitted up with every requisite to secure the comfort of the weak and ailing.

There can be little doubt that this custom rests on a firm basis of reason, and is amply justified by its results. Sea air is a marvellous tonic and restorative, and nowhere can it be enjoyed to such thorough advantage as on shipboard. It appears to owe its beneficial qualities mainly to its perfect purity and entire immunity from those sources of contamination which are more or less operative everywhere on land. Pure air can be enjoyed on the desert or on the mountain top, but in its highest perfection probably on the surface of the ocean. Here all the usual sources of atmospheric pollution — such as putrefaction, combustion, and effete animal matters — are conspicuously absent. Between sea and sky sweep unrestrained the ocean winds, ready to bear far away any taint of corruption which may from any chance have been generated. How vastly important in this consideration, in view of modern scientific teaching, need hardly be pointed out. This age sees in morbid germs the "power and potency" of a vast range of diseased action, and recognises, no doubt truly, in corrupted air the nidus in which alone these germs can acquire the development necessary for their full activity. Our present knowledge all points to the conclusion that in an ideally pure atmosphere all germ-begotten disease would be an impossibility, and the aim of modern preventive medicine is not so much to destroy the sources of contagion (which is probably for ever beyond our power), but to deprive them of those necessary conditions of activity without which they are comparatively innocuous and inert.

It is unfortunate that on shipboard, while perfect purity of air always exists on deck, a very different condition too commonly prevails in the saloons and sleeping cabins. Good air being always obtainable by stepping on deck, ventilation is often insufficiently attended to; the cubic space allotted to each individual is wholly inadequate for the delicate and ailing, and in many ships the evil odours in some manner mysteriously generated are indescribably nauseous and disgusting. In this respect steamers are much more at fault than sailing vessels. Now, the healthy passenger, who goes to sea merely as a means of reaching his destination, may afford to endure with what patience he can command the foul air of an unventilated saloon or the still more noxious atmosphere of a small cabin, where four people are crowded together in a space that on land would be thought ridiculously inadequate for one; but the invalid cannot tolerate such things without putting to the hazard the major part of the advantage which he hoped to gain by braving the perils of the sea. The first and most imperative requisite, then, of the invalid ship is adequate saloon accommodation, roomy sleeping cabins, thorough ventilation by day and night, and rigorous care in checking the evolution of foul gases.

Purity is not the sole virtue of sea air. Its remarkable equability is hardly less important, especially for consumptive invalids. Sudden changes of temperature are practically unknown upon the ocean, and the diurnal range of the thermometer there attains a minimum. Hence sailors enjoy a comparative immunity from diseases traceable to exposure, catarrhs are rare among all classes on ship-

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board, and in tropical and subtropical regions passengers frequently sleep upon deck without injury. This equability is of the first importance to all sufferers from respiratory disease, who are prominent amongst the number of those who derive signal benefit from the sea voyage. The barometric range at sea exhibits for the most part great equability, and the changes of pressure are more regular and uniform than upon land. This is probably not without an important influence upon the organism. The impregnation of sea air with traces of bromine and iodine has also no doubt its part in the general therapeutic influence exerted.

One of the first effects of the ocean voyage, after the usual initial inconvenience of sea-sickness has been successfully surmounted, is a great stimulation of the appetite. Hence the choice and regulation of food on shipboard are matters of vital importance; but too often the dietary, even on the best ships, is arranged on a purely routine system, with little regard to change of climate or to the special needs of the invalid. In some ships roast beef and plum pudding greet the passenger with unfailing regularity even in the sultriest region of the torrid zone. Meat is abundantly supplied and liberally partaken of as often as three times daily, although the heat of the atmosphere and the scanty amount of physical exercise usually practised on shipboard should suggest even to the most thoughtless some moderation in the consumption of animal food. From such indiscretions spring the dyspeptic troubles which in so many cases constitute a serious set-off to the great benefits so usually derived from the ocean voyage. The dietetic principles which should prevail on shipboard are sufficiently obvious. In the higher latitudes, if the passenger take a reasonable amount of exercise, there is no reason why he should not eat and drink as has been his usual habit on land, provided he keep in view that at sea there is increase of appetite with decrease of activity. As the equator is approached, butcher's meat should give place to poultry, farinaceous foods should have the preference over the heavier articles of diet, fat in the form of such dishes as suet puddings should temporarily disappear from the daily bills of fare, and vegetables should be supplied as liberally as the exigencies of ocean voyaging permit. As regards drinks, there is nothing so grateful or so generally useful in the very hot latitudes as the simple juice of the lemon. Alcohol is injurious, and all hot drinks are at such times usually in a large measure voluntarily abandoned. As the vessel runs into cooler latitudes, the usual dietetic practices of the average Englishman may be gradually resumed.

With such simple and obvious precautions, the ocean voyage may take its place as one of our most valuable restoratives. It is applicable to most cases of debility, from whatever cause arising, provided there be neither great prostration nor marked irritability; it is especially valuable in incipient phthisis and in hereditary tendency to scrofula, and it finds one of its most useful applications in cases of retarded convalescence from surgical operations or acute disease.

THE interesting observations by Dr. COATS, which are to be found in another column, go far to determine a question that has exercised the minds of students of auscultation throughout the seventy years that this method of physical examination has been practised. What is the cause of the pulmonary breath sounds? Are they, as LAENNEC conjectured, due to the mere transit of air through the bronchial passages? Are they produced by the actual unfolding of the lung on its expansion, and the outflow of air from the lobules with expiration? Or are they extra-pulmonary in origin in whole or in part? Some of these conjectures are purely fanciful, and, since the universal adoption of the *veine fluide* theory, are quite untenable; but a clearly satisfactory solution is still complicated by the readiness with which sound waves are conducted through the media that we find in the respiratory apparatus. The doctrine that the respiratory murmur is wholly extra-pulmonary, and consists really in the sounds created by the passage of air through the glottis, modified by the peculiar texture of the lung through which they are conducted, has received some countenance both abroad and in this country. But this teaching was fairly disproved by the experiments of BOUDET and CHAUVEAU, and has practically received a *coup de grâce* at the hands of Dr. COATS, whose observations are the more important because they were conducted upon the human subject. By means of the apparatus which had been substituted for the larynx, after extirpation of that organ, Dr. COATS was enabled to test the auscultatory phenomena when the glottic aperture was absent; and he was further able to modify the conditions of his experiments and thereby to arrive at juster conclusions. Thus, in the first place, where breathing was only carried on through the tracheal tube, the loud expiratory sound produced at the open mouth of the tube could be heard to be freely conducted all over the chest in the line of the tracheo-bronchial channels, but to be obviously damped by the pulmonary parenchyma. Since the conditions did not allow of a *veine fluide* being produced at the open mouth of the tracheal tube during inspiration, there was only a very feeble inspiratory murmur audible over the trachea, which became more intense as the lungs were reached, eventually assuming the characteristic vesicular character. This observation by itself is of much value, as showing not only the readiness with which the trachea and bronchi conduct an expiratory murmur, but that the pulmonary inspiratory bruit is probably solely produced at the infundibula. Again, by causing the patient to breathe through the narrower pharyngeal tube, the actual conditions of the glottis were simulated, with the result corresponding to the signs observed in the natural body. Lastly, the experiment was further varied by narrowing the tracheal tube, and thus again reproducing a "glottis," with the consequent generation of sound both during inspiration and expiration, the inspiratory murmur much predominating over the expiratory, in the direction of the current. The conclusion arrived at by Dr. COATS was, it will be observed, verified by a committee composed of Drs. GAIRDNER, NEWMAN, and STEVEN, and it amounts to an emphatic denial that the glottis has anything to do with the production of the normal vesicular murmur. Thus, as so often happens, do we find a theory which had been accepted by one generation overturned by another; and, small as the point in question may be, it is at least instructive for those who may pursue the path of inquiry that still remains open. We have now before us two sources of distinct

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respiratory sounds — the laryngeal and the pulmonary. The limits of the former have been clearly ascertained; the precise mechanism of the latter remains matter of conjecture. By excluding laryngeal sounds from any share in the production of the vesicular bruits, we are driven to seek in the structure and mechanism of the pulmonary tissue itself for the conditions of these latter. But no one can assert that we know precisely in what way these sounds are produced. We find them modified in disease and variously altered with the varying textural changes in the lung, but a demonstration of their mode of production which shall also harmonise with these changes is still to be desired.

IF Europe is again this year to be visited with cholera in an epidemic form, it will probably be during this month that the diffusion will take place from the centres in which the disease has manifested itself since the cessation of the epidemic prevalence of 1885. It may therefore be convenient now to give a summary of the movements of cholera in Europe during the present year, in so far as official and other intelligence has been received in this country.

In France the disease has been almost entirely confined to the north-west, where the neighbourhoods of Brest and Quimper appear to have suffered in consequence of importation from the south. In several localities the disease was a continuance of that which prevailed before the close of 1885, and in others the extension was a new one. Early in January, Concarneau, Douarnez, Audierne, and Brest were attacked, and by the middle of March the cholera deaths which had taken place in those localities were 13, 27, 4, and 36 respectively. A later occurrence of the disease took place at Tréboul, where a large number of cases were announced to exist; but some exaggeration probably took place, for the mortality was limited to six cases. Since the middle of April no cholera intelligence has been received from France.

In Spain, cholera has during 1886 been altogether limited to the extreme south, in so far as any intelligence has been allowed to reach this country. Early in January the disease caused 11 deaths at Algeciras; about the same date 8 fatal attacks took place in the province of Malaga; and later on a summary account of what had taken place at Tarifa was received, from which it appeared that up to the end of the first week in March 63 deaths had been registered there. No further news has since been received on the subject.

Italy has been much more severely affected since the close of last year than either France or Spain. The first cholera deaths this year were announced from Brindisi early in April last, and the disease extended into May, by the end of which month 31 deaths had occurred. A cessation of fatal attacks then ensued, but after the middle of June the disease again began to cause a daily fatality. Up to the end of the month over 60 deaths took place, making a total of between 90 and 100 deaths at Brindisi. When the disease first appeared at Brindisi, 2 deaths also occurred in the neighbouring town of Monopoli. The disease further extended into the province of Brindisi, where fatal attacks took place during May, and then, after a cessation, recurred and were maintained up to the end of June, some 70 deaths in all being registered. Soon after this the disease was found to prevail in the neighbouring port town of Bari, where fatal attacks were first noted about the middle of May, and where, with but occasional intervals, they have been maintained into the third week of June. In May 70 deaths took place there, and to these must be added some 35 during the month of June, or over 110 in all.

But before Bari was infected intelligence came as to the reappearance of the disease in the north. During the winter months cholera occurrences had been announced in the districts between Venice and Trieste, and early in May isolated deaths occurred again in Venice. Steadily the disease made progress, and by the end of the month over 150 fatal attacks had occurred there, the largest fatality being reached towards the end of the month. With the onset of June the fatality was maintained, but since the middle of the month there has been a steady tendency to decrease until the fatal cases have been reduced to about one a day. During June over 210 deaths occurred, making in all a fatality exceeding 360. During the same period of two months, over 300 cholera deaths took place in other localities in the province of Venice. Setting aside a few isolated attacks due to importation, no further outbreak of importance took place until Codigoro, a port town to the south of Venice, on the estuary of the Po, was announced to be infected during the fourth week of June, and where 41 deaths were stated to have taken place. With this single exception, cholera in Italy is less fatal than it was about a month ago, but nearly 950 deaths have occurred in that kingdom this year, and the tendency to abatement, with subsequent recurrences on a wide scale, is too important an element in the natural history of cholera diffusions to give much hope of a real decline in the prevalence at this time of the year. July and August are essentially the cholera months for Europe, and these months we still have to face.

THE enactment of direct representation of the profession in the Medical Council is a historical fact to be considered. It is painful to remember that cliquism has always existed in the profession. It used once to dominate nearly all hospital appointments, and he would be a bold man now who would deny that it sometimes yet tells in elections that should be purely impartial. We shall not here dwell on the past. At length, against Governments, and against the whole tone and letter of the Medical Council, the Legislature has recognised the reasonableness of giving to medical men, whose fees maintain the Medical Council, whose education is supposed to be regulated by it, whose names may be erased from the Register by it, a representation has been conceded. The representation is indeed inadequate; its proportion to that of the representation of officialism and "interests" will be that of one to five or six. But, such as it is, it is at last a fact. Let us hope that other lesser authorities—the councils of our colleges, &c.—will take a lesson and show a little more respect to the claims of the rank and file of the profession. It is premature to discuss the persons who should be entrusted with this honourable duty. It is more to the point at present to consider the nature of the duties they will be called upon to discharge, and the general principle which should guide the profession in selecting its representatives. There are many reasons

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why this representation should be begun well, both as regards the method of conducting the election and the selection of candidates.

First, as to the method of election. Our readers will see by another article, and by the Act itself, which we publish to-day, that the election is by voting-papers. Each member of the profession in November will receive from the Branch Council of the division of the kingdom in which he lives a voting-paper, in which he will be able to vote for as many direct representatives as are to be elected for the division. It is of the greatest possible moment that this election should not degenerate into a contest like that for a Member of Parliament. Canvassing in the ordinary sense of the word should be discouraged. The number of candidates should not be too great, and when nominated, as they require to be, by at least twelve members of the profession, they should leave their election very much to the unbiased vote of the members of the profession.

The direct representatives of the profession will have it in their power, we trust, from time to time to be of much service, primarily to the public, and secondarily to the profession. But they will have to keep within the four corners of the Medical Acts, and they will best discharge their own duties to their constituents by strictly observing the limits of the law under which they act. This law may ultimately have to be amended, and for once the representatives of the profession will have the vantage-ground of the Council for urging the necessary amendments. But for the present all they can do will have to be done under the present Acts. Their duties will have reference chiefly to—(1) the regulation of the subjects of preliminary and medical education; (2) the accuracy of the Medical Register; (3) the perfection of the Pharmacopœia; (4) the fairness and efficiency of the examinations of the various medical authorities; (5) the case of members of the profession lying under imputation of unprofessional or criminal conduct. These are all weighty subjects. They have hitherto been treated by the Medical Council too much as if they were the peculiar care of the medical schools and examining authorities. In future we may hope to have practical contributions to their settlement by members of the profession who view these questions from the standpoint of general practice. Whoever the gentlemen may be to be chosen to represent the profession, it seems desirable that they should be chosen chiefly from the ranks of general practice. Members of the consultant and the official section of the profession already practically make up the Council. It is time that the ranks of general practice should be represented.

ON the occasion of the celebration of the jubilee of the British Medical Benevolent Fund, Sir James Paget, who has taken immense trouble to render the gathering a success, will be supported by Sir W. Jenner, Sir A. Clark, Sir J. Lister, Sir Prescott Hewett, Sir J. Fayrer, Sir Dyce Duckworth, Dr. Habershon, Mr. G. Pollock, Dr. Clifford Allbutt (Leeds), Mr. Cadge (Norwich), and Mr. Lund (Manchester). Cardinal Manning and the Dean of Gloucester will be among the visitors. The benefits conferred by this fund upon the members of the profession have been but recently stated in a forcible manner by Dr. Broadbent; and we sincerely hope that, despite the dissolution of Parliament and the consequent turmoil of a general election, the jubilee celebration will earn the title of "a great success."

Annotations.

"Ne quid nimis."

THE UNIVERSITY OF LONDON.

MR. MAGNUS'S scheme for reconstituting the University passed through Convocation on Tuesday last without any substantial modification, except the omission of the clause giving power to the Senate to confer honorary degrees. Convocation, though not without protest on the part of many members, has pledged itself to the adoption of fundamental changes, bringing the authorities into closer contact with the teachers. Certain educational institutions having one, or more than one, faculty of university rank are to be admitted as Constituent Colleges; a Council of Education, composed of representatives of Convocation, of Constituent Colleges, and of the Examiners of the University, is to be formed; and the Senate is to be modified by the introduction of direct representatives from University and King's Colleges, the Royal Society, the Colleges of Physicians and Surgeons, the Council of Legal Education, and the Incorporated Law Society. By consenting to such a scheme as a basis of conference with the Senate, Convocation, after summarily rejecting Lord Justice Fry's proposals, has, under the guidance of Mr. Magnus, practically acceded to every demand which has been made by those who support the Teaching University scheme. The power of the teachers becomes a substantial factor in the University, instead of being consistently ignored or resisted. Moreover, the institution of an intermediate body between the Senate and Convocation, no matter whether it be called a Council of Education or a Board of Studies, is a distinct gain to the teaching element, and by it many salutary changes in the examinations and regulations are sure to be initiated. The change in the vote of Convocation on Tuesday from that given in November last shows how little value can be attached to the opinion of such a fluctuating body, and it was apparent at the meeting that most of its interest in the reform had dwindled away. About seventy members only were present, and at no time were there a dozen medical graduates at the meeting. Since the formulating of Lord Justice Fry's scheme, the chief reformers on the teaching line—such as Sir Edward Fry himself, Mr. H. Matthews, and Dr. Pye-Smith—have been appointed on the Senate, and the vote for Dr. Wilks will add another distinguished Fellow on the same side. The centre of interest has shifted now from Convocation to the higher body.

THE CROONIAN TRUST.

THE increased income from this Trust, which has caused so much perplexity to the Fellows of the Royal College of Physicians, was finally disposed of at the meeting on the 29th ult. The subject had been before the College at several previous meetings; the Council had submitted two schemes, and several eminent Fellows had proposed amendments, so that only after a protracted discussion could the final voting be taken. We venture to think that the decision not to tie the hands of the College authorities any tighter than is absolutely necessary for the satisfaction of the legal conditions of the Trust is a very wise one. The very fact that it is now proposed to alter Lady Sadlier's bequest from the prosecution of the study of Anatomy, to which she devoted it, to the wider area of "Anatomy, Physiology, and Pathology, with a view to the prevention, control, and cure of diseases," shows plainly that what is considered the most urgent need in the progress of medical science in one generation is in an entirely different position in the next. For this reason especially, we are pleased to see that the exclusive devotion of the

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Trust to the prosecution of Therapeutic Science was rejected. Therapeutics now comes under the Trust as a branch of physiology in respect to the control and cure of disease just as physiological chemistry does, but it has not a primary claim on the attention of the lecturers and investigators who will be appointed by the College on this foundation.

THE INTERNATIONAL MEDICAL CONGRESS.

In spite of differences on code questions, territorial questions, &c., in the profession of the States, it is evident that there is to be an International Medical Congress in Washington. This being so, it ought to be the endeavour of all parties to make it a complete success, worthy of the nation that is to act as host, and the nations that are to be received as guests. Much has yet to be done in this way. Undoubtedly some of the best known leaders in the States are still standing aloof. We should be glad to hear that they were abandoning that attitude and kindly taking to arrangements which are the best compromise that can be made in the circumstances. Dr. Nathan S. Davis, of Chicago, is to be president in place of the lamented Dr. Flint, and the preliminary organisation of the Congress is in a forward state. Dr. Davis is a veteran in the profession, and much respected, though less known in Europe than some of his *confrères*. A correspondent, who is well informed, thinks the arrangements are now on the high road to success. He says that efforts will be made greatly to reduce the cost of tickets for the voyage and for visiting all parts of the country, and that arrangements in Washington are likely to be satisfactory. Another valued correspondent, writing from New York, says: "The Congress is to be, and it is to be a success. The troubles are healing over, and before the Congress meets I think all difficulties will be, to all intents and purposes, settled."

ELECTION MORTALITY.

THERE is a profound and, as yet at least, inscrutable mystery about the operation of those laws of nature which determine the rate of mortality. This is equally true of the civilised and of the uncivilised portions of the human race, scattered over the whole face of the earth, under the most diverse conditions. If at any time it seem likely that the rate of mortality will fall below the normal point, some special "visitation," as it is called, occurs, and the balance of life and death is readjusted. History supplies conclusive evidence of the truth of this general proposition. It is nevertheless, startling to be confronted with the facts about mortality, and perhaps no others are more striking than those which show that every great commotion, whether of mind or muscle, produces its crop of deaths due to the disturbance set up or the effects following upon it. A general election forms no exception to the working of this law. That of 1886, following as it does close upon the election of 1885, is only too likely to be fruitful in this terrible respect. Already there have been cases of death occurring suddenly as the result of exhaustion by nerve excitement, and by disease either contracted or aggravated in the course of the proceedings connected with the election. It is more than probable we shall have to deplore further losses. There is something in this wholly apart from the mere incidence of mortality on the proportion of persons occupied with the political crisis. We know how—resting for its basis of fact on the incidence of the death-rate proportionally—there has grown up a strongly-rooted belief that of thirteen persons dining together on any single occasion one will die before the end of the twelve months following. The truth is, that of any large number more than one is likely to die, and so on. The same law of proportional incidence of the average mortality, of course, applies to classes or sections of the community generally; and it is inevitable that of the thousands actively engaged in the election now in progress, a notable number must, in the nature of things, die before it is completed. Outside this, there is the fact that the perturbation into which minds and bodies are thrown by the exceptional business of the crisis has what must be regarded as its own proper fatality. In short, a definite number of persons will be *killed* by the election. With a view to minimise that number as far as possible, it would be well if the fact last mentioned could be more generally understood. There is the making of death in the extreme mental excitement stirred by the election, in the exhaustion of brain and muscle which it must cause, and in the exposure to heat or cold which cannot be avoided. It is easy to make light of these matters, but that does not in the least degree diminish their importance. Far more reasonable would it be to recognise the risks entailed by exceptional activity, or exposure, or both, and to meet the dangers which actually exist with rational measures of precaution. Those who are conscious of weakly organisms would be simply prudent to avoid too severe demands upon their strength and vitality; and those who, while thinking themselves to be sound and strong in mind and body, are conscious of being what is pleasantly described as "excitable," should understand that irritability seldom exists without weakness, although the seeming energy of excitable persons is apt to mask their want of real power and stability. It is better to be a little niggardly in the output of strength than to die of exhaustion, and discretion is certainly the better part of valour in respect to the running of risks by undue exertion or exposure. It is no part of our business to suggest or even countenance the neglect of duty in a social or political crisis; but there are always two ways of doing a thing, and those who must need mingle in the fray of a particularly hot election contest will find the coolest and the most self-controlled way of doing what has to be done at the behest of duty the best.

REMARKABLE ACCIDENT WHILE TAPPING A HYDROCELE.

A RARE and remarkable accident during the ordinary operation of tapping a hydrocele is reported from Bordeaux. The patient was a healthy peasant of forty-four years of age, who had never suffered from any venereal affection. The hydrocèle, which was on the right side, had been in existence some two years, and had followed an accidental blow. As it continued to increase in size, he sought advice, and was admitted into M. André Boursier's clinic. When the trocar was introduced, about 125 grammes of straw-coloured fluid came away. M. Loumeau, who performed the operation in M. Boursier's presence, then, having satisfied himself that the extremity of the cannula was free in the cavity of the tunica vaginalis, proceeded to inject gently sixty grammes of a mixture of tincture of iodine with twice its volume of water. All at once the patient complained of severe pain in the cord and the loins, with cramp in the right forearm. The ulnar border of the right hand then became flexed, the ring and small fingers being completely flexed, while the index and middle fingers, though extended as far as the second and third phalanges were concerned, were flexed at their metacarpo-phalangeal articulations. The thumb also was flexed and brought near the fingers. Exactly the same position was shortly afterwards assumed by the left hand. There were no convulsions or syncope. After a few minutes the "ulnar *griffe*" began to relax, and the index and middle fingers became flexed completely on the hand, which itself became strongly flexed on the forearm. All the muscles on the front of the forearm became hard and contracted. The palmar fascia was strongly retracted, and

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the palmaris brevis quite tense. On both sides the ulnar affection had given place to contraction of the muscles supplied by the median nerve. The patient was unable to articulate a sound, his tongue hanging loosely in the buccal cavity. The muscles supplied by the hypoglossal nerve were also contracted, but for a short time only. The forearms were shampooed, and after nearly an hour the muscles relaxed. The patient recovered completely, and left the hospital after a few days. M. Loumeau has been unable to find an example of this kind in medical literature; but M. Desplats of Lille published a paper on pleural eclampsia last year in the *Semaine Médicale*, in which he refers accidents connected with pleural operations to four categories: (1) Toxic action of the liquid injected, (2) true epilepsy, (3) uræmia, (4) reflex action. The author surmises that the accident was due to reflex irritation of the nerves of the serous membrane by the liquid injected. The testicle, it may be remarked, was in no way injured. Whatever explanation may be offered, the fact remains, which is itself sufficiently extraordinary, of a healthy peasant man of middle age being thrown into a state of severe nervous spasm by the performance of a very simple and very common surgical proceeding.

OATHS IN COURTS OF LAW.

IT will be remembered that several letters recently appeared in these columns under the heading "Kissing the Book." They arose from the circumstance that a medical witness, when giving evidence in the Divorce Court, objected to kiss the book presented to him, on the grounds that, as the two previous witnesses were common prostitutes, he might incur a risk of infection. Simultaneously, several medical witnesses in different parts of the country made each a similar objection, the difficulty in each case being eventually got over by the witness being permitted to kiss the open book. Mr. John Patterson, J.P., of Liverpool, has recently addressed a letter to one of the local daily papers, in which he calls attention to an Act of Parliament which is still in force, and which runs as follows:—

"1 and 2 Victoria, c. 105, 14th August, 1838.—Be it declared and enacted—That in all cases in which an oath may lawfully be and shall have been administered to any person, either as a juryman or a witness or a deponent in any proceeding, civil or criminal, in any court of law or equity in the United Kingdom, or on appointment to any office, employment, or on any occasion whatever, such person is bound by the oath administered, *provided the same shall have been administered in such form and with such ceremonies as such person may declare to be binding*; and every such person, in case of wilful false swearing, may be convicted of the crime of perjury in the same manner as if the oath had been administered in the form and with the ceremonies most commonly adopted."

Mr. Patterson contends from this that any Presbyterians may claim to be sworn as their co-religionists in Scotland and Ireland are, *with uplifted hand*. We have taken some pains to ascertain the law upon this point, and find that not only is this true, but also that any native of Scotland or other country where the oath is administered with uplifted hand may claim to be sworn in a similar manner. And, moreover, any person who declares that that is the method of taking the oath which he considers binding may claim to be so sworn, be his or her nationality or religion what it may. All that is required by the Court is that an oath shall be taken before it. It will thus be seen that all those witnesses who object to kissing the book can avoid doing so, provided they declare that by holding up the right hand while the words of the oath are repeated they consider themselves duly sworn. Whether this may lead to the universal adoption of the Scotch oath remains to be seen, but there can be no second opinion as to its being preferable to the present mode adopted in England. Even if the risk of infection were remote, the successive handling and kissing of the same book by a number of witnesses is, to say the very least, an uncleanly practice. Should any objection be taken by the Court to a wholesale preference for the uplifted hand, perhaps each witness will be permitted to bring his own Testament.

THE INDO-COLONIAL EXHIBITION AND EMIGRATION.

THE opening of an Emigration Inquiry Office in the Exhibition at South Kensington will for several reasons be regarded as an important step in the right direction. As to its economic significance there is little need for us to speak, though its salutary influence in helping to deplete an overcharged labour-market is obvious. Another aspect of emigration should not be forgotten. There are many in humble life who are and may long continue to be physically sound, but who are constitutionally unsuited to our uncertain climate. Everyone is familiar with the lymphatic type so common in Teutonic races. Capable of much muscular exertion, but dependent in a marked degree upon wholesome conditions, it suffers unduly by the crowded and laborious life of great cities. Emigration to the Southern Colonies offers, to any who inherit this predisposition, the opportunity of labour out of doors in an equable climate, and in that the best assurance of healthy development with a maximum of usefulness in time to come. For working men generally, indeed, if they be healthy, active, and sober, the chances, both vital and social, are often more favourable in wider Britain than at home, more favourable in point of daily bread, and, for the enterprising, of advancement. At the same time, all will admit that an emigrant rush is by no means desirable either for the emigrants or the country they leave behind. Fortunately it is not likely to occur. Of our unemployed but able population, particularly in the towns, we may still say there is enough and to spare.

ERYTHEMA AS A SPECIFIC DISEASE.

THE simplification of an overburdened terminology and the reduction of numerous lesions under one common head is as important a process in the advance of medical science as the converse operation; and in no department can this be more satisfactory than in that of diseases of the skin, where the terms descriptive of morbid states are excessive and not always used in the same sense. The number of species which corresponded to the genus erythema was formerly very large. An important advance was, however, made by Hebra when he united them under the term Erythema polymorphœa, thus dispensing with such species as E. papulatum, circinatum, nodosum, &c., which are only used for purposes of description. But a further simplification of this group is arrived at by M. Villemin, who read a paper at the *séance* of the Academy of Medicine on May 18th, in which he combated the very prevalent idea that erythema was nothing more than a local disease of the skin, and proposed that in future we regard it as a specific disease, of which the skin lesion bears a part similar to that played by the rash in scarlatina. This is not altogether a new idea. Erythema has been regarded as connected with rheumatism or as one of the manifestations of the rheumatic diathesis; some observers have thought that the joint pains which so often accompany the disease are secondary to it, in a similar way to the joint affections which occur during the course of scarlatina. But M. Villemin regards the pains in the aponeuroses and the swelling in the joints as manifestations of one disease, of which the cutaneous eruption is also another sign. His chief reason for coming to this conclusion is that the various manifestations all yield in a marvellously rapid manner to

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the action of one drug—viz., iodide of potassium,—which tends to prove that they all have a common origin. The effect of this drug is surprising from its rapidity; given in doses of thirty grains, the fever, pain, and rash are held in check in the first twenty-four or forty-eight hours; while in three or four days there is no trace of the disease, though, as may be supposed, a slightly longer time is required to allow of the absorption of any liquid which has been extravasated into the skin. The general truth of this view will no doubt be admitted, but many may object to the method. Because several diseases are benefited by the same drug, it in no way follows that they have a common origin.

REPEATED VACCINATIONS IN THE INCUBATION STAGE OF SMALL-POX.

A RUSSIAN medical student, M. Gubert, recently performed a series of experiments with calf vaccine, chiefly making use of dogs as subjects for the purpose of deciding whether there is any use in vaccinating persons (1) who have already been infected by small-pox, (2) who are in the incubation stage, or (3) in whom the disease may have actually begun to manifest itself. This question, he says, has generally been decided in the negative, on the ground that insusceptibility to small-pox is only obtained thirteen or fourteen days after vaccination—that is, after a period at least equal to that of the incubation stage. Having somewhat modified the method of vaccinating, M. Gubert, who describes his experiments in the *Zemskaya Meditsina*, was able to obtain vaccine vesicles in a shorter time than usual. By repeating the vaccination on three successive days he was able to produce mature vesicles in four or five days. This rapid saturation of the organism with the vaccine virus enabled M. Gubert to arrest the development of the disease in twenty-seven persons, in whom, he states, he was quite certain that the small-pox was incubating, while in twelve others the disease was so modified as to be considered only varioloid. The vaccination was performed in some cases when the temperature had already reached 40° C. It should be remarked that all the experiments were carried out with calf lymph, so that we are as yet without information as to whether humanised vaccine could be made to "saturate the organism" sufficiently to produce mature vesicles in four or five days. At all events, M. Gubert's observations are interesting, and worthy of repetition by other practitioners.

TEA-DRINKERS' DISEASES.

IT is not a little curious that the diseases arising from the wrong use of tea should be met with in greater frequency in countries foreign to its growth. It might have been supposed that where production went on there would be found those evils that attend the consumption of tea in their greatest extent; but such does not appear to be the case. The diseases due to tea are well known to doctors, but the public seem to be strangely indifferent to the teachings of their medical advisers in these matters. Recently in France M. Eloy has reminded medical men how vast is the number of diseases owning an allegiance to the dominion of Queen Tea. The list of headings in M. Eloy's paper is well calculated to arouse attention, and, we hope, to lead to some abatement of this widespread disorder. America and England are the two countries that are afflicted most with the maladies arising from the excessive consumption of tea. Individuals may suffer in a variety of ways. It is customary to speak of acute, subacute, and chronic "theism"—a form that has no connexion with theological matters. It is possible to be a "theic" by profession or a "theic" by passion. The predominance of nervous symptoms is a characteristic of theism; general excitation of the functions of the nervous system may be observed; or the weakness may be noted more especially in the brain as distinguished from the spinal cord. Perversion of the sense of hearing is not at all an uncommon symptom—patients hearing voices that have no real or objective existence. The irritability that overtakes women so frequently may sometimes be clearly traced to an excessive indulgence in afternoon tea. It is a mistake to suppose that it is the poor sempstress who is the chief sufferer from theism. No doubt the tannin which tea that has been standing long contains does a great amount of mischief, but the derangement that it causes hardly belongs to that class of diseases with which we are at present concerned. Rather does theism belong to that genus of disease in which morphinism, caffeism, and vanillism are found. The habit of tea-drinking is one that grows on its victims like the similar ones of opium or alcohol. Taken in strict moderation, and with due precautions in the mode of preparation, tea is, like alcohol, a valuable stimulant; in its abuse there is also a certain analogy. There is hardly a morbid symptom which may not be traceable to tea as its cause. This is a fact that general practitioners often use to their own satisfaction and to their patient's advantage, if it happen to be that kind of patient who does not object to make some sacrifice in order to be rid of troubles.

AMALGAMATION OF THE PARKES MUSEUM AND SANITARY INSTITUTE.

THE definite amalgamation of these two institutions, which are both intent upon very similar work and which already occupy the same premises, has been for some time debated by the councils of both Societies. The formal assent of the members of the Sanitary Institute has already been obtained, and on the 23rd ult. an extraordinary general meeting of the members of the Parkes Museum was held for the purpose of ascertaining the views of the members on this important question. Sir Robert Rawlinson, the senior vice-president, was called to the chair, and among those present were Sir Thomas Crawford, Inspector-General Lawson, Mr. F. D. Mocatta, Captain Douglas Galton, Professor de Chaumont, Professor Corfield, Mr. Rogers Field, Mr. T. Twining, Dr. Steele, Mr. Berkeley Hill, Dr. Poore, and Dr. Parkes. It is satisfactory to state that the proceedings were characterised by an absolute unanimity of opinion, and a series of resolutions were passed, to the effect that the Parkes Museum is willing to amalgamate with the Sanitary Institute. A special committee, composed of members of the two bodies, will be appointed for arranging the details of amalgamation, and application will be made to Government to grant a Charter to the new Society. Both Societies have been in existence for ten years, and each has made steady progress in the work which it was established to carry out, and each has grown steadily in public estimation. Union is strength, and the new body must prove a very strong Society, and, looking to the position and eminence of many of the members, one calculated to have great influence with the public in guiding it in sanitary matters. There ought to be no difficulty in getting the required Charter, and certainly a thoroughly well established Society which shall serve as a rallying ground for the rapidly increasing number of persons interested professionally in sanitary science is very much wanted. The last work accomplished by the Parkes Museum has been very successful. This was a course of lectures given by a number of eminent sanitarians, and intended specially for the benefit of sanitary inspectors. Although the notice given was short, no less than sixty-four gentlemen entered for and attended this course of lectures, and the result of the examinations lately held by the Sanitary Institute (at which there were fewer failures than at any previous

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examination) shows that the lectures were of solid benefit to those who attended. We understand that a second course is to be given. The arrangement of the library is proceeding satisfactorily, and all the books have now been catalogued by Mr. Taylor. The numerous pamphlets are in course of classification. The library now comprises about 6000 volumes, and it is to be hoped that the medical officers of health throughout the country will not forget to keep this central sanitary library well supplied with their annual reports and similar publications.

THE VOLUNTEER MEDICAL SERVICE.

THERE has been recently raised a considerable interest in the development of the medical department of the Volunteer army. Much has been done in London and in other populous centres; even in country parts the movement has attained large proportions. An instance of this occurred at Redcar on Saturday last, when the 2nd Volunteer Battalion of the Yorkshire Regiment was inspected after a week under canvas. This battalion, which is 600 strong, is largely recruited from the rural districts, although the headquarters are at Scarborough. The medical department consists of three surgeons and forty-one non-commissioned officers and men, most of whom wear on their right arm the Red Cross brassard, received after examination. The surgeon in command is Dr. J. W. Taylor of Scarborough, to whose zeal and intelligence the detachment owes its development and efficiency. To make up the full strength of a bearer company (sixty-four officers and men), we understand recruits are only waiting to be enrolled. So far as we know, this is the first bearer company that has been actually formed in the north of England, although it has not yet received official recognition. The bearers marched past as a company with their officers in rear of the battalion, and afterwards took part in what is known as "the attack." By permission of the colonel in command several men were permitted to fall out and feign injuries received in action. A large number of persons assembled at the collecting station, to which the "wounded" were carried, and great interest was displayed during the unloading of the stretchers. Colonel Barratt, the inspecting officer, also rode up to see the wounded cared for, and afterwards inspected the whole bearer company, and saw them execute the stretcher drill and other movements. He also presented certificates of proficiency to those bearers who had passed the examination since the last inspection. The equipment of the company consists of ten stretchers (McLure's pattern), ten water-bottles, a dressing haversack, and a field companion. The surgeons also carry small flags for signalling purposes. We commend this example of efficiency to volunteer surgeons in other places than North Yorkshire.

HEALTH OF PRESTON.

THE borough of Preston is now suffering from a severe epidemic of measles, which caused no fewer than 86 deaths in the six weeks ending last Saturday, equal to an annual rate of 7·2 per 1000 of the estimated population. The epidemic commenced in February, since which 116 deaths from the disease have been registered within the borough. This fatality is the more noteworthy since epidemics of measles prevailed in this town in 1882 and 1884, causing 125 and 61 deaths respectively. In connexion with the high death-rate from all causes that has prevailed in recent years, it is impossible not to view this exceptional mortality from measles as evidence of unsatisfactory sanitary condition. Preston was added to the list of large towns dealt with by the Registrar-General in his Weekly Return at the beginning of the year 1882, and it appears that the mean annual death-rate in the borough in the four years 1882-5 was 26·9 per 1000, which was higher than the mean rate in the same period in any other of the twenty-eight large towns, and exceeded the average rate in those towns by no less than 5·4 per 1000. In other words, the mortality in Preston during those four years exceeded the mean mortality in the twenty-eight towns (including Preston) by fully 25 per cent., signifying that in equal numbers living there were 5 deaths in Preston to every 4 in the twenty-eight towns. The excess of mortality among infants in Preston was proportionally greater than the mortality at all ages. Infant mortality, measured by the proportion of deaths under one year to registered births, averaged 214 per 1000, against 160 in the twenty-eight towns, showing an excess equal to 34 per cent., or more than a third. Summer-diarrhœa mortality in Preston was more than twice as great, and "fever" mortality (principally enteric) nearly twice as great, as the mean mortality in the twenty-eight towns. It should be stated that the present population of Preston is locally considered to be under-estimated, but even should this be to some extent the case, it would not in any way affect the excess of infant mortality measured by the proportion of deaths of infants to registered births, and the marked decline in the recorded birth-rate of the borough since 1881, is against the probability of any considerable under-estimate of its population.

CIRCULAR CAUTERISATION IN OPACITY OF THE CORNEA.

M. LOUIS VACHER of Orleans finds that in cases of corneal sclerosis or epi-scleritis better results can be obtained by circular cauterisation lightly performed with a loop of wire heated by the galvanic current than by the more usual method of passing a knife round the edge of the cornea. In one case, after eighteen months of this treatment, a patient, who had been unable to see from corneal opacity for fourteen years, recovered the power of vision. In another, a cornea which had been absolutely covered with leucoma for ten years, had in two years become sufficiently transparent for the performance of iridectomy. M. Prouff confirmed M. Vacher's statement, stating that he himself had three times operated in this manner with the most complete success.

RE-ELECTION OF MEDICAL OFFICERS OF HEALTH.

WE regret to learn that the Chesterfield rural sanitary authority have refused to receive a report from their medical officer of health under circumstances which occur more frequently than they ought to do. The question of the reappointment of Dr. Angus Mackintosh has more than once arisen, and the Local Government Board have never disguised their feeling that he is an able officer, and as such they have strongly objected to his being replaced by another officer. About a fortnight ago Dr. Mackintosh presented his authority with a report, but they refused to read it, and this because his appointment had not yet been confirmed by the Local Government Board. If they received it they held that they would thereby acknowledge him as their officer, and hence be liable to pay for his services. But in the absence of the needed confirmation of the reappointment, the auditor would have surcharged them, as he did once before. With whom the responsibility for the delay rests in this instance we cannot say; on a former occasion it rested with the local authorities concerned. But such delays are by no means unfrequent, and when surcharges are made they are almost invariably cancelled by the Local Government Board. So long as this somewhat roundabout method is adopted no wrong to any individual is done, but there is no power to make an authority pay for services rendered during the interval between the period for which

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services were originally sanctioned and the receipt of the sanction for the reappointment. At the date we refer to Dr. Mackintosh had for two weeks performed all the duties attaching to his office, and for this he will apparently receive no remuneration. In future cases it should be a rule that the arrangements for re-election should be so timed that, allowance being made for such contingencies as cause delays, all the formalities can be completed before the expiration of the current term of office.

THE DANGER OF SYNCOPE IN HOT BATHS.

IT is surprising that deaths by syncope during the use of hot baths are not more common than the coroner's court returns would show them to be. The peril of faintness by the mere determination of blood to the surface of the body, thus quickly depriving the heart of its usual normal support and stimulus, is very great. In cases of muscular weakness of the heart this danger must be imminent whenever the "hot" or even the "warm" bath is used. Apart from this obvious risk, however, there is always the possibility that in weakly or too impressionable states of the nervous system the peripheral stimulation produced by the application of heat to the whole of the cutaneous extremities of the afferent nerves may so act on the centres as to arrest the evolution of energy by an inhibitory influence. It is doubtful whether we lay enough stress on this consideration when prescribing the use of such external agents as act on large areas of surface and strongly impress the nerves there commencing. We know how burns of even moderate severity may kill by the impression they produce on the centres of vitality from the periphery. There is much to learn in regard to the nature and extent of the central effects which may be thus caused. Whether for good or evil, the application of heat or cold to the whole surface is a potent measure, and one that ought not to be recklessly resorted to, more especially in cases of great susceptibility, involving such excitability of the nervous centres as often coexists with fairly good health in a weakly body.

FAMILY LIKENESS.

ANY individual may be regarded as a very complex mingling of widely different bloods. To go no further back than the grandparents, he must be composed of at least sixteen different natures. It is not to be wondered at that such remarkable combinations should lead to great variations. The wonder seems rather to be that members of a family should resemble one another as much as they undoubtedly do. Sometimes in face, sometimes in form, frequently in the gait, gesture, and tone of voice, family peculiarities make themselves apparent. To many of these traits Mr. Francis Galton has devoted his attention. His latest interest has been shown in the colour of the eye. The tints of the eye for the purposes of inquiry were divided into "light," "hazel and dark-grey," and "dark." "The heritage of peculiarity" in relation to eye-colour for any child was found to amount to one-fourth from each parent and one-sixteenth from each grandparent.

CHILDREN'S HELP FOR CHILDREN'S HOSPITALS.

As a development of the Hospital Sunday and Saturday collections, a movement has been organised amongst the Sunday-school children in Birmingham, from which the Children's Hospital in that town receives very substantial support. To Councillor Wallis belongs the credit of having suggested the idea in 1880, but its success would have been very questionable if it had not received the warmest encouragement of the Hospital Sunday Committee and the most generous and steady co-operation from its honorary secretary, Mr. W. N. Fisher. The collection was made last Sunday, and for the future it is proposed to set apart for this special object the last Sunday in June. A few weeks must elapse before all the schools pay in and the total can be cast, but already facts warrant the hope that this year's proceeds may exceed those of previous years, which were as follows:—1880, £343 11*s.* 6*d.*; 1881, £231 16*s.* 5*d.*; 1882, £266 2*s.* 4*d.*; 1883, £234 3*s.* 1*d.*; 1884, £271 5*s.* 1*d.*; 1885, £327 17*s.* 6*d.* Ministers of all religious denominations and Sunday-school superintendents have worked the scheme with unsectarian and truly benevolent zeal, and it is most satisfactory to note that advertising and printing are the only items of expense. In the future very material support may be anticipated from the Board schools, as many of their teachers have signified willingness to co-operate, and the Chairman of the Birmingham School Board has sanctioned their doing so.

EFFECTS OF DRUGS ON THE SWEATS OF PHTHISIS.

DR. ABLETSOFF, who has made a number of accurate observations on the effects of various drugs upon the sweats of phthisical patients, finds that hydrochlorate of pilocarpine, given in doses of a twentieth of a grain, produces no limitation of the sweats in a very large proportion of cases; but its use frequently causes or increases gastro-intestinal irritation and sleeplessness, and, in fact, makes the general condition of the patient worse. With doses of from one-eighth to one-sixth of a grain the diurnal and nocturnal loss of weight almost always increases, and with doses of from one-twentieth to one-tenth of a grain the loss is augmented in the majority of cases. The reasons why this drug has been recommended for phthisical patients are probably to be sought in its expectorant action; but though as a matter of fact the amount of sputum daily expectorated is increased by the drug, it has no advantages whatever over other remedies whose effects in other directions are not so deleterious. Homatropine, picrotoxin, and duboisin distinctly decrease the cutaneous perspiration in healthy subjects, the latter drug having the greatest effect. For phthisical patients, however, who are weakened by exhausting sweats, more suitable drugs will be found in agaricin and homatropine, as duboisin and picrotoxin frequently produce other and undesirable effects.

NORTH-EASTERN WATERING-PLACES.

THE new line of railway between Scarborough and Whitby will prove a great boon to the visitors of both places, as opening up some of the wildest and most romantic coast scenery in the kingdom. Robin Hood's Bay and The Peak will prove, no doubt, the favourite excursions. The former we prophesy, will ere long rise from its position of a mere fishing village to that of a well-frequented seaside resort, for, in addition to its wild coast and its beautiful inland scenery, it offers excellent sites for building, and natural advantages for dealing with the great problem of all watering-places—viz., drainage. Among the north-eastern watering-places, Saltburn has within the last few years progressed most rapidly in relation to its size, and care has also been taken with its growth to maintain the sanitary requirements of the town, and one of our Commissioners, who recently visited it together with Scarborough and Whitby, reports himself much pleased with all he saw. Saltburn is naturally much quieter than its larger neighbours, and more suited for those who require rest and quiet rather than change and amusement. The wooded glens with their picturesque streamlets, are admirably adapted for invalids who are unable to take long walks. At all the watering-places along the coast that our Commissioner had

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an opportunity of visiting he was much struck by the attention now paid to sanitary details, in marked contrast to the state of affairs some ten or twelve years since—not only with respect to drainage and water-supply, but in such matters as scavenging and cleansing. At Scarborough, for instance, during Whitsun week, although the town was daily thronged with excursionists, the streets each morning were thoroughly swept and watered, and everything sweet and clean.

PERIPHERAL NEURITIS AND CHRONIC RHEUMATISM.

THE evidence in support of the theory that rheumatism—or perhaps one ought rather to say rheumatoid arthritis—is dependent on nerve lesions has hitherto been for the most part clinical, and therefore more or less hypothetical. A communication made to the Société de Biologie on the 12th ult. by MM. Pitres and Vaillard may possibly advance the question a step further. They related the results (*Progrès Méd.*, No. 25) of the examination of two subjects who during life had presented the most typical signs of arthritis deformans, with considerable osseous lesions and trophic changes of the skin and nails. The nerves of the affected limbs were found to be in a most extreme degree atrophied, exhibiting the characters of parenchymatous neuritis. It was asked whether such changes are constant in chronic rheumatism, or are they due to some accidental localisation of the rheumatism, or are they partly the cause of the osseous, muscular, and cutaneous lesions? These questions were not discussed by MM. Pitres and Vaillard, and therein they showed a wise caution, for there is no proof at all why in such advanced cases any nerve changes that are met with may not be secondary to the chronic disablement of the motor apparatus.

FOREIGN MEDICAL APPOINTMENTS.

DR. E. KRAPELIN, chief physician for mental diseases in the Dresden Hospital, formerly a pupil of Dr. von Gudden, whose recent sad death in the faithful discharge of his duty is so well known, has been appointed Professor of Psychiatry and Director of the Clinic for Mental Diseases in Dorpat, succeeding Dr. Emminghaus. Dr. Rabb has been appointed Professor of Anatomy in the German Faculty of Prague. Dr. G. Runge, who was recently "called" from Dorpat to Basle, has just been appointed Professor of Medical Chemistry in Kieff. Dr. Morosoff of Kharkoff has been nominated Professor of Operative Surgery in Kieff.

HYDROPHOBIA.

IT will be necessary for M. Pasteur to give an account of all his cases, so that every criticism may be fully answered. Another death is reported of one of the patients on whom his preventive treatment had been fully carried through. The case was that of a girl named Lagut, aged eleven, who was bitten by a dog on April 27th. After some days illness she expired on June 17th. Report says that death was due to hydrophobia, but this would require investigation. Meanwhile M. Pasteur's system is being tested in New York by Dr. Mott and Dr. Sternberg, and a Pasteur Institute is about to be founded in Milan under the direction of Dr. Barattieri. The death of a labourer is reported from Plymouth as resulting from hydrophobia. A wound was inflicted on his thumb by a small terrier four weeks before the development of the fatal symptoms. The poor fellow's case is worth special mention, because of the profuse bleeding which accompanied the infliction of the wound. It is often asserted that free hæmorrhage prevents the absorption of the virus of rabies. Although a flowing away of fluid from the wounded part does somewhat diminish the chances of absorption, still it must be remembered that opening of bloodvessels likewise increases the chances of infection. Moreover, under such circumstances a more rapid development of the symptoms may be accounted for.

THE MAYO NATIVE HOSPITAL.

THE report of the transactions of the Mayo Native Hospital at Calcutta and its dependent dispensaries, for the year 1885 has just been published. This hospital, intended, as its name implies, for the treatment of the native poor, was founded in 1792, and receives a monthly donation from the Government of 1000 rupees, the only condition attaching to this gift being that the nomination of the members of the Committee of the hospital be subject to the approbation of the Governor-General in Council. The foundation-stone of the building occupied at the present time was laid by Lord Northbrook in 1873, and has been open for the treatment of patients since 1874. During 1885 the aggregate number of patients treated was 2564 in-door and 179,208 out-door. In 1884 these numbers were 2451 and 181,274 respectively. The total income, including a balance of 5760 rupees from the previous year, was 64,165 rupees, and the expenditure amounted to 58,900. The generous support which the Mayo Hospital has met with from the native population of Calcutta is an eloquent testimony of the appreciation in which it is held by those for whose benefit it was founded.

COCAINE AS A DIURETIC.

DRS. DA COSTA and PENROSE of Philadelphia have been investigating the diuretic action of cocaine, and they have obtained some striking results. In all the cases but one in which observations on the urine were made a notable increase in this secretion was observed. In one case the hypodermic injection of half a grain of cocaine once a day increased the amount of urine from 24 oz. to 48 oz., and in another case a grain given by mouth thrice daily increased the urine at once from 40 oz. to 96 oz. The specific gravity of the secretion was but slightly altered; thus in one case, in which the daily amount of urine was raised from 14 oz. to 88 oz. and 72 oz., the specific gravity varied from 1020 to 1023. Abundant deposits of urates were observed, but no special estimation of the solids of the urine was made. The diuretic action was found to persist for some short time after the discontinuance of the cocaine. The authors of this paper recommend the employment of cocaine in cases of weak heart with dropsy, and in uræmia with scanty secretion of urine.

ESERINE AND PILOCARPINE IN GLAUCOMA.

M. PANAS reports to the Paris Academy of Medicine that in certain classes of glaucoma which are not benefited by operation he has had considerable success by instilling eserine or pilocarpine, and he suggests that in all cases where operative procedures fail in arresting the increase of ocular tension these agents should be tried.

WHO IS RESPONSIBLE?

IT is now some years since THE LANCET undertook an inquiry into the case of the sick in metropolitan workhouses, and the circumstances which were by this means brought to light led to important alterations and improvements. A report from Dr. Bridges, the inspector of the Local Government Board, which was read last week at a meeting of the Strand Board of Guardians, criticising and condemning the arrangements at the Edmonton Workhouse, shows that perfection is not yet attained. The chief complaint made relates to the dispensing of medicines in the workhouse, which

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to have been very largely in the hands of the nurses. published in the *Standard* subsequently, from a of the Strand Board, places the responsibility for of the present condition of affairs upon the Local ament Board, who, he states, have neglected during aths to give their sanction to the appointment of a ser. That one or the other board is to blame is evident, ich?

TOXICITY OF URINE IN BRIGHT'S DISEASE.

have already informed our readers of M. Bouchard's es on the toxicity of the normal urine, which promise of considerable value in practical medicine. M. y has determined that the toxicity of the urine in disease is less than in health. There are two modes h the toxicity of the urine may be reduced. It has arly shown that increased oxidation possesses this Deficient elimination is another method, though it an altogether opposite manner. In Bright's disease onousness of the blood rises whilst that of the urine ndingly diminishes. It has been suggested that in Bright's disease without albuminuria this diminished of the urine might prove of service in diagnosing ases of unconsciousness due to uræmia. The co- of toxicity is reckoned as that quantity of urinary equired to kill a rabbit of definite weight. Thus it possible to make mathematical calculations.

POISON FOR A PENNY.

days ago Dr. Danford Thomas held an inquest on of a man, aged nineteen, who died from the effects rat-poison. From the evidence it appeared that en out of work, and had led a homeless, wandering ore than six months. A police-constable deposed ame to the King's-cross Police Station and stated had taken a pennyworth of phosphorus paste. He by the police divisional surgeon, who ordered his to the Royal Free Hospital, where he died after ays of intense suffering from syncope, the result of generation of the heart and other organs. The medical officer stated that there was no difficulty ing phosphorus paste, and that *a fatal dose could red from any oilman for a penny*. Comment on ld be superfluous. The jury returned a verdict of while of unsound mind," without appending any

THE HOSPITAL SUNDAY FUND.

totals of the first four days' receipts up to Thursday amounted to £18,000, as compared with £14,000 at period last year. Some large collections are paid for the first time since the establishment of the

UEEN has been pleased to approve of the appoint- the Order of the Indian Empire of Mr. G. Watt, , and J. W. Tyler, M.D., F.R.C.S. Ed., for in connexion with the Colonial and Indian

ENRY, in company with the Right Hon. and others, received the honorary degree of Sheldonian Theatre, Oxford, on Wednesday, in of the Prince and Princess Christian.

BAUER, Bart., was yesterday, by 57 votes out Foreign Associate of the French Academy of Charles West, of London, and M. van Beneden, other candidates.

THE PRESENT ASPECT OF THE CHOLERA QUESTION.[1]

BY PROF. DR. MAX VON PETTENKOFER,
OF MUNICH.

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HENRY KOPLIK,
OF NEW YORK.

DR. VON PETTENKOFER, in the above work, discusses the transactions in the scientific world on the subject of cholera since the year 1883. He elaborates his views more from an epidemiological standpoint, as combined with the teachings of the vast advances in the subject of bacteriology at the present day. The work thus embraces a discussion of the two conferences in Berlin, the conference in London in 1885, the Sanitary Congress in Rome, June, 1885, and the Transactions of the Academy of Medicine, Paris, 1883-85. The author has divided his work according to the following schema:—I. The Autochthonists. II. Contagionists: (1) The infection of physicians and nurses through the sick; (2) Excrement of the sick as a seat of infectious matter; (3) House epidemics in hospitals and barracks; (4) Linen of cholera patients; (5) Cholera on ships; (6) Spread of cholera through intercourse on land; (7) Spread through drinking water. III. The Cholera Theories from a Bacteriological standpoint. IV. The Localists: (*a*) The influence of local disposition; (*b*) Influence of time. V. The Prophylactic Measures.

There are two main views at the present day concerning the nature of cholera. One that the disease, originally endemic in India, has been introduced into the different countries of Europe through the agency of a specific micro-organism transported thence through human intercourse (cholera Asiatica) Another view, that of the Autochthonists, is that cholera may be caused in other lands, as in India, by telluric and atmospheric conditions and special circumstances; appearing in isolated cases as cholera nostras, and at times becoming epidemic. The author proposes for the first the term of "Ephodist" (*ἔφοδος*—intercourse), and rejects as misleading the term "Contagionist."

The *Ephodists* hold that the specific micro-organism, the cause of cholera, is endemic in lower Bengal, where its history dates either since or previous to 1817. From here the germ is carried through human intercourse into different localities. It does not thrive outside its endemic locality, and the micro-organism must be introduced anew each time in order to cause an epidemic. The Ephodists are further divided into two schools: the Contagionists, who attribute to cholera patients the power of generating a specific infectious matter; and the Localists, who hold that cholera patients and their excretions are not infectious, but that only the local conditions existing at the time are capable of generating an epidemic by favouring the growth of the imported infectious matter.

The *Autochthonists*, as opposed to the Ephodist view, that cholera is spread through the agency of human intercourse and traffic, are headed by James Cunningham working in Calcutta, and Jules Guérin in Paris. Though both of these men stand almost alone in their theories at the present day, yet the facts collected by them remain as firm as ever. Cunningham especially, with his long and vast experience, commands attention. Working on the site of the disease, he has, by the introduction of practical prophylactic measures, been able to diminish the frequency of the disease in the barracks and prisons of India. These measures presuppose that the cholera patients produce nothing capable of making the healthy ill, nor do they recognise in any way the fundamental teachings of the Contagionists. Cunningham shows by large statistics that the frequency of cholera in India is less dependent on cases of cholera, which are always to be found in India, than upon the particular *locality* and *time*. The latter are much more diverse and changeable than the human economy, which for the Contagionists is at the same time the centre of manifestation and origin of the disease. Moreover he has shown that the

[1] Résumé from the German work (in the press). "Zum Gegenwärtigen Stand der Cholerafrage," by Prof. Dr. Max von Pettenkofer, of Munich.

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spread of cholera outside its endemic localities does not present the picture of a gradual extension of disease from a central point, but rather that of isolated outbursts in a comparatively small number of inhabited cities and villages.

If in India the cholera spreads in an epidemic manner outside its endemic locality, it does so, not in the direction of intercourse and travel, but rather in a contrary direction. The system of drainage in the upper provinces, carrying the refuse of cholera patients, runs in a direction contrary to that of the spread of the epidemic. Railroads in recent times have also not influenced the direction taken by the disease, nor the rapidity of its extension or the frequency of the epidemic, as may be seen by comparing the statistics of to-day with those obtained before the construction of railroads. The same may be argued in the case of ships. If, against these facts of Cunningham, Koch argues that the frequency of cholera epidemics is greater in such districts as Penschab since the opening of railroad lines, we must conclude that in this particular instance the frequency is more apparent than real, inasmuch as, perhaps, the statistics are more accurate to-day than in former times. The author is thus disposed to fully agree with Cunningham in the above particulars. Jules Guérin, in maintaining that the influence of human intercourse is a factor of no moment in cholera epidemics, cites the fact that in Paris during the Exhibition of 1867 there were no cases of cholera, though the city was filled with thousands of strangers, some coming from the localities where the cholera was at the time in progress, and though the disease existed in many of the neighbouring countries. Netten Radcliffe showed that at this time the cholera existed in Tunis, with which France was in close relationship, and in the neighbouring Italian cities where it was at its height. In Paris there was no quarantine. Cholera existed also north of Paris, in Zurich, Dusseldorf, and the Rhinelands. The argument of Fauvel, the opponent of Guérin, that the inhabitants of Paris had acquired a certain immunity from the disease on account of a previous epidemic in 1865, can scarcely be considered tenable; many thousands of people lived in Paris in 1867 who were not subjected to the influences of the epidemic of 1865.

An important point brought forward by the Autochthonists is the wide separation of the first cases in the outbreaks of local epidemics. The cases are scattered without the slightest connexion with one another. In the cholera epidemics in Toulon and Marseilles in 1884, the author maintains that evidence points to the existence of cholera in Marseilles before the arrival of the student, to whom the spread of the disease in the latter place was attributed. Rather is it more plausible that the student from Toulon contracted his cholera through local conditions existing in Marseilles. The disease manifested itself, in his case, three days after his arrival there. [Besnier, in discussing the spread of cholera epidemic since 1832, denies that such spread was commensurate with the amount of intercourse with infected localities.]

The author at this stage of the work enters into the definition of infectious diseases. Under infectious disease are included those diseases caused by the entrance of a specific infectious matter into the body. Such specific infectious matter is found by the light of recent research to be micro-organisms, or products of the same. In England we have a classification of diseases into contagious (scarlet fever, measles) and infectious, the latter being subdivided into transmissible and non-transmissible. An infectious disease being here understood as a disease caused by infectious matter from the soil, water, or air, these diseases may be "transmissible" from place to place (cholera); others are "non-transmissible" (malaria, pure miasmatic.) In Germany we have the division into contagious, miasmatic, and contagious-miasmatic. These terms, contagious, miasmatic, and infectious are, on the whole, very misleading in the light of recent bacteriological research and from an epidemiological standpoint. The author would propose that under the specific term "Infectious matter" (*Infectionstoffe*) we include in the future the words "contagium" and "miasm." This infectious matter may be distinguished as entogen or ektogen, according to whether the infectious matter passes directly from the sick to the healthy, or the bacterium capable of infection, or its products, develops in the surroundings of the infected person before passing into the economy (ektogen). Inasmuch as some organisms can develop after both fashions, Stricker has proposed a third term amphigen—to supplement the above. Returning to the fact asserted by Autochthonists (Guérin), that at the beginning of epidemics we have to deal with isolated cases which have no connexion with each other, the author has found that in the case of the three epidemics in Munich in 1836-37, 1854, and 1873, the exact mode of introduction of the germ could not be established. In these three epidemics, however, the cases were found always in particular streets of the city—speaking more for the Autochthonists than for the Contagionists. Moreover, the railroads of the city lay in an opposite direction to the localities where the epidemics began. The author, however, does not at all accept the Autochthonist doctrines, for the following reasons:—

The Autochthonists (Cunningham, Guérin) do not recognise that modern bacteriology has proven that all infectious diseases are caused by a specific micro-organism (tuberculosis, milzbrand, &c.) We must accept the view that the cholera bacterium is an "ens sui generis" which now exists in the world and can be spread from place to place. It may have originally developed under favourable conditions from a non-pathogenic micro-organism in a way similar to what we find to be the case in the history of the plant world. While Macpherson thinks that cholera has been endemic in India from the earliest times, Koch and Semmelink think that cholera first appeared in India in 1817. At whatever time it originated, at least from 1817, the germ could be conveyed from its place of origin and by human intercourse spread over Europe. The questions, however, arise—(*a*) Does it thrive in the new localities to which it is brought, and if so how long? (*b*) Does the germ, as in India, become perennial in its new home, or does it after a time die out, and must it be brought in anew? The Autochthonists can eliminate the question of human intercourse by supposing that the cholera germ can develop in other places as in India (autochthon), but being subject to other conditions it causes epidemics with less regularity and with longer intervals. Besnier, in the case of Paris, has supposed a certain space of latency to exist during which the germ develops. The periods between the outbursts of cholera can be of different duration, and a fresh introduction of the germ from without is not necessary. The author thinks that from his own studies of the epidemics in such places as Malta and Gozo islands the cholera germ does not in its new home become perennial, but dies out, and must be brought by human intercourse anew into the locality in order to develop and cause an epidemic. The Ephodists, both localists and contagionists, admit the influence of human intercourse in spreading cholera. It can never be proven that a locality recently attacked with cholera has had no communication with a place where cholera is existing; and, moreover, where cholera patients have come to large cities and died, there have always been a number of pendant cases to those original ones where the subsequent investigation showed the case succeeding the first to have been in personal close relation with the sick. These facts must lead to a complete rejection of the autochthon theory. It must be admitted that there is something adhering to persons coming from localities where cholera exists which is capable of spreading the disease in a new spot.

(To be continued.)

Pharmacology and Therapeutics.

LANGLINE.

WE have received two specimens of lanoline—one which contains 20 per cent. of water, and one quite free from water. The profession is indebted to Dr. Oscar Liebreich for this new basis for ointments. Although vaseline has met with great favour, two objections have been urged against it. On the one hand, it is said to be an irritant to some skins; and it is further alleged that it has but slight power of penetration, so that active ingredients of vaseline ointments are not readily absorbed. From the experiments of Dr. Liebreich, it appears that lanoline possesses great powers of penetration, and that when employed as the vehicle of active drugs they are absorbed from the skin with great readiness; and it promises, therefore, to be extremely useful in all cases where alkaloids are used in the form of ointments. Lanoline is a cholesterine fat—the natural fat of

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...in; it is neutral in reaction, and decomposes with ... difficulty. It is improved by the addition of from 5 to ... cent. of fat or glycerine.

HYDRASTIS CANADENSIS.

The current number of the *Therapeutic Gazette* contains ... article on the Physiological Action and Therapeutic ... of Hydrastis Canadensis. To Schatz is due the credit ... having first introduced it into gynæcological practice, ... Fellner was the first to subject it to a thorough ... physiological examination. From experiments recently pub... it would appear that its action varies according to ... mode of administration. Fellner finds that large doses ... administered to dogs under the influence of curare induce ... of the blood-pressure and slowing of the pulse, ... by rise of pressure and quickening of the pulse ... irregularity of the heart's action. Medium doses pro... similar phenomena, but the blood-pressure rises more ... first stage and falls less at the end of the second. ... doses increase the general blood-pressure, whilst sub... injections and enemata, even in large doses, act ... to small doses injected into the veins. It is probable ... Hydrastis exerts its effects chiefly on the vaso-motor ... centres, but it is also a direct heart poison. Practically, ... found to be useful in many catarrhal conditions and in ... forms of gastric and uterine disturbance.

SALOL.

A new compound, introduced by Nencky, is a derivative ... salicylic acid, one atom of hydrogen of which has been ... by the phenol group (*Pharmaceutical Journal*). ... antipyretic and antiseptic properties, it is hoped ... may prove of service in cases in which the salicylate ... is badly borne. Its physical characters are those of ... powder of faintly aromatic odour, almost insoluble ... and perfectly tasteless. In the organism the com... becomes split up into the salicyl and phenol elements; ... may be detected in the urine, which becomes very ... as happens after the ingestion of carbolic acid, of ... Salol contains 38 per cent. The spliting of the com... is believed to take place in the duodenum, under the ... of the pancreatic digestion. It is remarkable that ... symptoms appear to have resulted from the employ... of salol.

CONDURANGO IN GASTRIC DISEASES.

Enrique Suñer writes to *El Genio Medico* that, having ... employed Condurango bark in the treatment of ... cases of gastric carcinoma and catarrh, he has found ... beneficial. He gives a tablespoonful of the infusion ... two hours, and in all cases the pain was decidedly ... and the appetite and digestion improved. In ... cases of mere gastric catarrh the painful nausea and ... ceased, and subsequently the patients recovered ... the mental depression which was due to the acute ... disturbance. In the malignant cases, of course, ... could be hoped for but alleviation of pain, and some ... in the ability to take and retain nourishment.

PHOSPHORUS IN INTERMITTENT FEVER.

A Russian provincial practitioner, Dr. Sochinski, states ... during a rural practice of five years he has found ... a valuable remedy in intermittent fever. He ... the oleum-phosphoratum in the form of emulsion, ... in six ounces, of which a tablespoonful is given ... times a day. This, he says, never produces unpleasant ..., and is in his experience superior to tincture of iodine, ... of eucalyptus, and even to arsenic, cinchonine, and ..., though scarcely equal to quinine or carbolic acid ... sublimate. It is, however, a simple and a very ... remedy for out-patients in dispensary or parochial ...

ETHOXYCAFFEINE.

... caffeine in which one atom of hydrogen is ... by the group C_2H_5O. Alkalies precipitate its salts ... Hypodermic injections in rabbits gave ... diuretic action. M. Dujardin-Beaumetz has ... this agent in cases of severe headache, and with ... Its insolubility is an objection, as is also ... other allied bodies, to cause gastric sym... these difficulties are overcome by dis... salicylate of soda and adding some ... largest dose given was twenty-five ... and Panlilla owe their value in ... caffeine.

SALICYLATE OF BISMUTH.

Bismuth in the form of carbonate or trisnitrate is one of the few valuable remedies we possess. Dr. Solger now claims for the basic salicylate of this metal a special value in cases of diarrhœa and chronic intestinal catarrh. He administers about twenty grains every eight hours, and attributes its beneficial action mainly to its disinfectant properties. In some invalids, malaise, furred tongue, and abdominal pains are said to be caused by the drug, though a small dose of castor oil readily removes the toxic effects without requiring its discontinuance.

URETHAN.

M. Coze has investigated the physiological action of urethan on frogs, guinea-pigs, rabbits, and dogs. He finds that it is antagonistic in its action to strychnia. It causes muscular relaxation and induces sleep; slows the pulse and the respiration, whilst lowering the temperature. As it has no irritant local action, it can be conveniently used for hypodermic injection; it does not disturb the secretions or the nutrition; its use in convulsions and in tetanus is recommended.

IODOFORM IN ERYSIPELAS.

Dr. A. J. Selitski mentions in a Russian military medical journal the satisfactory results he has obtained by treating erysipelas, whether idiopathic or traumatic, by means of an iodoform ointment of the strength of from 1 to 8 or 1 to 10. The effect of this application was seen in the reduction of the swelling, the relief of the pain, the diminution of the intensity of the erythema, and the reduction of the high temperature.

PARTHENINE.

According to M. Guyet, parthenine is not a simple substance, but of complex nature, like scillitine and the amorphous digitalines. It does not appear to have any antipyretic action, but seems to be useful in some cases of neuralgia.

PILIGANINE.

M. Adrian has discovered a new alkaloid in Lycopodium Saussures. It has an alkaline reaction, and emits white vapours, like ammonia, in the presence of hydrochloric acid. It causes powerful emesis and catharsis.

UNIVERSITY OF LONDON.

A MEETING of Convocation of the University of London was held on June 29th, Dr. F. J. Wood, Chairman of Convocation, presiding.

The nomination of a list of three graduates, "to be submitted to Her Majesty for the selection therefrom of a Fellow of the University" was proceeded with, the scrutineers eventually reporting that Dr. Wilks had received 428 votes, Mr. Magnus 379, and Professor Thistleton Dyer 187; whilst 114 voting papers were cancelled for non-compliance with the regulations.

A motion respecting the celebration of the jubilee of the University, standing in the name of Mr. Whitehead, was withdrawn; and in its place a resolution proposed by Mr. Howse was carried, referring the question to the Annual Committee, with power to confer with the Senate upon it.

Mr. Newson's Special Committee of seven members to consider the regulations for the Law Examinations was approved, the members nominated being James Anstie, B.A., Q.C.; J. B. Benson, LL.D., B.A.; E. H. Busk, M.A., LL.B.; B. Kisch, M.A., B. Sc.,; T. L. Mears, LL.D., M.A.; T. B. Napier, LL.D.; F. A. Philbrick, B.A., Q.C.

A motion by Mr. MAGNUS to pass to the business of the extraordinary meeting—namely, the resumption of the adjourned debate upon the scheme on the constitution of the University, was resisted by Mr. Tyler, whose resolutions upon the same subject stood next upon the agenda. On a division, there voted for the motion 44, against 16.

Mr. MAGNUS therefore moved, and Mr. ANSTIE seconded the following resolution, recommended on page 6 of the Report of the Special Committee:—(C.) "That Convocation approves of the proposals for the constitution of the Senate of the University contained in Section 2 of the subjoined scheme." This section runs as follows:—The Senate to consist of—(*a*) Chancellor, to be appointed by the Crown.

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(*b*) Vice-Chancellor, to be elected by the Senate annually from amongst its members. (*c*) The following members *ex-officio*: Chairman of Convocation, Chairman of Council of Education, Chairman of each of the four Boards of Studies. (*d*) Ordinary members, to be appointed as follows: Six by the Crown, eight by Convocation, four by the Council of Education, and one by each of the seven following institutions: University College, King's College, Royal Society, Royal College of Physicians of London, Royal College of Surgeons of England, Council of Legal Education and Council of Incorporated Law Society. The ordinary members to hold office for a period of four years, and to be re-eligible. The Senators elected by Convocation to be elected by members of Convocation voting in their respective Faculties. Two members to be elected by the members of each of the four Faculties. The Senate to have the control and management of the University.

Mr. ROUND contended that this scheme would give a preponderating influence to teachers, and would alter the character of the University. He moved the omission of University College, King's College, and the two Legal Councils; and also to provide that only two out of the eight representatives of Convocation should be teachers.

Mr. LYNN seconded the amendment, and characterised the scheme as a proposal to tear the University up by the roots, and as infallibly tending to lower the value of the degrees. The University might develop in many directions, such as founding laboratories, observatories, &c., without constituting itself another teaching body, but remaining the highest possible examining board.

Dr. SERRELL, LL.D., pointed out that the representation of Convocation on the Senate was not sufficient, and he did not see the need for inviting other bodies to share privileges at present restricted to the Crown and Convocation.

Mr. TYLER said the scheme would create a new university which would be swamped by teachers. He did not see that the Colleges of Physicians and Surgeons had any claim to be represented on the Senate, and contended that University College was already well represented, whilst King's College sends so few graduates as not to constitute a claim. He also objected to the Royal Society and other bodies sending senators, and believed the best plan would be to maintain the existing Senate with greater proportionate members elected by Convocation.

Mr. MACDOWALL defended the scheme, and pointed out that neither the Royal Society nor the Colleges of Physicians and Surgeons would be likely to send men engaged in teaching to the Senate.

Mr. NESBITT thought that power would be given into the hands of teachers, and the University would lapse into the state of the Scotch universities. He denounced the proposals as revolutionary and opposed to the traditions of the University, whilst they would certainly entail a lowering of degrees. He objected to the four years' tenure of office, and advocated life tenure, as at present; and he also objected to the representatives of Convocation being elected by each faculty, and not by the whole body.

Dr. T. B. NAPIER, LL.D., said there was no direct representative of the teaching bodies except in the case of the two colleges. The Council of Education consisted largely of the examiners of the University, and but one-third of it would be teachers. Altogether, he did not think the Senate would have more than five of its members directly representing the teaching element.

Mr. NEWSON opposed the scheme on the ground that Convocation had so small a representation, and he totally objected to the paragraph giving all the control and management of the University to the Senate.

Mr. ANSTIE, Q.C., defended the scheme. Convocation would be largely represented on the Council of Education, both directly and through the examiners, most of whom are members of the University. It was needful for the University to be fully informed of the views of teachers, and care could be taken that the interests of teachers did not get the better of their judgment. He ridiculed the notion that the inclusion of representatives from the Royal Society and the two great London colleges would tend to lower the value of degrees, and trusted that Convocation would not be actuated by such small motives and jealousies as had been expressed. He pointed out that the constituent colleges would comprise many institutions, and that the scheme would remove the complaints that provincial colleges were disregarded. The section was vital to the scheme, and the introduction of these bodies on the Senate was of the highest consequence to the University.

Mr. HINTON thought provision should be made for replacing any of these bodies, if necessary, by others, and Mr. COTTON opposed the scheme.

On a show of hands, a large majority voted against the amendment; but a division being called for, there voted for the amendment 1, against 42.

On the original resolution being put, Mr. NEWSON moved the omission of the words, "The Senate to have the control and management of the University." This was seconded by Mr. UPJOHN, supported by Mr. TYLER, but rejected by a large majority.

Mr. HINTON moved the omission of the clause providing for election by the Faculties, but this was not seconded; and a similar motion by Mr. NESBITT was lost.

The original resolution was then put and carried by a large majority.

Mr. MAGNUS then moved the adoption of the following resolution, recommended on page 8 of the Report of the Special Committee—(D) "That Convocation approves of the proposals contained in Section 6 of the subjoined scheme for enabling the University to assist in the promotion of higher university education." He said that the University should now undertake other functions than mere examining, and do something to encourage learning for its own sake. He had no doubt that it would obtain funds, for it was absolutely necessary to be freed from State control, and they had a right to ask for a permanent State endowment. With the sole exception of the Normal School of Science—which is devoted to the training of certificated Government teachers—London receives no aid from the State for teaching purposes. He believed that if the University were placed on a different basis, there would be no lack of donations and bequests, which would render the University an educational power of which the country would be proud, and one worthy of the metropolis.

Mr. ANSTIE seconded the resolution.

Mr. TYLER pointed out that the University already administered the Brown bequest. He also objected to the proposal to grant honorary degrees. Some discussion arose upon this latter point, and eventually an amendment striking out the clause referring to honorary degrees was carried.

Dr. FOSTER MORLEY thought, in fairness to the University and King's Colleges, who on the foundation of the University surrendered their powers to grant degrees, that these bodies should be consulted before the University took on teaching function. But his amendment to that effect was not seconded, and the resolution was carried.

The final resolution, (E) "That the Report and Scheme be adopted as a basis of conference with the Senate, and that the Special Committee be reappointed with power to confer with the Senate thereon," was then moved by Mr. Magnus, seconded by Mr. Anstie, and carried, Mr. Tyler protesting that the scheme would be disastrous to the University.

The House then adjourned after a sitting which had occupied three hours and a half, and Mr. Magnus received many congratulations upon the manner in which he had successfully carried the scheme of his committee, involving as it does such radical changes in the constitution and functions of the University.

ROYAL COLLEGE OF PHYSICIANS.

AN extraordinary Comitia of the Fellows of the College was held on Tuesday last, at 5 P.M., the President, Sir William Jenner, Bart., K.C.B., in the chair. A licence was granted to Mr. John Ernest Trask. A communication was read from the Royal College of Surgeons, stating that the Council had appointed delegates to confer with those nominated by the College of Physicians in reference to the future use of the vacant plot on the Embankment after the erection of the Examination Hall.

The next business on the agenda was the further consideration of the report of the Croonian Trust Committee, which had been discussed and postponed at two previous meetings. The adoption of the report by which the increased income of the Trust would be devoted to the promotion of "anatomy, physiology, and pathology, in their bearing on therapeutic science, with a view to the more

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efficient prevention, control, and cure of disease," was moved by Sir Risdon Bennett, and seconded by Dr. Balfour.

Dr. Dickinson moved, and Dr. Wilks seconded, the amendment standing in Dr. Bristowe's name—viz.: "That there be three Croonian Lectureships: one of these to be simply the continuation of the present Croonian Lectureship, to be generally held by a Fellow of some years' standing, who shall be called, as heretofore, 'The Croonian Lecturer'; the other two to be devoted specially to the promotion of original research. That one of the two Research Lectureships be devoted to the investigation and discussion of subjects connected with the anatomy and physiology of disease, and that the lecturer be styled 'The Croonian Professor of Pathology.' That the other of the two Research Lectureships be devoted to the investigation and discussion of subjects connected with clinical medicine and the treatment of disease, and that the holder be termed 'The Croonian Professor of Clinical Medicine and Therapeutics.' That each of the Research Lectureships be tenable for one, two, or three years, at the discretion of the President; and that the number of lectures to be delivered annually in each case be not less than three or more than six." This was lost on a division.

Dr. Quain then moved, and Dr. Wilson Fox seconded, another amendment: "That there shall be one or more Croonian Lecturers appointed by the College, who shall be required to deliver lectures on one or more subjects in anatomy, physiology, and pathology, with a view to the prevention, control, and cure of diseases. That the College shall devote the funds derived from the Croonian Trust (1) to the payment of such lecturer or lecturers, and (2) to the contribution of such sums as the College may think fit towards the promotion of scientific investigation on the subjects of the lectures." This was passed by a large majority.

A further amendment to change the words "with a view to the" for "with the special object of the more efficient" was lost, and the insertion of the word "chemistry" was also objected to, inasmuch as it might entail some legal difficulty in passing the scheme through the Court of Chancery.

Dr. West's proposal to alter Bye-law 69, affecting the powers of the Council, was rejected by a large majority.

The Registrar then moved: "That it be referred to the Committee of Management to consider what staff should be appointed, and under what conditions, for the efficient management and conduct of the business of the Examination Hall, and to report to the two Colleges," which was carried, and the proceedings terminated.

A BILL TO AMEND THE MEDICAL ACTS.

BE it enacted by the Queen's most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows:—

I. *Short title and construction.*—This Act may be cited as the Medical Act, 1886, and shall be construed as one with the Medical Acts.

PART I.—ADMISSION TO MEDICAL PRACTICE AND CONSTITUTION OF GENERAL COUNCIL.

Qualifying Examinations.

II. *Examination before registration.*—On and after the appointed day a person shall not be registered under the Medical Acts in respect of any qualification referred to in any of those Acts, unless he has passed such qualifying examination in medicine, surgery, and midwifery, as in this Act mentioned.

III. *Qualifying examinations held by medical authorities.*—(1) A qualifying examination shall be an examination in medicine, surgery, and midwifery held, for the purpose of granting a diploma or diplomas conferring the right of registration under the Medical Acts, by any of the following bodies—that is to say:—(*a*) Any university in the United Kingdom, or any medical corporation legally qualified at the passing of this Act to grant such diploma or diplomas in respect of medicine and surgery; or (*b*) any combination of two or more medical corporations in the same part of the United Kingdom who may agree to hold a joint examination in medicine, surgery, and midwifery, and of whom one at least is capable of granting such diploma as aforesaid, in respect of medicine, and one at least is capable of granting such diploma in respect of surgery; or (*c*) any combination of any such university as aforesaid with any other such university or universities, or of any such university or universities with a medical corporation or corporations, the bodies forming such combination being in the same part of the United Kingdom.—(2) The standard of proficiency required from candidates at the said qualifying examinations shall be such as sufficiently to guarantee the possession of the knowledge and skill requisite for the efficient practice of medicine, surgery, and midwifery; and it shall be the duty of the General Council to secure the maintenance of such standard of proficiency as aforesaid; and for that purpose such number of inspectors as may be determined by the General Council shall be appointed by the General Council, and shall attend, as the General Council may direct, at all or any of the qualifying examinations held by any of the bodies aforesaid.—(3) Inspectors of examinations appointed under this section shall not interfere with the conduct of any examination, but it shall be their duty to report to the General Council their opinion as to the sufficiency or insufficiency of every examination which they attend, and any other matters in relation to such examination which the General Council may require them to report; and the General Council shall forward a copy of every such report to the body or to each of the bodies which held the examination in respect of which the said report was made, and shall also forward a copy of such report, together with any observations thereon made by the said body or bodies, to the Privy Council.—(4) An inspector of examinations appointed under this section shall receive such remuneration, to be paid as part of the expenses of the General Council, as the General Council, with the sanction of the Privy Council, may determine.

IV. *Withdrawal from medical authorities of right to hold qualifying examinations.*—(1) If at any time it appears to the General Council that the standard of proficiency in medicine, surgery, and midwifery, or in any of those subjects or any branch thereof, required from candidates at the qualifying examinations held by any of the bodies for the time being holding such examinations is insufficient, the General Council shall make a representation to that effect to the Privy Council, and the Privy Council, if they think fit, after considering such representation, and also any objections thereto made by any body or bodies to which such representation relates, may by order declare that the examinations of any such body or bodies shall not be deemed to be qualifying examinations for the purpose of registration under the Medical Acts; and Her Majesty, with the advice of her Privy Council, if upon further representation from the General Council, or from any body or bodies to which such order relates, it seems to her expedient so to do, shall have power at any time to revoke any such order.—(2) During the continuance of any such order the examinations held by the body or bodies to which it relates shall not be deemed qualifying examinations under this Act, and any diploma granted to persons on passing such examinations shall not entitle such persons to be registered under the Medical Acts, and any such body shall not choose either separately or collectively with any other body a member of the General Council; and the member (if any) for the time being representing such body in the General Council shall, unless he was chosen by such body collectively with any other body not subject to an order under this section, be suspended from taking part in the proceedings of the General Council.

V. *Qualifying examinations held by medical corporation, with assistant examiners.*—(1) If a medical corporation represents to the General Council that it is unable to enter into such combination as is in this Act mentioned for the purpose of holding qualifying examinations, and the General Council is satisfied that the said medical corporation has used its best endeavours to enter into such combination as aforesaid, and is unable to do so on reasonable terms, it shall be lawful for the General Council, from time to time, if they think fit, on the application of such corporation, to appoint any number of examiners to assist at the examinations which are held by such corporation for the purpose of granting any diploma or diplomas conferring on the holders thereof, if they have passed a qualifying examination, the right of registration under the Medical Acts.—(2) It shall be the duty of the said assistant examiners to secure at the said examinations the maintenance of such standard of proficiency in medicine, surgery, and midwifery as is required under the foregoing provisions of this Act from candidates at qualifying examinations, and for that purpose the said assistant examiners shall have such powers and perform such duties in the conduct of those examinations as the General Council may from time to time by order prescribe; and any examination held subject to the provisions of this section shall be deemed to be a qualifying examination within the meaning of this Act.—(3) Assistant examiners appointed under this section shall receive such remuneration, to be paid by the medical corporation at whose examinations they take part, as the General Council determine.—(4) A medical corporation shall have power to admit to its examinations assistant examiners appointed under this section, and to conduct its examinations in accordance with the requirements of this section and of any orders made thereunder, anything in any Act or charter relating to such corporation to the contrary notwithstanding.

Effect of Registration.

VI. *Privileges of registered persons.*—On and after the appointed day a registered medical practitioner shall, save as in this Act mentioned, be entitled to practise medicine, surgery, and midwifery in the United Kingdom, and (subject to any local law) in any other part of Her Majesty's dominions, and to recover in due course of law in respect of such practice any expenses, charges in respect of medicaments or other appliances, or any fees to which he may be entitled, unless he is a fellow of a college of physicians, the fellows of which are prohibited by bye-law from recovering at law their expenses, charges, or fees, in which case such prohibitory bye-law, so long as it is in force, may be pleaded in bar of any legal proceeding instituted by such fellow for the recovery of expenses, charges, or fees.

Constitution of General Council.

VII. *Members of General Council.*—(1) After the passing of this Act the General Council shall consist of the following members—that is to say:—Five persons nominated from time to time by Her Majesty, with the advice of her Privy Council, three of whom shall be nominated for England, one for Scotland, and one for Ireland. One person chosen from time to time by each of the following bodies:—The Royal College of Physicians of London, the Royal College of Surgeons of England, the Apothecaries Society of London, the University of Oxford, the University of Cambridge, the University of London, the University of Durham, the Victoria University, Manchester, the Royal College of Physicians of Edinburgh, the Royal College of Surgeons of Edinburgh, the Faculty of Physicians and Surgeons of Glasgow, the University of Edinburgh, the University of Glasgow, the University of Aberdeen, the University of St. Andrews, the King and Queen's College of Physicians in Ireland, the Royal College of Surgeons in Ireland, the Apothecaries Hall of Ireland, the University of Dublin, the Royal University of Ireland; three persons elected from time to time by the registered medical practitioners resident in England; one person elected from time to time by the registered medical practitioners resident in Scotland; one person elected from time to time by the registered medical practitioners resident

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in Ireland.—(2) The provisions of this section relating to the representation of the Universities of Edinburgh and Aberdeen shall take effect on the occurrence of the first vacancy in the office of the person representing those universities at the time of the passing of this Act, and the provisions of this section relating to the representation of the Universities of Glasgow and St. Andrews shall take effect on the occurrence of the first vacancy in the office of the person representing such last-mentioned universities at the time of the passing of this Act; but nothing in this section shall affect the duration of the term of office of any person who at the time of the passing of this Act is a member of the General Council.

VIII. *Regulations as to election of representatives of the medical profession.*—(1) The members of the General Council representing the registered medical practitioners resident in the several parts of the United Kingdom (in this section referred to as "direct representatives") shall themselves be registered medical practitioners; they shall be elected to hold office for the term of five years, and shall be capable of re-election, and any of them may at any time resign his office by letter addressed to the President of the General Council, and upon the death or resignation of any one of them, some other person shall be elected in his place; but the proceedings of the General Council shall not be questioned on account of a vacancy or vacancies among the direct representatives.—(2) Each direct representative shall be a member of the branch council for the part of the United Kingdom in which he is elected; he shall also be entitled to fees for attendance and travelling expenses to the same extent as other members of the General Council are entitled to the same.—(3) The President of the General Council, or any other person whom the General Council may from time to time appoint, shall be the returning officer for the purpose of elections of direct representatives, and such returning officer shall, some time not less than six weeks nor more than two months before the day on which the term of office of any such representative will expire, and as soon as conveniently may be after the occurrence of any vacancy arising from the death or resignation of any such representative, issue his precept to the branch council for that part of the United Kingdom in which such representative was elected, requiring the said branch council to cause a representative to be elected by the registered medical practitioners resident in that part of the United Kingdom within twenty-one days after the receipt of the precept of the returning officer.—(4) The election shall be conducted in such manner as may be provided by regulations to be made by the Privy Council, provided as follows: (*a*) The nomination shall be in writing, and the nomination paper of each candidate shall be signed by not fewer than twelve registered medical practitioners; and (*b*) the election shall be conducted by voting papers, and it shall be the duty of the branch council in any part of the United Kingdom in which an election is to be held to cause a voting paper to be forwarded by post to each registered medical practitioner resident in that part at his registered address, but the election shall not be rendered void by reason of the omission of the branch council to cause such voting paper to be forwarded in any particular case or cases, and any registered medical practitioner to whom a voting paper has not been sent in pursuance of this Act may on application to the registrar of the said branch council obtain one from him; and (*c*) any registered medical practitioner entitled to vote at such election may vote for as many candidates as there are representatives to be elected.—(5) Each branch council shall certify to the returning officer the person or persons elected by the registered medical practitioners resident in the part of the United Kingdom to which such branch council belongs.—(6) A direct representative elected in the place of any such representative retiring on the expiration of the period for which he was elected shall come into office at the expiration of that period, and a direct representative elected to fill a vacancy caused by the death or resignation of any such representative shall come into office on the day on which he is certified by the branch council to the returning officer to have been elected.—(7) The expenses attending the election of a direct representative shall be defrayed as part of the expenses of the branch council for that part of the United Kingdom in which such representative is elected.—(8) For the purpose of the first election of direct representatives the returning officer shall, in the course of such period of seven days (ending not later than the fifteenth day of November next succeeding the passing of this Act) as the Privy Council may appoint, issue his precept to the branch council in each part of the United Kingdom, requiring such branch council to cause the proper number of representatives to be elected in the part of the United Kingdom to which such branch council belongs, within twenty one days after the receipt of the said precept; and the said representatives shall come into office on the first day of January, one thousand eight hundred and eighty-seven.

IX. *Election of President of General Council.*—The General Council from time to time on the occurrence of a vacancy in the office of president of the General Council shall elect one of their number to be president for a term not exceeding five years, and not extending beyond the expiration of the term for which he has been made a member of the said Council, but nothing in this Act shall affect the duration of the term of office of the person who at the time of the passing of this Act is president of the General Council.

Revision of constitution of General Council.—(1) The General Council may at any time represent to the Privy Council all or any of the following matters: (*a*) That it is expedient to confer on any university or other body in the United Kingdom capable of granting a medical diploma, not being one of the constituent bodies for the time being of the General Council, and being in the opinion of the General Council of sufficient importance to be worthy of such a privilege, the power of returning a member to the General Council, either separately or collectively with any other body or bodies in the same part of the United Kingdom capable of granting a medical diploma; (*b*) that it is expedient to confer on any constituent body, for the time being returning a member to the General Council collectively with any other body or bodies, and being in the opinion of the General Council of sufficient importance to be worthy of such a privilege, the power of returning a member to such council separately; (*c*) that it is expedient to confer on the registered medical practitioners resident in any part of the United Kingdom the power of returning an additional member to the General Council; (*d*) that it is expedient that any constituent body, having in the opinion of the General Council so diminished in importance as not to be entitled to such privilege, should either be wholly deprived of the power of returning a member to the General Council, or be deprived of the power of returning a member separately, and permitted to return a member collectively with some other body or bodies.—(2) The Privy Council, before considering such representation, shall cause the same to be laid before both Houses of Parliament.—(3) If either House of Parliament within forty days (exclusive of any period of adjournment for more than one week) next after any such representation has been laid before such House present an address to Her Majesty declaring that such representation or any part thereof ought not to be carried into effect, no further proceedings shall be taken in respect of the representation in regard to which such address has been presented, but if no such address is presented by either House of Parliament within such forty days as aforesaid the Privy Council may, if they think fit, report to Her Majesty that it is expedient to give effect to such representation, and it shall be lawful for Her Majesty, by Order in Council, to give effect to the same, and any Order in Council so made shall be of the same validity as if it had been enacted in this Act.

PART II.—COLONIAL AND FOREIGN PRACTITIONERS.

XI. *Registration of colonial practitioner with recognised diploma.*—On and after the prescribed day where a person shows to the satisfaction of the registrar of the General Council that he holds some recognised colonial medical diploma or diplomas (as hereinafter defined) granted to him in a British possession to which this Act applies, and that he is of good character, and that he is by law entitled to practise medicine, surgery, and midwifery in such British possession, he shall, on application to the said registrar, and on payment of such fee not exceeding five pounds, as the General Council may from time to time determine, be entitled, without examination in the United Kingdom, to be registered as a colonial practitioner in the Medical Register; provided that he proves to the satisfaction of the registrar any of the following circumstances:—(1) That the said diploma or diplomas was or were granted to him at a time when he was not domiciled in the United Kingdom, or in the course of a period of not less than five years during the whole of which he resided out of the United Kingdom; or (2) that he was practising medicine or surgery or a branch of medicine or surgery in the United Kingdom on the said prescribed day, and that he has continuously practised the same either in the United Kingdom or elsewhere for a period of not less than ten years immediately preceding the said prescribed day.

XII. *Registration of foreign practitioner with recognised diploma.*—On and after the said prescribed day where a person shows to the satisfaction of the registrar of the General Council that he holds some recognised foreign medical diploma or diplomas (as hereinafter defined) granted in a foreign country to which this Act applies, and that he is of good character, and that he is by law entitled to practise medicine, surgery, and midwifery in such foreign country, he shall, on application to the said registrar, and on payment of such fee not exceeding five pounds, as the General Council may from time to time determine, be entitled, without examination in the United Kingdom, to be registered as a foreign practitioner in the Medical Register; provided that he proves to the satisfaction of the registrar any of the following circumstances:—(1) That he is not a British subject; or (2) that, being a British subject, the said diploma or diplomas was or were granted to him at a time when he was not domiciled in the United Kingdom, or in the course of a period of not less than five years during the whole of which he resided out of the United Kingdom; or (3) that, being a British subject, he was practising medicine or surgery, or a branch of medicine or surgery, in the United Kingdom on the said prescribed day, and that he has continuously practised the same in the United Kingdom or elsewhere for a period of not less than ten years immediately preceding the said prescribed day.

XIII. *Medical diploma of colonial and foreign practitioner when deemed to be recognised.*—(1) The medical diploma or diplomas granted in a British possession or foreign country to which this Act applies, which is or are to be deemed such recognised colonial or foreign medical diploma or diplomas as is or are required for the purposes of this Act, shall be such medical diploma or diplomas as may be recognised for the time being by the General Council as furnishing a sufficient guarantee of the possession of the requisite knowledge and skill for the efficient practice of medicine, surgery, and midwifery. (2) Where the General Council have refused to recognise as aforesaid any colonial or foreign medical diploma, the Privy Council, on application being made to them, may, if they think fit, after considering such application, and after communication with the General Council, order the General Council to recognise the said diploma, and such order shall be duly obeyed. (3) If a person is refused registration as a colonial or foreign practitioner on any other ground than that the medical diploma or diplomas held by such person is or are not such recognised medical diploma or diplomas as above defined, the registrar of the General Council shall, if required, state in writing the reason for such refusal, and the person so refused registration may appeal to the Privy Council, and the Privy Council, after communication with the General Council, may dismiss the appeal, or may order the General Council to enter the name of the appellant on the Register. (4) A person may, if so entitled under this Act, be registered both as a colonial and a foreign practitioner.

XIV. *Separate list of colonial and foreign practitioners in Medical Register.*—The Medical Register shall contain a separate list of the names and addresses of the colonial practitioners, and also a separate list of the names and addresses of the foreign practitioners registered under this Act; each list shall be made out alphabetically according to the surnames; and the provisions of the Medical Act, 1858, relating to persons registered under that Act, and relating to the Medical Register and to offences in respect thereof, shall, so far as may be, apply in the case of colonial and foreign practitioners registered under this Act and of the said lists of those practitioners, in the same way as such provisions apply in the case of persons registered under the said Medical Act, 1858, and of the Register as kept under that Act.

XV. *Medical titles of colonial and foreign practitioners.*—On and after the appointed day it shall be lawful for any registered medical practitioner who, being on the list of colonial or of foreign practitioners, is on that day in possession of or thereafter obtains any recognised colonial or foreign medical diploma granted in a British possession or foreign country to which this Act applies to cause a description of such diploma to be added to his name in the Medical Register.

XVI. *Registration of foreign degrees held by registered medical practitioners.*—On and after the appointed day it shall be lawful for any registered medical practitioner who, being on the Medical Register by virtue of English, Scotch, or Irish qualifications, is in possession of a foreign degree in medicine, to cause a description of such foreign medical degree to be added to his name as an additional title in the Medical Register, provided he shall satisfy the General Council that he obtained such degree after proper examination and prior to the passing of this Act.

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XVII. *Power of Her Majesty in Council to define colonies and foreign countries to which this part of the Act applies.*—(1) Her Majesty may from time to time by Order in Council declare that this part of this Act shall be deemed on and after a day to be named in such Order to apply to any British possession or foreign country which in the opinion of Her Majesty affords to the registered medical practitioners of the United Kingdom such privileges of practising in the said British possession or foreign country as to Her Majesty may seem just; and from and after the day named in such Order in Council such British possession or foreign country shall be deemed to be a British possession or foreign country to which this Act applies within the meaning of this part thereof; but until such Order in Council has been made in respect of any British possession or foreign country, this part of this Act shall not be deemed to apply to any such possession or country; and the expression "the prescribed day" as used in this part of this Act means, as respects any British possession or foreign country, the day on and after which this part of this Act is declared by Order in Council to apply to such British possession or foreign country. (2) Her Majesty may from time to time by Order in Council revoke and renew any Order made in pursuance of this section; and on the revocation of such Order as respects any British possession or foreign country, such possession or foreign country shall cease to be a possession or country to which this part of this Act applies, without prejudice nevertheless to the right of any persons whose names have been already entered on the Register.

XVIII. *Amendment of 21 & 22 Vict., c. 90, s. 36, as to medical officers in ships.*—Nothing in the Medical Act, 1858, shall prevent a person holding a medical diploma entitling him to practise medicine or surgery in a British possession to which this Act applies from holding an appointment as a medical officer in any vessel registered in that possession.

PART III.—MISCELLANEOUS PROVISIONS.

XIX. *Default of General Council.*—If at any time it appears to the Privy Council that the General Council has failed to secure the maintenance of a sufficient standard of proficiency at any qualifying examinations, or that occasion has arisen for the General Council to appoint assistant examiners under this Act for the purpose of examinations held by any medical corporation, or to exercise any power or perform any duty, or do any act or thing vested in or imposed on or authorised to be done by the General Council under the Medical Acts or this Act, the Privy Council may notify their opinion to the General Council; and if the General Council fail to comply with any directions of the Privy Council relating to such notification, the Privy Council may themselves give effect to such directions, and for that purpose may exercise any power, or do any act or thing vested in or authorised to be done by the General Council, and may of their own motion do any act or thing which, under the Medical Acts or this Act, they are authorised to do in pursuance of a representation or suggestion from the General Council.

XX. *Addition to qualifications under 21 & 22 Vict., c. 90.*—The diploma of member of the King and Queen's College of Physicians in Ireland, and the degree of Master in Obstetrics of any university in the United Kingdom, shall be deemed to be added to the qualifications described in Schedule A to the Medical Act, 1858.

XXI. *Registration of diploma in sanitary science.*—Every registered medical practitioner to whom a diploma for proficiency in sanitary science, public health, or State medicine, has after special examination been granted by any college or faculty of physicians or surgeons or university in the United Kingdom, or by any such bodies acting in combination, shall, if such diploma appears to the Privy Council or to the General Council to deserve recognition in the Medical Register, be entitled, on payment of such fee as the General Council may appoint, to have such diploma entered in the said Register, in addition to any other diplomas or diplomas in respect of which he is registered.

XXII. *Exercise of powers of Privy Council.*—(1) All powers vested in the Privy Council by the Medical Acts or this Act may be exercised by any two or more of the Lords and others of Her Majesty's most honourable Privy Council.—(2) Any act of the Privy Council under the Medical Acts or this Act shall be sufficiently signified by an instrument signed by the clerk of the Council, and every order and act signified by an instrument purporting to be signed by the clerk of the Council, shall be deemed to have been duly made and done by the Privy Council, and every instrument so signed shall be received in evidence in all courts and proceedings without proof of the authority or signature of the clerk of the Council, or other proof.

XXIII. *Evidence of orders.*—The following copies of any orders made in pursuance of the Medical Acts or this Act, or the Dentists Act, 1878, shall be evidence—that is to say:—(1) Any copy purporting to be printed by the Queen's printer, or by any other printer in pursuance of an authority given by the General Council. (2) Any copy of an order certified to be a true copy by the registrar of the General Council, or by any other person appointed by the General Council either in addition to or in exclusion of the registrar to certify such orders.

SAVING CLAUSES.

XXIV. *Saving as to practice of existing practitioners.*—This Act shall not increase or diminish the privileges in respect of his practice of any person who, on the day preceding the appointed day, is a registered medical practitioner, and such person shall be entitled on and after the said appointed day to practise, in pursuance of the qualification possessed by him before the said appointed day, in medicine, surgery, and midwifery, or any of them, or any branch of medicine or surgery, according as he was entitled to practise the same before the said appointed day, but not further or otherwise.

XXV. *Saving as to local law.*—Any person who at the time of the repeal of any enactment repealed by this Act was, in pursuance of such enactment, legally entitled to practise as a medical practitioner in any colony or part of Her Majesty's dominions other than the United Kingdom, shall after the date of such repeal continue to be so entitled if he would have been entitled if no such repeal had taken place.

DENTISTS.

XXVI. *Provisions as to 41 & 42 Vic., c. 33.*—It is hereby declared that the words "title, addition, or description," where used in the Dentists Act, 1878, include any title, addition to a name, designation or description, whether expressed in words or by letters, or partly in one way and partly in the other. There shall be repealed so much of Section 4 of the Dentists Act, 1878, as provides that a prosecution for any of the offences under that Act mentioned shall not be instituted by a private person, except with the consent of the General Council or of a branch council, and no prosecution for any such offences may be instituted by a private person accordingly. Notwithstanding anything in Section 5 of the Dentists Act, 1878, the rights of any person registered under the Dentists Act, 1878, to practise dentistry or dental surgery in any part of Her Majesty's dominions other than the United Kingdom shall be subject to any local law in force in that part. It shall be lawful for Her Majesty at any time after the said appointed day to declare by Order in Council that Section 28 of the said Dentists Act, 1878, shall be in force on and after a day to be named in such Order, but in the meantime and until such order has been made, and before such day as last aforesaid, such section shall not be deemed to be in force. Save as in this Act mentioned the Dentists Act, 1878, shall not be affected by this Act.

DEFINITIONS.

XXVII.—In this Act, unless the context otherwise requires, the expression "part of the United Kingdom" means, according to circumstances, England, Scotland, or Ireland. The expression "British possession" means any part of Her Majesty's dominions exclusive of the United Kingdom, but inclusive of the Isle of Man and the Channel Islands; and where parts of such dominions are under both a central and a local legislature, all parts under one central legislature are for the purposes of this definition deemed to be one British possession. The expression "local law" means an Act or Ordinance passed by the legislature of a British possession. The expression "the appointed day" means the first of June, one thousand eight hundred and eighty-seven, or such other day in June, one thousand eight hundred and eighty-seven, as may be appointed by the Privy Council. The expression "medical corporation" means any body in the United Kingdom, other than a university, for the time being competent to grant a diploma or diplomas conferring on the holder thereof, if he has passed a qualifying examination, the right of registration under the Medical Acts. The expression "registered medical practitioner" means any person for the time being registered under the Medical Acts. The word "diploma" means any diploma, degree, fellowship, membership, licence, authority to practise, letters testimonial, certificate, or other status or document granted by any university, corporation, college, or other body, or by any departments of or persons acting under the authority of the government of any country or place within or without Her Majesty's domains. The expression "medical diploma" means a diploma granted in respect of medicine, surgery, and midwifery, or any of them, or any branch of medicine or surgery. The word "person" includes a body of persons, corporate or not corporate. The expression "the Medical Acts" means the Medical Act, 1858 (21 & 22 Vict., c. 90), and any Acts amending the same passed before the passing of this Act.

REPEAL.

Repeal of enactments in schedule.—XXVIII. The Acts mentioned in the first part of the schedule to this Act are hereby repealed to the extent mentioned in the third column of the said part; and the Acts mentioned in the second part of the said schedule shall be repealed on and after the appointed day to the extent mentioned in the third column of the said last mentioned part; provided that the repeal enacted by this section shall not affect anything done or suffered, or any right or title acquired or accrued, before such repeal takes effect, or any remedy, penalty, or proceeding in respect thereof.

THE SCHEDULE.

FIRST PART.

Session and chapter.	Title or short title of Act.	Extent of repeal.
21 & 22 Vict. c. 90	The Medical Act, 1858	Sections 4 and 5. In Section 6 the words "The President shall be a Member of all the Branch Councils." Section 24.
46 & 47 Vict. c. 19	The Medical Act (1858) Amendment Act, 1883	The whole Act.

SECOND PART.

21 & 22 Vict. c. 90	The Medical Act, 1858	Section 31.
31 & 32 Vict. c. 29	The Medical Act Amendment Act, 1868	The whole Act.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns 6132 births and 2957 deaths were registered during the week ending June 26th. The annual death-rate in these towns, which had declined in the preceding fourteen weeks from 29·3 to 16·8, rose again last week to 17·0. During the first twelve weeks of the current quarter the death-rate in these towns averaged only 18·7 per 1000, and was 3·1 below the mean rate in the corresponding periods of the ten years 1876–85. The lowest rates in these towns last week were 12·4 in Cardiff, 12·6 in Brighton, 12·9 in Sheffield, and 13·6 in Norwich. The rates in the other towns ranged upwards to 23·7 in Portsmouth, 24·5 in Salford, 24·9 in Bolton, and 37·1 in Preston. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had been 265 and 293 in the preceding two weeks, further rose last week to

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312; they included 96 from measles, 83 from diarrhœa, 56 from whooping-cough, 32 from "fever" (principally enteric), 24 from scarlet fever, 21 from diphtheria, and not one from small-pox. No death from any of these zymotic diseases was recorded last week in Halifax, whereas they caused the highest death-rates in Bolton, Portsmouth, and Preston. The greatest mortality from measles occurred in Portsmouth, Bolton, and Preston; from whooping-cough in Manchester and Preston; from "fever" in Portsmouth; and from diarrhœa in Derby and Salford. The 21 deaths from diphtheria in the twenty-eight towns included 14 in London, 2 in Wolverhampton, and 2 in Birmingham. Small-pox caused no death either in London and its outer ring, or in any of the twenty-seven large provincial towns. The number of small-pox patients in the metropolitan hospitals situated in and around London, which had been 31 and 23 on the preceding two Saturdays, had further declined to 17 at the end of last week; 4 cases were admitted to these hospitals during the week, against 9 and 2 in the previous two weeks. The deaths referred to diseases of the respiratory organs in London, which had been 216 and 184 in the preceding two weeks, rose again last week to 194, but were 29 below the corrected average. The causes of 73, or 2·4 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Bradford, Leicester, Sunderland, Newcastle-upon-Tyne, and in five other smaller towns. The largest proportions of uncertified deaths were registered in Salford, Oldham, Huddersfield, and Halifax.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 20·9 and 21·7 per 1000 in the preceding two weeks, declined to 20·2 in the week ending June 26th; this rate exceeded, however, by 3·2 the mean rate during the same week in the twenty-eight English towns. The rates in the Scotch towns last week ranged from 12·5 and 16·4 in Greenock and Perth, to 20·8 in Edinburgh and 22·5 in Glasgow. The 498 deaths in the eight towns showed a decline of 38 from the number in the previous week, and included 21 which were referred to whooping-cough, 20 to measles, 11 to diarrhœa, 7 to scarlet fever, 6 to "fever," and not one either to diphtheria or small-pox; in all, 65 deaths resulted from these principal zymotic diseases, against 68, 49, and 57 in the preceding three weeks. These 65 deaths were equal to an annual rate of 2·6 per 1000, which exceeded by 0·8 the mean rate from the same diseases in the twenty-eight English towns. The fatal cases of whooping-cough, which had been 21, 19, and 18 in the previous three weeks, rose again last week to 21, of which 16 occurred in Glasgow, 3 in Aberdeen, and 2 in Edinburgh. The 20 deaths from measles showed a further increase upon recent weekly numbers, and included 11 in Edinburgh, 6 in Leith, and 3 in Glasgow. The 11 deaths attributed to diarrhœa also exceeded the numbers in recent weeks, and were 5 above the number in the corresponding week of last year. Six of the 7 fatal cases of scarlet fever and 5 of the 6 deaths referred to "fever" occurred in Glasgow. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 90 and 93 in each of the previous two weeks, declined last week to 86, but exceeded by 12 the number in the corresponding week of last year. The causes of 82, or 16 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 20·8 and 22·9 per 1000 in the preceding two weeks, further rose to 24·7 in the week ending June 26th. During the first twelve weeks of the current quarter the death-rate in the city averaged 25·8 per 1000; the mean rate during the same period did not exceed 17·3 in London and 19·7 in Edinburgh. The 167 deaths in Dublin last week showed a further increase of 12 upon the numbers in the two previous weeks, and included 10 which were referred to the principal zymotic diseases, against 5 and 7 in the previous two weeks; 3 resulted from scarlet fever, 3 from whooping-cough, 2 from "fever," 1 from diphtheria, 1 from diarrhœa, and not one either from small-pox or measles. These 10 deaths were equal to an annual rate of 1·5 per 1000, the rates from the same diseases being 1·8 in London and 3·7 in Edinburgh. The fatal cases both of scarlet fever and whooping-cough showed an increase upon the numbers in the previous week. The deaths referred to fever were fewer by one than the number in the previous week, the mortality from this disease having shown a marked decline during the present quarter. Five inquest cases and 6 deaths from violence were registered; and 49, or more than a quarter, of the deaths were recorded in public institutions. The deaths both of infants and of elderly persons showed an increase upon recent weekly numbers. The causes of 28, or 17 per cent., of the deaths registered during the week were not certified.

Correspondence.

"Audi alteram partem."

JOHN HUNTER.

To the Editor of THE LANCET.

SIR,—Circumstances have brought teaching in hospitals as well as John Hunter rather to the fore lately. I have in my possession the correspondence that took place between him and his colleagues at St. George's Hospital, relating to their unfortunate disagreement at the hospital. I send you some extracts from an address by Hunter to the governors of the hospital. I have omitted some portions that are more personal than at the present time interesting. At the time (1768) of his election as surgeon to the hospital, his colleagues were Cæsar Hawkins, Bromfield, and Gunning; subsequently Charles Hawkins, George Hawkins, William Walker, and Thomas Keate, with Everard Home as an assistant. I do not now offer any opinion upon this unfortunate controversy—the immediate cause of his death,—as I may print the whole correspondence: it shows well the state of medical education not only at St. George's a hundred years ago, but also at Guy's and St. Thomas's Hospitals, the information being supplied by the teachers at these hospitals at that time for the guidance of the staff at St. George's in drawing up a system for medical education.—I am, Sir, yours truly,

June 12th, 1886. CHARLES HAWKINS.

"*To the Governors of St. George's Hospital.*

"When I solicited to be appointed one of the surgeons to St. George's Hospital, it was not with a view to augment my income, either immediately by the profits of the hospital, or in a secondary way by increasing my practice; but to acquire opportunities of extending my knowledge, that I might be more useful to mankind, not only by improving my private practice, but if I should be enabled to make discoveries even in the art itself. I had a view also to the instruction of those who were studying under me, particularly to that of the pupils of the hospital, whose improvement is one principal benefit accruing to the public from such instructions, and I have reason to believe that my intentions and endeavours in all these points have been attended with some success. . . . I conceived that the governors of the hospital would wish that not only immediate relief should be given to the poor and distressed, but that the hospital should diffuse its influence to mankind in general; and by these means, even to themselves. I concluded that to render the hospital of such universal use would be agreeable to the feelings of the governors of this charity, and probably considered by them as the most important service. I conceived to give an hospital a reputation for improvement it was to invite the philosopher as well as the charitable to contribute to its support. Other hospitals were beginning to participate in the improving spirit of the times, more especially those into which the younger surgeons had been elected. They united their powers, and had lectures given to their pupils, not only in surgery, but in every branch of the healing art. Mr. Pott, though one of the senior surgeons in London, gave lectures to the pupils of St. Bartholomew's Hospital, which lectures became the basis of his works on the operations in surgery, and do credit to the governors of that charity for their choice of one so able to instruct.....Finding the pupils of St. George's Hospital fewer than they had formerly been, I imputed it to the want of that increasing attention which the surrounding improvements in the art required, for one part should keep pace with the other. My practice in the hospital soon convinced me that this observation was just, and having been long in

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habit of improving myself along with others, it had become in a manner natural to me.....When I mentioned with the medical gentlemen of other hospitals did, and what I thought we should do, one gentleman said, 'he did not choose to lose any reputation he might have in surgery by giving lectures,' which, at least, was modest. Talking of the improvement of the art, one of the surgeons confessed 'he did not see where the art could be improved.' The natural conclusion from this declaration was that such a man would never improve it; but the answer then made was, 'to see where anything could be improved might be considered as going almost half way towards the improvement itself; and that Lord Bacon was the cause of all the advances in philosophy since his day, by seeing and pointing out where and how they might be made.'.....In this [a recent election of a surgeon to the hospital], as in most other public contests, the mind, inflamed by opposition, lost sight of the great object, by which means private friendships and connections had more weight than public utility, to which object the governors will not on the present occasion confine themselves. My motive was in the first place to serve the hospital, and in the second to diffuse the knowledge of the art, that all might be partakers of it; this, indeed, is the highest office in which a surgeon can be employed, for when considered as a man qualified only to dress a sore or perform a common operation, and perhaps not all of those that may be reckoned common, he cannot be esteemed an ornament to his profession. ..... They [the governors] will consider how far a numerous class of pupils increases the reputation of the hospital; they will consider whether those numbers do not produce the secondary good arising from an hospital, which is the effectual diffusion of knowledge, and, if so, whether every surgeon should not be in duty bound to contribute his share towards this good purpose ..... I hope this Court will not consider this as similar to a contested election between two men. It is of general interest; it concerns no individual, or, if any, only four men, who are servants of the hospital; and though in one point of view I may appear to stand single, yet I stand on equal ground with the governors of this charity, who formerly established the very law the advantages of which I have now illustrated. Indeed, from a consciousness of the disinterestedness of my motives, and a conviction of the clearness of the question in point of public utility, which I trust they cannot overlook and will not disregard, it would give me more pleasure to see the friends of the other gentlemen here today than my own. In whatever way it may be determined to me is personally immaterial; the good of mankind, the improvement of the healing art, and the character of the hospital are the motives of my conduct, and according to which, whatever may be the decision of the present question, I shall continue to do my duty to the hospital as a charity, and confine myself to the laws of the institution.

"Leicester square, Feb. 28th, 1793." "JOHN HUNTER.

PROPOSED UNIFORM DIETARY SCALES FOR WORKHOUSES AND INFIRMARIES.

To the Editor of THE LANCET.

SIR,—At a meeting of the guardians of St. George-in-the-East on Friday last, Mr. Dellow moved a resolution to the effect that a memorial be addressed to the Local Government Board, asking them to adopt a uniform dietary scale for all the workhouses in the metropolis. He had statistics for 1883 showing the annual cost per head for provisions in the various metropolitan workhouses, and from these it appears that the cost at Whitechapel is the lowest, being £6 19*s.* 3*d.* per head per annum, while at Lewisham it is £12 1*s.* 9*d.* Referring to the East-end, he showed that the cost of provisions was the highest at St. George's, where it is £7 11*s.* 9*d.*, or £1 11*s.* 6*d.* more than at Whitechapel Union. Poplar, Stepney, Shoreditch, and Hackney each cost varying amounts between the two given above, but increasing in the order in which they are named. The motion was seconded and carried with but two dissentients. Mr. Crowder gave notice that he would move an addition to the resolution asking for a uniform dietary scale in all metropolitan Poor-law institutions.

There is no doubt that there should be uniform dietary scales for the inmates of all workhouses and infirmaries, and in addition there should be drawn up uniform diet tables for all the officers and servants residing in these institutions. As it is, there is much discrepancy in the dietaries and no real reason for it, as the duties and responsibilities of the officers and servants are much the same in all. Why, for instance, should the assistant medical officer at Marylebone Infirmary have a much better dietary than the assistant medical officer at St. George-in-the-East? At Whitechapel Infirmary, the assistant medical officer has extra salary and provides his own rations. If the Local Government Board were to effect these changes, they would remove the existing dissatisfaction. Uniformity, however, could only be obtained on paper, for what according to the diet table may appear to be a very good dietary, may in reality be but a poor one, as, though the articles are supplied in proper quantity, some of them may be so deficient in quality as to be scarcely fit for food. As there is frequently a considerable amount of trickery in the supplying public institutions with provisions &c., it behoves guardians to be on the alert, and see for themselves that contractors continue to supply goods of the same quality as the samples. A more frequent visitation of the stores and at unexpected times, or an inspection when goods are being delivered, would in all probability be attended with the most beneficial results.

I am, Sir, your obedient servant,

London, June 21st, 1886. SCRUTATOR.

DURATION OF LIFE OF THE RED BLOOD-CORPUSCLES.

To the Editor of THE LANCET.

SIR,—In referring to a paper on "The Duration of Life of the Red Blood-corpuscles, as ascertainable by Transfusion," recently read by me before the Royal Society of Edinburgh, your correspondent in your last issue ascribed to me a method of investigation which would entirely deprive the results of any value which may attach to them.

So far from transfusing the blood of one animal into the circulation of another of different species, whose blood-corpuscles were of different size and shape, I was at pains to show that such a method of investigation, implying as it did the use of "dissimilar" blood, was absolutely worthless for the attainment of the object in view, since the blood-corpuscles of such blood always break down in the body of their host within a day or two of injection, and hence their duration of life could offer no criterion of that of the normal red blood-corpuscles. In all my experiments, therefore, the blood used was that obtained from an animal of the same species—so-called "similar" blood—the fate of which after transfusion differs essentially from that of dissimilar blood, but resembles in all respects that of the normal blood.

I should feel greatly obliged if you could kindly give the same prominence to the above correction as was given to the original reference, as the ignorance on my part implied in the use of the kind of blood described by your correspondent for arriving at any conclusions regarding the life duration of normal blood-corpuscles is so great as would serve to completely condemn the accuracy of my results in the estimation of all who are already acquainted with the subject of transfusion. I remain, Sir, yours faithfully,

Edinburgh, June 27th, 1886. WILLIAM HUNTER.

BRITISH MEDICAL BENEVOLENT FUND JUBILEE.

To the Editor of THE LANCET.

SIR,—In addition to the sums already mentioned, the following donations have been received:—

	£	s.		£	s.
W. Cadge, Esq. (Norwich)	52	10	W. Morrant Baker, Esq. ...	10	10
G. D. Pollock, Esq.	21	0	Sir William Mac Cormac ...	5	5
Sir Spencer Wells	21	0	W. Berkeley Hill, Esq.	5	5
Sir Henry Thompson	21	0	D. de Berdt Hovell, Esq. ...	5	5
Lady Wilson	21	0	F. H. Webb, Esq.	5	5
Mrs. Montefiore.....	21	0	C. E. Aikin, Esq.	5	5
Dr. Wegg.....	21	0	C. A. Aikin, Esq.	5	5
E. Parker Young, Esq.	21	0	Dr. Withers Moore	5	5
Dr. Ord	20	0	Mrs. Franz (through Dr.		
Dr. Brodie Sewell.....	10	10	Parsons) (Dover)	5	0

Mr. Veasey's donation is £25, instead of £20, as previously stated.

The list of guests at the banquet must be closed almost at once, and I have to request that all who have not replied will do so without delay.

I am, Sir, yours faithfully,

34, Seymour-street, Portman-square, W. W. H. BROADBENT.

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EDINBURGH.

(From our own Correspondent.)

UNIVERSITY ELECTION.

THE election of a representative in Parliament of the Universities of Edinburgh and St. Andrews will take place next week. Mr. Macdonald, the present member, has issued an address to the electors in which he offers himself for re-election; and at present it seems most unlikely that any opposition will be offered to his return. In consequence of the absence of the Vice-Chancellor of the University the duties of returning officer for the election will devolve upon Professor Sir Douglas Maclagan, the senior professor available, who at a recent meeting of the University Court was deputed by their authority to act for the time, and for the purpose referred to, as Vice-Chancellor of the University. The present member, the Right Hon. J. H. A. Macdonald, Q.C., was returned for the University at the last general election by a considerable majority of votes over Mr. Erichsen; he acted as Lord-Advocate under the late Conservative Government.

SIR DOUGLAS MACLAGAN.

Last Wednesday a congratulatory address was presented to Professor Sir Douglas Maclagan, on the occasion of his knighthood, by the undergraduates of the University, through the Students' Representative Council. Sir William Turner presided at the meeting, which was held in the anatomy theatre, and which was attended by a densely packed crowd of enthusiastic students. In replying to the address, and in thanking the students for their enthusiastic demonstration in his honour, Professor Maclagan took occasion to discuss the claims of wide culture in relation to medical studies; and he urged upon his hearers the importance of keeping their minds free from the narrowing effect of too close concentration upon one branch of study. He advocated the cultivation of collateral interests in art or literature, and, above all, the maintenance of a robust and healthy physique by developing an interest in one or other of the forms of physical exercise or of manly sports.

DR. WENDELL HOLMES IN EDINBURGH.

Dr. Holmes's visit to Edinburgh has partaken largely of the nature of an academic triumph, and not only has he been most warmly welcomed by all connected with the University, but his presence in the city has excited great interest amongst the very many who, as members of the reading community, have come in contact with his writings. On Friday afternoon the honorary degree of LL.D. was conferred upon him in the Upper Library Hall of the University by the Chancellor, Lord Inglis. The hall was crowded for the occasion, there being a large number of ladies present in reserved seats and in the galleries, whilst the body of the hall was occupied by visitors and a considerable number of students. On entering the hall Dr. Holmes was greeted with enthusiastic cheering, which was from time to time renewed as the ceremony proceeded. Professor Kirkpatrick, Dean of the Faculty of Law, delivered a short address of the customary nature, in presenting Dr. Holmes to the Chancellor for promotion to the degree. He shortly referred to the leading events in Dr. Holmes's career, and enumerated the names of some of his best-known writings. After Lord Inglis had completed the ceremony of "capping" the Autocrat, the latter signed the roll-book of honorary graduates of the University, and then, in response to urgent cries of "speech," he addressed a few words to the students, thanking them for the warm reception they had accorded him, and expressing the gratification he had experienced in enacting his part in that day's ceremony. The meeting terminated amidst renewed cheers for Dr. Holmes and the singing of "For he's a jolly good fellow." On Saturday evening the students held a concert in honour of Dr. Holmes, at which he was present. Professor Crum Brown occupied the chair, and the Queen-street Hall, which was taken for the occasion, was crowded with an interested audience of students and their friends. After the first part of the programme had been concluded, Dr. Holmes was presented with an address from the students welcoming his visit to Edinburgh, and expressing their earnest appreciation of the value of his writings. In replying, Dr. Holmes sketched an interesting outline of his own career, and in particular he dwelt upon the relation which existed between the literary and professional portions of his life-work. In this connexion he gave important advice to young men who have a passion for literary labours. Literature, he said, was a good staff for walking with, but not a good one to lean upon. He had early received an important piece of advice from the lips of Coleridge, that every literary man should have as well some fixed and regular occupation; this advice he handed on to any who might feel tempted to exchange steady preparation for a practical career for the uncertain pathway of a literary life. In concluding his remarks, Dr. Holmes thanked the students for the brilliant reception they had given him, the memory of which would be a lasting and inspiring pleasure to him for the remainder of his life.

Edinburgh, June 29th.

ABERDEEN.

(From our own Correspondent.)

ROYAL INFIRMARY.

THE preface to the annual report for last year says that "the history of the Aberdeen Royal Infirmary during 1885, apart from the stated work of the hospital, has been marked by some features of interest. ..... The managers record with satisfaction that the appointment of Miss Lumsden has already been attended with the best results, both in the arrangements for nursing and housekeeping. ..... The sanitary condition of the hospital has been greatly improved; but the administration is put to disadvantage on account of the small size of some of the wards and deficiency of accommodation; attempts at improvement have been made, but nothing effectual can be done without improved buildings." The number of cases treated in the wards was 1951, and of these 1135 were surgical, with 29 deaths; 816 were medical, with 85 deaths; 910 persons, including 194 eye cases, received advice and medicine as out-patients. The expenditure for the year was £7171 5*s.* 1*d.*, and unfortunately the income fell short of this sum by £956 3*s.* 2*d.* The most important changes proposed in the new charter are:—1. The separation of the management of the Lunatic Asylum from that of the Infirmary and Convalescent Hospital. 2. The present Board of Managers is hereafter to be known as the Constituent Board, which is to meet annually (instead of quarterly as at present), to elect directors for the government of each branch of the institution. The number of directors on each of the two boards was first fixed at fifteen, but as the two committees might occasionally have to meet together, it was thought better to fix the number at nine. 3. Ladies are "to be as free as men are to take part in the management" of the institution. The Charter Committee suggest that the contemplated changes in the constitution should be carried out by means of an Act of Parliament, in place of by new charter, which involves the use of cumbrous and not readily intelligible language, whereas in an Act of Parliament the phraseology might be made much clearer, and the new constitution placed in a much more distinct light before all concerned. At their quarterly meeting, held on the 14th ult., the managers agreed to the recommendation of the Committee of Management that an assistant-physician should be appointed, and resolved to make the appointment at their next meeting in September. Five candidates entered the field, but one, Dr. Edmond, is said to have retired, the four remaining being Drs. Booth, MacGregor, Rodger, and Smith. It is to be hoped that the gentleman appointed will do something to supply the want of clinical teaching.

AMPUTATION OF UPPER LIMB, INCLUDING SCAPULA AND TWO-THIRDS OF CLAVICLE.

At the beginning of the winter session, Professor Ogston excised, in the case of a young man aged twenty-one, the head of the humerus, which was involved in a large sarcomatous tumour. The disease returned, and to eradicate it thoroughly Dr. Ogston removed the entire limb, including the scapula and two-thirds of the clavicle. The patient made an excellent recovery.

DEATH OF DR. OGILVIE FORBES.

Dr. Ogilvie Forbes, who till 1877 filled the chair of Physiology in Aberdeen, died at Boyndlie, near Fraserburgh, on the 25th ult. The son of a physician, he chose his father's profession, and was first engaged in private practice; but in

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was appointed Lecturer on Physiology in Marischal , and then retired from practice. On the amalgama- of the two colleges he was appointed Professor of the tutes of Medicine, which, owing to failing health, he ed in 1877, when Dr. Stirling was appointed his sor. Dr. Ogilvie Forbes was sixty-six years of age.

DISEASED MEAT PROSECUTION.

re have recently been several prosecutions of indi- ls for selling diseased meat, and the medical evidence each been very conflicting. On Saturday of last week sanitary inspector presented a petition to the magistrates g permission to destroy a certain quantity of ham he found being sold for human food, and which, in opinion, was unfit for such. Dr. Thomson, medical of health, said that "the hams were altered in colour, smell, and consistency—the worst parts were putrid." A medical witness for the defence said that the ham "was all one piece; it had a very nice colour and a very sweet smell, with the exception of one part." The magistrates, however, declared the ham unfit for human food, and ordered it to be destroyed. Some weeks ago the sanitary officials seized a large quantity of fish which they considered unfit for human food. Drs. Beveridge and MacGregor said on oath that they were of the same opinion, but medical witnesses for the defence said they considered the dish quite good and fit for human food, and, indeed, had some of the worst cooked and ate them. Again, however, the verdict was in favour of the prosecution.

Aberdeen, June 29th.

IRELAND.

(From our own Correspondent.)

ROYAL COLLEGE OF SURGEONS IN IRELAND.

At a meeting of medical students connected with the medical school of the college, held last week, the following resolutions were unanimously adopted:—1. "Whereas medical students who have entered under the new regulations made in 1882, are subjected to other rules subsequently introduced, to this the meeting does object on the grounds that due notice has not been given." 2. "Whereas the fees formerly paid for re-examination have been afterwards (1886) increased without any apparent justification, the meeting is of opinion that the Council of the Royal College of Surgeons should reconsider their decision." The composition of these resolutions is not so well put as it might be, but the last paragraph has reference to the present fee for re-examination, which, early this year, was raised to three guineas instead of two, as formerly. At the examination for the First Half, which commenced last week, the failures were unusually numerous—viz., of nineteen candidates, fifteen were rejected.

UNIVERSITY OF DUBLIN.

The annual meeting of the Senate took place last week, and among the graces submitted from the Provost and Senior Fellows was that the degree of LL.D. (*honoris causâ*), should be conferred on John Tyndall, F.R.S., Professor of Natural Philosophy in the Royal Institution of Great Britain. Dr. Ingram said that he asked the votes of the Senate in favour of a distinguished Irishman, Professor John Tyndall. He stood in the foremost rank of living physicists, and there was scarcely any branch of physics with which his name is not honourably associated. Heat considered as a mode of motion, the absorption and radiation of gases and vapours, the phenomena of diamagnetism, and the relations of magnetism and diamagnetism to molecular structure, the floating matter of the air in relation to putrefaction and infection, the motion of glaciers, the methods of lighthouse illumination, and the theory of sound—all these subjects had been investigated by him. He was a master of the art of scientific exposition, as might be seen in his accounts of Faraday as a discoverer, and of Pasteur's researches on spontaneous generation; and as a writer he possessed a vigour, elasticity, and occasional elegance of style which many men of letters might well envy. The grace was passed.

THE ADELAIDE HOSPITAL, DUBLIN.

The examinations for the Hudson Scholarship, which consists of a gold medal and £30, and the Hudson Prize—a silver medal and £10—have concluded. There were two competitors, but the answering being below the standard fixed, the scholarship will not be awarded this year. Mr. Strangman, a fourth-year student, obtained the Hudson Prize.

BELFAST ROYAL HOSPITAL.

A handsome stained glass window has been placed on the main staircase of this hospital, which has been erected at the sole expense of Dr. Whitla, author of the well-known "Manual of Materia Medica," and one of the visiting physicians of the institution.

Dublin, June 29th.

THE COLLEGE ELECTION.

THE voting at the above election, which took place at the Royal College of Surgeons on Thursday afternoon, was not of that exciting character which often signalises this event. Only about 260 Fellows voted, and at five o'clock the result, which is as follows, was announced:—

MR. EDWARD LUND	162	including	1 plumper.
MR. BERKELEY HILL	142	„	10 „
MR. REGINALD HARRISON	109	„	10 „
MR. SEPTIMUS SIBLEY	108	„	3 „
Mr. Alfred Willett	96	„	10 „
Mr. John Couper	80	„	6 „
Mr. R. Brudenell Carter	71	„	5 „
Mr. James Rouse	34	„	1 „

Mr. Edward Lund and Mr. Berkeley Hill were therefore duly re-elected, and Mr. Reginald Harrison and Mr. Septimus Sibley elected members of the Council.

There was, as usual, a large and interesting exhibition of specimens which have been added to the museum of the College during the past year; some are of special interest, and form valuable additions to this important collection.

THE SERVICES.

THE Indian Government has conferred a good service pension upon Surgeon-General B. Simpson, M.D.

ADMIRALTY.—The following appointments have been made:—Surgeon John Anderson M'Adam, to the *Penguin;* Surgeon Thomas Martyn Sibbald, to the *Duke of Wellington;* Surgeon Robert Forbes Bowie, to the *Superb;* and Surgeons Alfred John Pickthorne, James Henry Dawe, and East Apthorpe, to the *Duke of Wellington*, additional, for disposal.

ARTILLERY VOLUNTEERS.—1st Dorsetshire: Augustus Kinsey-Morgan, Gent., to be Surgeon.

RIFLE VOLUNTEERS.—4th Middlesex (West London): Surgeon G. E. Norton is granted the honorary rank of Surgeon-Major.—1st Cumberland: Surgeon M. W. Taylor is granted the honorary rank of Surgeon-Major.—1st Volunteer Battalion, the Norfolk Regiment: Acting Surgeon C. W. Doyle, M.B., resigns his appointment.

MEDICAL NOTES IN PARLIAMENT.

The Medical Acts Amendment Bill.

IN the House of Commons on the 23rd ult., on the consideration of the Lords' amendments to this Bill, Mr. Tanner remarked that when the Bill was under discussion in that House, a division was taken on the point whether the Universities of Aberdeen and St. Andrews should each have a member, or whether they should have one member between them. On that occasion the House came to the conclusion that it would be better to treat them collectively, and therefore he now moved that the House should disagree with the amendment which had come down from the Lords.—Mr. J. A. Campbell supported the Lords' amendment on the ground that it gave effect to the principle which this House had laid down in the first instance.—Sir L. Playfair, while sympathising very much with the hon. member for the county of Cork, hoped the House would agree with the Lords' amendment.—Mr. Sexton urged his hon. friend not to press his objection.—The motion was then withdrawn, and the Lords' amendments were agreed to.

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Medical News.

UNIVERSITY OF DURHAM.—At the recent examinations for degrees in Medicine and Surgery the following satisfied the examiners:—

DOCTOR IN MEDICINE, FOR PRACTITIONERS OF FIFTEEN YEARS' STANDING.

Bately, John, L.R.C.P., M.R.C.S., L.S.A.
Cleghorn, George, M.R.C.S., L.S.A.
Crossman, Edward, L.R.C.P., M.R.C.S., L.S.A.
Eustace, Edward, L.R.C.P. Edin., L.R.C.S. Irel.
Fishbourne, Joseph Eustace, L.R.C.P. Edin., L.R.C.S. Irel.
Gowans, William, L.R.C.P., L.R.C.S. Edin.
McDermott, Joseph Patrick, L.R.C.S.I., L.K.Q.C.P.I.
Patrick, Robert, L.R.C.P. Edin., M.R.C.S.
Perkins, Whitfield, M.R.C.S., L.S.A.
Reston, Henry, L.R.C.P., M.R.C.S., L.S.A.
Tinley, Thomas, L.R.C.P. Edin., L.S.A.

DOCTOR IN MEDICINE (Essay).

Cock, Frederick W., M.B., M.R.C.S., L.S.A.
Edwards, W. Rice, M.B., M.R.C.S.
Parsons, J. Inglis, M.B., M.R.C.S.
Rodman, G. Hook, M.B., M.R.C.S., L.S.A.
Salvage, J. Valentine, M.B., L.R.C.P., M.R.C.S.
Tomson, Walter, Bolton, M.B.
Wigan, C. Arthur, M.B., M.R.C.S.
Wills, J. Pearce Budgett, M.B., M.R.C.S.

MASTER IN SURGERY.

Baumgartner, H. Spelman, M.R.C.S., L.S.A., College of Medicine, Newcastle-upon-Tyne.
Caley, G. Neville, L.R.C.P., M.R.C.S., St. Mary's Hospital.
Platt, H. T., M.B., College of Medicine, Newcastle-upon-Tyne.

BACHELOR IN MEDICINE (Final Examination).

Arnold, Ernest C., M.R.C.S., St. George's Hospital.
Bass, Frederick, L.R.C.P., St. Bartholomew's Hospital.
Baumgartner, H. Spelman, M.R.C.S., L.S.A., College of Medicine, Newcastle-upon-Tyne.
Blacker, A. Barry, M.R.C.S., L.S.A., St. Thomas's Hospital.
*Caley, G. Neville, L.R.C.P., M.R.C.S., St. Mary's Hospital.
Carlyon, B. Trewbody, L.R.C.P., M.R.C.S., St. Bartholomew's Hospital.
Codd, Arthur F. Gambell, M.R.C.S., St. George's Hospital.
Courteen, Raymond, M.R.C.S., St. Bartholomew's Hospital.
Cranstoun, C. Bruce, St. Thomas's Hospital.
Cross, Henry W., College of Medicine, Newcastle-upon-Tyne.
Davis, Ifor, Middlesex Hospital.
Dimmock, Augustus F., M.R.C.S., L.S.A., King's College.
Dove, Augustus C., M.R.C.S., St. Bartholomew's Hospital.
Garrett, John Henry, University College.
Hamilton, Geo. Clarendon, L.S.A., London Hospital.
Hardwick, Arthur, L.S.A., Westminster Hospital.
Hickey, Evan Lewis, M.R.C.S., King's College.
*James, J. Thomas, F.R.C.S. Eng., Middlesex Hospital.
Jeffree, Frank, M.R.C.S., L.S.A., King's College.
Larking, Arthur Ernest, M.R.C.S., L.S.A., Guy's Hospital.
Low, C. W., L.R.C.P., M.R.C.S., L.S.A., St. Bartholomew's Hospital.
Manning, Philip Percy, King's College.
O'Connor, C. Patrick, University College.
Paige, H. B. Wood, College of Medicine, Newcastle-upon-Tyne.
Phillips, Edward, M.R.C.S., Queen's College, Birmingham.
Race, William, College of Medicine, Newcastle-upon-Tyne.
*Rawes, William, M.R.C.S., London Hospital.
Richardson, W. G., College of Medicine, Newcastle-upon-Tyne.
Ruddock, W. James, College of Medicine, Newcastle-upon-Tyne.
Spoor, William Joseph, M.R.C.S., Middlesex Hospital.
Straughan, John, College of Medicine, Newcastle-upon-Tyne.
Sugden, Edward Scott, St. Thomas's Hospital.
Sumpter, Berners G., College of Medicine, Newcastle-upon-Tyne.
Turnbull, W., L.S.A., College of Medicine, Newcastle-upon-Tyne.
Wilding, James, L.R.C.P., M.R.C.S., Westminster Hospital.
*Young, E. Herbert, L.R.C.P., M.R.C.S., L.S.A. Univ. Coll.

* Second Class Honours.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—At an examination recently held the following obtained the Fellowship:—

Archibald Adams, M.D., Indian Medical Department.

SOCIETY OF APOTHECARIES.—The following gentlemen passed their examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received certificates to practise, on the 24th ult.:—

Chick-Lucas, J. Robb Goodman, M.R.C.S., Bellevue, Brading, Isle of Wight.
Edsell, George Alfred, The Grove, Beulah-hill, Upper Norwood.
Hemming, Claude Philip, Highfield, Bishop's Waltham.
Luff, Arthur Pearson, Denmark Villas, Ealing.
Michelmore, George, M.R.C.S., Gloucester-street.
Permewan, William, Redruth, Cornwall.
Seville, Charles Frederick, Mossley, Manchester.
White, Francis Silva, Lexham-gardens.

ON the 30th ult. their Royal Highnesses the Prince and Princess of Wales performed the ceremony of opening the new wing which has been added to the Royal Victoria Hospital for Children at Chelsea. The cost of the new building has been £7500, and the contributions already received amount to £4000.

ON the 25th ult. the new wing of the Queen Charlotte's Lying-in Hospital, Marylebone-road, was formally opened by the Princess of Wales.

AT a meeting of the City Corporation on the 1st inst. it was referred to a committee to consider the propriety of acquiring the Tottenham Marshes as an open space.

THE Metropolitan Board of Works on the 25th ult. decided to order from the Barrow Shipbuilding Company (Limited) a vessel capable of conveying 1000 tons of sewage sludge out to sea.

BEQUESTS.—Sir William Gillilan Johnson, late of Belfast, has bequeathed £250 to the Belfast Royal Hospital, £250 to the Belfast Ophthalmic Institution, and £100 to the Belfast Hospital for Skin Diseases.

SANITARY INSTITUTE OF GREAT BRITAIN.—The anniversary dinner of the institute will be held at the Holborn Restaurant on the 8th inst., and will be presided over by Captain Douglas Galton, C.B.

AT a meeting held on the 23rd ult. in the boardroom of the York County Hospital it was unanimously resolved that a Volunteer Medical Association for Yorkshire be formed.

HUDDERSFIELD INFIRMARY.—The Board of Management of this Infirmary have requested Messrs. H. Saxon Snell and Son to prepare designs for the enlargement of the building, and also a report as to the sanitary condition of the premises generally.

AN unfortunate teetotaller some months ago attended a temperance lecture, and was there informed that ammonia was the best substitute for alcohol. Having a pain in the chest, he took a tablespoonful of the drug, which caused his death after great agony. At the inquest the jury returned a verdict of accidental death.

PIROGOFF MEMORIAL CHURCH.—In the May number of the *Russkaya Starina* there is a picture of a handsome church of Byzantine architecture, with dome and cupola surmounted by a cross, which has just been erected over the grave of the illustrious Russian surgeon, Prof. Pirogoff, at Vishna, near Vinnitsa, in the province of Podolsk. Our medical contemporary, the *Vrach*, publishes a copy of this engraving in its issue, No. 20.

NORTH LONDON HOSPITAL FOR CONSUMPTION.—The festival dinner in aid of the funds of this institution was held on the 23rd ult., when subscriptions and donations amounting to £1256 were announced. The hospital, which is unendowed, and depends entirely upon voluntary contributions, receives patients from all parts of the kingdom, and 160,000 patients had been relieved since its foundation. The total receipts from all sources during the year 1885 were £4837 11*s.* 2*d.*, against £3029 2*s.* 6*d.* in 1884, and £2736 3*s.* 1*d.* in 1883.

NATIONAL DENTAL HOSPITAL.—On the 29th ult. a dinner in aid of the funds of this institution was held, the chair being taken by Alderman Sir Robert N. Fowler. In proposing prosperity to the National Dental Hospital, the chairman stated that the hospital had been founded in 1861, and after existing a quarter of a century came forward for the first time to appeal for support—after the fashion followed by so many other charities—at a dinner. Since its institution it has relieved 221,422 cases, the number of patients in 1885 being 20,367, and of cases of operation 37,364.

LADY DUFFERIN'S FUND.—The managers of this fund have published an account of the progress made in supplying female medical aid to the women of India, in which they state that the attendance at the dispensary in Calcutta is increasing rapidly, and that the institution promises to be a great success. The North-Western branch association is establishing a female hospital at Allahabad, while the female medical school at Agra shows great vitality. A provincial branch association has been formed at Rangoon, and from Lahore, Delhi, and some of the native States come applications for more lady doctors. The conditions on which the Queen's and Viceroy's medals are to be awarded will shortly be made public. Money is, however, urgently required, the sums already subscribed having proved quite insufficient to meet the requirements.

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THE Lord Chancellor has added to the Commission of Peace for Cardiff the name of Mr. D. E. Jones, L.R.C.P. Ed., F.R.C.S. Ed.

ANCIENT ALCHEMIST'S LABORATORY.—In connexion with the British Association meeting which is to be held in Birmingham, there is to be an Exhibition, and Messrs. Southall Bros. and Barclay are desirous of representing an ancient alchemist's laboratory. They have received most generous help from Professor Redwood, Henry Irving, Esq., Lawson Tait, Esq., Messrs. Corbyn and Co., Messrs. Godfrey and Cooke, and others, and they will be greatly obliged to gentlemen who possess old utensils, implements, fixtures, &c., if they will forward particulars in case they are disposed to lend them for the occasion. The Exhibition will remain open for about six weeks, commencing the latter part of August.

TANFANI v. WINSLOW.—This case was decided in the Court of Queen's Bench on the 25th ult. The following are the facts:—Madame Tanfani, suing as a married woman under her separate estate, brought an action against Dr. Winslow for alleged false imprisonment in Sussex House Asylum. The lady was confined as long ago as 1878, but being then a *femme convert* she could not bring her action until after the passing of the Women's Property Act in 1883, when she became a *femme sole*. Dr. Winslow received the lady on the order signed by the sister and by two medical men, against whom actions are still pending. Within three days of her incarceration in an asylum, she was visited by the Commissioners in Lunacy, and again after she had been there a few weeks, who pronounced on her insanity. She had also been confined in Rome, and was brought over from Italy by two men. Dr. Winslow appeared in person to defend this action. Without requiring Dr. Winslow to call witnesses or address the Court, Mr. Justice Manisty submitted to the jury that what Dr. Winslow did was perfectly justified, and the jury returned a verdict for the defendant.

ST. THOMAS'S HOSPITAL.—On Wednesday the Dean of Westminster distributed the prizes at this hospital for the summer session 1885-86. The Dean offered some good counsel to the younger members of his audience, which he enforced and illustrated by a telling anecdote. Among the successful students were Mr. J. W. Wheaton, who took the College Prize of £15 and the Mead medal for practical surgery, and who attained the second place in an open competition for the Murchison Scholarship, and Mr. J. Macevoy, who took the College Prize of £10, a bronze medal for practical medicine, and was bracketed equal with Mr. Wheaton in the competition for the Murchison Scholarship; Mr. A. F. Stabb obtained an Entrance Science Scholarship of £100, the William Tite Scholarship of £30, and special mention for practical medicine; Mr. E. Solly took the Solly Medal and a prize of £25; Mr. H. J. Smyth gained the Treasurer's Gold Medal for general proficiency and good conduct; Mr. F. C. Abbott carried off a College Prize of £15, the Peacock Scholarship of 40 guineas, and a certificate of honour; and Mr. C. H. Eccles, a College Prize of £15 and another of £20.

QUEEN'S COLLEGE, BELFAST.—At the General Examinations at the close of the Session 1885-6 the following were awarded prizes:—Practical Chemistry: Robert Thomson and Alexander Jamison. Zoology: Senior Division—James Taylor and J. S. Morrow; Junior Division—E. W. McBride, Douglas Maconachie, John Jamison and H. J. Heron (equal), and Alexander Jamison. Anatomy and Physiology: Third Year—J. L. Livingstone; Second Year—John Campbell; First Year—James Taylor, H. J. Heron and James McConnell (equal), John Larkin and Robert Wilson (equal). Practical Anatomy: Third Year—John Campbell, D. C. Smiley, R. C. McCullagh, J. L. Livingstone, R. W. Haslett, F. E. Murray, G. A. Waring (non-mat., hon. mention for Dissecting); Second Year—J. M. Hall, Robert Wilson, W. P. M. Eldowney, and S. J. Parker; First Year—James Fulton, S. H. Withers, John Larkin, and D. H. Hamilton. Medicine: Second Year—W. B. McQuilty, S. R. Collier, and G. S. Thomson; First Year—John Campbell and J. M. J. Downer. Surgery: G. H. Thompson and R. J. Duffin (equal), John Campbell and Simon Ryan. Materia Medica: M. H. Quarry, Andrew Burgess, William Ekin, and J. S. Downer. Midwifery: W. Elliot, J. Campbell, and W. Kilbeen (equal), W. Hamilton and R. Esler (equal), James Hunter and H. L. Mac Kisack (equal, with hon. mention).

Medical Appointments.

Intimations for this column must be sent DIRECT to the Office of THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

AIRD, CHARLES, M.B.Aber., has been appointed Assistant Medical Officer to the East Riding Asylum, Beverley, vice Broatch, M.B.Ed.

AUDLAND, W. E., L.R.C.P.Lond., M.R.C.S., has been appointed House-Surgeon to the General Infirmary, Northampton, vice J. Oswald Lane, M.D.Cantab., resigned.

CAMPBELL, HARRY, M.D., B.S.Lond., M.R.C.P., has been appointed Assistant Physician to the North-West London Hospital.

ELLIS, WILLIAM HENRY, M.R.C.S., L.S.A., has been reappointed Medical Officer of Health to the Shipley Urban Sanitary Authority.

FITZPATRICK, J. V., L.K.Q.C.P.I., L.R.C.S.I., has been appointed Medical Officer to the Moville Dispensary District, Public Vaccinator, Sanitary Medical Officer, and Medical Officer to the R. I. Constabulary, vice Sproulle, deceased.

FROST, W. ADAMS, F.R.C.S.Eng., L.R.C.P.Lond., has been appointed Ophthalmic Surgeon to the Victoria Hospital for Children, Chelsea.

HILL, F. A., M.D., M.R.C.S., has been appointed Medical Officer for the Kilburn District of the Parish of St. John, Hampstead.

JOHNSTON, FRANCIS, M.B., C.M.Glas., has been appointed Senior House-Surgeon to the Liverpool Infirmary for Children, vice A. Stookes, M.B., C.M.Edin., resigned.

MITCHELL, ADAM G., L.R.C.S., L.R.C.P.Ed., of the Peninsular and Oriental Steam Navigation Company's Service, has been appointed to the *Sutlej*.

MURRAY, ANDREW, M.D., B.Ch., has been appointed Medical Officer for the Hampstead District of the Parish of St. John, Hampstead.

PENNY, WILLIAM J., F.R.C.S.Eng., has been appointed Assistant Surgeon to the Bristol General Hospital.

PENROSE, FRANCIS GEORGE, M.D.Lond., M.R.C.S., has been appointed Medical Registrar to the Hospital for Sick Children, Great Ormond-street.

RANKIN, MALCOLM A., M.D.Glas., has been appointed Medical Officer to the Workhouse of the Luton Union.

RIGDEN, ALAN, L.R.C.P.Lond., M.R.C.S., has been appointed Junior Assistant Medical Officer to the Salop and Montgomery Counties Asylum, Shrewsbury, vice P. M. Earle, L.R.C.P., L.R.C.S.Ed., resigned.

SUCKLING, C. W., M.D.Lond., M.R.C.P., has been appointed Consulting-Physician to the Birmingham Orthopædic and Spinal Hospital.

WITHERS, J. SHELDON, M.R.C.S., L.R.C.P.Lond., has been appointed Medical Officer for the Ashton-on-Mersey District of the Altrincham Union.

Births, Marriages, and Deaths.

BIRTHS.

EMMETT.—On the 25th ult., at Woodville, Portsmouth, the wife of Richard Emmett, M.R.C.S., L.R.C.P.Lond., of a son.

FISHER.—On the 25th ult., at West Walk, Dorchester, the wife of Fred. Bazley Fisher, M.R.C.S., F.R.C.P., of twin daughters.

GARLICK.—On the 22nd ult., at 39, Great James-street, London, W.C., the wife of George Garlick, M.D.Lond., of a son.

GRAHAM.—On the 24th ult., at 17, Queen-street, Wigan, the wife of Charles R. Graham, M.R.C.S., &c., of a son.

THOMPSON.—On the 27th ult., at Suffolk-place, Sevenoaks, the wife of Herbert Thompson, M.R.C.S., of a son.

WEBSTER.—On the 27th ult., at St. Alban's, the wife of F. R. Webster, M.R.C.S., of a son.

WEBSTER.—On the 8th ult., at Golcar, Yorkshire, the wife of A. G. Webster, M.R.C.S., of a daughter.

MARRIAGES.

COOK—CORNWALL.—On the 24th ult., at St. James's Episcopal Church, Aberdeen, James Will Cook, M.B., C.M., of Bury, Lancashire, to Jane MacKay, second daughter of J. R. Cornwall, Esq., of Queen's-road, Aberdeen.

HAYES—MUIR.—On the 24th ult., at the Bowdon Congregational Church, by the Rev. Alexander Mackennal, B.A., and the Rev. Joseph Corbett, D.D., of Glasgow, James Hayes, M.R.C.S., L.R.C.P.Lond., eldest son of John Hayes, J.P., of The Limes, Leigh, to Jessie Geddes, elder daughter of Alexander Muir, of Altrincham.

STEEL—OWEN.—On the 23rd ult., at the Parish Church, Llandilo Pertholey, near Abergavenny, by the Rev. James Owen, uncle of the bride, assisted by the Rev. Allen Steel, uncle of the bridegroom, William Dyne Steel, M.D., of Abergavenny, eldest son of S. H. Steel, Esq., M.B., of Abergavenny, to Mary Emily (Trottie), eldest daughter of His Honour Judge Owen, of Ty Gwyn, near Abergavenny.

STURGE—SHERRIFF.—On the 1st inst., at St. Andrew's Church, Westminster, by the Rev. Melvill Haslope, Wm. Allen Sturge, M.D., of Nice, France, to Julia, daughter of the late A. C. Sherriff, M.P. for Worcester.

DEATHS.

BARRINGER.—On the 23rd ult., at Parkhurst-road, Thomas Stevens Barringer, M.D., in the 75th year of his age.

BATT.—On the 6th ult., at Gloucester, R. B. D. Batt, M.R.C.S., L.S.A., aged 25.

COLE.—On the 27th ult., at Ely, George Cole, Surgeon, aged 79.

OGILVIE-FORBES.—On the 25th ult., at Boyndlie House, by Fraserburgh, Aberdeenshire, George Ogilvie-Forbes, M.D., of Boyndlie, formerly Professor of Institutes of Medicine in the University of Aberdeen, aged 65.

N.B.*—*A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

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METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, July 1st, 1886.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
June 25	30·16	W.	63	57	122	75	53	...	Cloudy
,, 26	30·72	W.	63	57	111	77	56	...	Overcast
,, 27	30·100	N.E.	69	58	115	75	52	...	Hazy
,, 28	30·204	E.	67	61	119	79	58	...	Hazy
,, 29	30·236	E.	66	59	109	80	57	...	Hazy
,, 30	30·282	N.E.	65	59	117	75	59	...	Hazy
July 1	30·300	E.	60	54	116	76	53	...	Bright

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

Letters requiring notice must be authenticated by the name and address of the writer.

We cannot undertake to return MSS. not used.

UNQUALIFIED PRACTICE AND THE NEW MEDICAL ACT.

General Practitioner says: "I have seen some glaring blunders smoothed over by signature of principal, even craniotomy, by an unqualified man, single-handed, and death certificate by principal for both mother and child," and asks, Does the Medical Act affect such cases, or the legal prosecution of the offenders? We are sorry to say the Medical Act leaves this grave question just where it found it, and does nothing to deter offenders. We must trust to coroners and medical men who are called in to such cases for the exposure of a great evil.

Enquirens (Porthleven) is referred to a general notice at the head of this column.

Mr. David Newman (Glasgow).—In about three weeks or a month.

THE POSTAL MICROSCOPICAL SOCIETY.

To the Editor of THE LANCET.

SIR,—Thinking there may be many members of the profession who do not know of the existence of a special Medical Section for the circulation of histological and pathological slides in the above Society, I ask you to insert this letter, in the hope that it may come under the notice of gentlemen interested in pathology, &c., and to ask them to assist the section by becoming members or obtaining friends to do so. The great advantages of the Society are (1) that it takes up very little of their time (only that in which the specimens and notes are examined, and once a year a new selection to be got ready and sent to the secretary to forward on the various circuits), and (2) that members who cannot attend the meetings of societies for various reasons, and those who live too far distant from them, are thus brought into communication, ideas and notes are exchanged, and much useful information is brought to light, the specimens often presenting features of special interest. The section is gradually increasing, and we hope before long to have many more among our ranks. Those gentlemen who were students when pathology and histology were only in their early growth would in this way become acquainted with the progress of the sciences and the various processes used in them. Of course, the slides of the Medical Section are not circulated amongst any but those of their own professional section. Should any further particulars be desired, they can be obtained from the secretary, Mr. Alfred Allen, 1, Cambridge-place, Bath.

I am, Sir, yours truly,

Manchester, June 28th, 1886. V. A. LATHAM.

MEDIÆVAL INNS.

THE pestilences of antiquity and of the Middle Ages were simply the explosions of disease engendered by long periods of insanitary living. Want of cleanliness was prominent among the predisposing causes. In Gustav Peyer's "Geschichte des Reisens in der Schweiz" ("History of Travel in Switzerland") a graphic account is given of the mode in which the wayfarer was housed and entertained in the hostels of the sixteenth century, which may be read as a supplement to the still more graphic description of the same in Sir Walter Scott's "Anne of Geierstein," in the century preceding. In the year 1520 Erasmus wrote to a friend:—"On arriving at your inn, there is no one to receive you, so that there might be no appearance of lying in wait for guests. After you have shouted a long time, a head is thrust out of the little window of the stuffy apartment. You ask for stabling, and the reply is a wave of the hand to the outhouse in question. There you may groom your horse to suit yourself, for no ostler is within reach. Your horse provided for, you make your way, accoutred as you are—boots, baggage, and dirt—to the apartment aforesaid. The room is common to every guest, and there you draw off your boots, replace them by shoes, and even change your linen. On one side of you an 'arrival' is combing his hair; on the other a second is mopping the sweat off his person; while a third is polishing his shoes or riding-boots. You arrive at 4 P.M., but yet you may not dine till 9, or not until 10 P.M.; for the meal is not served till all that the inn can hold have come. As soon as each one has taken his place at table, there enters the sour-visaged Ganymede—grey-bearded, close-clipped as to his head, repulsive of aspect and foul as to his apparel. Then come with great pomp the dishes. Finally the bearded attendant makes his rounds, in his hand the dinner slate, on which he has described with chalk sundry hooks and eyes. Those who can read the hieroglyphics lay down their money on the slate, one after another, till it is covered, and so he marks off those who have paid. No one disputes an unjust reckoning. If, weary from your journey, you wish after supper to go to bed, you are told you must wait till all the other guests are ready to lie down. Then everyone is shown his 'rabbit-hutch'—a bed, and nothing more; for, besides the bed, there is no furnishing to it which you can use. The sheets most likely have not been washed for six months." So, freely translated from his idiomatic Latin, wrote the dainty humanist, whose efforts in behalf of the Reformation were *motives* by other abuses than those of ecclesiastical authority. In explanation of the remark "that there might be no appearance of lying in wait for guests," Herr Peyer quotes a decree of the Zurich Town Council of 1402, to the effect that "fremdenfängerei"—that is, touting for strangers—was forbidden under severe penalties. Certainly, the landlords of the day did their best to make the enactment superfluous.

Mr. R. T. Thomas.—The possession of the L.R.C.P.Lond. does not entitle its holder to style himself "Doctor" on his door-plate.

APPLICATION OF FORCEPS.

To the Editor of THE LANCET.

SIR,—I fully concur with Dr. Brand of Driffield as to the comparative facility of the application of forceps by introducing the upper blade first; and I have often been puzzled to discover the reason why the text-books, almost, I think, without an exception, recommend the lower blade to be introduced first. Ever since I began practice, nearly fifty years ago, I have used, except in very few cases, the double curved forceps, introducing the upper blade first by the hollow of the sacrum, and gliding it by gentle rotation into position. I then introduce the lower blade, also by the hollow of the sacrum, and glide it into position, when, by gentle manipulation of the handles, the instrument is easily locked. When the operation is performed in this manner, there is no occasion to disturb and alarm the patient by bringing her to the edge of the bed, nor is the aid of an assistant required.

I am, Sir, yours faithfully,

Tring, June 28th, 1886. EDWARD POPE, M.R.C.S.

STRANGE CAUSE OF MUMMIFICATION.

M. BROUARDEL has reported to the Paris Academy of Medicine upon the mummification of the body of a young woman which was found in a heap of straw in a cellar. The cellar had not been opened for eight months. The body was in a remarkable state of preservation. The mummification was due, according to MM. Brouardel and Mégnin, to myriads of acari of various kinds whose eggs were embedded in the tissues.

C. M. M.—The words *wood sorrel* in our last issue should have been in inverted commas, as they were copied from a report of the case in a contemporary. "Wood sorrel" is undoubtedly the popular name for *Oxalis acetosella*. We believe the plant ingested was the sorrel dock (*Rumex acetosa*); possibly it was the sheep sorrel (*Rumex acetosella*).

Dr. Russell (Glasgow).—Bell and Sons, York-street, Covent-garden, London, W.C.

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A QUESTION IN MEDICAL ETHICS.

An ex-medical officer of health, of great practical experience in house sanitation and in tracing diseases to sanitary defects, asks if it would be unprofessional to advertise his services for sanitary house inspection, either openly or under a *nom-de-plume*. Hitherto, so far as we know, such a practice has not been resorted to, except in so far as the names of medical advisers to the different sanitary associations are appended to the advertisements of those societies. If such advertising as is indicated in the question put to us were limited to the professional journals, as is the case in respect of the care of the insane, &c., we could hardly raise objection to it; but beyond this the practice is one which we could not advocate.

D. F. (Barrow-in-Furness).—The tragic end of the King of Bavaria has given a fresh start to observations on the "law of hereditariness." Dr. P. Maréchal, in an interesting paper, reminds us that the Royal House of Spain exemplifies a transmitted neuropathy lasting 250 years. John II. was imbecile; Isabella of Portugal mad; Ferdinand the Catholic melancholic; John, surnamed "the Mad," a victim of hallucinations; Mary Tudor hysterical; Charles V. epileptic and superstitious; Philip II., his son, a homicidal mystic; Philip III. first imbecile and then mad; Philip IV. imbecile; and his two sons, Baltasar subject to convulsive fits and Charles VI. imbecile, melancholic, and finally mad. With this last, who died without issue in 1700, the family became extinct.

Saltcreek.—We should recommend the interior regions of South Africa, Australia, or New Zealand. The towns should be avoided.

OVERCROWDING IN THE PROFESSION.

To the Editor of THE LANCET.

SIR,—I read with some interest a letter in your last issue, signed "L.M.P.S. Que.," pointing out that the profession is "full" in Canada. Will any of your correspondents tell me if they know of any spot in this world where that is not the case? This leads me to ask another question, What may we expect the condition of the profession to be in, say, half a century, if some steps are not taken by those in authority to check in some way the overcrowding which is making itself painfully felt more and more year by year? Month after month we see pass-lists appearing, swelling the tide of practitioners, and making each one's share of bread-and-butter less and more precarious. The inevitable tendency of this must necessarily be to lower the status of the profession in the eyes of the public. I know of very few small towns or country places where there are two or more medical practitioners without a perpetual ill feeling in the said practitioners towards each other, in many cases almost amounting to strife. And why is this? It is because these members of an honourable profession entertain jealous feelings towards one another, the one always apparently thinking that the other intends to let no opportunity pass of robbing his neighbour of his patients. And is this fear wholly without foundation? I grieve to say it is not. A personal friend of mine, a M.D., had recently the pleasing experience of losing a club because a brother practitioner, a M.R.C.S. and L.S.A., kindly undertook the job at a shilling a head less. Then, again, another sign of the overcrowding may be found in the ridiculous salaries which "assistants" may expect to get. I have myself been offered £1 a week for my services, which I was fortunately in a position to decline with thanks; but I have no doubt that there are many working both day and night, with hardly a moment to call their own, at such a fee, and albeit are expected to—and must, indeed—keep up a good appearance on such a pittance. A remedy is not far to seek, if only those who are in authority will exercise their power. Why is it that men (and I have known not a few who have done this), after repeatedly failing at one of our universities, can without trouble obtain a qualification in medicine and surgery at the Colleges?

In conclusion, I would like to ask your correspondent if a graduate in medicine and surgery of a British university cannot practise in Canada without passing an examination in Ontario or Quebec, as he would seem to imply.

I am, Sir, yours faithfully,

Ryhope, Durham, June 28th, 1886. "FELIX HOLT."

CIRCULAR CLINICAL THERMOMETERS.

IN reference to a letter from "M.D. Durh.," in our issue of June 19th, a correspondent writes to ask for further opinions in confirmation or otherwise of the unfavourable testimony therein borne to the value of circular clinical thermometers.

Mr. Tom Lee.—The question surely scarcely requires an answer. The names were fictitious.

DR. ALLEN'S CASE OF EXTRA-UTERINE PREGNANCY.

To the Editor of THE LANCET.

SIR,—Will you allow me to say that the most important lessons of this case are the illustrations it affords of the futility of tapping as a method of diagnosis or treatment and its great dangers. In this case an exploratory incision would have secured at once a correct diagnosis, and would have opened the way to successful treatment.

I am, Sir, yours truly,

Birmingham, June 26th, 1886. LAWSON TAIT.

THE ARCHÆOLOGY OF SURGERY.

J. H. (Carlisle).—Sir James Young Simpson's very clever work on "Acupressure" (Black, Edinburgh, 1864), which, though its *raison d'être* was almost immediately annulled by Listerism, may still be read with profit as a contribution to the history of medicine. It was not till 1564 that surgery, at the instance of Ambroise Paré, revived the deligation of bleeding vessels with simple threads described by Celsus, and substituted it for their cauterisation with red-hot irons. Attempts to find an earlier origin for the ligature have not been successful. In the excellent "Handbook to the National Museum in Naples," its English editor, Mr. E. Neville Rolfe, thus describes the beautiful fresco of Æneas Wounded: "The painting, which is quite unimpaired, represents an episode of the Trojan War. Æneas leaning on his spear, with an expression denoting pain, has his arm round the neck of Julus, who weeps. A surgeon is on his knees, *picking up the artery with forceps*. Other warriors look on, while Venus appears from Olympus with a sprig of balsam." The proper reference is to the Latian War, as told by Virgil, who gives the story of Æneas's hurt in the twelfth book of the Æneid, verse 383 *et seqq.* It was no artery that the surgeon tried in vain to take up in the hero's wound; it was the arrow-head embedded in the tissues that had to be extracted, by one of the methods described by Celsus (Book vii., c. 5, "De Telis e Corpore Extrahendis"). The surgeon failed, as Celsus could have told him he would, and Venus had to interpose with an infusion of Cretan dittany, which, used as a fomentation, caused the arrow-head to drop from the wound without farther ado. So sound a scholar as Mr. Rolfe would do well before adopting the views of his Italian coadjutor to test them by classical authority.

Mr. W. H. Bourke.—No doubt the secretary of the Brussels Medical Graduates' Association, Dr. Pocock, The Limes, St. Mark's-road, North Kensington, will, on application, answer the questions of our correspondent.

Dr. J. Lowe (London).—Yes, if not long.

SEA AIR IN SCROFULA.

To the Editor of THE LANCET.

SIR,—Mr. Frederick Treves, in his able and instructive paper upon the treatment of scrofulous neck (*vide* THE LANCET, June 5th), says:—"In the choice of a sea-side resort, I think it matters little whether the spot be east, west, north, or south, so long as it presents this feature—a beach upon which a large extent of seaweed lies exposed at low water. Iodine is, or can be, obtained from seaweed; and it is reasonable to conjecture that this volatile substance may be given off into the atmosphere when acres of seaweed are drying in the summer sun. An iodine-laden air is an ideal atmosphere for a scrofulous person. Certain it is that those sea towns are most beneficial where this condition is pronounced; and it is to this circumstance, and the fact that it lies surrounded on three sides by the sea, that Margate probably owes its great repute as a place of healing." This question of free iodine in the air under the conditions named is a very interesting one. Upon consulting an eminent professor of chemistry, and recent works upon the subject, I find that it is not universally admitted that atmospheric air ever contains free iodine; if present, the quantity is so small as to render detection almost impossible. Seaweed contains iodides which can be dissolved out of the fresh weed by fresh water; a fall of rain would supply this water. Ozone sets free iodine from iodides, and ozone being always present in good air we might suppose that it would do this. Where, however, large quantities of seaweed are exposed at low water other processes are at work—viz., those of decay and oxidation—which give rise to products the smell of which is probably often mistaken for that of iodine or ozone. These processes use up the ozone, and convert the free iodine, if there is any, at once into an iodide. It has therefore yet to be proved by direct experiment that the air of such places contains free iodine, notwithstanding that Mr. Treves speaks of "an iodine-laden air." The fact that Margate is so freely exposed to the sea air is most probably the cause of the benefit that scrofulous patients receive whilst there. This fact Mr. Treves mentions; and he would probably be disposed to admit that a sea voyage, under favourable conditions, would be even more likely to benefit such patients. This, however, he could not attribute to the seaweed that is in the water, any more than he could the saltness to the salt fish contained therein.

I am, Sir, yours faithfully,

Southport, June 15th, 1886. EDWARD DAY MCNICOLL.

ERRATUM.—In our report last week of the meeting at Lambeth Palace, page 1254, the name of the organiser should have been printed Mr. R. Garrard Kestin, not "Keskin."

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Quinlan, Dublin; Mr. W. Whitehead, Manchester; Dr. Harkin, Belfast; Mr. L. Tait, Birmingham; Dr. B. B. Truman, Nottingham; Dr. Donald Hood, London; Dr. Geo. Johnson, London; Sir W. Mac Cormac, London; Dr. Gowers, London; Dr. Broadbent, London; Mr. Mayo Collier, London; Dr. A. Johnson, Wellington, N.Z.; Dr. Manning, Hunter's Hill, N.S.W.; Mr. Piggott, Clare; Mr. B. Pope, Tring;

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Dr. Imlach, Liverpool; Dr. J. J. Chisholm, Baltimore; Mr. Stephen Paget, London; Mr. Buée, Slough; Brigade-Surgeon J. B. Hamilton, Lucknow; Mr. N. A. Latham, Manchester; Dr. Wm. Hunter, Edinburgh; Mr. V. Richards, Goalundo; Dr. Bornn, Dominica; Rev. H. Layton, Hounslow; Brigade-Surgeon W. Curran, London; Rev. Arthur Robins, Windsor; Mr. G. M. Smith, Clifton; Messrs. McCallan and Co., Ayr; Rev. J. Macdonald, Southall; Messrs. W. H. Smith and Son, Manchester; Rev. J. S. Smith, Enfield; Rev. J. M. Gordon, Redhill; Dr. Tomkins, Leicester; Mr. C. Applegate, London; Rev. R. Nobbs, Upton; Rev. W. E. Hurndall, London; Mr. C. G. Williamson, London; Rev. W. Benham, London; Mr. Parish, Horncastle; Rev. A. Ingleby, Ilford; Mr. Heywood, Manchester; Messrs. Ulbert and Co., Stroud; Mr. Hays, Leigh; Mr. Whitmarsh, Kensington; Dr. Booth, New Jersey; Rev. G. W. Mackie; Rev. T. Hill, Finchley; Rev. Canon Leigh; Rev. T. Scott, West Ham; Mr. J. Girling; Messrs. Wright and Co., Bristol; Rev. J. W. Pratt, London; Rev. J. Snowden, Stamford Hill; Rev. A. S. Palmer, Woodford; Rev. W. Warren, Barnet; Rev. J. Olphert, Harrow; Mr. T. Gwen-Wilson, Plaistow; Mr. R. Bruce Low, Helmsley; Mr. O. B. Shelswell, London; Rev. R. J. Andrew, Kilburn; Rev. J. B. Harbord, London; Rev. R. B. Ransford, Hernehill; Dr. A. Thompson, Ulverstone; Mr. Fullerton, Ryde; Mr. West, Stoke-on-Trent; Rev. J. G. Mills, Enfield; Mr. F. W. Lowndes, Liverpool; Dr. Newman, Glasgow; Mr. Fraser, Middlesborough; Rev. B. Spiers, London; Dr. Hume, Newcastle-on-Tyne; Dr. E. T. Davies, Liverpool; Messrs. Southall Bros., Birmingham; Mr. W. J. Benham, London; Rev. L. Thomas, London; Rev. E. J. Haddock; Dr. Forbes Winslow, London; Rev. R. Glover, Holloway; Messrs. Richards and Co., London; Rev. D. Adler, London; Mr. W. T. Harris; Mr. R. W. Parker, London; Dr. Laseron, Tottenham; Mr. Goulder; Mr. Baker, Newport; Mr. Stickney, Boston; Mr. Bowser, London; Messrs. Austin and Son, Clifton; Dr. Death, Bucks; Mr. Howard; Messrs. Oliver and Boyd; Mr. Burcombe, Lincoln; Mrs. Melton, Darlington; Mr. Ellis, London; Mrs. Pratt, Bournemouth; Mr. Bingham, Uley; Dr. Pearse, Plymouth; Mr. Willey, Sheffield; Mr. Brown, London; Messrs. Bush and Co., London; Dr. Lowe, Whitley; Mr. Gravatt, London; Mr. Fry, Swindon; Rev. T. H. Nicholls, London; Rev. W. G. Horder, Wood Green; C. M. M.; General Practitioner; Enemata; Delta, Worthing; Y.; W. B., Holloway.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Smith, Colchester; Mr. Hedden, Upcott; Dr. Monckton, Marden; Mr. Mason, Highbury; Mr. Pearson, Bristol; Dr. Walker, Middlesbro'; Mr. Allen, Bournemouth; Mr. Overton, Newton-le-Willows; Messrs. Condy and Co., London; Mr. Bowes, Marden; Mr. Wright, Bristol; Messrs. Joy and Son, London; Dr. Harris, Birchington-on-Sea; Messrs. Reynolds and Branson, Leeds; Mr. Williams, Notts; Messrs. Butterfield and Son, Northampton; Miss Carson, Burton-on-Trent; Messrs. Lee and Martin, Birmingham; Mrs. Lambton, Rochdale; Mr. Hayes, Manchester; Dr. Blandford, London; Mr. Reed, Preston; Mr. Kaye, Huddersfield; Mr. Lea, Hampstead; Miss Peck, Bristol; Mr. Morrice, Dover; Mr. Pigott; Mr. Jackson, Bradford; Mr. Johnson, Leicester; Mr. Morgan, Reading; Mr. Bell, Etwall; Mr. Hart, Bath; Mr. Scott, Birmingham; Mr. Brunton, Limehouse; Mr. Robertson, Wellington, N.Z.; Mr. Graham, Wigan; Dr. Liveing, London; Vigilans; Medicus, Sheffield; Medicus, Croydon; Premier; M. D. X.; Doctor, Stoke Newington; Medicus, Liverpool; W. H., Glasgow; Matron, Cardiff Infirmary; M. E. S., St. John's Wood; Experience; G. H., Stone Cross; Medicus, Poplington; Medicus, Tottenham; Alpha, Long Eaton; B. L., Chard; R. H. B. M., Gunnersbury; J. E. C., Forest Hill; D. G. H., Southampton; J. B., Darlington; Walden; S. W. R.

Huddersfield Chronicle, Macclesfield Courier, York Herald, New Zealand Times, Auckland Evening Star, &c., have been received.

Medical Diary for the ensuing Week.

Monday, July 5.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesdays, same hour.
CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2 P.M.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.
ROYAL INSTITUTION OF GREAT BRITAIN.—5 P.M. General Monthly Meeting.

Tuesday, July 6.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.
CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

Wednesday, July 7.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesdays and Thursdays, 1.30 P.M.
ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department, Tuesdays and Fridays, 9.30 A.M.
ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.
LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.
GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.
KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; and on Friday, 2 P.M.; and Saturday, 1 P.M.
OBSTETRICAL SOCIETY OF LONDON.—8 P.M. Specimens will be shown by Dr. Daly, Mr. Doran, and others. Dr. Herman: Case of Chronic Abscess of the Urethra.—Dr. Champneys: Observations on the Uterine Bruit.—Mr. Doran: Papilloma of the Fallopian Tube.

Thursday, July 8.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

Friday, July 9.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Saturday, July 10.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.

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"THE LANCET"
THIRD SPECIAL SUPPLEMENT,
IN SUPPORT OF THE
METROPOLITAN HOSPITAL SUNDAY FUND.

HOSPITAL SUNDAY RESULTS, AND AFTER.

HOSPITAL SUNDAY and the Hospitals Week for 1886 are past and gone. Those who have worked in the cause of the hospitals have ample reason to thank GOD and take courage. The effect of the public meetings in all parts of London, attended as they have been in increasing numbers, and culminating in the enthusiastic gathering at Stratford on Saturday afternoon, have borne good fruit. Thanks to the press, and especially to *The Times*, *Daily Chronicle*, *Morning Post*, *Daily Telegraph*, *Echo*, and *Globe*, amongst our daily metropolitan contemporaries, the proceedings have attracted and fixed the attention of all classes, notwithstanding the political excitement and the approaching elections.

From very varied sources evidence is forthcoming that the clergy and ministers of religion have been encouraged to renewed exertion on behalf of all the hospitals. Some have written to express their indebtedness for the help they have received from THE LANCET Special Supplements. Many others, more than on any former occasion, have studied the hospital question, and have given the results to their congregations in special, touching, and eloquent sermons. All have doubtless done their best. This is as it should be; and evidence of improved returns from places of worship in every district is already forthcoming. Indeed, there is reason to hope the total sum collected this year will be the largest yet received on Hospital Sunday.

We heartily thank preachers, speakers, and workers for what they have done; and we feel confident that if opportunity is taken to improve the machinery and organisation during the winter months, the amounts raised on Hospital Sunday will show a continuous increase year by year. Not only have the speakers and preachers roused the people, but they themselves gratefully acknowledge that this question has made a distinct advance in their own minds, and that the meetings, discussions, and publications have been helpful to an unforeseen extent.

THE REV. CANON FARRAR, D.D.,
ON
THE CHRIST-LIKE WORK OF THE HOSPITALS.

THE following are the chief points of an eloquent sermon preached by Canon Farrar at Westminster Abbey from the text,

"Who went about doing good."—Acts x. 38.

DIFFICULTIES OF DISBELIEF.

To anyone who will open his heart to the revelation of God, who will listen with quick-eared spirit for the whispers of His voice, it will become more and more impossible to disbelieve in Christ. Nothing, indeed, is easier than to make oneself a sceptic. A man has but to give himself wholly to the world; he has but to drown himself in an avaricious, an impure, a selfish life; he has but to neglect prayer and public worship, and the care of his moral being, and then, star by star, every gleam of moral conviction and spiritual truth will die out of his soul. In the black pools of subterranean caverns it is found that the fish are eyeless. They have lost a capacity which they could not exercise. Even so men who love darkness lose the apprehension of light. Men who will not see God soon find that they cannot.

THE BEST EVIDENCE OF CHRIST'S DIVINITY.

It has been said that the best evidences for the divinity of Christ are Christianity and Christendom. But there is a better still. It is Christ Himself. There is in these days much argument about Christ. But the one argument for our adoration of Him who transcends all others, the one which has forced even from sceptics a burst of acknowledgment, is His character, His guilelessness, His originality, supreme, transcendant superiority. For nearly eighteen centuries has the fiercest light of criticism and history been cast upon the records of the life of Christ, yet He still stands alone and unapproachable at the summit of all grandeur and holiness. The masses of mankind have failed—even God's purest saints have failed—not merely to attain to the consummate splendour of His spiritual perfectness, but even to grasp the meaning of more than some one fraction of His example. All these centuries of Christian history are but a comment on the divineness of His perfections, and therefore an ever-accumulating confirmation of the truth that He was not only the Son of Man but also the Son of God.

THOMAS A KEMPIS.

For during all those centuries the world was indeed learning from Him all that was best and most beautiful in its thoughts and in its conduct. Yet, all the while, even the Christian world was losing indefinitely from incapacity to grasp any more than one part of His example. So far as it followed Him, it was blest; so far as it did not comprehend Him, it was unblest. Take, by way of illustration, the exquisite religious manual of the Middle Ages—the Imitation of Christ, usually attributed to Thomas à Kempis. It has been more popular than any religious book ever written since the days of the Apostles; more popular even than our own "Pilgrim's Progress." Sceptics have valued it as well as saints. The "brief quivering sentences," its simple scriptural imagery, its charm of holy quietude, have come home with a sense of blessing and elevation to thousands of souls. In reading it we seem to be resting in some scene painted by Perugino or by the youthful hand of Raphael, where we see nothing but what is lovely and pure and sacred, and where there are none but sweet and holy faces gazing ever on the mother and child.

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BEING ALONE WITH THE ALONE.

Now, doubtless, for any noble life there must be something at least of this interiorness, of this detachment from the world, of this being alone with the alone. But it must only represent one side of life. If we must imitate Christ in His love for occasional solitude, His communings with His Heavenly Father under the starlight, in desert places, on lonely hills, we must imitate Him also in His immense beneficence. The life of meditation must issue in the life of action. We are not meant to be hermits in the wilderness, or to fence ourselves off in the cloistral cell from the coarse, intrusive elements of man. The world we are meant to live in is not in the least like the soft scenes of Perugino, bathed in pellucid air; nor are the streets we tread peopled with the sweet, serious faces of Fra Angelico. There are no meadows of asphodel on this side the grave, nor did Christ come to found some spiritual aristocracy on the Galilean hills. The retirement of Paul in Arabia must be supplemented by his daily battle, his league-long wanderings, by his toil in Corinth, his martyrdom at Rome; the seclusion of John in Patmos, where from the glowing rocks he could see nothing but the white wings of seabirds breaking the sunlit azure of the sea, must be but an episode to the work of John in the busy streets and wrangling marts of Ephesus, and among the prodigals and harlots there. Yes, the "Imitatio Christi" is an exquisite book, yet it reflects but one ray of the sevenfold light. It wholly passes by that element which St. Peter gives as the summary of our Lord's activity that, "He went about doing good." The Christianity of the "Imitatio" is purely individual. It is not the Christianity which overcame, which civilised the world. It had but one precept, Fly from this wicked world. Whereas the Gospel, the Gospel of the living Christ, says, Fight for this wicked world; make it purer, make it happier, make it better. Live for it in active kindness, as Christ lived for it; die for it (if need be, amid its anger and ingratitude) as Christ died for it. Save it, indeed, you cannot as Christ saved it by the one sacrifice of Himself once offered; help to save it by teaching of His redeeming truth, by the following of His daily example, by the continuance of His holy work.

"HE WENT ABOUT DOING GOOD."

And this was His example: "He went about doing good." For thirty years, indeed, He lived as the carpenter of Nazareth; lived as we have all to live, surrounded by common human influences, engaged in common daily duties, earning bread by toil of brain or sweat of brow, with mother, brethren, and sisters in His village home. This He did to show us that there is nothing unsacred, nothing ignoble, in our common daily duties, the anxieties, the domesticity, the ordinary surroundings. Not otherwise could He have revealed to us the dignity of man simply as man; the sacredness of home, be it never so homely; the possibility, by pureness, by kindness, of living even in the lowliest hovel as a son of God. But when His life burst into the consummate glory of His ministry, then "He went about doing good." Where do you find Him? You will not find Him in some deep seclusion meditating over an open grave; or sitting, with a skull before Him, beating His breast with a stone in a hermit's cavern; or elaborating minutiæ of legalism in some school of the rabbis; or absorbed in ritualism among bands of sacrificing priests. No; but you will find Him everywhere in the bright, busy, varied, suffering, common life of a man with men; attending their feasts and marriages, smiling with their laughter, weeping amid their tears, teaching in their synagogues, healing the sick, cleansing the leper, releasing the tortured soul of the demoniac, restoring to father and mother and sister their much-loved dead. You will find Him taking the little children up in His arms and laying His hands upon them and blessing them. You will find Him giving sight to the blind, and hearing to the deaf, and consolation to the sorrowful, and self-respect to the despised, and love to the hated, and to the most fallen the conviction that there might yet be joy in Heaven for them. You will find Him doing the work of the Good Physician for men's bodies as well as for their souls. And if there be one scene which strikes the three first evangelists alike as one which most sets forth His glory, it was that evening when, while the rosy sunset fell on the silver lake, the stillness of the sabbath twilight was broken as the people thronged to Him with their demoniacs and their diseased. The groans and sighs of that collective misery touched his inmost soul. He suffered with those whom He saw suffer; He sighed for them; His heart bled for them; He bore their griefs; He carried their sorrows; and as He moved amongst them in His love and tenderness, His heart was thrilled with a more than human rapture, as He laid on each unhappy and tortured sufferer the touch of His healing hand.

THE SECRET OF THE LIFE OF CHRIST.

Yes! Sympathy, not seclusion; beneficence, not asceticism; mercy, not sacrifice; love, not Pharisaism. There, for those who care to learn it, is the secret of the life of Christ. He went about doing good. And what is the lesson for us? What is it which Christ's voice says to us across the centuries? It says to us, You are living in a world of sin and sorrow. The sorrow touches you all that you may learn a common sympathy. You may shut out for a time—yea, for years,—in slothful luxury and in selfish isolation, the still, sad music of humanity, the moan of its anguish, the cry of its oppression. You may live for yourself, not for others, not for God. The worse for you. You cannot escape from the solidarity which makes you one of a fallen and ruined race. You cannot shut yourself up in some sweet circle of the orthodox, or of the elect, and give to your selfish spleen the name of religion. Old age will steal upon you. Pain will lay upon you her fiery finger. The pale, chilly, shadow of death will glide into your houses. And thereby the Lord bids you leave your callous-hearted worldliness, or your cliques of selfish religionism, and take your part, as He did, in the suffering, struggling world. He came to enlighten its errors, to break the yoke of its oppressors, to lull its pangs with an everlasting anodyne, to give to its living and its dying an immortal hope. He came to send into the ravage and the misery ten thousand white-winged messengers of mercy, to minister at least to the anguish they cannot extinguish, and to move, like angels, in the midst of it, with hearts of compassion, and words of healing love.

WORK FOR YOUR FELLOW MEN!

And this voice says further to us, You, each in your measure, must thus work for your fellow-men. Misery and anguish and disease, the outcome of sin and guilt, the fatal legacy of the Fall, are not to be ignored, nor shunned, nor acquiesced in as inevitable necessities. We have two duties towards them—the one is to alleviate, the other to prevent. The latter is the nobler work and the most neglected. Nine-tenths of the disease and misery of man is preventable. It is physically preventable; it is morally preventable. Physically, for much of it rises from the infraction of natural laws; morally, for that which has its outlet by human suffering has, to a very great extent, its inlet by human crime. Divert the runnel and you escape the flood; prevent the sins and you obviate the catastrophies. Go to any of our great hospitals. Look at that poor little Lazarus suffering from a complication of leprosies to which he was born. What made him so? The will of God? No! but the vice of his parents. Look at that poor bruised woman felled last night in one of your licensed ginshops, by the foul hand of the brute which she calls her husband. What reduced her to that condition? The will of God? No! but the curse of drink. Look at that case of delirium tremens in all its revolting ghastliness. Who reduced the man to this heat of wretchedness? God? No! but his own depravity. Look at that young man yonder dying from the awful Nemesis of his own early vices, his loins full of a sore disease which shall lie down with him in the grave. Who slew all these? God? Nay! but they died of moral suicide the wilful defiance of God's merciful and beneficent laws. While it is our duty to mitigate the awful results, have we no duty also as regards the awful causes? Even mere sanitary duties are potent against the multiplication of disease. Give the people pure air and pure water, and the atmosphere of cities will not be winnowed by the foul wings of the pestilence. Bring greater cleanliness into homes, and before its touch, as before the touch of Christ, fever and cholera will vanish as the "black death" and the leprosy have already fled. But much more: help men to live in temperance, soberness, and chastity, and the legion of evil spirits who batten upon human degradation will sicken, and shriek, and die. To heal disease is Christ's work; but to pull down rotting streets, to provide proper dwellings

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for the poor, to minimise cruel temptations, to train children in habits of self-control, to make it easy to do right and difficult to do wrong, to treat vice and foulness as spectres to be exorcised, as monsters to be expelled,—that too is the work of every Christian. By so doing we advance the Kingdom of God. If the task seem hopeless, it is only because we are slothful and selfish. When men become faithful, fearless, loving, Utopia will be but another name for time.

THE CHRIST-LIKE WORK OF THE HOSPITALS.

But that bright day will not be yet. For many a long year, while, step by step, we try to remedy, we must also try to heal. That is the work of these our great hospitals, with their clean bright wards, their faithful medical staff, their devoted nurses, their loving Christian visitors. I know no institutions which the Lord Christ would have more deeply loved. Not a day passes but what deeds are done in them which He would have approved more than 20,000 daily services, more than 500 fasting communions, if they bring forth no fruit of love. To provide the poor worn mother with a room where, skilfully tended and lovingly cared for, she may recover or die in peace; to surround the poor workman, whose limb has been shattered, with such trained ministrations as shall save him from becoming a helpless burden on those whom he best loves; to help the poor lad, maimed by some accident, to bear more easily the anguish of a boyhood which has thus been blighted; to re-illumine the dulled light in the eyes of children, and on their cheeks the faded rose, and where it is beyond us to give back life's lost sunlight to poor sufferers, at least to tinge with the moonlight colourings of resignation the clouds which have darkened our human lives; this truly is an angel's, this truly is a Christlike work. And it is the work of hospitals. We are asked to-day to support them. If we are beneath every appeal but that of selfishness, even on selfish grounds we ought to help them liberally. For if their direct ministrations are mainly for the poor, their resultant blessings flow largely back upon every class alike. It is in them that our surgeons and physicians learn the art of healing. It is in them that our nurses acquire their skill, and pass cheerfully from the dying bed of a great noble to the dying bed of some poor sufferer in Clare-market or Drury-lane. It is through them that there has been so vast a diminution of the annual mortality of London. It was in them that the use of anæsthetics was perfected which exempts our minds from some of their deadliest terrors. It was in them that the antiseptic treatment was developed, which has already saved thousands of lives. It was in them that men have learnt how cholera is caused and typhoid multiplied. If you have done anything for them you have been superabundantly rewarded. Out of 4,000,000 inhabitants of London, 1,000,000 directly received relief from the hospitals this year alone.

NOT A BURDEN BUT A PRIVILEGE.

I would entreat you, then, to regard the opportunity of this day, not as a burden, but as a privilege. How very few, alas! of any congregations are taking any direct personal part in works of good. Ask yourselves, each of you, what you are thus directly doing to alleviate the misery, to elevate the condition, of your brother-men. Multitudes of you, if you be honest, will be forced to admit, "We are doing just nothing outside the circle of our families and the routine by which we earn our daily bread." Well, then, if that be so, you are doubly bound: you are bound by every law, human and Divine, to give to the utmost of your power. Do any of you think that London in this matter is commendably generous? If I am to speak truth, not flattery, I say shamefully the reverse. This wealthiest city in the world—this city, of which the wealth is said annually to increase by £20,000,000—is appealed to by the united voices of every single religious denomination on one Sunday, and it only gives some £30,000—i.e., some seven-hundredth fraction, not by any means of its income, but of its yearly accumulation. Out of our 4,000,000 people, one in every four is directly assisted, and only one in every thousand separately contributes. All classes are to blame. Myriads of the poor, who receive the noble beneficence of hospitals, do not spare for them all their lives long so much as the value of one quart of ale from their monstrous luxury of drink.

WHAT SHALL I SAY OF THE RICH?

And the rich—what shall I say of the rich? I say that there are scores of men in London who could save our hospitals from anxiety almost without feeling it. Look at very recent art sales—£2000 for one dessert service; £1500 for two flower-pots; £3000 for a chimney ornament; £10,000 for two rose-coloured vases; £300 for a single lady's dress; £1000 for the flowers of a single ball. I do not criticise this expenditure; I only say that, if there be in London such a Pactolus of wealth for these gewgaws of silk and of clay, can there be by comparison only a drop or two to heal the bodies, to ameliorate the souls of men? Why should the runnel of Charity dribble on as it does while the full tide of Luxury is still at flood?

"I SAY ALL CLASSES ARE TO BLAME!"

I say all classes are to blame. The working classes, whom it is the abject fashion of the day to fool and to flatter to the top of their bent, are every bit as selfish and every bit as extravagant in their way as the rich are in theirs; and, if it comes to that, the day labourer or the shoeblack, who starves his children and leaves his wife in rags in order to besot his own degradation with beer and gin, is indefinitely more guilty than the millionaire who indulges his taste for jewels or bric-à-brac. I should like to know how many thousands of pounds exchange hands every Derby Day, not only among the rich, but even among schoolboys, and shop-boys, and clerks, and loafing idlers in back slums, who are so ignorant of the whole matter as to be every blackleg's ready dupes. If all this flood of money is forthcoming for the Satanically senseless folly of gambling, is there so little by comparison for worthy and noble purposes? I said that 1,000,000 persons are every year relieved and aided by our London hospitals, and that is a considerable under-statement. Well, if only this million thus directly benefited would but contribute 1*s.* apiece in gratitude for medical skill, more precious than a king could have purchased a hundred years ago, that shilling apiece would at once produce £50,000, which would not only exceed, but almost double, what London has annually given for her 100 hospitals. Yet, obviously, these shillings are not forthcoming. Were there not ten cleansed? But where are the nine?

FOLLOW IN THE BLESSED MINISTRIES OF MERCY.

The case this year is urgent. These blessed institutions are at this moment £40,000 in debt. Might not, then, some of you who have come to-day meaning to give silver—might you not just as easily, with no real self-denial to yourselves—might you not more conscientiously give gold? Might not some of you who have come with your small coin ready prepared make for once an infinitesmal sacrifice for Christ, and give double or treble or decuple the value of that coin? Will none of you try to-day (were it but for once), with the poor entrusted mammon, to earn something of the true eternal wealth? Do this, my friends, and if you do it in a right spirit, and if you leave this church with a deeper desire to follow, in the blessed ministries of mercy, the example of your Saviour Christ, I am sure that your hearts will be all the happier, and your thoughts all the sweeter, when you lay your heads upon your pillows to sleep to-night. I ask you then to do it, I appeal to you all, to the rich, the middle class, the poor, the generous-hearted Americans, and strangers here present. My voice is feeble and insignificant, but may you not hear, even in my voice, the millionfold reverberation of countless pleading agonies,—yea, the cry of charity herself, the voice of your Saviour Christ? To you who know what sickness is, I appeal by the sad fellowship of human pain; to you who know it not, I appeal by your gratitude to God for the priceless boon of health, by the sacred name of those who suffer, by the awful mystery of human anguish, by the withered strength and the throbbing nerve, by your own dear children whom you shelter so tenderly, by those other little ones the shorne lambs of Christ's flock, by the strong man's agony, by the brave man's tears, by the hectic flush upon the young man's cheek, by all the sacredness of human sympathy,—ay, and far more in the name of Him, who dropped the awful plummet of his Godhead into the fathomless abyss of human woe and pain,—for His sake, in His name, I plead with you for this, and for all good works. He that soweth plenteously shall also reap plenteously; or, as it is more forcibly and beautifully in the original and in our Revised Version, "He that soweth with blessings shall reap with blessings."

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SERMONS AND ADDRESSES.

ST. PAUL'S CATHEDRAL.

THERE was a large congregation at the morning service in the Cathedral. The sermon was preached by the Rev. Prebendary Billing, rector of Spitalfield, who took for his text 2 Kings v. 3: "And she said unto her mistress, Would God my lord were with the prophet that is in Samaria! for he would recover him of his leprosy." He referred to the applicability of the lesson taught in the text to the present occasion, and observed that there was a deep significance in the association in the Old Testament time of the teacher and healer—the man who was sent as a teacher also found to be a healer. That was anticipatory of the time when the greatest Teacher and Healer should himself come. At the present time we had found the suggestion of the teacher and healer being acted upon. We had now medical missions—men and women who went forth by the practice of the healing art to relieve men from their bodily afflictions and infirmities, and also to induce them to worship Jesus Christ the true Teacher and Healer. The hospitals were the pride of our city, and they enabled, through the ministrations of the chaplain, nursing sisters, and other godly men and women, together with those of the physician and surgeon, a work to be performed which was Christian in the highest and fullest sense of the word, because the work was a work which combined the teacher and healer, and which brought the greatest comfort to the soul, while it ministered comfort, healing, nnd help to the body. An invitation was now given to all those who under any form worshipped the one true God to unite that day to help to maintain the good and useful work which was carried on in our hospitals. Let them set an example in that metropolitan church of Christian benevolence and Christian charity and gratitude to our Lord Jesus Christ.

The afternoon service was invested with additional interest by the presence, in accordance with annual custom on the first Sunday in the Trinity sittings, of her Majesty's Judges, and of the Lord Mayor, the Sheriffs, and the members of the Corporation of London, all of whom wore their State robes of office. There was a very large congregation. The judges present were—the Lord Chancellor, Lord Justice Fry, Mr. Justice Denman, Mr. Justice Chitty, Mr. Justice North, and Mr. Justice Grantham. With the Lord Mayor and the Sheriffs were Alderman Sir J. Whittaker Ellis and Mr. Alderman Gray, the Recorder, the Common Serjeant, and others of the high officers of the City. The members of the Common Council wore their mazarine gowns, and, like the judges and the civic authorities, carried nosegays. The sermon, which was prefaced by the Bidding Prayer, was preached by the Rev. Henry Scott Holland, M.A., the canon in residence, who took for his text Acts ii. 32 and 33. It was their privilege that day to give evidence that God was still in their midst, and to prove, even to the cynical, that those who loved God could not help loving their brother also.

WESTMINSTER ABBEY.

THE 10 o'clock morning service was attended in State by the Lord Mayor and the Sheriffs of London and Middlesex, and also by the Duke of Westminster as Lord High Steward of Westminster. The sermon was preached by Dean Bradley from the words, "Remember that thou in thy lifetime receivedst thy good things." The preacher urged that the parable of Dives and Lazarus was being enacted in various ways in these days, that he who lived a life of enjoyment and shut his eyes to the misery around him must inevitably suffer "evil things," and that it was not enough to give the crumbs that fell from the tables of the rich, but that the poor must share in their consolations and enjoyments. These considerations were specially applied to the cases of sickness and accidents, and their treatment in hospitals.

The Archbishop of York preached to a large congregation in the evening, on the Divine purpose in the permission of suffering, the completion of that redemption which is the "earnest expectation of the creature." He contrasted the theories of optimists and pessimists, and said there was a third which was often overlooked. Christians seemed to abdicate their power over these questions, and to act as if the Gospel were a message of salvation for another world, whereas it was nothing if it were not redemption for this world. It was not for religious teachers to stand apart and say they had nothing to do with the advancement of men. The Gospel declared the equality of all men long before independent theorists had thought out the doctrine. The Gospel view of equality would quicken the recognition of the claim of the hospitals. It was a great claim shamefully neglected or put aside. We taxed ourselves by Hospital Sunday 6d. in £100 of income, or 1-16th of 1d. in the pound. It was disgraceful—he could not use a milder word—that there should be at this time a talk of throwing the care of the sick and injured on the State, and making that which was the plainest Christian duty a matter of municipal concern. They ought not to allow this. It would be an abdication of their power; it would be a scandal to a Christian country, if they could not by an effort reverse this state of things, and place the hospitals in a condition to do their work completely and efficiently

ST. JUDE'S, SOUTH KENSINGTON.

THE Vicar (Rev. Dr. Forrest) preached from the text, Proverbs xxii 2: "The rich and the poor meet together; the Lord is the maker of them all." After enlarging on the text, the preacher said:—One great mean or instrument of relieving the vast mass of human misery is brought before the people of London to-day, in every church and chapel of the metropolis—viz., the hospitals and medical charities of London. It is very grievous and distressing, and even humiliating, to have to report that there is a deficit in the hospital funds this year of about £40,000. It has been calculated, almost to a certainty, that as many as a million of the population have derived benefit, in one form or another, during the past year; yet this is the unsatisfactory and melancholy account we have to give to the support those splendid institutions receive from the public. It has been felt by those responsible for the management of our hospitals that this state of things should not be permitted to continue, and that a special effort should be made this year to render Hospital Sunday a greater success than it has hitherto been. Accordingly, meetings have been held in various districts of London, and some of the leading men of our time have done their utmost to call attention to the noble cause we, the clergy, are privileged to plead to-day. In addition to this, all the principal newspapers have devoted their space, so valuable at the present time, to give full and detailed reports of these meetings, besides inserting powerful leading articles on the subject. Of one journal I must, in simple justice, make honourable mention. One of the proprietors of THE LANCET contributed £1000 to the Hospital Sunday Fund last year, and has offered to contribute another £1000 should four others subscribe a similar sum. But not content with this, the proprietors of that journal, at considerable cost, have issued 20,000 free supplements of their influential journal in order to disseminate information as to the condition and needs of our hospitals, and especially to furnish all who have to plead the cause to-day with such full knowledge of facts and figures as will enable us to do so effectively. I do not enlarge upon the benefits we ourselves derive from the hospitals. We are often amazed at what modern surgical science can accomplish. Oh, how much do we feel we owe, every one of us, directly or indirectly, for ourselves, or those dear to us, to the noble medical profession! But do we always realize that our physicians and surgeons learn the

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practice of their profession in those great schools, the public hospitals; but I do not dwell on this, as it might seem a selfish reason to urge upon you to-day. I prefer to dwell on the incalculable benefits conferred by these blessed institutions on the poor, the suffering, the miserable around us on every side. It has been suggested if only one of the many friends of each of the million patients just referred to would make up his or her mind to give even one shilling to the Hospital Sunday they alone would swell the total by £50,000. The preacher then made an earnest appeal to the immense congregation which filled all parts of the spacious church, referring to their great generosity in past years, and asking them to surpass themselves on the present occasion. The collection amounted to £850 17*s.* 7*d.*, being more than £133 in excess of last year's offertory.

CHAPEL ROYAL, WHITEHALL.

THE sermon in the morning was preached by the Rev. Dr. Momerie, who prefaced an interesting discourse against selfishness with these words: "You have all heard that the London hospitals are sorely in need of increased support. At least double the amount of last year's collections should be contributed to-day in order that these beneficent institutions may continue to perform their work efficiently: £80,000 is wanted, as against £40,000 collected twelve months ago. If every individual would only give double the amount which he contributed last year, the desired result would be attained. The advantages afforded by the hospitals to our poorer brethren, when suffering from disease or stricken down by serious accidents, are so obvious that it is not necessary to dwell upon them. But great as is the good done by the hospitals in the cause of the poor, it does not constitute their sole claim to your support. Those who can afford to pay for the very best medical attendance are also indebted to these public institutions, because the best part of a doctor's education is that which he obtains in the hospital. We ourselves, therefore, are benefited by the hospitals, and in helping to maintain them we are doing an act of justice rather than of charity. I hope, then, you will contribute to-day as generously as you can."

CHAPEL ROYAL, SAVOY.

THE Rev. Henry White preached from Acts iii. 2, and said that the religion of Jesus Christ inaugurated that reign of mercy and loving-kindness for the sick and sorrowful which had been foreshadowed and predicted in Hebrew prophecy. The men who scorned the name of religion were not the men to whom were due the beneficent enterprises which had soothed and healed the hurts of humanity. An undevout philanthropist was rarely to be met with. There was a beautiful experiment, by which grains of sand would arrange themselves on a glass plate in symmetrical figures under the influence of musical sounds. So the sand-grains of human life were arranged in harmony and beauty when all social life was filled with the music of Divine sympathy. During the past week much had been spoken and written to arouse a special interest for the Hospital Sunday this year. The badness of the times, and the pressure upon charity of a long and severe winter, had contributed seriously to cripple the resources of our hospitals; und political circumstances had removed from London many whose offerings would otherwise have been presented that day. They were therefore asked to make a supreme effort of charity now. Though the Savoy offertory, in proportion to the numbers which the chapel could possibly hold, had ever been one of the largest, if not the very largest in the metropolis, the appeal for redoubled generosity might yet be urged. It needed to be remembered that hospitals were of equal value to the rich as to the poor, for they were the training schools for the education of those whose skilful aid any might be glad to summon. Indirectly, if not directly, every member of the community owed an inestimable debt of obligation to hospitals. A remembrance of the valuable and unpaid services which the members of the medical profession rendered to our hospitals, and of the devoted and unremunerated care and kindness of Sisters of Mercy in their holy work of charity, might well awaken and stimulate a bestowment of generous alms to reinstate our hospitals in a condition of full and permanent efficiency.

ST. JUDE'S, DULWICH ROAD.

THE Vicar, the Rev. R. B. Ransford, preached from St. Matthew xi., 2–6., on the temporary failure of the Baptist's faith—his impatience, if not despair. Wickedness and misery rampant. So little being done to remedy. The Saviour's response: an appeal to the good being done, the progress actually made, and the promise of a better time coming. Plenty of suffering and misery now. One million persons seeking medical or surgical relief in one year in London alone! Those who know the poor best, know best their agony. No wonder if their faith fail sometimes. But one million persons relieved in one year in the hospitals of London! How glorious a fulfilment of the promise: "Greater works than I do shall ye do, because I go to the Father." Where scores were healed by Christ, millions are healed to-day in Christian England. What a witness to the blessings of Christianity! And what a strong argument for our support of hospitals! What if the non-worshipping classes leave their share undone? We must fill the gap. One great part of all philanthropy is to remedy the faults of other men.

THE ROYAL HOSPITAL CHAPEL, GREENWICH.

THE Rev. J. B. Harbord, the chaplain of the fleet, preached on the subject of "The Rich Man and Lazarus." These two men are types of the extremes of prosperity and adversity. But the having riches is not in itself a sin, nor the being poor in itself meritorious. Besides the external circumstances of these two, a glimpse is given of their inward character. The rich man's whole life was a sin against God, because he treated the things he possessed as absolutely his own, and lavished them in selfish indulgence, without a thought for the suffering of others at his very door. The other man is called Lazarus, a name signifying "God is my help," showing that in the depth of his misery he trusted in his God. Here is the explanation of what followed. Wealth is a snare and poverty is a trial, and each man shall be judged hereafter according to the manner he has passed through that which has been his lot. The two men both died; to the one death was a happy release, to the other it was parting with all the treasures he possessed. The poor man, whose help was in his god, was now safe in Paradise, associated with the father of the faithful and the blessed angels. The rich, selfish man was alone with his reproaching conscience. He could receive no relief himself, neither could he afford any relief to others; he was a solitary lost soul; no mutual help, no comfort to himself or others, no sympathy with the living or dead, no blessed communion. Our Lord described in the parable two classes—those who have it in their power to help, and those who have need of help—though they do not belong to the extremes of these types. The first lesson is, that we must not treat the things we possess as our own. Our prayer should be, "Lord, what wouldst Thou have me to do with *Thy* good things which Thou hast entrusted to Thy servant?" His answer is given in a form adapted to the circumstances of the great city in which we live: "Support the hospitals, where this help can be given in the most effectual manner." We must not think we can fulfil our duty by casual help at our gates. The true meaning of this parable had its influence on the Holy Church in her organization for the relief of the sick and afflicted. And in the darkest days of the Middle Ages, Christians were not content to leave the sick to chance assistance, and thus in the twelfth century there rose up the Order of the Knights of St. Lazarus. Foregoing selfish luxury, they devoted their lives to relieve the most loathsome forms of malady, and "lazar-houses," or "lazarettoes," were found throughout Christendom. Hospitals of all kinds followed in every Christian city, increasing in usefulness with the development of medical and surgical science—an advance which they themselves materially aided by becoming the great medical schools.

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ST. MARY'S, BRYANSTON SQUARE, MARYLEBONE.

THE sermon in the morning was preached by the Rector, Hon. and Rev. Canon Leigh, from the last verse of the Epistle for the day, and the first three verses of the Gospel for the day—*i.e.*, 1 John iv. 21, and St. Luke xvi. 19, 20, 21. The Epistle, he said, taught the first great command, love to God; and also the second, which followed, love to our neighbour for God's sake. In the Gospel we had set before us the terrible consequences of neglecting this Divine command in the parable of Dives and Lazarus. The rich man was punished, not because he was rich, but because of his self-indulgence and the gratification of his own appetites and desires, with little thought of his neighbours' wants. As Christians in a Christian country, it should be the rule of every Christian man and woman to do the work of Christians—to show compassion for the multitude, to help to heal the sick, and to labour in the work of salvation and love. Our noble institutions were symbols of a Christian country. They were unknown before the advent of Christ. We search in vain for remains of them in Athens or Rome, the chief cities of those wonderful countries where civilization reached its highest pitch. With Christianity came the law of self-sacrifice, and from this sprang the establishment of these institutions, which are now to be found in almost every part of the civilized world, and especially in our own land. Such institutions we may consider as sure signs of the prevalence of good laws, sound morals, and a general state of prosperity; and when these institutions began to fail through want of proper support it would be a sure sign of the commencement of the decay of our nation. It was not so much an object that there should be many people as that those there are should live as happily and comfortably as possible, and be relieved of the trials and hardships, the aches and pains, which are incidental to poor suffering humanity. The preacher then quoted THE LANCET to show that such increased liberality was most urgently needed, and that the rich and poor are equally benefited by our hospitals. "There are, no doubt, in this congregation," he said, "some who owe, it may be, their own lives, or perhaps the lives of those who are near and dear to them, to some skilful operation, or treatment successfully carried out, by able practitioners who have attained a degree of efficiency and excellence which never could have been attained except through constant practice in the hospital wards. Why, there is at the present moment, lying in a hospital near here, one of our church officials, who owes her life to the skill of the operation she has undergone. Thirty years ago her case would have been considered hopeless; twenty years ago there would have been great risk as to fatal results of the operation: then they were 20 to 30 per cent., now they are not more than 6 per cent. This is one example out of a great number of the benefits to the community resulting from hospitals, and it is sad to think that, whilst each year the benefits are increasing, the funds required to meet the expenses necessarily incurred are on the decrease.

The Lazaruses are ever with us. God sends them; and as they are to be found at our gates, wan and haggard and full of sores, and disabled through accident or disease, they are our judges: not merely by whether we give, but by how we give and by what we give, they judge us.'

THE HOSPITAL CHAPEL (ST. MARY AND ST. THOMAS OF CANTERBURY), ILFORD.

FOUR collections were made, as usual, during the day, for the fund. At the special afternoon service the Chaplain (Rev. A. Ingleby, M.A.) preached. He pointed out the double and treble force of his appeal in an ancient Hospital Chapel dedicated to the same St. Thomas whose shrine at Lambeth had developed into the great St. Thomas's Hospital. He went on to say that if in other places there was a want of enthusiasm for Hospital Sunday, it would be less due to the Church's apathy for the noble work of the profession represented by THE LANCET, than to the apparent indifference of some of the profession for the work of the Church. He said that where, as in the case of the late Dr. Brett, for many years churchwarden of St. Matthias, Stoke Newington, medical men came forward and placed themselves in sympathy with the work of congregations, the latter would never fail to respond with their thousands, if necessary, as they did to the appeals of that pious and philanthropic man.

LEYTONSTONE PARISH CHURCH.

THE Rev. A. Smythe Palmer, of Holy Trinity, Woodford, preached on Christ's cure of the incurable as exemplified in the miracle of St. Luke viii. 43. He observed that Jesus was the ideal of the good physician, never wearied in ministering to men's bodily ailments, and adopting a distinct mode of treatment to each individual patient, according to his varying need or circumstances. It was a fine saying of Cicero's, that "in nothing does man come nearer to God than in giving health to his fellow-men." The preacher referred to an old and well-authenticated record, that the woman with the issue of blood afterwards showed her gratitude for her cure by erecting a statue of bronze commemorative of the event in front of her house at Cæsarea Philippi, which Eusebius saw, and described in the third century. If we ask ourselves, What shall I render unto the Lord for all the benefits He hath done unto me, in preserving me from this disease, or delivering me from that illness? we need not think to prove our gratitude by vowing a costly statue to our Redeemer. One fellow-man raised up from the bed of languishing, the sick man restored to health, the lame made to walk, the deformed made straight, a *living* monument in God's own image raised up—*that* is the best memorial of our thankfulness. In supporting our hospitals we are doing Christ's work for Christ's brethren for Christ's sake. Done to *them*, it is done to *him*.

ROSSLYN HILL CHAPEL, HAMPSTEAD.

THE Rev. Dr. Sadler took as his text Acts xxiv. 17—"I came to bring alms to my nation, and offerings"—and said that there was a sense in which we all were, or ought to be, public men; that is, we have duties to the public, and are not justified in leaving the public welfare to a class. Our larger sympathies, no less than those of a more restricted kind, have a foundation in our nature; and it is the especial work of the religion of Christ, the religion of the Divine Fatherhood, to unite mankind into one great brotherhood, and to give universality to the claims of humanity. Dr. Sadler showed how truly hospitals are entitled to be regarded as national institutions, the benefit of which extends to every member of the community. But the Hospital Sunday Fund has especially in view those who are more liable to disease, and whose sickness is all the harder to bear from the deprivations of poverty. The value of hospitals was illustrated by instances which had come within his own knowledge, not only in connection with disease, but also in cases of accident. In conclusion, the preacher said that if the wisest of mankind cannot explain the mystery of suffering, all of us know what to *do* with suffering—bear it as patiently as we can, so far as it is irremediable, and alleviate it, as far as we can, where we find it in others. The collection amounted to £77 12*s.* 9*d.*

ST. MARY BOLTONS, SOUTH KENSINGTON.

THE Rev. G. W. Mackie, B.A., B.Sc., Lond., took as his text 1 John iv. 21—"This commandment have we from him, that he who loveth God love his brother also"—and urged the claims which hospitals have on our sympathy and on our purse, upon the grounds of (1) Christian duty, (2) an urgent need, (3) self-interest. The Epistle for the day dwelt upon the vital importance of love of the brethren, which was different from natural affection, inasmuch as it embraced all mankind. The Gospel, which was in the words of Christ himself, gave an awful example of the result of a life of selfishness and indifference to the wants of others: Dives, rolling in wealth, caring not for the sick Lazarus—living in the conviction that it was no concern of his—realizing only

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to him that this indifference had been one of the chief causes which had brought him to "this place of torment." The preacher next dwelt upon the well-known facts of the case. All the hospitals were in debt, or at least in difficulties. Those who professed to be constrained by love of Christ ought to be the foremost in setting a good example in this matter. How much depended upon this fund was shown by the fact that only one in two had contributed to the hospitals (apart from the Hospital Sunday Fund)—*i.e.*, in a parish such as their own, of some 4,000 people, rich and poor, young and old, it might be possible to find ten people who had stretched out a helping hand. Doubtless the poor were most directly benefited. Those only who worked among them were able justly to estimate the good the hospitals did for them; but all who had read it must have been touched with the cry of the weak-minded girl in "Little Dorrit"—"Make him have hospitals; they are so heavenly." If heaven means rest, quiet, peace, and loving sympathy, there are thousands who never have, never will taste, these things unless within the walls of a hospital; no wonder, then, hospitals seem to them "heavenly." But the rich were benefited quite as much as the poor, though indirectly. It was the hospitals alone that could train nurses and educate medical men, upon whose care and skill we all, under God, may be dependent for our very lives. It was the hospitals which were the centres of medical advance and of medical science.

PARK CHAPEL, CAMDEN TOWN, N.W.

The Rev. S. D. Hillman, of Ilkley, Yorkshire, preached in the morning from Romans xv. 1–3, expounding and enforcing the principle contained in the verses chosen, of the strong ministering to the feeble. It was shown that this principle, so frequently reiterated in Scripture, has its application to every age and to all the relationships of human life. Turning from the principle to the pattern, Mr. Hillman dwelt upon the case of "The man Christ Jesus," as furnishing a beautiful illustrative example of the practical exemplification of this teaching. St. Paul might legitimately have referred to his own personal history in this connection, since his career furnishes a striking example of a man strong in faith, hope, love, and zeal, bearing the infirmities of the weak and not pleasing himself. "To the weak he became as weak, that he might gain the weak." "He sought not his own profit, but the profit of the many, that they might be saved." When thinking of the duty of the strong to seek, to comfort, and help the weak, St. Paul's thoughts instinctively turned to this most illustrious example of the exercise of such self-denial and consecration, and his enthusiastic admiration for the character of the great Exemplar found expression in the utterance "For even Christ pleased not himself." The whole life of Christ was one continued exemplification of the principle. "Himself took our infirmities, and bore our sicknesses," and His followers best represent Him when, in His own spirit, they lovingly care for the suffering and sorrowing.

At the evening service Mr. Hillman preached from Hebrews xiii. 8—"Jesus Christ, the same yesterday, and to-day, and for ever"—and in the course of his sermon gave special prominence to the thought of the immutability of Christ as sustaining His servants amidst the adverse influences and the darker experiences of their life.

LOCKERBY SQUARE CONGREGATIONAL CHURCH, BELGRAVE ROAD, S.W.

The pastor, the Rev. J. Hiles Hitchens, D.D., took for his text Jeremiah vii. 9, "Show mercy and compassion every man to his brother." Dr. Hitchens began his discourse by saying that "a heathen moralist gave as his advice, *Omnibus, bene facere amicis*—'wish well to all; do good to friends.' But Godlike sympathy scorns such limits. It does not wait to recognise in the person of the needy a friend, a relative, or even a fellow-citizen. It is not to be bounded by thoughts of country, class, or creed. It looks upon man as *man*. It embraces all the human race in the bonds of its brotherhood. It forbids a man being his own Alpha and Omega. It cannot sit calmly at any banquet while the wan face of the hunger-bitten looks in at the window. It cannot sleep in any man's Gethsemane. It places the man in the very position of the afflicted brother, and makes him mental partaker of his lot. Thus the strong sympathises with the weak, the rich with the poor, the free with the captive, the healthy with the sick, the successful with the unfortunate, the living with the dying. This is true compassion; as the word etymologically expresses, it is suffering *with* another:

> 'Compassion proper to mankind appears;
> Which nature witnessed when she lent us tears.'"

Dr. Hitchens then proceeded to show how this fellow-feeling was manifested in the history of the Old Testament saints; how it was exhibited in perfection in the life and labours of Christ; and how it was cultivated by the early Christians. Quotations from the satirical Lucian, and Julian the Apostate, were given to prove how active the early followers of Jesus were in aiding the sick and poor. The duty and privilege of still cultivating practical Christian sympathy was then enlarged upon. The efforts being made to set class against class were severely denounced; and Judge Talfourd's last words were quoted: "If I were asked what is the great want of English society so as to mingle class with class, I should say in one word, The want is the want of sympathy."

THE CHURCH OF NOTRE DAME DE FRANCE, LEICESTER SQUARE.

The Rev. L. Thomas made an appeal to his French congregation on behalf of the collection of the day. The preacher urged upon his people to contribute to the Hospital Sunday Fund on the ground (1) of Christian *charity*, inasmuch as their co-operation was requested in favour of the poor and the sick—hospitals are indeed numerous in London, but still not sufficiently so, considering the number of necessitous cases; (2) on the ground of *justice*, inasmuch as many have found, or may find, themselves in the necessity of recurring to the care bestowed in hospitals; (3) from *gratitude*, as many persons of French nationality, though a French hospital exists, are received in those charitable institutions, and, although foreigners, experienced great kindness and consideration on the part of the authorities, surgeons and nurses. Mention was made of the very striking instance, not only of the free access of the French Catholic priest allowed in behalf of a dying fellow-countryman, but also of the promptitude with which he is summoned when the condition of the sick person requires the presence of a priest of his nation. So, the other day, one of the missionaries of Notre Dame de France was called in great haste to attend to a dying Frenchman, a cab being kindly provided for his conveyance to the hospital; and the charitable soul who secured the ministry of the French Catholic priest was one of the resident surgeons of the English hospital which had afforded shelter to the sick foreigner. Every member of the congregation was pressed to act the part of the Good Samaritan towards our suffering brethren, and thus to follow in the footsteps of our Divine Master.

METROPOLITAN TABERNACLE.

Mr. Spurgeon took for his text Luke i. 77-79, and concluded as follows:—"There is not a man here to-day who may not himself be in the hospital to-morrow. I ask every man and woman here to-day to give to the common stock for all who need it. The claims upon these establishments are very urgent—so much so that many of them have been obliged to meet their current expenses by the sale of their funded property. I am often inclined to think that the Government ought to take the management of these establishments into its own control, but I am afraid that they would not be managed as well as they now are. The amount of their income should be double what it is now. How many cases have come before each of us where individuals must have died but for the care bestowed upon them in the hospital? This is not a day for small contributions from wealthy people

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Especially is this the day for the pence of the poor. The Lord will accept their contributions even as the widow's mite was accepted.

ISLINGTON PRESBYTERIAN CHURCH.

IN the afternoon Dr. Davidson addressed upwards of 2000 persons at the Agricultural Hall, Islington, on the claims of the Hospital Sunday Fund. Taking for his text Psalm xli. 1, "Blessed is he that considereth the poor," he showed that true Christian charity must be discriminate, and that if the money that was bestowed on street beggars and on unknown applicants at the door were devoted to the coffers of this fund, a great deal more of real good would be effected.

HAMBRO' SYNAGOGUE.

THE Rev. B. Spiers preached in this synagogue last Saturday in aid of the Hospital Fund. He preached on the lesson for the day, Numbers xv. 1. Having pointed out the evil consequences arising from blind ambition, selfishness, and arrogance, so graphically portrayed in the history of the ungodly strife waged by Korah and his associates, the preacher said: "Are not the opposite duties of liberality, unselfishness, and generosity especially commended to us by this same history? And at this time more particularly, when collections are being made on behalf of the metropolitan hospitals and dispensaries, we are forcibly reminded of our obligations in this respect. We should show that although we are separated from those who differ from us in religion and nationality, we, on the other hand, do not stand apart from the rest of our fellow-citizens in matters of common humanity, the alleviation of common distress and suffering. The excellent hospitals in this vast metropolis, in which the best medical and surgical skill, the most finished appliances, the most approved methods of treatment are readily and freely afforded—these noble institutions are sorely in want of funds to carry on their laudable work, and require our generous and liberal support. Shall we stand aloof, and not give our ready assistance where it is so much needed? Shall we see our fellow-creatures suffering, and not endeavour to alleviate their pains? We all know that every human being, rich or poor, strong or feeble, is liable to be stricken down by illness or accident, and when such does occur, and the suffering person is conveyed to one of these invaluable institutions of medical skill and kindness, who can tell the sense of relief experienced both by the patient, and those near and dear to him, when they know and feel that everything which medical science can suggest is being done for the sufferer. There cannot be a more godly act than healing the sick, there cannot be a greater charity than helping to alleviate and to cure disease, and to soothe the sufferings incident to life; there cannot be a more sacred duty than to succour the afflicted poor. And the sages of the Talmud say: "The healing of the sick is so meritorious an act, that whosoever practises it receives his rich reward in this world, and may confidently look forward to eternal bliss in the next."

ST. MARY'S, ENFIELD.

THE sermon in the evening was preached by the Rev. J. Grant Mills, Hospitaller of St. Thomas's Hospital, who took his text from the Epistle of the day (John iv. 8: "God is love"). With reference to the special subject of the day—hospitals—he said, that he had no hesitation in making a strong appeal for help, as he himself was connected with a hospital which had been endowed by the piety and benevolence of our forefathers, and which did not therefore share in the collections of Hospital Sunday. This consideration made him all the more willing and ready to plead on behalf of those hospitals not so happily circumstanced, which were almost entirely dependent upon voluntary offerings. He said that the editor of THE LANCET had done good service, for which they owed him a debt of gratitude in publishing a summary of the work done, and the money expended and received by those hospitals for whom an appeal was made that day. He must confess that the reading of that summary to them made him ashamed of the rich in London. Was it not a scandal that whilst hundreds, nay thousands, were constantly expended on *bric-à-brac*, old china, and so on, there should be a deficit of £40,000 on institutions which were fulfilling Christ's command: "Heal the sick." Was it not a scandal that £11,000,000 could be obtained by a Prime Minister without a dissentient voice, and as the result of one speech, and that the income of these hospitals for which he pleaded should be less than half a million, and that there should be £40,000 deficit. It ought to make people blush. Why, if for no higher reason, they ought to support hospitals for self-interest's sake. He himself lived and had for some years lived in a London hospital, and he could tell them that it would be a poor look out for them in time of illness were it not for the nursing and experience received and gained by our doctors and nurses in the wards of the hospital. What made it possible for them to have the services of skilled surgeons and physicians in their own homes? The hospitals. What made it possible for them to have the services of skilled professional nurses? The hospitals. Well, then, for self-interest's sake support the hospitals. This was low ground, he would like to lift it up. Support them because it was Christlike to heal the sick. These institutions were a testimony to the power of Christianity. There were ways, Mr. Mills pointed out, in which they could help in preventing sickness and disease and its transmission. There were many preventible accidents and diseases due to impurity, intemperance and overcrowding. Let them apply themselves to the removal of these fruitful causes of disease, and they would be helping the hospitals in a very practical way. Their principal thought, however, that day was the collection of money. If we loved God, who is love, because He first loved us; then that love would manifest itself in love to the brethren, and love shown to them was love shown to Christ, who had said, "Inasmuch as ye have done it unto one of the least of these my brethren, ye have done it unto Me."

BAYSWATER SYNAGOGUE.

THE Rev. Dr. Hermann Adler, Delegate Chief Rabbi, took as the text Job xxx. 25: "Did not I weep for him that was in trouble? Was not my soul grieved for the poor?" He dilated upon the importance of practical sympathy, and he characterized each efficient hospital as a true People's Palace. He paid a glowing tribute to the services rendered by the public press this year, and especially by THE LANCET, in diffusing accurate knowledge respecting the medical charities and stimulating the generosity of the community.

ST. LUKE'S, WEST HOLLOWAY.

THE sermons at this church were preached by the Vicar, the Rev. Richard Glover, M.A., from Isaiah xxxiii. 24. He descanted on the many ways in which *sickness is overruled for good*, and amongst them on the effect produced on those who are the mere *beholders* of suffering:—"How much wholesome thought is occasioned by the mere sight of suffering, or by the knowledge of the suffering that exists? The very sight of suffering tends to make the worst, for the time, sober and thoughtful, and to do kind acts that they never might do otherwise, and in this way tends to humanize even the bad. But how salutary the effects on the good! How it draws out their pity, their sympathy, and all their kindly qualities! And, what a benefit to them is the fact that it does! See what an occasion sickness is of drawing out and developing medical skill and science, and all the humanities that are connected with the surgeon's and the nurse's care. Then think, finally, of the way in which it develops and exercises benevolence in the world, in regard, for example, to Hospital Sunday. In every Christian city the hospital is erected and maintained, and think of the amount of wholesome sympathy and benevolence that all this evokes, and of the wholesome effect of all that even on those who show it. And thus, through the mercy of God, the very curse is turned into a blessing, and good comes out of evil. Yet an evil

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nevertheless, sickness is. It is no creation of God, but a creation of sin; and in that world or state where there is no sin "the inhabitant shall not say, I am sick."

CHEAPSIDE, MERCERS CHAPEL.—Rev. Arthur Veysey, Chaplain to the Company, on "Dives and Lazarus." Collection £13.

ENFIELD.—BAKER STREET CONGREGATIONAL CHURCH.—Rev. S. J. Smith, B.A. "The Unique Physician, Jesus Christ;" "The Recovered Patients." Collection £5 10s.

FERNHEAD ROAD, W.—TRINITY WESLEYAN CHAPEL.—Rev. W. R. Bevan. Collection £5 16s.

GREAT PORTLAND STREET, ST. PAUL'S.—Rev. H. Bickersteth Ottley, Vicar of Horsham. Ecclesiasticus xxxviii. 1. Collection £39 10s.

HARROW ROAD, WESLEYAN CHAPEL, SUTHERLAND GARDENS.—Rev. Joseph Olphert. St. Luke x. 25 (morning); St. of £4). Mark vi. 56 (evening). Collections £19 10s. (an increase

ISLINGTON, AGRICULTURAL HALL.—Rev. Dr. Thain Davidson, to congregation of upwards of 2000 persons. Psalm xli. 1.

HOSPITALS WEEK MEETINGS.

MEETING AT KENSINGTON TOWN HALL.

THE third district meeting was held at the Town Hall, Kensington, on Wednesday afternoon. The chair was taken by the Duke of Norfolk, who was supported by Lord Cadogan, Mr. W. H. Smith, M.P., Sir Sydney Waterlow, M.P., Sir William Mac Cormac, Rev. Dr. Finch, and Mr. H. C. Burdett. Letters of apology were read from the Dean of Westminster, Lord Hartington, Canon Fleming, the Hon. F. Fortescue, and others.

The DUKE OF NORFOLK, in opening the proceedings, said all present must know the importance of the work which they were met to put forward, and also that it had not heretofore met with the success which its importance deserved, and therefore those who had energetically undertaken to foster its operations had thought it well to make a great effort to stir up public opinion throughout the metropolis in support of the hospitals. It was an unfortunate occurrence that the week which had been chosen for the advocacy of this crusade should coincide with a week in which the whole country was taken up with preparations for the forthcoming elections; but this ought to stir them up to be more eager to support the cause of the sick poor of London rather than to forget them at this crisis (hear, hear). Throughout the country men were doing their best to forward one cause which they believed to be the best for the people at large, but they might be quite sure that whatever mistakes individuals or parties might make in political warfare, they would make no mistake at all in doing the best to succour the sick poor. It was a cause they would always have before them, for do what they might by generous assistance, and however progressive the science might be which it was their object to foster and extend, they might be quite sure that the pleadings of suffering humanity would never be silenced. But while they could not take away from them that melancholy and continuous appeal, they could at all events draw great good from those evils by showing to those who suffered that they were not forgotten in their sufferings. He urged them to do everything they could in support of this great cause, to determine never to forget its importance, and the lamentable fact that it had not hitherto met with that support which it so richly deserved.

Mr. W. H. SMITH, M.P., moved the first resolution: "That this meeting pledges itself to use every endeavour to arouse the inhabitants of this district of London to the importance of maintaining the hospitals and medical charities in the utmost efficiency; and, in furtherance of this object, it urges the clergy and ministers of religion to make an earnest appeal to the people to so increase their contributions on Hospital Sunday as to secure that the whole sum collected shall not be less than £80,000." He said the concluding paragraph of the resolution was a measure of the magnitude of the effort which would be required next Sunday. He spoke of the necessity of arousing the attention of the public of London to this great want, because a vast number of the inhabitants of the metropolis, who were in comparatively easy circumstances, were unaware of the great necessity and want existing at their doors, and were not capable of being brought to realize their duty under the circumstances in which they were placed (hear, hear). A double appeal was made—an appeal to those who were present, and also an appeal to the clergy of that prosperous and wealthy district, to use the great influence which undoubtedly they possessed, and, as a rule, worthily exercised, to bring before their people one of the most pressing Christian duties which it was possible for human beings to be called upon to discharge. What was it they were asked to do? It was to take the best means in their power to secure that their neighbours and fellow-subjects should have the best possible attention and relief in time of sickness, when they were unable to help themselves. The hospital was the sick-room in the home of the poor man; it was that which he could not provide for himself, and as he could not provide it for himself, it was the duty of others in better positions in life to do it for him. He knew there were persons who said that this was a duty which might fitly be undertaken by the State, and not a duty which fell upon individuals. He should be exceedingly sorry if that were at all a common feeling. No greater misfortune could happen to the cultivation of the science of medicine, to the training of the future doctors and surgeons, than that the voluntary hospital should cease to maintain the position which it had held in the metropolis and throughout England during the past half-century (cheers). However excellent a public institution might be which was maintained by taxes or rates, there was something wanting in it which was found in a voluntary hospital—the personal interest, sympathy, and care—the deep anxiety to relieve suffering. There was a Christian feeling pervading the work of the voluntary hospital day by day—the desire of self-sacrifice, the pleasure of doing good; and however excellent a rate-supported institution might be, everyone there was paid to do his duty, and they could not find the amount of self-devotion and earnestness in the work, which was found in those who devoted themselves to doing good for the love of it (applause). On that account it would be a very great misfortune indeed if one after another of these national institutions must be closed because those who possessed the money had not the consciousness that it was their duty to assist those who devoted themselves to this work. Looking to the great benefits which the hospitals conferred upon society at large, he urged their claims upon all those who had it in their power to aid in their support.

Sir SYDNEY WATERLOW said: Having as Lord Mayor in 1873 established the Hospital Sunday Fund in London, and having been vice-president ever since that period, it was very gratifying to him to find that from year to year public interest in the movement continued to be enlisted to a larger and larger extent. In the beginning they had no doubt many difficulties to contend with; but thirteen years had satisfied the public that if they had the means they could not do better than contribute to the Hospital Sunday Fund, and for this reason, that no grant was made to any hospital or to any dispensary until the accounts of the past three years had been sent in to the committee, and so carefully analysed and dissected as to enable the committee to determine not only that they needed help, but that they deserved it, because they did their work well (applause). The grants recommended by the committee were always made upon the basis of the needs of the institution. One great point in,

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favour of this fund was, that whether by annual subscriptions, or dinners, or any of the other various methods adopted, in no case was the collection made at such a small cost. The whole of the money contributed, with the exception of three per cent., which was the cost of collection, went direct to the funds of the hospitals and dispensaries. They had no rent, rates, or taxes to pay, for through the kindness of each successive Lord Mayor they were able to carry on the whole of the business at the Mansion House. They had collected on an average during the last thirteen years between £28,000 and £30,000 on Hospital Sunday, from about 1500 congregations; but that was not anything like the sum they ought to collect or would collect if the question was fairly and clearly understood by the public of that great metropolis (applause). £34,000 only enabled them to contribute about one-eighth of what was absolutely necessary for carrying on these hospitals and dispensaries. The number of patients coming to the London hospitals continually increased, not merely in proportion to the ratio of the population, but as they increased the facility of communication between the metropolis and large towns in the country districts, patients who could not be as efficiently and carefully dealt with in the country were continually sent up to London in larger and larger numbers. He hoped, therefore, that all provincial visitors to London, of whom there were so many at this time of the year, would give a contribution in recognition of the use made of the London hospitals by the country people. He called attention to a statement in the *Daily Telegraph* that morning, challenging the idea that all the great London hospitals—Guy's, St. Thomas's, and Bartholomew's—were in debt. As treasurer of St. Bartholomew's, he was happy to state that it was not in debt; but all these hospitals had been seriously crippled, and all the others, without exception, were actually in debt, owing to the serious diminution of their incomes, and in many cases hospitals had had to draw very largely upon their capital. He was very glad these meetings were being held, and felt sure that it was only necessary to bring the facts before the public, and to make them clearly understand the facts of the case, in order to secure a very largely increased support. He added that none of the funds collected on Hospital Sunday would go to Bartholomew's, St. Thomas's, or Guy's. Those hospitals had not yet applied to be on the fund, though the time might come when they would have to do so.

The resolution was unanimously agreed to.

The EARL OF CADOGAN moved: "That this meeting regrets to learn that the expenditure of the hospitals and medical charities of this district in the year 1885 exceeded the charitable income by £20,000, and pledges itself to increased exertion with the view of preventing any like deficiency during the year." He said that hospitals really covered nearly all the aims and objects of really true charity. It had been said that poverty leads to sickness, and that was no doubt true; but it was also equally true that sickness itself very often led to poverty. By the means of hospitals those who, if their sickness had not been cured, would have been plunged into want and misery, were saved to live lives of usefulness and to be able to support their families. That being so, and the advantage of hospitals being so patent to all, how was it that even in that district the expenditure had so largely exceeded the income? That question required an answer, and the best answer which could be given would be that year by year they should endeavour to supply that want, until at last it should be found that the annual income of these charities was equal to their expenditure.

Sir WILLIAM MAC CORMAC seconded the resolution, and said he was in some sense an outsider, because he belonged to one of those great hospitals (St. Thomas's) which were outside the sphere of the operations of this fund. Sir Sydney Waterlow had told them, with regard to St. Thomas's, that it was restricted in the usefulness it might otherwise be doing, by the diminution of its income in recent years. It was quite true that these great hospitals had suffered with the others. Nothing more astonishing had come out in the inquiry that had resulted from the institution of these meetings, than the fact of the very limited number of persons who subscribed to the London hospitals. There were some hundreds of them, and yet, as he was informed, but one person in every hundred was a subscriber to these charitable institutions. Surely there must be some reason for this that was not apparent on the surface. He could scarcely imagine that anyone understanding and knowing something of the work done in those institutions could hesitate to respond to the call which had now been made upon them. In the hospital to which he belonged there was a large number of beds occupied by sick and sorely suffering persons, but not merely were the beds occupied, but every day and every week hundreds upon hundreds came to that and other hospitals with many ailments, for which they could be treated as out-patients. The benefits of the out-patient department were perhaps not sufficiently realised, but they were not less great than the work done within the hospital wards themselves. Of one thing he was sure, namely, that hospitals were a necessity of their social organization. They would never be able to do without them, and if the community at large did not support them, then the State must step in and do it. That no doubt would be a disaster. He knew from personal experience what the rate and State supported hospitals were in France, Germany, and Austria, and he could assure them that the sympathy there afforded was not the same kind of sympathy with that given in the voluntary hospitals of this country. Patients in foreign hospitals were looked upon in some instances as subjects for scientific consideration; whereas, as had been truly said by a speaker at one of the former meetings, each one of the patients in an English hospital, was regarded as everyone could wish to be regarded if in a similar condition, and nothing was done that would not be freely done to those who might be very near and dear to the attending physicians and surgeons themselves.

The resolution was adopted.

On the motion of Mr. H. C. Burdett, seconded by the Rev. Dr. Finch, a cordial vote of thanks was accorded to the speakers and to the Duke of Norfolk for presiding, and the proceedings terminated.

MEETING AT ST. ANDREW'S HALL, NEWMAN-STREET.

THE fourth District meeting was held at St. Andrew's Hall, Newman-street, on Thursday evening, the 24th ult., under the presidency of the Earl of Northbrook, who was supported by Lord C. Beresford, M.P., Mr. Bauman, M.P., Mr. Seager Hunt, M.P., Sir Julian Goldsmid, Bart., M.P., Sir Risdon Bennett, F.R.S., Mr. J. McMillan, Mr. H. C. Burdett, Rev. Dr. Finch, Mr. H. N. Custance, &c. There was a very good attendance, including many tradesmen and working men.

Lord NORTHBROOK, in stating the objects of the meeting, claimed that no provision could be made by any man, however wealthy he might be, with respect to accidents, at all approaching that made in the hospitals, and the same thing might be said with regard to the vast majority of the population in reference to disease. There had been 59,000 in-patients, and 941,000 out-patients, treated in those institutions in the course of the last year (applause), and the cost of dealing with this vast mass of human misery was £490,000. The annual income, he was sorry to say, was only £450,000, leaving a deficit of £40,000 on the year 1885 alone; and an additional sum of £40,000, making £80,000 in all, was required to place these institutions in a thoroughly satisfactory and efficient condition. So that, although they might congratulate themselves on the large development and great efficiency of these hospitals, they must also look in the face the necessity for increasing the amount of annual contribution, in order to maintain that efficiency. It was for that object that this movement had been inaugurated, and it was one which must commend itself to all who took an interest in their fellow-creatures. No doubt just now times were hard on everybody, and he did not know that those interested in hospitals had any real cause to complain of the manner in which the middle classes of the country helped to support them. It was not their wish to throw blame upon any one class; what they wanted was to call the attention of everyone to the necessity of hospitals, and

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by more earnest effort to increase the channels of contribution to those institutions. The way to keep up the funds of a charity was to encourage as much as possible small contributions. The mechanics and artisans were in many cases those who got the most advantage from the hospitals, especially with respect to accident wards; and he was quite sure that if efforts were organised to obtain contributions in their great manufactories and workshops, something might be done to increase this fund. Referring to that particular district, he said the finances of their hospitals were rather worse than they should be as compared with those of the whole area of the metropolis, the deficit being no less than £18,000 on last years working alone.

Lord CHARLES BERESFORD, M.P., moved the first resolution, pledging the meeting to use every endeavour to arouse the inhabitants of the district to the importance of maintaining the hospitals and medical charities in the utmost efficiency, and urging the clergy and ministers of religion to make an earnest appeal to the people, so that the whole sum collected on Hospital Sunday should not be less than £30,000. He said of all the forms of charity to which their great and generous-hearted nation subscribed, there was no form so grand as that which gives money towards the hospitals. He showed that while in 1873, the first year in which the Hospital Sunday collection was taken, £27,370 was collected and divided among fifty-four hospitals and fifty-three dispensaries; in 1885 the amount collected £32,000) was divided among 140 hospitals and dispensaries, so that their proportionate share was much diminished. He urged that special attention should be directed to the Hospital Saturday Fund, as it seemed capable of very great expansion with a more extended organisation. A Frenchman had once said, on learning that the English hospitals were voluntarily supported, that that fact ought to be inscribed outside the building in letters of gold, and he agreed with the Frenchman. (Applause.)

Mr. BAUMAN, M.P., in seconding the resolution, said he had lately taken a deeper interest in the London hospitals from the conviction that if they were going to have two general elections a year he should very shortly become an inmate of one of those hospitals. (Laughter and applause.) It would be interesting to stop and ask the average Londoner—the man in the white hat who rides on the knifeboard of the omnibus, and who Lord Palmerston used to say you must question if you want to get at the average mind—how he thought the 104 hospitals in London, of which we are all so justly proud, have been founded, and how they are maintained? Judging from the amount of contributions traceable to the inhabitants of the metropolis, the average Londoner apparently thought that hospitals grew by some unaided operation of nature, for in no other way was it possible to explain the fact that in the richest city of the world, whose mere bricks and mortar were valued at something over thirty millions sterling, the annual average sum collected for hospitals on Hospital Sunday varied from £28,000 to £34,000. When they came to consider the amount of money that was spent—he supposed he must not say wasted—on politics and pleasure, they would agree with him that that was a ridiculously small result. (Applause.) It only amounted to £1 per thousand people—at least so he was told by an arithmetician in *The Times*, and if they were very good arithmeticians they could find out for themselves what an infinitesimal fraction of a farthing that was per head of the population. He confessed that the sum was too difficult for him. He was bound to add, for the credit of Londoners, his conviction that their omission was one more of ignorance than of ill-will; if they did not open their purse-strings as liberally as they might and ought, it was not because they underrated the good work being done by the hospitals, nor was it because they failed to appreciate the absolute necessity of their existence. They had hitherto laboured under a hazy and comfortable delusion that there were plenty of rich people who were always dying and leaving money to hospitals. The facts brought to light during the past week must have opened their eyes rather rudely. It was, he believed, too true that most hospitals lived, like Mr. Micawber, in a state of chronic expectation that something would turn up (sometimes) in the shape of a windfall. But whether it was due to the depression of trade or to the development of unthrift habits, the fact remained that rich people no longer die (laughter), or rather, he ought to say, people no longer die rich in these days. It was to supplement and compensate this falling off in benevolent bequests that this strong, earnest, and, he hoped, successful attempt was being made to stir up not only the consciences and compassion but also the ordinary prudence of Londoners. For, after all, it is a matter of common prudence to keep our hospitals going. It is only in the houses of the comparatively rich, only in the houses of the few that there is adequate accommodation for the sick and wounded or invalid. Hospitals, therefore, seemed to him to be as much necessaries of our modern life as gas, water, and drainage, for which we all pay such heavy taxes so cheerfully and so ungrudgingly. He hoped that this year the amount of contributions to the hospitals would double that of the previous year. (Applause.)

The resolution was carried by acclamation.

Sir RISDON BENNETT, in moving the second resolution, "That this meeting regrets to learn that the expenditure of the hospitals and medical charities of this district in the year 1885 exceeded the income by £18,000, and pledges itself to increased exertion with the view of preventing any like deficiency during the current year," said there was hardly anything more conducive to the interests of their country as a great commercial country than the support of the various institutions by means of which labour and all its adjuncts were carried on so much more efficiently than they could be without those aids. It was the greatest glory of this country that charitable institutions were voluntarily supported. There was no country in the world that could make such a splendid display of hospitals and benevolent institutions established by the freewill offerings of the people, without any aid from the Government, and one of the most striking features in the development of the colonies was their imitation of the mother country in this respect. Hospitals were institutions by which the public at large were benefited indirectly as much as those who were assisted there, because it was in the hospitals alone that students could gain the skill which resulted from personal observation of disease on a large scale, and which they were afterwards able to put into practice in their professional life. He was sure that nothing would tend so much to secure the success of this movement as to make the action of the hospitals more generally known. (Applause.)

Mr. SEAGER HUNT, M.P., seconded the resolution. He said that, notwithstanding the immense amount of relief afforded, only £6000 had been collected in that rich district last year. If every one of the patients attended to had subscribed 1*s.* on leaving the hospital an additional income of £8500 would have been raised. If the cost of maintenance were put upon the State, the poor would feel the additional burden, while the rich would be relieved.

Mr. H. C. BURDETT supported the resolution, and said the deficiency was not £18,100 but £22,500, because a sum of £4400 in connexion with some extra new buildings of the Middlesex Hospital had been accidentally omitted. They had heard from Sir Risdon Bennett and others that were it not for hospitals they would have no doctors; but it was also the fact that but for these institutions they could have no trained nurses and no skilled nursing. THE LANCET had sent a special commissioner through all the hospitals of London, and after spending two months in that work he came back and said, "I will tell you why the hospitals want funds. It is a very simple matter. It is because the people do not know what the hospitals are doing. If the people knew what was done in the hospitals they would not want money, and the managers would probably have more money than they knew what to do with." Applying that experience, it was hoped that this Hospitals Week might not be a transitory movement, but that it might take root and flourish and become permanent. He suggested the formation of a Hospital Society in every parish, which might become an organisation for the relief of every kind of human suffering, and also keep alive public interest in this great question.

The resolution was carried unanimously.

On the motion of Mr. J. McMillan, seconded by the Rev. Canon Barker, a vote of thanks was passed by acclamation to Lord Northbrook for his kindness in presiding.

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THE FIFTH DISTRICT MEETING.

THE fifth district meeting was held in the Highbury Athenæum on Friday, under the presidency of the Duke of Westminster. The Duchess of Westminster was also present. In opening the proceedings,

The Duke of WESTMINSTER said the object of the meeting, like that of its predecessors, was to awaken the public, especially through the agency of the press, to an interest in the Hospital Fund. A great debt of gratitude was due to the press for its efforts in the cause, without which, indeed, the promoters of the movement would be absolutely powerless. The coming election would probably distract attention from the movement, and the prevailing agricultural and commercial depression would also act prejudicially against it. In London too, from its vast size, there was a want of local feeling and interest; and hence the subdivision of effort that had been made during the week. The matter was one affecting rich and poor alike. To the poor man it was of the utmost importance that his sickness should receive prompt attention, and he could nowhere receive such effective treatment as in a London hospital. The rich also were benefited by the enlarged experience gained in hospitals by those who attended their families. Hospitals were not so liable to abuse as many other charities, and there was no object to which public charity could be so fitly directed. The support of the hospitals fell at present on a very limited number of individuals. The subscribers numbered only 40,000 persons out of 4,000,000. Surely the burden ought to fall on a wider area. The amount required next Sunday was said to be £80,000; the amount hitherto collected was less than half that amount. Besides the general wants of maintenance, there were special wants to be met in the No. 5 district. University College Hospital required enlargement and a great deal of rebuilding, entailing a large outlay. The Soho Hospital for Women also required enlargement, so as to accommodate a larger number of patients. A site had been selected for the North London Central Hospital, but sufficient funds had not been received to enable the committee to begin building. A great deal of interest had been taken in another matter which was in one sense connected with hospitals. There was a Bill in Parliament for acquiring the open space known as Parliament-hill, near Hampstead, and, if that addition to the Heath could be made, probably less funds would be needed for the North London Hospital, and the health of the metropolis would be largely promoted.

Sir SYDNEY WATERLOW moved the first resolution, pledging the meeting to use their best exertions to promote the efficiency of the London hospitals, and urging ministers of religion to make an earnest appeal for increased contributions, so that the whole sum collected might not be less than £80,000. He said that no money was collected for charitable purposes in London at so small an expense as that collected for the hospitals. None of it was wasted in transit, but went direct to the object for which it was given. Grants were made by the Hospital Fund to 115 institutions, according to their needs and merits, which were inquired into with the greatest care. The amount collected in 1885 was £34,320, contributed mainly in 1597 places of worship. In a rich place like London that was not an adequate amount, and he hoped it would be largely increased. Even if the £80,000 asked for by the Duke of Westminster were given it would only provide about one-fifth of the total amount that had to be collected. The wants of the hospitals were constantly increasing, not only for the inhabitants of London, but to meet the applications often made from the provinces. Increased expenses had to be met for the improved nursing and the additional cleanliness attending it, for surgical appliances, and other demands.

Mr. C. LAMBERT, in seconding the resolution, urged the claims of the hospitals in the district, and expressed a hope that the utmost endeavours would be made to meet their pressing demands.

The resolution was unanimously adopted.

Mr. INCE, M.P., moved: "That this meeting regrets to learn that the expenditure of the hospitals and medical charities of this district in the year 1885 exceeded the income by £4500, and pledges itself to increased exertion with a view to preventing any deficiency during the current year." He said that the support of London hospitals was not so much a matter of charity or benevolence as it was a matter of duty. He knew that times were hard, for even lawyers felt the pressure; but a great deal of money was wasted that might be turned to better uses. If those who sought to "cut out" their neighbours, to have smarter carriages and higher-stepping horses, or to give more dinner parties, would only think of the little use they were doing in comparison with that attending the support of hospitals they would expend their money differently. Now that there were so many divisions in society, political and religious, all might unite with advantage in the hospital movement; and most assuredly nothing would be found to pay so well as the good that was done to our fellow-men.

Mr. BURDETT, in seconding the resolution, said that if hospitals ever came upon the rates all persons would have to pay for them, and the cost would be infinitely greater than under the voluntary system. The condition of countries without hospitals was simply frightful, as might be seen by the descriptions that had been given of the hideous deformities in China, where a broken limb had to unite as it best could. The development that had taken place in hospitals was well illustrated by the contrast between the state of the Hôtel Dieu in Paris ninety years ago (when some of the beds contained four or five or more patients) and its present highly satisfactory condition. In the fifth district there was about to be constructed one of the best hospitals in London, of which a prominent feature would be the introduction of the provident system, which would entitle it to a proportionately larger grant than that given to hospitals where no such element existed.

The motion was unanimously adopted.

Sir E. HAY CURRIE, in proposing a vote of thanks to the chairman, alluded to the dreadful results that would attend any impairment of hospital efficiency in London. He also paid a tribute to the efforts of the press in promoting the hospital movement, and to Dr. Wakley and to Mr. Burdett for having set the ball rolling.

Mr. WILLETT seconded the motion, which was unanimously adopted, and was briefly acknowledged by the chairman.

THE DUKE OF CAMBRIDGE AND THE MARQUIS OF SALISBURY AT STRATFORD.

ON Saturday afternoon the Hospitals Week was brought to a close by a crowded and enthusiastic meeting held in the Stratford Town-hall. The chair was taken by Mr. E. R. Cook, and there were present Sir E. Currie, Mr. Carr Gomm, Sir T. F. Buxton, Mr. H. C. Burdett, Mr. J. Buxton, Colonel FitzGeorge, Captain Storer Smith, Messrs. Custance, Meeson, F. Young, A. Johnston, Ashton Warner, T. Mitchell, A. H. Haggard, and Nixon, Dr. S. Mackenzie, the Bishop of Colchester, the Rev. Canon Scott, the Rev. Reaney, and several clergymen and ministers.

The Duke of CAMBRIDGE moved the first resolution, which pledged the meeting to arouse the inhabitants of the district to the importance of maintaining medical charities in efficiency, and urged the clergy and ministers to appeal for increased subscriptions, so that Hospital Sunday might produce not less than £80,000. His Royal Highness said he had the honour of being president of two great hospitals in this part of London, the London Hospital and the German Hospital. In that district they had a deficiency of £15,000, which was their proportion of the deficiency of £40,000 or £50,000 for the whole of London. It was observed from the statistics that last year no fewer than a million patients were treated in all the hospitals of London, and that the total cost was £500,000. That gave the singularly small figure of 10s. per patient. If they could not keep the hospitals going a sad calamity would fall upon the community at large. The sum collected this year in connexion with Hospital Sunday was £40,000; it fell £40,000 short of the requirements of the London hospitals. This was why the large figure of £80,000 was presented to them on the resolution. The amount collected was 9s. per patient, and now they wanted to make it 16s. per head. These were marvellous facts. It was hardly known to the public how large an amount was expended, how small was the average expenditure on the individual patients, and how large a number of patients were represented by the additional shilling required. (Hear, hear.)

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leading features in this question was that they had no State hospitals in this country, and a very good thing too, because he believed all these institutions were far better under private management by individuals who took the interest which was taken by so many gentlemen on that platform. If they wished to keep the hospitals free from dependence upon State support, which he thought was essential, they must be supported by the people, not only by their sentiments, which he was sure would always go in this direction, but by positive pecuniary contributions. It was a very difficult thing to send a penny or a sixpence to a subscription list, or, it might be, to put it upon the plate on the Sunday, and to feel that they had done the right thing. They might be giving as much as they could individually, and yet feel a sense of shame at giving so little, although they had not the means to give more. It was not the amount—it was the sentiment with which it was given. (Cheers.) Very often a penny or a sixpence represented a far finer sentiment than a £100 note. It was often a more serious thing for a poor man to give a penny than it was for a rich man to give a £100 note. (Hear, hear.) That was why the Sunday collections were of such great value. There could not be two opinions of the value and importance of such a meeting as that, and such meetings all over London would increase the general appreciation of the value of hospitals. Every man and woman could contribute to the great work they had in hand. When there was such a work in hand, there could be no question of convenience or inconvenience. When a man had a great object in view he sacrificed everything to attain it. (Cheers.) No doubt many felt their pockets affected by the depressed state of trade; but sickness, disease, and accident did not stop; they did not go with the times in that respect, and the scarcity of money was no reason why there should be less sickness or fewer accidents. Nay, in times of depression sickness increased because nourishment fell off from the want of employment, and disease resulting from want due to non-employment increased the demands upon the hospitals. (Hear, hear.) There was, therefore, a special claim upon them to give their mite, penny, shilling, or guinea, to these great and useful institutions. If they got the larger sum they required, he should feel more than ever gratified that he had come down among them. (Loud cheers.)

Sir E. HAY CURRIE seconded the resolution, which was supported by the Bishop of Colchester and unanimously agreed to.

The Marquis of SALISBURY moved: "That this meeting regrets to learn that the expenditure of the hospitals and medical charities of this district, in the year 1885, exceeded the income by £15,000, and pledges itself to increased exertion with the view of preventing any like deficiency during the current year." The noble Marquis said—The apology, the defence which we have for this universal movement in favour of the Hospital Sunday Fund is furnished by the peculiar circumstances of the times in which we are speaking. I do not refer only to the great state of depression of trade and industry in London, though that is an element which has already been alluded to, and is one of the most stringent. It is a reason that applies more especially to the East of London, so thickly populated, so industrious, so full of energy and labour, but one in which the accumulated wealth of the metropolis is not to be found to the same extent as elsewhere. And the consequence is that when depression of trade comes it affects a vast number of persons, it affects all these small subscriptions upon which the support of the hospitals is dependent in this part of London. And men feel that, struggling as they are against the cold and sinister tendency of the times, they may be well excused if they diminish the offerings which they formerly brought forward gladly. It is partly to struggle against this natural feeling that we are here to-day; because as the difficulty of subscribing increases the misery is increasing. That very want of enterprise, that very depression affects all, increases the wants of the poor; it spreads the withering and fatal influence of insufficient nourishment and the evils of illness or disease which might claim relief from the hospitals at another time are made worse. It is necessary to cure the spread of the evil over a larger area by the effect of the commercial suffering against which the middle classes of our poorer brethren are struggling. All the arguments that should urge you to special effort this time. It is one that I hope is transitory. But we must make an effort to get over it without allowing these magnificent institutions to fall into arrear or diminish in utility. And I think there is another argument for a greater effort, which, perhaps, those who summoned this meeting did not foresee at the time. They did not, perhaps, foresee that while we were addressing this meeting a certain ceremony would be taking place which has the effect, besides a great many other effects, of emptying London of a large proportion of its richer population. I mean the dissolution. I do not allude to politics. On this fact rests a great part of the trade of London. It diminishes the number of those from whom subscriptions might be obtained; it makes all charitable effort more difficult than before, and gives Hospital Sunday a worse chance than it otherwise would have had. Therefore, whatever political colour we are of, let us make an effort to diminish this evil effect of political events in which we are all interested. And I confess that when I consider the tremendous interests which we are engaged here to-day to promote; when I consider the comparatively small pecuniary effort that is required in order to stem so much suffering, to remedy so much misery; and when I look outside this room into the turmoil that rages away from our peaceful councils, and think how much energy, how much money, is being spent on other matters, I cannot but have melancholy feeling about it. It has been well said,

> "How small of all that human hearts endure
> That part which laws or kings can cause or cure."

And the contrast between the difficulty of sustaining these admirable institutions, the effort that it requires to collect the small sum that is necessary, with the tremendous energy that is characterising our movements out of doors, makes us feel that there is, perhaps, a little disproportion in our enthusiasm—that we care much for that which is temporary and small, and that we care less for that which is more important than any political interests—viz., the vast amount of human suffering contained in this tremendous population. Perhaps it is that the hospitals suffer because no one disputes their excellence. If they were an interest about whose value there was any controversy they would have their assailants and defenders; and their defenders and assailants would be very keen, and parties would be formed, and there would be leaders and programmes, and, no doubt, great political efforts, and large sums of money collected, and great struggling and political life on both sides. But the hospitals have the misfortune of being so undoubtedly good that nobody will venture to attack them; and therefore the defence of them is comparatively lukewarm and rare. I do not know whether we shall be able to persuade anybody to act the part of what is called elsewhere "the devil's advocate," and give the hospitals a chance of vigorous controversial existence by attacking them thoroughly well; but I am sure it would be very good for them. Not that there would be any defects discovered, for I do not believe there are any; but I believe that it would call attention to them; and in England no duty is thoroughly well performed unless a little fighting is involved in it. But, seriously, I would urge upon you that this claim of the hospitals is prior to any other claim that can be made upon you. It is the only philanthropic kind of charity against which the sternest and most rigid professor of political economy has never ventured to raise his voice. If you relieve the misery that you see in the streets you may be said to be encouraging beggary and pauperisation. You are always exposed to the risk, if you try to relieve suffering, of seeming to discourage the individual effort by which that suffering should have been attacked. But the sufferings which the hospitals relieve are those which no foresight can prevent and no industry or energy can cure entirely for themselves. It is a kind of effort which has no drawback; a kind of charity which leaves no evils behind it; and it is precisely, perhaps, for that reason that it requires more effort to advocate it than is the case with other charities. No doubt these are times of depression. Everybody has less to give than he had before, and we feel that especially when we have to rely on the small contributions which are diminished by distress. But everybody, though giving less, must give something (hear, hear). A certain proportion of his income would be necessary in order to remedy the sufferings of those less fortunate than himself, and let me urge you rather to put other objects of philanthropy behind; rather, if so it must be, to cease from gifts elsewhere, than to allow this splendid machinery for succouring the masses of human

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suffering to run any risk of having its utility abridged, or of being thrown upon the dangerous, and insecure, and delusive support of State contributions. These are evils which are worth very serious attention on our part. And, depend upon it, it is an evil from which no one can hope to escape the responsibility by saying that his own position in life is low, and his own means restricted. No doubt the heavier call is upon the rich; but it is equally upon all, and this deficiency will never be filled up unless the vast masses of those whose incomes are not large will each feel the responsibility of contributing what he can to so glorious an object. (Loud cheers.)

The resolution was seconded by the Rev. G. S. REANEY, supported by Mr. C. H. BUXTON, and unanimously agreed to.

Mr. H. C. BURDETT moved, and Mr. F. C. CARR GOMM seconded, a vote of thanks to the Chairman and speakers, and the meeting terminated with hearty cheers for the Duke of Cambridge and the Marquis of Salisbury.

INCIDENTS OF HOSPITAL SUNDAY.

TOO BAD.

A collection was made at the Home Hospital, Fitzroy House, Fitzroy Square, on Hospital Sunday, at the request of the paying patients who were inmates on that day. This collection, amounting to a goodly sum, was taken by one of the nurses, on behalf of the patients, to be given at the offertory at St. Mary Magdalen's, Munster Square, the church which the staff of this hospital attends. No collection was, however, made there on behalf of the hospitals on Hospital Sunday, and the patients' contribution went to swell the amount elsewhere in the evening.

THE RECEPTION OF THE SUPPLEMENT.

The Duke of Cambridge quoted at the Stratford meeting several of the figures published in the First Special Supplement. After the meeting, one of the clergy present inquired if he could be informed where the same information could be obtained for the purpose of his sermon. He was told that it was taken from THE LANCET Special Supplement, and he was asked if he had not received a copy. He replied, "Certainly; but I never looked at it, because I am swamped with communications of a similar character." Contrast this with the following letter from Canon Trench:—"Let me thank you for the Special Supplement of THE LANCET, which must have greatly helped many clergymen, as well as myself, yesterday, by the statements you have so clearly put together."

A VOLUNTARY LAY PREACHER'S CONTRIBUTION.

Mr. John Girling, a voluntary lay preacher and worker amongst the people of Bethnal Green and Shoreditch, obtained the largest amount that he has ever collected, from Hackney Road Mission, Union Street, E., on Hospital Sunday. He truly says, "This year we have done extra well"—a statement which is borne out by the following details, showing how the total is made up:—Morning: Open-air service, at corner of Columbia Road, Hackney Road, 12 to 1.20 p.m. Amount collected, 30s. 4d. Afternoon: School in Mission Hall, Union Crescent. Collected, 10s. 6d. Evening: Service in ditto, 7 p.m. Sum contributed, 24s. Evening: Open-air service at same place as morning, at 8.30 p.m. Collected by 10.30 p.m., 40s. 8d. Total, £5 5s. 6d.

COLLECTING ON A TRICYCLE.

"Cyclist" writes to *The Echo* stating that he spent Sunday afternoon on a tricycle in Seven Dials and Drury Lane amongst the very poor. He everywhere met with a kind reception, but his collection was not nearly so much as in 1885, because certain friendly societies had a church parade and collection before he arrived, in aid of the funds of King's College and the Temperance Hospitals. He adds: "Surely on a day set apart for a general collection, and when appeals were being made in all places of worship for the general fund, it was extremely bad taste on the part of the authorities of these two hospitals to send round the hat on their own account. It may have been only an error of judgment, and can be rectified by their treasurers forwarding the amounts collected to the Mansion House." Some explanation seems to be called for from the authorities of the hospitals in question, and will doubtless be forthcoming.

WHAT AN OFFERTORY BAG CONTAINED.

The *Pall Mall Gazette* gives the following list of the coins given at the collections at St. Margaret's, Westminster, on Hospital Sunday:—

		£	s.	d.
2	Five-pound notes	£10	0	0
2	Cheques (£5 and £2)	7	0	0
1	Postal order	1	0	0
50	Sovereigns	50	0	0
52	Half-sovereigns	26	0	0
117	Half-crowns	14	12	6
168	Florins	16	16	0
578	Shillings	28	18	0
547	Sixpences	13	13	6
281	Threepenny-pieces	3	10	3
732	Pennies	3	1	0
243	Halfpennies	0	10	1½
10	Farthings	0	0	2½
2778		£175	1	7

HOW NURSES CAN HELP!

There are upwards of fifteen thousand skilled nurses in the United Kingdom, many hundreds of whom are engaged in private nursing. The majority were trained at one of the great general hospitals, and most of them in London. One hospital nurse, A. P. Roche, collected from the Earl of Howe's household, on Hospital Sunday, the sum of £9 0s. 2d. She sends the announcement of this collection from Branksome Dene, Bournemouth.

THE EFFECT UPON INDIVIDUAL HOSPITALS.

The secretary of one of the principal Metropolitan general hospitals states that he has been issuing an appeal for funds for some weeks past. During the last fortnight he has received a response many times greater than that he has ever before met with throughout many years' experience. This is no doubt one direct advantage of the new departure on the part of the Hospital Sunday Fund Council.

The following is a list of sums collected, information of which was sent direct to THE LANCET Office.

	£	s.	d.
Christ Church, Trent-park, Enfield	21	15	0
Holy Trinity, Penge	40	0	0
St. Bartholomew's Mission, Camberwell	3	14	6
St. Edmund's, Lombard-street	5	16	4½
St. George's, Tufnell-park	65	2	10
St. John's, Redhill	25	18	6
St. Jude's, East Brixton	78	0	0
St. Luke's, Bermondsey	10	1	10
St. Mary's, Plaistow	4	0	10
St. Peter and St. Paul, Harlington	5	5	0
St. Peter's Mission, Plaistow	1	7	0
St. Stephen's, Coleman-street	10	7	7
St. Stephen's, Canonbury	16	2	5
St. Stephen's, Hounslow	13	13	10
West Hackney Parish Church	51	3	4
West Ham Parish Church	33	15	4
Harley-street Congregational Chapel	22	10	0
North Finchley Congregational Chapel	25	10	0
Quex-road Wesleyan Chapel	10	0	0
Romford-road Congregational Chapel	15	18	6
Westbourne-park Chapel, Bayswater	47	9	9
Wood-green Congregational Chapel	15	14	1

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METROPOLITAN HOSPITAL SUNDAY COLLECTIONS, 1886.

THE following statement shows the sums received at the Mansion House on Monday, Tuesday, and Wednesday last. It will be seen that the collections for the years 1885 and 1886 are placed in parallel columns for the purposes of showing the influence exercised by the Hospitals Week. Up to Thursday evening £18,000 had been received, as compared with £14,000 at the corresponding date last year, being an increase of upwards of 25 per cent.

	1885.			1886.		
	£	s.	d.	£	s.	d.
St. Michael's, Chester Square, Rev. Canon Fleming, B.D.	951	4	6	1006	4	0
St. Jude's, South Kensington, Rev. R. W. Forrest, D.D.	717	0	0	850	17	7
London Football Charity	—	—	—	125	0	0
"D. C." (a further)	100	0	0	100	0	0
R. H. D. White (New South Wales)	—	—	—	20	0	0
Joseph Maynard	—	—	—	100	0	0
O. V. Morgan, M.P.	—	—	—	50	0	0
J. Ramsay L'Amy	—	—	—	20	0	0
Duke of Norfolk	—	—	—	200	0	0
B. L. A.	—	—	—	5	0	0
Marquis of Salisbury, K.G.	—	—	—	100	0	0
"F." (a further)	50	0	0	50	0	0
St. Paul's Cathedral	161	6	0	267	16	6
Westminster Abbey	195	5	0	375	17	0
St. Peter, Vere Street	215	0	0	206	4	0
Percy Ricardo	—	—	—	25	0	0
Barnes Parochial Church (Surrey)	30	3	10	48	19	4
St. James, Camberwell	37	16	0	44	7	6
St. Stephen, Ealing	—	—	—	119	7	0
St. Mark, North Audley Street	220	5	2	264	1	7
Camberwell Parochial Church	40	15	3	60	4	0
"F. G. D." (a further)	25	0	0	25	0	0
Christ Church, Marylebone	34	0	5	53	0	0
St. John Evangelist, Penge	88	1	9	114	10	0
Streatham Wesleyan Church	17	8	9	21	16	9
St. Stephen, Lambeth	17	12	4	28	1	1
Blackheath Wesleyan Chapel	24	1	0	24	5	7
Society of Friends, Stoke Newington	15	3	1	22	11	1
Camden Road Presbyterian Church	28	0	0	27	10	3
St. Mary (Old Parish Church), Stoke Newington	23	12	8	31	15	9
St. Mary (New Parish Church), Stoke Newington	40	8	6	60	17	0
St. Paul, Forest Hill	64	0	0	64	0	0
All Saints and Holy Trinity, Wandsworth	27	13	9	36	4	1
St. Mary Brookfield, St. Pancras	35	11	7	28	18	1
St. Peter, Brockley	51	4	10	58	5	11
Stoke Newington (Congregational Church)	28	13	10	39	10	4
St. Mary Boltons, South Kensington	55	8	1	75	0	0
St. Mark, Reigate	40	12	11	44	1	6
St. John, Highbury Vale	25	19	10	21	12	0
Malden Park Church (Surrey)	28	12	5	22	2	1
St. Stephen, Hampstead	35	0	0	37	16	11
Gower Street (Baptist) Chapel	28	0	0	24	5	0
St. Luke, Camberwell	17	13	11	39	0	7
St. George, Bloomsbury	50	0	8	66	3	1
St. Stephen, Clapham Park	22	13	7	42	2	10
St. James, Garlickhithe (City)	39	5	2	31	17	7
Dulwich College Chapel	35	7	0	38	8	2
Highbury Quadrant (Congregational) Church	42	5	11	39	0	0
Chapel Royal, Whitehall	87	13	5	53	12	6
Chapel Royal, St. James's	56	2	3	29	5	2
Chapel Royal, Hampton Court Palace	7	0	0	17	3	1
St. Saviour, Southwark	24	9	1	26	4	3
Islington Parish Church	20	7	7	20	11	6
St. Andrew, Westminster	27	0	0	30	10	8
Chipping Barnet Parish Church and 3rd Middlesex Volunteer Parade Service	29	5	9	32	10	0
C. H. T. Hawkins (a further)	21	0	0	21	0	0
St. James the Less, Westminster	32	16	6	23	9	9
St. Andrew, Islington	19	12	8	26	16	0
St. Matthew, Brixton	51	13	11	59	10	0
Messrs. Reid & Co. (a further)	200	0	0	200	0	0
H. Trin, Knightsbridge	43	6	6	44	4	5
St. Paul, Upper Norwood	47	11	10	52	0	3
Islington Presbyterian Church and Agricultural Hall Services	55	0	0	49	0	0
St. Andrew, Fulham	42	3	0	54	2	11
All Saints, St. John's Wood	46	5	1	40	10	11
St. Paul, Canonbury	26	3	9	32	3	9
Carmelite Church, Kensington	12	12	0	30	5	0
St. Margaret, Westminster	184	19	6	175	1	3
Christ Church, Lower Sydenham	20	0	0	25	0	0
South Street Baptist Chapel, Greenwich	27	11	7	31	1	4
St. Stephen's Society, Dulwich	200	0	0	136	0	0
Christ Church, Hampstead	100	0	0	120	2	6
St. Luke, Shepherd's Bush	21	18	7	29	0	0
Rochampton Parish Church	53	0	8	80	2	6
Holly Park Wesleyan Church, Crouch Hill	15	6	3	23	15	6
Holy Trinity, Kilburn	53	2	10	74	4	0
St. John, Redhill	21	17	10	25	18	6
Horbury (Congregational) Church, Notting Hill	32	4	9	45	10	0
St. Paul, Clapham	37	0	7	53	6	7
St. Anne, Limehouse	26	1	2	23	2	1
St. Paul, Greenwich	20	0	0	27	14	6
St. Peter-le-Poer, &c. (City)	12	17	5	24	10	11
All Saints Parish Church, Kingston	35	0	0	20	0	0
St. Michael, Battersea	19	16	11	24	11	6
Christ Church, Hornsey	46	16	9	73	13	8
Belgrave Presbyterian Church	30	12	6	27	1	10
St. Matthew, Denmark Hill	65	0	0	73	12	0
St. Luke, Battersea	25	16	0	40	10	0
Brunswick Chapel, St. Marylebone	53	10	9	68	17	4
Christ Church, Trent Park	27	8	0	21	15	0
Harley (Congregational) Church, Bow, E.	19	17	0	22	10	0
St. Alban, Streatham Park	26	19	0	37	15	2
St. Margaret, Lothbury	37	18	9	40	9	3
Holy Trinity, Lee	67	10	2	69	18	10
St. Matthew, Upper Clapton	76	19	5	80	9	11
Woodford Parish Church	19	1	0	22	18	4
Church of the Annunciation, Chislehurst	51	11	1	47	15	6
Fulham Parish Church	34	5	3	33	0	3
All Saints, Romford Road, E.	11	15	2	26	8	9
All Hallows, Great and Less, City	65	0	0	70	0	0
Beckenham Parish Church	29	3	3	41	0	2
All Saints, Paddington	52	17	4	55	11	0
Catholic Apostolic Church, Hackney	21	12	6	32	2	1
St. Michael, Blackheath	64	2	6	70	4	0
St. Andrew, Stockwell	16	7	8	20	8	3
St. Bartholomew and St. Matthew, Sydenham	69	5	2	76	11	8

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	1885.			1886.		
	£	s.	d.	£	s.	d.
Merton Park Church and Mission	29	9	9	37	8	10
The Baroness de Hirsch	—	—	—	40	0	0
St. George, Tufnell Park	58	18	9	65	2	10
Christ Church, Gipsy Hill	64	11	6	62	7	7
St. Paul, Paddington	38	0	0	38	12	7
St. Michael, Cornhill	26	12	9	28	7	1
St. James, Holloway	105	5	0	122	0	10
Upper Clapton (Congregational) Church	32	16	3	40	0	0
Union Congregational Chapel, Islington	101	1	2	115	18	8
Messrs. Peek, Frean & Co. (a further)	25	0	0	25	0	0
Willesden Presbyterian Church	12	0	0	20	0	0
All Saints, Clapham Park	36	15	5	60	1	8
Bromley (Kent) Parish Church	35	9	7	60	15	10
Temple Church	177	14	5	208	0	0
St. Mark, Camberwell	7	5	3	25	1	1
Hornchurch, Essex	11	13	8	22	1	7
Eltham Park Church	17	12	8	29	5	6
St. John, Brixton	29	13	6	33	16	5
Holy Trinity, Woolwich	21	6	9	29	9	6
Metropolitan Tabernacle, Newington	200	0	0	200	0	0
St. Anne Brookfield, St. Pancras	40	13	7	33	9	4
Park (Presbyterian) Church, Highbury	27	0	0	31	10	0
Christ Church, Lee Park	36	4	7	41	13	7
Mitcham Parish Church, &c.	31	1	4	48	0	10
Greek Church (St. Sophia), Bayswater	97	3	9	87	18	6
St. Luke, West Holloway	43	18	6	46	15	0
St. Peter, Cranley Gardens	175	9	9	280	14	4
St. Paul, Avenue Road	100	18	3	114	17	6
All Hallows, Lombard Street, E.C., &c.	29	6	2	24	13	4
Trinity Church, Hampstead	63	18	0	87	13	0
St. Gabriel, Pimlico	35	8	2	100	4	0
All Saints, Grosvenor Road	13	4	7	21	9	5
St. Luke, West Norwood	34	16	0	34	8	6
Christ Church, Southgate	45	16	8	42	7	2
St. Matthew, Canonbury	20	3	11	20	5	9
Chapel Royal, Savoy	51	2	2	66	1	0
St. Martin-in-the-Fields Parish Church	41	3	11	100	0	0
Monken Hadley Parish Church, including £20 from Mr. C. Hemery	34	18	9	41	10	11
St. Mary, Shortlands	42	6	5	36	17	3
St. George, Hanover Square	187	15	10	215	1	7
Upper Norwood Baptist Chapel	23	14	0	25	3	10
St. Stephen's, Westminster	32	5	2	33	17	6
St. Marylebone Parish Chapel	21	0	0	35	10	6
All Saints, Benhilton, Surrey, Parish Church of	22	0	6	28	0	8

HOSPITALS WEEK WORKERS.

It cannot fail to be a matter of permanent interest, and it would in any case be but justice, to place on record the names of those who have actively exerted themselves in the various districts to make this new departure a success. Of course the honorary secretaries have had much to do and to think of, but all who undertook extra voluntary labour deserve well of the hospitals and medical charities of London. It would be invidious to mention anyone especially, but it is fair to record that the meetings at Lambeth Palace, St. Andrew's Hall, and Stratford were much the most largely attended, although every meeting excited general interest, and all the speakers expressed themselves gratified by their reception and pleased with the genuine interest displayed throughout the Hospitals Week. The institutions and their representatives which took an active part in the work were as follows:—

No. 1 DISTRICT.

Rev. A. W. Jephson, Chaplain to the Royal Hospital for Women and Children.
Rev. Canon Erskine Clarke—Battersea and Wandsworth Dispensary.
Colonel Grant—Skin Hospital, Stamford-street.
Mr. W. Owen—General Lying-in Hospital, York-road.
Mr. C. J. Price—South London Medical Aid Institute.
Hon Secretary: Mr. R. Garrard Kestin.

No. 2 DISTRICT.

Mr. Fredk. Cleeve, C.B., Chairman of the Executive Committee, Seamen's Hospital; Mr. P. A. Nairne, Deputy Chairman of the Seamen's Hospital Committee; Mr. George Lidgett.
Mr. Wm. Bristow, Hon. Secretary; Mr. Edgar Sydney; Mr. Thos. Moore, F.R.C.S.; Mr. James Marks.—Miller Hospital.
Mr. T. S. Chapman, Secretary of the Evelina Hospital.
Mr. W. Aste, Hon. Secretary of the Home for Sick Children, Sydenham.
Mr. Jas. Wyeth, Hon. Secretary of the Camberwell Provident Dispensary.
Mr. H. J. Powell, Hon. Secretary of the East Dulwich Dispensary.
Rev. C. Swainson, Chairman of the Blackheath Cottage Hospital.
Hon. Secretaries: Messrs. W. T. Evans and W. J. Purver.
By an oversight the Royal South London Ophthalmic Hospital was not invited to co-operate.

No. 3 DISTRICT.

Mr. Henry Dobbin, Secretary of the Brompton Hospital.
Mr. J. H. Easterbrook, Secretary of the Chelsea Hospital for Women.
Mr. Ernest Morgan, Sec. of National Hosp. for Consumption.
Mr. Fredk. Leach, Hon. Sec. of the Kensington Dispensary.
Mr. W. H. Hughes, Secretary of the Cancer Hospital.
Captain Blount, R.N., Secretary of the Victoria Hospital for Children.
Mr. J. White Moray, Secretary of the St. Paul and St. Barnabas Dispensary.
Mr. W. C. Meates, Secretary of the Royal Pimlico Dispensary.
Hon. Secretary: Mr. St. Leger Bunnett, St. George's and St. James's Dispensary.

No. 4 DISTRICT.

Mr. Pietro Michelli, Secretary of St. Mary's Hospital.
Mr. Ryan, Secretary of Queen Charlotte's Lying-in Hospital.
Mr. Canning, Secretary of the National Orthopædic Hospital.
Mr. W. H. Prockter, Kilburn Provident Medical Institute.
Mr. Collins, Assistant Secretary of the Lock Hospital.
Mr. G. Thurlow (Hon. Secretary of All Saints' Convalescent Hospital, Eastbourne), Mortimer-street, W.
Hon. Secretary: Mr. A. O'D. Bartholeyns, Secretary of the Middlesex Hospital.

No. 5 DISTRICT.

Mr. Owthwaite—City of London Lying-in Hospital.
Mr. Kershaw—Central London Hospital for Diseases of the Throat and Ear.
Sir E. Saunders, Mr. Gregson, Mr. Ibbetson, Mr. Small, Mr. Willett, Mr. Hepburn—Dental Hospital.
Mr. C. T. Murdock, Mr. Austin, Dr. Potter, Dr. Barnet, Mr. Wm. T. Grant—Great Northern Central Hospital.
Dr. Hopwood, Mr. Callander—London Fever Hospital.
Mr. J. J. Austin—Royal Hospital for Diseases of the Chest.
Mr. Bartram—Islington Dispensary.

No. 6 DISTRICT.

All the hospitals and charities in this district warmly co-operated, but the Acting Committee consisted of—
Mr. J. B. Scott—North-Eastern Hospital.
Mr. Ashton Warner—Shadwell Hospital.
Mr. E. Jacob—German Hospital.
Mr. J. Fry—Metropolitan Free Hospital.
Dr. Lazaron—Tottenham Hospital.
Mr. F. C. Carr Gomm, Mr. W. J. Nixon—London Hospital.
Mr. E. Baden—Stoke Newington Dispensary.
Captain Storrar-Smith—City of London Chest Hospital.
Colonel Feneran—Poplar Hospital.
Mr. H. N. Custance—Metropolitan Hospital Sunday Fund.
Hon. Secretary: Mr. A. H. Haggard.

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Clinical Lecture
ON
ATAXIC PARAPLEGIA.

Delivered at University College Hospital, Feb. 23rd, 1886,

BY W. R. GOWERS, M.D., F.R.C.P.,
ASSISTANT PROFESSOR OF CLINICAL MEDICINE.

(Concluded from page 3.)

THESE lesions enable us to understand the origin of the symptoms, at any rate in part. As we have seen, the symptoms are twofold, defect of coördination and defect of power. The lesion is also twofold, in the posterior and in the lateral columns. We must ascribe the incoördination to the disease of the posterior columns. We know that in tabes, ataxy is often the result of their degeneration. If there is a difference between the two maladies in the symptoms produced by the disease of the posterior columns, there is also a difference in the lesion. We must consider these differences in some detail, for we can only understand the origin of the incoördination in ataxic paraplegia by the light of its origin in tabes. What, then, is the mechanism of tabetic ataxy? It is easy to obtain some answer to the question; it is difficult, perhaps impossible, to obtain a complete answer. The chief mechanism is probably the disease of the sensory muscle nerves. The evidence of this is that tabetic ataxy may be due to disease of the peripheral nerves when the spinal cord is unaffected; that it is not due to disease of the cutaneous nerves, and therefore it must be due in such cases to disease of the muscle nerves. It is probable that a very slight affection of these nerves abolishes the knee-jerk, a greater degree causes ataxy, and a still greater degree is required to render the muscles insensitive to pressure and tension. We may sometimes observe a relation between the insensitiveness of the muscles and the degree of incoördination. In a patient, for instance, with much greater ataxy in the right leg than in the left, I found that the muscles of the right leg were insensitive to forcible traction, which caused a keen sensation in the left leg, cutaneous sensibility being equal in the two. There are two ways by which disease of these nerves may disturb coördination. First, it must abolish whatever muscle-reflex action occurs and influences muscular action; and, secondly, it must interrupt the connexion of the muscles with the cerebellum. There is reason to believe that the direct cerebellar tract is the path from the sensory muscle nerves of the lower trunk muscles. It is probable that the fibres of the posterior median column continue the afferent path from other muscles to the cerebellum. Between the grey matter of the post-pyramidal nucleus of the medulla (in which these fibres end) and the cerebellum there is an extensive connexion. The centripetal impulses which traverse these fibres may influence cerebellar coördination, and influence conceptions of posture, without giving rise to sensations comparable to those from the skin. There is, moreover, another possible mechanism. When the posterior columns are extensively sclerosed there must be considerable damage to the short fibres which connect the posterior grey matter at adjacent levels. It is possible that this deranges coördination. I may remind you, in passing, that this is the oldest of all theories of the mechanism of ataxy, being that put forward by the distinguished English physician, Dr. Todd, to whom, if to anyone, belongs the credit of the discovery of tabes. He believed that such association of adjacent parts of the cord was the chief function of the posterior columns, and inferred therefore that in locomotor ataxy the posterior columns would be found diseased, and he subsequently verified his inference by demonstrating the lesion of these columns in two cases. Eight years after the publication of Todd's opinions and facts—viz., in 1885—the theory that the ataxy was due to muscular anæsthesia was put forward by Dr. Russell Reynolds, and one of his statements is worth quoting, on account of the sagacious foresight of the latest conclusions of pathology: "It appears most probable that the centripetal tract of fibres is affected, and that the locality of the lesion is very variable." In ataxic paraplegia there is every reason to believe that the sensory nerves are unaffected in their peripheral parts, and in the lumbar region of the cord the sclerosis is so slight in the root zone that they probably escape there also. But higher up the cord the sclerosis extends through part at least of the posterior median column, and in some cases the direct cerebellar tracts have been diseased. Thus, although the muscle reflex arc is intact, the path from the muscles to the cerebellum must be in some degree interrupted; and there are other facts, which I have not time now to mention, which make it probable that this interruption is more effective in disturbing coördination than is that of the muscle-reflex arc, and therefore that, wherever the disease is situated, whether in the nerves or the cord, it is by the arrest of the impressions that should guide cerebellar coördination that ataxy is chiefly produced. But the locality of the lesion of the centripetal path has one important effect. If it is in the nerves or root fibres, it arrests the muscle-reflex action on which the knee-jerk depends; if it is higher up the cord, it leaves this action unimpaired, and free to become increased under the influence of any other morbid process in the cord which tends to cause such increase. Hence we can understand the persistence of the knee-jerk in spite of the ataxy.

Let us turn now to the second element in the symptoms, the muscular weakness. Loss of power, with increased myotatic irritability, and ultimately tonic spasm, are the characteristics of disease of the pyramidal tracts in the spinal cord. The visible sclerosis in the lateral columns always involves these tracts in some degree, and has been greater on the side of the greatest weakness; hence it seems a sufficient explanation of the symptoms of this second class. There is, however, one difficulty. In some cases in which the paralysis of the legs has been great the disease of the lateral columns has been very slight. Westphal has especially called attention to this discrepancy, and has discussed at some length the question whether the loss of power could be of peripheral origin, rejecting the theory, however, as absolutely inconsistent with the symptoms. I think that the discrepancy is susceptible of explanation, but to make this clear to you I must again diverge, for a moment, to more general considerations.

It will enable us to obtain much clearer conceptions of many facts of disease if we regard the motor path, which extends from the motor cortex of the brain to the muscles, as consisting of two segments, an upper and lower, each of which is similar in its component parts. The upper segment consists first of the motor nerve cell in the cortex of the brain; secondly, of the pyramidal fibre proceeding from that nerve cell, and extending through the internal capsule, the anterior pyramids of the medulla, and the pyramidal tract of the spinal cord; and thirdly, of the termination of the fibre in the grey matter of the cord. The lower segment consists of, first, the motor ganglion cell of the cord; secondly, the motor nerve fibre which extends through the motor nerve root, and the mixed nerve to the muscle; and, thirdly, the terminal ramification of the fibre in the muscle. It will complete the analogy between the two segments if we reflect that the upper segment must terminate, within the grey matter of the cord, in a ramification analogous to that in which the lower segment ends within the muscle. The evidence of such a terminal ramification of the upper segment is twofold. In the first place, the fibres of the anterior roots are more numerous than the fibres of the pyramidal tracts, and hence each of the latter must be connected with more than one of the motor nerve cells. Moreover, the only undivided process of each ganglion cell of the cord is that which constitutes the axis cylinder of a root fibre; the other processes divide and subdivide in the spongy network of the grey substance; and it must be through these and this spongy network that the connexion with the pyramidal fibres is established. This also involves a ramification of the pyramidal fibres. Note next that the symptoms produced by disease of the upper or lower segment of the motor path are very different, but the symptoms are just the same whatever part of each segment is diseased. It is the same when the terminal ramification is diseased as when the cell of origin is destroyed or the fibre divided. We are familiar with this in the case of the lower segment, but it must be equally true of the upper segment. Disease of the terminal ramification in the grey matter will cause

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all the symptoms of lateral sclerosis. Further, the axis-cylinders of the nerve fibres of each segment are the prolonged processes of the nerve cells from which they spring—that of the upper segment of the pyramidal cell of the cortex, that of the lower segment of the ganglion cell of the cord. The nerve fibres depend for their vitality on the influence of these cells, and perish when separated. It may reasonably be assumed that the nutritional stability of the fibre diminishes the greater the distance from the cell on which it depends, and that it is lowest in the terminal ramification of each segment. In the lower segment multiple degenerative neuritis is most intense at the periphery, and the degenerated nerve fibres become fewer as we examine the nerves higher up. If there were a corresponding disease of the upper segment, the most extensive degeneration—that of the terminal ramification—would probably escape detection, because it cannot be identified among the numerous structures of the spongy substance; but the disease of the fibres would be traceable in the lateral columns, and would be less than that of the termination, and would lessen as we ascend the cord. So far as the lateral columns are concerned, this is the condition found in many cases of ataxic paraplegia. Hence it is a reasonable assumption that, when the visible degeneration in the pyramidal tracts is insufficient to explain the paralysis, and when it increases as we pass down the cord, there is a greater amount of disease in the terminal ramification of these fibres in the grey matter. We have seen that the sclerosis is often not limited to the lateral tracts. Whether this extension is because it is in part a random process, or whether it is because there is a compound system degeneration—i.e., a degeneration of more than one system of fibres,—we are at present unable to say.

Thus, gentlemen, the pathological facts, if meagre, enable us to understand the origin of the symptoms in their positive and negative characters, the ataxy and weakness, the preservation of the knee-jerk and its excess with clonus, the absence of anæsthesia, and the slightness of the pains. It is the remarkable clinical uniformity of the symptoms that is the justification for the distinction of the disease. This justification is not annulled by the fact that cases now and then occur which are intermediate between this and other well-defined diseases. We classify by types, but Nature often reminds us that she does not separate where we distinguish. In true tabes there is sometimes loss of power from the addition of disease of the lateral columns to that of the posterior. But these cases, for the most part, emphasise the distinction of this disease from tabes, for the knee-jerk, once lost, never returns because the lateral columns are sclerosed, and it is remarkable with what constancy the knee-jerk persists to the last in ataxic paraplegia. If there is no tendency at the outset to the interruption of the reflex arc, there is none at a later period.

The diseases from which ataxic paraplegia has to be distinguished differ according to the stage of the disease at which the diagnostic problem presents itself. The dominant symptom in the early period is the incoördination; in the later period, the spastic palsy. Hence the disease in the early stage is liable to be confounded with true locomotor ataxy. In discussing the relation of the two diseases we have already considered their differences. Of these the most important is the condition of the knee-jerk, which is lost in the one, excessive in the other. In the rare cases of early tabes in which it is not lost, it is never increased. The presence of a clonus is also exclusive of pure tabes; and so also is the extensor spasm, of which we may often observe some indications while power is still only slightly impaired. Other differences may confirm the diagnosis, but are never necessary to make it, and are indeed not uniform enough to be alone conclusive. In the state of sensation on the limbs, in the occurrence of or freedom from pains, and in the action of the iris, the two diseases present a contrast in the vast majority of cases, although not invariably. From primary spastic paraplegia the diagnosis depends on the presence of incoördination, or in a history of it if voluntary power has become too slight to be susceptible of derangement. Ataxic paraplegia is spastic paraplegia, *plus* incoördination. If the ataxy is considerable, as it often is, the distinction is easy enough, for experience shows that it is chiefly with tabes that such cases are confounded. The so-called "hereditary ataxy" presents a close resemblance to ataxic paraplegia, and is, indeed, intermediate between this disease and true tabes. It is distinguished by its occurrence in several members of the same family, by the common loss of the knee-jerk, and by the presence of nystagmus and of some impairment of articulation.

The greatest diagnostic difficulty is presented by cases which have subacute onset, and the distinction from a local myelitis involving posterior and lateral columns may be very difficult. It depends chiefly on the progressive tendency of the symptoms, which contrast with the regressive tendency of myelitis. It is possible that when there is a degenerative tendency, a focal myelitis may set up a progressive degeneration in the columns concerned, as it certainly may set up a degeneration limited to the posterior columns. A tumour in the middle lobe of the cerebellum may cause unsteadiness closely resembling that of some cases of ataxic paraplegia, and it may also cause weakness of the legs with increased knee-jerk, from the pressure on the pyramidal fibres as they pass through the pons. In such cases, indeed, we probably have the two elements of the disease, although produced in a different manner by lesions in a different position. We have a degeneration of the lateral columns which is secondary instead of primary, and we have disease of the coördinating centre instead of interruption of the path to it. But the weakness in the legs is never great in cerebellar tumour, and other special symptoms are never absent. Occipital headache, vomiting, and optic neuritis are present in most cases, and all are never absent; while in a case in which the pons is compressed, some cranial nerves are usually also damaged.

So far as the prospect of recovery is concerned, the prognosis in ataxic paraplegia is unfavourable. In a few cases I have seen distinct improvement. Arrest is more frequently obtained, but in the majority of cases the progressive tendency of the disease baffles all attempts to check it. The progress of most cases is, however, very slow—far slower than might be inferred from the history of recorded fatal cases; and the danger to life is small.

The treatment of ataxic paraplegia is, in the main, that common to all chronic diseases of the spinal cord. The first important measure is to exclude, as far as possible, from the patient's life all those influences that are capable of producing the disease or of contributing to its production, and which therefore will tend to augment it, whether, in the individual case, they were or were not its cause. The most important of these are four: exposure to cold, exhausting fatigue, falls, and excess, alcoholic or sexual. Walking may be permitted, but it should stop short of fatigue, or at least of more fatigue than a brief rest will remove. If the disease is increasing rapidly, or is recent, and indeed in any progressive case, absolute rest for a week or two may be tried. If it seems beneficial it may be continued for a longer time, or, what is preferable, it may be repeated in a few weeks. If a patient is kept at rest continuously for many weeks, his muscles may become weaker from the mere disuse, and then he may be long in regaining his former level of strength. Drugs are less frequently useful in this disease than in pure tabes, in which their influence is often striking. I am now speaking of the so-called "nervine" remedies, not of anti-syphilitic drugs, which, as a rule, fail to exert any influence over the nerve degenerations that follow syphilis, save in rare instances, chiefly of rapid course and succeeding the venereal disease at a comparatively short interval. This is true also of ataxic paraplegia, but, as we have seen, there is not often any history of syphilis to suggest such treatment. Very small doses of mercury, however, stand on a different footing from large doses and from iodide. They seem to have a tonic influence in the subjects of old syphilis, and during their administration anæmia has been proved to lessen by an observed increase in the number of corpuscles in the blood. Of other drugs, arsenic is that which most frequently seems to do good. Some of my patients who improved under its use took at the same time Calabar bean and belladonna. Quinine may also be given with some apparent advantage. Nux vomica you may give in the early stage, but when spasm is developed both nux vomica and strychnia are better avoided on account of their tendency to increase reflex action and the tonic spasm. The latter, when it becomes great, is a very troublesome symptom, and one over which unfortunately drugs have but little influence. It is distinctly lessened by the process of rubbing the muscles, and after the rubbing is over the spasm remains less for a time, and I have found this process a very distinct help in the treatment of all forms of spastic paraplegia. Upward rubbing seems to have most influence on the spasm. If the patient's constitutional condition permits it, the rubbing may with advantage be combined

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with diaphoresis in the Turkish bath. In more than one case the effect of this treatment has been marked, and has distinctly contributed to the very considerable and permanent improvement that was obtained. Electricity is of little value in this disease. Faradaism should be avoided; the irritation of the sensory nerves increases the reflex action and augments the spasm. In several cases I have tried the voltaic current in various ways—applied to the limbs and to the spine, and to both—and in no case have I been able to satisfy myself that any benefit resulted from its use.

One other remark and I have done. Whenever there is retention of urine, or whenever the bladder is imperfectly emptied, the condition must be dealt with by appropriate local treatment. Remember that kidney disease, secondary to cystitis or to mere distension of the bladder, is a common cause of death in all diseases of the spinal cord. In ataxic paraplegia this danger, if not absolutely great, is relatively greater than in many other diseases, because other sources of danger to life, such as bedsores or interference with respiration, are insignificant. There is no doubt that this danger may to a large extent be obviated. I have not in any case, or in any disease, seen an evil result from the early and frequent use of the catheter, and I have known more than one patient die whose life might have been saved had residual urine been regularly removed and the bladder repeatedly washed out. I know patients who are now alive who would, I am sure, have died had this treatment not been adopted. The simple reflex incontinence in which the bladder is perfectly emptied from time to time calls for no interference.

ALBUMINOMETRY BY ESBACH'S TUBES.

BY GEORGE JOHNSON, M.D., F.R.S.,
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I AM indebted to Mr. Blomfield's paper in THE LANCET of Jan. 23rd, 1886, for a knowlege of Dr. Esbach's method of albuminometry. After reading it I lost no time in obtaining one of the graduated tubes from MM. Brewer Frères, of 43, St. André-des-Arts, Paris; and Mr. E. Cetti, of 36, Brooke-street, Holborn, has made for me a number of tubes with exactly the same graduation. Having made numerous observations on urines containing variable proportions of albumen, I find the results so much more certain and satisfactory than those obtained by any other known method of clinical albuminometry, that I venture to recommend the general adoption of Esbach's method as an easy and accurate means of determining the actual amount of albumen in the urine.

Thinking, from my experience of picric acid as an albumen precipitant, that the addition of citric acid would be found unnecessary, I experimented with solutions of variable proportions of picric acid. First, I tried a saturated solution of picric acid (equal to 5·3 grains per ounce), testing the same albuminous urine with this and with Esbach's solution. The result was that in most instances the saturated solution of picric acid caused a firmer, and therefore less bulky, coagulum, so that the amount of albumen, as read off upon the scale, would appear to be slightly less than that shown with Esbach's reagent. I next tried a solution of picric acid in the same proportion as that contained in Esbach's solution—namely, 1 per cent., or 4·375 grains per ounce. This usually gave a less firm and more bulky coagulum than Esbach's reagent, and would therefore indicate an excess of albumen. Lastly, I experimented on numerous specimens with a solution of picric acid in the proportion of five grains to the ounce—intermediate, that is, between a saturated and a 1 per cent. solution; and the result is that this solution gives results practically identical with those obtained by Esbach's solution of picric with citric acid. The latter solution, on account of its excessive acidity, throws down uric acid more frequently and more copiously than the picric acid solution alone. In two specimens of albuminous urine Esbach's reagent gave so copious a precipitate of uric acid, as if not allowed for, would have led to an excessive estimate of the amount of albumen. The result, therefore, of numerous careful observations is that Esbach's solution of picric with citric acid and a simple five grains to the ounce solution of picric acid give practically identical and equally accurate results; but as the simple picric acid solution is more easily prepared and cheaper than Esbach's compound solution, it will probably be preferred by most practitioners. It is important to bear in mind that if the urine be neutral or alkaline it must be acidulated by acetic acid before the analysis is made.

To test the accuracy of Esbach's method, in one specimen the precipitate formed by Esbach's reagent and the five grains to the ounce picric acid solution having each indicated 1·1 gramme of albumen per litre, the two sediments were separately washed, dried, and weighed by my son, G. Stillingfleet Johnson, in the laboratory of King's College, and the calculated result in both sediments was 1·09 gramme per litre, a difference of only 1-100th of a gramme per litre from Esbach's result. It may be interesting to add that the slightly more dense and less bulky precipitate formed in the same specimen by the *saturated* solution of picric acid was found, when washed and dried, to have exactly the same weight as each of the other two sediments; thus showing that, although the bulk of the precipitate was less, the weight of the dried albumen was the same as that of the other two sediments.

The original account of Esbach's method is published in the *Bulletin Général de Thérapeutique Médicale et Chirurgicale*, tome xcviii., p. 497.

Mr. E. Cetti is now prepared to supply the accurately graduated tubes, with brief printed directions for their use, at little more than half the cost of obtaining them from Paris.

Savile-row, W.

A NOTE ON CYCLIC ALBUMINURIA.

BY SIDNEY COUPLAND, M.D., F.R.C.P.,
PHYSICIAN TO THE MIDDLESEX HOSPITAL, AND LECTURER ON PRACTICAL MEDICINE.

THE following case belongs to the interesting class of albuminuria in the apparently healthy, to which Dr. Pavy so prominently drew attention at the Cardiff meeting of the British Medical Association, and again subsequently in the columns of THE LANCET (March 6th, 1886, p. 427). The case resembles those recorded by Dr. Pavy in the fact that albuminuria, to a greater or less extent, occurred once or more often diurnally; but there was less regularity in the period of its recurrence—it was rather "intermittent" than cyclical. The amount of albumen was estimated quantitatively by Esbach's method, of which Dr. Veale has published a full description (*British Medical Journal* 1884, vol. i., p. 898).[1]

Sarah S——, aged sixteen, in domestic service, an active, bright and intelligent brunette, rather undersized, but well-nourished and healthy-looking, not presenting any of the characters of renal disease, was admitted into the Middlesex Hospital on April 1st, 1886, on account of albuminuria. She had been seen a few days previously by Mr. Fardon, the resident medical officer, and at his request had brought a specimen of urine, which he found to be highly albuminous. But after her admission no trace of albumen could be detected, and the same negative result being obtained during the next two days, it was surmised that the previous appearance of albumen in the urine was accidental. On April 5th I handed over the charge of my wards for three weeks to my colleague, Dr. Biss, who, with these facts before him, suggested that the case was possibly one of cyclic albuminuria, and that the urine should be examined at intervals of three hours. This was done for the first time on April 10th, with the result that urine passed at 3 A.M. and 6 A.M. contained no albumen; at 9 A.M. a faint trace appeared, and there was a deposit of lithates; at 12 noon and 3 P.M., no albumen; at 6 P.M., a measurable quantity—viz., 0·3 per cent.; at 9 P.M., 0·06 per cent.; and at 12 midnight, no albumen.

Reverting now to the previous history of the patient, it

[1] The accuracy of this method whereby the number of grammes of albumen per litre of urine can be calculated was tested by Dr. Veale, and more recently by Dr. P. Guttmann (Berl. Klin. Wochenschrift, 1886, No. 8), the latter further showing that the precipitant used (viz., picric acid one part, citric acid two parts, water ninety-seven parts) is superior to other reagents for the purpose. The method has also been described by Mr. Blomfield (THE LANCET, 1886, vol. i., p. 181) and Dr. Cruise (Dublin Journal of Med. Science, June, 1886, p. 499).

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does not appear that she had ever had any serious illness, measles in childhood being the only occasion that she could recollect being ill. Two months previous to her being sent to the hospital she began to suffer from some pain in the back and legs and boils in the neck. But she declared herself as feeling quite well, and could not understand why she had been sent to the hospital at all. She was perhaps slightly anæmic, and the temperature on admission was 99·6°, but it fell to normal next day, and never rose above the normal subsequently. Menstruation was regular. She had no headache, slept well, and had a fair appetite. The lungs were healthy, but the cardiac sounds were abnormally loud and booming, the second sound being occasionally reduplicated. There was no evidence of enlargement of the heart. On April 4th she complained of slight pain in the back, with tenderness over the lumbar spine, but this entirely disappeared in two days, and she was allowed to get up.

TABLE I.

Time.	April 29th.	April 30th.	May 1st.	May 2nd.	May 3rd.
3 A.M.	0·0	0·0	0·0	0·0	—
6 A.M.	0·0	0·0	0·0	0·0	—
9 A.M.	0·0	0·0	0·06	—	0·03
12 noon	0·0	0·0	0·0	—	0·06
3 P.M.	0·08	0·05	0·0	0·05	Trace
6 P.M.	0·025	0·0	0·0	0·025	0·04
9 P.M.	0·1	0·0	0·0	—	Trace
12 midn.	0·0	0·0	0·0	—	0·0

The discovery of intermittent albuminuria on April 10th led to the repetition of the three-hourly examinations, with the result that at 9 P.M. on the 11th the urine contained 0·06 per cent. of albumen, and at 9 A.M. on the 12th there was a trace of albumen. Menstruation now commencing the observations were suspended for some days, the patient remaining apparently quite well, and assisting in the work of the ward. On April 29th and following days the urine was again, so far as possible, examined every three hours, with the results shown in Table I., the figures denoting the percentage of albumen in the specimens examined. During these days she was on fish diet and milk, but it is noteworthy that on May 3rd, when albumen appeared more abundantly, she was allowed an egg for breakfast. This meal is taken at 5.30 A.M., and although on the three following days the same addition was made to the diet it had no appreciable effect. (See Table II.) The specific gravity of the urine was high, ranging from 1026 to 1036; the urine was always acid, mostly clear, but occasionally depositing lithates. Sugar was never detected, nor blood, pus, or hæmoglobin; and microscopically there were neither casts, nor crystals of oxalates, nor uric acid. The albumen did not yield peptone reactions. The patient was "up" the whole day—i.e., rising at 5 A.M., breakfasting at 5.30, assisting in the ward till 7 A.M., then returning to bed until 11.30 A.M., when she remained up until 8 P.M. She seemed perfectly well, and never complained of fatigue.

During the next three weeks the urine was tested every four hours, so far as possible, but obviously there were occasions when no specimen could be obtained. The observations were made by my house-physician, Mr. T. H. Williams, and the results are given in Table II. One is struck by the variable character of the albuminuria, both as to time of its occurrence and the actual quantity of albumen discharged. Upon six days out of the twenty-three no albumen was found on any occasion of testing; and upon three of these days it must be noted that the patient was kept in bed all day; but that even this absolute rest did not suffice to wholly prevent the appearance of albumen is shown on May 14th, when a small but appreciable quantity was found in the specimen passed at noon. The effect of rest as opposed to activity in controlling the albuminuria—a point clearly brought out in Dr. Pavy's cases—is further shown in the fact that none of the urine passed at 4 A.M. ever contained any albumen, and only on two occasions was albumen present in that which was passed at midnight, four hours after the patient had been in bed, and once (viz., May 18th) this might be explained by the fact that no urine had been collected at 8 P.M. On the other hand, it was at 8 P.M.—i.e., at the close of a day of comparative activity—that albumen was most frequently found, and it is conceivable that the phenomena would be much more marked when the patient is about her ordinary duties than in the somewhat restrained life of a hospital ward. But we find that the albumen appeared occasionally at other times during the day—more often at 8 A.M., as well as, or independent of its appearance, at 8 P.M.; and occasionally it was present in one sample and absent from the next, to reappear in the following. Sometimes only a mere trace of albumen was present, and at other times quite an appreciable quantity.

I have already alluded to the apparent influence of rest in preventing the appearance of the albuminuria. Of other possible controlling or exciting agents two only were investigated, and these not to the extent which might have been desired. Thus diet and time of taking food had practically no effect. She was placed on a diet of fish, beef-tea, and milk when admitted, and continued upon this diet until May 14th, when meat was given in place of fish. No effect was produced on the albuminuria by this change. I have already alluded to the somewhat negative result of adding an egg to the diet, but I must admit that more valuable evidence might have been gained had the diet been more

TABLE II.

Date.	4 A.M.		8 A.M.		12 NOON.		4 P.M.		8 P.M.		12 MIDNIGHT.		Remarks.
	Specific gravity.	Percentage of albumen.	Specific gravity.	Percentage of albumen.	Specific gravity.	Percentage of albumen.	Specific gravity.	Percentage of albumen.	Specific gravity.	Percentage of albumen.	Specific gravity.	Percentage of albumen.	
May 4th	—	0·0	—	0·0	—	Trace	—	0·0	—	0·1	—	—	Took egg for breakfast, 5·30 A.M.
,, 5th	—	0·0	—	0·0	—	0·1	—	0·0	—	0·0	1030	0·0	Ditto.
,, 6th	1030	0·0	1035	Trace	1033	0·08	1035	0·0	1037	Trace	1035	0·0	Ditto.
,, 7th	1032	0·0	1027	0·0	1032	0·0	1028	0·0	1032	0·0	1035	0·0	In bed all day.
,, 8th	1036	0·0	1032	Trace	1030	0·0	—	—	1035	Trace	1028	0·0	—
,, 9th	1028	0·0	1030	0·3	1028	0·05	1030	0·1	1028	0·0	1026	0·0	—
,, 10th	1026	0·0	—	—	1025	0·05	—	—	1033	0·06	1033	0·0	—
,, 11th	1033	0·0	—	—	1015	0·0	—	—	1033	0·0	1032	0·0	—
,, 12th	1030	0·0	1030	0·05	1026	Trace	—	—	1035	0·05	1032	0·0	—
,, 13th	1031	0·0	1027	0·0	1015	0·0	—	—	1026	0·07	1030	0·0	—
,, 14th	1032	0·0	—	—	1026	0·02	—	—	—	—	1035	0·0	In bed all day.
,, 15th	1035	0·0	1030	0·04	1027	0·0	—	—	1032	0·13	—	—	Cold bath, 8.30 A.M.
,, 16th	1032	0·0	—	—	—	—	1030	0·0	—	—	1035	0·0	—
,, 17th	1035	0·0	—	—	1028	0·09	—	—	1035	0·25	1032	Trace	Cold bath.
,, 18th	1030	0·0	—	—	1025	0·0	—	—	—	—	—	0·06	Ditto.
,, 19th	—	—	1032	0·2	1026	0·0	—	—	1033	0·05	1026	0·0	—
,, 20th	1026	0·0	—	—	1028	Trace	—	—	1032	0·05	1028	0·0	—
,, 21st	1028	0·0	1025	0·0	1025	0·0	—	—	1032	0·0	1036	0·0	In bed all day
,, 22nd	1038	0·0	—	—	—	—	—	—	1035	0·15	1032	0·0	—
,, 23rd	1033	0·0	—	—	—	—	—	—	—	—	1026	0·0	—
,, 24th	1028	0·0	—	—	1020	0·0	—	—	1032	0·04	1028	0·0	—
,, 25th	1027	0·0	1018	0·0	1015	0·0	—	—	1018	0·0	1020	0·0	Cold bath; in bed all day.
,, 26th	1020	0·0	—	—	—	—	—	—	1028	0·06	1025	0·0	—

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thoroughly changed for stated periods. Again, on four occasions a cold bath given at 8.30 A.M. produced no constant result; once only was albumen present in the urine first passed after the bath, and this in spite of the fact that on another occasion albumen was found in the urine passed just before the bath. So far, then, the case accords with those related by Dr. Pavy, in showing that the only constant factor preceding and accompanying, and probably influencing, the appearance of albuminuria is exercise.

From a study of Table II., it would appear that (excluding the four days on which the patient remained entirely in bed), as regards the time and quantity of albumen passed at different periods of the twenty-four hours, we have the following results: Urine passed at 4 A.M.; eighteen specimens examined, albumen invariably absent. Urine passed at 8 A.M.; nine specimens, albumen present in six, amounting on two occasions only to a trace, and after rest averaging 0·14 per cent. Urine passed at noon; fifteen specimens, in eight of which there was albumen, but on three of these occasions there had been no urine passed at 8 A.M.; on three occasions the quantity amounted to only a trace, and the mean amouut excreted on the other occasions was 0·065 per cent. Urine passed at 4 P.M.; only six specimens could be obtained, and one of these was albuminous. Urine passed at 8 P.M.; sixteen specimens, of which no fewer than thirteen contained albumen, which appeared on two days as a trace, the amount on the other days averaging nearly 0·1 per cent. Urine passed at midnight; seventeen specimens, two only containing albumen, and of these the specimen which had a measurable quantity (viz., 0·06 per cent.) was passed on a day when none had been collected at 8 P.M. Lastly, the high range of the specific gravity of these specimens of urine must be noted, this density being in no relation to the albumen, nor to the colour of the urine, which was mostly a pale-straw tint. Except on a few occasions, when there was an excess of lithates, the urine was quite clear and free from deposit. Sugar was not present whenever looked for; but it is right to add that it was not sought for as frequently as albumen was. Looking, then, to the concomitant characters of the urine, as well as the general condition of the patient, one cannot believe that there is any structural disease of the kidney, and can only conclude that the derangement is a functional one, unless one goes further and regards the occurrence of albuminuria in this instance as a purely physiological condition, an idiosyncrasy, which more individuals may possibly possess than we are aware of. It is instructive that, as the urine in hospital patients put up for examination is generally that which is passed in the early morning, the presence of "cyclic albuminuria" might easily be overlooked (as it was indeed in this case at first), since the abnormal characters rarely appear until after the subject has been taking exercise

MYXŒDEMA FOLLOWING UPON REMOVAL OF THE THYROID GLAND.

BY JAMES GORDON, B.A., M.D. EDIN.

THE following case has been under my observation for the past eleven years, and as special interest and importance attach to it in connexion with recent discussions I will give it in detail.

Mrs. A——, aged forty-two, a widow, who had a large goitre of several years' standing, not less than six, was operated upon by Professor Lister eleven years ago, and the entire thyroid gland completely excised. The operation as a piece of surgery was eminently successful, and the patient, so far as this point was concerned, made a good recovery. She accordingly returned home about the end of three months from the time she entered the hospital. When she left she was still weak and pallid, but the weakness and pallor appeared to herself and those concerned the natural result of an operation of such magnitude. Inquiry made subsequently, however, elicited the fact that even before she left the hospital she found her speech was affected, and that on reading aloud for a time subsequent thereto. That she was correct in this, and that she had undergone some profound change besides that which the operation, as a great operation would produce, could be detected in her very appearance. Of this no better testimony could be adduced than her first interview with her mother, an aged woman, but possessed of all the keenness of her faculties. She was, on the day of her return, anxiously waiting for her daughter's arrival, and when Mrs. A—— stepped in, the mother inquired if "Marion was not come." The daughter replied, "Yes, Marion *has* come." The mother not recognising her daughter, and fearing she was a messenger sent with bad news about her, exclaimed, "Is Marion dead?" "No," she replied, "I am Marion myself." But the aged mother, not yet recognising her daughter, insisted: "You cannot be Marion, for you have neither Marion's *face* nor Marion's *voice*." This scene shows that already, at this early date, important alterations were produced in this woman's constitution, and that the origin of this sprang from the operation. Indeed it was a popular remark, made to her on every hand, that she was not recognised.

When first seen by me soon after her return home, her strangely altered appearance took me by surprise. Her face was pale, yet not the pallor of loss of blood—it was a sallow pasty paleness. It was swollen, especially about the eyes, the eyelids above and below presenting a waxy, transparent look. The lips were thick, swollen, and of a purple colour, and the expression of the face was lost and imbecile-like. The first thought suggested by her look was that kidney affection was present, but on hearing her speak I was struck with the alteration here. She spoke in an embarrassed manner, slowly, and with a nasal intonation. At this early date, then, there were already present the following symptoms: feeling of great weakness; feebleness in walking; face pale, sallow, pasty, and swollen; speech affected in the manner just described. The question of renal disease was tested. The urine was scanty, no albumen present, and nothing abnormal in its specific gravity. The heart sounds were feeble, but nothing otherwise abnormal existed; they might perhaps resemble the sounds of a dilated heart. Neither at this time nor at any time afterwards was there ever anything wrong found with the heart or kidneys; the latter throughout the course of the case exhibited the abnormality of a marked deficiency of secretion. Some days (especially when the bowels were constipated) very little urine was passed. A pint and a pint and a half were the common measures of the amount; it never exceeded or rarely amounted to two pints. There was feebly acid reaction; specific gravity 1025; phosphatic deposit.

In a short time additional symptoms developed, so that by the end of six months the patient began to display the following:—The swelling of the face and the œdematous condition of the eyelids were more marked; but at this time, as well as afterwards, this was subject to variation, being always greater in amount, for example, when the head was in a dependent position. There was no blush on the malar eminences, but the point of the nose displayed a pinkish hue. The fingers, backs of the hands, and wrists became swollen, coarse, and red-coloured. The fingers became more awkward and less useful at work; they fumbled in buttoning her dress, for instance, so that this operation took a long time, and in cold weather became almost impossible. She could not pick a small object from off the floor—she felt no pith in her hands or fingers; for instance, in washing the floor she found that cloth and hand rolled round together. Then she noticed that she lost sensation in her fingers. This was first observed in sewing; she found she could not feel the needle between her fingers—could not distinguish between a "darning" and a small fine needle; so that she was obliged to desist from this industry. Her feet swelled occasionally—i.e., either with too much walking or standing, or, on the other hand, when entirely sedentary. When the feet swelled they felt as if standing in a wet damp place. But she experienced abnormal sensations in her feet also at other times—e.g., when lying in bed. Her walk became feeble and staggering, like one drunk. She found herself apt to fall, and was always in fear of doing so. The least object, as the edge of a carpet, would cause her to tumble. Her limbs felt stiff and feeble, so that she could not lift them up to mount a high bed or carriage. Cold weather aggravated the weakness, as she called it, in her hands and feet. So, too, with respect to her speech—when exposed to cold she could hardly utter any word. She always felt cold even in the hottest weather. Her temperature was always subnormal—97°, 97·2°, 97·6°, and sometimes even below 97°; it scarcely ever reached 98°. When she made an effort to walk her best, as when she walked on the public road, she felt her head as if *nodding*. I have not myself observed

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his point, but the patient described the condition as resembling that of one having the "shaking palsy." This feature apparently arose from weakness of the muscles of the neck, and the loss of voluntary power to coördinate their action. After a time—i.e., when the effort to do it well ceased—the phenomenon disappeared. Her tongue was somewhat large; she herself insisted that it was too large for her mouth, giving as a proof of this that she found it project beyond her teeth in the morning on waking. I cannot, however, say that it presented such extreme bulk whenever an examination of it was made by me. Her abdomen became large and bulky universally. This feature was marked at the earlier period of the history of the case, and seems to have annoyed the patient most. She felt ashamed to appear in public on account of it, lest it should be thought that she was pregnant. This increased bulk did not appear to me to depend so much on any underlying deposit in the abdominal cavity as on relaxation of the intestinal walls yielding to gaseous distension. Her skin became dry and rough, constantly throwing off a coarse furfuraceous desquamation, and even thick scales. Her hair began to fall off, and continued doing so for a period of four years, when at length the scalp became almost entirely bare, and at this stage shed large, coarse, thick scales. The eyebrows also became thin and scanty. The bowels were habitually constipated, never acting without laxative medicine. She feels a lightness and giddiness in stooping or in rising after stooping. On getting out of bed in the morning she had to be careful lest she fell; and similarly, in stooping to light the fire, she was obliged to rest on her knees, otherwise the giddiness would cause her to fall down. Her memory is much impaired, but she is not the least affected as to her intellectual faculties. She is peculiarly placid and self-possessed. Her expression and speech cause her to appear slow and stupid, but she is intelligent enough Her ideation may be slow, but it is quite clear and accurate. Having been previously shortsighted her vision is not consciously affected; there is no impairment of hearing or of sight, and no difficulty ever experienced in swallowing. Her menstrual functions continued unaffected, and was prolonged to the age of fifty. There is one point more to be noted—the patient herself drew attention to it—viz., that the least pressure on the skin left a livid mark behind, so that she was constantly ecchymosed about the hand.

Such was the assemblage of symptoms presented by this case. I say *was* presented (and in my details of the case, the past and the present are mingled together), for there is no doubt that at this moment the patient is so far improved that some of the symptoms have altogether disappeared, while of many others there is amelioration. For example, she has recovered sensation in her fingers, so that she is now able to sew. There is also less anæmia, and decidedly less œdema. Probably an atrophied condition of the subcutaneous tissue exists, but of this I am not sure. The hair has grown again, and, though not luxuriant, is a fair growth. The speech, too, is considerably improved. The amelioration in regard to these points have been, I may say, gradual and insensible. The patient remains but a wreck of what she was, this improved condition notwithstanding.

This case is evidently an example of the cachexia strumipriva of Dr. Kocher, of Berne—a deteriorated state of the system observed by him to follow upon the complete extirpation of the thyroid gland. It is equally manifest that it responds to all the essential clinical features of the disease studied in this country under the name of myxœdema. They are apparently identical pathological conditions. From the standpoint of the surgeon, who sees in the ablation of the thyroid gland the direct cause of the affection, it is justly styled the cachexia strumipriva. From the standpoint of the physician, whose attention was arrested by the swollen condition of the connective tissue from the abnormal development of mucin, the term myxœdema is applicable, inasmuch as this feature is thereby indicated. Dr. Ord, who was the first to make use of the name, was led to believe that this mucoid degeneration was the essential feature in the production of the various symptoms which accompany the disease. The terminal fibrils of the sensory nerves are, he thought, so padded by this mucoid jelly-like tissue that they are cut off from the stimuli of external impressions, and these being slowly received and transmitted to the cerebral centres, the latter are insulated from the natural stimulus of its healthy growth, and suffer degeneration proportionally. On the same principle he explains the deficient mental growth in cretinism, and thereby seeks to establish the connexion between cretinism and myxœdema, first suggested by Sir Wm. Gull. This theory as originally set forth seems to have been so far modified, for similar connective tissue changes were also thought to occur in the cerebral centres, whereby deficient mental power results and slow response in the action of the muscles to the will—i.e., the myxœdematous condition occurring in the brain, gives rise to phenomena directly connected with affections of that organ. This hypertrophy of the connective tissue is, upon this theory, looked upon as independent of nervous influence, the nervous disorder being the result of this alteration of that tissue. The remarkable atrophy of the thyroid which obtains in this disease is similarly accounted for by these changes in the connective tissue; the hypertrophy, causing pressure and strangling of the glandular tissue, results in its atrophy. But the condition itself is not considered important in the etiology of the disease, and is on this view secondary, and in no way related as causative in the phenomena of the disease.

Theories based upon pathological lesions are apt to be narrow, and such it would appear to me is the case in regard to the subject now under consideration. That which is here under the guidance of pathological lesion put first ought to be placed last, and that which is last ought to occupy a first place in the sequence of the phenomena of this affection. In the light of the case which I have here reported, it would seem that the connexion of the thyroid gland is at any rate not unimportant, and that it occupies in relation to the various phases of the disease an early and intimate connexion. The gland is wholly removed, and straightway there follows the train of symptoms which have been detailed. There is, on the one hand, an experiment in which the removal of the gland initiates the train of symptoms which, grouped together, give the totality of symptoms which constitute the disease. On the other hand, we have clinical observation in regard to the affection in its idiopathic form, pointing out that there is frequently, if not always, an atrophied condition of the gland present. Therefore both experiment and clinical observation concentrate attention on the thyroid as having somehow an essential connexion with the causation of the pathological state.

That the operation of extirpating the gland may be followed by such consequences there can be no manner of doubt. This woman returned from the hospital completely metamorphosed, so that her identity was questioned. It is alleged that the cause is not in the mere ablation of the gland, but connected rather with certain injuries inflicted by the operation in that region. Accordingly, Baumgarten, of Berlin, suggests that by tying the inferior thyroid close to the gland the vessels supplying the larynx, trachea, and œsophagus are secure, the recurrent laryngeal is safer, and the cachexia less likely to occur. He further states that in those few cases in which some of the symptoms of the disease were present they entirely disappeared on the performance of tracheotomy. But in Mrs. A———'s case, in whom all the symptoms were typically developed, there never existed at any time any indication for tracheotomy from the involvement of the laryngeal. Others, again, deny altogether the fact of its occurrence. Thus Billroth has never seen, in a large number of cases of total excision, any of the symptoms of cachexia strumipriva described by Kocher. The reply to this is that, inasmuch as it has actually been found to occur in this case and others reported by Kocher, the burden of proving the negative is imposed upon him by observing and reporting on the subsequent state of each case operated upon. I have no doubt that if Sir Joseph Lister were asked as to this very case if he had observed anything of the nature of strumipriva after the operation, he would reply in the negative. Opportunity was not presented to him to ascertain the fact. So also it may be in the case of Billroth. Such was assuredly the case with Kocher himself, for it was only incidentally that the fact was first disclosed to him. On his attention having been drawn to the point every case of complete excision subsequently examined by him showed signs of the disease except two, and these were found to have, the one a small accessory gland, the other a redevelopment of the goitre.

Special importance may be claimed for the case here reported, since it disposes of the criticism made at the Berlin Conference on Dr. Kocher's report of his cases. It was there alleged that the condition described by him was one which would have occurred, at any rate, independently of the excision of the gland, and that the enlarged thyroid was but a link in the chain of events already in progress—

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...of the same,—and that they depended rather ...y to which the patient belonged (one in which ...prevalent) than on the fact of the extirpation ... The case of Mrs. A——— is a sufficient ... statement, for no such connexion can be ...her case. It must further be noted that my ... appears to go further and embrace more ... may of those observed by Dr. Kocher. He ...ample, that the cachexia was specially inci... young and growing, having seen only two ... This woman's age was forty-two. Therefore it ...ed to the growing age. From this fact, it may ...on the other hand, that the thyroid must have ...ons than those which it performs during the ...wth as an elaborator of the blood, with which ... is usually associated. That it has a general ...nutrition in this way directly is readily ac... that its influence should be exerted indirectly ... nerve centres, though not in the meantime ... being asserted, would appear probable. To limit ... to nutrition as connected merely with that of ...tive tissue is, it would seem to me, too narrow a ... merely a dystrophy of the connective tissue, ...rent in this cachexia. We find also the nutri... tegumentary system affected. Indeed, I think ...ch stress is laid upon this so-called œdema. ...rted in which the myxœdema is not excessive. ...he condition, though present, was not by any ... to constitute it the pathognomonic symptom ... The more one became familiar with the case, ...ly did the neurotic element in it strike the ... one time in this woman's case the impressions ...ensory nerves were so completely lost that she ..., not being able to feel the needle between ... Yet at this time there was not present that ...ucoid padding adduced in explanation of the ... At the same time, as well as after this ... recovered from, the nutrition of the integu... ...em was markedly impaired. The skin was ...and desquamating profusely, and the hair was ... The want of sensation gradually disappeared, ...th of the hair by degrees also was restored, but ... improvement in both these respects was in no ...ted with the condition of the œdema. The ...refore, of those who have surmised that the ... disease is central and not peripheral appears to ...h the various manifestations presented by the ... A... ...between the thyroid and the assem... ...ptoms under review is at present veiled in ... All tha... is aimed at by the above case is the ... of a ...act which bears on the gland as the ...gh which the solution of the subject is pro... ...approached. To show how it is related to the ...nomena will necessitate that we should possess ...wledge of the physiology of the gland itself. I ... thinking, however, that its action is in some ... through the sympathetic. Note has been made ...uberant state of the abdomen and the habitual ... The enlarged state of the abdomen always ...me to be due in great measure to a relaxed ...state of the muscular fibres of the bowels, and ...uent yielding to the pressure of flatulence from ...ondition regulated by the sympathetic. The per...tipation would be accounted for by the same ... abnormal temperature, too, points to some rela... ...sympathetic. Further, while there was in Mrs. ... a state of unyielding permanent œdema ...s worst, there was also an amount which ... vary, such as might arise from the state ...illaries—a condition likewise which would ...me share in the phenomena on the part of ...etic. Does the thyroid gland stand in some ...on to the great vaso-motor centre of the sym...ate in the medulla oblongata? It has always ...e that in this cachexia in connexion with the ...d we may possess a parallel to what obtains in ...ease, where a profound cachexia is induced in ...th disease of the supra-renal capsules. It would ... of interest to note this, seeing that the mystery ...e turns upon its relation to those glands which, ...re understood to perform the function of blood ...he thyroid, are also supposed by many to have ...intimate connexion with the sympathetic system of nerves—if not also of the cerebro-spinal—forming part thereof. As bearing on this point, I may fitly advert to the attention which the special innervation of the thyroid has attracted. In Robin's *Journal de l'Anatomie*, 1875, the great number of nerve filaments with which it is furnished is commented upon. It is there pointed out that these are out of the due proportion requisite of vaso-motors for the supply of the large number of blood-vessels which the gland contains; and it is believed that many of these fibres are sensory. It is stated that small islets of the gland substance are surrounded by plexuses of these nerves, and that the branches passing to and from the gland maintain a telegraphic connexion between these plexuses and the cerebro-spinal axis; while within the gland itself there exists an independent system of telegraphy, the stations being represented by numerous microscopic ganglia, with connecting branches, which do not pass outside the gland. These anatomical minutiæ show that by the structure of the gland it is fitted to exercise special functional relations to the nervous centre; but how they may be utilised in connexion with the question now under discussion awaits solution at the hands of those specially conversant with this department of science. The above are crude suggestions merely.

East Linton, N.B.

FOUR CASES OF

CHRONIC INFLAMMATORY DISEASE OF THE UTERINE APPENDAGES.[1]

By LAWSON TAIT, F.R.C.S.

Mrs. M. F——, aged twenty-eight, a patient in the St. Luke's Home, Edinburgh, under Dr. Halliday Croom, was seen by me on December 18th, 1885, when Dr. Croom and the patient gave me the following history. She was married when about twenty years of age, and within a year had a child with an extremely severe labour, and a long lingering convalescence. She has never been well since that confinement, there having existed marked dyspareunia, which has increased rather than improved. She has had regular and extremely profuse menstruation accompanied with intense pain, that pain being worse for some time before the onset of the period. She has had more or less intense intermenstrual pain excited by movement, and was made much worse by either standing or walking. For years she has been totally incapacitated from performing her domestic duties. In general appearance she was pale and anæmic, with a suffering and anxious expression of countenance; and she had been the round of the hospitals and specialists in Edinburgh, with a uniform failure in obtaining any kind of relief. On examination the uterus was not very large, and it was distinctly retroverted and fixed in its position, and any attempt to replace it gave rise to considerable pain. On each side the general matting could be felt, though no distinct tumour could be made out. The opinion I gave was that the whole contents were matted together, the origin of the condition having been a peremetric attack at the time of the labour; that probably one or other of the tubes was occluded, and that no amount of treatment short of removal of the appendages and the arrest of menstruation would give any satisfactory result. As this conclusion had been previously arrived at by Dr. Halliday Croom, there was no difficulty in making up our minds to it, and therefore on December 19th I operated in the presence of Dr. Halliday Croom, Professors Simpson and Chiene, Dr. Keiller, Dr. Angus Macdonald, Dr. Hart, Dr. Barbour, and Dr. Brewis. I found, as usual in such cases, that the omentum was glued on over the pelvis, and that what operation was done had to be performed through an aperture made to reach the organs. The pelvic viscera was so matted together that it was with difficulty the fundus uteri could be identified, but when this was accomplished it was not difficult to trace the ovaries and tubes first on the one side and then on the other, but a great deal of manipulation was required to detach them. Finally, after a great deal of trouble, they were secured, the pedicles tied by the Staffordshire knot, and the wound, an inch and a half in length, was closed. No drainage-tube was used.

The following letter, dated March 2nd, 1886, was received

[1] Read at the Midland Medical Society, March 3rd, 1886.

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from Dr. Halliday Croom giving the further progress of the case: "The patient had no rise of temperature or any bad symptom whatever. She had a perfectly uninterrupted recovery. When I saw her after the operation I was struck by the change in her appearance. Her pinched, suffering look had gone. Her face was round, of good colour, and looked well and cheerful—very different from the appearance she presented when you and I saw her in December last. She still has some pain in her pelvis, especially on exertion; but it is not continuous as it used to be, nor does it interfere with her work, or prevent her enjoying her life, which for seven years past has been a burden. She has not menstruated since the operation, but has some leucorrhœa."

When the appendages were removed and examined by the naked eye, no one, unless greatly experienced in such pathological appearances, could have detected much the matter with them. The tubes were small and atrophied, and the ovaries were apparently normal in size and appearance; the moment, however, they were put in fluid, it became evident, from the masses of flocculent fibres which were attached all over their surfaces, that they had been densely adherent—they were, in fact, adherent over the whole of the superficies. This is only one of the many illustrations in which ignorance of the disease centred in such organs may have, or actually has, led spectators to go away after such an operation with the impression that normal appendages had been removed. From the peculiarities of the operation, no one except the operator can be cognisant of what the real conditions are inside, as none of the adhesions can be seen by the bystanders; and the only evidence to be obtained of these adhesions is the occurrence of hæmorrhage at the time of the operation (frequently very profuse), and the flocculent remains to the adhesions, which can only be seen when the appendages are floated in water, in spirit, or in some other transparent fluid. Fortunately, however, I have in my possession three preparations where the whole of the pelvic contents have been removed at post-mortem examinations, and where the conditions therefore can be demonstrated beyond cavil.

The first preparation was presented by Dr. Littlejohn many years ago to the midwifery museum in the University of Edinburgh, and it is now impossible to obtain any history beyond the fact that the preparation was removed from the body of a prostitute. The conditions are precisely such as I found in the pelvis of the patient upon whom I operated for Dr. Halliday Croom. The Fallopian tubes can be seen to be buried in adhesions, and bands of adhesions pass in all directions, gluing the appendages into abnormal positions, from which they cannot be moved; and to remove these appendages would involve attacking precisely the same extent of adhesion which I had to encounter in the case I have just narrated. In this preparation both the tubes are occluded. (The three preparations were exhibited to the Society.)

The second preparation I also obtained through the kindness of Dr. Littlejohn, and it has precisely the same history, having been removed from the body of a prostitute some months ago; and here again, unfortunately, no history can be obtained. In this preparation the surface of the posterior wall of the uterus was adherent to the rectum, and bands of adhesion passed in every direction, binding the uterus and ovaries together, the ovaries and tubes being considerably below their normal level and fastened there by the adhesions. Both tubes were completely occluded and glued on to the surface of their respective ovaries; these latter were also glued down into the recto-vaginal pouch.

Curiously enough, the third preparation, also taken from the body of a girl who led a loose life, was obtained at a post-mortem made on the very morning on which I was announced to give an address to the Medico-Chirurgical Society of Edinburgh on this very subject; therefore I had the advantage of seeing the preparation perfectly fresh, and of obtaining from the girl's friends, especially her sister-in-law, with whom she resided, an accurate statement of her past history. She had been brought up in a house of ill fame, and at a very early age had fallen into the habits of her associates. She was nominally a worker at a mill, had had an acute attack of syphilitic gonorrhœa before she was fourteen, had gone through a variety of stages of syphilitic infection, and died at the age of twenty from the bursting of a syphilitic aneurysm in the aorta. Her sister-in-law told me that her menstruation was regular and extremely profuse, whilst the suffering which she underwent at each time amounted to agony of the most intense kind, for which she had to take large quantities of spirits to obtain relief. She was totally incapacitated from moving about during the week in which her menstruation occurred, and, without my asking the question, her sister-in-law volunteered the information that the curious part was that the pain was always worse two or three days before the period showed itself. A detailed description of the appendages in this case is as follows:—The uterus was large and heavy, almost as if the girl had had several children, although she never had been pregnant; it was retroverted and quite adherent by dense bands of adhesions (some of which are still visible) to the sacrum; it was opened on its anterior surface. The ovaries, from the presence of adhesions in every direction, were with great difficulty identified, being about three times their normal size. The Fallopian tubes passed curving round them, and were equally adherent and flaccid *in situ*. On the left side the tube was not occluded, whilst that on the right was.

Looking at the preparations now before you, it is impossible to come to any conclusion other than that women, with their ovaries and tubes so matted and adherent together, bound down and incapable of making those movements which it is necessary for the process of impregnation should be made, could be otherwise than absolutely sterile; the machinery of impregnation is wholly out of gear. We have so far, as I regard it, the condition of womanhood existing in three distinct functions. The first is the mere domestic and social life which all women may lead, whether they be wives or mothers. They may be and often are eminently useful members of society, leading absolutely celibate lives. Of this there is of course no doubt at all. There can be as little doubt that in this function, perhaps, they are as useful as in any other. The second function which woman has to fulfil is that of wife; and the third of course is that in which maternity is accomplished. Everyone knows that the condition of wife may be occupied by a woman with perfect happiness, and with a largely extended sphere of usefulness, without the function of maternity ever being even attempted. For the fulfilment of her maternal function and for the perpetuation of the race maternity is a matter of necessity; but it requires nothing save the ordinary every-day experience of the world to prove that the maternal function of woman is limited to a relatively small number. From this we may have abundant indications for our processes of reasoning in dealing with questions of diseases such as those which have been and are to be relegated to one or other of these divisions; few extend into two of them, and only one into the third. The third I have already alluded to. The occurrence of the disease in these women, and the onset of the pelvic inflammation, from whatever causes it may arise, have settled the question of maternity. It is impossible, as I have said, that women so afflicted could ever become mothers. I have attempted to undo such adhesions, and leaving the organs released, in the hope that they might fulfil their functions; but I have absolutely failed; and I believe it is perfectly impossible for any, even the most skilled, surgical efforts to unravel these adhesions and to undo this chronic inflammation to such an extent as to make these organs fulfil their third and most complete function. The pelvic organs are wholly unlike any others. You can rest an inflamed eye by a ball of cotton wool in a darkened room, and you can suspend absolutely the functions of an inflamed knee-joint by rest in bed and splint; but you have no means of putting the pelvic organs of a woman at rest short of arresting the function of menstruation. The second function—that of the sexual duties of a wife—may be as completely performed without the uterine appendages, either congenitally absent or absent as the result of surgical interference, as with them. On the other hand, we find from the united evidence of both husband and wife in a large number of these cases of chronic inflammatory disease in the pelvis, that the disease hinders more or less, and in the majority of cases absolutely suspends the possibility of marital intercourse. The removal of these diseased organs, the restoration of the patient to health, and the freedom from pain that she enjoys after the operation permit of the gradual resumption of married life, and, after the lapse of a reasonable time, this, the second function of womanhood, may be as completely fulfilled as if she had never suffered.

The first function of womanhood, that of the social and domestic life of a woman, is again absolutely independent of the fact whether she has or has not ovaries and Fallopian

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...man who has been formed congenitally defective ..., may prove as useful a member of society as if ... completely developed. So it is with those who ...ed to the mutilating efforts of the surgeon, and ...efore be easily seen that as the disease from ... have suffered must deprive them of that healthy ...onnotion which is essential to complete usefulness ... the relief from their suffering by the removal of ... organs must restore them to the complete fulfil... their prime function in life. The arguments, ... which have been, and are still, often adduced ... operation as mutilating and unsexing women ... in the impure imaginations of those who use ... have no foundation in fact. If the function of ... has been by the disease completely abrogated, the ... will make no difference; but if the suffering that ... have to undergo by their diseased condition ... with their marital and social duties, their restora... health by operative interference can be regarded ... blessing to themselves and as increasing their ... to those with whom they are associated.

NOTES AND REMARKS ON A CASE OF

...ICERCI OF TÆNIA SOLIUM IN CERE...UM AND FOURTH VENTRICLE OF TWELVE YEARS' DURATION,

...DUCING INTRA-VENTRICULAR DROPSY, INSANITY, EPILEPSY, AND DEATH.

By J. HARRINGTON DOUTY,

... MEDICAL SUPERINTENDENT, WORCESTER COUNTY ASYLUM.

...llowing case seems worthy of publication and brief ... as possessing several points of clinical and patholo... interest.

..., a woman aged thirty-one, was admitted into ...chester Asylum in November, 1877. She had been married ...more than three years previously, and is described by ...band as being, when he married her, in excellent ... perfectly sane, and of an affectionate and cheerful ...ion. There was no heredity or other cause of ... About a year after marriage she was noticed to ... at times dull and forgetful, and began to halt in the ...ation of her words, which were sometimes forgotten, ...y used, or transposed in a sentence. She became less ...mate to her husband, and was now liable to periods ...nted sulkiness, obstinacy, and quick temper. This ...of things went on and developed into a general ...l hebetude, which persisted until a few days before ...ission, when an attack of acute mania supervened, ...ich she was brought for treatment.

...notes on admission describe her as being the subject ...e mania, and suggest the probability of her proving ...in the early stage of general paralysis, of which she ...ine symptoms, such as incoördination of the articu... muscles. The maniacal state yielded gradually to one ...entia. Six months after admission it is noted that ...walked badly and was unsteady on her legs," and ... hardly speak intelligibly." Three months later, after ...lsive attack, the right limbs became *gradually* ... and she was confined to bed; this hemiplegia per... and contractions occurred. Two years later she is ...to have been "very paralysed and helpless, simple ...etic." At this time she could say simple words, such ...own name, or "Yes" and "All right," and could re... words she heard spoken. She could also answer a ...estions of a simple and common nature, such as ... is your name?" When asked this she always ...ed by giving her maiden name; this, being the longer ... and more frequently uttered name, required less ...y effort than the less-used married one. Five years ...ission (October, 1882) she is described as "much the ... She now talked and chattered like a parrot; could ...y what she wanted to say, and could not write it; ... expression, however, of sorrow, surprise, or ... evidence of the absence of sensory aphasia. ... later it is noted that she had "occasional ...of vomiting without obvious cause"; this recurred ... and was evidently of cerebral origin. Examination of her discs was attempted, but found to be impossible, although both pupils were always widely dilated. About this time (May, 1883) she began to have, at intervals varying from a few days to a few weeks, epileptic seizures of an interesting nature. Many of them consisted merely of a scream, followed by a brief period of unconsciousness and marked "epileptic pallor." The loss of consciousness was sometimes only momentary, sometimes of a minute's duration. At times the fits had a convulsive stage, the spasms being general and of the ordinary tonic and clonic type. The right limbs, being palsied and contracted, were not moved during these convulsions; and later on, when the other leg and then the arm became gradually paralysed, the spasms were only noticeable in the left side of the face and the left eye. Sometimes vaso-motor spasm was the only evidence of a fit. These epileptic and convulsive seizures continued with increasing frequency and force, vomiting became more troublesome, the dementia gradually more profound, and aphasia complete, until on March 19th of this year death occurred after twenty-four hours of coma, "Cheyne-Stokes" respiration, and occasional convulsions. The case had been looked upon as one of cerebral tumour.

Necropsy.—The following is an abstract from the notes:—Skull-cap thick. A large quantity of clear fluid poured out on proceeding to remove the brain, and the left hemisphere then fell in like an empty bag; the vertex of the right hemisphere also fell in to a slighter extent. Convolutions, especially the left, markedly flattened; ventricles enormously dilated, containing about a pint of fluid. The left ventricle almost entirely replaced the left hemisphere, whose white matter had disappeared excepting that sublying the anterior parts of the frontal lobe. The white matter of the right side persisted, but was of much less than the normal depth. In the white matter sublying the middle of the left superior frontal convolution was a cyst of the size of a marble, having a membranous wall, and containing clear fluid of gummy consistence and a small white opaque object about the size of half a pea adhering to its inner surface. The cyst was easily lifted from its bed in the white matter, which for about one-eighth of an inch around the cyst was greyish and translucent. The cortex of the left hemisphere was, excepting in the frontal regions, atrophied and buff-coloured, and, with the membranes, formed the walls of the bag-like ventricle. The left corpus striatum and optic thalamus were smaller than the right. The lining of the right ventricle was "frosted," especially over the corpus. On opening the fourth ventricle, a cyst was found lying in its cavity, exactly similar to the one above described both in size and appearance, adhering slightly around the opening of the Sylvian aqueduct. It was easily removed. The aqueduct was dilated to the size of a small quill, especially at its upper end. The other organs presented nothing abnormal in their appearance, excepting a recent congestion of the lungs and kidneys.

Remarks.

1. *The cysts.*—These are pronounced by Mr. J. Bland Sutton to be cysticerci of tænia solium. The absence of heredity or any other predisposing or exciting cause of insanity in the case leads naturally to the conclusion that these cysts were causative of the symptoms, both general and mental. They must therefore have existed *in situ* for twelve years. It is interesting to note that they had not undergone calcareous or other degeneration in that long period of time.

2. *Their position and effects.*—One lay in the white matter which persisted in the left frontal lobe; its site, therefore, was not an uncommon one for cystic growths, and its proper share in the production of symptoms was probably slight. The other lay in an important position; it effectually blocked the fourth ventricle, and thus produced the dilatation of the aqueduct and of the ventricles; as a result "compression" ensued, leading to dementia and general palsy. A few cases with growths in this position are on record by Jacobson and others; one of villous growth in this site, reported by me in *Brain*, October, 1885, had very similar symptoms and conditions.

3. *The epilepsy.*—It is possible that the intra-ventricular dropsy may have caused the epileptic and convulsive attacks; more probably, however, these phenomena owed their origin to the direct irritation of the medullary centres by the cyst in the fourth ventricle.

4. *The insanity.*—The initial mania seems to have been the result of the irritation consequent on the lodgment and development of the cysts. The subsequent gradual abolition of the intellect, ending ultimately in complete amentia, was

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but the natural accompaniment of the progressive cerebral lesions.

5. *The aphasia.*—This was normal in the order of its development. It will have been noticed above that the white matter sublying the left special speech centres had been completely destroyed. During the last few years of life voluntary intelligent speech was absent; involuntary and automatic utterances, however, continued until a few days before death—long, that is, after the left speech centres, and in fact almost the whole of the left hemisphere, had ceased to exist. The loss of the left speech centre therefore produced verbal amnesia, and almost effected the total loss of the motor speech processes; these last, however, were taken on to a certain extent by the right hemisphere, whose cortex also achieved (as Hughlings-Jackson says it always does equally with the left) the few simple automatic and imitative (reflex) utterances forthcoming until the onset of the præmortal coma.

6. *The excess of atrophy of the left over that of the right hemisphere.*—This cannot easily be explained. Both ventricles, as already stated, were much dilated; on the right side, however, white matter persisted, though thinned, and seemed to have been capable of conduction to a certain extent until the final stage set in.

7. *The unsteadiness in gait* noticed early in the case doubtless resulted from the pressure of the cyst in the fourth ventricle upon the middle lobe of the cerebellum. Vertigo and reeling gait were also prominent symptoms in the above mentioned case of villous tumour in this site.

8. *Dilatation of the pupils* was also a condition common to both these cases.

Powick.

SIMULTANEOUS LIGATURE OF RIGHT CAROTID AND SUBCLAVIAN ARTERIES FOR ANEURYSM OF ASCENDING PORTION OF ARCH OF AORTA.

REPORTED BY J. A. KELLY, L.M.S.,
RESIDENT MEDICAL OFFICER, HYDERABAD.

THE following case came under the care of Surgeon-Major E. Lawrie, M.B., M.R.C.S., Residency Surgeon, Hyderabad, Deccan, with whose permission I send it for publication.

W. de P——, a Eurasian, aged thirty-eight, had been under treatment since the early part of 1884 for repeated attacks of angina pectoris. He was also troubled by a hoarse cough, accompanied by frothy expectoration. The only treatment that afforded him any relief was hypodermic injections of morphia. In March, 1885, an aneurysm was detected by Brigade-Surgeon T. Beaumont in the ascending portion of the aortic arch; and in August pulsation appeared on the right side of the upper part of the sternum. After a time three ribs were eroded, and a pulsating tumour as large as a tennis-ball showed itself under the skin. There was difficulty in swallowing solid food, which was rejected as soon as it passed the pharynx; and the patient was obliged to live on liquids, which he had to swallow carefully and slowly for fear of being choked. The right side of the neck and face was œdematous and livid; the voice was changed to a whisper; there were paroxysms of angina with urgent dyspnœa, and a very troublesome cough. The pain had greatly increased, and, by preventing sleep, was impairing the patient's general health. No benefit was derived from absolute rest, Tufnell's diet, and large doses of iodide of potassium, and it was therefore decided to tie the common carotid and subclavian arteries.

On Oct. 22nd, a hypodermic injection of morphia having been previously administered, the common carotid and subclavian arteries of the right side were ligatured, under the spray, with carbolised catgut. Chloroform was administered for the first incisions. Afterwards, anæsthesia was kept up principally by the local application of a 10 per cent. solution of cocaine. The edges of the wounds were brought together by horsehair sutures, and thickly dusted with iodoform, and dressings of cloth prepared in a 1 per cent. solution of perchloride of mercury in blood-serum, and dried, were applied. He was ordered fifteen minims of antimonial wine in an ounce of water every two hours. In the evening the pulse and temperature (which before the operation were 90 and 98° respectively) rose to 120 and 101·4°, but subsided the next day, and the wounds healed without inflammation by the first intention. Most of the urgent symptoms connected with the tumour abated within the first week after the operation, and the patient's general condition gradually improved, so that he was able to leave the hospital on Dec. 18th. The radial pulse returned to the right wrist eleven days after the operation.

The aneurysm now (February, 1886) appears stationary, but still pulsates; pain has greatly decreased; swallowing is easily performed; and, with the exception of a dry cough, there are no pressure symptoms.

Hyderabad, Deccan.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Procemium.

UNIVERSITY COLLEGE HOSPITAL.

SECONDARY EPITHELIOMA SURROUNDING LEFT HALF OF THE BODY OF THE LOWER JAW; REMOVAL OF THE GROWTH, TOGETHER WITH HALF THE JAW; RECOVERY; REMARKS.

(Under the care of Mr. CHRISTOPHER HEATH.)

EPITHELIOMATOUS GROWTH secondary to that of the lip, seldom permits of successful removal when it has attained the size of the tumour in the present case. It is unusual to find so extensive an involvement of the bone, as in this instance, with such slight glandular affection, the secondary growths generally appearing in the glands under the jaw and involving the bone later and to a much less extent. The illustration shows well the size and appearance of the growth. Not only was the patient successfully relieved of a painful disease by the operation, but, from the careful manner in which all trace was removed, he has a prospect of prolonged life. For the notes of the case we are indebted to Mr. Bilton Pollard, surgical registrar.

J. H——, aged fifty-five, a labourer, was admitted into University College Hospital on March 22nd, 1886. Two years and a half ago an ulcerated swelling formed in the lower lip, close to the left angle of the mouth. About six months later the growth was removed, and the patient remained well till a year ago, when he noticed a swelling beneath the left angle of the lower jaw. The secondary growth had steadily increased in size up to the time of admission, when the lower part of the left side of the patient's face was much enlarged (see figure). The swelling extended from the middle line beneath the chin to the angle of the jaw, involving all the tissues in the left submaxillary space, and almost surrounding the body of the jaw.

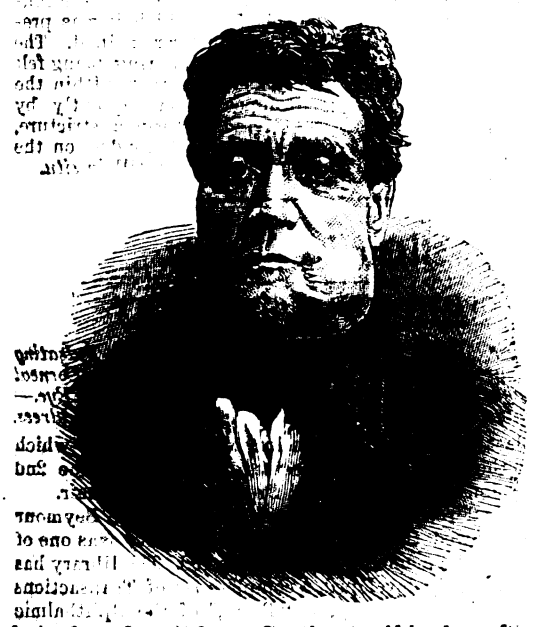
On March 24th, the patient being under the influence of ether administered through the nose, Mr. Heath entered the scalpel about half an inch below the left angle of the mouth, and carried it downwards and outwards over the growth in an elliptical manner for three inches and a half. A similar incision was made between the same points, but at a distance of an inch and three-quarters about the middle. The healthy skin was then dissected up till the limits of the growth were reached; the knife was then sunk down to the jaw in the middle line and through the masseter muscle to the ramus of the jaw, and the bone was sawn across at those two points. The bleeding from the inferior dental artery was arrested by touching it with the point of Paquelin's cautery. The tumour was then drawn outwards and the mass freed by dividing the muscles attached to the left side of the body and angle of the jaw. After the bleeding had been arrested the edges of the wound were drawn together by three button sutures and accurately adjusted with fine wire sutures. The outer part of the wound was left open for drainage. The wound was dusted over with iodoform, and a dressing of iodoform wool was applied.

The parts removed consisted of the left half of the body of

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the jaw together with the angle and a small portion of the ramus. It was surrounded below and on both surfaces, except close to the symphysis, by a mass of new growth, which involved the fibres of insertion of the masseter and internal pterygoid muscles, the deep fibres of the mylo-hyoid muscle, and the small muscles on the outer surface of the jaw, together with the greater part of the skin included between the incisions. The submaxillary gland was removed entire with the mass, and the anterior portion of it was implicated in the growth. The body of the lower jaw was diseased by extension of the growth into it. The growth consisted of a squamous-celled epithelioma; the tissue between the epithelial masses consisted of delicate fibrous tissue and small round cells.

The patient was fed twice a day by means of a tube passed into the stomach; each meal consisted of two raw eggs, half a pint of strong beef tea, half a pint of milk, and an ounce of brandy. On the fourteenth day after the operation feeding by the tube was discontinued, and the patient fed himself in the ordinary way. The dressing was



changed twice a day. On the twelfth day after the operation all the stitches were removed; the wound had healed by first intention, except at the posterior part, which had been left open for drainage. The patient was discharged on the twenty-second day after the operation; he was perfectly well and free from pain; there was a small sinus at the posterior part of the scar, and through it a little saliva dribbled.

Remarks.—From the above account and from the woodcut it will be seen that the growth was very large, and that its extirpation involved a great loss of skin and the removal of all the tissues in the left submaxillary space. The wound, nevertheless, healed rapidly and well—a result which may be largely attributed to the care which was taken to keep the wound and the mouth thoroughly clean. With this object in view, the patient's food was poured directly into the stomach for fourteen days after the operation, and the wound in the mouth was dusted twice a day with iodoform. The tumour itself presented some points of interest. The patient had had a growth removed from the lower lip two years before, so that it seemed most likely that the tumour under consideration was epitheliomatous, and that it was secondary to that primary growth. The tumour, however, presented the characters of an independent growth in connexion with the body of the lower jaw, for it almost completely surrounded that bone and consisted apparently of a single solid mass. There were no outlying enlarged lymphatic glands, and the growth was situated at a higher level than is usually the case with growths in the lymphatic glands secondary to epithelioma of the lip. That it was an epithelioma was shown by the microscopical examination, and so, considering the healthy state of the scar resulting from the operation on the lip, the tumour must have originated from a secondary deposit in one of the lymphatic glands beneath the jaw, and spread widely from that centre without infecting other lymphatic glands of the jaw. On the external surface of the latter it spread upwards as far as the alveolar border and over the ramus to the level of the lobule of the ear. A large mass of new growth projected into the floor of the mouth opposite the posterior part of the body of the jaw. At the left angle of the mouth there was a scar which reached down to the growth; but the scar itself was free from new growth. Over the most prominent part of the tumour the skin had a purplish colour and was fixed to the growth beneath, by which it was clearly implicated. The tumour formed a single mass, and no outlying glands could be felt.

BATLEY AND DISTRICT COTTAGE HOSPITAL.

CASE OF EXCISION OF THE OS CALCIS, ASTRAGALUS, AND BOTH MALLEOLI, WITH RESULTING USEFUL LIMB.[1]

(Under the care of Dr. ALFRED SWANN.)

L. P——, aged eight years, a little girl, came under care in June, 1882. Her family history reveals that her father had a piece of diseased bone removed from his right femur thirty-five years ago. This he ascribes to an accident. Both parents are living. There seems to be no positive evidence of struma, syphilis, or phthisis in the family. The child's previous history was that fourteen weeks before admission the ankle began to swell, and she suffered from great pain and feverishness. A medical man was in attendance, and poultices were applied until an abscess formed and burst. This gave very little relief; the ankle still remained swollen and the constitutional symptoms continued. There had been no injury to the joint.

On admission, the child was suffering from feverishness and pain (temperature 103·5°) and a very much enlarged right ankle-joint. On the outer side of the heel, below the malleolus, was a discharging sinus. The whole contour of the heel and ankle-joint was enlarged, and the part was very tender and inflamed. On passing a probe into the sinus, it went for three-quarters of an inch directly inwards and impinged on rough and crackling bone. Movement of the ankle caused slight pain, but there was no grating, and the movement was free. As the sinus ran straight into the os calcis, it was concluded that this was a case of disease of the cancellous tissue of that bone, and on June 15th, 1882, the child being under chloroform, Dr. Swann made a crucial incision, including the opening of the sinus, and, dissecting up the flaps, gouged away a large quantity of gritty and some caseous material from the interior of the bone, and inserted a drainage-tube.

The child was decidedly better after the operation, and for some time the pain disappeared, and the constitutional symptoms improved generally. Three weeks after the operation it was found that the sinus still remained open, the foot again began to swell, and there were great pain and feverishness. The disease still seemed localised to the os calcis; it was therefore determined to remove this, as rapid extension of the disease into the rest of the tarsus was apprehended. On July 7th, 1882, the child having been chloroformed, and an Esmarch's bandage having been applied to the limb, a horseshoe incision was made from the cuboid round the back of the heel to a point opposite to it. This flap was dissected up, keeping as close as possible to the bone, and saving as much periosteum as was practicable. The tendo Achillis and skin over it were split by an incision down to the bone, and dissected off laterally. The calcaneo-astragaloid and calcaneo-cuboid joints were then opened, their ligaments cut, and the bone removed. Attention was then turned to the astragalus, and it was found that this contained a plug of caseous material. This was gouged out. Dr. Swann found, however, that the disease extended so far that he could not avoid opening the ankle-joint; in fact, the ankle-joint was already the seat of commencing disease. (The specimens shown to the Society demonstrated the foregoing very plainly). He therefore enucleated the astragalus. This having been done, the scaphoid and cuboid, which appeared free from disease, although their cartilages were reddened, were examined. Both malleoli were then removed, and a thin slice excised from the end of the tibia, care being taken not to interfere

[1] This case was shown before the Leeds and West Riding Medico-Chirurgical Society on Jan. 15th, 1886.

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with the epiphysis. The limb was placed on an angular wire and tin-plate splint, and dressed with dry dressing. As soon as the healing process was fairly established the child made wonderful strides towards recovery, and was discharged on Nov. 13th, 1882, with a useful limb, capable of all ordinary movements.

Remarks by Dr. SWANN.—I have kept the child under observation ever since her discharge from hospital, and at the time of my showing her to the Leeds and West Riding Medico-Chirurgical Society she walked with a hardly perceptible limp, and was in perfect health. She is thoroughly well at the present time. The following points are of interest:—1. Erichsen says, where the disease is extended into the malleolar arch, and where the whole of the os calcis is diseased, no alternative remains but amputation, resection not leaving a useful foot. The above case certainly does not tally with this, as the whole of the os calcis was removed together with the astragalus &c., and an almost perfect limb has resulted. 2. The bones removed contained extensive plugs of tuberculous material. The child is now, four years after the operation, in perfect health. Did the operation by removing a focus of tubercle save the patient from becoming tuberculous? I deem this a question of importance with regard to one's action in future cases of strumous bone disease. 3. The first operation on the os calcis was useless, and I now regard it as having been a waste of time, as I believe partial operations on children's bones are rarely successful, and a free and wide exploration is safer in the first instance.

MEDICAL COLLEGE HOSPITAL, CALCUTTA.

IRREDUCIBLE PROLAPSE OF THE RECTUM TREATED BY AMPUTATION; RECOVERY.

(Under the care of Mr. O'CONNELL RAYE.)

A HINDOO male, aged forty-four, was admitted suffering from prolapse of the rectum of several days' duration. The protruded parts were livid and ecchymosed, with here and there isolated patches of sloughing mucous membrane. The mass was about the size of the clenched fist. The patient was in great suffering and much exhausted. He was placed under chloroform, and careful, prolonged efforts were made to reduce the prolapse, but without success. The measures commonly recommended for the relief of irreducible prolapse—such as excision of strips of mucous membrane, scoring with the actual cautery, nitric acid, &c.—seemed scarcely suitable for this patient, as the bowel had been protruded for several days, and was in a very doubtful state of vitality. Mr. Raye therefore resolved to amputate the protrusion level with the encircling skin. He acknowledged that he should almost certainly have to open the recto-vesical pouch, but hoped, nevertheless, to be able to keep the peritoneum free from contamination. The parts were carefully examined lest they should contain a loop of intestine.

For the operation a Wood's hernia needle was used, armed with a stout silk ligature about two yards long. The needle was introduced along the left index finger within the protruded bowel as far as the level of the anal orifice. The point of the needle transfixed the protrusion from within, and emerged on a level with the skin. A loop of the silk was caught, and held while the needle was withdrawn within the lumen of the bowel. The bowel was again transfixed on the same level, with the needle still threaded, so that the point emerged on the external surface of the prolapsed rectum about one inch away from the first puncture. Another loop of the silk was there similarly caught and retained. This procedure was repeated, just as in the ordinary method of ligaturing a nævus in sections, until the entire mass was included. The external loops were then cut and tied, and thus each included portion was separately secured. The next step was to amputate the mass. Expecting to meet the pouch of peritoneum, Mr. Raye began in front by carefully cutting until he came upon this structure. He dissected the pouch from its surroundings in the manner employed with the sac in some of the modern operations for radical cure of hernia. When the pouch was thus secured, it was raised out of the way and the prolapsed rectum amputated just below the transfixing ligatures. There was no hæmorrhage. Two of the ligatures had transfixed the pouch. He divided these two ligatures, and as portions of the cut edges of the bowel were thus liberated, these edges were seized with Spencer Wells's clamp forceps to prevent bleeding. The prolapsed recto-vesical pouch, being now free, was drawn gently downwards a little, and its neck tied with carbolised catgut just above the point where the ligatures had passed through it. The sac was then cut off and its pedicle allowed to slip back within the pelvis, secured by the catgut ligature. Those portions of the cut edges of the bowel which were held in the clamp forceps were again transfixed with ligatures, which, when drawn tight, completely occluded the orifice through which the process of peritoneum had been protruding. The ring of ligatured bowel was pushed within the anal orifice, the ends of the silk ligatures hanging out for facility of removal, a morphia suppository was inserted, and the man put to bed. The operation occupied about three-quarters of an hour.

There was considerable pain for two days. On the third day the bowels were moved naturally. From the first there was no difficulty in micturition. Two ligatures were found loose on the twelfth day. Two more ligatures came away two days later on. By this time the patient felt quite well, had little or no pain on defecation, and had complete control over the action of the bowels, from which it was presumed that some portion of the sphincter remained. The calibre of the bowel was almost normal, a ring being felt where the ligatured portion lay about an inch within the anus. Whether this ring disappeared subsequently by absorption, or whether it contracted to form a stricture, Mr. Raye is unable to say, as the man absconded on the twenty-first day, some of the ligatures being still *in situ*.

Medical Societies.

OPHTHALMOLOGICAL SOCIETY.

Monocular Iritis. — Interstitial Keratitis. — Pulsating Tumour of Orbit.—Double Chronic Glaucoma.—Corneal Changes in Acquired Syphilis.—Nævus involving Eye.—Paralysis of External Recti.—Mr. Hutchinson's Address.

THE last meeting of the session of this Society, which was also the annual general meeting, was held on the 2nd inst., Mr. Jonathan Hutchinson, President, in the chair.

The annual report of the Council, read by Dr. Seymour Sharkey, showed that the state of the Society was one of prosperity. The members number now 198. The library has been considerably developed, a complete set of Transactions of the Pathological Society, of "Brain," of the Ophthalmic Hospital Reports, and of the Archives de Neurologie having been added.

Dr. BRAILEY showed drawings from a case of Monocular Iritis in a child. The iris was discoloured, and projecting from it were several small greyish-white or pinkish-white nodules; it was adherent at three points to the lens. In the corneal substance were several small greyish opacities. He considered that the disease was tubercular, though the aspect of the patient somewhat suggested congenital syphilis.—Mr. HUTCHINSON said the sequel of the case might throw some light on its nature. The presence of enlarged cervical glands was in favour of a diagnosis of tubercle.

Dr. BRAILEY also exhibited a case of Interstitial Keratitis, in which the left cornea had a somewhat peculiar aspect, and the idea was that it was of tubercular origin. The right eye presented changes which were clearly of a syphilitic type. The left eye showed about a dozen small greyish-white fairly defined nodules.

Mr. A. Q. SILCOCK showed a man with a large Pulsating Tumour of the Orbit. The sight of both eyes had been destroyed by a charge of small shot some years ago. Within two or three days after the accident, he heard a hissing noise in his head. A tumour, occupying the inner angle of the left orbit and extending over the bridge of the nose, began to develop about twelve months after; pressure on the left carotid, which was enlarged, arrested the pulsation and bruit in the tumour, which was not growing rapidly in size. Mr. Silcock said he felt disposed to tie the carotid, but added that Mr. Hulke had advised the use of electrolysis.—Mr. ADAMS FROST was reminded of a case of arterio-venous aneurysm shown by himself to the Society in 1882 (Ophthal. Trans., p. 111). It was the case of a child in whom the signs pointed to fracture of the base of the skull.

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...g tumour had first appeared in one orbit, and ...n the other. He thought Mr. Silcock's case of a ...a. That the tumour had not appeared till a year ...dent, although the noise in the head had been ...the patient from the commencement, was in ...his view; and recorded cases showed that the ...ion was aneurysmal varix of the cavernous ...long duration of the case, the tendency of such ...y slowly, or even to remain *in statu quo* for long ...me, should be borne in mind in thinking of the ...He should not recommend electrolysis even if ...were entirely intra-orbital, and this would be ...out of the question if the disease were intra-...asional exacerbations of pain and pulsation ...lieved by rest and digitalis.—Mr. HUTCHINSON ...the views of the previous speaker. He would ...d to advise any radical treatment, but would ...te the carotid than employ electrolysis or in-...s showing the little inconvenience that such ...t give, he mentioned the case of a woman who ...irsoid aneurysm of the scalp, for which twenty ...e had ligatured the occipital and temporal ...hout effecting any improvement in her condition. ...gain the other day when her condition was not ...ltered.

...YMONS (Adelaide, South Australia) contributed ...f a case of Double Symmetrical Changes in the ... man aged twenty-nine, who had acquired ...t years earlier. The patient had first noticed ...s were weak, and that there was a film upon ...weeks before he came under treatment. At the ...there was thinning, bulging, and opacity over ...s of both cornea, without any disturbance of ...um. The iris was partially adherent in both ...other tissues of the eye appeared to be healthy. ...otassium effected but slight improvement in ..., when the patient left the hospital. — Mr. ...w said the corneal changes had occurred in the ...iod, but he was not certain whether they were ...o the syphilis. He asked members whether they ...rneal changes in acquired syphilis.—Mr. NETTLE-...een a few cases of keratitis in acquired syphilis. ...he had a case under his care in a woman.—Mr. ...recalled some cases in which inherited syphilis ...xcluded.—Mr. LANG had seen a case in a married ...d thirty-six, with typical interstitial keratitis ...ng from acquired syphilis; there was no evi-...congenital disease. A second case was referred ...an: the keratitis occurred twelve years after ...—Dr. A. MONEY asked what was the latest age at ...erstitial keratitis of congenital syphilitic origin ...r; he had seen a case in a woman aged thirty-...hom the inherited disease was unquestionable.—...CHINSON said he had seen several cases as late as ...years of age.—Mr. NETTLESHIP referred to a case ...hirty and forty years of age.—Mr. ADAMS FROST ... a case in a woman aged thirty-nine.

...ILEY described a case of chronic glaucoma affecting ...f a man aged sixty. The man died of aortic aneu-...h had lasted for twelve years; vision had been ...three years, but was never insufficient for ordi-...ses; tension in both eyes was increased (T + 1). ...ion was performed. Microscopical examination ... showed cupping of the disc, and inflammation of ...nerve, extending, in decreasing degree, through ...s to the optic tract. The iris was neither inflamed ...ed. The muscular elements of the ciliary body ...med. This case appeared to show that the ...ion and atrophy of the iris so commonly found ...a were entirely secondary to the establishment ...ion; the same remark applied to the inflamma-...trophy of the ciliary body.

...ON SNELL (Sheffield) sent a description of the ...irl aged seventeen, in whom a cutaneous nævus ...ver the brow of the right side from the orbit ...ches and involved the upper eyelid. Vision ... eye had always been imperfect, if not absent. ... of the globe was increased T + 2, and there was ...which was relieved by eserine. No reflex was ...from the fundus; the posterior part of the ...occupied by a greyish flocculent substance. ...was dilated; at the inner and lower ciliary region ...staphyloma, and the surface was vascular with ...vessels. In the circum-corneal region above was a purplish area, which extended upwards and backwards and apparently involved the sclerotic. The eye was enucleated.—Dr. BRAILEY examined the eye after removal. The retina was detached; the optic disc hidden by a great thickening of the choroid; the muscular substance of the ciliary body was shrunken; the iris was inflamed and atrophied. The thickening of the choroid was due to the presence of numerous vascular channels.

Mr. W. J. CANT (Lincoln) contributed a paper on a case of Paralysis of the External Recti. It was that of a man aged sixty-three, suffering from diplopia, headache, slight optic neuritis, and slight albuminuria. Under the influence of saline purgatives the recti gained power, and the double vision became less marked.—Dr. SEYMOUR SHARKEY supposed that it meant to be inferred that the paralysis was connected with Bright's disease; the evidence of the presence of this disease was slight; there was simple neuritis, not albuminuric retinitis. He suggested that the case was one of intra-cranial tumour.—Mr. HUTCHINSON suggested that the case was one of ophthalmoplegia externa in an early stage.—Dr. A. MONEY thought that the disappearing paralysis might be due to the diphtheria, which would also account for the slight albuminuria.

The following card cases were shown:—Mr. W. H. Jessop: Drawing of a case of Leukæmic Retinitis (under the care of Dr. Andrew, St. Bart.'s Hospital). Mr. Marcus Gunn: Peculiar Deep Partial Congenital Excavation of the Optic Disc. Mr. W. J. Cant (Lincoln): Drawings of Symmetrical Disease of the Fundus, probably congenital, in a child.

At the conclusion of the general business, Mr. HUTCHINSON delivered a valedictory address. He congratulated the Society on the appointment of Mr. Hulke as in-coming President, than whom no one was better fitted to carry on the traditions of the Society. Reference was next made to the severe and painful illness of Sir William Bowman, whose health Mr. Hutchinson was able to say now showed some signs of improvement. He then briefly reviewed the work of the Society during the three years' tenure of his office of President. He spoke with special approval of the experiment of collecting facts concerning Graves' disease which had marked the last session; the result was of good augury for the success of future undertakings of a similar nature; indeed, the President considered that this was a sphere in which the Society would find a special field for thoroughly valuable work. He gave several illustrations. The Society might play the part of a concentrating lens in bringing to a focus all the facts which it could collect anent any rare or disputed clinical subject. As some of the topics suitable for such work, mention was made of certain questions regarding tobacco-amblyopia. Does this form of amblyopia ever relapse? He opined from his own experience that it did not. Half an hour's debate, after the attention of the members had been directed to the question for a year or so, should be sufficient to settle this question. He also felt that there were grounds for believing that many cases of tobacco-amblyopia got well, even though smoking was not given up. Do neglected cases ever progress to absolute blindness? With regard to amblyopia potatorum, was this due to the spirits imbibed, or, as some thought, to renal disease or to tobacco? Many spirit-drinkers were also large smokers. Allusion was next made to Mr. Nettleship's case of progressive failure of sight in a woman without any other symptoms. What was the meaning of this temporary extinction of a special sense? Was it allied to the temporary blindness of megrim? The assumption that such cases were due to retro-ocular neuritis required careful investigation. The Transactions of the Society should be of encyclopædic dimensions; systematic efforts were needed; a small committee of energetic men should be appointed, with a view to organise the contributions to be made to the Society; contributions should not be left to chance. The discussion that had taken place that evening had shown that Mr. Morton's case of interstitial keratitis was not unique in the history of acquired syphilis; the severity and persistency of this case were most remarkable, for the results seemed to be deplorable; it was very gratifying to know that twenty years afterwards there had been considerable recovery, and this after mercury and iodides had been entirely discontinued. This suggested that our remedies were unable to influence such sequelæ of syphilis; the inherited form of keratitis was not specially benefited by specific treatment. Another suggestion he had to make for increasing the useful work of the Society. Further particulars and the sequel of cases inserted in the Transactions should be sought for and

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recorded in a supplement of the volume. The Society should endeavour to increase its value to general medicine by discovering and publishing accounts of those ocular lesions which indicate disease in other parts of the body. Are the atrophic patches in the periphery of the choroid invariably indicative of syphilitic taint?

A vote of thanks to the retiring President, proposed by Mr. Sympson and seconded by Dr. Eales, was carried by acclamation. The Society adjourned at 10.45 P.M.

The following officers and Council were duly elected for the year 1886-87:—President: *John Whitaker Hulke, F.R.S. Vice-Presidents: *Jonathan Hutchinson, F.R.S.; George Johnson, M.D., F.R.S.; *E. Nettleship; Thomas Reid, M.D. (Glasgow); D. Argyll Robertson, M.D. (Edinburgh); T. Sympson (Lincoln). Treasurer: William M. Ord, M.D. Secretaries: Seymour J. Sharkey, M.B.; *Robert Marcus Gunn. Other members of Council: John Abercrombie, M.D.; *W. A. Brailey, M.D.; Sidney Coupland, M.D.; Walter Edmunds; *H. E. Juler; *William Lang; *J. B. Lawford, M.D.; A. Stanford Morton; *P. H. Mules, M.D. (Manchester); Simeon Snell (Sheffield); J. B. Story (Dublin); John Tweedy. Librarian: W. Adams Frost. (The gentlemen whose names are marked with an asterisk (*) were not in the Council, or did not hold the same office during the preceding year.)

ACADEMY OF MEDICINE IN IRELAND.

Rupture of Pelvic Cyst.—Laryngeal Changes subsequent to Laryngo-tracheotomy.—Granular Disease of Kidneys.

AT a meeting of the Pathological Section, held on April 9th, Dr. C. B. BALL communicated a case of Rupture of a Pelvic Cyst. The specimen was removed from the body of an unmarried lady, aged eighty-six years, who died shortly after the performance of a very trifling operation. She stated that at the time of her menopause a tumour formed in her abdomen, which was attended at the time with considerable menorrhagia. A year ago he saw her for the first time for some trifling complaint, and she then directed his attention to this abdominal tumour, which for twenty years had not given her any uneasiness. It was at the middle line, very firm to the touch, and absolutely painless. About six weeks ago she consulted him for piles, from which there had been considerable bleeding, and he operated by clamping two or three small piles. For two days she went on as well as such cases usually did; and then, about forty hours after the operation, she was suddenly seized with sickness of the stomach, and a state of intense restlessness followed. Her abdomen was somewhat distended, but was not tender, and there was no very definite evidence of peritoneal mischief. The restlessness increased, and she died in ten hours after she was attacked with those symptoms, none of which were referable to the operation. He was enabled to make a post-mortem examination. He had been prepared to find a fibro-myoma attached to the uterus. The first part of that diagnosis turned out to be correct. The tumour was a fibro-myoma; but it was attached, not to the uterus, but by a broad pedicle to the neighbourhood of the right ovary. Section of the tumour showed that it corresponded with ordinary uterine myomata, and microscopic examination confirmed that view as to its nature.

Dr. E. H. BENNETT communicated a case of Laryngeal Changes subsequent to Laryngo-tracheotomy. The specimen consisted of the larynx and trachea of a man on whom he performed laryngo-tracheotomy fourteen years ago. During the building of the Spencer Dock, this man, who was then between twenty-five and thirty years of age, was employed at the excavations. He had previously suffered from typhoid fever, from which he had had a tedious recovery; and, pressed by the necessities of life, he undertook work sooner than he should have done. In a fortnight after leaving the Whitworth Hospital, where he had been treated for the fever, he was admitted into Sir Patrick Dun's Hospital suffering from extreme dyspnœa. His distress was so great that no detailed examination was possible; and he (Dr. Bennett) opened the air-passage by an incision through the crico-thyroid membrane and down through the cricoid cartilage. Immediate relief followed, and a tracheal tube was introduced. It was an ordinary double tracheotomy tube, with a loop-shaped orifice cut in it to facilitate respiration through the larynx. Very soon the mucous membrane projected into this opening; and at each change of the tube a sort of shearing of the edges of the membrane took place, accompanied with hæmorrhage and pain. Consequently that tube was abandoned, and another of more suitable size introduced. The injury to the mucous membrane occurred two or three times in consequence of the withdrawals of the former tube. The man left the hospital cured; and during many years afterwards he (Dr. Bennett) constantly saw him. During his convalescence after the operation a laryngeal examination was made, from which it was discovered that the dyspnœa had been caused by suppurative perichondritis of the larynx. All the tissues were swollen and infiltrated; and the laryngoscope showed that on the left-hand side of the vocal cords there was an opening, through which an abscess had penetrated into the larynx. No necrosis of any part of the larynx ensued. The point of interest was, why it was that in such cases as this, in which laryngeal operations were performed on adults for syphilitic ulceration or for any other affection, the tube had to be always worn afterwards. In several cases he had withdrawn the tube, and the result was that the opening contracted and he had to perform a second tracheotomy and introduce a fresh tube. Did the laryngeal changes result from the mode of operation, or from what other cause? Looking at the present specimen, he was inclined to think that the mode of operation had something to do with it. The first tracheotomy he ever performed was a laryngo-tracheotomy with an incision in the crico-thyroid. He maintained that Boret's mode of performing the operation was the easiest and safest, and much to be preferred to the high operation. In this, as in all the cases of old tracheotomy, the thyroid, cricoid, and other cartilages of the larynx were all ossified. The whole region of the cricoid was shrunk to a minimum, and the larynx was shrunk to the condition of a child's larynx.

Dr. M. A. BOYD communicated a case of Granular Disease of the Kidneys. The patient, a lad aged twenty, was received a couple of months ago into the Mater Misericordiæ Hospital. He had had tympanites of the abdomen, sickness and vomiting for some days previously, with brown typhoid tongue, and was sent into a ward as a case of typhoid fever. On seeing him he (Dr. Boyd) found that his temperature was normal, and, on examining the case more closely, he found him to be suffering from congestion of the base of the left lung, with bronchitis, while his face, upper extremities, and whole body were cyanosed. He was very stupid and lethargic; but his friends said that he had had those symptoms for a considerable time. He had also loss of memory and puffiness of the face, and had not been able to do his work, which was that of a grocer's assistant. For twenty-four hours before his admission he had not passed any urine, and it was withdrawn by a catheter. For three or four days afterwards his temperature was either normal or slightly subnormal—between 97·8° and 98·4°. After the first day in hospital his symptoms were those of uræmic coma, and the lethargic appearances seemed to increase. He complained of pain in the occiput and in the right side of the head. The urine, which was drawn off by the catheter, contained albumen. He (Dr. Boyd) concluded that it was a case of disease of the kidneys, with uræmic coma. He died comatose on the fourth day. It proved to be a case of what Dr. Hammond called red granular disease of the kidneys; but there had been no previous affection of the kidneys. Ten years previously he had had scarlatina, but no symptoms of dropsy or of acute nephritis afterwards. He had pains in the knees and ankles, with effusion at the right knee-joint. The diseased kidney was smaller than the natural size, and lighter than it should be. The cortex, although not adhering so closely as to tear the substance of the kidney, adhered pretty closely to it, and could be seen, white and granular-looking, through the capsule. A section of the kidney also disclosed small hæmorrhagic points here and there, and a granular condition of the cortex itself, and the area of the cortex was very much narrowed.

Sanitary and Judicial Aspects of Cremation.—The Climate of Dublin.

At a meeting of the Subsection of State Medicine, held on April 21st, Dr. H. C. TWEEDY read a paper on the Sanitary and Judicial Aspects of Cremation. Having alluded to the condition of graveyards which gave rise to the Southwood Smith Commission in 1849, he proceeded to show that the dangers arising from the present mode of sepulture were to be traced partly to the contamination of air and water by the gases of decomposition

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and other putrefactive matters, and partly by the fact that the germs of several forms of zymotic disease not only retain their vitality in graves, but are capable of indefinite propagation under favouring conditions of heat and moisture, and, becoming liberated on the disturbance of graves, give rise to the several diseases of which each is the specific ferment. The process of cremation got rid of all these dangers, anticipating putrescence by the rapid reduction of the body to its elements, and by the total destruction of all organic germs by the high temperature necessary for the process. A description was then given of the Gorini Crematory now in use at Woking, and various objections to cremation were discussed.—The REGISTRAR-GENERAL FOR IRELAND (Dr. Grimshaw) said the question of cremation was one of great and growing importance. Its sanitary aspect admitted of no discussion, and its sentimental aspect scarcely concerned the medical profession; but its medico-legal aspect required careful consideration in the interests of the public, having regard to the risk of cremation being made use of as a readier method than others to get rid of suspicious cases.—Dr. ATTHILL had long been in favour of cremation, and regretted that the good old system of ancient times was not still carried out.—Dr. HENRY KENNEDY said the question of expense was worthy of consideration in connexion with the subject, as the cremation of paupers would be a considerable tax on the country. He did not believe in the great danger to health alleged to arise from interment. There was no evidence that graveyards were a source of sickness, and therefore it might fairly be questioned that the mischief alleged to arise from such contamination was exaggerated.—Dr. JOHN WILLIAM MOORE regarded the argument from sentiment as altogether in favour of cremation. In the Bible there was nothing from beginning to end oppcsed to cremation. Dr. Henry Kennedy had not given sanitary or preventive medicine sufficient credit, nor could he agree with him as to the comparative innocuousness of the round of nature which he had described.—The PRESIDENT (Dr. Jacob) held with the Registrar-General that the sanitary aspect of the question was not open to dispute. Indeed, any system by which the results of decomposition could be got rid of would be a boon. Dr. Tweedy's paper had satisfied him that the medico-legal difficulties in the way of cremation had been thoroughly met. It was only in one of 20,000 cases that judicial considerations intervened and a suspicion arose to justify exhumation, and therefore, as regards cremation, they had to deal but with that one case in which the law found it necessary to protect the public against foul play.

Dr. J. W. MOORE read a paper on the Climate of Dublin, based on twenty years' observation. The climate of Dublin was, he said, in the fullest sense, an *insular* one, free from extremes of heat and cold, except on very rare occasions, and characterised by a moderate rainfall (about 28 in.) annually, which is distributed, however, over a large number of days (about 195 in each year). Clouded skies, a high degree of humidity, and a prevalence of brisk winds, chiefly from westerly points of the compass, make up the climatology of the Irish capital.

CAMBRIDGE MEDICAL SOCIETY.

AT the meeting on May 7th, Dr. J. B. Bradbury, President in the chair, the following communications were made:—

Quadruple Mammæ in a Man.—Mr. POLLOCK showed a patient with two accessory nipples situated below the two natural ones.

Specimens of the Naegele and other Deformities of the Pelvis, their diagnosis, and some points in the management of Labour.—Dr. W. S. A. GRIFFITH exhibited a specimen of the Naegele pelvis which he had recently obtained from a patient who died in St. Bartholomew's Hospital, after a labour terminated by craniotomy; also a model of the similar but bilateral deformity of the pelvis described by Robert, belonging to the museum of St. Bartholomew's Hospital. The Naegele pelvis was a rare deformity, there being only three other specimens in London. Some held that the synostosis and the consequent deformities might be acquired by disease of the sacro-iliac joint and pressure effects; others, including Naegele himself, believed that the ill development was congenital. His own view was that the sacro-iliac synostosis and arrest of development were congenital, and that the deformities of obliquity and flattening were part of the original defect, and only to a slight, if any, extent caused by altered pressure. As to treatment, Dr. Griffith stated that, for almost all cases, the simplest and most effective method of delivery after perforation of the head was by the best modern forms of the craniotomy forceps, or, as some preferred to call them, cranioclasts. The crotchet, like the vectis and blunt hook, was practically obsolete. The cephalotribe was a cumbersome instrument, and would not often be required by a man who thoroughly understood the operation of cranioclasm. He insisted on the necessity of an accurate knowledge of the mechanism of labour for a recognition of the abnormalities of mechanism in the early stages of labour, such as occurred in the rickety and generally contracted pelvis, and would save many women from some of the great risks of obstructed labour, and means could be employed with success that would be useless at a later stage.

A Visit to M. Pasteur.—Mr. WHERRY gave a short account of the new treatment for hydrophobia carried out by M. Pasteur in Paris, and briefly described the method of inoculation and the mode of preparation of the attenuated virus.

Two Cases of Serious Symptoms from Foreign Bodies in the Ear. — Dr. Ingle mentioned two instances in children, in which marked cerebral irritation and pyrexia were produced by the presence in the ear of foreign bodies. In the one case a swollen dead lady-bird was extracted by syringing, in the other some wax and a dried pea. He offered in explanation that the symptoms were produced by pressure on the branches of the third division of the fifth nerve and the vagus, which supplied the cutaneous lining of the canal and drum; further, pressure upon the vaso-motor fibres of the sympathetic might lead to the irritation of certain areas; and these changes would be more likely to occur in children from the small size of their ear-passage and from the fact that in both cases the foreign bodies were capable of enlargement from the absorption of moisture. Dr. Ingle was in favour of syringing as the safest and best method of removing foreign bodies from the ear.

Notices of Books.

On the Fœtus in Utero. By ALEXANDER HARVEY, M.D. London: H. K. Lewis. 1886.—The object of the publication of this work is stated in the preface to be to bring prominently forward the "inoculation theory," which is little known, is hardly noticed in physiological text-books, and the literature of which is hardly accessible. The book consists of a series of papers published in the *Edinburgh Monthly Journal of Medical Science* in 1849 and succeeding years, as well as elsewhere. The subjects of the essays are on the fœtus in utero (*a*) as inoculating the maternal with the peculiarities of the paternal organism (and on the influence thereby exerted by the male on the constitution and reproductive powers of the female); (*b*) as influenced in its development by mental states in either parent; (*c*) as the channel of transmission of constitutional syphilis from the male to the female parent. The book also includes a statement of Count de Strzelecki's law of relative sterility. The word "inoculation" is used in its proper and literal sense of *grafting*, and the chief facts in the book are those which may be taken to show that a mother may acquire through the fœtus the peculiarities of the father, so as to transmit them to future offspring, and that a woman may live with a syphilitic (secondary syphilitic) husband, and remain uninfected till she becomes infected through the fœtus. We are surprised to hear that these theories are little known; we were under the impression that they were generally known and accepted. It appears that the former of them was first propounded in 1849 by Mr. James Macgillivray of Huntly, a veterinary surgeon in Aberdeenshire, and that the latter was first set forth by Dr. Ramsbotham in a clinical lecture on Abortion in 1835. The author's essays are amplifications of them. The book is interesting as a record of the progress of a

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subject. The essays are obviously the work of a highly educated and scholarly person; of their matter, some has long since been incorporated and assimilated, some has gone the way of Count Strzelecki's "law."

Companion to the Latest Edition of the British Pharmacopœia. By PETER SQUIRE. Revised by PETER WYATT SQUIRE and ALFRED HERBERT SQUIRE. Fourteenth Edition. London: J. and A. Churchill. 1886.—Squire's Companion has reached a fourteenth edition, a striking proof of its popularity. The work was originally written by Mr. Peter Squire, and the first edition appeared in 1864. Since his death in 1884 it has been edited by his sons. The present issue has been brought into accord with the last edition of the British Pharmacopœia. It seems almost absurd to speak of it as a "Companion" to the British Pharmacopœia, seeing that it is commonly used as a substitute for that work. It is so thoroughly practical that it is of the greatest use, not only to chemists and those engaged in dispensing, but to physicians and prescribers generally. The amount of information it contains is really astonishing, much of it being quite new and original. The article on Belladonna, for example, is apparently almost entirely rewritten, and contains a great deal that is not only novel but thoroughly practical. On the first page we find an excellent account of the Abrus precatorius, with a selection of formulæ from Shoemaker and others. On the next page there is much that is interesting about emulsions, and so on throughout the whole book. We have noted seventy-two pages which seem to have been entirely rewritten for this edition. The faults and omissions are few and far between, but we may mention that we do not find picrotoxine in the index, and that the note on pure terebene is most incomplete. The account of the therapeutic action of nitro-glycerine is not strictly accurate, and we doubt if the credit of its introduction should be assigned to Dr. Ringer. A good formula is given for the preparation of syrup of wild cherry bark, now so extensively employed as a flavouring agent. The whole edition has been most carefully prepared, and fully maintains the high reputation of the work for care and accuracy.

Anatomie menschlicher Embryonen. Von WILHELM HIS. III. Geschichte der Organe. Mit 156 Abbildungen in Text und Atlas. Leipzig: Verlag von F. C. W. Vogel. 1885.—The contents of the third part of this interesting and valuable work concern the development of the human embryo to the end of the second month, as regards the alimentary canal, the mouth with the various cavities connected with it, the nose, the lower jaw and neighbouring parts, the front wall of the mouth and pharynx (thyroid body, entrance to the larynx and tongue), the cranial nerves and their relation to the segments of the head, the muscles of the head, the salivary glands and teeth, the special development of the appendages to the thyroid body (ductus thyreoglossus, lingual and thyroid ducts), the thymus, the development of the neck, the heart, the arch of the aorta, the modification of the great primitive cardiac veins, the external ear, and the umbilical cord. The method adopted has been that by consecutive sections, a most laborious process, but one which gives certain and trustworthy results. The volume, indeed, represents months and even years of work. The text is illustrated by 156 figures, and the Atlas contains 15 beautiful plates. The writing, as well as the illustrations, bears the stamp of earnest and truthful description, and the whole work forms a contribution to human embryology of the highest scientific as well as practical value.

The Baths, Bathing, and Attractions of Aix-les-Bains, Savoy. By W. WAKEFIELD, M.D. Pp. 223. London: Sampson Low and Co. 1886.—In this Guide to one of the most important health-resorts in France, the author does not profess to go into any detail respecting the class of case which might be advantageously sent to it for treatmen He has endeavoured rather to "give the members of th medical profession and the public some general informatio under the various heads, 'what the waters of Aix are goo for; their administration; what kind of a place Aix is; ho and where found; what the visitor should do when Aix i reached.'" The book is therefore more intended for th public than the profession, though it contains much in formation which will be found useful to the latter. Th advice he gives to the invalids is judicious, and especiall his caution against "the well-meant but hurtful advice c those amateur physicians, so plentiful at all thermal centre who, having undergone a course of treatment themselve imagine they are perfectly qualified to lecture or advis others as to the proper course to be pursued." The latte half of the book consists of an account of the numerou places of interest in the vicinity of Aix and the means o visiting them. It appears to have been carefully compiled and will doubtless prove very useful to those health-seeker who are able to take a moderate amount of exercise, and stil more to those in health who have accompanied them, an who are apt to weary of the monotony of a residence in watering-place, however beautiful it may be. They wil find abundant variety in the walks and drives sketched ou for them.

Carlsbad and its Environs. By JOHN MERRYLEES. With a Medical Treatise on the Use of the Waters, by B. LONDON M.D. Pp. 199. London: Sampson Low and Co. 1886.—*Guide to Carlsbad.* Edited, under the authority of th Mayor and Town Council of Carlsbad, by W. SCHACHT an Co. Pp. 37. London: Trübner and Co. 1886.—The first o these works is a very readable guide-book for the use c English-speaking visitors to Carlsbad. It appears to contai all the information necessary to enable them to find thei way there, to locate themselves comfortably, and to g through the usual course of treatment advantageously i invalids, or to pass the time of their visit pleasantly if i good health. The latest analysis of the principal spring which are sixteen in number, is given, and may be foun useful to the profession when called upon to advise patient as to the selection of a watering-place. The second part—th Medical Treatise—appears to have been written more for th use of the laity than of the profession, and might, we think have been judiciously curtailed and made much less technica in its language. A good index would have added materiall to the value of the book. Schacht's Guide does not giv any professional information regarding the properties of th waters, but it contains all that is necessary for person intending to visit Carlsbad respecting the various routes b which it may be reached, the regulations affecting th letting of apartments, the tariff for carriages and othe means of locomotion, and the course to be pursued in th event of any dispute arising with lodging-house keeper cabmen, &c. It has the advantages of being short, clea practical, and portable.

Bright's Illustrated Guide to Bournemouth, Christchurch New Forest, Poole, Wimborne, Corfe Castle, &c. B C. H. O. CURTIS. Pp. 182. Bournemouth: Bright. 1886.—This will be found to be a very useful guide to those wh select Bournemouth either for a holiday retreat or as a healt resort. The "general description" is rather too much in th florid style which seems peculiar to guide-books, and th detailed account of the various churches is unnecessaril long, occupying nearly thirty pages; but the book gives al the requisite information about Bournemouth itself and it suburbs, and a good account of the numerous places of interes within easy reach of it. A brief chapter on the climate o Bournemouth by Dr. J. Davison, which contains tables of th monthly temperature, humidity, and rainfall, extending ove

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[illegible], may be found useful in considering whether it is likely to prove a suitable health-resort in particular cases.

Ambulance Work: Questions and Answers upon "First Aid to the Injured." By J. W. MARTIN, M.D., and J. MARTIN. Pp. 42. London: Baillière and Co.—This little book has been compiled by the authors, not with a view to supersede, but to supplement, Shepherd's "First Aid to the Injured." The form of question and answer may probably be found an advantageous method of conveying instruction, and the cautions given against the pupil supposing that by having attended a course of ambulance lectures he has become qualified to take the place of the physician or surgeon are judicious. We are afraid, however, that some of the answers, especially in the anatomico-physiological portion, are beyond the general grasp of many of those for whom the book is intended. Nor are we quite satisfied with all the practical portion. For instance: "Q. If a child has swallowed a small coin, a bean, or other small, hard body, what might you do with success?—A. Hold the little patient up by the heels, inverting him." There might be considerable risk attending the carrying out of this process of inversion under such circumstances, unless performed by competent hands.

Dictionary of National Biography. Edited by LESLIE STEPHEN. Vol. VII. London: Smith, Elder, and Co.—The seventh volume of the Dictionary of National Biography, which has just been published, extends from "Brown" to "*Burthogge*," and its contents, in accuracy and literary polish, fully equal those of the preceding volumes. The favourable opinion which we expressed in our last notice of this publication has not been in any way diminished, and we congratulate Mr. Leslie Stephen on the manner in which he is performing his necessarily responsible task.

John Leech's Pictures of Life and Character from the collection of "Mr. Punch." London: Bradbury, Agnew, and Co.—We have received the first and second parts of this work, which is now being published in monthly instalments. It is well got up, considering the lowness of the price at which it is offered, and when completed will contain nearly 4000 sketches by the great master of English caricature, illustrating every section of social life from 1842 to 1864. John Leech's sketches are so familiar that it is unnecessary to describe them, and to everyone who does not possess a complete and handy copy of them we can advise the purchase of the collection which forms the subject of this notice.

Medical Annual, 1886. London: Kimpton.—The proprietors of this Annual have devoted several pages of the contents to a summary of the recent advances made in medicine and surgery, which will be found useful by members of the profession. The remainder of the volume is occupied with the subjects which formed the contents of the Annual for 1885, and affords a useful source for reference upon many questions of interest to medical men.

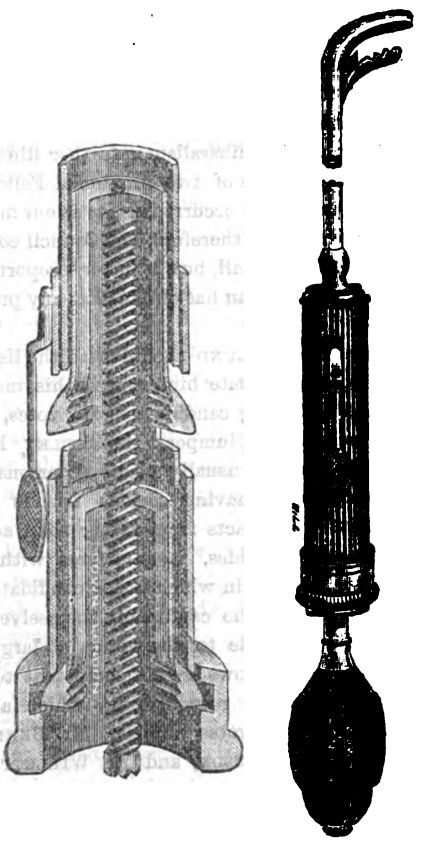
PRESENTATIONS.—On the 22nd ult., on the occasion of their annual dinner, the members of the West Kent Medico-Chirurgical Society presented Dr. Prior Purvis, of Rochester, with a drawing-room clock and two vases bearing the following inscription:—"Presented to Prior Purvis, M.D. Lond., by the members of the West Kent Medico-Chirurgical Society, in recognition of his valuable services as treasurer extending over a period of thirty years." Mr. [illegible] Skinner, M.R.C.S., L.S.A., has also been presented with a clock by the inhabitants of Burnham, as a mark of [illegible] of the manner in which he has discharged the duties of medical officer of health to that town.

[illegible] BENEVOLENT COLLEGE, EPSOM.—[illegible] at this institution was celebrated on the 6th inst. by a large gathering of the friends and old pupils of the [illegible] assembled to witness the distribution of prizes.

New Inventions.

A NEW LITHOTRITE.

IT has occurred to me, during the operation of lithotrity, that having with much patience seized a fragment of stone, I have again lost it in the attempt to lock the instrument, the morsel being of such size that the threads of the screw would not bite. An inspection of most old lithotrites will show that this must be no uncommon accident, as it will be seen that the edges of the male screw are burred from the force used to make it lock; and although theoretically it would appear impossible to remedy this defect, as a fresh catch would be necessary at every point of the screw, practically such perfection is needless, and the instrument (which has been ably made from my design by Messrs. Down Brothers of St. Thomas's-street) answers sufficiently well. Its novelty consists in two locks, so set that whenever the crests of the female screw of the first impinge directly on the crests of the male screw, the second lock can be brought into play by



moving up the catch with the thumb without altering the position of the operator's hands. By this arrangement the pitch of a screw like this of fourteen threads to the inch is reduced to one of twenty-eight, and the chance of jerking away the stone is proportionately lessened; and although the weight and length of the handle are increased, I consider that no disadvantage, as it affords a firmer hand grasp.

East Rudham. ALAN REEVE MANBY.

SOCIETY FOR THE STUDY AND CURE OF INEBRIETY.—The council of the Society had arranged for a Colonial and International Congress on Inebriety in London during the current month, but the General Election has made postponement desirable. The Congress will meet when Parliament sits.

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THE LANCET.

LONDON: SATURDAY, JULY 10, 1886.

THE College election, which is just over, will be held remarkable in times to come, because the Fellows, for the first time, have elected a general practitioner into the Council; and, secondly, because they have elected two provincial in face of some very eligible metropolitan Fellows. As regards Mr. SIBLEY'S election, the Council may be fairly congratulated. Apart from the obvious desirability of the great mass of the profession—the general practitioners—being directly represented, Mr. SIBLEY cannot fail to be a *persona grata* to the Council. His well-known business aptitude and his liberal and tolerant views specially qualify him for his office, and will prove of eminent service in the Council chamber. We rejoice, however, not on these accounts alone, but because in this departure from routine we recognise a wise and advancing liberalism among the Fellows which augurs well for the future of the College. This liberalism is further illustrated in the simultaneous election of two provincial Fellows—a fact which has not previously occurred, as far as our memory serves us. At the present, therefore, the Council contains four members—a still too small, but a juster, proportion of provincial representation than has obtained at any previous period.

It was natural that Mr. LUND should head the list, and we are pleased to congratulate him, and on his majority over the next and following candidates. His votes, moreover, included only one plumper, Mr. SIBLEY having received three. To plump is usually a sign of personal over general considerations, of having zealous friends rather than special merit. It detracts from rather than adds to a candidate's success. Besides, it interferes with that appreciation of the esteem in which other candidates are held, which is as useful to the candidates themselves as it is interesting and serviceable to the voters at large. It may also be argued that Fellows are not competent to vote when they thus shirk the responsibility which a more orthodox division of their votes implies. Mr. BERKELEY HILL, Mr. REGINALD HARRISON, and Mr. WILLETT, with each ten plumpers, are no better or worse off than they would have been without them. On the whole, we must congratulate the Fellows, and the Members of the College also, on the result of the past election. The Council as at present constituted is more largely liberal and progressive than at any previous period; and we may look forward hopefully to the future for the realisation of those reforms which we have so often and so urgently advocated.

Following precedent, Mr. JOHN WOOD would have become President; it is not surprising, however, that Mr. SAVORY has been re-elected in acknowledgment of his valuable services, of the admirable manner in which he has discharged his presidential duties, and also of his position and eminence as a surgeon. We congratulate Mr. SAVORY on being the first President on whom the honour of re-election to the presidential chair has been conferred since the name of the head of the College was changed from that of "Master." The only approach to a parallel case was in 1831, when Mr. ROBERT KEATE was chosen President after having occupied the chair part of the previous year in consequence of the death of his predecessor, Mr. R. C. HEADINGTON, before the completion of his term of office. Mr. WOOD'S turn is merely postponed for a year.

We can only express a hope that the new Council will use their best endeavours to bring about with all celerity an adjustment of the present differences subsisting between them and a large number of leading Fellows, and that they will also find means of enlisting the Members and their goodwill in the development and service of the College by timely and judicious concession in the directions sought by both classes of their constituents.

WE have recently given account of Mr. W. H. POWER'S report upon the prevalence of scarlatina among the consumers of milk from a farm at Hendon, and have expressed the conviction that the evidence which he adduced to show that a cow ailment caused the malady in man must be accepted as sufficient for this purpose. This evidence, it is true, was merely circumstantial, but the marked coincidence in the behaviour of the affections among the cows and among the consumers respectively placed it beyond reasonable doubt that the one was responsible for the other.

We have now before us the report of Dr. KLEIN upon his own share of the investigation which was undertaken by the Medical Department of the Local Government Board, and again we find very strong corroboration of the conclusions at which Mr. POWER had arrived. It was Dr. KLEIN'S duty to consider the subject from a different point of view than that taken by Mr. POWER, and to test by such experiment as was possible the question whether the cow malady was a communicable disease, and whether in its results upon this animal there was indication of its being concerned in the production of scarlatina in man. The subject was not altogether a new one. In the year 1882 scarlet fever had been distributed with milk in the parishes of St. Giles and St. Pancras, and this milk had been received from a country farm where the condition of one of the cows was noted by Mr. POWER, who conducted this inquiry. This cow had recently come into milk, and was evidently not in good health, as was shown by the fact that its hair had been shed in patches. In the absence of other evidence as to how the milk received infection, it was felt desirable that experiments should be made to show how far it was possible to inoculate cows with human scarlatina. It is unnecessary to refer more in detail to the lessons which were then learnt than to state, in the words of Dr. BUCHANAN, that it was found that a definite disease was producible in the cow by means of scarlatina infection, and that most readily when the cow was in milk.

A noticeable condition of the cows of the Hendon farm was the shedding in patches of their hair, resembling in this respect the cow which had attracted Mr. POWER'S attention in the previous investigation; but at Hendon were the further symptoms of vesication and ulceration of the teats and udder, supplying Dr. KLEIN with material for the prosecution of further inquiry. This virus was used for the inoculation of certain calves, with a result which clearly demon-

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... the affection was transmissible from one ... another, producing effects which resembled the ... in the Hendon cows. Further, the virus was ... nutritive gelatine and other suitable materials, ... micrococcus which grew freely in these ... in a manner resembling that of the streptococcus ... mouth disease but differing from this organism, ... ted in milk, in the fact that the latter does not ... uid character of the milk, whereas the former ... did. The inoculation of two calves by a third ... in agar-agar mixture of the streptococcus of the ... ng the Hendon cows led to the most instructive ... animal was found dead twenty-seven days after ... An examination of its body gave evidence of ... rbid changes in the peritoneum and internal ... kidneys were large and much congested, the liver ... gested, and also the organs of the throat. The ... was killed some nine days later, and very similar ... were found to exist. There was, moreover, a ... the skin and in the mouth which was similar ... nd in one of the Hendon cows which was ... of observation and in one other calf which ... culated. Writing of the microscopical appear- ... KLEIN notes the close resemblance of the minute ... characteristics of the eruption to those of ... rlatina, and particularly the disease in the ... in the kidney. This latter organ, he states, ... ds so closely with the kidney of an acute ... man scarlatina, that sections made of the one ... ed with those of the other show no difference ...

... moreover, found some reason for believing ... milk within the udder of a cow suffering ... disease did not contain the micro-organism, ... became infected at the moment of milking ... lcers on the teats; and he points out that ... would find in the milk a good medium in ... ltiply, and that the milk would then practically ... to an artificial culture of the streptococcus, such ... d capable of setting up a general disease when ... subcutaneously into calves. The feeding of ... h food containing this virus has not yet been ... and it is obvious therefore that the experiments ... complete, and even those which have been per- ... ve repetition. But enough has already been ... firm the opinion that Mr. Power's labours have ... face to face with the origin of scarlet fever in ... at the prevention of this fatal disease is rendered ... ssibility. It is therefore with much satisfaction ... that during the forthcoming year part of the ... ntific purpose will be devoted to further study ... which exist between human scarlatina and ... ...

... of these reports will doubtless give much ... investigation of animal diseases, and the ... Board have conferred a service both on the ... in the milk-consumer in making them ... A short account of a paper on the ... read, by Dr. CAMERON, the medical ... is appended to the reports of ... and the whole is prefaced by some remarks by Dr. BUCHANAN, which will add much to the usefulness of the publication.

Two excellent articles appear this month in the *Contemporary* and *Macmillan* respectively, one on food, the other on feeding. Both are written by laymen, and both exhibit a considerable acquaintance with the subject on which they write. The article in the *Contemporary* deals with the all-important question of a cheap and wholesome meat supply for the people. It is written by the Rev. FREEMAN WILLS, a clergyman, who, finding meat a luxury unknown to many of his parishioners owing to the prohibitive prices charged by the butchers, felt constrained to do something to interfere with this state of semi-starvation. So in order that "the poor seamstress, or the old body supported by the slender wages of her factory-boy son, might have a good meat dinner on Sunday," he determined to become a purveyor of meat in his Finsbury parish. His first butcher's shop was a schoolroom, and a few frozen sheep formed the stock. These had to be procured at least two days beforehand so as to become unthawed and fit for cooking by Sunday. But the chief objection to this arrangement was the difficulty of disposing of the remnants that remained over when the best parts had been disposed of. It therefore shortly became necessary to open a regular butcher's shop, and at this shop a trade of over fifty pounds a week was soon carried on. So successful did the experiment prove that two other shops were quickly added, and recently a fourth and fifth. We congratulate Mr. WILLS on having inaugurated and carried to a point of complete success a most useful and beneficial work—useful and beneficial not only in social, but also in its moral aspect. Much of the craving for alcoholic drinks amongst our lower classes arises from the want of a sufficiently stimulating food for body and brain; but "meat is dear whilst gin is cheap"; and, as Mr. WILLS remarks, the unsatisfied system craves for something comforting; "so dear butchers make full gin-shops, and the butchers help the publicans." Now that the way has been shown, is it too much to expect that the clergy throughout England will take steps to provide their poorer parishioners with wholesome meat at little above cost price. They may shrink from the encounter with tradesmen, or perhaps think it derogatory to the dignity of their cloth, but they must remember it is part of their pastoral duty.

The article in *Macmillan* is of a different character, though on an allied subject, and the "Philosophy of Diet" is treated by "A Layman" with a pleasant lightness that those who write from a somewhat superficial knowledge often impart to the gravest and driest subjects. Many of his remarks, however, are characterised by a caustic shrewdness well worthy the attention of the profession. With regard to the question he raises respecting the care our ancestors took of their digestion, he thinks that at one time they did so, though at a later period they were sadly reckless in such matters. But this can hardly be attributed to neglect of professional teaching, for if the seventeenth and eighteenth centuries had such prophets as CONARO and CHEYNE, ABERNETHY and JEPHSON preached strenuously against the dietetic errors prevalent at the commencement of the current century. The writer is hard on those "folk who will not so much as take a pill at their own venture, and never

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fulfil an invitation to dinner without a visit to the doctor next morning," and hints that the answer given by his physician to Falstaff through the page would be hardly wise to-day, lest we should hurt the susceptibilities of our patients. But the conditions differ. Falstaff's physician could go no further than inspection, and consequently no further than a declaration that, notwithstanding the water seemed a good water, other diseases might be present that in no way gave indication through the urine. Now, had Falstaff come under the hand of a modern uroscopist, the cause of his disorder would have at once been shown by chemical means, and the diagnosis chronic Bright's disease arrived at, and the old knight's life prolonged by submitting to the dietetic restrictions that would have been imposed. For our own part, when any person finds that "he cannot fulfil an invitation to dinner" without a feeling of discomfort the next morning, we should certainly not drive him from the door as "an inquisitive fool"; not because we "cannot afford to," but simply because we know that simple dyspepsia is often the earliest symptom of chronic disease of the kidneys or of that insidious and now common disorder, diabetes. And although the water to appearance may seem to be a good water, still the application of the heat or copper test may reveal hitherto unsuspected albumen or sugar. Again, too, with regard to the writer's belief that in matters of diet, exercise, and habit a man must be his best physician. We should like to know how and in what manner this experience is to be gained. Take, for instance, a very common example. A medical man tells a patient to live chiefly on milk: in nine cases out of ten the patient will reply, "Oh, but milk always disagrees with me." On inquiry we find that the experience has been founded, perhaps, upon one attempt; a pint of milk may have been taken when thirsty, and, on a stomach unaccustomed to it, have given rise to acidity, griping, and flatulence. But let us instruct the patient to begin with skimmed milk, till the stomach can deal with unskimmed, to add a few drops of lime-water to neutralise any acid that may be developed, and only to take small quantities at a time; we soon find the personal experience reversed, and that milk agrees with nine-tenths and disagrees, perhaps, with only one-tenth, if even with that proportion. Lastly, as to the great panacea—the simple rule of moderation. Who shall define its limits? For whilst some may thrive like CORNARO on twelve ounces of solid food, there are others, as PROUT pointed out many years ago who can only attain to moderate longevity by living well, and who, to maintain even an ordinary level of health, have to indulge in large and frequent meals.

OUR own correspondence columns and those of our contemporaries show a considerable amount of dissatisfaction with the readiness of some consultants to receive regular visits from patients who have been referred to them by their usual medical attendants—in other words, to become their ordinary instead of their extraordinary advisers. Mr. KESTEVEN'S letter, which we publish to-day, is in point. To such length has this dissatisfaction grown in some minds, that it has actually been proposed to create "an Association" for all who share it and wish to promote it. This is an age of associations, and one more or less would not make much difference; but we scarcely think that the evil complained of needs an association for its cure, and we have some doubt whether an Association would be the best means of bringing about a better state of things. Let us clearly understand the thing complained of. It is that consulting physicians and surgeons frequently receive patients and treat them as general practitioners. Sometimes small fees are taken. No reference is made to the regular adviser; his co-operation is not sought; he is not informed of the transaction, which, so far from being an individual one, becomes a habit, so that, in respect of the patient, he ceases to be the patient of the general practitioner and becomes that of the consultant. It is said that young consultants are most apt to err in this matter; but they are by no means the only delinquents, and it is alleged, apparently on good grounds, that men of world-wide reputation are not above absorbing a patient altogether and withdrawing him from the care of his family attendant. To state such a case is to condemn the practice complained of. We are not unmindful of the exigencies of young consultants; they never were more numerous, and they certainly never were more meritorious than they are at the present day. London alone would supply young consultants below forty years of age by the dozen, who could give a first-rate opinion or do a capital operation in a first-rate way in almost any case of medicine, surgery, or midwifery. They must live, and they must keep up good establishments; and, as a rule they are as honourable as they are efficient. We are not prepared to say that they should never see a case independently. Such an absolute dictum would scarcely be found in PERCIVAL, whose chapter "on the conduct of Physicians towards Apothecaries" may always be read with advantage and pleasure. *A fortiori* such an iron rule could not be laid down now; but we are, nevertheless, prepared to say that the young consultants who are most punctilious in cultivating true *consultations*—i.e., the real comparison of notes between the general practitioner on the one hand and the consultant on the other, and who are most anxious to make the general practitioner a real sharer in the treatment and in the credit of the case—will, in the long run best promote not only his own interests, but those of his patients and of the public. We shall be excused for reproducing here a few sentences from PERCIVAL, only making this important observation, that the difference in function and in education between the apothecary of his day and the general practitioner of the present all goes to emphasise the duty which this classical author enjoins on physicians in respect of the ordinary advisers of those who consult them:—

"The apothecary is in almost every instance the precursor of the physician, and being acquainted with the rise and progress of the disease, with the hereditary constitution, habits, and disposition of the patient, he may furnish very important information. It is in general therefore expedient, and when health or life are at stake expediency becomes a moral duty—to confer with the apothecary before any decisive plan of treatment is adopted, to hear an account of his whole experience concerning the *jurentia* and *lædenti* in the case. Nor should the future attendance of the apothecary be superseded by the physician; for if he be a man of honour, judgment, and propriety of behaviour, he will be a most valuable auxiliary through the whole course of the disorder, by his attention to varying symptoms,

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the enforcement of medical directions, by obviating misapprehension in the patient or his family, by strengthening the authority of the physician, and by being at all times an easy and friendly medium of communication."

Between such physicians and such general practitioners there can be no serious misunderstanding. The limited means of the patient may not always admit of a joint attendance. The patient has undoubtedly the right, too, to take an independent opinion. But such instances will not interfere with the perfect trust which honourable men in different lines of practice place in each other. It must be allowed that there are few absolutely pure consultants in any community—that is to say, few practitioners—who absolutely refuse to prescribe for patients or to give a prescription or opinion without the presence of the regular practitioner. It must also be allowed that in the other direction the line of demarcation between consultants and general practitioners is not sharply defined, and that many general practitioners do a considerable consulting practice. All this does not alter the obligation of the most scrupulous care resting on the physician to uphold the reputation of his professional brother, and, so far as he possibly can, to insist on communicating and co-operating with him in every case, especially in those cases which the said brother has referred to him. The physician or surgeon who can appropriate such cases, or lightly express or listen to any disparagement of the regular adviser, must be indeed defective in his moral constitution. No Association is needed for his condemnation; the unanimous voice of an honourable and united profession pronounces it.

Annotations.

"Ne quid nimis."

HEALTH OF THE TROOPS IN EGYPT.

WHILE we are disposed to exercise considerable reserve in accepting the sensational statements which have appeared in some of the daily papers respecting the excessive rates of sickness and death among the troops serving in Egypt, we have reason to believe that in the frontier field force they have been abnormally high. There is no doubt that enteric fever has prevailed to a very considerable extent, and in a fatal form, among the men on the frontier, and especially at Assouan. The chief factors in this have been the high temperature, the absence of active employment and the consequent continued occupation of an encampment on the same ground, the age of the men composing the force, and probably the emanations from the alluvial soil on the banks of the Nile. We are disposed to think that an undue share of the blame for this unhealthiness has fallen to Assouan, from various circumstances. When the reduction of the force was decided upon the troops from the various outposts were concentrated there, bringing their sick with them. When they were moved onwards, the sick—at least the severe cases—were left behind, and those which terminated fatally threw upon the reduced strength of the Assouan garrison. The return also, extending over a limited period only, of such a small force, is likely to give rise to an erroneous impression, owing to the fluctuations which occur under such circumstances. That a heavy death-rate, however, has prevailed since the commencement of the hot season is too true, and the question may be fairly raised, Has it been unavoidable? Occupation of the frontier by Europeans was a necessity; it is difficult to see how this unfortunate result could have been altogether prevented. We believe that every reasonable precaution has been taken in the sheltering, clothing, and feeding of the men. The only questions seem to be whether a more healthy place than Assouan could not have been found which would have equally answered the military requirements? and whether every necessary precaution was taken to preserve the men in health when obliged to occupy this unhealthy spot? We have reason to believe that, so far as the medical department has been concerned, this was done; that Surgeon-General Nial has exercised a careful and judicious superintendence over the sanitary arrangements, and that the Director-General has spared no pains to have the recommendations which were brought under his notice efficiently carried out. We have also reason to believe that the recommendation to reduce the number of Europeans and replace them so far as practicable by native troops, when these could be relied upon, was pressed upon the attention of the military authorities on the spot, by whom alone the extent to which such a measure was possible could be determined. The removal to Cyprus of men who have suffered from fever, and who were unable to regain their strength in the place where they became affected, has been sanctioned and carried out freely. We trust that the changes which have been made with this view, and the withdrawal of the men, so far as practicable, from the unhealthy localities, may be found effectual in checking the sickness and mortality, and that it may be possible to replace them by trustworthy Egyptian soldiers, who may probably be better able to resist the local causes of disease.

THIRST AND DRINKING IN HOT WEATHER.

So far as the mere sensation of thirst is concerned, there can be no question that it is a mistake to drink too much or too frequently in hot weather; the fluid taken in is very rapidly thrown out again through the skin in the form of perspiration, and the outflow being promoted by this determination toward the surface, a new and increasing demand for fluid follows rapidly on the successive acts of drinking and perspiring, with the result that "thirst" is made worse by giving way to it. Meanwhile, it must not be forgotten that thirst is Nature's call for fluid to replace that lost by cutaneous exudation in warm weather; and if the demand be not met, what may be regarded as the residual fluid of the tissues must be absorbed or the blood will become unduly concentrated. Now, this absorption of the residual fluid of the tissues has the obvious drawback of taking into the blood in a concentrated instead of a dilute form the products of disassimilation, together with the absorption of some excrementitious matters which would probably not be taken up at all if the blood were not abnormally dense. It is necessary to recognise that harm may be done by a process of self-poisoning with excrementitious matter, retained, or taken up, in default of an adequate supply of fluid in the form of drink to dilute and wash it away. There is, moreover, another disadvantage of the non-drinking method of suppressing thirst. It is especially needful for the preservation of health that the metabolism on which normal nutrition depends should be rapid and free in hot weather. If the organic temperature is, or more accurately if the several and complementary temperatures of the organism are, to be maintained at the health point, tissue-change must be favoured, and such modifications of body-heat as may be effected by flushing and evaporation must be facilitated. In short, if we refuse to drink when we are thirsty simply because we shall thirst again, we are imposing a restraint on the activities by which Nature is endeavouring to preserve the health. We are doing precisely what the irrational homœopaths do, or did, when refusing fluid to cholera patients or limiting the drink of those who

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suffer from fever. Of course, like produces like in the matter of thirst from any cause, but the like produced is natural; and it is, or rather was, strange to note that in one of the earliest notorious cases of malpractice by persons calling themselves homœopaths in England the dogma "Similia similibus curantur" should be flung to the winds, and drink refused to a patient dying of liquid diarrhœa, because, forsooth, the taking of fluids increased the diarrhœa and made him more thirsty! We venture to hope that those who are zealously urging the policy of refusing to quench their thirst in this hot weather because "drinking makes people more thirsty" will reconsider their policy from the physiological standpoint, and that they will recognise that to thirst and drink, and perspire and drink again, are the natural steps in a process by which Nature strives to maintain the integrity of those organic changes which the external heat has a tendency to impede. The natural and true policy is to supply an adequate quantity of fluid without excess. Therefore do not abstain from drinking, but drink slowly, so as to allow time for the voice of Nature to cry "Enough." There is no drink so good as *pure* water. For the sake of flavour, and because the vegetable acids are useful, a dash of lemon-juice may be added with advantage. The skin should be kept fairly cool, so that a sufficient quantity of the fluid taken may pass off by the kidney.

THE WIRE SUTURE FOR FRACTURE OF THE PATELLA.

DR. DENNIS, of New York, has published in the *New York Medical Journal* a very vigorous defence of Sir Joseph Lister's practice of wiring together the fragments in cases of transverse fracture of the patella. He points out, by way of introduction, that the birthplace of this operation was America; the earliest recorded case was operated upon by Rhea Barton in 1834; he was followed in 1838 by McClellan; and then, many years later, Cooper, Logan, and Green adopted the method. Dr. Dennis urges that the shortness of the period of treatment, measured by weeks only, the great superiority of result—bony union and a useful joint,—and the proved safety of the operation, are three unanswerable claims in support of this operation. Like all others who have practised this procedure, he lays great stress upon the precision with which all the details of aseptic surgery are carried out, and he urges that only those who are well versed in these details should attempt the operation. The mortality in the last sixty-nine cases collected by him has been at the rate of only 1·4 per cent., and he believes that even this may be diminished. A very useful table of 187 cases is appended to the paper, and a short account is given of many cases under Dr. Dennis's own care. The paper altogether is a valuable contribution to a surgical discussion which is not yet closed.

EXTENSION OF THE CHOLERA PREVALENCE.

LAST week we expressed a fear that with the month of July a change for the worse might be anticipated as regards cholera in Italy. The extension of the disease which we ventured to foretell has already come about, and it is to be feared that it may be but a first step in the direction of a still wider diffusion of the infection. Whilst in Brindisi itself the progress of the disease is steadily maintained, the neighbouring province of Lecce and the surroundings of Brindisi are the subject of a wide diffusion. On July 4th we learnt that in Latiano and Francavilla, with a total population of some 13,000, there had then been 214 cases of cholera with 59 deaths, and on the 6th there were 26 deaths at Latiano, 34 at Francavilla, and 4 at San Vito; and in the province of Lecce the total deaths recorded between June 30th and July 3rd amounted to 290. And whilst this extension has been going on in the south of Italy, the disease still causes a daily fatality in the north. Venice remains infected, and in the neighbouring province of Ferrara, where Codigovo was first attacked, a continuance of the disease is still recorded. And not only so, but Fiume in Austria has received the infection, a daily fatality taking place there. With a continuance of the hot weather this state of affairs can hardly be expected even to remain at a standstill, and hence a further diffusion may at any time be expected.

CONGRESS OF NATURALISTS IN BERLIN.

THIS year's assembly of naturalists and physicians in Berlin (writes our Berlin correspondent) promises to be on a grand scale. It has been decided, I learn, through the initiation of the German Colonial Association, to form a special section for Medical Geography, Climatology, and Hygiene, in which observations and personal experiences made in foreign countries, especially in the tropics, are to be discussed. The German Colonial Association has undertaken to make the necessary preparatory steps. Geheimer Medicinalrath Hirsch is the chairman for the formation of such a section, the co-operation being secured of competent men, who in the general interest would be willing to assist personally at these discussions. The following are the subjects which will occupy the attention of the section: 1. Acclimatisation in general. (*a*) The fitness for acclimatisation of special races; (*b*) Hygiene of the white races in the tropics. 2. Education; capability of training the natives to work. 3. Sanitary and educational statistics in respect of German colonies and dominions under German protection. Professor Waldeyer, chief of the Anatomical Section, has proposed the appointment of a special session for discussing the subject of Gastrula of the Vertebrata, and offers to introduce the debate by a short report on the results of discoveries up to the present time. Professor Hartmann will conduct the investigation of the anatomico-zootomical collections, for which the building of the old Exchange has been chosen.

ERYSIPELAS IN HELSINGFORS.

DR. LINDEN of Helsingfors, who has had opportunities for the observation of a large number (785) of cases of erysipelas in both hospital and private practice during the last few years, has written a paper summarising the results of his experience in Langenbeck's *Archiv*. The disease is, he says, certainly of an infectious character, and therefore it is necessary to isolate erysipelatous patients in a surgical hospital. The duration and severity of the attacks are always greater in buildings containing several such cases. No connexion can be traced between the number of surgical operations and the frequency of erysipelas; and it does not appear that the number of patients in a hospital exerts any influence over the disease. Neither is any effect produced by different seasons of the year, the atmospheric pressure, the quantity of dust in the air, the level of the ground-water, or the strength of the wind. Sudden changes, however, of pressure or temperature seem to favour the development of erysipelas. The development of the traumatic form depends less on the severity of an operation than on the contact of pus and other septic matter with the wound. With regard to the duration of the disease, Dr. Linden's observations correspond closely with those previously published by Rizmann—the mean number of days being 7 when the arm is first attacked, 7·3 when the disease begins in the head, 8·3 when it develops on the legs, and 9·5 when the trunk is first attacked. The duration is unfavourably influenced by the development of the disease after an

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in weakly patients. Cases of traumatic origin [illegible] than those which arise idiopathically. Cicatricial [illegible] more susceptible to erysipelas than healthy skin; [illegible] may be said of portions of the surface which are [illegible] to any mechanical pressure. Relapses occurring [illegible] two or three months of the original attack usually run a more favourable course than the original attack, but those occurring after seven or eight months' interval are unaffected by the first attack. With regard to treatment, Dr. Linden obtained the most satisfactory results from injections of alcohol. He did not, however, find that Hueter's plan of injecting an aqueous solution containing only from 2 to 5 per cent. of alcohol was of much use, but employed equal parts of alcohol and water, injecting one to three syringefuls in the same way as carbolic acid is employed hypodermically. As a prophylactic against erysipelas he considers Lister's dressings as of great value.

THE PRINCESS LOUISE AT UNIVERSITY COLLEGE.

[illegible] hospitals of London are neglected by the great mass of the inhabitants, it is certainly not the fault of the Royal family, the members of which are ever setting a good example by taking a lively personal interest in the welfare of our great medical charities. The kindly visit of the Princess Louise and the Marquis of Lorne to University College on the 2nd inst. will long be gratefully remembered, not only by those who are personally interested in the hospital, but by the inhabitants of the district. Her Royal Highness arrived at the hospital at 11.30, and was received by Mr. Prevost, the treasurer, Dr. Wilson Fox, Mr. Berkeley Hill, and other members of the medical staff, and proceeded to make the tour of the building, visiting all the principal wards, evincing a kindly sympathy in the sufferings of the inmates, and graciously permitting one of the wards to be named the "Princess Louise." The visit to the hospital finished, her Royal Highness crossed over to the College for the purpose of opening a Bazaar held in the grounds for the benefit of the hospital. Here the Princess was received by the Earl of Kimberley, president of the College; Mr. Cohen, the chairman of the Bazaar Committee; Sir Julian Goldsmid; the Dean of the Faculty of Medicine, and other officials; and after a short opening ceremony her Royal Highness proceeded to make the round of the various stalls, and made purchases at most of them. The Princess expressed her gratification at the picturesque and novel appearance presented by the bazaar; and well she might, for the grounds of University College are singularly well fitted for such a purpose, and with the fine portico for an orchestra, and the stalls arranged in a semicircle in front of it, the general appearance was one not soon to be forgotten. It seems impossible to get money for hospitals without some so-called festival, and, in selecting the form of festival to be held, it certainly seems advisable to choose one which is likely to excite a widespread and, if possible, also a local feeling for the charity. Such feeling sadly needs rousing in regard to the London hospitals, and in arranging this bazaar the Committee have, we are told, received much gratifying evidence of kindly sentiment towards the charity. It is barely two months since the idea of a bazaar was entertained, but, nevertheless, the influx of articles for sale has been beyond all expectations, and it is pleasant to be able to state that presents have been sent from all parts of the country, and very largely from patients and their friends, who have not forgotten the benefits they have received. Local feeling has also been roused, and many of the merchants and tradesmen of the district manifested great willingness to co-operate. On the second day the hospital was thrown open to those who wished to visit it. Large numbers availed themselves of this opportunity, and it is to be hoped that the actual sight of the good work the hospital is doing will convince some, at least, that it is a sacred duty to support such institutions.

THE HEAT.

It is not really very hot, though we feel it to be so. The truth is that although the natives of, and habitual residents in, this variable climate of ours ought to be especially responsive to changes of external temperature, and to possess the faculty of quickly adapting themselves to its requirements, we do not as a rule enjoy this excellent property of the organism in any remarkable degree. The special disability under which we labour relates to radiation. We are unable to get rid of heat from the skin by simple dispersion. The black man excels us in this respect. His dark skin glows, as it were, with the heat he throws off. A white man, and an Englishman particularly, resorts to the somewhat clumsy physical expedient of cooling himself by evaporation. He perspires heavily, and as the vapour leaves his body its temperature is reduced, or at least kept from rising. The black-skinned man is less dependent on perspiration, and can cover his body with oil, so that cutaneous exhalation is actually impeded, without suffering, simply because the colour of his surface is one which, like the willow pattern plate in the familiar experiment, gives off heat. Again and again the fact we are stating has been questioned; but recently, as scientists are aware, it has been demonstrated. One reason why English people are so ill-prepared to endure either extreme of temperature, although they are accustomed to great and rapid changes, is to be found in the fact that they rely on clothes for heat conservation to an extent and with a constancy in excess of the habit of almost any other people. We "wrap up" and we throw off our clothing more artificially than other folks. The way to develop a faculty of bearing extremes of temperature is to habituate the body to make its own temperature. Those who do not clothe themselves heavily in winter seldom find it necessary to make great changes in their clothing in order to bear the heat of summer.

THE DANGERS OF DUST.

Darkness, damp, and dust are potent agencies of disease. Everyone recognises this; but how many fail to adopt its precepts! If there be sermons in stones, surely the summer dust and its dangers would prove a fruitful subject for medical discourse. There is as great a difference between London and country dust as there is between the corresponding muds. Pulverised matter would be harmless enough if it were deprived of its physical property of ready diffusion. The atmosphere is laden and swarms with particulate matter of highly complex nature. Its chief peril to living beings resides in the organic constituents; largely this organic material consists of minute forms of life in a state of latency, only waiting for a spell of heat and moisture and a favourable amount of light, or it may be darkness, to awaken it into activity. The habits of individuals in every class of society, including the "masses," are not calculated to diminish but rather to augment the amount of organic matter in our atmosphere. Mucus, saliva, and humour popularly known as "matter," must be discharged from the mouth and nostrils to the extent of many gallons daily, and not a little of this comes from infective sources; whilst we venture to think that the bulk of it mingles with the dust of our streets and courts. If, as seems not unlikely, consumption is largely caused by "germs," then a very ready theory may be advocated concerning the mode in which the contagium is caught. Who

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can estimate the amount of mischief that the shaking of mats may have caused? How many young girls early in the morning on their way to business have, so to speak, received their death-blow whilst inspiring, all unconscious of harm, some of the clouds of dust that every morning greet them? Who can tell? The abatement of this danger and nuisance is a difficulty that almost seems insurmountable. Much may be done by personal habits of prevention.

DR. FLINT'S ADDRESS IN MEDICINE.

ONE of the most remarkable characteristics of the late Dr. Austin Flint was the promptness with which he set about any work he undertook. Accordingly, when he accepted the invitation to deliver the Address in Medicine at the forthcoming meeting of the British Medical Association he prepared the address at once, and it was found all ready for delivery among his papers. The address is published by D. Appleton and Co., having been passed through the press by Dr. Flint's son; accompanying it is a beautiful engraving of the distinguished physician, which is so true to life that all who were privileged with the friendship of Dr. Flint will greatly prize this memorial of him. The address is an attempt to forecast the advances of medicine in the next fifty years. Dr. Flint suggested that organic chemistry will reveal much that is now hidden, and that the application of the telephone and other recently invented electrical machines to medical practice will make our knowledge of disease as portrayed by sound more precise. Advances in bacteriology and in our knowledge of the causes of disease, with a juster view of the value of some of our therapeutic agents, are other gains which seemed to Dr. Flint to be close at hand. He predicted also changes in the style of medical literature—more subdivision and more concentration; changes in medical teaching—less didactic instruction and more demonstration; changes in medical practice—more specialism, which will need to be carefully guarded against the evils attending it. The address is full of interest; great is our regret that its accomplished author was not spared to deliver it, but we are glad that we are permitted to read it. As a literary production it is a worthy close to the many valuable contributions to the literature of medicine by that great and good physician.

POISONING BY PENNY ICES.

ON July 5th an inquest was held at St. Thomas's Hospital on the body of a boy aged eleven who had died at his own home with symptoms of irritant poisoning, alleged to be due to the eating of penny ice creams of which he had partaken three days before. There had been no analysis of the contents of the stomach or intestine, but from the fact that his symptoms commenced soon after he had partaken of ice-cream, or, as it is called in the district, "lemon-jack," and that others who had also eaten of it suffered from similar symptoms, it is fair to presume that the ice-cream was the cause of his death. The verdict returned by the jury was "Death from English cholera," brought on by eating some deleterious matter. In the account of the inquest it is mentioned that there were several persons present whose children were suffering from acute illness after eating ice-cream. This is certainly a case for the investigation of the Public Prosecutor. We know that there has been a large number (twenty to thirty) of patients treated at St. Thomas's Hospital during the last fortnight, all of whom obtained their ices from a particular stall in Lambeth, nearly all of whom presented evidences of irritant poisoning, and at least three were so ill that it was necessary to admit them. Surely this is a case in which the inquest ought to have been further adjourned for the analysis of the contents of the stomach (though at that distance of time the poison would have been probably eliminated), and the examination of others who had also suffered. In THE LANCET for last year, vol. i., p. 1094, we drew attention to a similar outbreak in the same neighbourhood, and due to the same cause, and we repeated the suggestion which we first made as the result of THE LANCET Sanitary Commission in 1879 (see vol. ii., p. 590): that there should be supervision by the local sanitary authorities of the vendors of the creams, and that from time to time chemical examination should be made of samples of what prove occasionally to be very deleterious compounds. We have no analysis of the vomited matters or of the ices, but from the similarity of the symptoms with those exhibited by the patients last year, it is probable that the poison was carbolic acid, which was found in sufficient quantity in more than one case to fully account for the symptoms. The way in which this poison could have been introduced was explained by the fact that it is used in the earlier stages of the manufacture of a preservative material employed by the men to prevent decomposition of the ingredients of the various ices. Either the chemical processes had not been carried out to their full extent, and the solution used contained much free acid, or the acid itself had been employed in mistake. Some weeks ago two children died at Worthing after only a few hours of severe vomiting and purging. A post-mortem examination revealed no sufficient cause of death, and the medical men, it is said, were baffled in trying to assign a name to the disease. No doubt these were cases similar to the others, but even more comparable to a rapid choleraic attack, in which a fatal collapse has forestalled the earliest signs of enteric congestion.

THE DANUBE AND ENTERIC FEVER.

ENTERIC FEVER has recently attacked 183 persons belonging to the garrison of Klosterneuberg, above Vienna, no less than eight officers having been amongst the number. The cause of this alarming state of things appears to be that the sewage of the town, which used to be conveyed direct to the Danube, has of late, in consequence of the new regulations having for their object the purification of the river, been discharged into a stagnant arm of the Danube upon which the town stands; this arm has thus been converted into a sort of open cesspool. The hospital authorities consider the drinking-water is affected, and so they order from 600 to 800 bottles of soda-water for the patients daily. The garrison is being supplied with drinking-water in casks from wells at a distance. The men are, however, to be immediately ordered away to less pestilential localities.

PREHISTORIC DENTISTRY.

DR. MARTER, of Rome, has for some time past been devoting considerable time to examining the skulls in the various museums in Italy, and in Etruscan and Roman tombs; and he has given an account of his investigations in the *Independent Practitioner*. In the ruins of one of the Etruscan tombs, about the date 500 B.C., he found a partial denture: It was an arrangement for holding in position three upper artificial teeth by banding them to the adjoining natural teeth. These teeth were carved out of some large animal's tooth. Another denture found in an old Roman tomb consists of two natural teeth fastened by means of soft gold bands to the contiguous teeth. The most recently opened and oldest Etruscan tomb yet discovered in Italy was lately excavated at Capadimonti; this tomb belongs to the sixth century B.C., and amongst several articles of jewellery a denture, very similar to those above described, was found. Dr. Marter

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...as ...o discover any stopped teeth, although many ... ...s and other dental diseases presented them... ...ve certain that dentistry must have been exten... ...ised in the early history of the world, and that ... have been used largely; otherwise the early Greek ...man legislators would not have mentioned the ... ...e celebrated laws of the twelve tables. Law 5th, ...rorum, is as follows:—"Quoi auro dentes vincti ... ...n ollo sepelire, se frande esto."

...RADUATE COURSES IN SCOTLAND.

THE ...estion has frequently been made that, following the e... ...e of our American cousins, the institution of a post-... ...te course in Great Britain would be both accept... ...able ... great utility. It has been left to Scotland to take ... ...st steps towards giving effect to the suggestion; and a ...rence of representatives of all the medical insti... ...tutions ... Edinburgh was recently held to consider the subject. ...he result of this meeting was that most of those pres... ...ressed their willingness to join in and to further such ..., provided that there really appeared to be a gener... ...de on the part of practitioners of medicine that such ...rse should be inaugurated. Further, it was ... ...a small committee, consisting of the Presidents of th... ...ges of Physicians and Surgeons, the Dean of the F... ...f Medicine in the University, with Professor Chie... ...Dr. Muirhead as secretaries, to endeavour to ascer... ... views of practitioners on the subject, and to make ...tments for a tentative course this autumn, to be he... ...ring the last week of September and the first fortn... ...f October. At Glasgow, too, on the 30th ult., a meeti... ...as held to discuss the question; and, after full consid... ...n of it in all its bearings, it was resolved to le... ...e matter to individual teachers for the present year; ... a committee was appointed to inquire fully into t... ...posal, to communicate with the local hospital auth... ... and to report the result of their investigations to a s... ...nt meeting. Gentlemen who feel disposed to join t... ...inburgh course are requested to communicate with ... ...of the secretaries before the end of the present mont... ...der that definite arrangements may be made. We s... ...tch with interest this new departure on the part ... Scottish *confrères*.

...AUTIONS AGAINST SUNSTROKE.

THE ...than genial warmth of the past fortnight has happ... ... unattended by that train of accidents from ... ...h which we have been in other seasons but too f... We must not, however, on that account con... ...clude ...asures of prevention are not yet necessary. A temp... ...of 80° or rather more in the shade is no con... ...sure of the solar power, and will more than justif... ...easures. The full meaning of sunstroke is not i... ... in that term. Heatstroke or insolation is a ...nd implies a further peril besides the down... ...an unclouded sun. The concentrated heat of a ... ...room, as well as the exposure incurred by ... labourers in the open field, may lead to most ...quences. The exhaustion of work also, ... clothing is heavy, is a predisposing con... should not be lost sight of. Ventilation, ...tion, light clothing, and as far as possible ... pressure of work, are strongly indicated ... conditions under which we are now living, ... venture to impress their importance ... and employed. Beer and other stimu... ...ther than helpful, and the substitution ... cooling drinks for those beverages is a ... ...sanitary advance in public taste. Pro... tection of the head is a subject which is now fairly well understood. It should not be forgotten that the neck as well as the cranium requires to be covered. Postmen seem to have some latitude allowed them as to summer head-gear. Soldiers have the white helmet. The police alone are left out of consideration. Will not Sir Charles Warren, who has felt the tropical sun, consider the need of the force now under his command, and advise, if not a lighter form of helmet, the addition of a scarf-puggaree to that now worn?

TRAUMATIC TETANUS TREATED BY REST.

DR. DE RENZI states, in the *Rivista Clinica*, that by treating patients with traumatic tetanus by means of perfect rest he has been able to restore four out of five to health; whereas when treated in other ways these patients usually die in two or three days. He places the case in a special room where absolute silence reigns. Even in the passages leading to it and in the neighbouring wards care is taken to lay down carpets so that no sound shall penetrate the tetanus ward. The door of the latter is of course well oiled, so as to open and shut noiselessly, and the patient's ears are stuffed with cotton-wool, he himself being strictly enjoined not to make the slightest noise. He must, of course, be fed. This has generally been considered impossible, the teeth being clenched and the spasmodic contraction being increased by attempts to masticate. The obstacle may, however, be easily overcome by parting the jaws and introducing liquid food through a curved sound; swallowing is accomplished without difficulty. This method of treating traumatic tetanus has been tried with success by several Italian practitioners—Drs. Pisani, Maragliano, Ria, &c. The only disadvantage is that the affection is sometimes prolonged for two months. It seems to increase in duration as it diminishes in force.

THE NEW MEDICAL ACT AND MEDICAL REGISTRATION.

WE are requested by the Registrar of the General Medical Council to say that, in view of the approaching election of direct representatives to the Council, he is desirous of bringing before the notice of the profession the great importance of due medical registration. According to the Medical Act, 1886, voting-papers will only be sent to those practitioners whose names are on the Medical Register, and they will be forwarded only to the registered addresses. Neglect, therefore, in at once supplying the Registrar with a correct address will probably involve the loss of the practitioner's vote.

"THE RELATION OF INSANITY TO SIN."

IT would have been more accurate to specify crime instead of speaking vaguely of sin. The *Saturday Review*, in an article on this topic, restates and professes to find approximate satisfaction in the familiar legal questions about insanity: "Did he know that what he was doing was wrong? If he did, could he help doing it?" We are unfortunately compelled by the facts of the case to join issue, and contend that a man may know he is doing wrong, and do it without obligation or impulse of any sort, and yet be insane. There is, unquestionably such a thing as "moral insanity"—that is, insanity of the conscience of morality; and this particular form of mental disease—for such it is—cannot unhappily be very readily or certainly distinguished from that depravity of the moral sense which characterises alike low developments, and what Herbert Spencer has designated, and Hughlings-Jackson has demonstrated in pathology, as "dissolution." There will be no substantial progress in the study of mental disease until this branch of science is rescued from the toils of the lawyers.

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The judges, by their formulation of imperfect views of facts in medicine—and therefore beyond the province of non-medical observers, however able and acute—have done grievous violence to truth and principle, and they have placed a great stumbling-block in the way of the doctors. For the present we must stand on the defensive, and may in all truthfulness be described as lost in amazement at the wondrous and inexplicable folly of those who, while attempting to recognise a disease and to discriminate between it and health, should set themselves against the study of the only methods by which diagnosis, in a medical sense, can be safely or successfully performed.

HOT WEATHER AND STREET HYGIENE.

THE summer having set in with more than its accustomed severity—an energy probably too hot to last,—attention is naturally directed to the condition of our streets and general surroundings, as regarded from a sanitary point of view. Mismanagement is to be expected, and must be endured. In this free country it is the privilege of an enlightened community to hand over its affairs of state and locality severally to the guardianship of authorities, which are purposely composed of amateurs. It is the genius of our English method of rule to be governed by persons who are in no sense professional. We glory in the fact, that, in the main, justice, finance, and politics are administered by men who are not experts. Our First Lord of the Admiralty must on no account be a sailor. Our Secretary of State for War must not be a military man. We prefer a Chancellor of the Exchequer who has not been engaged in the management of any large financial concern. Our bishops are selected by laymen, and it would be considered a disqualification for the chairman of a sanitary board to have any practical trade knowledge of the subjects which the authority is charged to administer. On the whole, doubtless the system which prevails works well. We are spared the nefarious policy of self-seeking, but there are disadvantages arising out of, or accruing to, this recourse to ignorance, as a way of avoiding interested motives and policy, which ought not to be disregarded or held of no account. It is the fashion of the day to impute carelessness to those who wrongly administer public and local affairs. This may be a charitable view of the facts, but it is very far from being an accurate or sound one. We do not think those who hold office in our midst are at all commonly neglectful of their duty. It is much more to the point that they are both fussy and ignorant. They wish to do well, but their want of acquaintance with the subjects on which they are required to pass a judgment misleads them, and leaves them at the mercy of the avowedly interested agents who are selected to work under them. Half a dozen years of government by experts would do this long-suffering country a world of good, though some evils might be inseparable from the good. It is not worth while to particularise the instances of mismanagement in the affairs of health which place the population at a disadvantage. Unemptied dustbins reeking with pestilential filth, because contractors underpay their men and vestries lack the knowledge necessary to make them masters of the situation and able to compel their contractors to discharge their duties; over-watered asphalte and wood pavements, and unwatered macadamised or stone-pitched streets; huge ponds cleaned at the worst possible time, and the neighbourhood poisoned with the putrid mud laid broadcast in the sun; carbolised water left about for children to drink, and the like—are incidents of the administration by unskilled hands on which we especially pride ourselves. If persons who really understood the business in which they were engaged could be placed in authority, these *gaucheries* would cease; but any such selection would have the drawback of introducing the peril that these skilled authorities might take advantage of their position, and turn it to their own benefit, so that we must put up with the dangers to health and the manifold annoyances to which we are subjected.

VESTRIES AND THE REMOVAL OF DUST.

THE example recently set by a resident in Marylebone who failed to procure the removal of house-dust by the parochial authorities, has been followed by a resident in St. George's, Hanover-square, who applied last week to Mr. D'Eyncourt to obtain his assistance to put pressure on the negligent officials. The complainant pathetically stated that he had made application to the vestry without avail, that he had no right to clear the dustbin himself, and that if he did so he was liable to a penalty of £5. The dustmen's aid had been sought; they had been given money, and a subscription had been sent to their beanfeast; what more could a ratepayer do? Mr. D'Eyncourt recommended that the vestry be summoned after seven days' notice had been given them, but he naturally objected to allow the constable to be used as a means of communication to the vestry. If magistrates were to do so, the metropolitan police would soon have to undertake the duty of dust inspectors. The encouragement magistrates are giving to householders is certain sooner or later to bear fruit. Vestries are not, as a rule, very susceptible to public opinion, but a conviction before the magistrate will help, more perhaps than anything else, towards the modification of the system which now exposes the health of the ratepayers to injury.

"MUMMIFYING."

THIS is the not particularly attractive term applied to a process which is alleged to render the animal organism so insensitive as to be almost unaffected by toxic influences, and so stable, or inert, as regards the metabolism of its constituent elements as to need very little sustenance from without. A man named Succi, who lives at Forli in the Romagna, is said to have discovered a "liquor extracted from various herbs" which has this marvellous effect on the bodies of persons taking it, that, as a result of its use, they can almost wholly abstain from food for a lengthened period, and can resist the influence of certain poisons. It cannot, we think, be doubted that ways of reducing the interchange of elements in the organism to an extremely low grade and of collaterally minimising the absorptive powers of the body do exist, and have been known to certain classes, and perhaps small communities of men, from very early times. This being understood we shall regard with tentative interest the investigation said to be in progress with regard to the process and powers of Succi by Professor Peruzzi of Bologna.

DISINFECTION OF RAILWAY CATTLE-TRUCKS.

DR. REDARD, Surgeon-in-Chief to the French Railways has lately presented a detailed report on the disinfection of cattle-trucks to the Government department charged with the railway administration throughout France. After reviewing the cleansing methods adopted in different countries and recording experiments with chemical antiseptics and disinfectants, Dr. Redard arrives at the following conclusions Chemical disinfectants are bad microbicides, requiring large quantities and prolonged contact. Spores and germ-corpuscles resist almost all chemical disinfectants. Some substances, which are very active against spores and bacteria are very frequently powerless against a virus, unless incorporated with it freely and long. Heat is the disinfectant *par excellence*. Numerous experiments with virus and successive inoculations proved that absolute disinfection can only be obtained with certainty with steam superheate

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This is not easy to obtain. The different pro- to in use only yield boiling water or steam C. Dr. Redard therefore proposes to pass the gh a serpentine coil placed in the locomotive m from 110° to 130° C. may thus be obtained.

HE RECENT LOW DEATH-RATE.

nt health of the large town population of dged by its death-rate, has been unprece- isfactory. The mean annual death-rate during weeks of last quarter, among the rather more illions of persons estimated to be living in eight large English towns dealt with in the neral's weekly return, did not exceed 18·6 per rate was 2·9 below the mean rate in the corre- riods of the ten years 1876-85, and 2·4 below rate in the four most recent years 1882-85. been especially healthy, its death-rate having as 17·2, and considerably lower than in any pre- onding period on record. The mean rate in the n large provincial towns was 19·8 and 2·7 above ondon. The death-rate in the whole of Eng- les bears a tolerably constant relation to that eight largest towns, and if the death-rate of untry during last quarter bore the same propor- f the twenty-eight towns, as it did in the four responding periods, it may be estimated that eath-rate in England and Wales in the three g June last did not exceed 17·1 per 1000. This e considerably lower than that recorded in any responding period since civil registration was n 1837, and 4·5 below the mean rate in the second he forty-six years 1838-84. The constant and decline in the recorded death-rate in England ently of the reality of sanitary progress.

HARMACOGNOSY OF NITRITES.

nt position of nitrites in medicine was clearly set . Armstrong in a lecture recently given in the ics department of the University of Edinburgh. that there are but three compounds worthy of a lace in therapeutics—nitrite of amyl for inha- te of sodium and nitro-glycerine for adminis- he mouth. For subcutaneous injection nitrite ould be preferred. If it were not for the intense always obviated by custom, that nitro-glycerine inly it would be most convenient for gastric ce it is practically stable in all conditions of . The decomposition of nitrite of sodium by retions of the stomach may readily be pre- ministering small doses of alkaline salts—the r carbonate of soda.

USSIAN PASTEUR INSTITUTES.

n Medical Society, having solicited permission ister of the Interior to open a subscription for stitute in Paris, have met with a refusal, considering that all Russian subscriptions e applied to the national Pasteur institutes, of than four are being established—viz., one in under Drs. Krugelviski and Hollmann; one Dr. Unkovski; one in Odessa, under Prof. Dr. Gamelal; and lastly, one in Saratoff, ski. All the above-named physicians ris and learned the method from Pasteur which has been inoculated with the brought back to Russia to serve as

HEALTH ASSURANCE.

THE idea of a fixed payment for medical services is a popular one, and becomes more so as it is debated. To know the worst, and to have no medical bill at Christmas to pay, must be a luxury which medical men are least able to appreciate. The essence of all such schemes, if they are to be successful, must be in their fairness. While really relieving the patient and his family from an onerous liability, they must be considerate of the medical man and secure him a fair remuneration. The fault of most existing Provident systems is that the medical remuneration is altogether inadequate. A system has been formulated by Mr. Fleming Phillips, of St. Mary Bourne, Andover, Hants, which he has stated in circulars. He has two classes—Class A and Class B. The former class is to include those whose wages do not exceed 30*s.* a week. The fees to be paid per annum per head are from 4*s.* to 8*s.*, extras excepted—viz., midwifery, vaccination certificates, surgical operation, fractures, &c.; medicines included or not, according to agreement. Class B is intended for those of higher means. The fees range from 10*s.* to 40*s.* or (rarely) 60*s.* per annum for each individual. A reduction is made in the rates for more than four persons of one family residing together. Specimen circulars, with explanatory statement, are to be had for a small sum on application to Mr. Phillips. In Class B the variation of rate is according to health, habits, means, &c., at the time of entrance. Extras as above are excepted; distance, too, is to be considered. In the circular sent to patients it is stated that the system does not involve pecuniary gain to the practitioner, and its acceptance is quite optional. Care would have to be taken not to address the circulars to the patients of other men. The fees given seem a fair basis for agreement in the respective classes of cases, and the scheme seems worthy of consideration.

PHOTOGRAPHY AND PATHOLOGY.

WE have before us photographs by Dr. Heneage Gibbes of striped muscle from the water-beetle, of goblet cells from the stomach of the newt, of Niesen's bacillus from a high altitude, of the comma bacillus, of cirrhosis of the liver, and of the cornea stained with gold. It would be difficult to speak too highly of these photographs. The definition of the bacilli and of the goblet cells is very perfect, and that of the striæ of the muscle of the water-beetle exquisite. The coarse photographic representation of morbid structures is assisted by a little colouring, and is most effective. Three such plates are before us, one representing cancer of the lung in a most vivid and beautiful way, the others, pericarditis and mitral disease respectively. It looks as if from this branch of art we should have much help in the future.

A MEDICAL ASSOCIATION FOR NEW ZEALAND.

IN response to a circular letter addressed to the various medical societies in Auckland, Wellington, Canterbury, and Otago, a meeting was recently held at the Dunedin Hospital, for the purpose of forming a general Medical Association for New Zealand. Several delegates having expressed their views, it was unanimously resolved that an Association be formed, having for its object the promotion of medical and the allied sciences, and the maintenance of the honour and the interests of the medical profession. At an adjourned meeting of the delegates, resolutions were passed calling the attention of the Government to the gradual and persistent increase of puerperal fever in various parts of the colony, and the necessity for instituting some form of registration for midwives, and protesting against the action of the Legislature in taking away the office of coroner from medical men in active practice. The Association has a wide

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field for its labours, and one of the chief ends to which its efforts should be directed is a reform of the law relating to the registration of medical practitioners. This, we may confidently assume, will occupy to a large extent the deliberations of the Council, deliberations which we trust may result in success.

DR. WILHELM FROEBELIUS.

THE death is announced, in the Russian papers, of Dr. Wilhelm Froebelius, formerly a great ophthalmic surgeon in St. Petersburg. When ophthalmoscopy was in its infancy Dr. Froebelius wrote largely on the subject, and he was the first to perform iridectomy for glaucoma in St. Petersburg in 1857. He was appointed inspecting officer to the foundling institutions in 1864, and gathered under him a number of young subordinates of great ability and scientific attainments, who have rendered the greatest service to the important establishments committed to their charge; he obtained the appointment of a prosector, the first of these officers in the country. He also established, as early as 1868, an institution in St. Petersburg for calf lymph vaccination.

FALLACIOUS SURGICAL STATISTICS.

La Gazzetta degli Ospitali (June 30th) concludes a series of articles on eight years' work in the surgical clinique of Pavia (1877-85), with a summary showing 58 deaths in 1098 operations—a mean mortality of 5·28 per cent. How little importance can be attached to such a general average may be deduced from these facts: 21 cystotomies were performed without a death; so with 41 amputations of the limbs, of which 18 were of the leg and 8 of the thigh. But 11 of 39 patients succumbed after extirpation of goitre, and 17 of 34 after the following gynæcological operations: extirpation of the uterus by laparotomy, 2 cases, 2 deaths; extirpation of the uterus per vaginam, 10 cases, 4 deaths; 3 laparotomies for solid uterine tumours, with 3 deaths; 19 ovariotomies, with 8 deaths.

FOREIGN PROFESSORSHIPS.

DR. F. FALK has been appointed Extraordinary Professor of State Medicine in Berlin. Dr. C. von Rzehaczek is retiring from the Professorship of Surgery in Graz. Prof. Späth of Vienna having retired, Dr. Breisky, the well-known gynæcologist of Prague, has been appointed to succeed him. Dr. Breisky's claims were so universally recognised that no other candidate ventured to appear in the field. He was Professor of Gynæcology in Berne from 1867 to 1874, when he received a call to his present post in Prague. Dr. Gustav Braun, one of the Professors of Midwifery in Vienna, has been given the title of Hofrath. Dr. Kaulisch, Professor of Internal Medicine in the German Faculty of Prague, has died at Giesshübl, at the age of fifty-six.

BLINDNESS DUE TO DECAYED TEETH.

DR. WIDMARK, a Swedish surgeon, having as a patient a young girl in whom he was unable to detect the slightest pathological changes in the right eye, but who was yet completely blind on that side, observing considerable defects in the teeth, sent her to M. Skogsborg, a dental surgeon, who found that all the upper and lower molars were completely decayed, and that in many of them the roots were inflamed. He extracted the remains of the molars on the right side and in four days' time the sight of the right eye began to return, and on the eleventh day after the extraction of the teeth it had become quite normal. The diseased fangs on the other side were subsequently removed, lest they should cause a return of the ophthalmic affection.

ELECTION DIFFICULTIES.

THE difficulties which beset the practice of indicating by means of voting-papers the preference of an elector for a particular candidate for a vacant office are seemingly too much, not only for poor Hodge, but for persons so superior to him in position and education as Masters in Arts, Laws and Science. Or is a contempt for trifling details to be regarded as the explanation of the remarkable fact, mentioned in our report last week of the meeting of Convocation of the University of London on Tuesday, that, in recording their choice of a candidate for the Senate, no fewer than 114 of the members' voting-papers were rendered invalid by informality?

AMERICAN DENTAL LEGISLATION.

THE following Bill has been introduced in the New York Legislature:—"Sec. 1: A dentist who shall administer chloroform or ether to any person, unless said dentist shall be a regularly graduated physician from some legally incorporated school of medicine and surgery, is guilty of a misdemeanor. Sec. 2: This Act shall take effect on and after September 1st, 1886."

THE DIRECT REPRESENTATION OF THE PROFESSION.

SEVERAL names have been mentioned as those of practitioners willing to act as Direct Representatives of the Profession in the Medical Council in Ireland, and also in England. So far we have not heard of Scotland. In the absence of formal nominations, and considering the shortness of the time that has elapsed since the passing of the Act, we think it premature to publish announcements of candidatures.

POISONOUS HONEY.

Il Morgagni reports that at the last meeting of the Agricultural Society of Dresden, M. Bley made a communication on the poisoned honey frequently imported from Trebizond. Stramonium grows there spontaneously, and, being taken up by the bees, poisons the honey, which is afterwards exported. Resulting cases of disease—some with fatal issue—have been officially certified. In American honey also, some poisonous principles have been found, gelseminum especially.

THE Jaffa Suliman Dispensary, instituted and sustained by the Medical Women for India Fund, appears to be in full work. During 1885 no less than 27,429 patients attended and received medical relief. But the resources were inadequate to the demands made upon the charity, and according a small temporary hospital at Khetwady was opened in April last year, and with the aid of a Government subsidy was got into working order. If Mr. Thornton's statement at the annual meeting of the National Indian Association is anywhere near the truth—viz., that of the 1,500,000 patients who received medical aid at the different hospitals and dispensaries of the Punjab in 1884 only one-fifth were female,—the justification for the provision of such institutions as the Jaffa Suliman Dispensary and the Khetwadi Hospital must be regarded as complete.

AT the forthcoming meeting of the British Association Lord Rayleigh will open a discussion on the Physical and Physiological Theories respecting Colour Vision, and Dr. Michael Foster will probably be one of the speakers.

DR. IRELAND'S book, "The Blot upon the Brain," is, we understand, to be translated into German. The French translation is reported to be almost finished.

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THE PRESENT ASPECT OF THE CHOLERA QUESTION.

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HENRY KOPLIK,
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(*Concluded from page 30.*)

HIRSCH, in his work on Historico-Geographic Pathology, has collected a number of facts concerning the Indian epidemics which speak as much in favour of the influence of human intercourse as they do for that of *time* and *locality*. The epidemiological facts connected with the course of cholera through long intervals of time and over wide tracts of land show that the spread of the specific cause of cholera through Europe is clearly connected with human intercourse, for in no other way could we explain how the disease has wandered in different directions from India step by step, and why so great a time was included in this spread of the disease. Yet human intercourse does not account for everything in this connexion; time and locality also play an important *rôle* in this question. The author lays especial stress on the two latter conditions, and endeavours to explain through them the diversity of epidemics in time and place of occurrence. The Contagionists, in rejecting the influence of time and locality, are as one-sided as the Autochthonists, who reject entirely the facts speaking for the influence of human intercourse.

1. *Infection of the healthy by the sick.*—Contrary to what is found to be true in the case of entogenic infectious diseases (small-pox, typhus, and scarlet fever), physicians in constant attendance on cholera patients are not attacked by the disease more frequently than others who are not. This same phenomenon has been observed among the nursing staff. If cholera were contagious in an entogenic sense, these persons should show a greater mortality than others. The researches of Günther, Bonchardt, Kopp, and Ricord support the above fact. Prof. Pettenkofer has found that in the epidemic in Munich the nurses also were as little subject to the disease as the physicians, though they came in much closer contact with the patients. The nurses, or other persons who are in the vicinity of the patients, become sick, not from an entogenic infectious matter, but from an ectogenic matter, which either develops in the locality itself or is brought by the patient on his person in sufficient quantity from the cholera district. That intercourse with the patient cannot be regarded as a source of infection shows itself most plainly in India among the nursing *personnel*. The explanation offered in the Berlin Conference of the fact that the nurses had perhaps acquired a certain immunity and protection against the disease from their being natives is inadmissible, inasmuch as natives outside the hospitals not in contact with patients fell victims to the disease. If the nurses became the victims of the disease (which occasionally happened), its spread among them was checked, not by disinfection, but by *changing the locality* of the hospital. Virchow (as contagionist) cited a case at the Berlin Congress which showed that a patient suffering from cholera infected also his three nurses. These nurses, however, might have been infected from ectogenic matter adhering to the body of the patient; or, again, the above facts do not exclude also the probability that the nurses may have been subjected to the same influences to which their patient was, and thus have contracted the disease. The vast number of facts given us by the history of epidemics in Europe and India (Cunningham) cannot be put aside by exceptional picked cases. If in most cases the physicians and nurses are not attacked by the disease, it must be because the cholera patient produces nothing in itself infectious (entogen), and the exceptional cases of infection can be explained by assuming that the patients in these instances have brought from the cholera district an ectogenic matter on their persons, which, developing in the new locality, spreads the disease.

2. *The excrement of the patients as the seat of infectious matter.*—If the cholera patient himself cannot in an entogenic sense produce anything to convey the disease, his excretions also certainly cannot. It is to be expected that, as the intestinal tract is the seat of the principal phenomena of the disease, the stools should be found to contain infectious matter. Professor Pettenkofer himself once believed that the stools, if not immediately the seat of infectious matter, could become so by subsequent development in waterclosets and drains. The experiments of Burdon-Sanderson and Thiersch seemed to support this view. Koch also has recently discovered that a constant element in the stools of cholera patients was a bacterium (comma bacillus). But if we go over the history of epidemics in former times, we see, by the light of present bacteriological researches, that the careful disinfection with iron sulphate and carbolic acid was powerless to carry out its professed object; the vitality of certain micro-organisms is not annulled by these agents. The vaunted control of certain epidemics by these agents must have been illusory. The limitation of the epidemics must have been due, in the light of present knowledge, to other more potent agencies not at the time understood. Moreover, in draining cholera localities the excrements of cholera patients must necessarily have passed through large tracts of country, yet no infection has been seen to take place along the direction of such drainage (India). Patients passing through towns have, though suffering from cholera, stopped at hotels and inns, and no cholera has been found to exist along their route. The author, therefore, though accepting the existence of a bacillus, *x*, entogenic in its nature, as the exciting cause of infection, does not admit the entogenic doctrine of Koch concerning the cholera bacillus. The ectogenic nature of the bacterium, *x*, is proved by its disposition to develop under favourable conditions of time and locality. Professor Pettenkofer does not accept the diblastic theory of Naegeli, which supposes that infectious diseases dependent on the circumstance of time and locality are due to the action of two micro-organisms, *x* and *y*, *x* being that emanating from the patient, and *y* being produced by the locality. The combination of the two in the human economy is the cause of the disease. By having lived in a locality containing *y*, a disposed subject can be infected by *x*, and *vice versâ*. The author is rather monoblastic in his belief, and believes that the bacterium *x*, of an ectogenic nature in cases of cholera, is spread by human intercourse.

3. *Hospital and barrack epidemics as a proof of the contagiousness of cholera.*—In spite of the universally observed fact that comparatively few physicians and nurses, in their attendance on the sick, contract cholera, the probability of the disease being contracted through this avenue has become more and more feared. This has led to the construction of separate hospitals for cholera patients. True it is that Griesinger's statistics show in Moscow a mortality of from 30 to 40 per cent. among the nursing staff in 1830, whereas in the city the mortality was 3 per cent. of the population. Romberg's hospital in Berlin shows in 1831 a mortality of almost 50 per cent. among the nursing staff. In the Paris Charité, in 1849, the deaths amounted to 16⅔ per cent., whereas 40 per cent. of the population died. The hospitals in Milan, Toulon, and Vienna also show an increased rate of mortality among the nurses. In Munich certain hospitals in particular localities show an increased death-rate among the nurses. In the case of the latter the author shows that these hospitals were situated in those parts of the city where cholera was also epidemic at the time. Other hospitals in Munich situated outside of these localities showed no mortality at all among the nurses, though they were in constant attendance on cholera patients. In both sets of hospitals the same variety of patients existed, also the same conditions of cleanliness and disinfection. The same order of nuns officiated as nurses in both. Porta supports the author in the above facts. If in Moscow and other cities the hospital nurses show such a rate of mortality, the cause must be sought, not in the patients, but in the *situation* of the hospital. The hospital situated in a cholera locality becomes, with all its inmates, subject to the same influences as other houses and their inmates in these localities. If the hospital is not a "cholera house," the patients will not be a menace to the nursing staff. Bryden has proved this to be the case with India. By studying the history of the spread of cholera in barracks in Munich, Professor Pettenkofer has found the same conditions to hold true as in the case of hospitals. Barracks and hospitals, moreover, situated in cholera districts showed the same course of the disease among themselves as was the case with houses outside the hospitals, but also situated in these districts.

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4. *The linen of cholera patients as a source of infection.*—If we believe that the excrement of cholera patients is a source of infection, we must also believe that clothing soiled with the same is a source of infection. Professor Pettenkofer, in 1854, himself called attention to facts which would seem to strengthen the belief that soiled clothing is an entogenic source of infection. Koch, in explaining the striking immunity of Lyons from cholera, attributes this to the fact that the clothing is not washed in the city, but in booths situated on the banks of the Seine and Rhone. But in Zurich, Vienna, and other places, where similar conditions exist, no such immunity from cholera has been observed. Koch also traces the cholera epidemic in the washing village of Capronne to soiled clothing of cholera patients—refugees from Marseilles to Lyons. But at this time there were about 1000 cases of cholera in the city of Lyons; and it is possible also that the epidemic in Capronne was due, not to the stained linen in an entogenic sense, but to a something adhering to the linen which, ectogenic in its nature, was thus conveyed from Lyons to Capronne. Moreover, such carriers of germs may be other articles than linen. It is not an absolute condition that such clothes be washed by others to convey the disease. Cases exist where clothes simply handled in *localities* and at *times* favourably disposed have conveyed the disease. If sick persons coming from cholera districts have proved more infecting than healthy persons coming from the same places, it must be because the sick person has come into closer contact with the local ectogenic infectious matter. But healthy persons coming from cholera districts may also be carriers of this infectious matter. Drasche, more a clinician than an epidemiologist, cites cases where epidemics resulted from washing infected clothing, but which seem to be only hospital epidemics not connected with infected linen. The author, while admitting that clothes from cholera districts can cause "sporadic infections," denies that epidemics can result from such cause alone. In this connexion the author cannot agree with those—as Drasche and Monad—who attribute such a short period of incubation to cholera as half an hour. In 1854 this question, considered in Munich epidemiologically, was divided into two varieties of cases: (*a*) A person coming from a locality free from cholera to an infected spot was attacked within from two and a half to five days. (*b*) A person coming from a cholera district to one free from it, the next case resulting appeared within six or seven days.

5. *Cholera on ships.*—It has been proved that epidemics do not result where one or two isolated cases come from a cholera district to a locality free from the disease. We may suppose in such cases that the patients bring from the infected localities sufficient germs to communicate the disease to two or three others in the new locality, but the infectious matter (ectogen), not finding a suitable soil, does not thrive, and dies out, hence no general infection. Therefore it follows that the cases of cholera in the new locality were not infected by anything produced by the cholera patients there, but by the original infectious material brought from the cholera district. Such protected spots are naturally ships, and the author has always classed these among the localities unfavourably disposed to the development of the cholera germs. Ships in cholera districts have cholera on board, both where persons have come on board from the infected districts, and also where the patients have not been in such districts. Bryson shows that where ships have for a time been in the cholera district the disease has ceased to spread on board as soon as the ships have left these localities. Therefore when ships with cholera on board set sail for open sea the disease does not become epidemic, but remains limited to one or two cases. If such ships return to the cholera localities the disease also reappears (*Caledonia, Queen, Bellerophon*). According to Macpherson, ships sailing up the Hooghly and Ganges frequently have cholera on board when passing the cholera banks (one or more cases), but as soon as the ship reaches open sea the disease disappears. That ships are bad soil for the development of cholera is shown by the fact that only 11 per cent. of the ships leaving cholera ports have cases of the disease on board subsequently. The mortality on shipboard is only 1·22 per cent. (Robert Lawson). Cunningham and Lawson explain the occurrence of cholera on ships, not by the infection of the healthy through the sick, but by the supposition that something is brought from the land on shipboard, and here develops or comes in contact with those on board who have not been in the cholera districts. In this connexion it would be interesting to call attention to the fact that Cunningham records that from 1861 to 1869, of 129 ships sailing from Calcutta, carrying 50,604 natives to America, in only twenty of them (16 per cent.) did cholera appear, and on only two ships were there more than five cases of cholera during the voyage. In the year 1873, which was a cholera year, not merely for India but also for Europe and America, we have the following statistics. In this year about 400 ships brought 152,135 persons from cholera-infected districts and localities of Europe to New York. Only *four* of these ships had cholera on board. An interesting instance of these four is the *Westphalia* from Hamburg to New York. On her journey two persons died with cholera. On her arrival in New York only nine cases of cholera were found on board; of these eight recovered subsequently in the quarantine hospital. All the eleven cases of this ship belonged to one family. Another interesting case, for a long time unexplained, is that of the war-ship *Britannia*. The war fleets of the United Powers—England, France, Italy, Turkey—lying in the vicinity of Varna (1854) were visited by cholera. The French frigate *Ville de Paris* and the *Britannia* had a large number of cases on board. The English ship, wishing to check the spread of the disease, sailed for open sea; but the disease continued its severity, and in one night fifty cases of death were recorded. It was only after the ship had returned to Varna (where the cholera was at the time) and had transferred the troops and men to other ships that the disease seemed to become less severe, and then ceased without spreading further. The officers of the *Britannia* remained free from the disease. The immense mortality in one night was for a long time attributed to the fact that during the night the companion-ways were all closed, and, the air being very close, the disease was thought to have a favourable soil for its spread among the crew. But investigation has shown that the crew of this ship had probably most of them visited the sailor resorts in Varna, there came in contact with the infectious matter, conveyed it on board, and then became sick with cholera, as the fugitives from other cholera districts are on land. The officers of the ship, not having frequented the resorts or cholera localities, remained free from the disease. That cholera finds an unfavourable soil on shipboard can scarcely be denied. The cargo of the ship also might be a means by which infectious matter is conveyed on board. Bad ventilation, uncleanliness, soiled linen, and cholera stools are not sufficient to explain the spread of cholera on shipboard, for cholera exists on ships where, as in the *Windsor Castle*, the hygienic conditions were all that could be desired. Ballast in the form of soil and sand may be regarded as the carriers of harmful matter, but ships themselves cannot be looked on as the carriers of infection. Koch and Virchow do not agree with the above views. The former, in support of the entogenic theory, shows that cholera is more frequent on transport ships than on merchantmen. But Professor Pettenkofer explains this apparent frequency by the fact that on merchantmen we are less likely to find the disease, in itself not frequent on shipboard, inasmuch as we have here a vastly smaller number of persons than on the transport ships; hence in the latter we are more likely to meet with instances of the disease. Cholera epidemics on shipboard are the exception.

6. *Spread of cholera through human intercourse on land.*—The Autochthonists do not believe in or admit the agency of human intercourse in the spread of cholera on land. Cunningham records that in India pilgrims very often travel in different directions from cholera-infected spots, and some die on their journey. But, independently of this fact, the epidemics always take a certain route. In places lying outside the line of route the cholera patients cause no epidemics, but in the epidemic direction they appear to be infectious. In studying the map of Europe, we find that the cholera epidemics do not in the least spread in the lines of travel. If we were to make a topographical map of the cholera in Europe from 1830-85, as Rheinhard and Günther have done for Saxony, we should see that cholera only favours special localities and avoids others. Railroads have changed nothing in the direction of the spread of cholera either in India or Europe. Nor does the cholera spread any more rapidly to-day than in the days previous to the introduction of railroads. Cunningham in India and Günther and Rheinhard in Saxony have shown that cholera does not spread in the direction of the railway network. If a person comes from a cholera district to one not infected, and cases

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follow his arrival in the new locality, or even when epidemics result, it does not follow that this original case is the cause. The arrival of the first case and the outbreak of cholera in the new locality may be simply accidental, or be due to germs carried into this locality at another time and until now latent. The mobilisation of troops in a cholera locality, combined with the want which they bring with them, and also the consequent concentration of masses of people, tend to raise the death-rate, but the spread of cholera is not due wholly to this cause. In 1866 countries harbouring no troops were the seat of cholera, more so in some cases than localities in which cholera-affected troops were quartered. Moreover, following the line of march of cholera-affected troops through a series of forty towns, it was found that only four of these subsequently became the seat of epidemics; in others the disease appeared sporadically, and in twenty-three not at all. It is only where the cholera germ finds a favourable soil that it develops and causes an epidemic. That intercourse has some influence in the spread of cholera is not denied by the author. It has not the great influence attributed to it by the Contagionists.

ADDRESS

DELIVERED AT

ST. MARY'S HOSPITAL,

AT THE

Presentation of Prizes, June 28th, 1886,

BY THE VERY REV. THE DEAN OF GLOUCESTER, D.D.
(DR. BUTLER.)

GENTLEMEN,—It must be the desire of any man who is honoured by the commission which I hold to day to say something which may be useful as well as acceptable to his audience. If you were listening to some member of your own great profession, you would doubtless expect some addition to your knowledge, derived from his insight and experience. You will now of course expect no such benefit. I have nothing to tell you that you do not know already. If I am able in any way to interest you, it will be because sympathy and respect can never be wholly disagreeable to those who receive them. Let me, then, at once try to find out at least one topic common to us all. My experience of life has lain chiefly with the young. I love to think of young men at the beginning of their career, while still a little "sicklied o'er" with the pallor of "hope deferred," and before they become too rudely embrowned by the sun of assured success. They are less interesting to me in what Mr. Canning calls "the brightness of meridian glory" than when for the time a cloud seems to brood on their imaginations and their hopes.

The keen interest of biographies lies not so much in tracing how men of genius find themselves gradually forming an "environment" exactly fitted to their gifts, as in noting how they develop gifts which were not originally conspicuous; how a sense of duty, or of ambition, or of sheer professional perseverance brings out powers of which they were almost unconscious. No doubt there is a pleasure in seeing genius move calmly and swiftly to its recognised goal. We like to read of the young Correggio standing before a masterpiece of Raphael and muttering to himself, with the consciousness of power, "I, too, am a painter." We like to read of Sheridan, after one of his early failures in the House of Commons, striking his head and saying, "I have got it in me, and, by Heaven! it shall come out." But I confess I find something even more stimulating in reading—first, the humorous praise given by a surgeon of St. Thomas's Hospital to Sir Astley Cooper: "Sir, it is of no consequence what instrument Mr. Cooper uses—they are all alike to him; and I verily believe he could operate as easily with an oyster-knife as the best bit of cutlery in Laundy's shop." I like to compare this fervid eulogy—not perhaps to be taken quite literally—with what Sir Astley wrote of himself and left among his private papers: "Sir Astley Cooper was a good anatomist, but never was a good operator where delicacy was required. He felt too much before he began ever to make a perfect operator." Have we here simply the unconsciousness of genius, the self-ignorance of an artist whose ideal of excellence is surpassingly high and exacting? or was this great surgeon really right in his estimate of his own natural powers; as right and as instructive as Brodie afterwards, who in his Autobiography—a twenty years' favourite of mine—has told us this strange story: "A friend of mine, a craniologist, told me that he saw I had the organ of constructiveness much developed, and that this explained how I excelled in the use of my hands, and was an excellent dissector. There was never," says Brodie, "a greater mistake. I was naturally very clumsy in the use of my hands, and it was only by taking great pains with myself that I became at all otherwise."

Gentlemen, I a little hesitate to draw the moral from this candid avowal. I hardly like to conceive of it as even possible that anyone here may say, "I am naturally clumsy in the use of my hands"; but if there be such a man I would dare to say to him, Let not his diffidence be too much for his ambition. Let him not exaggerate the sentiment of pity for those unknown sufferers whom in self-accusing moments he would call his victims. Nay, let not the very irksomeness of the pursuit have too depressing an effect on his spirits, for has not Brodie said, again, that those who succeed best in a profession are those who have embarked in it not from irresistible prepossession, but perhaps for some accidental circumstance, and persevere as a matter of duty, or because they have nothing better to do? "They often," he adds, "feel their new pursuit to be unattractive enough in the beginning; but as they go on and acquire knowledge, and find that they obtain some degree of credit, they become every day more interested in what they are about." But enough upon this head. Let me carry you away, gentlemen, however suddenly, from the reverie of early depression to the heyday of recognised fame and usefulness, and let me bring the physician before you in another aspect.

What rich opportunities does the physician enjoy for the study of his fellow-creatures! I am thinking, of course, of the confidential relations between doctors and the families of their patients. The ear of the physician is the modern confessional. Who is afraid to trust him, if he be worthy of trust? What insight he gains into family histories, into the causes which prevent men from being of one mind in a house, of the secret humiliations concealed beneath a bold front, of the patient heroisms, of the unsuspected sins and even crimes, of the daily tragedies under roofs which to the world at large seem a very temple of prosperity. The thought that I would endeavour to leave with you, my younger friends, is this: If such is to be your position hereafter, what manner of persons ought you to be now in preparing yourselves for so high a trust? The qualifications for such an office are clearly not professional alone, unless, indeed, you are bent on demanding for "professional" training a range and a latitude ideal rather than conventional; unless, just as Cicero claimed for his ideal orator every branch of learning and every intellectual accomplishment, you are prepared to claim for the ideal physician not only all that gives richness to the intellect, but all that gives grace and beauty to moral worth. For, consider how much is required by one who is to be the confidential friend and almost confessor of hundreds of families. He must have in a high degree the gift of sympathy first implanted by nature and then systematically trained. He must have, further, wide knowledge of the world, a clear and sober judgment, an acute moral sense, and an absolute rectitude of purpose. Further, he must have the gifts which attract and inspire affection. Much of the power which doctors so happily wield in families is, I cannot doubt, to be set down to the gentleness of their manners. I suppose, my friends, we are all more or less rough at some part of our lives, and it would be strange if this moral hirsuteness, often found among the young in all departments of study, were conspicuous by its total absence in the student of medicine. The Lord Chesterfield of the hospital is perhaps seldom matured before twenty-two. Unlike the poet, "fit, non nascitur." But it is rare, I think, to find other than gentleness in the adult physician and surgeon, though there have been, and may again be, Abernethys and Jephsons. Gentleness may fairly be termed a characteristic—if you like, an acquired instinct—of your profession. I read of one whom you regard as one of the chief ornaments of your profession. "His manner in ordinary society was sometimes complained of as harsh or abrupt, and he certainly was occasionally neglectful of the mere trifling courtesies of life, and sometimes careless of refinement of punctilio. ..... *But*"—and this is what I love to read of so

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strong and true a man—"but in the proper and trying scene of the labours of the medical man, in the chamber of the sick, he was *gentle* as he was resolute. He never had a patient who was not anxious to become a friend, and the voice which was sometimes discordant amid the petty annoyances of daily life was music to a sick man's ear. Into the scene of suffering he never brought a harsh word or an unkind look." This, as I dare say many of you know, was the great operator, Robert Liston.

Gentlemen, there are just two further points on which I shall ask your permission to say a few words, and I am bound to admit that they have the smallest possible connexion with each other. The first is the importance of storing facts as we pass through life; the other is the way of dealing with one important class of facts—our own mistakes. The careful storing of facts is, I presume, one chief characteristic of the philosophic mind. Most of us let facts, whether facts of nature or facts of life, come and go unobserved. We have no microscope ready, and no journal. We were not prepared for them by any previous thought, and therefore they laid no finger upon us. Doubtless, in the medical profession, as in every other body of students, some able men are more distinguished for their extempore acumen, and others for their careful research. In reading the lives of eminent doctors, one notes with delight how one after another is distinguished by this truly Baconian passion—the passion for the accumulation of facts, facts which they have themselves seen with their own eyes and noted down with their own pen or pencil. I am almost ashamed to cite any of those illustrious names which must be so familiar to you, but you must allow something for the naïve admiration of a novice. When the great Harvey, at the desire of Charles I., accompanied Lord Arundel on his embassy to the Emperor of Germany, we get this pleasant glimpse of him from an artist who was one of the party: "He would still be making of excursions into the wood, making observations of strange trees, plants, earths, &c., and sometimes like to be lost; so that my Lord Ambassador would be really angry with him, for there was not only danger of wild beasts, but of thieves." Then, again, we have Sydenham showing in his lively way, by his perilous gift of irony, so fatal to a man's prospects until he has turned sixty, his contempt for mere book-learning as compared with actual experiment. Jenner, again, the great and guileless Jenner, whose statue is one of the ornaments of my own cathedral at Gloucester, and whose spirit seems once more needed among us to save us from a dire apostacy—of Jenner we are told: "He was ever observant of natural phenomena; the objects of his studies generally lay scattered around him" in his room. "He had accumulated a great store of original observations." Of Dr. Bright, again, it is recorded that "he always took careful notes and often made drawings." In like manner, Dr. Chambers, "both at the hospital and in private practice, personally recorded the particulars of every case that he saw. Yet once more. Listen to the words of one who can never be listened to without respect—I mean Sir James Paget. This is how he describes what he calls "the simplicity of John Hunter's ordinary method of work": "It consisted mainly in the orderly accumulation of facts from every source, of every kind, and building them up in the simplest inductions. I know no instance so striking as in him of the living force which there is in facts when they are stored in a thoughtful mind." And yet further: "I think it would be difficult to find in all the masses of facts which he has recorded any one which was either observed or recorded erroneously."

A few concluding words on the other topic to which I have referred, and I release you, gentlemen, from this too-prolonged demand on your courteous attention. How to deal with one's mistakes is a problem on which one would have been glad of a little guidance from a Montaigne, or an Addison, or a Charles Lamb, or a Dr. John Brown. Some of us are blind to our mistakes; we do not see them or suspect them. Others are but too well aware of them, but try to conceal them and even to avoid thinking of them. Others, of a nobler order, make it part of their self-training in truthfulness both to see and to admit. Permit me to read you a sentence from Brodie's very interesting Autobiography, which, as I before said, has been with me a twenty years' favourite. He is speaking of what he owes to St. George's Hospital, where he was assistant-surgeon for fourteen years, and then surgeon for nearly eighteen years: "Some of my happiest hours," he says—and how many great surgeons and great physicians will echo his words,—"were those during which I was occupied in the wards with my pupils around me, answering their inquiries, explaining the cases to them at the bedside of the patients, informing them as to the grounds on which I formed my diagnosis, and my reasons for the treatment which I employed, and not concealing from them my own oversights and errors; and all this to kind and willing and only too partial listeners." In his lectures he was equally unsparing towards his own and others' errors. "Not concealing from them my oversights and errors"—that is the sentence which interests me. There, I venture to say, lay the chief moral value of the lecture, and doubtless much of its professional value also. The man who could be thus frank in the exposure of his own errors must have been a superior man. He had learnt much, at least, of the lifelong problem, "how to deal with our mistakes."

And now, gentlemen, in taking my leave of you I cannot but be painfully aware of the thinness of the metal which has been beaten out in your presence during the last half-hour. What I had to say to you amounts to little more than this: Be hopeful; be worthy of confidence; be gentle; be punctual; collect facts—and acknowledge your mistakes.

VETERINARY REPORT ON THE NILE EXPEDITION.

A VERY interesting report by Mr. Fleming, the principal veterinary surgeon, respecting the health of the animals employed in the recent Nile expedition, has just been issued from the War Office. The numerical returns forwarded by the veterinary surgeons unfortunately do not afford the means of compiling a clear statement of the losses of each class, and the injuries and diseases by which these were occasioned. From the report of Mr. Burt, the inspecting veterinary surgeon of the expeditionary force, we learn that the number of camels purchased was about 7050, and that at the end of March, 1885, only 3016 remained, showing a loss of 4034, or upwards of 57 per cent. At the end of December, 1884, when the desert and river columns left Korti to proceed to the relief of Khartoum, the strength of the camels was about 4400, that of the desert column being about 4050, and of the river 350. The former lost in dead, destroyed, killed, and missing 1850, and the latter 32, being respectively in the ratio of 43·6 and 9·1 per cent. In addition to these, 268 died or were destroyed at Korti, and 180 died while out grazing with natives. The loss in the expedition to Metammeh, therefore, between the 30th December and the 25th March amounted to 53 per cent. It is stated that of these numbers 160 were shot or died from wounds received in action, being in the ratio of 3·6 per cent. of the strength. The causes of the great mortality of the camels were chiefly under-feeding, over-work, insufficient supply of water, and the original faulty selection of the animals; it was due, in fact, "to starvation and over-work, and not to disease." As regards feeding, it is stated that on the march from Korti to Gakdul Wells only between three and five pounds of grain were issued. It was hoped that this might be supplemented by grazing, but this was found to be almost impossible under the circumstances. The river column was better off in regard to supplies both of green forage and water. With reference to overwork, Mr. Smith says: "There is no doubt that the strength of the camel was much over-rated and taxed. He was loaded and expected to carry much more weight than should have been the case.....The estimate of weight by the soldiers seemed at times very vague, more often 600 lb. or 700 lb. being loaded than 400 lb." The marches, also, they were required to perform were too long, ranging generally between twenty and thirty miles and occasionally exceeding that distance, while sixteen miles are considered to be a fair day's work; and it was impossible to give them an occasional rest from work. On the subject of watering the camels, Mr. Fleming states that "before the desert column started from Korti an order was issued that the camels were to be watered only every third day, with the object, it is supposed, of accustoming them to exist for long periods without water. This was not very judicious treatment, especially when it was well known that the animals would have little else than dry food on their journey." The order would appear to have been issued without consulting the

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responsible head of the veterinary department on the spot. Another important factor in causing the high rate of mortality was the injudicious purchase of animals which were too young to undergo the fatigue of the work they had to perform. Mr. Fleming says: "I am informed that from 15 to 20 per cent. of the camels were scarcely more than two years old; but a camel is not able to undergo hard work until it is six or seven years old." Another cause of disease appears to have been the great variations in temperature to which the animals were exposed, without any adequate covering to protect them from the cold at night, the thermometer ranging between 39° and 92° Fahr. A recommendation for the issue of a strong blanket to each camel was not adopted, owing, it may be presumed, to the difficulties arising from deficient means of transport. The greatest cause of inefficiency was the enormous amount of sore backs, arising partly from the use of badly fitting pack-saddles, and partly from the ignorance or carelessness of the men in charge of the animals. For instance, it is stated that a convoy of Aden camels "marched from Kosseir to Assouan, a journey of sixteen days, during which the saddles were only once taken off." It is but fair to state, however, that in many instances the men were greatly over-worked, as "it sometimes happened that there were five, and often six, animals to one driver." Colonel Furse, the Director of Transport, very justly observes that "the officers and men, after a long and wearisome march, were as fatigued as the camels, and darkness allowed of nothing beyond their bestowing a very superficial attention to injured animals." We have hitherto confined our remarks to the camels, but there is also a very interesting report upon the horses of the 19th Hussars, by Colonel Barrow, the commanding officer. In the eight months from November, 1884, to July, 1885, the losses in a strength of 350 horses were 71, or 20 per cent. Of these, 20 were killed in action, 3 died from wounds, 31 from exhaustion, and 17 from other causes. In the march across the desert, the horses suffered great privations, especially want of water, of which on one occasion they were completely deprived for fifty-five hours. The animals were Arab stallions of an average height of 14 hands, and they carried an average weight of about 14 stone. The comparatively satisfactory results as regards the health of these animals were mainly due to the judicious arrangements made by Colonel Barrow, and the careful supervision which his report shows him to have exercised.

Very much of the untoward results which are recorded in this report was undoubtedly attributable to the inexcusable vacillation and delay on the part of the Government at home, by which the time allowed for the necessary preparations was so limited as to render it impossible to make them in a thoroughly efficient manner. But it was also partly due to the neglect of the military authorities to consult the experienced heads of the veterinary service as to the proper treatment of the camels, and to avail themselves of their skilled opinions in their purchase. Mr. Fleming makes a very fair complaint of the manner in which the efficiency of the department which he so efficiently conducts was ignored. A letter is appended to the report from Colonel Furse, who was Director of Transport to the expedition, in which he calls in question some of the complaints made by the veterinary officers; but the defence may be summed up in the statement that "they must, as can be seen by their reports, admit that many of the faults they bring to notice had their origin in the very unusual peculiarities of the undertaking." The report contains a large amount of valuable information respecting camels and their value as transport animals, which cannot fail to prove useful when troops are employed in countries where they are available, and the manner in which it has been prepared is very creditable to the officers concerned. We trust that, as suggested by Colonel Furse, a manual for use on future occasions may be drawn up from the data thus collected, so that a recurrence of some of those mischances which marred the character of the Nile expedition may be prevented.

REGISTRATION OF PLUMBERS.—At a meeting of the Plumbers' Company on the 30th ult., it was reported that the movement initiated a short time since by the master and other members of the guild for the improvement of the plumbing trade, with a view of protecting the health of the public, had been attended with much success, and that several hundreds of plumbers had already registered themselves.

THE COLONIAL AND INDIAN EXHIBITION.

[FIRST NOTICE.]

BY an almost unanimous verdict this year's Exhibition has proved the most popular and attractive of all the displays at South Kensington. It presents scenic effects which in themselves suffice to draw immense crowds. Intending emigrants, and those whose friends and relatives already live in the colonies, will naturally find much that interests them personally; while all Englishmen must feel a sense of pride, tempered by responsibility, when they contemplate this magnificent illustration of the vast resources and extent of our colonial empire. Technically, the physician, the sanitarian, the chemist, and the naturalist must see that so vast a collection of the world's products embraces many things that especially concerns him. But it must, nevertheless, be confessed that the sanitary problems involved in the development of British colonisation have not received the amount of attention they deserve. The present Exhibition differs most advantageously from its predecessors by the exclusion of the petty trading elements. On the other hand, commercial interests shown on a larger scale still hold too prominent a position. If England acquires a colony, it should not be solely for the purpose of trade. Care should be taken to show those civilising influences we are capable of introducing, and which are not associated with personal gain. If England assumes the responsibility of governing vast tracts of land, it must be for some other and nobler purpose than that of enriching individual colonists. We should like to see more clearly the improvement our presence has produced on the homes, the material existence, the education and comfort of the native tribes. How far have the resources of civilisation increased the quality and abundance of their food-supply? How far has our superior scientific knowledge contributed to save and prolong the lives of the natives whom we govern by the right of conquest? Our first responsibility is evidently towards those whom we have by force compelled to accept us as their masters. We can only justify domination by improving the lot of those we coerce, and the present Exhibition was an excellent opportunity of showing that, as a race, the English people had understood this high duty. In no respect could we do more than in matters relating to the preservation of public health. We know better than others what are the causes of epidemic and endemic diseases, and we can command the necessary engineering skill to carry out successfully sanitary works. For each colony we should have wished to see in some prominent position a statement showing the improvements effected. The rate of mortality should in all instances be given, and this is only done in some cases. Nor have we yet been able to discover figures that prove the extent of benefit derived from our rule. Surely some of the colonial authorities can state what was the proportion of preventable disease when first English authority was established and what it is now. Nor do we want to know merely the benefit derived by Europeans; but, for conscience' sake, we are more anxious to learn that the lives of the natives have been prolonged by our sanitary works.

There are, of course, some indications of this description to be found at the Exhibition, but it is necessary to hunt them out, and at best they are very incomplete. There is yet a grand work to be done in the vindication of England's honour. This would consist of mortality tables of all our colonies, to demonstrate that, on the whole, English domination has materially contributed to prolong the lives and improve the health of the native populations whose lands our soldiers have conquered, and whose resources our science and commerce have developed.

In respect to therapeutics there is more reason for satisfaction. A very large assortment of medicinal herbs from all parts of the world may be examined. Dr. G. E. Pierez, for instance, exhibits a rich collection of medicinal plants from the West India Islands. The plants are pressed and put in frames, accompanied by a full written description. The following specimen will show the system adopted:—"Colonial name: Christmas Pride. Botanical name: Convolvulus tiliifolius. Natural order: Convolvulaceæ. Uses: This plant is highly extolled by the native midwives, as possessing a powerful emmenagogue action; it is conse-

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quently frequently used in tedious labours, an infusion of the root being given."

In the Imperial Court the drugs from East India occupy an ample space. There are about 2000 drugs in India, and of these no less than 1500 were described and shown at the recent Calcutta Exhibition; they have now been brought over to England, though there are scarcely more than 120 that present any real practical interest. It was only right, however, to show all that existed, and the exhibit is the richest of its sort that has ever been seen. The fact that it was prepared by Government has prevented any repetition of specimens; for merchants would have each sent very much the same thing. The purchases of these special samples were made in India by Mr. T. N. Mukharji, acting under the direction of Dr. G. Watt. But the whole of the collections for the Indian Section were gathered together by the Revenue and Agricultural Department of the Government of India, and the primary credit is therefore due to Mr. E. C. Buck, the Secretary to the Government, under whom Dr. Watt acted as chief administrative assistant. Volumes might be, and indeed have been, written on the specimens now placed within such easy access, though some of them, such as the monkshood and wolvesbane, had to be picked from the Himalayan range at an altitude of 10,000 feet. Close upon 800 samples of Peruvian bark, acclimatised in India, are a cheering example of what the Government have done to provide at a cheaper rate this essential febrifuge. The Government plantations at Darjeeling and on the Nilgiris now yield close upon a million pounds' weight of bark. This is for the most part manufactured in febrifuges. Then there are also considerable private plantations in the south of India, and the exports of Indian bark were estimated last year at £100,000.

The opium and hemp cultivations of India are, of course, fully illustrated at the Exhibition, but it is hardly necessary to insist on the obvious importance of these products. The fact that the Indian Government derives an average annual revenue of £9,000,000 from opium alone has, of course, given rise to so many discussions on the advantages and the evils of the opium trade, that it would carry us altogether beyond our province to re-open this vexed question on the present occasion. It suffices, for the moment, to say that, though sanitary questions do not occupy a sufficiently prominent position at the Exhibition, there is, nevertheless, much to be seen that cannot fail to interest the naturalist, the scientist, and the medical practitioner.

NUMERICAL TESTS OF HEALTH CONDITION.

IT is scarcely possible to over-estimate the value of trustworthy mortality statistics, or their beneficial influence upon sanitary progress. The correct construction of mortality statistics and their intelligent interpretation is therefore of the first importance. Very slight examination and study of the subject is sufficient to lead to the conclusion that the crude death-rate—that is, the simple proportion of annual deaths to population—is not a scientifically accurate exponent of the health of the population. Dr. William Farr, in whose hands this imperfect measure of true health or mortality exercised so important an influence upon health progress in England, only claimed that the annual death-rate per 1000 of a population afforded a test of comparative health condition sufficiently approximate for general practical purposes, and he frequently pointed out the limits within which such death-rates could alone be accepted as trustworthy. It is undeniably desirable on many grounds that the disturbing influences which militate against the scientific accuracy of the death-rate, calculated by what has been called the national system, should not be exaggerated. We cannot, in the interest of sanitary progress, surrender the death-rate as an approximate test of sanitary condition until the discovery of a more trustworthy measure of human mortality that may take its place.

During the past ten years the subject of vital statistics has received a continuous accession of students from the constantly increasing numbers of medical officers of health, and there has been a natural tendency upon the part of a certain proportion of those students of vital statistics, including notably Dr. Letheby, Dr. Rumsey, and Dr. Syson, to attach undue importance to the disturbing influences referred to above, and to conclude that the national death-rate system was fallacious and misleading. The subject has been discussed again and again, and it has been conclusively proved not only that the limits of disturbance do not destroy the value of death-rates as a general and approximate test of health condition, but that the principal opponents of the national system based their attacks upon an entire misconception of the inter-relations of birth-rates and death-rates. Except for the fact that this source of error is not yet quite extinct, there would apparently be no excuse for reopening the subject.

Mr. A. Wynter Blyth, in a recently issued Report upon the Sanitary Condition of Marylebone for the year 1885, which is especially valuable for its information bearing upon the influence of tenement life on mortality, deals with the subject of mortality statistics in a manner which calls for special notice. The importance of the subject in its general bearing upon sanitary progress makes it desirable to examine critically some of the statistical statements and suggestions in this report. Mr. Wynter Blyth says: "From want of knowledge of the subject, people are apt to quote mortality statistics as if they were in themselves absolute proof of the health or the reverse of a locality; whereas death-rates, unless interpreted intelligently, are very misleading." He, unfortunately, goes on to assert that "a low death-rate may be caused by a low birth-rate"; and "a high death-rate may be due to a high birth-rate." Here is Dr. Letheby's oft-refuted fallacy revived, with the substitution of *may be* for *is*. It is unquestionably true that the death-rate of a population is appreciably dependent upon its age constitution. A low death-rate may be due to abnormally favourable, and a high death-rate to abnormally unfavourable, age constitution of the population. It is, however, absolutely true that, in all actual populations, a low birth-rate implies an age constitution unfavourable to the death-rate; while a high birth-rate implies an age constitution favourable to the death-rate. If, therefore, it were justifiable to attribute to the birth-rate any influence upon the death-rate, which it is not, it might be said that a low death-rate may be due to a high birth-rate, and a high birth-rate may be due to a low death-rate. It can never be true, however, with regard to actual populations, to say, as Mr. Wynter Blyth says, that a low death-rate may be caused by a low birth-rate, and that a high death-rate may be due to a high birth-rate.

Mr. Wynter Blyth claims to suggest a new numerical test of the sanitary condition of a district. He says: "The mean duration of life, which is computed from both the birth-rate and death-rate and the rate of increase, are, all things considered, a better guide to the state of a district than any other single class of statistics." The value of some new numerical test of sanitary condition which should be more trustworthy than the death-rate, calculated by the national method, could not be well over-estimated, and all suggestions in this direction deserve careful consideration. We are told that if b be taken to represent the birth-rate of one unit of the population, d the death-rate of one unit of the population, r the rate of increase, and x the mean duration of life, then $x=\frac{\lambda b - \lambda d}{\lambda (1+r)}$. We are not told definitely enough what is meant by "rate of increase"; is it increase of the enumerated population, or merely increase by excess of births over deaths? and does it signify "*annual* rate of increase"? In the absence of this information it is useless to discuss the formula, although the bearing of the rate of increase of population upon the difference between the birth- and death-rates, with reference to the mean duration of life, is not at all clear. Further, when we come to test Mr. Blyth's application of his own formula we are faced by several difficulties. The report proposes to give the mean duration of life (calculated by the above-mentioned formula) for the sanitary district of Marylebone, and for each of its component registration subdistricts. This mean duration of life is said to vary from 37·9 in Christchurch, to 64·7 in Cavendish-square. Bearing in mind the variation of class in the populations of these two subdistricts, it may reasonably be expected that their true mean duration of life would vary widely; but seeing that the formula takes no account of the actual age distribution of the population dealt with, which is the most powerful factor in the control of the mortality, and hence of the mean duration of life, it is impossible to feel any confidence in the figures given. No account, moreover, is taken of the effect of migration, as dis-

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tinct from the excess of births and deaths, and its effect upon the increase or decrease of population; and in the case of Marylebone and its registration subdistricts, although the excess of births over deaths in the ten years 1871-80 was 13,235, the enumerated population in 1881 was 4344 fewer than at the previous census in 1871. Mr. Blyth shows in his report that the birth-rate and death-rate in St. Mary subdistrict were equal, and it is well known that the population of the subdistrict is declining by migration; it would be interesting to know how Mr. Blyth uses his formula for arriving at the mean duration of life in this subdistrict.

Finally, it conclusively appears from Mr. Blyth's report, that his figures, purporting to give the relative mean duration of life in the several registration subdistricts of his sanitary district are untrustworthy, either because the formula is fallacious, or because it has been incorrectly applied. The term "mean duration of life," scientifically or technically, signifies the mean age at death of a life-table population—that is, of a theoretical population under observation from birth to death, undisturbed by migration, and in which the births are equal to the deaths. In any population in which the births exceed the deaths, or which are affected by migration, the mean age at death differs materially from what is technically known as the mean duration of life. But to return to Mr. Blyth's figures, he calculates the mean duration of life in St. Mary subdistrict as 45·0 and in St. John subdistrict as 43·3 years. Now another table shows the death-rate per 1000 living in 1885, at five groups of ages, in each of these registration subdistricts. From this table it appears that the death-rate in St. Mary subdistrict very considerably exceeds that in St. John subdistrict at each of these five age periods. It follows, therefore, inevitably, that the true mean duration of life must be much lower in St. Mary than in St. John subdistricts, instead of being higher, as it is made out to be when calculated by Mr. Blyth's formula.

The value of the "mean duration of life," if correctly calculated, as a test of health condition, is entirely beyond question; but a life table is the only correct basis for its calculation, and this involves laborious calculation. As regards Mr. Blyth's method for calculating the "mean duration of life," his formula requires further elucidation, but in the meantime the figures said to be computed by it are unquestionably fallacious.

WILLS OF MEDICAL MEN.

THE will and two codicils of Mr. Thomas Pennington, M.R.C.S., L.S.A., formerly of 59, Pembroke-place, but late of 22, Devonshire-road, Liverpool, were proved at the Liverpool District Registry on the 14th ult., by Mr. James Pegram and the Rev. John Smith, the acting executors, the value of the personal estate amounting to upwards of £121,000. The testator after making sundry bequests, including some in favour of local charities, devises all his real and bequeaths the residue of his personal estate upon trust as to the income for his wife, Mrs. Jane Pennington, his sister, Sarah Sleddon, and his three grandchildren, John Reginald Richard Pennington, Thomas Robert Pennington, and Edith Sarah Bremner, in equal shares; with remainder in favour of the children of such grandchildren.

The will of Alfred Pett, M.D., late of 57, Avenue-road, Regent's-park, who died on April 3rd last, was proved on the 28th ult. by Mr. James Hilton, one of the executors, the value of the personal estate amounting to over £28,000. The testator bequeaths his watch, chain, diamond ring, and plate to his wife, Mrs. Mercy Pett, for life, and then to his daughter, Louisa Harriet; £200, and his household furniture, books, and the rest of his effects to his wife; an annuity of £300 to his wife so long as she remains his widow, in addition to the provision made for her by their marriage settlement; an annuity of £100 to his daughter, Louisa Harriet, while unmarried; and legacies to his sisters and to his executors. The residue of his real and personal estate he leaves upon trust for his three daughters, Emilia Louisa Bond, Mary Gertrude Pryor, and Louisa Harriet Pett, in equal shares.

The will of Richard Parry, M.D., of 2, Lancaster-terrace, Regent's-park, who died on May 10th last, was proved on the 9th ult. by Mrs. Eliza Ann Parry, the widow, and Mr. Joseph Prosser Hill, the executors, the value of the personal estate amounting to upwards of £12,000. The testator gives the cash at his bankers and his household furniture and effects, except a few articles specifically bequeathed, to his wife; £500 to his daughter, Rosa Menpes; and two or three other legacies. The residue of his real and personal estate he leaves upon trust for his wife for life; then as to £2000 for his son, Thomas Palmer Parry, for life; and the ultimate residue for his three daughters, Mary Harriet Parry, Rosa Menpes, and Jessie Buckle.

The will of Peter Mageniss, M.D., of 27, Euston-road, King's-cross, who died on March 1st last, was proved on the 28th ult., by Mr. John Ortelli and the Venerable Patrick Mageniss, the executors, the value of the personal estate amounting to upwards of £10,000. The testator confirms the settlement of property made by him on his daughter, Catherine Rose, at her marriage; and gives the rest of his estate upon trust for his grandson, Vincent Peter Kennedy.

The will and codicil of Alexander Guthrie, M.D., Deputy Surgeon-General, H.M. Army, formerly of Maisondieu, near Brechin, N.B., but late of Fort Pitt House, Chatham, who died on March 3rd last, were proved on the 29th ult. by Mr. John Guthrie, the brother, Mr. Montagu St. John Maule, and Mr. George Cottrill Downing, the surviving executors, the value of the personal estate amounting to over £8000. The testator bequeaths his household furniture, plate, linen, china, and goods to his wife, Mrs. Emily Guy Menzies Guthrie. As to the residue of his property, he leaves the whole income to his wife for life, but if she marries again one-half only; and subject thereto to be equally divided among his lawful children.

The will of Richard Tuthill Massey, M.D., formerly of Park-road, Redhill, but late of 18, Powis-road, Brighton, who died on Feb. 17th last, was proved on the 22nd ult. by Mrs. Anna Massey, the widow and sole executrix, the value of the personal estate amounting to over £2000. With the exception of a legacy of £900 to his sisters, Mary Anne and Caroline, the only legatee under the will is testator's wife. His daughter Beatrice Jane is fully provided for by his marriage settlement.

The will of James Thompson, M.D., formerly of Avenue House, Leamington, but late of 1, Matheson-road, Kensington, who died on the 5th ult., was proved on the 3rd inst. by Mr. Andrew Thompson, the brother, and Mr. Edward Henry Panton, the executors, the value of the personal estate amounting to nearly £2000. The testator gives a few memorial legacies, and the other legatees under the will are his wife, Mrs. Mary Jane Thompson, and his two daughters, Millicent Phœbe and Kathleen Mary.

The will of Mr. Frederick John Alexander, Surgeon, of Margery Hall, Margery-park-road, Essex, who died on April 7th last, was proved on the 18th ult. by Mr. Horace Augustus Alexander, the brother, and Mr. Frederick Bush, the executors. The testator leaves an annuity to his mother, a legacy to his housekeeper and her husband; and the residue of his real and personal estate upon trust for the benefit of his wife, Mrs. Lucretia Sanders Alexander.

The following legacies have recently been left to hospitals and other medical institutions:—Mr. Henry Christey, formerly of Beer-lane, Tower-hill, but late of 23, St. Andrew's-square, Hastings, the gross value of whose personal estate amounts to nearly £14,000, after bequeathing legacies amounting to £350 to his brother and sisters, leaves and bequeaths all the rest of his property to the London Hospital, Whitechapel-road.—Mr. William de Hague, of the East India United Service Club, St. James's-square, and the Langham Hotel, Langham-place, £3000 each to St. George's Hospital, the Middlesex Hospital, the London Hospital, the Royal Hospital for Incurables, West-hill, Putney-heath, the Westminster Hospital, and the City of London Hospital for Diseases of the Chest, City-road.—Sir Henry Morgan Vane, of 74, Belgrave-square, £200 each (free of duty) to St. George's Hospital, Hyde-park Corner, and the General Infirmary, Northampton.

EAST LONDON NURSING SOCIETY.—Princess Christian presided on the 6th inst. over a drawing-room meeting on behalf of this Society, the object of which is to provide nurses for the sick poor, in their own homes, in the east of London. It is now at work in twenty parishes, and employs a similar number of nurses, who are under the supervision of three matrons.

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Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Aylesbury Rural District.—Dr. Hilliard has to record a considerable freedom from mortality by reason of infectious diseases. Aston Clinton has been much benefited by Lady de Rothschild's intervention in laying the mains of the Chiltern Hills water through the village. Some cottages, however, still resort to wells liable to pollution, and the authority should see that this is no longer tolerated. Bye-laws as to buildings have been enacted, and much benefit is expected to result from them. Dr. Hilliard's report includes a careful *résumé* of vital statistics and meteorological records.

Newcastle-upon-Tyne Urban District.—Mr. Henry Armstrong's annual report practically forms a handbook on the health of the city under his sanitary supervision. So far as mortality statistics are concerned, the city has in its general death-rate retrograded; the rate for 1885 being 26·0 per 1000, and standing higher than it has done since 1875. Under the Local Improvement Act 1727 cases of infectious diseases were reported, 1227 being scarlet fever, 253 enteric fever, 93 diphtheria, and 70 small-pox; there were also 9 cases of typhus. Of the latter, it is said that 8 cases occurred in separate houses, and one in an institution. The failure of the disease to spread must largely be attributed to the resort to isolation in hospital. In all, 128 patients were removed to either the fever or the small-pox hospitals, the accommodation in which is at present much restricted. In 1883 a systematic house-to-house inspection of the borough was commenced, a special staff of inspectors being engaged; and the results include a return for every inhabited dwelling in the city, except two, admission to which was refused. The number of defects which came under notice has been great, and a large amount of valuable work has been the result, all this being set out in summary in Mr. Armstrong's report. In addition to the general report, a special one is submitted on the water-supply of the city. It forms an exhaustive summary of all the conditions under which a water-supply should properly be conveyed to a city and its inhabitants, and of the evils and drawbacks to be avoided if a wholesome supply is to be utilised to the utmost advantage.

Batley Urban District.—The general death-rate for 1885 was 19·4 per 1000, and that for zymotic diseases was as high as 3·69 per 1000, the principal causes being whooping-cough, diphtheria, scarlet-fever, and measles. Action was taken to stay the spread of infection, but though the matter has for years past been brought under the notice of the Corporation, Batley still has no means for the isolation of first attacks of infectious diseases. A summary of dangers to health includes references to houses without proper drainage, dwellings fouled by contiguity to middens and privies, need for proper drain disconnexion, inadequate privy accommodation, and houses otherwise unfit for habitation. Reference is made in Dr. Swann's report to Dr. Thorne Thorne's inspection of Batley in 1878; and we fear that, in many respects, the town remains much what it was at that date.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 5609 births and 3064 deaths were registered during the week ending July 3rd. The annual death-rate in these towns, which had been equal to 16·8 and 17·0 per 1000 in the preceding two weeks, further rose last week to 17·6. During the thirteen weeks ending on Saturday last the death-rate in these towns averaged only 18·6 per 1000, and was 2·9 below the mean rate in the corresponding periods of the ten years 1876-85. The lowest rates in these towns last week were 13·3 in Salford, 14·2 in Derby, and 14·7 in Sunderland. The rates in the other towns ranged upwards to 23·3 in Halifax, 25·9 in Plymouth, 26·9 in Manchester, and 30·4 in Preston. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had steadily increased in the preceding three weeks from 263 to 312, further rose last week to 333; they included 115 from measles, 86 from diarrhœa, 67 from whooping-cough, 30 from "fever" (principally enteric), 20 from scarlet fever, 15 from diphtheria, and not one from small-pox. No death from any of these zymotic diseases was recorded last week in Sunderland, Wolverhampton, or Derby; whereas they caused the highest death-rates in Bolton, Portsmouth, and Preston. The greatest mortality from measles occurred in Oldham, Portsmouth, Bolton, and Preston; from diarrhœa in Plymouth and Blackburn; from whooping-cough in Manchester and Salford; and from "fever" in Newcastle-upon-Tyne, Portsmouth, and Birkenhead. The 15 deaths from diphtheria in the twenty-eight towns included 9 in London, 3 in Liverpool, and 2 in Nottingham. Small-pox caused no death either in London and its outer ring or in any of the twenty-seven large provincial towns. The number of small-pox patients in the metropolitan hospitals situated in and around London, which had been 31, 23, and 17 on the preceding three Saturdays, had further declined to 14 at the end of last week; 2 cases were admitted to these hospitals during the week, against 2 and 4 in the previous two weeks. The deaths referred to diseases of the respiratory organs in London, which had been 184 and 194 in the preceding two weeks, further rose last week to 197, but were 23 below the corrected average. The causes of 68, or 2·2 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Salford, Nottingham, Brighton, and in three other smaller towns. The largest proportions of uncertified deaths were registered in Hull, Oldham, and Liverpool.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been equal to 21·7 and 20·2 per 1000 in the preceding two weeks, rose again to 20·8 in the week ending July 3rd; this rate exceeded by 3·2 the mean rate during the same week in the twenty-eight English towns. The rates in the Scotch towns last week ranged from 11·7 in Aberdeen and 13·1 in Dundee, to 25·9 in Leith and 31·2 in Paisley. The 514 deaths in the eight towns showed an increase of 16 upon the number in the previous week, and included 16 which were referred to diarrhœa, 15 to measles, 10 to scarlet fever, 10 to whooping-cough, 4 to "fever," (typhus, enteric, or simple), 4 to diphtheria, and not one to small-pox; in all, 59 deaths resulted from these principal zymotic diseases, against 49, 57, and 65 in the preceding three weeks. These 59 deaths were equal to an annual rate of 2·0 per 1000, which exceeded by 0·1 the mean rate from the same diseases in the twenty-eight English towns. The fatal cases of measles, which had been 10, 17, and 20 in the previous three weeks, declined again last week to 15, of which 9 occurred in Leith and 5 in Edinburgh. The 16 deaths attributed to diarrhœal diseases showed a further increase upon the numbers in recent weeks, but agreed with the number in the corresponding week of last year, and included 7 in Glasgow and 4 in Edinburgh. The 10 deaths from whooping-cough showed a marked decline from recent weekly numbers; 8 were recorded in Glasgow. The 10 fatal cases of scarlet fever, on the other hand, showed an increase, and included 9 in Glasgow. Two of the 4 deaths referred to "fever" and to diphtheria were returned in Glasgow. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 93 and 86 in the previous two weeks, further declined last week to 77, but exceeded by 8 the number in the corresponding week of last year. The causes of 72, or more than 14 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 20·8, 22·9, and 24·7 per 1000 in the preceding three weeks, declined again to 22·9 in the week ending July 3rd. During the thirteen weeks of the last quarter the death-rate in the city averaged 25·6; the mean rate during the same period did not exceed 17·2 in London and 19·7 in Edinburgh. The 155 deaths in Dublin last week showed a decline of 1 from the number in the previous week, and included 1 which were referred to the principal zymotic diseases, against 5, 7, and 10 in the previous three weeks; 4 resulted from "fever," 4 from whooping-cough, 3 from diarrhœa, 1 from scarlet fever, and not one either from small-pox, measles, or diphtheria. These 12 deaths were equal to a

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annual rate of 1·8 per 1000, the rates from the same diseases being 2·8 in London and 2·3 in Edinburgh. The fatal cases of "fever," whooping-cough, and diarrhœa showed increase upon the numbers in the previous week, and those of scarlet fever a decline of 2. The 28 deaths from "fever" in the thirteen weeks ending last Saturday were but half the number in the first three months of the year. Six inquests and 4 deaths from violence were registered; and 58 more than a third, of the deaths were recorded in public institutions. The deaths of infants showed an increase upon the weekly numbers, whereas those of elderly persons had declined. The causes of 21, or 13 per cent., of the deaths registered during the week were not certified.

THE SERVICES.

WAR OFFICE.—Army Medical Staff: Surgeon-Major F. Alfred Smith has retired upon temporary half pay.

ADMIRALTY. — The following appointments have been made:—Surgeon Henry W. D. Walsh, to the Bermuda Hospital; Surgeon Michael J. M'Carthy, to Hong-Kong Hospital; Surgeon Neal Keays, to Plymouth Hospital; Surgeon T. Pendlebury, to the *Icarus;* Surgeon G. C. Ward, to the *Alecto;* Surgeon Henry Berry, to the *Banterer;* Surgeon W. G. E. Smith, to the *Flirt;* Surgeon Thomas M. Sibbald, to the *Duke of Wellington;* and Surgeon and Agent Charles Harrison, to Queenstown and Berehaven.

INDIAN MILITIA. — 3rd Battalion, the Connaught Rangers: Surgeon George W. Hatchell is granted the honorary rank of Surgeon-Major.

RIFLE VOLUNTEERS.—2nd Volunteer Battalion, the Duke of Cornwall's Light Infantry: Acting Surgeon John Henry Jenkins to have his appointment; William Nettle, Gent., to be Acting Surgeon.—1st Volunteer Battalion, the Lincolnshire Regiment: Surgeon and Honorary Surgeon-Major C. B. Moody resigns his commission; also is permitted to retain his rank and to continue to wear the uniform of the Battalion on his retirement.—1st Sussex: James Turton, Gent., to be Acting Surgeon.

Correspondence.

"Audi alteram partem."

THE APPROPRIATION OF PATIENTS BY CONSULTANTS.

To the Editor of THE LANCET.

SIR,—Will you allow me to bring under your notice what I call the absorbent action of consultants as exerted on patients introduced to them by general practitioners? A few weeks ago I felt specially sore on this point, as within a short period previous to that I had discovered that three patients, whom I had introduced to as many consultants, had been blandly absorbed by these gentlemen as their own exclusive property. It is fair to say that in one of these cases the consultant has since given me a full explanation of the circumstances. This was not my first experience of each treachery, but the accidental occurrence of three cases was the immediate cause of my then soreness. I frequently have had similar cases from my neighbours, and there can be no doubt that there is no longer that perfect safety in calling a consultant that used to exist. This, it seems to me, is a matter much to be regretted, not only because it increases the hardships of our professional existence, but because it denotes a certain loss of tone in the moral fibre, and must, if carried on, finally land us in a death-clutch at each other's throats. No longer shall we be able to trust a brother practitioner to see a patient for us if we are ill; no more shall we find available that outside assistance on which, in cases of emergency, we have been accustomed to rely—in a word, it will be "every man for himself."

In California there is a process called "jumping a claim." Land in the gold districts is there taken up by parties of two, three, or four, and it is no uncommon thing for a small party to awake one fine morning and find a notice on their claim to the effect that a larger party has taken it. On remonstrance, it is customary for the larger party to produce their revolvers, and to remark that their numbers being four, five, or six, as the case may be, to the original party of three, four, or five, it will be best for the rightful owners to depart. This is about our position with regard to consultants. We find our patients being assimilated by them, and in view of their moral revolvers—in other words, this titles, their position, and their prestige—we are obliged to recognise the futility of resistance, and resignedly to see our patients "jumped." Whether the struggle for existence in the upper ranks of the profession is the real cause of this behaviour, or whether it is ignorance of the ethical laws which swayed the conduct of our ancestors, the result is the same: there is a loss of tone, and the gentlemanly honour of the profession loses its lustre. Men are too ready to believe what patients say of their doctors. There is no subject on which the laity so unblushingly lie as on that of their relations with their doctors. Does a patient owe a doctor a bill and on that account for very shame hesitate to call him in, he will tell another doctor that his reason for changing is on account of some error of his original doctor. If a consultant asks a patient who comes for a second consultation without his regular adviser the reason of this absence, he is most probably told that the patient and the doctor have quarrelled, whereas the real reason is that the patient thinks to save the double fee. And so it is in many other instances, so that now I, for one, never believe what a patient tells me about doctors.

I have mentioned the "double fee." There is no doubt that this fact, that when a patient is accompanied by his own medical adviser a fee of two guineas is charged when if he went alone he would only have to pay one, goes a long way to account for the action of the patient. As has been frequently observed, this method of procedure is a little difficult to explain, for when the medical or surgical particulars of the case are ready cut and dried there cannot be so much for the consultant to do as when he has to ferret them out for himself. And, sad to tell, by this increase of charge the consultant lays himself more open to be assailed by temptation, as men will always try to get as much as they can for as little as possible. Altogether, Sir, what with absorbent consultants, prescribing chemists, and pay wards at the hospitals, the general practitioner's outlook is not cheerful. Cannot you help us? A few words from you may make the consultants more careful and more willing to observe the good old rule by which one medical man, in times now nearly gone, would absolutely refuse to see a patient to whom he had been introduced by another without the knowledge and consent of that gentleman. After all, this is only another reading of a still more ancient rule which bids us do to others as we would they should do to us.

I am, Sir, yours truly,

Holloway-road, N., July 6th, 1886. W. HENRY KESTEVEN.

THE RECENT CHOLERA SCARE AT QUEENSLAND PORTS.

To the Editor of THE LANCET.

SIR,—As some doubt seems to have been expressed in certain quarters as to the nature of the symptoms, supposed to be those of cholera, which have recently been manifested in the latter part of the outward voyage on certain Queensland Government emigration steamships, and which proved fatal to several of the emigrants on the *Dorunda*, it would be interesting to inquire whether there could be any other cause tending to modify the diagnosis, for it is well known, as Dr. F. Roberts remarks in his "Handbook of the Theory and Practice of Medicine" (3rd ed., p. 226, vol. i.), that "intense gastro-enteritis, excited by poison or some other irritant, has been mistaken for cholera." As I happened to be temporarily filling the post of surgeon to an outward-bound steamer, calling at Queensland ports, which immediately succeeded the *Dorunda* at Batavia at the time of the occurrence—viz., at the close of last year and the commencement of the present,—it may be presumed that the inquiry is not without some personal as well as public interest. The medical officer of health at one of the Queensland ports, who had acquired considerable practical acquaintance with the symptoms of cholera during a residence in Central America of some years, expressed to me very decided doubts as to the accuracy of the diagnosis, though I think I am not now justified in mentioning his name. Hearing by telegram of the fatal sickness which had occurred on the *Dorunda*,

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and being warned—too late, however—not to enter the harbour of Batavia, we were not without some anxiety lest we ourselves should suffer in like manner—a fear which appeared not wholly unfounded on the occurrence of several cases of severe colic, of a nature somewhat mysterious in origin, but happily more or less readily yielding to medical treatment, some time after leaving that port.

In a previous letter in your columns (see THE LANCET, April 24th last) your readers may have noticed my mention of what appeared to afford ground for suspicion as to the cause of the symptoms which came under my notice, and which I suggested as probably due to zinc-poisoning, a view which received confirmation on referring to the researches of M. L. L'Hote in *Comptes Rendus*, in the decomposition of water by zinc in the presence of iron, and from the manifest presence of the injurious metal in a sample of the water we had been consuming, which I had reserved and submitted to chemical test after my return home; the possible cause of the epidemic having been first suggested by one of the ship's engineers, who was aware of the presence of zinc anti-corrosive plates affixed inside the boiler we had been using for condensing purposes. Since somewhat similar symptoms, but fortunately not fatal, have more recently occurred on board the Queensland Government emigration steamship *Quetta*, which you have remarked as being in all probability not of a choleraic nature, it would be interesting, from a medical aspect, to inquire whether these ships also have, in like manner, zinc anti-corrosive plates in their condensing boilers, which, supposing the invention of modern application, would excite greater suspicion if the ships in question are of more modern construction than others in the line of service. If so, we arrive at what would seem to be an interesting confirmation of a probable cause of certain symptoms which, even though fatal in several cases on board the *Dorunda*, have at least been adjudged by certain individuals to possess some difference in type and duration as compared with those usually manifest in epidemic cholera. Apart from the enfeebling character of a tropical voyage on the average British unacclimatised constitution, which might be supposed to predispose the system to epidemic and other prejudicial influences, in support of the idea suggested as to the probable cause of the symptoms, which give rise to very considerable anxiety and apprehension in Queensland, and which would seem, in case of recurrence, in danger of seriously impeding commerce, it is well to remember that the symptoms appear to have arisen shortly after leaving Batavia, or even before arriving at that port, in the case of the *Quetta*, or, as it is presumed, after the consumption of condensed water—for it is not now usual, I believe, to take in supplies of that commodity at the port of Batavia,—and, as it appeared to me, amongst a section of the ship's company consuming the water most freely, and where, perhaps, the accommodation was not quite so good, or the diet-table so liberally varied.

Without appearing to prejudice the interests of our ship-builders, whose marvellous works we so much admire, and who would be the first to desire to remedy any palpable error in construction affecting the health of the passengers or crew, or, by raising an unfounded alarm, to interfere with the freedom of invention or of commerce, it might seem that an official inquiry might be instituted on the lines above suggested with manifest advantage, in order to prevent, if possible, the perpetuation of an injury to the health of the sea-going community, and others who may have to depend upon supplies of condensed sea-water for consumption from time to time; and should confirmation be given to a supposed assignable cause of symptoms of illness giving rise to alarm, it is manifest that the inquiry will not be futile. Should, however, there appear to be insufficient ground for an official inquiry on the subject, I should feel glad to receive any information as to the presence of zinc plates in the condensing boilers of the ships in question, or bearing on the subject generally. Whilst in pursuit of the medical investigation, any information tendered by those members of the profession who may have had the charge of the ships where the illness has occurred or of the Brisbane Quarantine Station, or who have had to do with the inspection of the ships of the line where illness has occurred, in their official capacity as port sanitary officers, communicated to your columns, will, I doubt not, be of interest to many of your readers.—I am, sir, yours faithfully,

JOHN WARD, M.D., ex-M.O.H.

Sutton Coldfield, Birmingham, June 15th, 1886.

JOHN HUNTER.

To the Editor of THE LANCET.

SIR,—I beg leave, through you, to tender warm thanks to Mr. Charles Hawkins for having just published in your columns a very remarkable letter from John Hunter to the governors of St. George's Hospital. The great surgeon's writings often leave much to be desired. He was a deep thinker and an untiring worker, but neither a wide reader nor a facile exponent of thought. On the latter point judgment must be expressed with reserve, because facts fail through the deplorable destruction of much of John Hunter's manuscript by Everard Home. That the loss was irreparable is beyond doubt, but whether the papers burnt were rough notes or finished essays it is impossible to say. The letter which you now publish was written some months after John Hunter's last communication to the Royal Society, and not many weeks before his death. It is rich in evidence of philosophic spirit, of enthusiasm for professional work, and of public disinterestedness. Mr. Hawkins tells us that the letter is one of a series in his possession, and that he *may* print the whole correspondence. By doing so I venture, through you, to assure Mr. Hawkins that he will be rendering a very great service to all students of surgical history. As the editor of Sir Benjamin Brodie's writings, and as one of the comparatively few surviving links between the epoch immediately succeeding the Hunterian and our own times, Mr. Charles Hawkins must possess a store of information which would be priceless now, and irrecoverable unless he place it on public record.

I seize this opportunity for referring to one item in Hunterian history on which information is much needed. John Hunter's wife, sister of Sir Everard Home, bore him four children, of whom two died young; the other two, Agnes and John, were said to be living in 1835, when Henry Ottley wrote the life of Hunter prefixed to Palmer's edition of his works. The Annual Register for 1793, the year of John Hunter's death, states that he left a son in his twentieth year, then at Cambridge. That son, according to information kindly supplied to me by Dr. William Hunter of Rothesay, entered the army, rose to the rank of colonel, and left a daughter, named after his sister Agnes. But I can obtain no further reliable information. Anyone able to supply it will, I am sure, be welcome to your columns.

I am, Sir, your obedient servant,

Birmingham, July 4th, 1886. SAMPSON GAMGEE.

A MISTAKE, A DEDUCTION, AND A MORAL.

To the Editor of THE LANCET.

SIR,—The general brevity of our English summer renders us very liable to forget the fact that in weather such as we are now experiencing the extreme heat of the sun's rays may, without the exercise of due care, be very powerful of harm. A brief mention of the following case will illustrate my meaning, and may not merely be of interest, but, should the weather continue, may also be beneficial in helping others to form at once a correct diagnosis, where I must confess I at first decidedly failed.

On Sunday evening, July 4th, I was called to see Alfred L——, aged four years, a well-nourished, healthy-looking child. His parents, who were very anxious about him, told me he was taken ill on Friday, July 2nd, until which day he had been in his usual health. The only history I obtained of the illness was that he was very restless on Friday evening, shivered slightly, and then became feverish, thirsty, and complained of his throat. I found him lying on his side with his face away from the window, and nearly buried in the pillow. The thermometer registered his temperature at 104° F. His skin was very hot and dry, tongue coated with a white fur, pupils dilated, breathing rapid, and also nasi working.

Remembering the prevalence of east and north-east winds, I thought I had to deal with a case of pneumonia or capillary bronchitis. And here comes the harm of forming an opinion before examination. The percussion note was apparently good and breathing vesicular. But I was prejudiced, and at times I thought I detected slight roughness in the breathing on one side, while I fancied the puerile breathing was almost bronchial over one back. However, the signs

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...tive, so I ordered a simple mixture of citrate ... spirits of ammonia, with milk diet, and left, ... return in the morning, when I thought, were I ... ical signs would have more fully developed. ... glad to say that on the same evening, a few ... suddenly occurred to me that the case was ...ke; and then I remembered, again, the position ... the dilated pupil, and the avoidance of light; ... a sign of great significance that I have not ...—viz., well-marked reflex muscular irri... ...ially in the spinal region; and I put these with ...erature and absence of lung signs, and was ...idden conviction was correct. It was more ... next day, when the child was much better, ...e being 100°, lung sounds quite healthy, and ...ability much less. He continued the medicine, ... of rhubarb and mercury with chalk at bed- ...ield to the spine. To-day (Tuesday) he is ...roved and wishes to get up. I have no doubt ...convalescence.

...ising, if necessary, for the length at which I ...urge this deduction. We in England are even ...unstroke in this short summer of ours than ...s in the tropics. And for this reason: In the ...idents are continually alive to the dread effects ...un, and go about in pith helmets and spinal ... England, we make no change in our dress, ...ost tropical sun with careless indifference. ... is because our climate is so uncertain. The ...n of to-day may be hidden by clouds and ...o-morrow, to shine no more in its potency ... However this may be, during this brief ... I would urge a constant and mindful care, ...ended to children too young to know or care ...themselves. And the moral is one I take to ... Avoid drawing conclusions until certain of ...n which they should be based."

... Sir, your obedient servant,

... FRANK STURGES, L.R.C.P., Lond.,
... 6th, 1886. Late Surgeon P. & O. S. N. Co.

LIVERPOOL.

(From our own Correspondent.)

CONVALESCENT HOSPITAL AT WOOLTON.

The ... annual meeting of the supporters of the Woolton Convalescent Hospital was held on June 26th. In this city, as elsewhere, an institution of this kind supplies a great want. Our four general hospitals are not more than sufficient for a centre containing a population of nearly 600,000. Moreover, they are not merely city but county institutions, receiving patients from a considerable distance. It follows therefore that many patients leave our hospitals in a condition which would be greatly improved by a short residence in a convalescent hospital. Woolton is a pleasant village several miles south-east of Liverpool, and the institution is most ably administered. Mr. George Cope has presented £500 for the endowment of a bed to be known as the "George and Thomas Cope bed," for the use of the working people employed in their factory.

THE LOWEST MORTALITY EVER KNOWN.

At the last meeting of the Health Committee, the chairman, Mr. J. B. Smith, remarked that the rate of mortality (18·2 per 1000) was the lowest he had ever known.

THE DEAD-HOUSE.

There would appear to be a special Providence over the ... other classes of this city. It has never happened that ... body of a "merchant prince" has been found floating in ... river, been recovered by some waterman, and conveyed to ... Prince's Dock Dead-house. Had such an event occurred ... would probably have been a general chorus of in... that the body of any gentleman should have been ...veyed to such a miserable place as the mortuary or dead-... has always been. Some years ago it was removed ... its former site to another not far off, and it was fully ...ected that the present structure was only a temporary ... But as years have rolled on this has turned out to ... a pleasing illusion. The place as it is, especially in hot ...ther, is a disgrace to everyone responsible for its continuance. It is, unfortunately, another melancholy instance of what is everybody's business being nobody's business. A very small expenditure would suffice to produce a structure which would be suitable for the reception of bodies, and at the same time not prejudicial to the health of those who have to visit it, and even spend some time there. It is greatly to be hoped that this will soon be done, as otherwise it is quite impossible to say how soon a very serious scandal may arise.

HOSPITAL SATURDAY.

The amount found in the Hospital Saturday boxes exceeds £3000, which is the largest sum received since the first starting of the fund in 1871. It is expected, however, that as years pass on this amount will be considerably augmented, and there can be no reason why the working men of Liverpool should not raise as much as has been done by their fellow-workmen in Birmingham and Glasgow—viz., £5000.

TESTIMONIAL TO DR. HYLA GREVES.

Dr. Hyla Greves was presented on June 29th with a silver bowl as centre-piece and an illuminated address from a number of his medical friends. The presentation took place at a supper at the Adelphi Hotel. Mr. Mitchell Banks presided, and there were about seventy gentlemen present. Dr. Hyla Greves leaves Liverpool for Bournemouth with the heartiest good wishes for his health and prosperity of a very large number of both professional and lay friends; it may, indeed, be said that he does not leave an enemy behind. In the various appointments he has held of physician to the Infirmary for Children and the Bluecoat Hospital, he has won golden opinions, and the regret felt at losing his future services is felt by the committees of both these charities. Dr. Greves has also held office at the School of Medicine as Demonstrator of Anatomy and Medical Tutor, where he was most popular with all the students. His perfect recovery to health after a most serious illness caused the greatest satisfaction to all his numerous friends.

Liverpool, June 30th.

MANCHESTER.

(From our own Correspondent.)

OWENS COLLEGE.

FRIDAY last was the annual prize day and meeting for presentation of associates of the College. There was a large attendance, and, either owing to the General Election taking place on the same day or to some other cause, the students indulged much more than has been usual of late in giving vent to their animal spirits by the shouting and cheering of names of politicians &c., those of Sir H. Roscoe and Lord R. Churchill being apparently in greatest favour. The report of Dr. Greenwood stated that the number of students during the past session had been 1251, exclusive of those in the department for women. The lady students numbered 66. The number of associates admitted this year was 33, 17 of these being graduates of Victoria University, and 14 either of London, Oxford, or Cambridge. One-half were graduates in medicine, and the remainder in arts or science. In alluding to the resignation of Sir H. Roscoe as Professor of Chemistry, the Principal paid a well-deserved tribute to the part he had taken in bringing the College to its present position, and especially that to him was due the perfection of its chemical laboratories and teaching. An important feature of the year's work is the projected establishment in the immediate future of a hall of residence, to be called the Hulme Hall, already endowed with £1000 per annum.

ELECTION OF SIR H. ROSCOE.

The candidature of Sir Henry Roscoe for the representation of South Manchester in Parliament has again been successful. At the last election Dr. Royle opposed him, but this time Colonel Fowler was the Conservative candidate, and Sir Henry's majority was reduced to some 300 only. No medical man has this time appeared as an aspirant for parliamentary honours in either Manchester or Salford.

MR. LUND.

The heading of the poll by Mr. Lund at the late election for members of the Council of the College of Surgeons has given much satisfaction here, and shows that the time and attention he has devoted to his duties there during the past

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eight years have been appreciated. Although resident two hundred miles from London, his attendance at the meetings has been most regular, and demonstrates that efficiency is no monopoly of the metropolitan members.

WORKHOUSE DIETARIES.

Apropos of some correspondence in THE LANCET of the 3rd inst. upon uniformity in workhouse dietaries, it may be mentioned that at a meeting of Poor-law authorities held in the Manchester Town Hall to make preliminary arrangements respecting their autumnal conference, this subject was referred to, and it was determined that it should form one of the subjects for discussion there. Dr. Rhodes, a member of the Chorlton Board of Guardians, has devoted much time and attention to this matter, and he was requested to prepare a paper and introduce the subject at the coming meeting. Another matter also fixed upon for debate was "the abuse of lying-in wards and lock wards in workhouse infirmaries."

THE COMING MAYOR.

It is expected that the office of mayor during the ensuing municipal year will be accepted by the present chairman of the Health Committee, Mr. Alderman Schofield. Under his able direction for some years past sanitary work has been vigorously carried on, and although Manchester is as yet far removed from Dr. Richardson's ideal city, still much has been accomplished in setting our house in order from a sanitary point of view. Perhaps one of the most pressing evils of the present time is the smoke nuisance; that, and the improvement of the homes of the poor, may well occupy the serious attention of the council.

THE ROYAL INFIRMARY.

A vacancy in the post of sister-superintendent of nurses at the Royal Infirmary has been caused by the resignation of Miss McKie, who has held that office for some half-dozen years, and under whose *régime* many and important changes have come to pass in the organisation and accommodation for the nurses and sisters. Although the lady is severing her connexion with the infirmary, she will still retain her interest in the institution, as the occasion of her leaving is due to a matrimonial engagement with one of the junior members of the honorary staff. She will leave with many good wishes for her future happiness. Miss Brown, of St. Bartholomew's Hospital, has been appointed her successor.

Some little speculation is already abroad as to who shall represent the Victoria University in the Medical Council under the provisions of the new Medical Act, but it is too soon at present to mention with certainty any names in connexion therewith.

After much asking, the School Board has at last resolved to allow some of the playgrounds to remain open during the evening for the use of all the children living in the crowded districts in which they are situate, irrespective of whether they attend the schools or not. This utilisation of playgrounds and such spaces as we have for children's recreation is much to be commended.

Manchester, July 5th.

NORTHERN COUNTIES NOTES.

(From our own Correspondent.)

PRESENTATION TO DR. G. Y. HEATH, OF NEWCASTLE.

AN interesting meeting took place last Friday in the library of our infirmary, when a congratulatory address was presented to the much-respected lecturer on surgery by his past and present students, who felt the honour which the worthy Doctor has lately received in being admitted by selection to the honorary Fellowship of the Royal College of Surgeons of England to be an appropriate occasion to express the respect in which he is held here in the north. It is very gratifying that the movement originated and was carried out by students, although Dr. Heath's colleagues and many of his professional brethren were also present, and participated in the expressions of esteem which were rendered at the meeting. Dr. Arnison occupied the chair, and the address presented was inscribed in a handsome album, having special views of the Medical School, the University of Durham, the Cathedral, &c. Dr. Heath replied in feeling terms, and stated that he was quite taken by surprise when the presentation was first mooted to him, and that the honour he had received from the College of Surgeons was quite unsolicited on his part. On the conclusion of the meeting the students gave further expression of their feelings in the familiar but hearty form known as "musical honours."

THE LATE REV. CANON EAST, OF NEWCASTLE.

I much regret to notice the death of this estimable clergyman, who died at St. Andrew's Vicarage, Newcastle, last week, in his seventieth year. Although in holy orders, Canon East was intimately connected with our profession, having originally studied and qualified as a surgeon, and, indeed, practised in London, Coventry, and Leicester. He was a man of wide reading and culture, with marked literary tastes, so that he gradually forsook the medical profession and became connected with the editorial staff of the *Atl* and other metropolitan newspapers. Finally he directed his attention to theology, and his superior education secured ordination one year sooner than is usual with candidates for holy orders. He came to Newcastle as a curate of St. Nicholas, but in a very short time he received the living of St. Andrews, where he remained for the rest of his life. He was also chaplain to the garrison in this city. Canon East's sympathy with our profession was of the warmest nature, and his early connexion with it enabled him to take a broad and useful view of many questions concerning our medical charities and their administration.

NEWCASTLE CATHEDRAL NURSE AND LOAN SOCIETY.

The annual meeting of this excellent Society was held last week, when it was stated that owing to the liberal response of the public to the appeal for funds, it was enabled to increase the staff of nurses so as to undertake the whole nursing of the sick poor of the city and district where required; but at the present time, it is stated, there are no poor persons in Newcastle suffering from non-infectious disease who has not received the benefit of skilled nursing by the nurses of the Society. The vast extent of this work will be perceived by the following figures within the past twelve months: 1331 cases have been attended, 13,[illegible] visits paid, and 67 night nurses provided, all thoroughly trained. From the invalid kitchen have been given out 5319 pints of milk, 1354 pints of beef tea, 1451 dinners of meat, rabbit, and fish, 154 puddings, also eggs, cocoa, and other drinks. In September last the committee deemed it well to begin to make a small charge for the nourishment given; since that time £16 17*s.* 10*d.* has been repaid by the pence of the patients to the funds of the kitchen. Notwithstanding the bad times, and the very destitute state of many of the sick, some patients have raised by collecting-cards the sum of £6 4*s.* 8*d.*, and promise to do more in better times. At the conclusion of the meeting, Dr. Beatley stated that of 1331 cases attended by the nurses, over 400 had been patients of the Newcastle Dispensary.

FATAL GUNPOWDER EXPLOSION.

I have sometimes referred in these letters to the reckless manner with which gunpowder is handled and stored by miners and their families. An inquest was held at Lumley, in the county of Durham, on the body of a woman, the wife of a miner. It appeared that the deceased was smoking in a room where there were 6 lb. of blasting powder, when an explosion took place and she sustained fatal injuries. It was shown that the powder cask was uncovered, and it is supposed that she had struck a match and let it fall on the powder.

Newcastle-on-Tyne, July 5th.

THE LATE MR. W. WHITE COOPER.—The London *Gazette* announces that "the Queen has been graciously pleased to ordain and declare that Mary Elizabeth Cooper, widow of William White Cooper, Esq., Fellow of the Royal College of Surgeons, Her Majesty's Surgeon-Oculist in Ordinary, deceased, shall henceforth have, hold, and enjoy the style, title, place, and precedence of a widow of a Knight Bachelor of these realms, in as full and ample a manner as she would have enjoyed the same had her husband survived and received the dignity of a Knight Bachelor; and her command that the said Royal Order and declaration be registered in Her Majesty's College of Arms."

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EDINBURGH.

(From our own Correspondent.)

UNIVERSITY MUSEUMS AND LABORATORIES.

For the last five years, during which period the new University medical buildings have been gradually rendered suitable for the occupation of the several departments of medical training, there has been a great growth in the facilities afforded for students and practitioners who desire to take part in original investigations. In every branch of medicine this is the case. In the Anatomy department the present session signalises the virtual completion of the magnificent collections of Goodsir and Sir W. Turner, which are now arranged in a palatial hall open daily for the use of students. Between each of the glass cases in which these historical specimens are preserved a table and chairs have been provided for the use of those studying, so that they may arrange their books and papers, and be able to work comfortably in any part of the building that may be allotted to specimens illustrating the special subjects upon which they are engaged. In the ample space now at command many treasures are brought to light, and fully available for purposes of study, which were formerly all but lost to view in the midst of the copious and crowded collections of the old University museum. In other departments the increase of space has worked no less satisfactorily in ensuring greatly increased opportunities for study. In the department of Chemistry, Professor Crum Brown presides over a laboratory replete in its arrangements for pursuing investigations in all branches of that science; the same may be said of the departments of Physiology, Pathology, and Materia Medica. In all these departments original investigations by graduates of the University have been carried on for some years; and it is satisfactory to note that in the important branch of Public Health the same result has now, although the unwearied efforts of Sir Douglas Maclagan, been completely attained; for provision is now made for instructing a large number of medical practitioners and students in the science and practice of hygiene, in connection with which the University grants the degree of B.Sc. (Public Health department). In this department also a complete bacteriological section is now established, although this branch has been for some years pursued in laboratories set apart for the purpose in the departments of Surgery, Medicine, and Pathology. With the completion of the Public Health laboratories this session the University may fairly be said to have arrived at maturity of development in its relation to the advancement of experimental science; and the large number of papers now issuing from its various departments indicate that the facilities it affords are not only appreciated, but increasingly exercised.

ROYAL SOCIETY OF EDINBURGH.

At the last meeting of this Society an interesting addition was made to the long-standing discussion upon the formation of coral reefs. Dr. Guppy, the medical officer in charge of H.M.S. *Lark*, has utilised his three years' sojourn in the vicinity of the Solomon Islands by making a series of observations upon the growth of corals in a variety of external conditions. The point of chief importance in his paper was one which bears intimately upon past and present theories of coral-island formation. From recent soundings in the Pacific Ocean, and a comparison of their results with observations made in the same oceanic area nearly a hundred years ago, Dr. Guppy arrives at the conclusion that coral reefs do not rise to a greater height than from eight to ten feet from the surface, where they are exposed to the full sweep of the trade winds and the accompanying currents; and that in the Straits, where they are protected from these agents, they rise only to within four or five feet of the surface. He therefore concludes that these reefs never rise actually above the surface without the aid of terrestrial upheaval. During his research, Dr. Guppy collected between seventy and eighty species of coral, which he transmitted to London, amongst which the specialist at the British Museum has found between thirty and forty as yet undescribed species.

A CORRECTION.

In Dr. Hunter's paper upon the "Duration of the Red Blood-corpuscles," communicated to the Edinburgh Royal Society a fortnight ago, a grave error concerning his method of investigation was inadvertently committed. In the last issue of THE LANCET Dr. Hunter has indicated and corrected this misconception, and as it is a point of considerable importance, I must refer those interested in his method and its results to his lucid letter on the subject.

Edinburgh, July 6th.

PARIS.

(From our own Correspondent.)

PROFESSOR GRANCHER ON PASTEUR'S INOCULATIONS.

At the Hygienic Exhibition which is being held in Paris popular lectures are delivered on the various subjects appertaining to public and private sanitation. Professor Grancher who is one of the lecturers on the list, chose for his discourse the divers phases followed by M. Pasteur in his anti-rabic researches, commencing with the day on which he made his communication to the Academy of Sciences (Jan. 24th, 1881) on the saliva of a child who died of rabies in the ward of M. Lannelongue, up to the time of the application of the experimental methods to young Meister which had hitherto so well succeeded in animals. M. Grancher particularly drew the attention of his audience to the objections that have been raised in different quarters to the method. These objections may, he said, be reduced to two principal classes, one of which is that the substance employed by M. Pasteur in his inoculations does not contain any rabic virus; the other, that the greater number of those that had been inoculated had been bitten by dogs that were not rabid. As regards the first objection, the English Commission that came over to Paris a short time ago to study the method returned fully satisfied that the product used by M. Pasteur in his inoculations really contained the rabic virus. As regards the second objection, M. Grancher made the following remarks: Of 1335 persons who were inoculated to June 21st—that is, the day on which he delivered his lecture—he found that of 96 patients who belonged to the first or experimental category—namely, of those in whom the existence of rabies was indisputable—there was only one death, or a mortality of 1·04 per 100, or, in round numbers, 10 per 1000; and of 644 persons of the second or clinical category, 3 succumbed to rabies, or 0·46 per 100 of the mortality, or 5 per 1000 in round numbers. In comparing these statistics with those of the department of the Seine, it will be seen that the average mortality from hydrophobia has been reduced from 160 per 1000 to 7·5 per 1000. These figures apply only to those bitten by mad dogs. As regards the 48 persons bitten by mad wolves before the 22nd of April, there were 4 deaths; but a calculation based upon eight documents communicated to M. Pasteur indicates a mortality of 82 per 100 after the bites of mad wolves. A paper published by Professor Brouardel in the "Dictionnaire Encyclopédique des Sciences Médicales" on rabies gives a mortality proportion of 67 per 100. Thus it may be seen that the difference between the two results is considerable. To give further proof of the value of the anti-rabic inoculations, M. Grancher compared the efficacy of the three different kinds of inoculations that are now generally practised—namely, that of Jenner, that for charbon, and that for hydrophobia. Before the Jennerian vaccination, the non-vaccinated died from small-pox in the proportion of 500 per 1000, those imperfectly vaccinated succumbed in the proportion of 260 per 1000, and those properly vaccinated in the proportion of 23 per 1000. The preservative action of the Jennerian vaccine is therefore represented by the absolute value of 500:23—that is to say, 21·70. Besides, veterinarians numbering more than 200 who employ the charbonous vaccine give the following statistics:—Mortality before vaccination, 120 per 1000; mortality after, 5 per 1000 on an average. The preservative action of the charbonous vaccine is therefore represented by the absolute value of 120:5—that is to say, 24. Finally, the statistics furnished by M. Leblanc to the Council of Hygiene, compared with those of M. Pasteur, concerning hydrophobia, give the following results:—Mortality before the rabic vaccination, 160 per 1000; after vaccination, 7 per 1000. The preservative action of the rabic vaccine is therefore represented by the absolute value of 160:71—that is to say, 21·85. Thus it may be seen that the three vaccines appear to be sensibly equal, and this surely ought to be sufficiently convincing to

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anti-vaccinationists. Notwithstanding such convincing proofs, a good deal of scepticism prevails, and will still prevail for some time, as regards the efficacy of the anti-rabic inoculations as practised by M. Pasteur, and nowhere perhaps has this scepticism been more evident than at the Municipal Council of Paris. While M. Pasteur is receiving liberal subscriptions from all quarters, both at home and abroad, the attitude of the Paris Municipal Council is anything but encouraging to M. Pasteur, as at a recent meeting it voted a donation of only £1000, instead of £2000 as originally proposed, for his institute, and it gave him only a ninety years' grant of half the ground he wanted as a site for it. Meanwhile, awaiting the projected building, the laboratory of M. Pasteur has been transferred to the Rue Vauquelin, the premises in the Rue d'Ulm being far too small to accommodate the influx of patients from all parts.

DEATH OF DR. J. M. PRAT.

Dr. J. M. Prat, a well-known aurist and laryngologist, died at his residence in Paris on June 27th, in the sixty-fifth year of his age, after a long and painful malady. He was the son of a physician, and he devoted himself early to the study of natural and biological science, and was for a long time assistant to Gratiolet at the Museum of Natural History. He took his degree in 1848, and was a member of nearly all the scientific societies of Paris. He was much sought in Parisian society for his accomplishments. He was the author of several works on diseases of the ear and on deafness, and contributed largely to the medical periodicals on the same subject. During the war he was attached to an ambulance, and for his services there he was created Chevalier of the Legion of Honour.

DEATH OF A LADY DOCTOR.

Mdlle. Ribard, M.D., of Paris, who accompanied Paul Bert on his appointment as Resident-General at Tonquin, died from dysentery, very much regretted. The deceased lady promised to become remarkably efficient in her profession. She devoted herself specially to diseases of the eye, and had already been successful in curing several mandarins at Hué, and, had she lived, she would have operated on the Dowager-Queen, who was completely blind.

Paris, July 5th.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

AT a quarterly meeting of the Council of the College held on Thursday last, at which all the members were present, the minutes of the extraordinary meeting of June 24th were read and confirmed. Mr. Marshall presented his report as representative of the College on the General Medical Council. This was received and entered in the minutes, and the best thanks of the Council accorded him.

Mr. W. S. Savory was re-elected President by a large majority. Mr. J. Hutchinson and Sir Joseph Lister were elected Vice-Presidents for the coming year. We have referred in another column to the departure from the usual course in regard to the re-election of the President. The appointment of two new Vice-Presidents is also a variation from the ordinary routine.

The following motion, proposed by Mr. Macnamara, was carried:—"That, in pursuance of the resolution of the Council of the 9th of April, 1885, the Committee on the Mode of Election to the Council, and on other matters relating to the Charters and Bye-laws of the College, be requested to report, with as little delay as possible, on the steps taken by them in reference to the preparation of the new sections required in the charters and the formulæ for new bye-laws to give effect to the resolutions of the Council respecting them."

THE VOLUNTEER MEDICAL STAFF CORPS. — The officers and men of this corps gave their first ball at Kensington Town Hall on July 2nd. A number of distinguished patronesses, including the Princess Louise, lent their names and active assistance to further the interests of the corps, which is expected to benefit financially to a considerable extent by the festivity. The corps is to be congratulated on this the first venture, the more especially as it is intended that the ball should be held annually.

Medical News.

UNIVERSITY OF OXFORD.—At a congregation held on the 1st inst., the degree of M.B. was conferred on—

Henry Willingham Gell, Balliol; Edmund Taylor Milner, Merton; Henry John Tylden, Exeter; Henry Patrick Cholmeley, Magdalen; Albert W. Webb, non-collegiate.

UNIVERSITY OF DUBLIN.—The following degrees were conferred last week by the Earl of Rosse, Chancellor of the University:—

BACHELOR IN SURGERY.—Edward Arthur Crampton Baylor, William Jones Crofton, M. J. Eustace, John Christopher Ferguson, Kenneth Frazer, William Vere MacMahon, John Murray, William Napper, Nevill, Samuel Simpson, Richard Henry Smith, Robert Henry Todd (stip. cond.), George Augustus Wade (stip. cond.), Hugh Woods.

LICENTIATE IN SURGERY.—John O'Connor.

BACHELOR IN MEDICINE.—George Hindes Bagot, Edward Arthur Crampton Baylor, Edward Carrigan, William Jones Crofton, William L'Estrange Eames, Marcus J. Eustace, John Christopher Ferguson, Kenneth Frazer, John Wm. Golden, John Murray, William Napper Nevill, Samuel Simpson, Richard Henry Smith, Brooking Soady, Robert H. Todd (stip. cond.), George Augustus Wade, Hugh Woods.

LICENTIATE IN MEDICINE.—John O'Connor, Perceval Cecil Ryan.

DOCTOR IN MEDICINE.—W. Beatty, Geo Cowen, Benjamin Devonsher Dickson, John Samuel Fenton, Kenneth Frazer, Robert Henry Todd.

SOCIETY OF APOTHECARIES.—The following gentlemen passed their examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received certificates to practise, on the 1st inst.:—

Gregory, Alfred John, Clifton-road, St. John's.
Mackonochie, William, Traverse-street, Parr, St. Helen's.
Stabb, Ewen Carthew, Vincent-square, Westminster.

UNIVERSITY OF LONDON ELECTION.—The poll for a Parliamentary representative closed on Thursday at 4 P.M., with the following result:—Sir John Lubbock, 1314; Mr. Frederic Harrison, 516. The votes of the medical graduates were distributed as follows: for Sir John Lubbock, 495; for Mr. Harrison, 43.

A DENTAL HOSPITAL for Brighton was opened on the 1st inst.

HOSPITAL SUNDAY FUND.—Mr. Henry Irving has remitted to the Lord Mayor the sum of £111 1*s.* 9*d.*, being the amount collected in the boxes at the London theatres for the Hospital Sunday Fund.

MEDICAL MAGISTRATE.—The Lord Chancellor has, on the recommendation of Earl Sydney, Lord-Lieutenant of the County, appointed Richard Rothwell Daglish, M.R.C.S. &c., of New Romney, to the Commission of the Peace for the county of Kent.

FIRE AT THE BRUSSELS UNIVERSITY.—A destructive fire occurred on the 7th inst. at the Brussels University, when the whole of the right wing, where the laboratories, the library, and the great academic hall were situated, was entirely destroyed in less than an hour, though some of the books in the library were saved by the students. The collections of anatomical specimens and surgical instruments and the whole of the left wing escaped destruction. The damage is estimated at one million francs, none of which is covered by insurance.

GUY'S HOSPITAL.—The annual distribution of prizes to the successful students attending Guy's Hospital Medical School took place on the 1st inst. in the presence of a large assembly. The following is a list of the principal prize-winners:—The Treasurer's gold medal for Clinical Medicine, John Wychenford Washbourn; the Treasurer's gold medal for Clinical Surgery, Frédéric François Burghard; the Gurney Hoare prize for Clinical Study (£25), Richard Moody-Ward; the Beaney prize for Pathology (£31 10*s.*), John Wychenford Washbourn; the Mackenzie Bacon prize for Ophthalmoscopy (£10 10*s.*), Sidney Wacher; the Mackenzie Bacon prize for Nervous Diseases (£15), Edward Wilberforce Goodall; the Burdett prize for Hygiene (£10), William Henry Bowes; Sands Cox Scholarship (£15 for three years), Alfred Parkin; the Michael Harris prize for Anatomy (£10), divided between Alfred Parkin and Robert Devereux Mothersole. For Fourth Year's Students, Frédéric François Burghard, first prize (£25), and Francis Stanhope Hawkins, second prize (£10); and for Third Year's Students, Arthur Edward Poolman, first prize (£25), and Ernest Henry Starling, second prize (£10).

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THE METROPOLITAN HOSPITAL SUNDAY FUND.

THE following sums, collected in the places of worship mentioned, as well as gifts from individual donors, have been forwarded to the Mansion House since our last issue. The amounts raised in 1885 for the same object are also given for the purpose of comparison, which it will be seen is, with very few exceptions, highly favourable to this year's returns.

	1885.			1886.		
	£	s.	d.	£	s.	d.
Christ Church, Highbury ...	44	0	0	69	3	4
Park Chapel, Chelsea (first time of sending)	—	—	—	80	17	5
R. H. Noble, Esq. (a further)	30	0	0	30	0	0
St. Mark, Tollington-park ...	21	5	6	22	13	0
St. Mary of the Angels, Bayswater	11	11	0	22	5	0
St. John, Upper Holloway ...	25	19	10	22	7	8
Chislehurst Parish Church (St. Nicholas)	178	1	0	243	5	1
Holy Trinity, Beckenham ...	46	11	10	45	9	6
H.R.H. Duke of Cambridge	—	—	—	20	0	0
St. Barnabas, Kensington ...	100	7	2	136	2	1
Christ Church, North Brixton	49	15	8	54	8	8
St. Margaret, Lee	67	4	1	70	15	0
Finsbury-park and Gillespie-road Wesleyan Chapels ...	46	17	11	35	18	5
Lady Tilson (a further) ...	50	0	0	50	0	0
All Saints, Ennismore-gardens	223	15	6	310	4	8
Emmanuel (Parish Church) Forest Gate, E.	30	5	2	36	12	8
St. Paul's Congregational Chapel, Kentish Town ...	15	10	0	20	11	0
Royal Hospital Chapel, Greenwich	10	9	0	22	1	6
St. John, Chelsea	19	10	7	20	15	0
Lewisham High-road Congregational Church ...	44	14	3	43	7	9
Holy Trinity, Paddington ...	183	12	6	242	14	8
St. John, Notting-hill ...	70	5	0	77	1	8
St. Marylebone Parish Church	92	8	3	85	8	4
St. Jude, East Brixton ...	50	0	0	78	5	6
Leyton Parish Church and Phillbrook Mission... ...	24	5	7	24	0	4
St. Paul's Presbyterian Church, Westbourne-grove	35	6	0	52	10	0
All Saints, Clapton Park ...	23	0	11	29	4	10
Hanwell Parish Church ...	—	—	—	21	10	0
St. Peter, East Dulwich ...	43	11	2	48	8	0
St. Mary, Hammersmith-road, Fulham	106	0	4	52	12	10
St. Paul, Onslow-square, and Mission-Hall	261	1	0	368	8	2
Stepney Parish Church and Schools	63	6	6	42	11	8
Emmanuel Church, Streatham	69	17	8	82	13	10
Hammersmith Parish Church and St. Mark...	27	18	11	30	18	5
St. Mark, Hamilton-terrace .	200	1	7	223	18	2
Holy Trinity, Sydenham ...	107	3	0	117	16	0
St. Marylebone Chapel ...	21	0	0	35	10	6
St. Dominic, Haverstock-hill	22	13	10	24	8	2
St. Mary, Kilburn	68	0	5	87	5	1
St. Philip, Regent-street ...	15	18	2	31	0	11
Holy Trinity, Lambeth ...	14	14	5	20	0	3
St. Paul, Mill Hill	20	0	0	24	13	8
St. Alphage, London Wall ...	26	7	0	24	6	10
West Ham Parish Church ...	27	16	7	33	16	4
All Saints, Upper Norwood...	21	6	3	31	16	2
St. Augustine, South Kensington, and Banstead Asylum	*31	11	4	107	5	0
St. Michael, Chester-square (with additions)	951	4	6	1006	4	0
Portman Chapel, Baker-street	163	12	5	166	16	7
St. Mary, Bryanston-square .	118	12	6	93	15	3
St. Paul, Great Portland-street	30	0	0	39	10	0
Eaton Chapel, Eaton-square	61	7	6	72	4	5
Grosvenor Church, South Audley-street	107	8	8	141	9	4
St. Peter, Streatham	38	4	9	36	7	2
Lock Chapel, Harrow-road ...	59	15	7	51	6	6
Dutch Church, Austin Friars	26	12	0	25	6	6
St. Mary Aldermary, St. Thomas, St. Antholin, and St. John the Baptist, City	87	10	11	87	11	6
St. Mildred, Lee	44	17	1	45	7	3
Miss Windle	—	—	—	50	0	0
The Oratory, Brompton ...	36	2	0	36	0	0
St. Giles-in-the-Fields ...	32	5	0	41	14	0
Chiswick Parish Church ...	21	0	0	31	3	7
Church of the Ascension, Balham	62	19	0	63	11	10
St. James, Paddington ...	122	6	11	141	6	10
The Hon. Richard Strutt ...	—	—	—	25	0	0
Holy Trinity, Penge	27	11	0	40	0	0
Box outside the Mansion House	—	—	—	18	13	5
John Smith, Esq.	—	—	—	50	0	0
Chigwell Church, Essex ...	—	—	—	22	13	7
Green Lanes Wesleyan Church	*16	9	10	*30	3	8
St. Thomas, Westbourne-grove	51	10	10	70	0	0
West Hackney Parish Church	42	11	0	51	4	1
St. Luke, Chelsea	39	6	9	44	16	9
West Kensington Congregational Church	—	—	—	21	15	0
Hayes (Kent) Parish Church	29	17	0	24	1	9
Old Church, Chelsea	24	0	0	23	15	0
Magdalen Hospital Chapel ...	23	14	2	34	1	7
Clapton Wesleyan Chapel ...	18	13	9	20	9	0
St. Katherine's Royal Hospital Chapel	48	10	0	22	5	0
Upper Holloway Baptist Chapel...	34	2	9	40	1	3
Holy Trinity, Islington ...	41	4	11	35	13	6
East Finchley Congregational Church	21	14	0	23	0	0
Chapel of the Boys' Home, Regent's-park	27	11	6	37	4	2
St. Pancras Parish Church ...	75	10	9	74	7	9
St. Paul, East Molesey... ...	11	0	0	25	5	2
Church of Immaculate Conception, Farm-street ...	8	10	0	33	4	0
St. James, Elmer's-end, Beckenham	12	9	10	20	14	0
Christ Church, Woburn-sq.	30	2	0	40	1	8
St. Jude, South Kensington (corrected per Rev. Dr. Forrest)	717	2	0	852	19	7
St. Peter, Eaton-sq., £144 16s. 1d.; St. John, Wilton-rd., £20 15s. 11d.; St. Peter's Chapel, £7 14s. 7d.... ...	578	14	0	743	7	4
St. Mary Abbots, Kensington, £333 10s.; Christ Church, Victoria-rd., £100 12s. 2d.; St. Paul, Vicarage Gardens, £25 4s. 6d.	484	9	7	520	6	8
St. Stephen, Westbourne-pk	117	12	11	145	0	0
St. Thomas, Westbourne-pk. (iron church)	51	10	10	60	0	0
Friern Barnet Parish Church and St. John's Temporary Church	22	17	4	25	1	5
All Saints, Friern Barnet ...	21	17	9	26	12	0
St. Mark, Clerkenwell ...	18	16	9	25	1	1
Bloomsbury Chapel	47	19	2	40	7	3
St. Peter, Paddington, and Schools	27	10	0	30	0	0
London Hospital Chapel ...	22	8	2	27	12	0
St. James, Hatcham	12	9	6	20	14	0
St. James, Marylebone ...	86	7	6	67	10	0
All Saints, Kensington Park	48	17	10	55	5	10
Christ Church, Beckenham ..	36	5	3	50	0	0
All Saints, Hatcham Park ...	35	16	6	31	15	0
St. James, Piccadilly... ...	125	10	3	108	17	9
Chapel Royal, Tower... ...	10	0	0	20	0	0
Willesden Parish Church ...	—	—	—	29	10	0
Christ Church, Brondesbury	20	15	6	32	10	3
St. Mary, Lewisham	31	11	11	36	13	9
St. German, Blackheath ...	38	1	10	48	6	7
Heath-street Baptist Chapel, Hampstead	30	12	2	39	14	6
Wanstead Churches	37	5	2	46	2	6
St. Peter, Bayswater	112	13	0	160	0	0
Christ Church, Mayfair ...	71	0	0	82	1	0
Stamford Hill Congregational Church	32	14	5	56	9	11
St. Thomas, Portman-square	68	9	1	140	4	3
Emmanuel Church, Dulwich	12	18	3	21	0	8
Hornsey Parish Church, Chapel of Ease, and Sunday Schools	59	19	2	48	8	10
St. Mark, Kennington ...	38	14	5	41	7	0
St. James and Mission Church, Clapton	22	10	6	21	0	0
St. John the Divine, Kennington	38	13	7	30	18	7
All Saints, Camberwell ...	38	11	5	36	12	10
St. Saviour, Paddington ...	62	10	1	67	14	7
St. Stephen, Avenue-road ...	36	9	1	30		2

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	1885.			1886.		
	£	s.	d.	£	s.	d.
St. Mary, Tothill-fields ...	14	18	8	20	14	10
St. Saviour, Brixton-hill ...	22	0	8	25	5	11
St. John the Baptist, Leyton-stone	26	15	6	28	7	1
Blackheath Congregational Church	60	5	10	101	6	3
St. Barnabas, Holloway ...	†22	13	3	31	12	11
Regent-square Presbyterian Church	122	15	0	117	11	6
Holy Trinity Church and Mission, Greenwich ...	30	15	7	37	4	0
St. John, Deptford	56	7	0	62	5	6
Theistic Church, Swallow-street, W.	16	12	2	58	5	0
Park Congregational Chapel, Camden Town	46	18	9	32	2	0
Downs Baptist Chapel, Clapton	33	12	0	36	4	9
Beddington Parish Church...	†25	14	1	†37	14	6
All Saints, Putney Common	25	7	3	40	0	0
St. Luke, Hackney	29	8	3	36	8	0
Bromley (Middlesex) Parish Church	8	12	10	26	6	7
Whitechapel Parish Church .	17	5	9	20	12	9
Pro-Cathedral, Kensington...	32	10	0	38	3	0
Archway-road Wesleyan Chapel...	19	10	10	22	3	2
Catholic Apostolic Church, Gordon-square	20	10	9	22	0	11
St. Andrew, Holborn... ...	24	8	11	25	4	0
New College Chapel, South Hampstead	†16	2	6	28	10	0
Putney Parish Church ...	23	0	0	24	8	0
St. John the Evangelist, Putney	52	0	0	53	14	8
Finchley Parish Church ...	45	13	2	51	6	0
St. James, Norlands	70	3	6	80	6	10
Mrs. Sloane, Stanley	—	—	—	30	0	0
"A Friend"	—	—	—	100	0	0
William Vokins, Esq. ...	—	—	—	50	0	0
E. Brodie Hoare, Esq. ...	—	—	—	50	0	0
St. Dunstan, East Acton ...	32	11	0	36	8	4
St. Anne, Soho...	90	10	0	122	0	0
Camden Church, Camberwell	113	2	10	113	2	2
Kensington Presbyterian Church	37	0	0	40	0	0
St. Matthew, Bayswater ...	200	6	7	217	9	11
St. Andrew, Upper Norwood	21	6	3	30	0	0
Brockley Baptist Chapel ...	—	—	—	29	2	4
St. Stephen, Lewisham ...	43	5	10	33	12	6
Hon. and Rev. A. C. Stanley	—	—	—	20	0	0
All Saints, Child's Hill ...	30	4	0	26	9	2
Hendon Churches	39	5	5	48	0	0
Epsom Parish Church ...	31	2	1	26	14	11
Chapel of Ease, Holloway ...	29	14	3	20	11	9
St. James, Muswell-hill ...	19	11	7	20	19	4
St. Peter, Vere-street (with additions)	215	0	0	241	14	6
St. George, Campden-hill ...	51	2	10	54	0	8
St. Saviour, Denmark-park...	25	3	2	30	2	3
St. Mark, North Audley-street (with additions) ...	220	5	2	268	1	7
All Souls, Langham-place ...	99	15	3	100	3	6
Christ Church, Streatham ...	40	1	11	46	7	0
Crouch Hill Presbyterian Church	35	10	0	20	2	1
Roupell-park Wesleyan Church	16	18	4	24	14	9
"A Lady" (S.E.)	—	—	—	100	0	0
"N. A. S."	—	—	—	5	0	0
Clapham Congregational Church	63	19	0	86	10	1
St. Michael, Paddington ...	152	0	7	149	13	9
G. H. Waterhouse, Esq. ...	—	—	—	25	0	0
Clapton Park Congregational Church	55	7	8	48	8	2
Hampstead Unitarian Church	69	9	0	82	1	0
Christ Church, Greenwich ...	31	9	11	32	16	6
Hanover Church, Regent-street (corrected)	17	11	7	26	15	6
Great Stanmore Parish Church	22	19	0	33	14	9
St. Peter, Norbiton	27	1	8	26	13	4
St. Paul, New Beckenham ...	103	4	3	100	0	0
Brixton-hill Wesleyan Chapel	81	2	3	79	16	4
St. Mary Boltons, S. Kensington	55	8	1	81	0	0
Brompton Church	372	9	6	404	2	0
St. John, Deptford (with addition)	56	7	0	62	16	0
Denmark-hill German Evangelical Church	41	0	0	48	1	0
Camden-road Baptist Chapel	25	5	2	38	8	4
St. Giles, Cripplegate, ...	63	13	9	46	9	8
Kensington Congregational Church	68	3	0	71	13	0
Christ Church, Chislehurst	60	15	6	47	10	3
St. John the Baptist, Kingston-vale	*6	3	5	†18	14	8
St. Columba, Scotch Church, Pont-street	86	12	3	84	10	10
Emmanuel Church, Maidavale	57	17	10	71	11	0
St. Mary Magdalene, Paddington	†48	12	0	†50	15	4
St. Saviour, Hampstead ...	37	11	3	28	9	3
Aldenham (Herts) Parish Church	15	3	0	25	0	0
Beckenham Congregational Church	8	8	0	25	0	0
St. Barnabas, Pimlico ...	43	9	10	42	16	3
St. Mary, Bourdon-street ...	19	7	3	20	8	9
Lambeth Parish Church ...	16	1	3	25	0	9
St. Luke, Nutford-place ...	24	9	7	32	16	11
St. Mary, Balham	63	14	9	68	16	7
St. Andrew, Wells-street ...	110	12	2	130	12	9
John McAndrew, Esq. ...	—	—	—	20	0	0
St. James, Clerkenwell ...	20	12	6	25	0	0
Tandridge (Surrey) Parish Church	10	0	0	21	2	2
Christ Church, Lancaster-gate	519	8	10	565	13	0
Holy Trinity, Eltham, Kent	—	—	—	59	8	7
St. Paul, New Southgate ...	12	0	0	15	17	0
St. Gabriel, Canning-town ...	2	5	9	5	2	6
North Finchley Congregational Church	—	—	—	27	0	0

* Moiety. † Proportion. ‡ Two-thirds offertory.

The total sum received up to Thursday evening last amounts to £31,300 (quite £5000 more than on the corresponding day last year).

ERRATUM.—In our list of collections published last week, page 60, line 1, for "Merton Park Church," &c., read Merton *Parish* Church.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

CHARLTON, CLIFTON, M.B., C.M.Ed., has been appointed Assistant House-Surgeon to the Liverpool Northern Hospital, vice Fisher, promoted.

CLARKE, J. MICHELE, M.A., M.B.Cantab., has been appointed Assistant Physician to the Bristol General Hospital.

FISHER, ALFRED, M.R.C.S., L.R.C.P.Ed., has been appointed Senior House-Surgeon to the Northern Hospital, Liverpool, vice Johnston, resigned.

GRIFFIN, JOHN, M.B., C.M., has been appointed Assistant Physician to the Royal South Hants Infirmary.

HENDERSON, G., M.R.C.S., has been appointed Medical Officer for the Carham District of the Glendale Union.

HERN, JOHN, M.D.Edin., M.R.C.S., has been appointed Ophthalmic Surgeon to the Darlington Hospital.

HOWE, J. DUNCAN, M.R.C.S., L.S.A., has been appointed Resident Medical Officer to the Manchester Workhouse Infirmary.

LIDDARD, THOMAS, M.R.C.S., L.R.C.P.Lond., has been appointed Medical Officer to the Workhouse, Mary-place, of the Parish of St. Mary Abbotts, Kensington.

LOWNDS, HENRY A., L.R.C.S., L.R.C.P.Ed., has been appointed Medical Officer for the Kirkbinton District of the Huddersfield Union.

OSWALD, ROBERT J. W., M.R.C.S., L.R.C.P.Ed., has been appointed Medical Officer for the Seventh District of the Parish of St. Mary, Lambeth.

POPE, H. F. M., M.R.C.S., L.R.C.P.Ed., has been appointed Medical Officer for the First District of the Malling Union.

SMITH, G., M.R.C.S., L.R.C.P.Lond., has been appointed Medical Officer for the Ford District of the Glendale Union.

SMITH, J. E., M.R.C.S., L.S.A., has been appointed Medical Officer for the Fifth District of the Malling Union.

TAYLOR, THOMAS, L.F.P.S.Glas., L.M., L.S.A., has been appointed Medical Officer of Health for Mile-end Old Town.

THOMAS, J. L., M.D., has been appointed Physician to the Royal South Hants Infirmary.

WALKER, R., M.D., has been appointed Medical Officer for the Wooler District of the Glendale Union.

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Births, Marriages, and Deaths.

BIRTHS.

COMBOW.—On the 1st inst., at Eastbourne, the wife of Surgeon-Major Combow, of a son.

CROCKSHANK.—On the 30th ult., at Yaldham, Kent, the wife of Edgar M. Crookshank, Esq., M.B.Lond., of a daughter.

LEFTWICH.—On the 5th inst., at The Limes, Brixton-road, S.W., the wife of Ralph W. Leftwich, M.D., of a son.

LEWERS.—On the 30th ult., at Wimpole-street, Cavendish-square, W., the wife of Arthur H. N. Lewers, M.D.Lond., of a daughter.

MORRIS.—On the 27th ult., at Devonshire-place, Brighton, the wife of John Morris, M.R.C.S., of a daughter.

NUNN.—On the 2nd inst., at Feckenham, near Redditch, the wife of J. R. Nunn, M.R.C.S., L.S.A., of a son.

RAKE.—On the 5th inst., at Herne-hill, the wife of Beaven Neave Rake, M.D.Lond., Government Medical Officer, Trinidad, of a son.

WALKER.—On the 5th inst., at Hotham House, Putney, the wife of Alexander Walker, M.D., of a daughter.

WHITE.—On the 29th ult., at Winchester, the wife of Surgeon-Major Charles White, Army Medical Staff, of a son.

MARRIAGES.

CLABBURN—SPAGNOLETTI.—On the 30th ult., at the Parish Church, Marylebone, T. George Clabburn, M.R.C.S., to Charlotte Ellen, eldest daughter of Charles Spagnoletti, Esq., of The Poplars, Aberdeen-place, N.W.

DAVIES—AIRD.—On the 1st inst., at St. Mary's, Pembroke, Arthur Mercer Davies, Surgeon, Army Medical Staff, Netley, to Evelyn Crosbie Aird, youngest daughter of the late Capt. David Aird, R.N., of The Anchorage, Pembroke.

DOBIE—ROSS-CHURCH.—On the 7th inst., at the Parish Church, St. Marylebone, by the Rev. F. Braithwaite, Stanley Locker Dobie, Surgeon-Major, 4th Madras Cavalry, to Violet Theodora, third daughter of Colonel T. Ross-Church, and granddaughter of the late Captain Marryat, R.N.

LAWRENCE—JOSEPH.—On the 30th ult., at the Bayswater Synagogue, Louis Isidor Lawrence, M.R.C.S., to Lizzie, eldest daughter of I. S. Joseph, of Clapham, and adopted child of H. S. Joseph, of Queensborough-terrace.

MASON—ROBERTS.—On the 30th ult., at Grafham, Huntingdonshire, John Mason, M.B., M.R.C.S., of Windermere, to Amy Isabella, only daughter of the late Colonel G. B. Roberts, Madras Light Cavalry.

SCARTH—MASTERS.—On the 6th inst., at St. Mark's Church, Lewisham, S.E., Isaac Scarth, M.B., B.S.Lond., to Rose Marion, daughter of the late G. C. Masters, of Lewisham.

DEATHS.

DEARDEN.—On the 27th ult., at his residence, Lytham (after a long and painful illness), James Dearden, M.R.C.S., L.S.A., in his 56th year.

EBDEN.—On the 14th ult., at Haughley, Rondebosch, near Cape Town, Henry Anderson Ebden, M.D. (late Bengal Medical Establishment, H.E.I.C.S.), President of the Medical Committee, in the 62nd year of his age.

TITLEY.—On the 30th ult., James Titley, M.D., of Brigg, Lincolnshire, aged 45.

N.B.—*A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.*

BOOKS ETC. RECEIVED.

ALCAN, F., Paris.

Les Bactéries et leur Rôle dans l'Anatomie et l'Histologie Pathologiques des Maladies Infectieuses. Par Professeurs Cornil et Babes. Deuxième Edition, revue et augmentée. pp. 839, avec 248 Figures.

APPLETON & Co., New York.

Medicine of the Future: an Address prepared for the Annual Meeting of the British Medical Association in 1886. By Austin Flint, sen., M.D., LL.D. pp. 37.

BAILLIÈRE ET FILS, Paris.

De l'Autoclasie. Par le Dr. A. Pousson. pp. 261, avec Figures.

BAILLIÈRE, TINDALL, & COX, King William-street, Strand, London.

A Manual of Bandaging: adapted for Self-Instruction. By C. Henri Leonard, A.M., M.D. Second Edition, Revised. pp. 109.

Ambulance Work: Questions and Answers upon "First Aid to the Wounded." By J. W. Martin, M.D., and John Martin, F.R.C.S.Ed. pp. 47.

BLACKWOOD & SONS, Edinburgh and London.

Cookery for the Sick and Convalescent. By Barbara Thomson. pp. 72.

CASSELL & Co., London, Paris, New York, & Melbourne.

Illustrations of the Craft of Surgery in England. From materials compiled by John Flint South. Edited by D'Arcy Power, M.A.Oxon., F.R.C.S.Eng. With Introduction by Sir J. Paget, Bart., F.R.S. pp. 412, with Coloured Plates and Engravings.

CHURCHILL, J. & A., New Burlington-street, London.

An Introduction to General Pathology. By John Bland Sutton, F.R.C.S. pp. 290, with numerous Illustrations.

Materia Medica: a Manual for the Use of Students. By Isambard Owen, M.D., F.R.C.P. Second Edition, Revised in accordance with the B.P. of 1885. pp 228.

Private Treatment of the Insane as Single Patients. By Edward East, M.R.C.S., L.S.A. pp. 68.

The Modern Treatment of Stone in the Bladder by Litholapaxy. By P. J. Freyer, M.A., M.D., &c. pp. 113, with Illustrations.

On Some Forms of Paralysis from Peripheral Neuritis. The Harveian Lectures for 1885. By Thomas Buzzard, M.D.Lond., &c. pp. 147.

On Cancerous Affections of the Skin. By George Thin, M.D. pp. 87.

DOIN, O., Paris.

Manuel Pratique des Maladies des Fosses Nasales et de la Cavité Naso-pharyngienne. Par le Dr. H. J. Moure. pp. 296, avec 58 Figures et 4 Planches.

FANNIN & Co., Dublin; BAILLIÈRE, TINDALL & COX, London; MACLACHLAN & STEWART, Edinburgh.

History of the Royal College of Surgeons in Ireland and of the Irish Schools of Medicine, including numerous Biographical Sketches, also a Medical Bibliography. By Sir Charles A. Cameron, President.

KIMPTON, HENRY, High Holborn, London.

Chemistry of the Carbon Compounds, or Organic Chemistry. By Prof. V. von Richter. Authorised Translation by Edgar Smith, Prof. Chem. From the Fourth German Edition. pp. 710, with Illustrations.

LEDGER, SMITH, & Co., St. Mary Axe, London.

The Medical Digest, or Medical Practitioner's Vade-Mecum. By Richard Neale, M.D.Lond. Second Edition, with Appendix. pp. 723-250.

LEWIS, H. K., Gower-street, London.

The Student's Manual of Venereal Diseases. By Berkeley Hill and Arthur Cooper. Fourth Edition. pp. 118.

LOESCHER, E., & Co., Rome.

Corrado Tommasi-Crudeli: Il Clima di Roma. Conferenze fatte nella Primavera del 1885, inaugurando l'Instituto d'Igiene Sperimentale della R. Universita di Roma.

MACMILLAN & Co., London.

On Disorders of Digestion, their Consequences and Treatment. By T. Lauder Brunton, M.D., F.R.S. pp. 389, with Illustrations.

MAY, J., Aldershot.

The Elements of Squad, Company, and Battalion Drill. By J. Buckley, Q.M., Medical Staff. pp. 47.

PENTLAND, YOUNG J., Edinburgh.

Synopsis of Therapeutics. By R. S. Aitchison, M.B.Edin. pp. 120.

The Refraction and Accommodation of the Eye and their Anomalies. By E. Landholt, M.D. Translated under the Author's supervision by C. M. Culver, M.A., M.D. pp. 600, with 147 Illustrations.

PUTNAM'S SONS, New York & London.

How to Care for the Insane: a Manual for Students. By W. D. Granger, M.D. pp. 96.

Manual of Differential Medical Diagnosis. By C. W. Cutler, M.S., M.D. pp. 161.

SAMPSON LOW, MARSTON, & RIVINGTON, Fleet-street, London.

New South Wales and Victoria in 1885. By Douglas M. Gane. pp. 207.

An Account of a West Indian Sanatorium, and a Guide to Barbadoes. By Rev. J. H. S. Moxley. pp. 209.

Carlsbad and its Environs. By John Merrylees. With a Medical Treatise on the Use of the Waters. By B. London, M.D. pp. 199, with Illustrations.

SMITH, ELDER, & Co., Waterloo-place, London.

Dictionary of National Biography. Edited by Leslie Stephen. Vol. VII.: Brown—Burthogge. pp. 453.

WRIGHT, JOHN, Bristol.

Elementary Bandaging and Surgical Dressing. By Walter Pye, F.R.C.S. pp. 186.

The Church, the Laity, and the Hospitals; by B. Burford Rawlings.—Ichthyol und Resorcin; von Dr. P. G. Unna.—Tonsillitis in Adolescents; by C. Haig-Brown, M.D.—True Socialism; by C. Gelkie, D.D.—Jarrold's Guide to Norwich.—Index Medicus, Vol. VIII., No. 5.—Report of the Board of Managers of the Pennsylvania Hospital.—Report of the Mansion House Council on the Dwellings of the People for 1885.—Deutsches Bäder-Coursbuch nach officiellen Quellen bearbeitet.—De l'Éléphantiasis des Arabes chez les Enfants; par le Dr. Moncorvo. (Paris, Steinheil.)—Variola Discreta, Photographs of a Case; by Dr. J. A. Thompson. (Sydney, Richards.)—Principles of the Treatment of Dislocations and Fractures; by Hugh O. Thomas. (London, Lewis.)—Baden-Baden und Seine Kurmittel. (Wild, Baden-Baden.)—Where to take a Holiday: Holiday Number of the London Medical Record.—South Africa as a Health Resort; by Arthur Fuller, M.B., C.M.Ed. (Whittingham, London.)—The Holiday Annual. (Causton, London.)—Medical Tracts for the Times; by James Craig, M.B.Ed., and William Manle, M.B., &c. (Pentland, Edinburgh.)—Beiträge zur Physiologie und Pathologie der Verdauung; von Prof. Ewald und Dr. Boas.—Bazaars and Christianity; by M. O. D.—Développement de la Méthode de Scarenzio; par G. Smirnoff. (Helsingfors.)—Transactions of the Medical and Physical Society of Bombay, No. 8, New Series.—Babyhood: a Magazine for Mothers. (New York.)—Bourne's Handy Assurance Directory, 1886.—A Word for Ireland; by T. M. Healy, M.P.—El Himen en México; por Prof. F. A. Flores.—Surgical Operation Chart; Arranged and Tabulated by L. H. Ormsby, M.D., F.R.C.S.—Good Words, Sunday Magazine. (Isbister.)—Leisure Hour, Sunday at Home, Boys' Own Paper, Girls' Own Paper (with Summer Number), for July.—Beiträge zur Klinischen Chirurgie; herausgegeben von Dr. Paul Bruns, Zweiter Band. (Laupp'schen, Tübingen.)

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METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, July 8th, 1886.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
July 2	30·33	S.E.	60	56	110	81	55	...	Hazy
,, 3	30·32	S.E.	69	61	112	86	59	...	Hazy
,, 4	30·27	W.	74	66	122	89	66	...	Bright
,, 5	30·26	N.W.	71	63	122	84	63	...	Bright
,, 6	30·14	S.W.	72	64	125	88	63	...	Bright
,, 7	29·96	N.W.	70	64	118	85	62	...	Hazy
,, 8	29·77	N.	62	61	91	70	59	...	Overcast

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

Letters requiring notice must be authenticated by the name and address of the writer.

We cannot undertake to return MSS. not used.

ALCOHOL IN HOSPITALS.

THE Secretary of the Middlesex Hospital objects to the statement of the *Irish Temperance League Journal* as to the proportion of alcohol used by patients and officials respectively in the hospital. He declares that the calculation attributed to him was never made. We entirely accept his correction, and trust our temperance contemporaries will do the same. They are always and properly demanding accuracy of data and inference in this important question, and it would be a great mistake if they sought to enforce their views by using a disowned and unauthorised statement. It must tend to disturb Mr. Green's mind that such a statement was part of the infirm ground on which he based the justification of his wasteful destruction of good port wine.

Orthographer.—Both forms of spelling are in use, and either is correct, though "whooping-cough," as being more expressive of the forcible inspiratory act characteristic of the disease, is now usually adopted.

PONDEROUS BREASTS.

To the Editor of THE LANCET.

SIR,—I have a patient who suffers from great pain round the waist, and in the breasts almost constantly, due to the size of her breasts, which are unusually large. She complains that they make her life a burden to her, and constantly entreats me to amputate them. Would this be justifiable? Their weight produces a constant dragging pain from the clavicle downwards, and from the back and sides forwards, relieved when the weight of the breasts is supported. Is there any known means of causing the breasts to contract by the application of any drug? If their weight and size could be greatly reduced it would be a boon. If any of your readers can from experience of a similar case suggest a trustworthy line of treatment I shall be most grateful.

I am, Sir, your obedient servant,

June 30th, 1886. M.B."

A CORRECTION.

To the Editor of THE LANCET.

SIR,—In your report of the discussion on Mr. Brudenell Carter's paper on cataract extraction (June 26th, page 1229), I am reported to have said that I had performed Mr. Anderson Critchett's operation "in severe cases." Instead of "severe" *seven* was what I said.

Believe me, Sir, faithfully yours,

Leicester, July 6th, 1886. FRANK E. HOWES.

THE PROGRESS OF CHEMICAL SCIENCE IN JAPAN.

FROM the annual report of the Tokio Chemical Society which was recently presented it appears that the study of chemical science is making rapid progress in Japan. Ten ordinary meetings and one annual meeting were held during the year, at the latter of which an important paper on the "Constitution of some Non-saturated Oxygenous Salts" was read. The Society has undertaken to translate chemical terms into Japanese, and it now possesses a dictionary of the common chemical terms in Japanese, English, French, and German. It has also undertaken to establish a system of chemical nomenclature in the Japanese language, of which the nomenclature of elements and of inorganic compounds is already nearly finished.

E. A. P.—The case mentioned appears to come distinctly under Art. 18 of the General Consolidated Orders, and the fee could no doubt be recovered in the county court. As an alternative course, pressure might be put upon the Local Government Board, either through the Poor Law Medical Officers' Association or by means of a question put in the House of Commons.

M. PASTEUR'S CURE OF HYDROPHOBIA.

To the Editor of THE LANCET.

SIR,—Having during the past week seen more than 250 inoculations performed in the Rue Vauquelin, and read over a number of the histories of patients operated on by Dr. Roux, I have come to the conclusion that there is no longer any reasonable doubt of the immense advance made in therapeutics by M. Pasteur's process for the cure of hydrophobia. The statistics are so telling that no one, I think, can read them without feeling convinced that an all-important discovery has been made. M. Grancher, whose abilities as a physician all are aware of, takes the date of April 22nd, 1886, as the one which allows of his drawing a conclusion warranted by the length of incubation of hydrophobia, and then shows that M. Pasteur has treated ninety-six cases of persons who had been bitten by dogs which were proved to be rabid because other animals bitten by them had died rabid, or because rabbits inoculated from their brain and spinal cord had succumbed to the disease. Of these ninety-six cases there was only one death. Again, of 644 cases of bites by dogs which were certified as rabid by the veterinary practitioner of the commune when they were bitten, only three of those treated died. Taking these two groups together, the death-rate of those treated was only 0·75 per cent., against 16 per cent., which is the death-rate assigned to a similar set of cases by M. Leblanc, Veterinary Surgeon of the City of Paris, where patients had been treated by other methods. In addition to these, M. Pasteur has treated forty-eight persons bitten by rabid wolves, and seven of these, or 14 per cent., have died, whereas the death-rate of persons bitten by wolves has been shown by M. Brouardel to be 66·5 per cent. Putting these facts together, M. Grancher contends with truth that Pasteur's treatment is twenty-three times as successful against the bites of dogs as the treatments of past times. I may add that the treatment seems to me to be perfectly and absolutely innocuous, and that the only pain felt by the patient consists in the prick given in the abdomen by the injection syringe ten times on ten consecutive days. The process, too, of inoculating the rabbits is now so simplified that there can be not the slightest reason, except popular prejudice, why M. Pasteur's inoculations should not be performed in every country. All that is required is that an inoculated rabbit should be imported, and then that other rabbits should be inoculated from it at its death. In this way the practice of inoculations might become at once generalised in every civilised country so long as rabies exists, which, of course, it will not do when the muzzling of dogs is as well carried out as it is in Berlin and North Germany. In the meantime all persons bitten by suspicious dogs should without any delay avail themselves of the noble offer of M. Pasteur to cure them of the most fatal of all diseases.

I am, Sir, your obedient servant,

C. R. DRYSDALE, M.D.,
Senior Physician, Metropolitan Free Hospital of London.

Paris, June 3rd, 1886.

P.S.—This morning 102 patients were inoculated by M. Roux at the Rue Vauquelin.

THE COVENTRY PROVIDENT DISPENSARY.

To the Editor of THE LANCET.

SIR,—In your current issue (p. 16) I see the above institution spoken of as "one of the sound and old-fashioned provident dispensaries which prospers." Four medical men receive an average of £347 per annum, which sounds well; but whenever I have visited Coventry—and that has been frequently over a series of years—I have heard numerous complaints about the dispensary, as most damaging to the profession, by including for cheap attendance a large number of well-to-do people. If the actual facts could be ascertained through your columns they would be interesting.

I am, Sir, yours obediantly,

July 4th. A CONSULTANT.

"HOW NURSES CAN HELP."

A. P. ROCHE wishes to correct an error which occurred under the above heading in THE LANCET of July 3rd. It was not the household of the Earl of Howe from which her collection was made, but that of the Earl of Home.

Subscriber.—The Brussels M.D. can be so registered.

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THE LATE DR. J. S. RIDLEY OF PRESTON.

We [illegible] asked to mention that an appeal is being made on behalf [illegible]'s widow and two daughters, who have been left [illegible] circumstances. The circumstances appear to be such as to [illegible] practical sympathy of the profession. Mr. H. A. Smith, [illegible] Lodge, Ealing, W., will be glad to receive subscriptions [illegible] which has already been opened.

SHIP SURGEONS.

To the Editor of THE LANCET.

SIR,—It is not my wont to rush either into print or controversy, but the [illegible] your correspondent, "M. A. P.," in your issue of June 26th, being [illegible] at variance with my own experience of ship-life, which is of [illegible] nation, I cannot let them pass without comment.

Considering precedence, a surgeon has, and always must have, [illegible] of his own department; and knowing this, why should he [illegible] name is first on an often varied list, or wish to infringe on the [illegible]'s undoubted right to arrange passengers' seats? If "tagrag and [illegible] (to quote "M. A. P.") are placed next to him, a little [illegible]" in the right quarter will prevent such a thing happening [illegible]. Concerning vaccination fees, they are a matter of agreement with a company beforehand, and therefore cannot be grumbled at; but I [illegible] never known a case of a surgeon going short of passengers' [illegible] any scope at all, or is deserving of them. His sanitary [illegible] enough without being vexatious, will seldom be challenged, and I [illegible] would be an unusually bold captain who, knowing the [illegible] patients being seen at all times, would take the grave [illegible] of keeping his surgeon off the quarter or any other deck. [illegible] that if the medical officer had any self-assertion such a thing [illegible] possible, unless from reasons of general misbehaviour. [illegible] profession find themselves employed professionally on the [illegible] several causes, the chief one, I believe (and hope), being [illegible]; and, I think, in the vast majority of cases, are on the best [illegible] with their brother officers, for such they are for the time [illegible] general system of give-and-take is acted upon, it will be [illegible] small ship that will not be large enough for every one [illegible] lawful right.—I am, Sir, yours faithfully,

W. T. HARRIS, Surgeon.

[illegible] Castle, East India Dock, E., June 29th, 1886.

"AN APPEAL."

To the Editor of THE LANCET.

[illegible]ing to my appeal in your issue of the 26th ult., for the [illegible] which allow me to thank you, I regret to say that it has not been [illegible] to in a manner in which I hoped it would have been. I [illegible] that those of your readers who have overlooked this appeal [illegible] to respond thereto. Up to the present time I have received [illegible] following liberal sums:—

Sir [illegible] Hewett, Bart.	£5	5	0	Dr. O. Habershon ...	£1	1	0
[illegible], Esq.	5	5	0	Dr. T. Lauder Brunton ...	1	1	0
Sir [illegible], Bart.	5	0	0	Signs	1	0	0
[illegible], Esq.	5	0	0	Dr. Ewart	0	10	0
Sir [illegible], Bart.	3	3	0	E. J., Newcastle ...	0	10	0
[illegible]	2	2	0	Lady Estcourt ...	0	5	0
Sir [illegible] Blank, Bart.	1	1	0	H. A. Latimer, Esq. ...	0	5	0

I am, Sir, yours faithfully,

R. FITZROY BENHAM.

[illegible] House, Baron's Court, S.W., July 5th, 1886.

[illegible]ATIONS OF POOR-LAW MEDICAL OFFICERS TO BOARDS OF GUARDIANS.

To the Editor of THE LANCET.

SIR,—I am requested to inform you that at a Council meeting held on July [illegible] it was resolved that a memorial should be forwarded to the [illegible] Government Board, asking for a reconsideration of the case of Mr. [illegible]mpson, in reference to the late Poor-law inquiry held at the [illegible] Workhouse, when Mr. Simpson was called upon to resign [illegible]ining certain of the guardians, by not obeying a verbal [illegible]d to him by the chairman of the visiting committee, which [illegible], if carried out, the council considered would lead to [illegible]ation.—I am, Sir, yours truly,

J. WICKHAM BARNES, Hon. Sec.,
Medical Officers' Association, 3, Bolt-court,
Fleet-street, E.C., July, 1886.

"TOO BAD."

The [illegible]retary of the Home Hospitals Association presents his [illegible] to the Editor of THE LANCET, and begs to inform him, [illegible]ce to the paragraph headed "Too Bad," on page 58 of the [illegible] 3rd, that (1) no general collection was made at the Home [illegible] Sunday. The patients were reminded of the day [illegible] entirely free to choose where they would send their [illegible]. (2) The staff do not attend St. Mary Magdalen, [illegible]; but on Hospital Sunday one of the patients sent her [illegible] church, when she learnt that there was no col[illegible] Hospitals.

[illegible] [illegible] [illegible] [

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. James Braithwaite, Leeds; Mr. W. P. Mears, Newcastle-on-Tyne; Dr. David Newman, Glasgow; Mr. Sandiford, Dorchester; Dr. F. M. Pierce, Manchester; Mr. Walter Whitehead, Manchester; Mr. F. H. Hodges, Leicester; Mr. Leach, London; Mr. Cantlie, London; Mr. Howard Marsh, London; Mr. F. Sturges, Beckenham; Dr. Edwin Morris, Spalding; Mr. J. H. Douty, Powick; Dr. George Johnson, London; Mr. T. Forster, Daventry; Dr. Macintyre, Glasgow; Messrs. J. Allen and Son, London; Dr. Quinlan, Dublin; Mr. F. A. Southam, Manchester; Mr. Barwell, London; Mr. A. Mitru, Kashmir; Dr. Leslie Phillips, Birmingham; Dr. C. R. Drysdale, London; Rev. T. Hill, Finchley; Mr. F. Benham, London; Mr. Hawkins, London; Dr. Hood, London; Mr. Wilson, Billingshurst; The Hon. Mr. Wills; Messrs. Lee and Martin, Birmingham; Dr. Hewitt, Cheltenham; Messrs. Gibbs and Co., Ryde; Mr. Poole, Shrewsbury; Messrs. Whitehead and Co., London; Mr. Elliott, Carlisle; Mr. Maitland, London; Dr. Reid, Stafford; Mr. Armstrong, Newcastle-on-Tyne; Messrs. Wright and Co., Bristol; Messrs. Williams and Co., London; Messrs. Hulbert and Co., Stroud; Dr. Cambridge, Stonechurch, U.S.A.; Messrs. Pocock Bros., London; Miss Applethorpe, Worthing; Messrs. Squire and Sons, London; Mr. Wardley, Buxton; Mr. Pease, Darlington; Mr. A. Jones, London; Mr. E. East, London; Dr. Maclean; Messrs. Austin and Son, Bristol; Mr. Greenwood, Liverpool; Messrs. Smith and Son, Manchester; Mr. Stretton, Kidderminster; Messrs. Hall and English, Birmingham; Mr. Steinheil, Paris; Mr. Lancaster, London; Mr. Scott, Manchester; Mr. Sotheran, York; Mr. Thwaites, Bristol; Mr. Webb, Bury; Mrs. Rahn, Ipswich; Dr. Coates, Sirhowy; Mr. Stride, Brighton; Mr. Pinneger, Lee; Dr. Needham, Gloucester; Dr. H. A. Smith, Ealing; Mr. T. M. Hovell, London; Mr. E. J. Worth, Millbrook; X. Y. Z.; C. T. K. P.; H. M. W.; L. M. N.; M. D. C., Tunbridge Wells; J. T.; Spes.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Gunn, Chicago; Mr. Ampussy, Zanzibar; Mr. Hulme, Birmingham; Dr. Rae, Blackburn; Mr. Mays, Sheffield; Dr. Dearden, Lytham; Dr. Slade King, Ilfracombe; Mr. Crassweller, Highbury; Mr. Mayon; Mr. Gill, Tavistock; Mr. Morton, Brighton; Mr. Smyth, Hadfield; Mr. Allden, Southampton; Mr. Barnascone, Plymouth; Mr. Maule, Maryport; Mr. Hayward, Grantham; Mr. Knightley, London; Mr. McLachlan, Ayr; Dr. Hull, Highgate; Mr. Davis, Gateshead; Mr. Griffiths, Lampeter; Dr. Lyon, Fence Houses; Mr. Pierce, Liverpool; Miss Hunter, Manchester; Dr. Crookshank, Yaldham; Miss Carson, Burton-on-Trent; Dr. Jones, Ilford; Mr. Warren, Royston; Mr. McGregor, Huddersfield; Dr. Wall, Cranleigh; Mr. McClean, Harpingdon; Mr. Logan, Glasgow; Dr. Harkin; Mr. Wright, Halifax; Mr. Ellis, Birmingham; Mr. Draper, Almondbury; Mr. Pratt, Cardiff; Substitute; F., Liverpool; Alpha, London; J. B., Brighton; Medicus, Norwood; Julius, Kidderminster; Shati, India; X. Y. Z., Matlock; Fides; X. X.; Z., Maidstone; Medicus, Finsbury-park; L. B.; Surgeon, Stamford-hill; Medicus, Birmingham; Physician, London; M.D., London; P. Q. R.; D. C. S.; Experienced; Reflex, Leicester; Medicus, Wigan; M. A. C., Cavendish-square; B. D., Dover; Anson; Surgeon, Islington; Medical, London; Matron, London; M. F., Notts; M.D., Pentonville; Venta, Walton; Medicus, Ealing; J. H., Spennymoor.

Manchester Guardian, Catholic Times, Haddingtonshire Advertiser, Advocate of India, Belfast News Letter, Measures not Men, Belfast Northern Whig, Sussex Daily News, &c., have been received.

Medical Diary for the ensuing Week.

Monday, July 12.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.

ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesdays, same hour.

CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2 P.M.

HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.

Tuesday, July 13.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.

CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

Wednesday, July 14.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesdays and Thursdays, 1.30 P.M.

ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department, Tuesdays and Fridays, 9.30 A.M.

ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.

LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.

GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.

KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; and on Friday 2 P.M.; and Saturday, 1 P.M.

Thursday, July 15.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

Friday, July 16.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Saturday, July 17.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.

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Answers are now received at this Office, by special arrangement, to Advertisements appearing in THE LANCET.

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Agent for the Advertising Department in France—J. ASTIER, 66, Rue Caumartin, Paris.

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Clinical Lectures
ON
CASES OF DIFFICULT DIAGNOSIS.

SAMUEL FENWICK, M.D., F.R.C.P.,
PHYSICIAN TO THE LONDON HOSPITAL.

LECTURE VII.

GASTRIC AND PERIGASTRIC ABSCESSES.

GENTLEMEN,—We have hitherto been considering abscesses communicating with the intestinal canal, but in order to complete our survey of the whole subject of abscesses opening into the digestive tube, we must now turn our attention to those connected with the stomach. It will, however, in order to gain a clear idea of these affections, be necessary for us first to consider separately gastric and perigastric abscesses. The former are situated in the walls of the stomach, and may or may not open into it; the latter are in the neighbourhood of the viscus, and communicate with it by an opening through its coats, or are the result of ulcerations in its interior. Gastric abscesses may present themselves either as a purulent infiltration or as a localised collection of pus in the coats of the stomach. The former have been occasionally observed as an accompaniment of an acute infectious disorder, more especially in puerperal cases, and in such circumstances they probably result from the absorption of pus. The latter are also very rare, only thirty cases of both forms having been recorded; but as my experiences have fallen under my own observation, it is probable they are not so uncommon as is generally represented. In the cases I have seen there has been always thickening of the walls of the stomach, either by malignant disease or as the result of previous inflammation; the pus has been situated in or near the newly-formed structure, and the mucous membrane has presented numerous small openings through which the pus could be readily squeezed. We occasionally meet with patients who assure us that they have suddenly relieved of epigastric pain by the vomiting of pus, but considering how easily mistakes may be made between pus and other secretions, we are not justified in accepting such statements as evidence of a gastric abscess. Leube, after an examination of the various recorded cases of gastric abscess, has laid down the following as the symptoms of the disease. "In the midst of perfect health, after a period of general malaise, the individual is attacked with pain in the stomach and vomiting, accompanied by thirst, dry tongue, small, frequent, and irregular pulse, meteorism, and diarrhœa; subsequently delirium and paralysis ensue, and finally death."[1] Now, unfortunately, in the cases I have seen there were no symptoms pointing to any change in the condition of the patient that would lead one to suspect an abscess of such an important organ. The following is the last case that has fallen under my notice.

CASE 1.—A man of middle age was admitted into the hospital with the ordinary symptoms of acute pneumonia. He stated that he had been unable to work for the last few years, on account of gradually increasing debility, and had daily vomited a quantity of clear fluid, but had not the habit of vomiting his food. On post-mortem examination, in addition to the pneumonia, the pylorus was found to be greatly thickened, and the stomach somewhat, though not excessively, dilated. There was a cavity, apparently of recent formation, near the pylorus, where the coats were extremely thin and wasted, the mucous membrane in that region having a gangrenous appearance. In the thickened pylorus there was a collection of pus which could be easily squeezed through numerous minute holes with which the mucous membrane was perforated.

In this case there was no complaint on the part of the patient of any pain in the epigastrium, and it was only from what we were informed of his previous impressions that the other cases I have seen there has been a complete absence of well-marked signs of suppuration, and we may, I think, seek for an explanation of this in the rapidity with which the pus makes its way through the numerous small openings that form in such cases in the mucous membrane of the stomach.

Abscesses occur in the left hypochondrium and epigastrium independently of any irritation in the stomach, or of a communication with that organ. Thus you will occasionally see them arising from a suppurating hydatid cyst, more rarely as the result of tubercular peritonitis, or from irritation set up in the liver, spleen, or kidneys. But the form of perigastric abscess to which I propose to limit my remarks is that which either commences in the stomach, or which afterwards forms a communication with that viscus. The following case which was admitted under my care will show how obscure the affection frequently is, and how very difficult it may be to recognise it.

CASE 2.—A man, aged thirty-eight, was admitted Jan. 31st, 1881. He was a weaver, and had enjoyed good health until "some time ago," when he began to suffer from indigestion, the food appearing to lie heavy on his stomach and producing great pain. He stated that he had suffered from an injury to the back, but its nature and the date are not mentioned in the notes, and he evidently did not attach any importance to it. He never had syphilis. On admission, he had an anxious expression and complained of very severe pain in the left hypochondrium, extending backwards round the left side as far as the spine. All this region was very tender on percussion, the most tender spot being opposite the tenth and eleventh ribs. He was unable to lie on his right side, so that he constantly lay on the left side, with the neck bent forwards and his knees drawn upwards. Pulse 90; temperature 99°. He had no appetite, the tongue was thickly furred, and the bowels obstinately confined. The liver dulness extended from the fifth costal interspace to below the ribs, and it was slightly tender on pressure. Abdomen generally resonant. In the left hypochondrium, dulness on percussion extended upwards to the heart's apex, and downwards to a level with the umbilicus. Chest normal. The heart's apex was not raised, and there were no murmurs. On Feb. 10th he had constant vomiting, and he complained of the severity of the pain, extending from the left hypochondrium to the spine; the breath was very offensive; he could take no food; the pain was increased directly he attempted to take any food, but it was also continuous, and increased at night, preventing sleep. The recti muscles were hard and rigid. On the left side near the spine there was dulness on percussion, but no increased pulsation, and no murmur. He had constant nausea, increased even after a drink of water. It is noted on Feb. 15th that a hardness could be felt below the left hypochondrium, and an elongated dulness on percussion in the left hypochondrium, measuring three inches longitudinally by six laterally. (See Fig. 1.) The lower border of the liver was also remarked scarcely to descend on full inspiration; there was also some dulness on percussion, and increased resistance to pressure immediately above the umbilicus. The man continued in much the same state until April 22nd. The pain was excessive and constant, and required the use of subcutaneous injections of morphia frequently in the day. He had steadily lost flesh, and was then only 6 st. 12 lb., having weighed 8 st. on admission. The temperature varied from 98° to 100° during February, but rose to 102° in March, and afterwards oscillated until April 22nd, at which date it rose to 103°, and the patient complained of great pain at the base of the lungs behind, although neither dulness nor friction sounds could be discovered. On the 27th, he had a severe rigor, the temperature rising to 106°; but the pain in the left side was not more severe than usual. The left chest was now found to be dull on percussion, with absence of breath sounds, diminished vocal and tactile fremitus, but no friction sounds could be heard. On the 29th he had severe and general sweatings, the dulness was much increased in the left hypochondrium, but the tenderness was not increased, and the pain had diminished. Friction sounds were first discovered on May 2nd near the apex of the heart; rigors recurred from time to time, and a herpetic eruption showed itself on the lips, palate, and roof of the mouth. After this period the appetite began to improve, the pain decreased, and his weight remained stationary. On May 12th friction sounds could be heard over the whole left hypochondrium, where there was formerly such marked dulness on percussion, the dulness at the back of the lung slowly diminished, and the pain gradually lessened, until it only came on after food. From

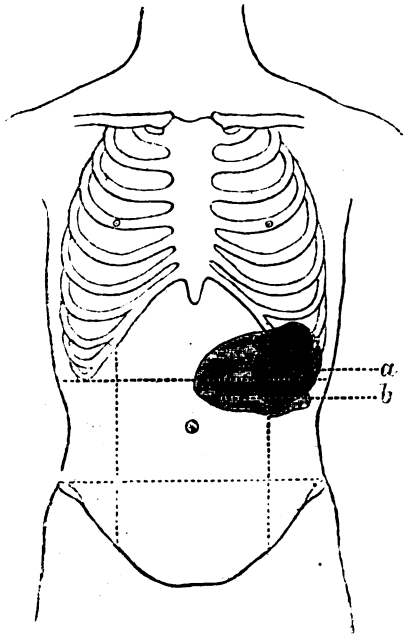
[1] [illegible] of Medicine, vol. vii., p. 151.

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this time he rapidly improved, the pain entirely left him, the appetite returned, and he gained (so the notes state) as much as six pounds in weight in a single week. On June 22nd he was discharged, after being in the hospital five months, and at that time there was no dulness at the base of the lung and no friction sounds; there was some fulness under the left hypochondrium, but the part was tympanitic on percussion.

There must, of course, be always a certain amount of doubt about any case in which a post-mortem examination has not confirmed the accuracy of the diagnosis, but by taking into consideration the termination as well the course of the disease we may in most instances arrive at a correct decision. In the foregoing case it will be necessary for you to bear in mind that the patient had suffered from symptoms of gastric ulcer for some time before he entered the hospital; that on his admission the pain had become constant, although it was still increased by food; and, in addition to this, that an ill-defined tumour could be distinguished below the ribs, whilst on percussion a dull space was found both before and behind in the region of the stomach. He remained in this state for about three months, having lost a stone in weight, and the pain being so severe that the constant use of hypodermic in-

FIG. 1.



Plan of case of Perigastric Abscess. *a*, Part dull on percussion; *b*, part tympanitic on percussion.

jections was required to alleviate it. At the end of that time severe rigors ensued, accompanied by effusion into the left chest, although the pain did not increase, and no friction sounds were heard until ten days afterwards. After this he gradually improved, gained a stone in weight, and although the pain after food persisted for some time, it eventually disappeared. There was afterwards a friction sound to be heard in the left hypochondrium, where there had been formerly the dulness on percussion, but this also became gradually inaudible. Now this was clearly not a case of cancer, as was at first suspected, for there was no enlargement of the glands or liver, and the ultimate recovery of the patient negatives such a supposition. Neither was it an abdominal aneurysm, for you will remember it is stated there was neither a murmur nor pulsation, and the favourable issue is sufficient to disprove it. The undefined feeling of the tumour, and the dulness on percussion in front and behind, point to a collection of fluid rather than to a solid tumour, and this might arise either from a hydatid cyst or perigastric abscess. The former would not explain the pain after food, nor its persistence after the convalescence of the patient, whilst the latter seems to meet all the difficulties of the case. We shall afterwards find that this form of abscess chiefly occurs in chronic ulcers of the stomach, where adhesions have been formed, and you will observe that adhesions must have been present, for it is remarked in the notes that the liver did not seem to descend on full inspiration. The dulness, again, was clearly the result of an inflammatory exudation, for a friction sound could afterwards be heard in the locality where it was formerly detected. Then it is almost certain that perforation of the diaphragm occurred, and the pent-up pus made its way into the pleura, and this is a common accident in perigastric abscess. But in the diagram copied from the notes, you will remark there is a space in front of the dulness that was tympanitic on percussion, and you might suppose this was distended with gas, as is so common in perigastric abscess; but if such had been the case we should have had pneumothorax when the perforation occurred, so that the idea must, I think, be dismissed. You will, however, be able better to appreciate the probabilities of diagnosis being correct if we now discuss in greater detail the subject of perigastric abscess.

Perigastric abscess of the kind to which I have limited our inquiries is a very rare form of disease, for I have only discovered eight instances of it in the post-mortem records of this hospital. In all of these the walls of the abscess were formed by adhesions of the neighbouring viscera; in five ulceration of the stomach and in three a cancerous tumour were present; in one of the latter an opening had taken place through the abdominal walls. I have been able to collect only forty-four other cases from various authors, but I hope these will suffice to enable me to lay before you some of the chief circumstances connected with the disease.

When we were considering the subject of abscesses connected with the duodenum, we found that in a certain proportion their walls were formed of connective tissue; but it is evident that, from the complete investment of the stomach by the peritoneum, such is not likely to be the case with a similar affection of this organ. We consequently find that in the majority of cases the abscess was walled in by adhesions of the liver, spleen, or colon with the stomach, and that the pus was situated in front of this latter organ; in only four the abscess was situated behind it, in two it was placed in the right hypochondrium, and in three the ribs of the left side formed part of its walls. Of fifty-two cases, nineteen, or more than one-third, are stated to have been in contact with the diaphragm, and, as we shall afterwards see, perforation of this muscle is a common consequence of the disease. A foreign author has attempted to explain the frequency of this situation of perigastric abscess on the supposition that the distension of the intestines that always accompanies peritonitis pushes the pus upwards; but I think it is more probable that, as the perforation of the stomach usually occurs in its smaller curvature, the inflammation must necessarily generally commence in this locality, and where this is not the case, the upward movements of the diaphragm must tend to draw the pus upwards, whilst the descent of the muscle is unable to depress it on account of the adhesions that are already present between the contiguous organs. Occasionally the abscess is situated in the lesser omentum, but there are very few cases on record. It is worth while therefore to record the following.

CASE 3.—A man, aged forty-seven, was received into the London Hospital, under the care of Dr. Hughlings Jackson,[2] with a history of having suffered from pain of the abdomen for eight or nine years; he had never had hæmatemesis or vomiting of food. The day previously he was attacked with constipation, for which numerous enemata had been administered without effect. He complained of extreme pain over the abdomen and great dyspnœa, but died four hours after his admission.

Post-mortem examination.—"The mesentery attached to the upper part of the jejunum was covered over with puriform lymph; the upper and transverse parts of the meso-colon were also coated with lymph. On separating the colon an abscess was exposed lying in the cavity of the lesser omentum, bound in by the jejunum and colon and under the liver and back part of the stomach. The left end of the stomach was much thickened, and on opening the organ a large ulcer was found at the œsophageal end, near the lesser curvature and in the posterior wall. It was about an inch and a quarter in diameter, and had a firm grey floor, with round thick edges. At one spot it had perforated the coats of the organ and communicated directly with the abscess. The bronchi were filled with pus derived from the abscess."

[2] I beg most heartily to thank my colleagues who have so kindly placed the notes of their cases at my disposal.

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...ty-one cases of perigastric abscess in which there is ... evidence as to the cause, six were associated with ..., four with abscesses commencing externally to the ..., whilst forty-one were due to the irritation of simple ulcers.

You are well aware that gastric ulcers are more common towards the pyloric than the cardiac end of the stomach, but of nineteen in which the site of the ulcer coexisting with a perigastric abscess is recorded, eleven were at the cardiac and only eight at the pyloric end. Of sixteen in which the position of the ulcer is stated as regards the curvatures, thirteen were on the smaller and three in the larger; whilst three were on the anterior and five on the posterior wall. The unusual number of the ulcers in these cases at the cardiac end suggests the suspicion that the greater fixity of this portion of the stomach may be the reason why localised abscess was more prevalent in this situation than at the pylorus. This seems to be supported by the fact that adhesions, apart from those forming the walls of the abscess, are often mentioned as existing between the stomach and some of the neighbouring organs, and that very frequently the perforation had taken place at the point where the parts were thus united. Twenty-two cases of adhesion are recorded, and as no doubt this matter had often escaped observation, they were probably present in the greater number of those affected with this form of abscess. In some the small size of the perforation is expressly mentioned, and in five instances no communication could be found between the abscess and the ulcer, although they were in close proximity. The conclusion in these instances has been drawn that the perforation had preceded the formation of the abscess, but I would throw out the suggestion that in some of these cases there may have been an abscess originating in the coats of the stomach itself, which had set up suppuration by discharging its contents externally. There is another supposition worthy of consideration—viz., whether an inflamed ulcer of the stomach may not be able to set up suppuration in newly-formed tissue external to it, in the same way as we before mentioned in some of the cases of perinephritic abscess, suppuration was produced around a tubercular kidney, although the capsule of the organ remained intact. The following case seems to show that an abscess of this kind may also originate in pyæmia:—

Case 4.—A man, aged forty-seven, was admitted under the care of Dr. Stephen Mackenzie. "Eighteen months previously he had suffered severe pain in the epigastrium, coming on one hour after food; one month ago he was seized suddenly with severe pain of the abdomen, having been two or three days before been greatly constipated. A tumour the size of a cricket-ball was discovered on the left iliac fossa, which was nodular and painful on pressure; dulness on percussion and distant breath sounds were also found at the base of the left chest. A few days afterwards the abscess was opened and eight ounces of very fetid pus evacuated. This was, however, followed by erysipelas, and his breathing became difficult, the left chest was tapped and forty ounces of pus removed."

Post-mortem examination.—It is stated that there "was perforation of the descending colon and an abscess in the abdominal walls," but the notes on this point are very meagre. "There was also an irregular contraction of the stomach around a point midway between the cardiac and pyloric ends, and at the base of this a circular depression which was adherent to the left lobe of the liver. External to the adhesion, there was a small abscess below the stomach, between liver, and diaphragm. The stomach was much thickened around the ulcer, and an abscess the size of a walnut was situated below the capsule of the spleen. The left pleura contained pus."

I will observe here that the patient had suffered from symptoms of gastric ulcer for eighteen months, but the formation of pus, which was small in quantity, had in all probability only taken place lately. As it was accompanied by abscess in the spleen and in the abdominal walls, and was also found in the left pleura, it is most probable that they were all due to a common cause—viz., to pyæmia arising from the abscess in the iliac fossa.

In the state of the ulcer is mentioned, it is in all cases which accompanies one of long duration, and in some the perforation is said to have taken place in the cicatrix of an ulcer. The coexisting conditions of the organ itself point to the same conclusion. Thus, in four the stomach was much contracted, in three the coats were thickened, in two it is mentioned as dilated, in one there was narrowing of the duodenum, in one of the œsophagus, and in three of the pylorus.

The facts we have now ascertained will, I think, suffice to show under what circumstances a perigastric abscess is most likely to take place—viz., when adhesions have occurred between the stomach and some of the neighbouring organs, and the ulceration either proceeds very slowly to the surface, or the perforation is so minute that only a very small portion of the gaseous or liquid contents of the organ finds its way into the space limited by the adhesions. Such conditions are of course most likely to occur when the coats of the organ have been thickened by long-standing disease, and when the ulceration is situated at some place that can most readily contract adhesions to the neighbouring parts. In thirty-four of the cases collected the pus eventually made its way either into the cavity of the chest through the abdominal parietes or into one of the neighbouring organs. When you remember the power of the gastric fluid of digesting animal substances, you will be tempted to ask whether this unusual tendency to perforation of the neighbouring structures may not be partly the result of the contents of the abscess being in communication with the interior of the organ. In support of this one case may be quoted in which no remains of the pancreas could be discovered, its site being occupied by the pus; and in two others the opening of the stomach into the pleura is stated to have been very large. But, putting aside these cases, there is not much evidence in favour of such a supposition, for the openings into the stomach are generally recorded as being very small, and no appearances similar to those of post-mortem digestion have been noticed. This probably arises from the fact that the communication between the stomach and the sac was not very free, or the whole contents of the latter would have been discharged through the canal. As a consequence of this, little or no gastric juice would become mixed with the pus, and thus the vitality of the neighbouring structures would be a sufficient protection. It is, however, evident that in cases of this kind there is a great tendency to decomposition, arising probably from the entrance of gas and other products of fermentation from the stomach, for the pus is usually described as "ichorous"; in three instances the spleen was found to be greatly softened, in six there was pneumonia, and in two there was also gangrene of the lung.

We before found that the greater number of perigastric abscesses were in immediate contact with the diaphragm, and it is therefore not surprising that the cavity of the chest has been more frequently perforated than any other part. This occurred in twelve of those I have collected, and where there was a communication with the stomach of course both air and fluid were present in the pleura, but in cases, such as we have before seen sometimes occur, where there was no direct opening into the organ, pus alone was met with. Occasionally adhesions had taken place in the pleura, dividing it into separate compartments filled with pus; but this was a very unusual condition. You will remember that we remarked in a former lecture that perinephritic abscesses were also liable to perforate the diaphragm, and it will naturally strike you as strange that this should be so common in abdominal abscesses; whilst, as you know, perforation from the chest into the abdomen is unusual. The reason of this difference I believe to be that in empyema the fluid has a ready means of escape by perforation of the lung or the intercostal spaces, whilst in the abdomen it is pent up by adhesions, and closely surrounded by organs with thick and vascular coats. But empyema was also sometimes present even where perforation of the diaphragm was not discovered; and the most reasonable explanation of this is that some of the contents of the abscess were absorbed by the lymphatics of the diaphragm, which, as you are aware, are very large and active in this structure. Considerable difference existed as to the liability of the sides of the chest to perforation, it having been recorded in ten cases on the left, and in only two on the right side; but this, of course, arises from the greater number of abscesses being situated in the left side of the abdomen.

I have only found three cases in which perforation of the pericardium took place, the entrance of the fluid, of course, setting up sudden and violent inflammation of the membrane.

In twelve cases perforation of the abdominal parietes is recorded, the pus being discharged externally, and leaving a communication between the surface of the body and the stomach. Seven of these seemed to have originated in

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gastric ulcer, one in cancer, whilst in four the abscess commenced outside the stomach, but afterwards perforated its coats. This termination of perigastric abscess is extremely rare, and many seem to have been placed on record only because they are so uncommon. I find the following example in our post-mortem books, but I have been unable to obtain any history of the patient during her life.

CASE 5.—The patient was a female, aged thirty-five, admitted under the care of the late Mr. Maunder. "An incised wound to the right of the umbilicus communicates with a large sinus-like cavity. Beneath the left lobe of the liver, and in front of the stomach, is a quantity of reddish grey, juicy substance, which looks like encephaloid cancer. On a level with the incised wound the abdominal wall is adherent to the omentum, and this firm adhesion encloses the liver, stomach, and upper part of the duodenum in one cavity. The colon is empty and does not communicate with it. The small intestines are normal. A bougie is seen to pass from exteriorly into the stomach at the pyloric extremity, and this fistulous opening admits the introduction of a finger, so that the contents of the stomach must have escaped out of the abdominal walls. The pyloric end is invaded by cancerous masses, its surface being irregular and ulcerated. Close to the pylorus, at the greater curvature, the walls of the stomach are absent, having been completely destroyed by the cancerous ulceration, and it is here that the external opening communicates with the organ. A little to the right of the opening the stomach is contracted by firm fibrous thickening, and only admits two fingers. The glands along the spine are cancerous."

The foregoing is a good illustration of the terrible destruction often wrought by gastric cancer; but, as a rule, the formation of an abscess is not common, the morbid growth tending to invade and consolidate the neighbouring structures, instead of inducing suppuration. Still, you must remember that the formation of pus does occasionally occur, for I lately diagnosed tubercle of the peritoneum chiefly on the ground of the presence of an abscess under the abdominal walls, but post-mortem examination showed I was wrong, and that it was the result of malignant disease.

Perforations are noted as having occurred into most of the neighbouring hollow organs; thus in one instance the stomach, duodenum, and colon communicated with the same abscess, in seven there was an opening into the colon, in one into the small intestine, and in one into the gall-bladder. In eleven there was more than one ulceration in the stomach, and in some instances more than one ulcer opened into the same abscess. The sex was recorded in forty-one cases of perigastric abscess arising from ulcer, and of these twenty-five were females. Dr. Brinton concluded from his inquiries that females were twice as liable as males to gastric ulcer, so that if we can trust to so small a number of cases as I have collected, males are more apt to have epigastric abscess than the weaker sex. The ages are given in thirty-seven cases of perigastric abscess, and I have compared in the following table the percentages at different ages with those given by Dr. Brinton of 226 cases of gastric ulcer.

	Under 20.	20 to 40.	40 to 60.	Above 60.
Percentages of gastric ulcer	9	37	31	23
Percentages of perigastric abscess	19	56	19	6

You will here see the greater proportion of cases of perigastric abscess in the earlier period of life, when the vital powers are strongest, and when there is, therefore, the chief tendency to adhesive inflammation, the greatest number occurring between twenty and forty, and very few presenting themselves after sixty years of age. It seems to point to the same conclusion at which we before arrived—viz., that the main predisposing cause of the disease is the formation of adhesions which, in case of perforation, prevent the escape of the contents of the stomach into the general cavity of the peritoneum.

(To be concluded.)

COLONIAL LEGISLATION FOR THE HABITUAL DRUNKARD.—In his address as chairman at the British and Colonial Temperance Congress, at the Princes Hall, this week, Dr. Norman Kerr stated that in Canada, South Australia, Victoria, and New Zealand, the habitual drunkard could be placed under care and treatment and restraint against his will. In this respect the Colonies were far ahead of the mother country. Colonial legislation was permanent, and not temporary, as at home.

EXCISION OF THE COCCYX.

BY WALTER WHITEHEAD, F.R.C.S.E., F.R.S.ED.,
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THE following two cases which have recently occurred in my practice illustrate the advantages under certain circumstances of excision of the coccyx.

CASE 1.—X. Y——, aged fifty-nine, male, has for the last twelve years suffered from distressing pain in the seat. He has consulted various surgeons both in London and in the provinces, but without obtaining relief, and his various advisers had failed to diagnose any sufficient cause for his symptoms. I was asked to see the case with Dr. Livy, of Bolton, the patient's private medical adviser, who told me that the case was one of ischio-rectal abscess suspected to be associated with some diseased condition of the coccyx. An examination confirmed this opinion, and I determined to cut down upon and investigate the condition of the parts. This I did two days after first seeing the patient. An opening which had been previously made into the abscess, above and just within the right tuber ischii, was freely enlarged, and a sinus leading into the rectum just above the internal sphincter was laid open. A second sinus was now found, which, on exploration with the finger, was ascertained to lead to a necrosed coccyx. An incision was then made immediately over that bone in the middle line, and through it were removed the last three segments. The wounds were thoroughly scraped so as to remove all unhealthy granulation tissue, and they were then plugged with iodoform gauze. Immediately after the operation, the temperature, which had previously ranged as high as 105°, fell to the normal, and never again rose above 100°, at the same time the general health of the patient improved rapidly. The pain from which he had previously suffered disappeared at once, and has not returned, and the wound healed well and rapidly.

CASE 2.—E. R——, aged thirty-seven, male, on consulting me, gave the following account of himself. His occupation is that of a piano dealer and tuner. For the last fifteen years he has been subject to attacks of pain, at first infrequent, at intervals of about a month, and not very severe; latterly these attacks have been as frequent as once or twice weekly, and his pain has been much more severe. The pain is always brought on by the commencement of the act of defecation and is in the region of the anus; when it occurs he has severe tenesmus and a desire to further empty the bowel, the pain meanwhile increasing in intensity, and often detaining him in the closet for two hours at a time. After such an attack more or less pain will remain throughout the day, and even during the whole of the following night. He can suggest no cause for the origin of these symptoms, except that he has always had a tendency to constipation. Some time since, however, he fell and struck the coccyx against a piano, but this appears to have been subsequent to the onset of the disease. He has hitherto found a certain amount of relief from the use of a warm sitz-bath, but this has not been of great efficacy, and all other measures have proved futile. On examination and especially on pressure over the posterior part of the rectum, pain is caused exactly similar to that induced by defecation. Finding that the seat of the pain was apparently the coccyx, and discovering that bone bent at a right angle, and having the history of an injury, I excised it by a median incision, without opening the rectum. The parts healed at once, relief from pain was complete, and there has been no return since the time of the operation.

In addition to these two cases in males, I had under my care, about ten years ago, five cases of coccygodynia in females, all produced by injury during parturition, and in all of which I removed the coccyx, with immediate and complete cure of the disease.

The treatment of coccygeal pain falls under three heads—viz.: 1. By means of rest and anodynes. 2. By complete or partial separation of the bone from its muscular connexions. 3. By excision of the bone. As in other cases, our method of treatment must always be guided by the nature of the case. Thus in those where the pain is due to hysteria or to reflected irritation, owing to uterine or ovarian disease, it would obviously be unsurgical to remove the coccyx. There are, however, a large number of other cases, in which surgical interference will probably be required, and which may be

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under the following heads: Old fractures and dislocations in which the bone has become fixed in a faulty position, either that of flexion or of extension; congenital elongation of the coccyx; necrosis, whether traumatic or otherwise; tumours connected with the coccyx; and, finally, a large group of cases of obscure pathology, in some of which there appears to be periostitis of some or all of the segments, in others inflammation of the sacro-coccygeal joint.

In old fracture or dislocation with displacement, we can hope for no improvement apart from operation, and here Simpson's operation of separation of the attached muscles cannot be expected to succeed in relieving the patient. I have attempted to remedy an old dislocation backwards with consequent extreme flexion of the coccyx, by means of traction made by passing a loop of wire over the apex of the bone and connecting this loop with a splint attached to the spine; but the pain produced by this method was so great that it had to be abandoned. It might appear possible in such cases to separate the displaced bone at its abnormal angle and endeavour thereafter to retain it in position by a pad introduced into the rectum, but the difficulty of preventing a return of the displacement must necessarily be great, if not insuperable. Hence in such cases I should advise excision of the bone.

Again, if congenital elongation be a cause of pain, removal of part is clearly indicated. So also in cases of necrosis, as in first of my patients, we are following the ordinary surgical method in removing the sequestrum. Cases of tumour involving the coccyx must be treated on general surgical principles. But it is in cases where there is no evidence that there is the greatest room for diversity of opinion as to the method of treatment to be adopted. Here we should naturally try, before resorting to operation, the effect of rest and of the various anodynes. But if this treatment should fail, as it had done in my cases before they came under observation, what is to be done? Hilton recommended separation of the fibres of the sphincter ani from the front of the bone, and thus undoubtedly made possible more perfect rest. Simpson went further and completely divided the muscular connexions of the coccyx by means of subcutaneous section, and he was thus able to cure a considerable number of cases. But he himself admits that in some instances this operation was insufficient, and he then resorted to the procedure, which had long before been advocated by Nott, of removal of the coccyx. In nearly all cases the latter method seems to have effected a cure, and I should therefore be inclined to adopt it at once, instead of running the risk of wasting time by the subcutaneous isolation. The operation of excision of the coccyx is sufficiently simple and without danger: it is more easily performed than the subcutaneous division of muscles; its result is apparently infallibly good, providing that the diagnosis be correct; the removal of the bone does not seem in any case to have caused inconvenience. On these grounds, therefore, I would advise excision in all cases of coccygeal pain where non-surgical treatment has failed to give relief, unless the pain be referable to some constitutional condition as hysteria, or to reflex influence as in uterine and ovarian disease.

CASES OF SCIATICA TREATED BY GALVANISM.

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Since publishing my paper in THE LANCET of Jan. 19th, 1884,[1] on the Use of Galvanism in Sciatica, I have had sixty more cases under treatment, and the results have borne out the favourable opinion entertained as to its efficacy. I have therefore thought that the details of these additional cases might be of interest to the profession. I only purpose to give a very brief abstract of each case, embodying the most important points, and a description of the mode of applying the galvanism, as in my former paper.

CASE 1.—Jan. 24th, 1884. A lady, aged fifty, sent to me by Dr. Wright. Had suffered for five weeks. Galvanised once. Was greatly relieved, but not cured. Had retroverted displacement, and had been wearing a pessary up to the time of the commencement of the treatment for sciatica. This lady had a subsequent attack of sciatica, and was again relieved by galvanism after trying many other remedies.

CASE 2.—Jan. 26th, 1884. M. W——, female, aged thirty-five. An in-patient of the hospital. Had been ill for three months. Was galvanised about ten times. Cured.

CASE 3.—Feb. 11th, 1884. W. C——, male, aged thirty-three. An out-patient. Had been ill six months. Galvanised four times. Cured.

CASE 4.—Feb. 13th, 1884. M. M——, female, aged thirty-eight. An in-patient. Had been ill four months. Galvanised four times. Cured.

CASE 5.—Feb. 22nd, 1884. J. L——, male, aged fifty-eight. An in-patient. Had been ill six weeks. Galvanised five times. No improvement. On examination per rectum, a tumour was felt pressing on the side on which there was sciatica. After death necrosis of the tuber ischii was discovered. This was therefore not an ordinary case of sciatica.

CASE 6.—Feb. 28th, 1884. W. B——, male, aged twenty-four. An out-patient. Had been ill for ten weeks. Galvanised four times. Cured.

CASE 7.—May 12th, 1884. A. C——, male, aged twenty-three. An out-patient. Ill eight months. Galvanised four times. Cured.

CASE 8.—July 11th, 1884. L. W——, female, aged forty-two. An out-patient. First attack. Had been ill three weeks. Galvanised eight times. Cured. (Some of the out-patients do not return to report themselves when they are well. If no note has been made of their improvement we are doubtful as to the result. In several cases mentioned in this list I have had to go by the note last made. If to the effect "much improved," I have considered their ceasing to attend as evidence of being cured.)

CASE 9.—July 22nd, 1884. C. S——, male, aged thirty-one. An in-patient. The sciatic nerve was stretched on account of the man being subject to epileptiform convulsions. The operation was followed by sciatica and suppuration along the course of the nerve. Galvanised once. Improved.

CASE 10.—Aug. 11th, 1884. A. P——, male, aged twenty-three. An out-patient. Had been ill four weeks. After the third application of electricity he was much better. It appears by the register of cases that he was galvanised twenty-five times. He was quite well when I discharged him; how long he had been so I cannot say. Many of the patients continue coming twice a week for as long as they can. They say they feel so much better for the galvanising, and they think that it strengthens their nerves.

CASE 11.—Aug. 11th, 1884. C. H——, male, aged forty-five. An out-patient. Ill seven weeks. Second attack. Galvanised six times. Cured.

CASE 12.—Aug. 15th, 1884. E. C——, female, aged forty-one. An out-patient. Ill four months. Galvanised eleven times. Cured. The galvanising brought on menstruation.

CASE 13.—Sept. 2nd, 1884. Miss E. S——, aged thirty-one. Had had sciatica for two months, which necessitated deferring her wedding. Galvanised four times. Cured.

CASE 14.—Oct. 20th, 1884. J. O——, male, aged twenty-six. An out-patient. Ill five months. Had been in bed six weeks. Only attended once. Returned some few months afterwards (with another patient), and said that the first application of electricity had cured him.

CASE 15.—Oct. 27th, 1884. J. G——, male, aged twenty-nine. An out-patient. First attack. Had been ill five months. Only attended once. Came from Richmond.

CASE 16.—Nov. 16th, 1884. G. B——, a gentleman sent to me by Mr. Alfred Cooper, aged about fifty. Had been in pain for two weeks. Galvanised once. Cured. On the 15th of the following month he had a return of pain. Galvanised twice; cured.

CASE 17.—Nov. 18th, 1884. J. P——, a gentleman sent to me by Mr. Butlin, aged about forty-two. Had had sciatica for five months. Galvanised eight times. Not cured. (See subsequent note.)

CASE 18.—Nov. 21st, 1884. A. J——, male, aged forty-three. An out-patient. Had been ill for twelve months. Galvanised seven times. Cured.

CASE 19.—Nov. 27th, 1884. E. D——, male, aged forty-five. An out-patient. Had been ill two months. Second attack. Only attended once.

CASE 20.—Nov. 27th, 1884. T. N——, male, aged twenty-nine. An out-patient. Had been ill five weeks. First attack. Galvanised eight times. Much improved.

CASE 21.—Nov. 29th, 1884. C. S——, a gentleman, aged

[1] THE LANCET, 1884, vol. ii., p. 326.

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about twenty-nine. Had been ill for a few days. Second attack. Galvanised twice. Cured.

CASE 22.—Dec. 2nd, 1884. M. M——, female, aged twenty-seven. An in-patient. Had been ill five months. Was of a hysterical temperament. Treated by statical electricity. Sparks taken from over the course of the sciatic nerve. Application about eight times. Cured.

CASE 23.—Dec. 4th, 1884. A. F——, male, aged thirty-six. An out-patient. Ill seven weeks. First attack. Galvanised fifteen times. Cured.

CASE 24.—Dec. 29th, 1884. J. E——, male, aged fifty-five. An in-patient. Ill eleven weeks. Galvanised several times. Improved.

CASE 25.—Dec. 29th, 1884. G. N——, male, aged thirty-six. An in-patient. Had been ill for two months. Was in Luke ward for six weeks, and treated by electricity. Was not cured. Was made an out-patient on Feb. 9th, 1885. Galvanised fifteen times. Cured.

CASE 26.—Jan. 8th, 1885. A. M——, male, aged thirty-four. An out-patient. Sent to the hospital by Dr. de Havilland Hall. Had been ill ten weeks. Galvanised twelve times. Cured.

CASE 27.—Jan. 12th, 1885. R. B——, male, aged fifty. An out-patient. Fourth attack of sciatica. Had been ill two months. Galvanised fifteen times. Cured.

CASE 28.—Jan. 21st, 1885. M. C——, female, aged twenty. An in-patient. Had been ill for three months. Was galvanised in the hospital a large number of times. Improved. Was made an out-patient. Galvanised seven times. Cured.

CASE 29.—Feb. 19th, 1885. A. B——, male. An out-patient. Had been ill two weeks. Galvanised twice. Did not attend after the second time. No note as to whether improved or not.

CASE 30.—Feb. 19th, 1885. G. S——, male, aged thirty-four. An out-patient. Had been ill four weeks. Galvanised ten times. Was better.

CASE 31.—Feb. 26th, 1885. J. H——, male. An out-patient. Had been ill seven months. Galvanised fourteen times. Cured.

CASE 32.—May 7th, 1885. L. D——, male, aged twenty-eight. An out-patient. A policeman. Had been ill for six months. Had been an in-patient of the hospital, and had had his sciatic nerve stretched by forcible flexion, with only temporary improvement. Galvanised eight times. Cured.

CASE 33.—May 8th, 1885. E. C——, female, aged forty-nine. An out-patient. Had been ill for nine months. Galvanised four times. Improved. Ceased attending.

CASE 34.—June 4th, 1885. T. A——, male, aged forty-five. An out-patient. Second attack. Started with a sneeze. Had been ill two weeks before applying at the hospital. Has been galvanised twenty times. Was much improved after sixth application. Has now ceased to attend. The last time he came he said he had been free from pain for a week, but felt it slightly on that day.

CASE 35.—June 11th, 1885. G. T——, male, aged twenty-seven. An in-patient. Underwent an operation for fistula in ano, followed by sciatica. Galvanised eight times. Cured.

CASE 36.—June 24th, 1885. A. D——, a gentleman, aged about thirty. Had been ill for three weeks. Galvanised nine times. Once faradised. Cured. (This patient expressed himself as cured when he discontinued treatment; I afterwards heard that he had a return of his pain, which was relieved by a visit to Aix-les-Bains.)

CASE 37.—July 2nd, 1885. J. A——, male, aged fifty-nine. An out-patient. Had been ill a month. Galvanised ten times. Result not stated.

CASE 38.—July 17th, 1885. A. K——, male, aged thirty-six. An in-patient. Had been ill five weeks. Galvanised ten times. Cured.

CASE 39.—July 21st, 1885. M. H——, female, aged sixty. An in-patient. Had been ill two weeks. Was galvanised. This patient was cured of her sciatica, but in the notes of her case the result is credited to the exhibition of chloride of ammonium.

CASE 40.—July 27th, 1885. A. S——, male, aged forty-seven. An out-patient. Had been ill for five weeks. Galvanised twice. Ceased attending. Result not known.

CASE 41.—Aug. 10th, 1885. An American gentleman, aged sixty-five, sent to me by Mr. Savory. Had been in pain about a week. Second attack. The first attack had been cured by Duchenne with galvanism. Galvanised four times. Cured.

CASE 42.—Aug. 13th, 1885. G. R——, male, aged twenty-six. An out-patient. Has been ill for six weeks. Galvanised five times. Cured.

CASE 43.—Aug. 20th, 1885. E. J——, female, aged twenty-nine. An in-patient. Had been ill for two months. Galvanised five times. Cured.

CASE 44.—Aug., 1885. A member of the surgical staff of the hospital. Had suffered from sciatica for about a fortnight. Galvanised once. Cured.

CASE 45.—Sept. 24th, 1885. J. G——, male, aged forty-one. An out-patient. Had been ill for three months. Galvanised once. Did not return. Result uncertain.

CASE 46.—Oct. 5th, 1885. E. G——, male, aged seventy. An out-patient. Had been ill for three months. Galvanised twelve times. Improved.

CASE 47.—Oct. 23rd, 1885. M. B——, female, aged thirty-two. Had suffered more or less from double sciatica for two years. Pain in right thigh relieved after six applications of electricity, but it returned again about Christmas-time. Pain in left thigh relieved by four applications.

CASE 48.—Nov. 12th, 1885. M. W——, male, aged thirty-three. An out-patient. Had suffered from sciatica for two years. Galvanised thirteen times. Improved.

CASE 49.—Nov., 1885. A lady, about thirty. Had had sciatica for six weeks. First attack. Galvanised five times. Improved. Left town for the country before she was quite cured.

CASE 50.—Nov. 19th, 1885. C. H——, male, aged forty-two. An out-patient. Galvanised seven times. Cured.

CASE 51.—Nov. 30th, 1885. C. W——, male, aged thirty-seven. An out-patient. Had had sciatica for two weeks. Galvanised eight times. Cured.

CASE 52.—Dec. 21st, 1885. J. L——, male, aged forty-two. An out-patient. Had been ill for five months. First attack. Galvanised four times. Result not stated in notes.

CASE 53.—Dec. 22nd, 1885. M. B——, female, aged twenty-eight. Out-patient. Had had sciatica for six months. Confined a month ago. Galvanised four times. Cured. Came twice afterwards for treatment, as she said she felt so much better for the galvanising.

CASE 54.—Jan. 1st, 1886. R. F——, female, aged forty. Sent to me from the General Post Office. Had been ill three months. Galvanised ten times. Cured.

CASE 55.—Feb. 8th, 1886. G. B——, male, aged thirty-six. An out-patient. A fourth attack. Galvanised eleven times. Cured.

CASE 56.—Feb. 25th, 1886. T. T——, male, aged thirty-four. Out-patient. First attack. Had been ill for twelve months. Galvanised twice. Result not stated.

CASE 57.—March 1st, 1886.—A. W——, male, aged forty-five. Out-patient. Had been ill eight months. Galvanised seven times. Cured.

CASE 58.—April 1st, 1886. J. N., a gentleman aged sixty-one, with an enlarged prostate (? malignant). Had had pain down the course of the left sciatic nerve for five weeks. Galvanised seven times. Relieved so as to enable him to leave town for the seaside.

CASE 59.—April 8th, 1886. R. G——, male, aged fifty-six. An out-patient. Third attack. Had been ill this time for eleven weeks. Galvanised three times. Improved. Is still attending.[1]

CASE 60.—April 15th, 1886. J. R——, male, aged fifty-three. An out-patient. Had been ill four weeks. Galvanised once. Is to attend again.[1]

The above sixty cases have been more or less under my care. Thirty-seven have been cured; one had a return of sciatica and was cured a second time; eleven improved only; two did not improve; concerning nine, I am uncertain as to the result; and two are still attending the hospital.[1] Of those that recovered, three cases were cured with one application, two required two applications only, seven cases were galvanised four times each, two were galvanised five times, one case required six times, four cases seven times, five cases eight times, one case nine times, four cases ten times, two cases eleven times, one case twelve times, one case fourteen times, and three patients came fifteen times before they were satisfied that they were cured; one patient escaped my observation, and managed to get one or other of the students to galvanise him twenty-five times before I stopped his coming; he had been free from sciatica for several weeks. Of the cases which were not successful, one patient was, after death, discovered to have extensive necrosis of the ischium, with a sequestrum of dead bone. Another, a lady, was at the time suffering from some malposition of the uterus, which was tilted over on to the side in which the

[1] April 19th, 1886.

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pain returned, and no doubt exercised some pressure on the roots of the nerve. Although in this case the sciatica was not cured, the patient was so much benefited that she was able to get about the house again after eight applications. Before electricity was tried she had been confined to her bed for five weeks. With regard to the second unsuccessful case, I cannot well assign a reason for its non-improvement. The patient was a gentleman who had spent many years in the East Indies, and had suffered from dysentery and ague. He attended and was galvanised eight times, and as he was not then free from pain he did not care to continue the treatment. He tried several remedies afterwards, with the same unsatisfactory result. Perhaps if he had persevered longer with the galvanism he might have been cured, for several of the hospital patients attended as many as ten or fifteen times before they were quite relieved; but there is more difficulty in obtaining the prolonged and regular attendance of a patient who has to pay for each application than of one who gets his treatment gratuitously. The cases included in my list bear out the favourable opinion expressed by Dr. Stone, in his recent Lumleian Lectures, of the action of electricity in the treatment of sciatica.

Welbeck-street, W.

A COLOUR CIRCLE FOR TESTING THE CHROMATIC SENSE.

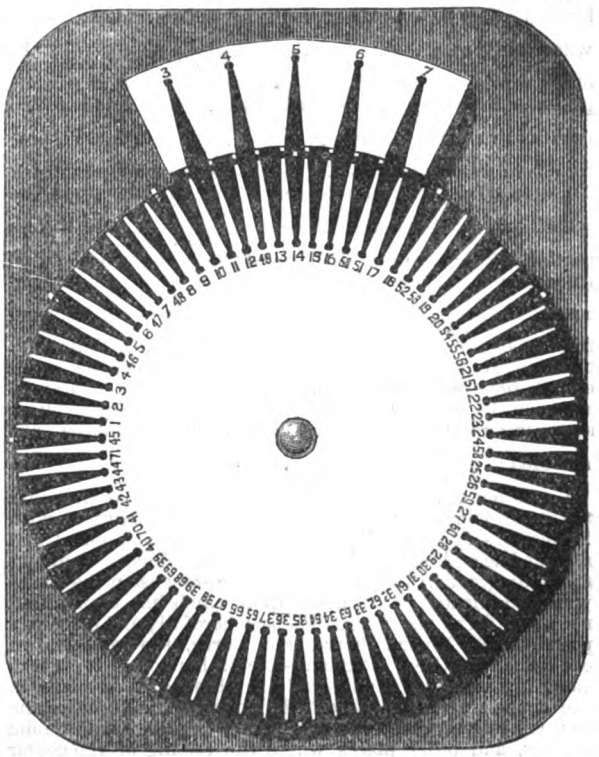
By C. S. JEAFFRESON, F.R.C.S.E.,

SURGEON TO THE NORTHUMBERLAND, DURHAM, AND NEWCASTLE INFIRMARY FOR DISEASES OF THE EYE.

Every instrument which tends to simplify and render more easy the functional examination of the eye is a great boon to the ophthalmic surgeon, not only by enabling him to do his work with less fatigue, but by facilitating the conduct of inquiries upon a much larger scale than is possible when the means at his command necessitate complicated apparatus or a lengthy system of examination. These remarks specially apply to the perception of colours. Within recent years defects in the colour sense, whether congenital or acquired, have assumed an importance which can scarcely be over-estimated: the former chiefly in connexion with the recognition of lights and flags in the railway and marine services; the latter in connexion with the different forms of amblyopia dependent upon diseases of the optic nerves and the various parts of the brain which constitute the visual centres.

It is not my purpose here to discuss the various theories which have been advanced in explanation of the phenomena of colour perception, but to introduce to the notice of the profession a piece of apparatus which I have had constructed with a view to the rapid detection of errors in this direction. Most of the methods in general use are either too complicated or not sufficiently efficient. Holmgren's is, of all others, perhaps the most convenient, but, carried out with the detached skeins of wool, it is tedious in its application and requires a good deal of talking and explanation. The wools, too, require constantly remixing; they are apt to be thrown about or mislaid; and, withal, there is no ready method of keeping a record of the colours that have been erroneously selected by those who have a defective chromatic sense. This system therefore is ill-adapted for the out-patient department of a hospital. What is required is some instrument which, always at hand, can be rapidly and efficiently applied with the minimum loss of time, and these attributes I claim for my instrument. The principle is essentially that of Holmgren, but the application is somewhat modified for the sake of rapidity and convenience.

The instrument consists of a test board and a revolving colour disc. The disc consists of a white enamel tin plate twenty-two inches in diameter. Its margin is cut out or notched so as to form altogether 72 bobbins or winders to hold the skeins of different colours. The wool, when placed upon these winders, passes through an aperture which is situated opposite the centre of each notch; it thus assumes the form of a cone, the apex of which is directed towards the centre of the circle, the base occupying the extreme margin, as clearly seen in the annexed sketch, where the shaded cones represent the colours. The test board, which is fixed and immovable, consists of a segment of a circle, also enamelled, so placed that its concavity exactly fits the convexity of the disc. Winders to hold the test colours are let into this tin plate in the same way as upon the disc, but the bases of the cones are directed towards the concavity of the test-board, the apex outwards. In this way the base of any colour cone on the wheel can be placed in exact apposition with the base of any colour cone upon the test board, forming with it a figure of this form: $\frac{\Delta}{\nabla}$. The disc rotates upon its centre, and by means of a weak catch stops when the bases of the cones are exactly opposite the bases of the cones on the test board. The colours that have been selected for the test board are the colours of the spectrum: red, orange (yellow), green, blue, and violet; and purple has been added, with a view to enable the tests to be applied upon Holmgren's principle. The green is the pale green which represents his No. 1 test; the purple is the tint which represents his test No. 2; the red is the full red which represents his test No. 3; the blue is a pure saturated blue, neither inclining to red nor green; the violet is a pure violet, as near to spectral violet as can be obtained. These test colours are arranged upon the board and numbered



as follows (there is no No. 1 or No. 2, for reasons which will follow): No. 3, pale green; No. 4, purple; No. 5 red; No. 6, blue; No. 7, orange or yellow; No. 8, violet. Upon the circle there are in all 72 colours, and they are numbered as follows: 1 to 19 represent the lighter shades of confusion colours; 20 to 29 the darker greys and browns; 30 to 36, greens of various shades; 40 to 46, purples of various shades; 50 to 56, reds of various shades; 60 to 66, blues; 70 to 76, yellows and oranges; 80 to 86, violets. To scatter the colours and yet to preserve some kind of order, the numbers do not follow each other consecutively on the circle, but in the following order: 1, 10, 20, 30, 40, 50, 60, 70, 80[1] (which represent one of each of the series of colours); then Nos. 2, 11, 21, 31, 41, 51, 61, 71, 81 (which represent another series), and so on in succession; each series as much as possible representing darker shades as they progress towards the higher numbers. In this way no two colours of the same hue come together upon the circle, and they appear generally scattered, although really a definite order is preserved. Now, with this arrangement it is easy to register and keep a record of the colour defects a person who is

[1] By a mistake of the engraver the numbers are erroneously placed on the block.

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examined may show; so that we may, as it were, subsequently examine him without his presence and study carefully his defects.

Let us now explain how the circle is used. A test colour (whichever is desired) is shown to the patient, and he is directed to look at it carefully, and then gradually and slowly turn the wheel until a colour which to his eye corresponds, although of a lighter or darker shade, comes immediately above it, and completes the figure which is formed by the junction of the two cones at their bases. When he is convinced of the correspondence, *he is to remove his hand completely from the wheel*, and the examiner then notes the number of the colour chosen. Now, in recording the cases, if we write down the number of the test as a numerator and the numbers of the colours chosen as denominators, we shall find that, in accordance with the arrangement of the colours and their numbering, in a person with normal chromatic sense, the first number of the denominator will always be the number of the numerator, because the different shades of each colour are grouped in series of tens—the greens are all under 30, the purples under 40, the reds under 60, and so on, their corresponding test number being 3 for green, 4 for purple, 5 for red, and so on.

Let me give a few practical illustrations. A patient presents himself. Test 3 (the pale green) is given him. He stops the wheel only at 30, 31, 32, 33. C. S. $= \frac{3}{30 \cdot 31 \cdot 32 \cdot 33}$. In other words, his colour sense is normal. Another patient presents himself. No. 3 is given to test. He selects 1, 5, 7, 6 (confusion colours). C. S. $= \frac{3}{1 \cdot 5 \cdot 7 \cdot 6}$. He must therefore have dyschromatopsia. Has he partial achromatopsia? No. 4 is now given him to sort (purple). He stops the wheel only at the series of 40 — $\frac{4}{41 \cdot 43 \cdot 44}$. He has no partial achromatopsia. Had he stopped the wheel at 60 (blue) or 80 (violet), his colour sense would have been recorded $\frac{4}{41 \cdot 43 \cdot 60 \cdot 80}$, and he would have been suffering from red-blindness, according to the Young-Helmholtz theory. Had he selected with Test 4 any of the series of 30 (greens), or any of the darker greys contained between 19 and 29, he would have been green-blind, according to the same theory, and his case might be thus recorded: $\frac{4}{40 \cdot 30 \cdot 24 \cdot 27}$.

I need not multiply these illustrations, as far as the other tests are concerned. Anyone who is acquainted with Holmgren's system will see how they can be applied and recorded according to the plan I have laid down. A glance at the diagram will render easy of comprehension the somewhat complicated verbal description which has been found necessary. The instrument has been carefully and elegantly prepared by Messrs. Picard and Curry, the well-known opticians, [illegible] Portland street, Manchester. It works smoothly and well, and should find a place in the consulting-rooms of both the physician and ophthalmic surgeon, railway offices, recruiting depôts, private and public schools, and other places where the testing of the colour sense is a question of interest.

It has been urged as one of the chief features of Holmgren's system that the hand and eye combine together to reveal the defect of colour sense in patients who are submitted to this form of examination; the hesitancy and vacillation of their movements in selecting the skeins giving a clue to the deficiencies of their perceptive colour functions. In using the colour circle these manœuvres between the eye and the hand lose nothing; I think, indeed, they become more conspicuous, and frequently enable us to detect a colour-blind person at a glance. A person with normal chromatic vision, who has had the operation of the wheel explained to him, will sit down and go through the various tests in less than a minute. A colour-blind person seems to shrink from the wheel; when he sits down to it he turns it with hesitation that in a few seconds usually convicts himself. There may be difficulty sometimes with stupid persons, as there are in all forms of examination; but we must beware of those who *pretend to be stupid*, and who, in reality, are deficient as regards their colour perceptions, but hope to escape by leaving the examiner under the impression that they are lacking in intelligence. The examiner should not lose patience with this class, but should carefully explain what is wanted of them, and should himself go through the tests with the wheel. A person who is stupid only will at once see what is required, whilst one who is colour-blind will receive no assistance by seeing the examiner sort the colours.

Newcastle-on-Tyne.

A CASE OF SENSORY APHASIA,

WITH NECROPSY.

By JOSEPH WIGLESWORTH, M.D. Lond.,
Assistant Medical Officer to the Rainhill Asylum.

I am indebted to Dr. Rogers for permission to publish an account of the following case.

Mary C—— was admitted into Rainhill Asylum on March 28th, 1885. No particulars were known about her, and it was never possible to obtain any information, for nothing could be ascertained about her friends, and the patient herself was unable to assist us. She was a grey-haired old woman, a little above middle height, and appeared to be about sixty-five years of age. Her irides were grey; the right pupil 3 mm., the left 2½ mm.; both acted well to light and to accommodation. The tongue was protruded straight, but showed considerable fibrillar tremor. There were slight signs of pulmonary emphysema, expiration being a little prolonged and wheezy. There was evidence of cardiac hypertrophy; the cardiac dulness was a little increased to the left, the apex beating in the fifth space in the nipple line, and there was a well-marked systolic bruit at the apex, heard with almost equal distinctness at the base; the aortic second sound was loud. The arteries generally were abnormally distinct. The urine contained the merest trace of albumen, but no sugar. No paralysis of any kind.

Mental condition.—She was, when admitted, very quiet, scarcely attempting to speak except when addressed; when a conversation was opened with her, however, she disclosed great amnesic defect. She gave her name as "Mary," but could not get any further, and, in fact, answered "Mary" to a number of quite unrelated questions. When shown various common objects, such as keys, a knife, &c., she could not name one of them, nor could she be got to repeat the names told her, except in one instance; she did not, indeed, seem to recognise the objects, nor could she be got to indicate, by gesture or otherwise, their use. To many questions she answered "Yes" quite irrelevantly. She could, however, talk pretty fluently when left to herself, though it was impossible to get anything connected out of her, as she constantly was at a loss for words, or misplaced them, and frequently repeated sentences or parts of sentences over and over again. She could, nevertheless, generally give some indication of what she wanted. She could not write, but seemed to try to make it understood that her failure was due to her right hand being numb; she had, however, free use of it. She appeared to a certain extent conscious of her defect, for frequently, when asked the name of anything, she said, "I cannot speak it"; but the impression conveyed was that she was only partially aware of her failings, and that there was some intellectual defect beyond her mere incapacity for naming objects. She clearly did not understand many things that were said to her. She frequently showed some amount of emotional excitement when unable to say what she wished.

About two months after admission—viz., on May 23rd—the patient had three epileptiform fits. On June 27th the following note was taken: "Mental condition much the same; she sits still most of the day very quiet, without speaking, unemployed; occasionally talks a little to herself. She has some command of words, but cannot apply them properly, and her conversation becomes, in consequence, ludicrously incoherent. She cannot name any object shown her, though she clearly recognises these at times, and assents when the proper name is given her; she is, however, *just as often wrong as right*. She also has a certain perception of her own defect, for she says she knows what a thing is if she could only name it, and shows some emotional excitability at her repeated failures. She clearly understands many things said to her, for she puts out her tongue and shuts her eyes when told to do so; says 'Good morning' appropriately. There appears to be some general intellectual feebleness, in addition to the amnesia."

After this date the patient got very restless. She would

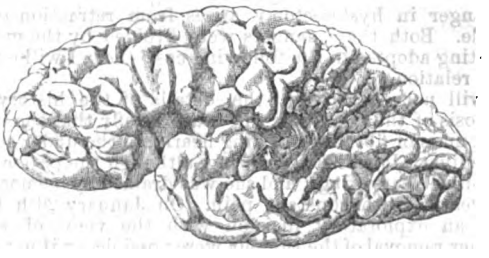
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...pontaneously every morning on the medical ...avour to tell a long story about herself, trying ... for her defect of speech by the use of gesture. ...wever, never able to express her meaning, though ...tly seemed to wish to make some complaint of ... condition; she always seemed very agitated, ... very depressed at her repeated failures. This ... more or less for a few months, and she then ... became quiet, seeming to get more reconciled. ... 18th she had another epileptiform fit; this was not ...

On March 4th, 1886, the patient's condition was noted to ... as follows: "She is much quieter and less obtrusive than ..., which may possibly be due to the fact that she ... found out how impossible it is for her to make herself ...stood. She can say numerous words and sentences, ... she says is almost all irrelevant and incoherent, ... not completely so. She seems quite destitute of ... of naming, and is unable to recognise the names ... objects, even when these are given her, although this ... is not quite complete. She gives her name as ... but cannot be got to give her surname, saying, 'I ... speak it'; this is, indeed, a favourite expression. ... knife and asked what it is, she says, 'I know the ... it,' but she cannot give the name; and when ... names are suggested, dissents from most of them, ... both when 'key' and 'knife' are suggested. ... pocket-book, she cannot name it; and when ... it is a book, says 'No,' as she does when other ... are suggested, but shows that she understands ... of it by opening it and pretending to write ... her finger. Shown a prayer-book, she opens it ... as if she understood it, but when asked what it is ... say in the least; and when 'knife' is suggested, ...ut afterwards, having opened it at the Psalms, ...taneously, 'This is the Psalms'; on being asked to ... makes signs for glasses, which are given her, and ... quite able to see the print, but cannot read a ... says, 'If I could speak it, I could say it.' Given ...d paper and asked to write down the words, she ...ke a stroke, even when the letters are dictated to ... plantar and abdominal reflexes are well marked, as ...nee-jerks. Sensation appears good everywhere. ...il 3½ mm.; left, 3 mm., the latter slightly irregu... act to light and to accommodation, but are ... Attempts were made to test the patient's vision ...opia &c., but no reliable results were obtained. ...otruded straight; steady as a whole, but shows ...lar tremor."

... morning of April 12th the patient died very sud... unexpectedly. She had just dressed herself, and ... on the side of the bed, when she suddenly fell ...scious; she became pale and frothed at the mouth, ...nvulsions were recognised; she died in a quarter of ...

...y, *seven hours after death.*—Skull-cap a trifle thick. ...er somewhat abnormally adherent anteriorly. ...al sinus empty; about three ounces of fluid in ...pace. Arachnoid generally very white and opaque; ...e mater decidedly thickened; everywhere strip... ...o adhesions. Moderate general wasting of gyri, ...esponding excess of subarachnoid fluid. On the ...lace of the left hemisphere, occupying the region ...erior parietal lobule, was a deep depression caused ...truction and absorption of the convolutions here ... The depression was bounded above by the intra... ...lcus, below by the posterior half of the parallel ...front mainly by the lower part of the ascending ..., and behind by the occipital lobe. The con... ...implicated were the supra-marginal, the angular, ...terior half of the superior temporo-sphenoidal. ... gyrus had disappeared in its anterior three... ...posterior fourth remaining attached to the ...; the posterior three-fourths, or rather more, of ...rginal gyrus, was also destroyed, a small portion ...r part, where it joined the ascending parietal ... intact. The same destruction had overtaken ...half of the superior temporo-sphenoidal gyrus. ...ion of brain tissue here was complete, and was ... to the outer aspect of the convolutions, but ... the white matter almost down to the lateral ... the posterior end of the ventricle, indeed, over ... lenticular area about the size of a florin, there ... not more than a line in thickness, of dis... organised brain substance, between the inner surface of the ventricle and the outer surface of the cerebrum. This destruction of brain tissue appeared to have been due to a process of necrotic softening and subsequent absorption, doubtless from the cutting off of the blood-supply by the plugging of the vessel supplying the area in question. The destroyed area corresponded pretty accurately with the region of distribution of the parieto-sphenoidal branch of the middle cerebral artery. The convolutions of the motor area were absolutely intact, as indeed were all the remainder, both in this hemisphere and the right. Left ventricle considerably dilated, right moderately so. Cortex of normal pale grey tint, of average depth, and lamination distinct. Consistence of brain good. Basal ganglia normal, as also cerebellum, pons, and medulla. The brain (immediately after removal) weighed 1169 grms.; right hemisphere, 476 grms.; left hemisphere, 403 grms. (both stripped of membranes); cerebellum, 123 grms. Numerous atheromatous patches on basal vessels and main branches. The heart weighed 11½ oz., and showed distinct hypertrophy of left ventricle; valves competent; slight thickening of base of aortic valves, and of anterior flap of mitral. Moderate atheroma of lower portion of aorta, and this vessel slightly dilated. Lungs moderately emphysematous, but otherwise normal. Liver



Lateral surface (left). The shaded portion indicates the area destroyed. (This figure is from a photograph kindly taken for me by Mr. F. T. Paul.)

and spleen normal. Kidneys each weighed 5½ oz. Capsules somewhat adherent, leaving a distinctly granular surface on stripping. Cortex of right fairly normal; that of left somewhat diminished in depth, and in places fatty; in the centre was a distinct cicatrical depression.

Remarks.—The case before us presents us with an example of disorder of speech due to lesion of the perceptive sensory centres in which spoken and written speech are elaborated; the motor centres, or those which preside over the expressive part of the process of speech, being intact. The case, indeed, is an example of combined *word-blindness* and *word-deafness*. That the above-mentioned sensory centres should simply be a part of the general cortical centres for sight and hearing is what we might have anticipated, and numerous cases have been recorded in which the subjects of this form of aphasia have exhibited after death a lesion in the same situation as in the case here described—viz., in the inferior parietal lobule and posterior part of the first temporo-sphenoidal gyrus on the left side. In the case under consideration the destruction did not involve quite the whole of this area, which may perhaps account for the fact that the patient's defect was not absolute; but I think it equally probable that the corresponding centres in the opposite hemisphere might have been able to furnish some assistance.

THE BOARDING-OUT OF PAUPER CHILDREN.—The plan of boarding-out children belonging to the workhouse has for the past twenty years been tried in the Cork Union, and with very satisfactory results, as shown by the annual inspection of the children last week. The movement originated in consequence of an inquiry which was held in 1862 at the instigation of Sir John Arnott, relative to the great mortality in the workhouse of orphan and deserted children. The guardians pay a monthly sum of 12*s.* 2*d.* for the rearing of each child. During the past twenty-four years about 1000 children have been sent out to nurse, and the results must be regarded as encouraging, as during that long period not more than twenty of the whole number died. When the children arrive at the age of thirteen they are generally adopted by their foster-parents, and in this way avoid the contaminating influence of the workhouse.

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CASE OF PARTIAL HYSTERECTOMY FOR FIBRO-MYOMA.

BY JAMES BRAITHWAITE, M.D.,
OBSTETRIC PHYSICIAN TO THE LEEDS GENERAL INFIRMARY.

IN a case of large and rapidly growing fibroid uterus, attended with such hæmorrhage as to endanger life, only two courses are open, if the patient is not to be left to her fate—viz., (1) to remove the uterine appendages, or (2) to remove the uterus as a whole, except the cervix, which forms the pedicle. I believe, however, that it has never hitherto been pointed out that if neither of these plans is available there is still open a third mode of operating, one which may at first sight appear to be, and possibly is, more hazardous than either, but which, nevertheless, avoids the principal dangers peculiar respectively to either oöphorectomy or hysterectomy as ordinarily performed. Apart from septicæmia, the principal danger of removal of the uterine appendages (for oöphorectomy, strictly speaking, is not the operation proper to these cases) is secondary hæmorrhage. One main source of danger in hysterectomy arises from retraction of the pedicle. Both these dangers were avoided by the mode of operating adopted in the following case—*how*, I will explain in its relation.

I will not go through the details of the history and diagnosis of the case, but will state briefly that the uterus was a mass of fibroids, reaching nearly to the under surface of the liver. It was still growing, although the patient was forty-nine years of age, and she was drained by hæmorrhage and wearied with constant pain. On January 26th last I made an exploratory incision with the view of seeing whether removal of the tumour were possible, or, if not, with the object of removing the uterine appendages. Mr. McGill and Mr. Robson of Leeds, and Drs. Black and Lever of Harrogate, were present. After making the abdominal wall incision, it was found that hysterectomy as ordinarily performed was impracticable, because there was no narrow part to form a pedicle, for the cervix was distended with fibroid growths to a large size, and it was impossible to raise the uterus upwards from the pelvis owing to its being held down by thick and firm but short broad ligaments. On the other hand, removal of the uterine appendages, though easy on the right side—and, indeed, I did remove a large hydro-salpinx,—on the left side would have been extremely hazardous, as the ovary was embedded in the side of the tumour, had no pedicle, and was entirely covered with large thin-walled veins. Thinking it better for the patient to die a natural death than from intra-peritoneal hæmorrhage within twenty-four hours, and death from natural causes appearing less probable than death from the operation, if proceeded with, I returned the tumour into the body, intending to close the wound. At this point my colleagues and friends forsook me, thinking all was over. As soon, however, as the tumour was replaced, blood welled up in large quantity, and its source could not be discovered; the tumour was therefore again raised and examined, as it was more than once, because the hæmorrhage ceased when the tumour was raised. The ligature was safely on the place whence the tube had been removed, and the bleeding did not come from this source. I therefore for a moment found myself in a difficulty from which no means of extrication could be seen. Not attempting any traction, I simply flexed the uterus forwards out of the wound, applied a Lawson Tait's clamp wire, and removed it by cutting through the body at a spot which seemed the most favourable, and where it was about four inches in diameter. When the clamp was tightened up this was reduced to a diameter of about two inches and a half. On bringing the wound together round the pedicle, it rested on all sides upon the mass beneath, which was as large as a uterus at five months' gestation. By weight, I suppose that two-thirds of the tumour would be removed, and one-third left behind. The uterine cavity was cut through in removing the tumour, and of course both ovaries went with it. Hæmorrhage from the stump occurred several times, but it was controlled, and the patient made an excellent recovery, thanks in great measure to the assiduous care of the resident obstetric officer to the infirmary, Mr. Croft.

It seemed to me that the successful issue of this case depended a great deal upon what might be considered the very fault of the operation—viz., the large size of the mass left behind. As stated, the edges of the wound rested upon this mass all round and adhered to it, so shutting off the peritoneal cavity. For the same reason there was no traction upon the pedicle—indeed, it never retracted, it was too large, and consequently all danger from this source was avoided. The mass left behind did no harm; it ceased to grow, and to some extent has shrunk. It now forms part of the abdominal wall, and has upon its surface a small fibroid, which has appeared since the operation, although the base from which it grows is smaller.

Leeds.

NOTES OF A FATAL CASE OF POISONING BY BISULPHIDE OF CARBON; WITH POST-MORTEM APPEARANCES AND REMARKS.

BY WM. FOREMAN, L.R.C.P. & L.R.C.S. ED.

POISONING by bisulphide of carbon is so rare that the following notes of a case may be deemed of some interest.

On March 15th of the present year, I was called at 5.30 P.M., to J. S——, aged sixty-three, shoemaker. He had been drinking for the previous ten days, and had come in from the public-house at 4.30 P.M., and asked that some gin should be sent for; this was done, and almost immediately afterwards he was noticed to be strange, and said, "I have done it." It was then perceived by a bottle close to him and by the smell that he had swallowed a preparation used by him in his trade, and which turned out to be bisulphide of carbon. I was at once summoned, and probably a quarter of an hour elapsed between his taking the poison and my seeing him. When I saw him he was sensible, and wanting to go in the back yard to defecate, but the persons present were trying to keep him in his chair. I was not able to get any information from him. There was a very strong smell of bisulphide of carbon in the room. I at once administered a tablespoonful of mustard with six ounces of warm water. He drank about four ounces. I then left him, and prescribed forty grains of sulphate of zinc, to be taken at once in warm water if the mustard had not acted; afterwards to take fifteen grains each of bicarbonate of soda and carbonate of magnesia every ten minutes. At 6.15 P.M. I saw him again, at which time he was completely unconscious, and could not be roused. As he had not vomited, I introduced the stomach-pump, but only obtained a small quantity of brown-coloured fluid, with a white frothy substance floating on the top, due probably to the mixture of soda and magnesia which had been given. I washed out the stomach with warm water. The pupils were normal, but reacted to light; conjunctivæ suffused and insensible to the touch. Respiration slow, long, and stertorous; pulse small, rapid and compressible, varying from 150 to 160 a minute. Surface of the body cold and clammy; tongue thick and furred. After washing out the stomach, I gave him two tablespoonfuls of brandy in half a glass of water through the stomach-pump. He never rallied, but died about two hours and a quarter after taking the poison.

Through the kindness of our coroner, Mr. Rowbottom, my partner, Mr. Berry, received instructions to make a post-mortem examination, which we made conjointly twenty hours after death, when the following appearances were noted:—Rigor mortis complete; pupils normal; hypostatic congestion of dorsum; body well nourished. On opening the head, the dura mater was adherent to the calvaria; surface of the brain much congested; veins gorged with black blood. Brain substance healthy. Thorax: The left lung was slightly adherent at the apex; no effusion in the pleural cavities; lungs healthy. Heart: The right ventricle contained about an ounce of dark fluid blood; walls covered externally with a layer of fat; left ventricle firmly contracted and empty. Abdomen: The stomach contained about a quarter of a pint of fluid, with flakes of lymph in it, slightly ropy, and appeared to be water and mucus. A faint smell of bisulphide of carbon was perceptible. The submucous tissue was injected, and there was a number of minute hæmorrhages. The posterior wall of the stomach was much more congested (to the size of a crown-piece) than the anterior surface. There was no perforation or

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abrasion of mucous membrane. The spleen was small, but healthy. The liver was normal in size, and healthy. The kidneys were surrounded with a large quantity of fat; they were slightly congested, but healthy. The bladder contained about two ounces of urine, having a slight smell of bisulphide of carbon. There was less of the cadaveric smell than is usual in post-mortem cases.

Remarks.—Bisulphide of carbon would appear to be a narcotic poison and very powerful in its action. In this case, although I had difficulty in ascertaining the quantity, half an ounce would be the full amount taken. In the *Medical Times and Gazette* of 1878 (vol. ii., p. 350) I find a case reported with symptoms similar to the foregoing, but with a better termination, as the patient recovered after being comatose for some hours. In that case two ounces is said to have been taken. In my case the patient became comatose in half an hour and could not be roused, and, although the stomach was emptied, no abatement of symptoms occurred and death took place in two hours and a quarter.

Wigan.

ON A CASE OF CÆSAREAN SECTION.

By JOSEPH HARPER, L.R.C.P. LOND., &c.

Mrs. G——, twenty-seven years of age, straw-plaiter, married, primipara, a very small woman, 5 ft. high, weighing 98 lb., living in a small, close, ill-ventilated house over a laundry in Barnstaple, engaged my partner, Mr. Henry Jackson, to attend her in her approaching confinement. She was taken ill about 5 A.M. on Dec. 1st, 1885; the pains were slight, and not enough to keep her awake for any time; about 10 A.M. they were worse, and came on regularly at 1 P.M. She then sent for Mr. Jackson, who, on his arrival, found the patient dressed and downstairs. He gave some general directions, did not make any vaginal examination, and told the nurse to send for him when he was wanted. The liquor amnii escaped at 5 P.M. He arrived at the house at 6 P.M., and, on making an examination, found the os fully dilated and the head and right arm presenting. The head could be felt at the brim of the pelvis. He tried to turn, but failed to do so. He then sent for me, requesting me to bring chloroform. I went, and found the presentation as described. Chloroform was administered, and when fully under its influence I tried to push up the arm of the child, but was unable to do so. I then tried to turn, but failed. After several attempts Mr. Jackson again tried, but without success. The hand could be got up as far as the chest of the child, but the difficulty seemed in the outlet of the pelvis, for it was impossible to get the arm further up the passage. The cord now became prolapsed, and, as it was not pulsating, I determined to perforate and try to deliver with the crotchet. After perforating, I introduced the crotchet into the skull and brought the head well into the brim of the pelvis, but was unable to deliver. We then decided to ask Mr. Cooke to come and give us his assistance. He tried to turn, but met with the same difficulty as we had done, and with the same result. He then tried with the crotchet; but after repeated unsuccessful trials, the external parts being swollen and hot, our patient having been under chloroform for three hours, we reluctantly came to the conclusion that Cæsarean section was the only chance for her.

The necessary preparations having been made, and chloroform administered by Mr. Jackson, I washed my hands and the surface of the abdomen with a strong solution of carbolic acid, and the instruments and sponges were immersed in carbolic solution. A catheter was then passed and the bladder emptied. I made an incision in the linea alba from just below the umbilicus to within a couple of inches of the pubes; but finding the incision too small had to extend it on the right about an inch above the umbilicus. After making an incision into the cavity of the abdomen, Mr. Cooke kept the wound on the stretch with his two forefingers, and the nurse supported the sides of the abdomen and kept the uterus well forward. There was very little hæmorrhage. The empty bladder was visible just above the pubes. I then made an incision of about four inches in the wall of the uterus, which appeared thin and pale and came down upon the child covered with the membranes. There was no hæmorrhage, but the edges of the wound appeared to retract. I removed the body of the child with ease, but the head, from having been pulled down into the brim of the pelvis, required some force for its extraction. The placenta, which was at the back and lower part of the uterus with the membranes, came away with the child, a male, weighing 6½ lb. There was a copious hæmorrhage from the interior of the uterus and also from the sinuses of the uterine walls, which I checked by pressing with my hand, but which recurred directly I let go. Mr. Cooke now kept the edges of the wound together for me, and I introduced a silver wire suture, with the effect of checking the hæmorrhage, and the uterus contracted under a little pressure. The cavity of the abdomen was washed with warm carbolic solution, the omentum replaced, and the edges of the abdominal wound brought together with silver wire sutures. Iodoform was sprinkled over the wound and covered with a piece of lint soaked in carbolic oil, a pad of lint being placed on either side of the wound. Gauze, cotton-wool, and a binder were applied, and the patient removed to bed, which had been properly prepared for her. A hypodermic injection of morphia was given, and she was left tolerably comfortable. Pulse 136; respiration 28; temperature 99°.

Dec. 2nd.—11.45 A.M.: Has been very comfortable all night, dozing most of the time. Pulse 120; respiration 22; temperature 99·4°. Four minims of morphia injected; catheter passed. — 9.30 P.M.: Complains of pain in right iliac region; lochia natural in colour and quantity. Pulse 126; respiration 26; temperature 99·6°. Catheter used and morphia injection repeated. No sickness.

3rd.—11 A.M.: Has had fair sleep; no sickness; has taken milk, egg, brandy-and-water, and ice; lochia scanty, but of good colour. The vagina to be washed out with weak solution of Condy's fluid twice a day. Pulse 112; respiration 26; temperature 100°.—9.40 P.M.: Has vomited twice to-day; complains of flatulence. Pulse 100; respiration 30; temperature 99·4°. Catheter introduced; morphia injection repeated.

4th.—11 A.M.: Has slept fairly well, but is rather restless and thirsty; has been sick several times. Pulse 110; respiration 30; temperature 100·4°. Introduced catheter; injection repeated. Takes milk, beef-tea, brandy-and-water, and ice. Pain in side less, and feels comfortable.—8.30 P.M.: Pulse 112; respiration 30; temperature 99°. Introduced catheter; injection repeated.

5th.—11 A.M.: Has passed urine freely; bowels acted once; several clots have come away; taken very little food. Pulse 110; respiration 28; temperature 98·8°. Injection repeated.

6th.—Has slept well during early part of night; feels comfortable; takes more food; no sickness, but has pain on each side of the bowels. Pulse 104; respiration 24; temperature 100·6°. Injection repeated.—9 P.M.: Passed a fair day; pain in sides slightly increased; inclined to be excited; complains of swelling and irritation of throat. Pulse 100; respiration 24; temperature 100·6°. Injection repeated.

7th.—11 A.M.: Has passed a good night. Pulse 104; respiration 30; temperature 100°. Injection repeated.—10 P.M.: Ordered an enema, which gave great relief and brought away a large quantity of fæces.

8th.—Slept well; complains of pain in left side: slight fulness. Pulse 98; respiration 26; temperature 99·4°. Injection repeated.—9.30 P.M.: Injection repeated.

9th.—Removed the sutures; abdominal wound healed; has had a good night; slept well; no sickness; bowels moved once naturally; vaginal discharge very little, but rather offensive. Pulse 100; respiration 26; temperature 100·4°. Omitted the morphia.—8 P.M.: Pulse 100; respiration 28; temperature 99·8°.

10th.—11 A.M.: bowels have acted freely twice; has had some good sleep; no sickness; no pain in breasts, nor has any milk been secreted; lochia pale, and still offensive. Pulse 92; respiration 24; temperature 98·4°.

She progressed well until the 13th, when she had a copious discharge of bright-red blood. Quinine, iron, and extract of ergot were given. From this time she progressed rapidly, and on the 26th a belt was applied. She came downstairs on the 29th. For ten days prior to the 30th, Mr. Jackson tells me, the pulse, temperature, and respiration had been normal. On Feb. 26th it was stated that she had remained well, with the exception of slight dyspepsia, but had not yet menstruated.

Barnstaple.

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CASE OF

CÆSAREAN SECTION AFTER PROLONGED LABOUR IN CONTRACTED PELVIS AND HYDROCEPHALIC (?) FŒTUS.

BY C. D'A. COLLINGS, M.A., M.B. OXON.

THE following case may be of interest to the readers of THE LANCET.

On the evening of Dec. 31st I was summoned to see Mrs. W——, as the midwife in attendance found that the labour did not progress. The patient was an ordinary-sized woman, a primipara, forty-three years of age. She estimated her pregnancy to have lasted ten months, and said that she had felt no fœtal movements for about a month; that she had had some indefinite abdominal pains for some time; but reckoned her labour pains to have begun on the previous Sunday (Dec. 27th), since which day she had taken scarcely any nourishment and had had no sleep. The liquor amnii was thought to have come away on the morning of Dec. 31st. On examination, a smooth, rather tense sac was found presenting in the upper part of the vagina, feeling like the bag of membranes, but becoming only slightly less tense during the intervals of the pains; and on passing the finger round in search of the margin of the os, this could not be felt, but small collections of hair were found apparently adhering loosely to the sac, as some of it was easily extracted for examination. The appearance of the sac as seen when the walls of the vagina were separated and a light cast up, was smooth, slate-coloured, and somewhat shining. A puncture with a grooved needle gave exit to a drop or two of semi-liquid matter of a sanguineo-purulent appearance. The bones of the fœtal head could not be felt on pressing the sac. The patient's pulse was 120 per minute. A bruit synchronous with it was heard over the abdomen to the left of the umbilicus, both above and below, but not to the right; the right side of the abdomen was rounder and fuller, as if the back of the child lay on this side.

As the presenting part was taken to be an encephalocele or a hydrocephalic head, Dr. Le Page was called in consultation, and it was decided to open the tumour, as no progress was made with the labour, and it was found impossible to push the tumour up or get the hand into the uterus to turn. The tumour was opened with a lancet, and a quantity of semi-fluid brain matter mixed with blood escaped, having the general appearance of the central softening in a case of tubercular meningitis. The thin parietal bones were then felt movable within the sac, and the base of the skull was felt just above the brim. The pelvic brim appeared to be equally contracted (justo-minor), and the hand could be inserted only with difficulty into the uterine cavity, the walls of which remained firmly contracted; and after several attempts under chloroform, it was found impossible to reach the feet to perform version, and on each withdrawal of the hand the presentation was found to have returned to a shoulder, and one of the fœtal arms appeared in the vagina. Fearing that further attempts at version might injure the uterus, it being so firmly contracted and the liquor amnii having so long been drained away, it was decided to draw down the arms in turn and amputate them at the shoulder-joint, in the hope that with the diminished width of shoulder the head and body might be drawn down with the craniotomy forceps or the cephalotribe. The amputation was easily accomplished with a curved blunt-pointed bistoury, each arm being drawn down in turn and disarticulated at the shoulder-joint; it was, however, still found impossible to get an instrument beside the hand through the brim, so as to decapitate or get hold of the base of the skull, which was fixed above the symphysis pubis. As the abdominal section appeared to be now the only means of delivery, it was decided to desist from further attempts for a few hours, in faint hope that natural efforts might fix the remains of the head in the pelvic brim. The patient was left between 2 and 3 A.M., with instructions for her being conveyed to the hospital early in the morning. When seen in the morning the swelling of the soft parts had further obstructed the pelvic canal, so that the hand was inserted with difficulty; the presenting part was found to be the amputated left shoulder. Drs. Carey and Robinson having been called in for further consultation, and an ineffectual attempt at evisceration having been made by passing the perforator into the scapular region, it was decided to proceed to the Cæsarean section without further delay.

The patient therefore, being kept under chloroform and ether, the abdomen was pressed inwards towards the middle line, so as to shut off as much as possible the peritoneal cavity and prevent protrusion of the intestines. An incision was then made from below the umbilicus to within an inch of the symphysis pubis, the peritoneal cavity opened, and bleeding from the abdominal walls arrested. The bladder was found to be semi-distended, and pushed up above the pubes to the right; the incision was therefore enlarged upwards for about an inch by the side of the umbilicus. An incision of nearly the same length was then made through the uterine wall, which was about one-third of an inch in thickness, when the back of the fœtus was exposed. There was scarcely any bleeding from the incision through the uterine wall. The fœtus was quickly extracted, and the placenta, which was partly detached, was taken out through the abdominal wound with a considerable quantity of partially clotted blood; part of the membranes and cord which remained were drawn out per vaginam. The uterus remained flabby and uncontracted even on pressure. Four interrupted sutures of catgut soaked in chromic acid were put into the uterine wound. The peritoneal cavity was sponged out, and the abdominal wound secured with silver sutures (three deep and three superficial), and supported with straps of carbolised adhesive plaster. The wound was dressed with carbolised lint and tenax, and a binder tightly fastened round. The patient was pulseless after the operation. Hot-water bottles were put to the feet, and her mouth moistened with brandy and water. The operation was completed about 2 P.M. By 4 P.M. she had recovered consciousness, and the pulse, though weak, was distinctly felt, about 120 per minute. In the evening she was feeling better; pulse slightly improved. She complained of thirst and some pain in the abdomen, but said that the previous pains in the back had quite disappeared; the sordes about the teeth had gone, and she took some beef-tea. A draught, composed of twenty-five minims of tincture of opium and a drachm of liquid extract of ergot in an ounce of water, was given, after which she had an hour or two of sleep. Her condition remained about the same until 4 A.M., from which time she began to wander in her mind. When called to see her at 7 A.M., her pulse could not be felt, and she scarcely answered questions put to her. Fifteen minims of ether were given hypodermically, but she did not rally, and died soon after 9 A.M., about nineteen hours after the operation. No post-mortem examination was made.

Guernsey.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Procemium.

ST. BARTHOLOMEW'S HOSPITAL.

A CASE BEARING ON THE TREATMENT OF ANEURYSM BY THE INTRODUCTION OF STEEL WIRE OR OTHER MATERIAL INTO THE SAC: REMARKS.

(Under the care of Mr. HOWARD MARSH.)

IT will be remembered that on Feb. 23rd, Dr. Cayley brought before the Medico-Chirurgical Society a case under his care in which Mr. Hulke had introduced forty feet of steel wire into the sac of an aortic aneurysm, with the result that the portion of the tumour acted upon had become completely solidified. Three important points were established by this case, and the discussion to which it gave rise: (1) That the introduction of foreign substances into aneurysms is usually easy; (2) that, so far as present experience goes, this proceeding appears to involve very little danger when it is carefully carried out; (3) that only nine cases in which this operation has been performed have yet been published,

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so that our experience of it is far too limited to warrant any conclusion as to its real value. The following instance should be recorded, not only because, while the cases are so few, every additional example is of use, but also because a difficulty was encountered that is very likely to occur, but which has not hitherto been met with.

R. M——, aged fifty-six, formerly a private in the army, never syphilitic, and always temperate, was admitted on Dec. 14th last, having sixteen days before noticed a swelling immediately above the clavicle in the course of the left common carotid, about the size of a bantam's egg, and presenting all the features of an aneurysm. The swelling was well defined above, but its lower border extended beneath the clavicle. On careful examination Dr. Andrew could detect no evidence of intra-thoracic tumour, and the case had the appearance of a sacculated aneurysm limited to the carotid just where it emerges from the chest. Pulsation could, it was thought, be felt in the carotid higher in the neck, but it was very faint; pulsation in the left superficial temporal was very indistinct. The patient said that since the swelling commenced he had suffered much pain in the neighbourhood of his heart, and on the day after admission he had some difficulty of breathing, and pain and numbness extending down his left arm. He appeared in good general health. In consultation with Mr. Savory and other members of the staff, it was agreed that the case was a suitable one for distal ligature. The diminished pulsation in the artery beyond the sac was seen to be an important feature in regard to this proceeding. Mr. Marsh, however, thought it might be explained by the supposition that the trunk of the carotid was overlapped and pressed upon by the tumour, for if the patient's history was correct, that the swelling had existed only sixteen days, it was very unlikely that the artery was already obliterated.

On Dec. 19th Mr. Marsh operated. He exposed the carotid on a level with the cricoid cartilage. Its pulsation was very doubtful, and the vessel felt hard and resistant. Having placed two ligatures (kangaroo tendon) round its trunk nearly three-quarters of an inch apart, he divided the artery between them. This being done, it was found that the lumen of the vessel was entirely filled with a firm tawny clot, adherent to the arterial wall and evidently of some age. From this condition of things it seemed clear that the arterial disease was of much longer duration than the patient was aware of. The healing of the wound progressed favourably; but at 9 P.M. on the 21st he was suddenly attacked with difficulty of breathing, and became very restless. As this condition continued, a fifth of a grain of morphia was injected subcutaneously at 1.30 A.M. He went off to sleep in a few minutes, but his breathing soon became noisy and irregular, and he was partially comatose. Later, his breathing grew still worse, his face was dusky, and he seemed in a dying condition. On being propped up with pillows, however, he improved, the noisy breathing ceased, and he was able to swallow. On the 22nd there was considerable swelling and induration about the wound and in the submaxillary region, with difficulty of deglutition. This attack was associated with marked enlargement of the sac, and the urgent symptoms were no doubt caused by sudden increase of pressure on the structures at the root of the neck. He was now placed on restricted diet, according to Tufnell's method, and kept as far as possible at complete rest. On Jan. 5th it was found that some pus had collected at the bottom of the wound beneath the sterno-mastoid muscle; a counter-opening was therefore made at the posterior edge of the muscle, and drainage secured by a strip of gutta-percha tissue. The wound gave no further trouble, and for the next month there was little increase in the size of the tumour, pulsation was less distinct, and the swelling was firmer: so that Mr. Marsh was satisfied with the progress of the case, and thought that deposition of fibrin was going on in the sac. But after this, between February 10th and March 5th, the swelling obviously increased, and became considerably more prominent. It was now determined to adopt the method of introducing some foreign substance into the sac, and on March 10th, having selected a part of the swelling a little removed from its greatest prominence, and where the skin was unaltered, but where pulsation was yet very distinct and apparently close to the surface, he passed a very fine trocar and cannula about an inch and a half into the aneurysm, and then withdrew the trocar. No flow of blood, however, followed, the cannula remaining as dry as if it had been inserted into a fatty tumour. A fine probe was then passed through the cannula for a distance of fully three inches. It entered readily, but still no blood escaped, nor was the end of the probe at all blood-stained as if it had been in contact with fluid blood. He then endeavoured to pass in some horsehair, but was unable to accomplish this, for as soon as it had traversed the length of the cannula its passage was arrested. On introducing the probe again, its end could be felt moving freely as if in a cavity, and although no blood escaped there was no doubt that the cannula was in the sac, for the pulsation was so distinct that the thickness of the soft parts over the aneurysm could certainly not be more than, at the most, a third of an inch. The supposition was that a portion of the clot had been frayed out, carried before, and was obstructing the end of the cannula, and was also carried in front of the end of the probe, so that the blood stream had not been fairly reached. As the patient was not under an anæsthetic, it was thought best not to proceed further—nor, indeed, was it considered safe to do so; the cannula was therefore withdrawn.

No bad result followed the operation, and Mr. Marsh intended in a few days to introduce the cannula at some other point. The patient, however, was unwilling that this should be done until he had been home, in order to arrange some family business about which he was anxious. He was persuaded to remain quiet for a time. On April 1st, however, he insisted on going out, but said he would return as soon as his affairs were settled. He did so on April 15th, when it was found that, though the swelling had not materially increased, there was an abscess over the front of the sac of the size of a walnut, and covered only by a very thin layer of desquamating cuticle. On the 16th Mr. Marsh divided this, and about a drachm of pus escaped. This relieved the pain he had been enduring; but on the following day the floor of the abscess gave way, and a mass of firm, interlaced fibrinous clot, somewhat dome-shaped, and three inches long and an inch and a half wide, slipped bodily out of the aneurysm, and was followed by a gush of several ounces of blood. The opening was immediately plugged with lint soaked in perchloride of iron. From this time bursts of hæmorrhage occurred from time to time, and were arrested by the introduction of lint and perchloride. Mr. Burd, the house-surgeon, on several occasions passed two fingers into the interior of the sac while introducing the plugs, and bleeding was only arrested by firmly packing the opening, which was at length fully two inches across. It seemed remarkable that the patient could continue to exist in such a condition, yet his death took place only on the night of the 22nd—that is, fully five days after the wall of the aneurysm had given way.

At the post-mortem examination a large aneurysm of the transverse portion of the arch of the aorta, involving the lower part of the carotid, was found. The aorta was extensively atheromatous. The swelling had pressed upon and displaced the trachea.

Remarks by Mr. MARSH.—Several points offer themselves for discussion on this case. 1. As to the seat of the aneurysm. Bearing in mind the overwhelming frequency of aneurysm of the arch of the aorta as compared with aneurysm of the root of the carotid[1], and remembering how often aneurysm of the arch has been mistaken for aneurysm of the vessels which it gives off, both myself and others suspected that, after all, this was an aortic aneurysm. There was nothing, however, to confirm this inference from statistics, unless it were the pain in the region of the heart of which the patient had complained. The pulse in the radial artery, though rather feeble, was not perceptibly weaker than it was in the radial of the opposite side. Auscultation and percussion gave no evidence of thoracic aneurysm, and there was no absorption either of the clavicle or the sternum. On the other hand, the diminished pulsation in the carotid and the site of the swelling were consistent with the view that the aneurysm was a carotid one. The case must be added to many already published which show the great *primâ-facie* probability that an aneurysm at the root of the neck will prove to be connected with the aorta, rather than with any of the vessels which are derived from it. 2. The distal ligature of the carotid was, under the circumstances, useless, as the vessel was already occluded. But it is important to notice that the closure of the artery beyond the

[1] Mr. Holmes remarks: "I think I am not mistaken in saying that no preparation exists showing aneurysm limited to the root of the carotid artery on either side, though aneurysms have been found tolerably low down in the vessel."—System of Surgery, Holmes and Hulke, vol. iii., p. 117.

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sac by the formation of a firm coagulum—an event precisely similar in its effect to ligature on Brasdor's principle—failed to cure the carotid part of the aneurysm. The case therefore ranges itself with those in which distal obstruction has no beneficial effect on the tumour. 3. I believe the entrance of the horsehair was prevented by the fact that the cannula had been introduced into a part of the aneurysm at which a considerable thickness of coagulum had been deposited. This coagulum, as we found when it was subsequently expelled from the sac, was not of the laminated kind, but resembled rather the loose, though tough, fibrillated clot that is often found interlaced among the columnæ carneæ in the left ventricle. This loose clot was no doubt carried forward on the points of both the cannula and the probe, so that neither of these instruments ever fairly entered the blood stream. 4. Very little experience has at present been gained as to which is the best material for introduction into the sac. In this case I selected horsehair, because, while this substance produced as speedy coagulation in a case under Mr. Bryant as steel wire did in Mr. Hulke's, I thought it would probably do less harm subsequently than the wire would. One could not help fearing that, though wire might become encapsuled, there was a greater probability that it might, later on, act as an irritating foreign body. 5. It was surprising to see to what an extent and for how long a time, plugging of the opening of the sac served to arrest hæmorrhage. As the post-mortem examination showed, here was an orifice in an aneurysm of the aorta and root of the carotid large enough, as Mr. Burd found, to admit the entrance of two fingers into the cavity of the sac. Yet the patient survived for five days, and died at last, not of hæmorrhage, but of dyspnœa and exhaustion.

HOLBORN UNION INFIRMARY.

A CASE OF EXCISION OF THE ELBOW-JOINT, WITH TROUBLESOME HÆMORRHAGE FROM THE BONES; REMARKS.

(Under the care of Mr. OSCAR B. SHELSWELL.)

A GIRL, aged nine, was admitted suffering from disease of the right elbow-joint, caused by injury some months previously. She was of delicate health and had a strong family history of phthisis. Prolonged rest, with arm in splint, effected no improvement. Abscesses were frequently forming about the joint, much discharge and pain existed, which were greatly undermining her health, and the bones were affected to a considerable extent. Excision was deemed advisable.

On May 14th, 1884, whilst she was under the influence of ether, an incision was made longitudinally over the olecranon and made to extend a little upwards and downwards. The condyles were cleaned, and the humerus then thrust out of the wound and sawn off well above the condyles; the head and neck of the radius (leaving bicipital tubercle) and upper part of ulnar, including the coronoid process, were removed. The bones at the line of section appeared healthy. One artery was tied with catgut, drainage-tube inserted, skin sutured with silver wire, wound dressed with carbolic oil, and Mr. Bryant's screw splint applied. A little oozing came on two hours after the operation, which subsided with the usual remedies, but recurred later on. As the former treatment failed to arrest it this time, and as the hæmorrhage was rather sharp, the wound was reopened at 11 P.M. under ether. No artery was seen spurting, but there was very considerable oozing from the cut ends of the bones. The actual cautery was applied, and after some difficulty the hæmorrhage ceased. The wound was plugged with iron and the arm firmly bandaged. The splint was kept on only a few days, as she seemed more comfortable without it. A small piece or two of dead bone, due to the cautery, came away, and the wound healed by granulation. Excellent movement resulted, pronation and supination being satisfactory and flexion and extension perfect, the arm being very useful, quite free from pain, and the girl vastly improved in health—in fact, quite well. She then left the infirmary and went to school, where she received a blow on the arm, which caused a little inflammation; this, however, subsided with rest, and the arm is now in a satisfactory condition.

Remarks by Mr. SHELSWELL.—I think this case is interesting as showing the necessity of removing an ample amount of bone in cases of excision of the elbow. It seems probable that the troublesome hæmorrhage from the bones in this instance was in consequence of the latter not being perfectly healthy at the time of division, notwithstanding the fact that so much was removed, the advice of Mr. Bryant to be free in the section of the bones being well borne in mind at the time of the operation. If such be the explanation it is probable that the good result was in consequence of the cautery destroying a little more of the bones, and thus satisfactorily preventing the necessity of a second operation.

NORTHAMPTON GENERAL INFIRMARY.

COMPOUND DEPRESSED FRACTURE OF THE SKULL INFLICTED BY A PISTOL; WOUND OF THE FACE; TREPHINING; RECOVERY.

(Under the care of Mr. R. A. MILLIGAN.)

FOR the history of this case we are indebted to Dr. J. Oswald Lane, late house-surgeon.

T. B——, aged forty-five, was admitted on March 4th, 1886, with the following history:—The evening before, after shooting his sweetheart and father, he shot himself in the face with a pistol loaded with No. 5 shot. He then ran into a neighbouring wood, and lay there hiding from his pursuers till 8 A.M. the next morning, when, fearing capture, he shot himself in the skull.

On admission, about 3·30 P.M., he was found to be suffering from two gunshot wounds. One on the right cheek, just below the zygoma and in front of the ear, was of a punctured character, with lacerated edges, a probe passing upwards and forwards subcutaneously an inch and a half. Another wound was found in the right parietal region, two inches and a half from the sagittal and two inches from the coronal sutures, also punctured and with lacerated edges, circular in shape, and half an inch in diameter. On probing, it was found to lead down to a depressed fracture of the parietal bone. Numerous shots could be felt under the scalp, especially about the forehead. The patient was conscious and answered questions rationally, stating that he had inflicted the wounds, and that he had never lost consciousness. At 5 P.M. he was put under ether, and, antiseptic precautions being taken, Mr. Milligan enlarged the wound over the fracture, removed the pericranium, trephined away a piece of bone adjacent to the fracture, and was then able to remove a depressed portion of bone of small size, and also four pieces of the inner table, which had been splintered and driven on to the dura mater, which, however, was not torn through; several shots were found underneath the depressed bone. The edges of the wound were brought together with wire sutures, and a drainage-tube introduced. Carbolised gauze dressings were used.

March 5th.—The patient passed a good night, having slept well. This morning he complained of slight headache. The wound was dressed, and looked healthy; slight hæmorrhage had occurred, but was soaked up by the dressings. Ordered three pints of milk, and ice-bag to the head. Pulse 84; respiration 28; temperature 99°.

8th.—Has gone on well; no head symptoms; wound is beginning to show granulations; has been dressed daily; temperature has not been higher than 99·6°.

9th.—Complains of rather more pain in the head, and there was found to be some œdema of the scalp and rather more discharge from the wound in the cheek. Several small incisions were made in the scalp.

10th.—The patient is rather more restless. There is some bagging of pus near the trephine wound; so two counter-openings were made and drainage-tubes inserted.

12th.—General condition much improved; purulent discharge much diminished.

15th.—From this date the patient progressed most favourably without any further complications, so that at the end of the month he was allowed to sit up in the ward. He was tried the next month on the capital charge, and is now an inmate of Broadmoor.

NOTTINGHAM MEDICO-CHIRURGICAL SOCIETY.—The annual meeting of this Society was held on the 2nd inst., Mr. Joseph White, President, in the chair. The following gentlemen were elected to fill the various offices for the ensuing session:—President: Mr. Hatherly. Vice-Presidents: Mr. Joseph White and Mr. Haydon White. Treasurer: Mr. Stanger. Hon. Librarian: Mr. Burnie. Hon. Secretaries: Dr. B. A. Whitelegge and Mr. T. D. Pryce.

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Medical Societies.

OBSTETRICAL SOCIETY OF LONDON.

Chronic Abscess of Female Urethra.—The Uterine Bruit.

A MEETING of the Society was held on July 7th, Dr. Potter, President, in the chair.

The following specimens were shown:—Dr. Daly: Growth removed from Uterus after delivery. Mr. Doran: Malformations of the Fallopian Tubes. Dr. Galabin: Growth removed from Cervix Uteri of a girl only seventeen years old. Dr. W. S. A. Griffith: Portions of Ovaries resembling Cystic Chorion. Mr. Knowsley Thornton gave details of the fatal termination of the case from which the specimens he showed at the previous meeting were removed.

Dr. HERMAN read a paper on a case of Chronic Abscess of the Female Urethra. The patient, aged forty-seven, had for four years suffered from dysuria, about two years from dyspareunia, and irritability of bladder, these symptoms gradually increasing in severity during this time. There was a tender swelling between the urethra and vagina. This burst into the urethra, pus being discharged. Examination with the finger through the dilated urethra eight days afterwards showed that the cavity was then about the size of half a walnut, with a soft, ragged, friable wall. Its interior was cauterised with nitrate of silver, and it soon contracted and disappeared. Four months afterwards the patient continued quite well. The author thought that there were two possible explanations of the origin of the abscess:—1. That it was the result of chronic congestion of the urethra, such as that described by Sir C. M. Clarke. 2. That it was a suppurating cyst. Abscess from either of these causes was rare. He quoted three cases that he had been able to find recorded. He gave reasons for thinking that the abscess in his case was probably not a suppurated cyst, and that the case was therefore to be classed with those of congestion of the urethra described by Sir C. Clarke and Dr. West.—Dr. DALY said that in a case of congestion of the female urethra which had resisted all treatment, the patient being for months confined to bed and suffering intense pain, he applied iodoform every day along the entire course of the urethra, and obtained a rapid cure. The application was made by filling the groove of a director with iodoform, and when the director was well in the urethra reversing the direction of the groove. He had to thank Dr. Herman for the suggestion.—Dr. MATTHEWS DUNCAN had seen many abscesses in the recto-vaginal septum, but he remembered none in the urethro-vaginal septum. Chronic urethritis he had often seen, and also some cases of urethrocele.—Dr. GERVIS, though surprised at the statement in Dr. Herman's paper as to the rarity of the condition described, could certainly only at the moment recall one case. In this the symptoms had been painful micturition, without evidence of cystitis, and pain, swelling, and tenderness referred to the vagina. On examination an abscess was found in the anterior vaginal wall in association with the urethra, and the same evening, probably as a result of the examination, which included the passage of a sound into the bladder, the abscess burst into the urethra, and the patient made a good recovery.—Mr. KNOWSLEY THORNTON had seen a few cases of the kind. He would raise the question as to whether the condition described by Sir C. Clarke was the same as that for which Dr. Emmet, of New York, had invented a special operation. If so, the condition must be much more common in America than in this country.—Dr. WYLIE (New York) said that the condition for which Emmet's operation was chiefly used was prolapse of the mucous membrane of the urethra in elderly females.—Mr. DORAN referred to an interesting case of a diverticulum in the female urethra, described by Sautesson of Stockholm, and published in the *London Medical Record*, March, 1885. The symptoms were very puzzling until the parts had been carefully explored.—Drs. GALABIN and M. HANDFIELD JONES also made remarks, and Dr. HERMAN replied.

Dr. CHAMPNEYS read a paper entitled "Observations on the Uterine Bruit." The author records a series of observations on this point, some of which have been already reported in this country, some abroad only, and some are recorded, it is believed, for the first time. The first series includes forty-six nearly continuous observations made at the General Lying-in Hospital regarding (1) the position of the maximum intensity before labour; (2) after the expulsion of the placenta; (3) the presence of pulsating arteries felt by the vagina, and the effect produced on the bruit by their compression. The bruit was heard on the left side in thirty-three cases; on the right side in one case. It was heard after the expulsion of the placenta in five cases. In all cases when heard after the expulsion of the placenta its point of greatest intensity had sunk down after delivery. In five cases a pulsating artery was felt in the vagina; pressure on it affected the bruit in one case only. The preponderance of left-sided over right-sided bruits confirms the view that the bruit is produced in the arteries as they reach the uterus or soon after, the left corner of the uterus being anterior to the right (dextral torsion). One observation concerns a case of placenta prævia, in which the bruit and the placenta were on the left side. The author analyses Rapin's and Rotter's papers, the latter of which concerns the relation between a uterine bruit heard and a thrill felt. The author records two cases in illustration of the same point, and one case in which the same observation was made in the case of a fibroid tumour of the uterus, also one in which post-mortem examination seemed to show that a uterine bruit was situated in a large sinus running over the surface of a fibroid tumour.—Dr. GERVIS asked why Dr. Champneys adopted the term "palpable bruit" to express the perception of a localised pulsation, and also whether in the course of his observations he had found corroborative evidence of Dr. Hicks's suggestions as to the effect of the uterine contractions on the characters of the souffle.—Dr. HERMAN thought that the variations in loudness of the murmur to which Dr. Gervis had referred were of much importance in its identification. There was no kind of abdominal enlargement in which a murmur having rhythmical variations in loudness was heard excepting that produced by uterine tumours. The presence of such a murmur showed that the tumour was uterine, but did not give any further information as to its nature. The murmur might be as a rule louder and the variations more marked in pregnancy than in fibroids, but he had heard murmurs over some fibroids louder than those in some cases of pregnancy. The murmur was not to be relied upon for the diagnosis between fibroid and pregnancy.—Dr. JOHN PHILLIPS asked if Dr. Champneys had any experience in vaginal stethoscopy, and if so whether it was corroborative of the hypogastric signs. He was aware that there was naturally a certain feeling of aversion to this method of diagnosis, but thought that if any facts of scientific value could be thus obtained it might be permissible or even advisable.—Dr. A. ROUTH asked how long the uterine souffle persisted (1) after labour, and (2) after the death of the fœtus in utero. He had seen a case at Charing-cross Hospital where labour had to be induced for incontrollable vomiting, in which vaginal stethoscopy proved the souffle to exist two or three weeks after the presumed death of the fœtus, which was mummified, the souffle being inaudible over the abdomen. He had frequently heard the souffle per vaginam over the cervix uteri when it was inaudible over the abdomen; and, so far as his experience went, he had found that whenever the souffle of a pregnant uterus was audible over an abdominal area it was always audible over the cervix uteri per vaginam. In one case of the souffle being heard in the abdomen over the site of a uterine fibroid, it was not audible over the cervix uteri. If this distinction of the area of diffusion of the souffle of pregnancy and of that of a uterine tumour be trustworthy, it would serve as a material aid in differential diagnosis.—Dr. W. S. A. GRIFFITH thought that the dextro-torsion of the uterus, which only occurs to a very limited extent, was by itself insufficient to explain the frequent absence of the uterine souffle on the right side. Some other explanation was wanted which would apply equally to the cases in which it was absent on both sides. The great cause of the bruit was almost certainly the passage of blood suddenly from a small into a larger channel at the junction of the uterine arteries and sinuses.—Dr. CHAMPNEYS, in reply, said that the subject was so large that he had not attempted a complete study of it; in this sense his observations were confessedly imperfect. By "palpable uterine bruit" he meant a bruit which was also palpable as a thrill. He was inclined to agree with Dr. Herman that marked rising in pitch was characteristic of the souffle in pregnant uterus rather than in fibroid. He had not used the vaginal stethoscope, as the gain was very questionable and the objections obvious. He had never

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observed dicrotism in the souffle. The souffle was often musical, the various notes forming a sort of chord, and this pointed to their being produced by many vibrating bodies. He could not answer the question as to the exact length of time the souffle was audible after delivery without referring to the hospital notes. The entrance of blood from a small into a large cavity was probably the chief cause of the souffle; but there were many other sufficient causes, such as the sudden curves in the arteries, the quality of the blood, &c. It was difficult to eliminate these.

ACADEMY OF MEDICINE IN IRELAND.

Nature and Surgical Treatment of Scrofulous Cervical Glands.

A MEETING of the Surgical Section was held on April 16th.

Mr. KENDAL FRANKS read a paper on the Nature and Surgical Treatment of Scrofulous Cervical Glands. The paper dealt, in the first instance, with the connexion between scrofulosis and tuberculosis. The history of the discussion regarding the identity or non-identity of the two affections was traced, and Mr. Franks showed that the conclusion arrived at up to the spring of 1882 was that the two diseases could not be separated—that they were both caused by the same virus, but that the nature of this virus had not been recognised. The discovery of the tubercle bacillus in that year had, however, settled the question, and the presence of the bacillus in all so-called "scrofulous" affections proved their tubercular nature. Thus scrofulous disease of joints, caries, cold abscesses, and "strumous" glands must henceforth be all classed under the head of tubercular diseases. Tuberculosis of the cervical glands was shown to be the result of the entrance of the tubercle bacillus at some contiguous abraded part, and most cases could be traced back to some local affection, such as eczema of the head, ulcers in the mouth, sore-throat, and so forth, all of which afforded a nidus for the bacillus. The constitutional peculiarity, the "vulnerability of tissue," was a most important factor in determining a proper soil for the development of the organism, and much depended on the dose of the poison received as to the future progress of the case. Three courses were open to the gland to pursue:—First, death of the bacillus and consequent resolution; this was not usual. Secondly, suppuration and expulsion of the tuberculous virus; this might occur in one gland after another, and was of common occurrence. Thirdly, the extension of the disease along the course of the lymphatic glands, and if this were not arrested, subsequent generalisation of the disease. Mr. Franks urged that surgical measures should be guided by our present knowledge of the dangerous nature of the disease; and that constitutional measures, which should be used in all cases, should not be trusted to exclusively, once the diagnosis as to the tubercular nature of the disease was established. He referred to three surgical measures as being the best, each of which was applicable to its own class of cases. 1. *Scooping* should be confined to cases in which a sinus already existed, or in which a superficial abscess was connected with a caseous gland beneath the cervical fascia (Teale). 2. *Cautery puncture*, recommended by Treves, was most applicable to softened caseous glands which had formed extensive adhesions. 3. *Excision*, which had the widest applicability, was chiefly suitable in cases where the glands were still hard and movable. It was applicable to extensive disease as well as to more limited cases; but he urged that it should be employed early, when practicable, before softening or adhesions were formed. It was then possible to eradicate the disease through a small opening, and thus save the patient from an extensive operation subsequently, or, if that were not resorted to, to a prolonged and exhausting process of suppuration.—Mr. THOMSON was not quite sure that surgeons could boast, what seemed to follow from Mr. Franks' assertion, that, in the treatment of scrofulous cervical glands, they had invaded territory which had heretofore been largely in the hands of the physicians. It was common experience that the physician's treatment often averted what appeared to be a threatening disaster; but there was a large proportion of cases which went to the bad, and, as to their surgical treatment, had been until lately in opprobrium. The present impetus to surgical treatment was due, perhaps, to Teale and Allbutt more than to anyone else. So far as internal treatment was concerned, he had found an extremely good remedy in chloride of calcium, given in from ten to fifteen grain doses, three times a day, continued for several months.—Dr. HENRY KENNEDY mentioned, as a surgical point worth remembering, that, having been repeatedly asked to deal with a single suppurating gland, he used simply a thread seton, passing a needle through the length of the suppuration.—Mr. CORLEY was impressed with the expediency of early removal of the glands, but not too early, because there was the chance of removing glands which probably in the ordinary course would disappear of themselves.—Dr. BENNETT regarded the incision of the glands in the neck as disastrous, it being impossible to say when the limit of operations would be reached, while there generally followed disease of a more disseminated type. He suggested that when a single gland or two happened to be engaged, and there was a difficulty of diagnosis between a scrofulous gland and a gland enlarged by irritation, the passing the point of a subcutaneous syringe into the substance of the gland with an injection of tincture of iodine would be beneficial.

On the Quantitative Estimation of Sugar in the Urine by the Polariscope.—Lichen Planus.

A meeting of the Medical Section was held on April 30th.

Dr. CRUISE read a communication on the Estimation of Sugar in the Urine by the Polariscope, and demonstrated the operation with the instrument known as the Yvon-Duboscq Diabétomètre. He dwelt upon the great advantages of this method over volumetric analysis, inasmuch as it is very accurate, very easily used, and occupies only about ten minutes; while chemical determination is surrounded by errors, both possible and serious, requires special skill, and can scarcely be accomplished in less than an hour.—Dr. TICHBORNE said he was indebted to Dr. Cruise for his introduction to this instrument, and was in a position to bear testimony to the utility of this very excellent polariscope, which would be effectual in estimating the quantity of sugar in any substance. The paper issued by the makers of the polariscope stated that either charcoal or acetate of lead might be used for decolourising the urine. He thought that charcoal was not desirable because it slightly reduced the percentage of sugar. He had found that where charcoal was used the amount shown was ·85, while in the case of acetate of lead it was ·94; so that the use of charcoal involved a sacrifice of accuracy, and care should be taken not to use more acetate of lead than sufficed to decolourise the urine. Unless the fluid were perfectly bright, it could not be used; but if an over-quantity of the acetate were employed, the fluid would be rendered sensitive to the carbonic acid of the atmosphere, and would become muddy almost as quickly as it was filtered. The speaker was in the habit of adding a few drops of a solution of basic acetate of lead, the quantity being determined by the intensity of the colour of the urine; water was then added in sufficient quantity to double the volume of the urine. By this method an excess of acetate of lead was avoided, and it was only necessary to multiply the results obtained by twenty to gain the percentage. In some cases the volumetric analysis could be more relied on than this polariscopic method; but, generally speaking, the latter proved the more trustworthy in two out of three cases. In using the polariscope it was necessary to guard against fluctuations of temperature, and also too high a temperature. Each degree of Fahrenheit made as much difference as ·2 in the rate of rotation exhibited with inverted sugar, and also a considerable difference in right-handed rotation. He had found that 60° F. was the best temperature in which to use the method.—Dr. WALTER SMITH said this instrument was sufficiently accurate for clinical purposes. If great accuracy were required, the palm must be yielded to chemical methods. This optical method was not reliable for percentages of sugar smaller than ½ per cent. It was not a positive test of sugar, for it went on the assumptions that urine contained no active substance except glucose, and that the optical behaviour of glucose was the same as that of distilled water. But the first of these assumptions was not true. Of late years it had been conclusively shown that in diabetes the urine contained not only glucose, which was dextrogyrate when seen optically, but also a peculiar acid, which was lævogyrate. In such a case the amount of sugar would be represented by the difference in rate between the two gyrations. Again, it had been made out that a large class of substances, several of which were now used in medicine, passed out in the urine in

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a chemical form, which excited a left-handed rotation in polarised light. This was true of a large group of bodies, including aromatic compounds, alcoholic derivatives, chloral, &c. Therefore the polariscope could not be accepted as an unerring determinant of the amount of sugar in diabetic urine.—Dr. NIXON said he agreed with Dr. Smith that strict scientific accuracy could not be obtained by the polariscope exhibited. He had for some years used the instrument of Soliel-Ventzke, of which the present one was a modification. The chief difficulties in connexion with its use were—first, the trouble it involved in decolourising the urine; secondly, that some nice manipulation was required in order to prevent bubbles of air from getting into the glass tube; and thirdly, that after each application the indiarubber washer usually got firmly attached to the glass slide, and necessitated some trouble in removing it. These difficulties, however, were got over by a little practice in the use of the instrument.

Dr. FINNY remarked upon the rarity of Lichen Planus in this country, and quoted Dr. Taylor, of New York, and Erasmus Wilson in support of the same rarity in America and England. Dr. Finny had never before met with any similar case, although for over twelve years he has had, weekly, an opportunity of studying diseases of the skin at the hospitals. The case was a very extreme example of lichen planus, as, with the exception of the head and face, the papules invaded every part of the body. The patient, Mrs. H——, aged fifty-three, had never before had any cutaneous affection. She was supposed to be rheumatic and dyspeptic. For some months her nervous system seemed to have been depressed, as she was easily tired and became irritable. On two occasions her bowels moved suddenly in the street, although she had had a natural evacuation in the morning. Her life was an easy one, and her circumstances comfortable. She consulted Dr. Finny at the end of August, 1885, for a very itchy affection of the skin, of six weeks' duration, the irritation of which had quite deprived her of sleep and caused loss of appetite. The disease began in small patches below the knees, and gradually spread, until in the first fortnight of September there was no part devoid of papules except the head and face. The eruption was, however, both as to the size of the papules and extent of the patches, greatest over the back, loins, abdomen, and vastus internus of the thigh. The papules in the palms and soles were few and scattered. The colour was very striking, being of a dull or purplish red, and resembled a papular syphilide. Each papule (2 to 6 lines) had characteristics peculiar to the disease. It was solid, free from all serous or purulent discharge, abrubtly raised from the adjoining skin, round or polygonal in outline, with sharply defined edges. Its surface was smooth, waxy, or glazy, to which, in some but by no means all instances, was attached a slight filmy desquamation. Many of the papules were slightly depressed or quasi-umbilicated. The papules formed extensive plaques, and, by their contiguity rather than their confluence, they produced a peculiar tesselated or mapped-out appearance of the skin. In such places the pigmentation of the skin was between the papules, which stood out whitish-grey on a brown-red ground. The treatment consisted in narcotics and hypnotics to procure sleep, and in the internal administration of arsenic, the dose of Fowler's solution being pressed up to 13 minims three times a day, until its physiological effects were produced; it was then intermitted, and, on resumption, was continued for a month after improvement had set in. The local remedies which gave most relief to the pruritus were warm alkaline baths and a lotion of carbolic acid and liq. carbonis deterg. Profuse diaphoresis from pilocarpine was also of use in the early stage. A fortnight after treatment by arsenic improvement commenced, and at the end of October, six weeks from the inception of its use, not a papule remained, though the skin for many weeks subsequently was deeply stained and mottled.

PLYMOUTH AND DEVONPORT MEDICAL SOCIETIES.

A MEETING of these conjoint Societies was held on March 24th, Mr. Geo. Jackson, President of the Plymouth Medical Society, in the chair.

The PRESIDENT showed a case of Ichthyosis of the Lower Lip, with Leucomatous Patches inside the cheeks, occurring in a man who had worked inside the double bottoms of ships, with no apparent ill effects at the time. He also showed Kidneys removed from a man who had complained of no symptoms of kidney disease during life. One kidney was much hypertrophied, the other atrophied, and the subject of cystic degeneration.

Dr. WILLIAM H. PEARSE read a paper on Cholera. He argued that the facts of miasmatic contagion and of the autogenesis of cholera must both be admitted, and were embraced in a greater theory of evolution. He applied Darwin's hypothesis of pangenesis to the autogenesis of cholera. He maintained that "changed" environment had been followed by cholera, and held that vito-chemical poisons evolved, after periodic intervals, from varied "shocks" or *extremes* of environment. He applied the doctrine of "continuity" to cholera, and suggested the method of coördination to those not visibly affected.

Reviews and Notices of Books.

Dictionary of Practical Surgery. By various British Hospital Surgeons. Edited by CHRISTOPHER HEATH, F.R.C.S. London: Smith, Elder, and Co. 1886.

THE success which the Dictionary of Medicine has achieved no doubt prompted the idea and led to the production of a kindred work on Surgery. This Mr. Christopher Heath has satisfactorily accomplished, with the aid of one hundred and sixteen different contributors, the majority of whom are well-known as surgeons or physicians to the metropolitan or provincial schools, many amongst them having attained the highest distinction as *littérateurs* in medicine and surgery. One of the first duties of the editor of a work of the kind before us is the selection of contributing authors, and the assignment to each, so far as may be possible, of subjects on which he is known to be especially informed, and therefore best qualified to expatiate. It is to the very judicious way in which the labour has been distributed by Mr. Heath and his coadjutors that the Dictionary of Surgery will largely owe the full measure of success which we have no doubt will be accorded to it, since a large number of its contributors are eminent authorities upon the subjects allotted them, thus adding greatly to the value of the work as a book of reference. The aim of the editor, as stated in his preface, has been to produce a compendium of the practice of British surgery, which may supply a want in the library of the busy practitioner, who necessarily often meets with cases of surgical disease or injury on which he desires to have immediate information as to diagnosis and treatment. With this view a series of articles on the diagnosis of the injuries and diseases of the several regions of the body, and general articles on Deafness, the Eye, Skin Diseases, &c., have been introduced, the subjects being treated of, so far as is practicable, in the following order: (1) Cause; (2) pathology; (3) symptoms and diagnosis; (4) treatment; and (5) prognosis. We take it that the chief advantages claimed for a Dictionary of Surgery over a system or treatise should lie in the conciseness and trustworthiness of the information supplied, and its ready accessibility by virtue of the adoption of the alphabetical arrangement of the subjects treated of; and in the present instance a further advantage may be presupposed, insomuch as the Dictionary in question is the outcome of the experience of many individuals, the editor having "exercised a general supervision," and "endeavoured to prevent the promulgation of crude theories or the inculcation of doubtful practices." With respect to the purely editorial work of compilation, faults we think there are, both of omission and commission; but on the whole it has been well done. Among subjects which are not indexed, and have no special alphabetical headings, are congenital tumours, bronchial cysts and fistulæ, congenital tumours of the sterno-mastoid, actinomycosis, caries of the ribs, and pericostal abscess; whilst we could not light upon any

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reference to tropical abscess of the liver, a subject which surely comes within the domain of surgery. Again, the surgical aspects of laryngeal and pharyngeal diphtheria, and tubercular or scrofulous kidney, which in other text-books commonly receive separate treatment, are dealt with somewhat cursorily in articles devoted to other matters. Sometimes what would seem to be useless repetitions occur: for instance, in the first volume is an article on Scald of the Larynx; another may be found in the second volume headed Scald of the Glottis, occupying twice as much space as the former, written by a different author, and traversing much the same ground. A large and even superabundant amount of space has been given to descriptions of various surgical appliances and instruments, well written by Mr. Bilton Pollard, perhaps at the expense of other subjects which deserved fuller notice: for example, the article on Specula monopolises no less than five columns; whilst the general article on the Surgical Diseases of Children is dismissed in four. "Doubtful practice" has, too, sometimes found its way in. As an instance, we may cite the assertion of Mr. Paul Swain, in his article on Masturbation, that "the application of nitrate of silver to the prostatic urethra" is of service in the treatment of that most pernicious habit. We think that very few surgeons would be inclined to adopt this method, which many deem unjustifiable.

The articles are so numerous and so compressed that a detailed or systematic criticism is out of the question; we therefore can but briefly refer to those which by the fact of their importance, special prominence, or for other reasons, merit the reviewer's notice. With respect to their substance, everybody is cognisant of the difficulties which beset the editor of an encyclopædia or dictionary in which a number of writers are concerned; thus it happens that an article on which much of the author's energy has been expended in carefully eliminating unimportant passages and redundancy of words, in order that in length it may fulfil the conditions of space imposed upon him by the editor, is mercilessly cut down or ordered to be rewritten, because, like many a good picture rejected by the hanging committee of the Royal Academy, it did not coincide with a certain superficies to be covered. Yet the reader is bound to hold the unfortunate author responsible for any delinquencies discoverable in the articles endorsed by his signature, whether they be the result of editorial excision or not. In General Surgery, Professor Stokes of Dublin has written a series of valuable essays on amputations generally, and on amputations of special parts. Mr. Jonathan Hutchinson writes characteristicly and almost irreproachably on Syphilis and allied subjects. A short but highly suggestive article is contributed by Sir James Paget on Old Age. Mr. Heath writes the sections on Aortic and Innominate Aneurysm, and the Surgery of the Jaws, his special knowledge and experience in these subjects being already well recognised and appreciated, together with a general article on Abdominal Surgery. Dr. William Murray, of Newcastle, naturally treats of Abdominal Aneurysm. Diseases of the Bladder, Stricture of the Urethra, and dependent subjects have been assigned to Mr. Berkeley Hill; Tumours of the Bladder to Sir Henry Thompson; Rupture of the Bladder to Mr. Rivington; Lithotomy and Lithotrity to Mr. Cadge of Norwich, and Urinary Calculi to Mr. Crosse of the same town: these matters have been practically and thoroughly dealt with by these authors in excellent articles. The sections on Diseases and the Surgery of the Kidney have been entrusted to Mr. Arthur E. Barker. The article headed Nephritis is somewhat meagre, only covering two and a half columns; in it but little attempt is made, either in a clinical or pathological sense, to differentiate between the kidney changes and associated symptoms of the various forms of Bright's disease, and those due to retention and back pressure of the urinary excretion, or the septic decomposition of the latter. In the article on Pyelonephritis we are in some doubt as to what is meant by the phrase "the 'overflow' of bad retention": the same author's account of the operative surgery of the kidney, and also that of the pylorus, is, however, very acceptable. We do not understand why the tests for albumen in the urine are not incorporated in the article on Albuminuria, written by Mr. Mansell Moullin; they are to be found, nevertheless, fully described under that of Morbid Conditions of the Urine; in fact, the whole subject of albuminuria is there again fully gone into. Diseases of the Breast are ably discussed by Mr. Marcus Beck; and of the Testis, by Mr. Pearce Gould, who also writes admirably on Popliteal Aneurysm and other subjects. Mr. Bond subscribes the article on Railway Injuries, considered chiefly in their medico-legal aspect; whilst Mr. Herbert Page contributes an original and well-written section on Injuries of the Back and Spine. In the Surgery of War, Sir William Mac Cormac is in his element in matters relating to Gunshot, Sabre, and Bayonet Wounds; and Mr. Cantlie writes on the Ambulance, the Management of the Sick-room, with other articles on Surgical Anatomy and methods of Ligature of Arteries. The work of Mr. Treves is varied, thorough, and concisely written; he subscribes the sections headed Air in Veins, Intestinal Obstruction, Strangulated Hernia, and a number of others devoted to the Surgery of the Intestine, as well as those on Diseases and Injuries of the Lymphatics. No one more competent could have been selected as the author of the article on Cleft Palate than Mr. Thomas Smith; or on the subjects of the Plastic Surgery of the Bladder and Urethra, and Radical Cure of Hernia, than Mr. John Wood. Many other articles are equally meritorious: among them are those on Fractures, by Mr. Marsh, who, moreover, contributes an excellent section on Hip Disease; on Dislocation and Wounds of Joints, by Mr. Clement Lucas; on Injuries of the Chest and Lung, by Mr. Howse,—to the same writer being apportioned the subjects of Femoral Aneurysm and Gastrostomy; on Empyema, by Mr. Godlee; on the Treatment of Wounds and other collateral subjects, by Mr. Sampson Gamgee; on Congenital Dislocations, by Mr. George Cowell; on Tetanus and Diseases of the Rectum, by Mr. McCarthy; on Erysipelas and allied subjects, by Mr. Pickering Pick; and on Diseases of the Tongue, by Mr. Morrant Baker. There is little to find fault with in the contributions of Dr. William Macewen of Glasgow on Osteotomy, Grafting, and those relating to Head Injuries; but might not the indications and methods of trephining for meningeal to hæmorrhage have been more precisely set forth? Mr. Barwell's views of the pathology of Scrofula are somewhat out of fashion; his notion that "rachitis is probably a scrofulous affection in the large majority of instances" will, we are inclined to think, hardly meet with general acceptance. In marked contrast to this writer's views of the relations of scrofula to tubercle, are those expressed in a carefully written article by Mr. Makins on Surgical Tuberculosis. It may be mentioned here that, whilst Mr. Makins fully considers the subject of tubercular diseases of the joints in their varying aspects, mainly of course from a pathological point of view, Mr. Warrington Haward, in his general article on Diseases of the Joints, which in other respects is excellent, gives no special designation to this class of cases; but, using the term "scrofulous," he apparently includes in that category those affections of the joints which are now classed as tubercular, and makes no reference to the fact that the bacilli of tubercle are demonstrable in the diseased structures connected therewith. Mr. Pepper writes with remarkable perspicacity on a variety of subjects. Mr. Victor Horsley may be said to be ubiquitous; but, although precise and

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accurate in his terminology and classification of septic processes and organisms, he is not always practical. It would be invidious not to mention the names of many writers who have done good work often in matters of minor import: such as Mr. Watson Cheyne, Mr. Boyd, Mr. Ballance, Mr. Golding Bird, Mr. Bellamy, Mr. Davies Colley, Mr. Clutton, Mr. Morgan, Mr. Mason (so lately deceased, and who wrote the article on Nævus), Mr. Dent, Mr. Symonds, Mr. Johnson Smith—the general subeditor,—and others. A commendable feature of the Dictionary is the introduction of sections upon Regional Diagnosis and Surgical Anatomy; they are, as a rule, trustworthy and practical guides. In more special subjects, Mr. Robert W. Parker and Mr. Owen have appropriately been assigned the greater number of the articles on the Surgery of Childhood; Dr. Barlow and Dr. Gowers write on Cranio-tabes and Pseudo-hypertrophic Muscular Paralysis respectively; whilst Mr. Henry Baker treats of Tenotomy and Club-foot: in the article on the latter subject, only a few lines are devoted to the pathology of the congenital variety, which the writer believes "to be due to disordered nervous function acting upon the muscles, which draw the foot into its deformed position"; and we think that the comparatively recent investigations of Messrs. Parker and Shattock into the pathogeny of this affection might at least have been referred to by the author. Gynæcological Surgery could hardly have been better cared for than in the hands of Mr. Knowsley Thornton and Mr. Doran. Diseases of the Larynx and Thyroid Gland have been assigned to Dr. Semon; of the Ear to Messrs. Field, Purves, and Cumberbatch; of the Teeth to Mr. Tomes. Dr. Stephen Mackenzie discourses on Chyluria and Filaria Sanguinis Hominis; Mr. Shirley Murphy on Vaccination: so that it will be seen that topics which are but on the threshold of surgery have been admitted to a place.

The value of the Dictionary is much enhanced by the incorporation of a series of essays on Ophthalmology and Dermatology; both subjects are treated with a completeness notably absent in some of the other more special departments. The articles, though often widely separated, really form a connected whole, and, for the most part, attain to a high standard of excellence. Mr. John Tweedy has supervised the articles on Affections of the Eye, and Dr. Robert Liveing those on Diseases of the Skin, than whom Mr. Heath could hardly have found two more capable coadjutors. In matters relating to the eye, a number of ophthalmologists are associated with Mr. Tweedy, whose names are a sufficient index of the character of the work done by them; they include Mr. Lawson, Mr. Power, Mr. Brudenell Carter, Mr. Priestley Smith, Mr. Marcus Gunn, Mr. Berry of Edinburgh, Mr. Charnley, and others. All have brought a large, and often special, experience to bear upon the subjects with which they are connected, and much new and original matter may be found scattered through their several articles; the most obvious fault to be found with the latter is that they bear some evidence of undue compression. Two exhaustive and interesting articles may be referred to here: one by Mr. Herbert Page on Disorders of Vision from Injuries of the Head and Spine; another by Mr. Rivington on Orbital Aneurysm. In matters dermatological Dr. Liveing has written largely and instructively himself, his colleagues being Mr. Malcolm Morris, who in an important contribution identifies himself with the subject of Lupus, Dr. Cavafy, Dr. Radcliffe Crocker, and Mr. Alfred Sangster.

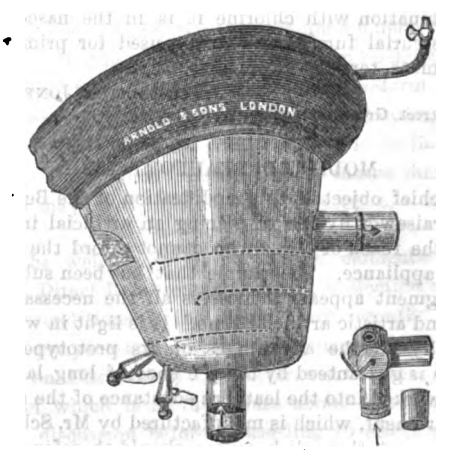
An adjunct of great utility is the insertion of a full index at the end of Vol. II., whereby subjects which have received no separate heading but are discussed in another place, and would otherwise be difficult to light upon, are at once easily discovered. The Dictionary takes the form of two conveniently sized and well-bound volumes, the type employed, though small, being clear and legible.

Mr. Heath is to be congratulated on the accomplishment of a work which, on the whole, is one of high merit, and alike creditable to himself and to the majority of those who have been associated with him; and the more so, since the compilation of the Dictionary progressed notwithstanding a severe and prolonged illness—terminating, happily, in complete recovery—which overtook him after he had commenced his editorial duties. We cannot close this brief review without expressing our admiration of the energy and perseverance which, amidst so many difficulties, have brought an arduous and anxious undertaking to a satisfactory and successful conclusion.

New Inventions.

GENERAL ANÆSTHETIC INHALER.

FEELING somewhat dissatisfied with all the anæsthetic inhalers at present in use, Messrs. Arnold and Sons, West Smithfield, E.C., have most ably made for me a "General Anæsthetic Inhaler" according to my instructions, as depicted in the accompanying woodcut. This may be termed a good "all round" inhaler, as it can be used for nitrous oxide gas, chloroform, ether, alcohol, or methylene bichloride, given either separately, mixed, or successively, as may be desired. For instance, you can begin with NO and continue with ether; or administer chloroform, and, in the event of signs of syncope, add a fluid drachm of ether or alternate one with either of the others as may be thought proper. Besides the above it possesses the following advantages:—1. A free influx of air as well as a free outlet. 2. A



good indiarubber cushion attached to the base, so as to fit any kind of face. 3. The use of plates or diaphragms (represented by dotted lines) turned up on the free edge so as to prevent the anæsthetic fluid from dropping down on the patient's face, of which the lower one serves to prevent the reinsufflation of expired air and directs it to the outlet, whilst the upper and middle ones are so placed as to receive the inhalant in any position of the patient and diffuse it over as broad a surface as possible for volatilisation, which is also accelerated by the warmth of the hand of the administrator. 4. Either of the funnels can be used according to position.

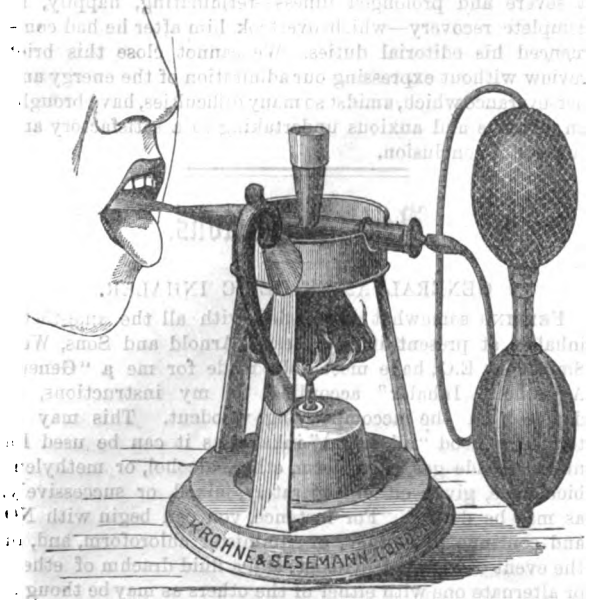
F. FAWSON LEE
Salisbury, May 12th, 1886. M.B. Lond., F.R.C.S. (exam.)

MERCURIAL FUMIGATOR.

THE accompanying illustration represents a method for treating locally syphilitic sores of all kinds in all situations. Into the iron kettle is introduced about a drachm of calomel, the stopper replaced, and the spirit-lamp lighted. After waiting a few minutes for the kettle to be well heated, on

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working the bellows a stream of mercurial vapour can be directed against any desired spot, and a film of metallic mercury will then be deposited over the surface towards which the nozzle of the kettle is directed. The mercury can thus exert a very powerful local action, not merely from its



being in a state of such extreme subdivision as it must be when deposited from its vapour, but as it is just free from its combination with chlorine it is in the nascent state. This mercurial fumigator may be used for primary sores, condylomata, tertiary ulcerations, &c.

W. H. FENTON JONES, M.D.

Brook-street, Grosvenor-square, W.

MODIFIED BEAUFORT LEG.

THE chief object of this modification of the Beaufort leg is the praiseworthy one of placing an artificial instrument within the reach of those who cannot afford the more expensive appliance. The sample that has been submitted to our judgment appears to possess all the necessaries for a useful and artistic artificial limb. It is light in weight, has practically all the advantages of its prototype, and its strength is guaranteed by the p e ence of long lateral steel splints worked into the leathern substance of the appliance. The instrument, which is manufactured by Mr. Schramm, of Princes-street, Cavendish-square, should therefore prove of great durability. The cost, ranging from £3 10*s.* to £4 10*s.*, is considerably less than that of the original.

"GUNTHORPE" NATURAL MERINO HOSIERY.

THE increased attention which is now being given to clothing, not only as a means of comfort, but as an auxiliary to health, is one of the satisfactory indications of the progress of sanitation amongst all classes of the public. A new candidate for popular favour as a desirable covering for the body is "Gunthorpe"—a material of which samples in various articles of dress have been submitted to us. The fabric is remarkably light and clean-looking, soft and pleasant to the feel, and is said to be not subject to shrinkage even by washing; but the chief advantage claimed for it is that it is entirely free from any kind of dye, which is often injurious to delicate skins. We have no hesitation in commending "Gunthorpe" as healthful and comfortable wear. The manufacturers are Rogers, Black, and Co., of Nottingham and Aldermanbury; and the agents are Bates, Hendy, and Co., 37, Walbrook E.C

NEW SANITARY COOKING UTENSILS.

MR. KEEN has designed a ventilating cover for kettles, saucepans, &c., which serves a very useful purpose. By giving opportunity for steam to escape and at the same time preventing the admission of soot, the contents are permitted to boil and gaseous impurities to escape without risk of damage by exposure to smoke. This method not only relieves the cook of the necessity for constant attention to prevent the contents from boiling over, but it is claimed for it that it has a relation to health in promoting their purity. However this may be, there is no doubt that the flavour of vegetable and animal matter is affected by their boiling in a close atmosphere, and Mr. Keen's invention overcomes this difficulty.

THE PREVENTIVE TREATMENT OF SYPHILIS.

To the Editor of THE LANCET.

SIR,—The following case is of interest, as showing how syphilis may be prevented by prompt local and general treatment before the chancre has arrived at maturity.

Early in November, 1885, Mr. A. B. C. consulted me for an eczematous affection of the skin, which itched intensely, associated with a few papules and vesicles, the eruption being sparsely scattered over the loins, buttocks, back, and upper arms. An aperient was prescribed, and glycerole of lead applications were ordered, but on Nov. 11th the disease remained *in statu quo*. The aspect of the dermatitis, in part, suggested scabies, but the integument was healthy at those points which are specially prone to become the seat of scabies—viz., the clefts between the fingers and the flexures of the wrists. Moreover, the sarcoptes hominis was not detected microscopically, after careful search in the ordinary manner. The case was further complicated by the recent appearance of a hard, elevated nodule, the size of half a pea, with an inflammatory zone around, situated on the dorsum of the penis immediately behind the corona in the median line. There was a history of impure contact, and nearly three weeks previously the covering of the penis had become abraded during coitus at the precise spot where this small nodule had developed during the past three or four days. The lymphatic glands in both inguinal regions were slightly enlarged. The physical condition of the lesion on the penis led me to consider it a hard chancre not yet arrived at maturity, and, being immature, the prompt destruction of the chancre might arrest the elaboration of the syphilitic virus at the point of inoculation, and its absorption therefrom. Accordingly, the chancre and surrounding parts were freely painted with a solution of hydrochlorate of cocaine, to ensure anæsthesia, and the chancre was destroyed with Pacquelin's cautery. I suggested that Sir William Jenner's opinion should be sought with reference to the skin affection. On Nov. 12th, Sir William considered the dermatitis due to scabies, and that its origin around the loins and buttocks was caused by contagion implanted during congress coincident with the receipt of the syphilitic virus. He suggested the application of sulphur ointment to the affected skin, and thought that the free exhibition of mercury internally was also advisable in order to combat the effects of any portion of syphilitic virus already absorbed. This treatment was fully carried out, and the dermatitis quicky disappeared. The sore on the penis healed under iodoform dressings. The internal use of mercury was discontinued after six weeks, the patient soon regaining his usual health, and none of the secondary manifestations of syphilis have appeared. The success which followed the destruction of the chancre in this case by Pacquelin's cautery, with the simultaneous employment of mercury, leads me to strongly recommend this course for syphilis, *before the chancre has arrived at maturity*, in preference to the opposite plan adopted by so many—viz., that of waiting for the appearance of secondary manifestations before commencing anti-syphilitic treatment. The use of cocaine is invaluable, as rendering the caustic application painless. I am, Sir, yours faithfully,

CHAS. E. JENNINGS, F.R.C.S. Eng.

Park-street, Grosvenor-square, W., May 22nd, 1886.

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THE LANCET.

LONDON: SATURDAY, JULY 17, 1886.

THE Commissioners in Lunacy having been pressed by the Home Office to produce their Report for the year 1885 somewhat earlier than usual—that is to say in a reasonable time—have accomplished this feat by the postponement of certain of their tables until next year. The Report, as issued, opens with what we must assume to be a tribute to the memory of Lord SHAFTESBURY, but the biographical sketch is meagre, even for an official notice, and the expressions of appreciation and regret have neither elegance nor eloquence to recommend them. However keenly the Board may feel the loss of its late Chairman, it is clearly not so overwhelmed by affliction as to be incapable of making political capital out of the event. The recollections of Lord SHAFTESBURY most cherished at Whitehall would seem to be those which relate to the opinions he held and the hopes he saw fit to take as an opponent of lunacy law reform. Except in so far as it may be convenient—or inconvenient—to the Board that the existing statutes affecting the custody of lunatics should be modified in a few quite unimportant particulars, the Commissioners are clearly antagonistic to any change, and they look upon the views and acts of their late Chairman as so much material with which to carry on the war against those who would reconstruct the entire system, bringing it into harmony with the needs and interests of the insane and the sane as they stand related in the general as well as the asylum population. The spirit of red tape and officialism is rampant in the Fortieth Report of the Commissioners, and even more demonstrative than in the reports which have preceded it.

The number of lunatics known to the Commissioners on January 1st, 1885, was 79,704; the number recorded for 1886 is 80,156, an increase of only 452, although the estimated growth of the population has been from 27,499,041 to 27,870,586, or 371,545, so that the "increase of lunacy," as the Commissioners are informed, amounts to about 1 in 822, the total proportion of known lunatics to population being about 1 in 349. As to the details of this aggregate number, the Commissioners say: "The total number of lunatics on January 1st last—namely, 80,156—was composed of 7792 of the private class (3968 males and 3824 females), 71,863 paupers (31,586 males and 40,077 females), and 501 'criminals' (333 males and 168 females)." The particulars of the change of numbers they give as follows:—"These figures show, as compared with January 1st, 1885, the increase of 41 (18 males and 23 females) of the private class, an increase of 448 (253 males and 195 females) among the paupers, and a decrease of 37 (23 males and 14 females) in those classed as 'criminals.' The total increase of 452 is much below that of any of the preceding eighteen years to which these returns extend." This statement of the matter is that there is an increase of lunacy. The inquiry was preposterous from the outset. The institution and record in relation to the insane has resulted, as it was likely to result, in gradually bringing the unsound of mind under the notice of the public. Many circumstances have conduced to make this work progressive, and there has consequently been an increase of registered lunatics; but we see no reason whatsoever—and we have never discovered any reasonable ground—for supposing that the actual number of occurring cases of insanity has increased year by year more rapidly than the population. The ratio per 10,000 of total lunatics to the population, as given in the Commissioners' table for 1859, was 18·67. This ratio of known lunatics has steadily increased; until in 1885, last year, it reached 28·98. This year it is 28·76, a fraction lower; yet there has, we maintain, been no increase of occurring cases, the apparent increase being due to the more extended recognition of lunatics and to the fact that their lives have been prolonged by more humane and careful treatment, so that the same inmates of asylums are counted in a larger, and increasing, number of annual returns.

There is nothing to note in the Report just issued beyond the facts that in the county and borough asylums the recovery rate has slightly increased, being 2·4 per cent. above the average rate of the previous ten years, and that the proportion of deaths to the daily average number resident is rather less than the average of the previous ten years. For the rest, beyond irrelevant remarks antagonistic to the several Bills which have been brought in with a view to remodel the laws affecting lunatics, and to afford better safeguards against the confounding of eccentricity or delirium with insanity which renders the sane liable to be placed under treatment as lunatics, the Commissioners content themselves with the recital of statistical and general facts. When, if ever, the obstacle to much-needed reform is successfully overcome, the reports of a Commission acting under conditions more consonant with the public welfare and conducive to the medical treatment of the insane than those which exist may be of higher value and interest.

IT may be well to revert for a few moments to the question of Direct Representatives and the election of them under the conditions of the Medical Act recently passed. The more compact and correct the general ideas of the profession on this subject the better will be the result of the election which is to take place about November. A little more discussion before proceeding to select persons is to be encouraged for several reasons. The duty to which registered members of the profession will shortly be called is an entirely new one. It is one in which they have had no previous experience, and in reference to which there are no precedents. Registered medical men are a busy, preoccupied body, consisting of 25,993 persons. For this purpose there are no organisations in the profession. There are associations and societies of various kinds, but not for the purpose of promoting such elections as are contemplated under this Act. Nor would the profession like any association to assume a caucus function, and dictate to it the selection of persons; and yet it is evident that without some concerted action in the different parts of the kingdom much time and influence will be wasted, much disappointment caused, and possibly much discredit accrue to the principle of direct representation. There are many critics who have hitherto been no friends to direct representation,

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and who have always declared that the election by vote would be an unsatisfactory and undignified proceeding. The strength of this feeling in quarters where better things might have been expected is almost incredible. It is of great moment that it should receive no confirmation in the coming election.

We have, in a previous article, discussed the kind of duties which, under the sharp limitations of an Act of Parliament, the Council has to discharge. We need only now mention them. It has to supervise medical education, to inspect or visit medical examinations, to issue from time to time the British Pharmacopœia, to keep a correct Register, and occasionally to sit in judgment on registered practitioners "accused of infamous behaviour in a professional respect."

One thing ought to be kept in mind—the fewness of the Representatives required by the Act. The 17,109 practitioners of England can only choose three representatives, the 4703 practitioners of Scotland one, and the 4186 practitioners of Ireland one. Five persons to represent 26,000 is a small number, and, within reasonable limits, the fewer the persons selected and nominated by the profession the better. It is of no use scattering votes over a promiscuous number of candidates unlikely to be elected. Two or three great points, it seems to us, should guide the profession in their selection.

First it seems desirable that a great community like that of England should have something like a territorial representation. The great district of the North of England, of the Middle, and of the South or Metropolitan district, might fairly expect to carry, respectively, a representative of their own selection, and to this end should take prompt and combined local action. How are men in London to judge for the men of Newcastle-on-Tyne, and *vice versa*? We adhere strongly to our view that the candidates should be representative of the body of the profession. The consultant class, the official members of universities, and medical corporations are represented already, and over-represented. All the wisdom and counsel to be got from them is already secured. The election of such members of the profession as direct representatives would seem to us a mistake of the first order. What is conspicuous by its absence in the discussions of the Council is the contribution of men who do the hard work of the profession, who know by experience the weak points in our medical educational system, in the Register and in the Pharmacopœia, and who may be trusted to maintain the honour of the profession.

THE lecture on Ataxic Paraplegia delivered by Dr. GOWERS last session at University College Hospital is a model of what a clinical lecture should be; and as it deals with a disease which has not yet received at the hands of the profession the attention to which its frequent occurrence entitles it, we propose to indicate its chief features, whilst recommending its detailed study in the pages of the last two numbers of THE LANCET.

A good gait is characterised by the exhibition of a certain amount of force and a certain degree of harmonious action of the muscles concerned in walking. Ataxic paraplegia, as its name implies, spoils both the power and the coördinate action of walking. On the one hand it is allied to locomotor ataxy, on the other to paraplegia; but it is not a simple combination of the two diseases, for it differs in some features from simple paraplegia, and still more remarkably from tabes dorsalis or locomotor ataxy. Though the development of incoördination separates it sharply from paraplegia, still the number of differences between it and tabes dorsalis is perhaps the most characteristic fact. The prominent feature of the etiology of tabes dorsalis is the very frequent history of syphilis; this is wanting in the causation of ataxic paraplegia. Like so many of the chronic diseases of the spinal cord, we find "cold," concussion, and mental distress, with over-exertion, playing a large share in the chapter of antecedents. But the real causes mostly elude detection, though it is very probable that the nervous protoplasm of affected individuals never was in that vigorous state of health which is the possession of the bulk of mankind. The clinical course of the majority of cases is one of a very gradual, not to say insidious, kind, and consists in the concurrent development of the two symptoms, weakness and unsteadiness, mostly manifested in the lower extremities. "As soon as the patient is conscious of weakness he is conscious also of unsteadiness." At first sight the patient looks as if he had locomotor ataxy, but an examination of the knee-jerk gives this appearance an active denial, for instead of WESTPHAL'S phenomenon, the knee-jerk is increased, and, what is more, a marked foot-clonus may be obtained, and even also a clonus of the rectus femoris muscle. This exaggerated state of the "myotatic irritability" gives the affection its resemblance to spastic and simple paraplegia. But it is not in the state of the reflex actions alone that differences are to be found, for there exists a remarkable absence of those sensory symptoms which make the clinical picture of tabes dorsalis what it is. The "lightning-pains" are as dominant in the clinical history of tabes as they are inconspicuous in that of ataxic paraplegia; and the same holds good of the other sensory phenomena. The superficial reflexes, as from the sole of the foot, are also present and excessive in the great number of cases. Again, though it is common to note absence of the reflex action of the iris to light in tabes, the "Argyll-Robertson" pupil is seldom present in ataxic paraplegia.

"As the disease increases the muscular power becomes more and more impaired, usually without much increase in the incoördination, which sinks into the background as the paralysis increases, and the patient has to have recourse to supports which at the same time afford him guidance. The increased myotatic irritability continues; stiffness and rigidity develop as its consequence. Thus the aspect of the patient comes to be that of spastic paraplegia, the feet drag as the patient walks, shake from clonus when he stops, and the legs are hauled forwards with visible effort at each step." Those who know most of the mode of gait in disease will recognise the hand of the master in this description.

In the absence of the various crises of the different viscera so much associated with tabes we have another difference in ataxic paraplegia; this goes side by side with the general want of sensory phenomena.

The prognosis is, on the whole, less distressing than the general run of spinal diseases, but chiefly in the circumstance

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that the affection has little tendency to cause death, and progresses in so gradual a fashion.

The pathology of the malady possesses several features of considerable interest. The anatomical distribution of the lesion is suggestive of many problems in the physiology of the spinal cord. The sclerosis or chronic degeneration occupies the lateral and posterior columns. The disease of the lateral or rather pyramidal tracts may be held responsible for the weakness, and that of the posterior for the ataxy. But the whole story is not so simple. As the clinical course shows and the anatomy corroborates, we have not a simple mixture of tabes dorsalis and spastic paraplegia. In the first place, the sclerosis is not so marked in the postero-external column as it is in locomotor ataxy, and the lesion is much less evident in the lumbar region. Moreover, there is not that exact limitation to the different "systems" of the cord. In the lateral columns the sclerosis is not accurately mapped out by the pyramidal tracts, for the lesion usually extends in front of and to the inside of these; it may even involve the direct cerebellar tract.

The mechanism by which the coördination of muscular movements is brought about has been considerably elucidated by the study of tabes dorsalis and ataxic paraplegia. The facts connected with these two diseases also show that this mechanism is probably of an even more complex nature than many of us may have been inclined to suppose. The matter, indeed, is too complicated for a full discussion of it here. Briefly we may say that Dr. GOWERS believes that the principal agent in the production of the ataxy of tabes dorsalis is disease of the true sensory nerves of muscles which have been shown to exist by TSCHIRJEW. The evidence on this point is very strong. We may have all the symptoms of tabes dorsalis when the cord is healthy and the peripheral nerves alone are diseased. Further, the symptoms of ataxy may exist in perfection when there is no defect in the cutaneous sensory functions. Therefore the ataxy must be due to disease of the sensory nerves of muscles. "It is probable that a very slight affection of these nerves abolishes the knee-jerk, a greater degree causes ataxy, and a still greater degree is required to render the muscles insensitive to pressure and tension." It is thought likely that disease of the posterior median columns may cause ataxy by preventing the proper transmission of the guiding impulses to the cerebellum; for the nucleus in which the fibres of this column end is in close communication with the cerebellum. Moreover, as Dr. TODD believed, the posterior columns probably contain short fibres connecting the posterior grey matter at different levels, and disease of these may also impede coördination. The theory that muscular anæsthesia was the chief cause of incoördination in tabes was advanced thirty years ago by Dr. RUSSELL REYNOLDS.

To return to the explanation of the weakness of ataxic paraplegia. It seems that this symptom cannot always be explained by the amount of sclerosis in the lateral columns. Dr. GOWERS is the author of an ingenious hypothesis which may throw light on this and cognate matters. He believes that the terminations of the pyramidal fibres in the grey matter of the cord may be compared in many ways to the terminations of the motor nerves in muscles; that there may be a kind of "motor-plate" in the ending of what he calls a motor segment. These terminal ramifications are supposed to act as local inhibitory centres. As this ramification is at the furthest possible point from the source of nutrition (i.e., the large nerve cells in the motor region of the cerebral cortex), it is reasonable to suppose that, in the event of a defective nutrition of the said source of trophic influence, the most distant portions of the pyramidal fibres would feel the defect first and most. If such an event occurred, then the local inhibition would cease, and weakness of voluntary movements with exaggeration of the myotatic irritability would occur. Possibly this is the explanation of long-lasting cases of hysterical spastic paraplegia that ultimately recover. The hypothesis will also serve to elucidate those cases of genuine ataxic paraplegia in which the sclerosis is almost absent from the lateral columns; for we may then imagine that the termination of the pyramidal fibres in the grey matter is degenerated.

The differential diagnosis of ataxic paraplegia has to be made from tabes, spastic paraplegia, hereditary ataxia, focal myelitis with its consequences, and tumour of the middle lobe of the cerebellum. Enough has been said to show how the first two may be differentiated; hereditary ataxy presents no knee-jerk, but nystagmus and some defect of articulation; whilst its onset in earlier life and in several members of the same family are distinctive features. From the fourth condition, in the nature of things, the diagnostic problem is of the greatest difficulty, and Dr. GOWERS thinks that the regressive tendency of myelitis, as contrasted with the progressive character of the lesion in ataxic paraplegia, is the chief means of distinction. The common accompaniments of cerebellar tumour should prevent any mistake on this score.

THE Town Council of Gravesend have unanimously decided not to build a hospital for infectious diseases on a site which they recently acquired for that purpose at a cost of £700. And they have taken this step in the face of a report from their own officers that their existing wooden hospital is so dilapidated that it had probably led to fatal results in some patients admitted, and that it is not worth repair. The real ground of objection to proceed is because, after certain conferences with the Local Government Board, the estimated cost has risen from £3500, which the Mayor regarded as sufficient, to about £5000; and a strong feeling in the direction of local self-government having influenced the members of the Town Council on the occasion in question, the intervention of the Central Authority was resented, and the scheme was abandoned. Such a result is very much to be regretted, and this especially in the case of Gravesend, lying as it does at the entrance of the great port through which disease may so easily make an entrance from abroad. And not only so, but Gravesend has already had experience of what it is to be unprepared to deal promptly with cases of imported infection.

But the main question to be considered is that of the intervention of the Local Government Board in such matters. As to this, we cannot but think, from a perusal of the proceedings of the Town Council, that some misapprehension exists. There is absolutely no reason why the Town Council of this or of any other town should not build and equip an infectious diseases hospital quite independently of any interference on the part of the Central Authority; although we are

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bound to admit that, having regard to the experience possessed by the officials at Whitehall on this subject, the money of the ratepayers would, apart from conference with those officials, not be likely to be spent in the most approved fashion. It was Gravesend itself that sought the intervention of the Local Government Board when they asked that department to take part with them in the proceedings necessary for the raising of a loan to defray the expenses of a hospital. How far it may be desirable for a Central Authority to enable a local authority to secure money for certain specified purposes, without inquiring how that money is to be spent, is a question which may admit of more than one answer. But if there is any justification for a refusal on the part of the Central Authority merely to act as a medium for securing a loan for the local authority, without regard to the method in which it will be applied, it is essentially in the case of hospitals for infectious disease that such a refusal should be made. A vast amount of mischief has been done by infectious disease hospitals, and this especially in the metropolis, where those institutions have been erected by the aid of public loans, and the Local Government Board have learned through their medical staff that there are many dangers, in excess of those hitherto contemplated by sanitary authorities, which have to be avoided. And unfortunately these dangers can only be properly avoided at a cost exceeding that which has heretofore been regarded as sufficing for such hospitals. A lessened number of patients per acre, an increased distribution of buildings over the site, a comparatively wide zone between the hospital buildings and its boundary wall, are all needed in the interests of the community whom it is intended to protect against infection; and these and other similar requirements cannot be ignored by the Local Government Board when their co-operation in the erection of an infection-hospital is asked. But we have heard of recent cases in which, whilst these points have been carefully attended to, no objection whatever has been made to a sanitary authority making only a first instalment of hospital provision; and it seems to us that if Gravesend be really prepared to spend some £3000 on hospital buildings, there ought to be a means by which this expenditure may be made to provide at least a part of such a hospital as will be free from any medical or other objection. On this basis we hope the subject will be reopened; and if this be done, we have no doubt that the district can be provided with a most useful, though not a complete, amount of accommodation for the isolation of the infectious sick, and the consequent protection of the inhabitants of Gravesend. If the Town Council still wish to be free from all interference in the matter, they have only to erect their hospital out of current rates; but in view of the experience of the metropolis, we would counsel them not to proceed in this direction without at least studying the effect which other hospitals have had over a somewhat wide area when those buildings have been used for the isolation of cases of small-pox.

MR. SAVORY'S re-election to the presidency, while generally looked forward to, came as a surprise to many, on account of the well-known objection of the Council to depart from custom. We must congratulate the Fellows and Members on this evidence that the Council is at last waking up to a proper sense of its own dignity, and to the feeling that the highest honour which the College has at its disposal is no longer to be bestowed on whomsoever happens to be the senior member of Council who has not passed the chair. This interference with routine, however, is sure to press harshly on someone. Mr. SAVORY'S re-election will appear somewhat in this light to Mr. WOOD, who, in the ordinary course of events, would have succeeded to the honour of the presidency. No disrespect of any kind could have been intended to the senior Vice-President, Mr. WOOD; neither Mr. SAVORY'S re-election nor the election of two new Vice-Presidents for the current year should be regarded otherwise than as a determination on the part of the Council, at length, to break with an old and undignified tradition. We trust the practice will be continued, and thus the Council will always have a certain number of past vice-presidents from among whom to select the gentleman who promises to make the best president. We cannot but hail these changes with satisfaction, as harbingers of reforms to come, and as the commencement of a more enlightened policy on the part of the Council of the College.

Mr. MACNAMARA'S resolution "that, in pursuance of the resolution of the Council of the 9th April, 1885, the Committee on the Mode of Election to the Council and on other matters relating to the Charters and Bye-laws of the College be requested to report, with as little delay as possible, on the steps taken by them in reference to the preparation of the new sections required in the charters and the formulæ for new bye-laws to give effect to the resolutions of the Council respecting them," we are pleased to find, was carried. This will bring into renewed activity the Associations of the Fellows and Members respectively, each anxious to secure a fair representation of their own views and interests in any new charter and bye-laws which may be enacted. The Fellows have already drawn up their suggestions and recommendations, and these have been discussed several times in our columns. It now only remains for the Members to do the same. Let us recommend moderation on the one hand and expedition on the other. It would seem very desirable that a further public meeting of the Fellows and Members at large should be held to consider these recommendations, and to learn exactly what the Council of the College proposes to do before application is made to the Privy Council.

The present is the Jubilee Year of Her Majesty the QUEEN and will doubtless bring some signal honour to the College. No time could be more propitious, therefore, for the introduction by the Council of wise and liberal reforms into the charter and bye-laws of this Royal College. It is much to be wished that whatever changes the Council desire to make will find favour with the entire constituency, and will secure unanimous support. We can only hope that such changes as may be enacted will be conducive to the general advancement of the College, and of the art and science of surgery.

WE have read with much regret a correspondence in *The Times* which has arisen out of the occurrence of some cases of diphtheria in the Charterhouse School at Godalming, and the action of the school authorities in the matter. From the letter of Mr. CARRITT, the father of one of the boys in the school, it appears that his son was very properly directed

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...master to inquire whether there would be any objection to his going home for the usual Saturday to Monday exeat, as there had been some cases of measles in the house. Consent having been given, Mr. CARRITT learned from [illegible] that in addition to the measles there had been two cases of diphtheria. Doubtful of the accuracy of this report, the boy's mother wrote to the house master for information, but received no answer to her letter. Hearing from [illegible] on his return to school that one of the boys had died, she wrote again, but with no better result. Not satisfied with this, Mr. CARRITT and his wife went to the school to make personal inquiries, when they learned that there had been nine cases of diphtheria in the house, that one boy had died in the house in which their son was placed, and that there was another boy in it recovering from the same disease. With natural anxiety for their son's safety, Mr. CARRITT applied to Dr. HAIG-BROWN for permission to withdraw him temporarily from the school. He was informed that if he did so the boy would not be allowed to return. Acting on the opinion of his medical adviser, Mr. CARRITT felt it his duty, notwithstanding this intimation, to take his son home, and therefore wrote to Dr. HAIG-BROWN to ask whether he really intended to carry out his threat of not permitting the boy to return. He received a reply that he could make no other answer than that already given. Mr. CARRITT then wrote to *The Times* giving a temperate account of the affair and protesting against the head master's arbitrary proceeding. This drew a letter from Dr. HAIG-BROWN to the editor, with a view to remove any anxiety which might have been created, in which he stated that "during the last two months we have had two cases of diphtheria and seven other cases of throat illness with diphtheritic tendency. To our great sorrow one boy died of the consequences of diphtheria at a time when we supposed his recovery to be assured. No further evidence of such illness has occurred since June 13th, and there is none such in the school now." At the same time he declined to answer anything in Mr. CARRITT's letter reflecting on his conduct. We regret to think that Dr. HAIG-BROWN has taken up a very false position in this matter. As head master he must reign supreme in the school; but this does not relieve him from the responsibility of acceding to reasonable requests on the part of parents when the health, possibly the lives, of their children are concerned, nor from the obligation to give them some explanation of his reasons for adopting so unusual and high-handed a course as he seems to have done on the present occasion. We also think some explanation is required of the discourteous part of the house master in not answering the letters addressed to him by the boy's mother. In connexion with this correspondence several important questions arise. We have no information as to whether the diphtheritic illness was confined to one house or extended generally over the school; nor whether any, and what, exhibit steps were taken to secure the separation of the sick from the healthy. It would also be important to know if this has been done with a view to trace the source of the outbreak, and what measures are proposed to prevent the recurrence of such a disaster. The head master would have consulted his own best course to relieve the public anxiety and restore the confidence of the public in the school will be to make a clear statement regarding the extent to which disease has prevailed among the boys, the measures which have been adopted to prevent its spread, the steps taken to ascertain its cause, and the course already pursued, or in prospect, to improve the sanitary condition of the establishment. We cannot but feel that when the question was very properly asked with regard to the return home of the boy from a house in which there were cases of measles, the fact that the existence also of diphtheria was concealed is very unsatisfactory and calls for some explanation.

Annotations.

"Ne quid nimis."

THE MINUTES OF THE GENERAL MEDICAL COUNCIL.

Now that the profession is to have five voices in the Medical Council it may be expected to show more interest in the proceedings of this body. A volume of Minutes—the twenty-third—has just been issued. It is one of more than usual interest, and conveys more than the ordinary information as to the ways of the Medical Council and of the bodies which are responsible for granting degrees. The reports of the Visitations of all the universities, and of the answers of the universities to the criticism of the Visitors, are contained in one of the appendices of this volume; and another appendix contains the second report of the Statistical Committee, furnishing an instructive summary of statistics regarding medical students registered as commencing their medical studies in the quinquennium of 1871-1875. The volume can be purchased either at the office of the General Medical Council, 299, Oxford-street; or from the publishers, the Messrs. Spottiswoode.

EXTENSION OF THE CHOLERA EPIDEMIC.

CHOLERA has, during the past week, made considerable ravages in Southern Italy, the daily number of cases and deaths in the province of Brindisi having steadily risen from some 30 and 5 respectively to about 150 and 50. During the four days ending July 13th the total cases in the province had amounted to 420 and the deaths to 149. Of these attacks the largest number occurred in the town of Francavilla Fontana, where, during the same period, 233 cases and 99 deaths took place. Latiano also has suffered severely, 138 cases and 56 deaths having occurred there. Amongst other places attacked in the province are Brindisi itself, with 30 cases and 14 deaths, and Erchie, with 20 cases and 5 deaths. The most southern portion of the kingdom as yet infected would appear to be San Vito, where in three days 44 cases and 11 deaths took place. Somewhat higher up the coast than Brindisi, the disease is stated to have made great havoc at Mola di Bari, but no statistics are forthcoming as to this place. In the northern part of the kingdom Venice still suffers, although no material increase has as yet taken place there, the daily fatality being limited to one or two only. At Codigoro, in the immediately adjoining province, the fatality is increasing, and in the four days ending the 13th inst. 38 cases and 9 deaths were reported to have occurred. So, also, occasional cases have occurred at Trieste and at Fiume; but no extension into the interior of the Austro-Hungarian Empire has taken place. Returning again to Italy it is stated that isolated cases have been reported from the provinces of Bologna, Verona, Padua, Modena, and Vicenza. It is not easy to place a proper interpretation on such rumours, for whilst in an early stage

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of an epidemic there is almost invariably a great tendency to hush up the first isolated attacks, there is after a time a similar tendency to regard every case of fatal diarrhœa as having been due to cholera. It is, however, satisfactory to know that amongst the Government officials who have visited the cholera-infected districts is Signor Morana, Secretary-General of the Department of the Interior, who has already acted as the Government historian of the epidemics of 1884 and 1885, and who has shown that his main desire is to place on record a faithful account of the occurrences of cholera in Italy, both as regards their statistics and as to the attempts that are made, whether by quarantine restrictions or otherwise, to stay the progress of the disease.

THE ETIOLOGY OF PNEUMONIA.

THE causation of pneumonia, notwithstanding its apparent simplicity in a great many cases, is in many more so obscure that every rational theory as to its origin must still possess a certain interest. It would be strange if sepsis, which is triumphant in various associated forms of illness, had no influence here, and we are accordingly prepared to find that it has. Even if those varieties of the disease which are connected with tubercle or with insidious catarrhal processes, and are not at first pneumonic, be excluded, the history of continued fever affords examples of germ development, which is first revealed in an inflamed lung, or is there engrafted during convalescence. In apparently simple cases due to chill, moreover, the share of malaria as a depressing precursor is not always easily defined. It must, however, be owned, after due allowance for every such morbid agent, that by far the commonest cause of acute lobar pneumonia is external cold. This theory, the truth of which is often self-evident, will best explain why strong and weak subjects alike are apt to be suddenly seized with inflammation of the lung, and why the prevalence of this disease bears a close relation to changes of the weather and is compatible with an atmosphere of great purity. Some who seem to favour an obscurer theory of chemical influence regard ozone as in some way directly responsible. Such, at least, would seem to be the implied meaning of statistics quoted by Dr. Draper, of New York, in which he couples an epidemic of pneumonia in that city with a high percentage of ozone in the air. We confess that we cannot trace any clear connexion between this supposed cause and the effect. If, however, we take the excess of ozone to indicate, as it well may, a fluctuating temperature with prevailing stormy winds, we have here conditions which will account for much inflammatory disease. This is probably the true version of the ozone theory. A theory which has been suggested,—not, we believe, by Dr. Draper, that ozone-pneumonias are due to ozone-fed germs, appears quite untenable in view of the fact that there is no better germicide than oxygen.

ELECTRIC CHARTS.

ELECTRICITY is of most use in diagnosis. To those who are in the habit of taking accurate electrical observations the possession of charts would prove of considerable value. Hitherto, in an ordinary way the number of facts to be recorded has been so limited that it has scarcely been worth while to employ electric charts. Nor is this state of things likely to change unless further important information of diagnostic or therapeutic value should be forthcoming; we cannot, therefore, predict for Dr. Leslie Phillips' neat, elaborate charts any very extensive employment. Though electric charts are not destined ever to become so generally useful as temperature charts, yet we cannot but think that any means which would facilitate the registration of observations are things to be desired.

ANATOMICAL AND MEDICAL KNOWLEDGE OF ANCIENT EGYPT.

THE surviving fragments of the early literature of Egy are mainly of a religious character; but this is not to wondered at, for the genius of the people was essentia religious, and their doctrine of the future state leaven their national life in almost every particular. To them t body was an integral part of the immortal humanit therefore it could not be permitted to turn to decay, t had to be preserved from corruption that it might be a receptacle for the soul to dwell in through eternity. Th treatment of the body was thus dependent on their belief its relation to the soul, and this, we learn from their religic writings, was a relationship of eternal independence. secure perpetual preservation the body had to be prope embalmed, the cavities opened and subjected to the acti of antiseptics. Although the body was sacred, under t special protection of the god Thoth, though each part w under the guardianship of a special divinity, yet tl sacredness did not preclude careful inspection and t processes necessary for preservation, for all parts had to perpetuated. Embalming was a religious rite, to be p formed by the priests of the Cultus; and the histori Herodotus, has preserved for us what is doubtless substantially accurate account of the different metho whereby it was done in the later times in which he liv The organs removed from the bodies of persons of the bet classes were not returned into the body, but were preserv in vases of alabaster or stone, surmounted by the heads the four divinities of Hades, the sons of Horus and Is The vessel which contained the stomach and colon bore t human head of Amset; that which held the lungs and he was under the protection of the jackal-head of Tuant-mut that which contained the small intestine was beneath t baboon-head of Hapi; while the liver was guarded by t hawk-head of Kabhsenuf. During the ascendancy Greek influence in Egypt, Alexandria earned the repu tion of being the chief school of anatomy and medicine the world. Erasistratus, who lived in the days of Ptole Soter, B.C. 285, was an anatomist of such enthusiasm, t he and his disciples receiving from the king criminals c demned to death, "Vivos inciderint considerarintque etia spiritu remanente, ea quæ natura ante clausisset, eorumq posituram, colorem, figuram, magnitudinem, ordinem, du tiem, mollitiem, lævorem, contactum, processus dei singulorum et recessus et sive quid inseritur alteri sive partem alterius in se recipit." But this Alexandrian sc although upon Egyptian soil, was essentially Greek in sp even Herophilus had learned some of his anatomy Praxagoras of Cos, although, as the anatomy of the e Greek school was originally derived from Egypt, it was returning to the mother country the traditions of cu derived therefrom. It was in Egypt Democritus of A studied, and so was fitted to teach anatomy to Hippocr the father of medicine. The three pithy and graphic le on anatomy (which are extant), which it is supposed D critus sent to Hippocrates may well have been the resu his Egyptian training. At a later period, it was at Alexa that Galen pursued his study of anatomy under Heracli and the anatomical school of Alexandria survived until Mohammedan invasion of Amru in A.D. 640. That even of the earlier Greek medicine, anatomy, and patho was derived from Egypt we learn both directly and directly. Most of the vegetable drugs in use in G were natives of Egypt; and Galen, speaking of one presc tion called Epigonos, tells us that it was obtained from adytum of the temple of Ptah, at Memphis. He quotes it other Egyptian prescriptions from the book Narthex, wr by Hera of Kappadokia. Medical colleges of far gr antiquity than that of Alexandria existed in the pri

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of Memphis, Heliopolis, Sais, and Thebes. These which more faithful exponents of the purely Egyptian of the art of physic. Of the ancient medical literature Egypt, two nearly complete treatises are still extant, or seven fragments of others. These vary in date perfection. The most complete are the Papyrus and the Medical Papyrus of Berlin. The fragments noteworthy are:—The British Museum Papyrus, the property of the Royal Institution, the Papyrus VI. de Boulaq, the Magical Papyri of Turin and Paris, the Medical Manuscript in the Borgia Library, and the Papyri 383 and 384 of Leyden. In a paper read at a meeting of the Royal Institution of Great Britain on the Medical Knowledge of Ancient Egypt, of which the above is a summary, Professor Alexander Macalister, M.D., F.R.S., stated that he hoped soon to be in a position to publish a detailed and critical study of this medical literature, a work for which few are better qualified.

MEDICAL CARE OF BOYS AT PUBLIC SCHOOLS.

The death of one of the scholars at Charterhouse School from the consequences of diphtheria at a time when his recovery was supposed to be assured is a fresh illustration of what for several years past we have endeavoured to point out. The grave defects in the medical care of sick boys at our public schools. At Charterhouse, as at other schools, the most elementary ordinary rule for the protection of the healthy by isolation of the infectious sick appears to be set at nought. The Association of Medical Officers of Public Schools has formulated a series of rules for the protection of schools from the introduction of infectious illness from without; but the rules, when required to be brought into operation for the protection of the public—and the relatives of pupils in the infected school—seem to be to a great extent ignored. The head master at Charterhouse, whose son, it would appear, is the medical attendant at the school, states that "he does not care to answer the charges so far as they affect his own conduct." We have before represented that whenever a death takes place at a public school there should be a full and impartial inquiry, not only into the cause of death, but into the methods adopted to guard against the fatal illness. Painful as it would be to the friends of the deceased scholar at Charterhouse School, it is to be hoped they will have sufficient courage and fortitude to demand an investigation by inquest into the cause of the death of their son at a time when "his recovery was supposed to be assured," as the head master asserts, and he was thought to be among his schoolfellows again.

THE MICRO-ORGANISMS OF ACUTE SUPPURATION.

Dr. O. KRANTSFELD, who has been engaged in the bacteriological study of acute suppuration in Professor Cohnheim's laboratory in St. Petersburg, states that it is always possible to detect micro-organisms in the pus of acute suppuration, both by means of cultures and by microscopic observation. Those most frequently met with are staphylococcus pyogenes (aureus, albus, and citreus) and streptococcus pyogenes. The presence and multiplication of micro-organisms in the tissues is, he thinks, the most important factor in the etiology of acute suppuration. They may, however, enter into the organism without setting up suppuration, the other conditions regulating this being virulence and concentration, and the local and general resistance. Staphylococcus and streptococcus are distinguishable from one another, both morphologically and in their culture media staphylococcus develops quickly and equally well whether air is present or not, whereas streptococcus develops more slowly and is less vigorous; it also thrives better without free access of air, as in the deeper parts of the medium. In the tissues staphylococcus pyogenes develops rapidly, and may be carried along with the blood, while streptococcus pyogenes is more slow in its development, and especially affects the lymphatic vessels. In a large majority of cases of local acute suppuration the micro-organisms gain an entrance by means of external wounds, though sometimes they do not do so; abscesses due to staphylococcus pyogenes are generally situated near the locality in which the micro-organisms enter; those due to streptococcus pyogenes, on the contrary, are found at a distance from the place of injury, along the course of the lymphatic vessels, the lymphatic glands determining the localities of the suppuration. Both the micro-organisms may set up pyæmia and septicæmia, the foci in which staphylococcus is gathered being generally situated in internal organs, tending thus to give the affection more of a pyæmic character, while the collections of streptococci are mostly found about the joints and in serous cavities, thus causing symptoms more of a septicæmic character. At the period of life when the skeleton is growing, staphylococcus aureus has a tendency to find its way to the organisms of locomotion, especially to the bones. Pure cultures of staphylococcus pyogenes introduced into rabbits set up abscesses, pyæmia, septicæmia, and acute osteomyelitis. The suppuration occurring when antiseptic dressings are used must be classed etiologically with ordinary acute suppuration. These remarks apply to acute suppuration only, the examination of the pus from cold abscesses giving different results from that of the contents of acute abscesses.

SLEEP-WALKING.

AN inquest was held on July 9th, at Chester, on the body of a soldier who had died from injuries received by falling from a high window on to the ground. It appears that he got out of bed, opened the window of the room in which he was sleeping, and jumped out. He was accustomed to sleep in a room on the ground floor, and frequently left the room by the window instead of the door. There does not appear to have been any evidence brought forward that he had been known to do so at night, or that he was in any way accustomed to walk in his sleep. A verdict of "Accidental death" was returned. Sleep-walking or somnambulism is explained on the hypothesis that the sleep is partial in its area; portions of brain which are usually involved in the physiological condition peculiar to sleep remain exempt, so that the sleeper exhibits powers which sleep usually annuls. The individual appears to possess an unusual power of calling his muscles generally into activity in response to dream thoughts. Sight in relation to the dream may be good, muscular sense impressions also, but the sleep-walker may be deaf to all ordinary sounds. Hilton Fagge had the opinion "that true somnambulism (at least, when it is not a manifestation of hysteria) has every claim to be regarded as one of the members of the group of paroxysmal neuroses," in which group he includes migraine, epilepsy, paroxysmal vertigo, and paroxysmal insanity. In the attacks of somnambulism the sleeper will perform various acts—get up in the night, perhaps dress, go downstairs in the dark, move something from its place, or do something else quite trivial in character, return to his room, undress, and get into bed again; in the morning, however, there will be no recollection of the occurrence. At other times the walk may not be without danger, and cases are on record where the sleeper has met with a violent death from following the suggestion of his dream. This is of importance from a medico-legal point of view under a con-

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tested policy of life insurance, in which it may have been provided that suicide would vitiate the policy. However, as suicide is held to include only intentional killing, could it be proved that the man was a somnambulist, the policy would hold good. The allied condition—that of somniloquy or sleep-talking—is extremely interesting, and there are wonderful accounts given of intellectual feats accomplished by people the subjects of it: abstruse mathematical problems solved, discoveries made, poems written, and long conversations carried on, there being complete forgetfulness on the part of the performer as to the occurrence of the act. In these cases there is not only a partial abeyance during sleep of some functions of the brain, but also an exaltation of others.

ELIMINATION OF MERCURY AFTER HYPODERMIC INJECTIONS AND INUNCTIONS.

THE system of treating syphilis by means of hypodermic injections having been of late largely employed both in this country and on the Continent, any information on the subject of the rate of diffusion and elimination of the mercury thus introduced is likely to prove valuable. An elaborate series of observations on the elimination of mercury by the urine after hypodermic mercurial treatment has just been published by Dr. Sukhoff, "ordinator" in the syphilitic clinic of Professor Tarnovski in St. Petersburg. The preparations used were a solution of corrosive sublimate, a similar solution with the addition of common salt, Bamberger's albuminate of mercury, the same author's peptonate of mercury, Max Bockhart's sterilised "blutserum-quecksilber," a solution of bicyanide of mercury, recommended first by Cullingworth (*vide* THE LANCET, May 23rd, 1874), a solution of the mercurial amide of formic acid, or Liebreich's hydrargyrum formamidatum, an emulsion of calomel, and, lastly, a solution of biniodide of mercury in iodide of potassium. The above solutions were mostly of the strength of 1 per cent., and the doses given usually corresponded to one-sixth of a grain of the salt used. Mercury was found in the urine about five hours after a single injection of any of the above, except the solution of the biniodide, which was not followed by any signs of mercury in the urine until after ten daily injections. During the course of treatment the amount of mercury in the urine gradually increased, but not at the same rate for all preparations. After the conclusion of the treatment the quantity eliminated continued for one or two weeks as great as it had been at the end of the treatment, and then declined, the fall being more gradual than the rise had been. There were no breaks in the elimination, and no difference was found in the quantities eliminated during different periods of the day. The organism gradually and spontaneously freed itself from all the mercury which had been introduced. Where mercurial stomatitis existed a much larger quantity of mercury was found in the urine than in other cases; the author therefore suggests that when stomatitis has been produced much smaller doses should subsequently be administered. The most active of all the preparations employed appeared to be the formamidate, for after a single injection the mercury was entirely eliminated in a couple of days.

Another series of observations on the urinary elimination of mercury has been made by Dr. Michaelovsky, also an "ordinator" of Professor Tarnovski's clinic. Here the form of treatment employed was that of inunction. The observations agree with those of Dr. Sukhoff in regard to the uniform and gradual method in which mercury passes from the system. Several different ointments were employed for the purpose of comparison. Mercury was detected in the urine about twelve hours after a single inunction of half a drachm of ung. hydrarg. cinereum duplicis, which contains fifteen grains of metallic mercury, no difference being observed when the ointment was prepared with cacao butter instead of suet, as is usual. A similar effect was produced in the same time by an inunction with half a drachm of Oberländer's mercurial soap, which also contains fifteen grains of mercury. An inunction of a drachm of the simple ung. hydrarg. cinereum, which contains twenty grains of mercury, was required to produce as rapid an effect on the urine as half a drachm of the two former preparations. Oleate of mercury was also tried in quantities of half a drachm, which contained fifteen grains of the yellow oxide. In this case three inunctions were required. The least active of all the ointments employed was the ung. hydrarg. sublimat. corros., which contains eight grains of the sublimate to the drachm. Here eight inunctions of half a drachm, or even a drachm, of the ointment were required before the urine answered to the test for mercury.

"IDIOTS" IN ASYLUMS.

WE warmly sympathise with the wish that idiots should not be exposed to the evils of contact with the insane. As Dr. Ireland eloquently contended in the address he delivered before a branch meeting of the Medico-Psychological Association at Carlisle in April last, "Imbeciles are generally weak, timid, and imitative. In a single night passed in an asylum for adults they learn practices which they never forget. They are often terrified by the wild words and antics of maniacal patients, catch up the oaths and curses which float about, learn their lowest habits, and imitate their wild movements. Naturally soft and credulous, they sometimes adopt the delusions which their insane companions take the trouble to teach them." All this is freely admitted. Nevertheless, it does not follow upon this recognition of a danger that the safeguard provided must needs be free from all peril of its own. We must confess to a fear that, inasmuch as the line of distinction between "idiocy"—or "imbecility," as it is now loosely called—and lunacy is not clearly drawn, it may happen that young persons who are, or are supposed to be, insane may be placed in asylums for idiots, instead of being subjected to the official scrutiny which, sooner or later, must be instituted as a protection to the insane before incarceration in an asylum for lunatics. It is doubtless most desirable that the greatest facilities should be offered for the separate training of idiots or imbeciles, but this ought not to be made an opportunity for the creation of a way by which weak-minded young persons can—we do not say will—be "put away" without the utmost precautions which the law can enforce for their protection. Dr. Ireland's address, which has just been published, is an excellent one, and we commend it to the attention of our readers as full of sound sense and trustworthy information.

THE BRITISH MEDICAL BENEVOLENT FUND.

SIR JAMES PAGET was in his right place presiding over the Jubilee Festival of this Fund. The eloquence, alike of his life and speech, was engaged in a thoroughly congruous duty in urging those who had been more fortunate in our "great unendowed profession to be mindful of those who had been less so. Sir James's chief theory of the want among members of the profession is that it may be entered without much capital. No one fact, of course, will explain why so many medical families come to need the help of such a fund. We may take another opportunity of discussing this. Meantime, let all who can help, do so. Great thanks are due to Dr. Broadbent for his hearty and valued labours as treasurer: £3500 is not a bad result of such good offices. The generous estimate of our profession by dignitories of the two great branches of the Catholic Church was very gratifying.

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THE BACILLI OF TYPHOID FEVER.

DR. VILCHUR, who has been engaged in studying the bacteriology of typhoid fever in Prof. Afanasieff's laboratory, and who has published an interesting communication on the subject in the number of the *Vrach* just to hand, finds that typhoidc olonies are generally larger than similar colonies of a non-typhoid character; their colour, also, is a yellowish cinnamon, whereas in others there is no yellow tinge, and, moreover, they are cinnamon under circumstances in which non-typhoid colonies turn of a brown or even of a black colour. In doubtful cases consideration of the symptoms and of the microscopical preparations of the colonies will generally serve to distinguish those of a typhoid origin. Dr. Vilchur made more than two hundred cultivations from the organs of four typhoid patients, and examined the stools of twenty cases about the thirteenth day of the disease. He found that the bacilli multiply more luxuriantly in meat-peptone agar-agar than in meat-peptone jelly. Their breadth seems, too, to depend upon the cultivation medium, the broadest being developed on potatoes at 27° C.; and the narrowest in meat-peptone agar-agar at the ordinary temperature of the room, the length ranging from the third of the diameter of a red blood-corpuscle to more than the full diameter. The longest specimens were developed in jelly cultures, and the shortest in agar-agar ones. Peculiar forms were met with after jelly cultures had stood for a considerable time; some bacilli being unequal in width, others having spores at the extremities and taking the stain very badly. Spores that could not be stained were obtained after a potato culture had remained in the thermal chamber at 37° C. for forty-eight hours, or for from fifty-eight to sixty hours at 27° C. When the potato remained for from seventy-two to eighty hours at 37° C. the spores regained the ability to take the stain, and indeed stained better than the bacilli themselves. An excellent stain for the purpose was found to be a solution of rubine in aniline water. In potato preparations kept for from forty-two to sixty hours bacilli were frequently met with presenting entirely unstained portions or vacuoli, the rest being well coloured. The author remarks that the micro-organisms which grow in colonies on plates do not correspond in number with those met with in stools, which implies that peptone jelly and agar-agar are not suitable media for the development of all micro-organisms. The stools of typhoid patients almost always contain typhoid bacilli in greater or less numbers and capable of being multiplied by cultivation. In the present series of researches they were found in sixteen cases out of twenty; in one case of typhus levis and in one of typhus afebrilis the existence of typhoid bacilli was demonstrated quite clearly.

SWIMMING A COMPULSORY STUDY.

THE sad recital of deaths from drowning which have occurred at various parts of our coast during this summer may well impress upon us the need, too little regarded, that every capable member of the community should learn to swim. We have already commented upon this subject, and have gone so far as to advocate the inclusion of swimming as an essential branch of education. Some, perhaps, may think that our view is an extreme one; they may tell us that fatalities from drowning do not, after all, greatly swell the registered death-rate, unless, indeed, we include those due to shipwreck, and that physical education may be regarded as an optional form of training, for which taxpayers would object to become responsible. From such a line of argument we feel obliged to differ. When we consider how great a portion of our population live at the coast, how many of these follow a seaman's calling, to what exigencies even the dwellers in inland districts may be exposed, and are often fatally exposed, by the chances of an occasional sea voyage, or by the customary visit to the seaside, it appears to us at least highly expedient that swimming should be included in the compulsory school course. It must be remembered that the time or trouble involved in teaching this art is as nothing in comparison with that required for intellectual study. The further steps of practice proceed without tuition. Admission to baths is not costly, the habit acquired is never lost, and the gain is invaluable.

MISTAKEN IDENTITY.

A CURIOUS case of mistaken identity, which recalls many others of like nature, was reported last week as having happened before a coroner's jury at St. Martin's Vestry Hall, Strand. The body of a man, aged about fifty, was found drowned near Charing-cross Bridge. A metal box was found in the pocket of deceased, which was identified by the clerks of Messrs. Carter and Co., seedsmen. But more curious still was the testimony of Thomas Kirby, in the employ of Messrs. Carter. This witness stated that he recognised the body as that of a fellow-clerk named Wilson, by the existence of "a peculiarity of two fingers of the right hand." Thus everything tended to warrant the jury in returning a verdict as to the death of the man Wilson, when the latter walked into court, bearing the marks on the fingers by which his identity had been mistaken. We are not informed whether the similarity of the deformity in the two persons was sufficiently marked as to deceive an experienced observer; but, at any rate, there can be little doubt that Wilson would have been "found drowned" though still living, had he not opportunely turned up. It would have been interesting to have watched the sequence of events which would have followed the finding in the coroner's court had Wilson failed to put in an appearance. The case illustrates the value of taking skilled medical evidence in all instances where death has arisen from other than natural causes, and of recording all physical peculiarities in a permanent way—e.g., by plaster-casting or photography. We doubt not that, had the facsimile of the marks on the body of the drowned man been kept for reference, it would have sufficed to show that the deformity differed in essential features from that of Wilson, even if this person had not been forthcoming to astonish the officials and audience of the coroner's court. It has been truly said that the mind is affected more by positive than by negative evidence, and for this reason it is advisable that every effort should be made to establish identity where there is more or less obvious similarity. The standard works on Medical Jurisprudence contain many cases of mistaken identity as regards both dead and living persons, but fortunately there are few where sooner or later the truth has not come to light. Nevertheless, it is of the highest importance that mistakes of the nature of the one under discussion should be detected and rectified before a miscarriage of justice has obtained, or possibly an irretrievable wrong has been inflicted.

THE RISE AND DEVELOPMENT OF NURSING.

UNDER the auspices of the National Health Society a series of lectures on the Art and Development of Nursing have been given by Miss Manson, matron of St. Bartholomew's Hospital, and were concluded on Wednesday last. The lectures have attracted considerable interest, the audiences being large and representative. Miss Manson takes a high view of the duties and responsibilities of a nurse, but insists upon the nurse being the assistant and servant of the doctor, whose eyes and ears she ought to be in the latter's absence. Tracing the history of medicine from the earliest times, she proved by quotations and references to authority that the Romans had hospital tents attached to their armies for the reception of the sick

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and wounded. The graphic description of an ancient Mussulman hospital at Cairo, the completeness of which was remarkable; a reference to the misery of those who were consigned to the wards of the Hôtel Dieu at Paris a century ago, where the arrangements were so horrible as to cause the leaders of the Revolution to change the name of hospital to hospice; and an outline of the treatment of patients in St. Bartholomew's Hospital at the date of its foundation, were amongst the most interesting and effective points of the first address. Miss Manson also emphasised the fact of the womanliness of nursing as a profession in which the best and keenest sympathies of women are awakened towards the sick and suffering. The patience, charity, and compassion that are aroused in the true woman by a nurse's calling tend to develop the best and highest qualities of her nature. The presence of "tares" in the nursing field, as elsewhere, she said, was greatly to be regretted, but the tendency of modern systems of training was to eliminate all the unworthy at an early period of their hospital connexion, and so to increase the value of nursing by adding to the respect in which nurses as a whole were held by all who have to do with them. Miss Manson certainly did good service to the medical profession and to the cause of nursing by her fearless condemnation of practices which we have had to censure on more than one occasion.

MANURE IN KENSINGTON GARDENS.

THE daily press has rendered good service in denouncing the distribution of the mud taken from the Round Pond over the grass by the side of the flower-walk in the Kensington Gardens. On Wednesday we visited the Gardens, and found that the manure had been spread over an immense area of ground. It lay close to the roadway, both on the Kensington and Bayswater sides. The smell might well reach the houses if the wind blew in that direction. Though at that moment there was a strong gale and no sun shining, we nevertheless noticed an odour of musty decaying vegetable matter. This came from the black mud which had been extracted from the Round Pond, where it had accumulated to a depth of two feet. It is obvious that the Gardens at Kensington cannot be treated as a field in some uninhabited rural district. If the grass is in need of strengthening, this is assuredly the occasion for the application of uninjurious and non-odorous chemical manures. The petty economy implied by the use of the mud out of the pond is utterly unworthy of this great city and of a pleasure-ground surrounded by some of the wealthiest habitations in the world.

ELECTRIC BATHS IN EYE DISEASES.

PROFESSOR DENTI, writing in the *Annali di Ottalmologia*, states that he has found electric baths and douches very valuable in several ophthalmic affections, especially in those which refused to yield to more ordinary methods of treatment. His apparatus consists of a vessel of water placed at a height of two metres above the patient's head, a constant current battery of thirty cells, and a glass or ivory box without a bottom. This box is fitted on to the eye. It contains a metal pipe communicating by an indiarubber tube with the water vessel, from which the box can be filled with water; an efferent non-metallic pipe is also provided. The metal pipe is connected by wire with one pole of the battery, the other electrode being placed on the forehead or crown of the head. The sittings are of from four to six minutes' duration. For baths eight or ten cells are used, for douches twenty or more. No unpleasant effects have ever been observed, the stimulating action being only sufficient to produce a slight degree of hyperæmia. The author finds that the baths are best in deep-seated affections, such as those of the vitreous or of the optic nerve; the douches are useful in more superficial affections, such as those of the conjunctiva and cornea. Dr. Denti tried the electric baths in six cases: four of atrophy of the papilla in different stages, one of disseminated cloudiness of the vitreous, and one of double ulcerative blepharitis. The papillar atrophy was benefited most when it was slightest. In one case of atrophy accompanying disease of the spinal cord, the intra-ocular affection was, or appeared to be, arrested. The patient with the cloudy vitreous was so much improved that, though at first he could scarcely distinguish large objects, after thirty sittings he was able to read ordinary print. The patient with blepharitis was completely cured. The douches were employed six times: in three cases of paralysis of the eye muscles, and in three of exudations remaining after ulcerative keratitis. One of the cases of paralysis was entirely cured, the other two being improved; and in the cases of keratitis the success was most marked, the exudation being completely absorbed.

POST-GRADUATE COURSES IN GLASGOW.

IN a former issue we were able to announce that a series of lectures had been arranged to be held during the ensuing autumn. We are now in a position to give more detailed information to our readers. Professor Gairdner, Dr. Joseph Coats, and Dr. David Newman have arranged together to give a series of lectures and demonstrations, which will be held in the Western Infirmary, and which will be made as practical as possible, being illustrated by cases, museum specimens, and diagrams. The subjects to be taken up are as follows. Professor Gairdner will lecture on the Diseases of the Abdomen, which are somewhat loosely grouped by the Registrar-General under the designation Tabes Mesenterica. Dr. Coats will take up the subject of Phthisis Pulmonalis in certain of its aspects, with reference especially to its etiology and the coincident lesions in other organs. Dr. Newman will discuss some of the Affections of the Kidney for which Surgical Treatment may be required, with special reference to pathology and diagnosis. The first two lectures will be delivered at the Western Infirmary on Friday, Oct. 1st, at 1 P.M. and at 2.15 P.M. respectively. The course will be continued every Tuesday and Friday until Oct. 19th, there being two lectures delivered at each meeting. A syllabus of the course will be published, and may be had on application to Messrs. James MacLehose and Sons, St. Vincent-street, Glasgow, from whom also tickets for the joint course may be purchased, price one guinea and a half.

THE RULING HABIT.

IT has often been remarked that an actor is generally extremely different in character and mood off and on the stage respectively, and that his greatest successes are commonly the result of his greatest efforts. There have been many notable exceptions to this rule, but it is certain that an assumed character may so react on the brain and nervous system as to modify the natural type. Another point of interest is that in the case of performers who develop special facilities of action—for example, acrobats—habit, becoming "organised," is part of the nature, so that even in moods the least consonant with those to which the acts learned are professionally associated the ruling habit may be brought into play and determine conduct. It is not therefore certain that when an acrobat killed himself the other day in a lunatic asylum by throwing half-somersaults until he succeeded in striking his head so as to cause death, he deliberately chose that mode of suicide. It is quite as likely that in a paroxysm of madness the habit dominated. Lunatics are often remarkably insensible to pain.

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...D BISMARCK ON STATE MEDICINE.

...olume of some seven hundred pages, entitled ... Politica del Cavour e del Bismarck," has just ...r the competent editorship of Signor Filippo ... well-known Italian publicist and man of ...gh primarily designed for the student of ...book has a great deal to interest the profes... ...nd not least the votary of the healing art, ...oes with the relations of hygiene to the State, ...t of Government to interfere in professional ...he food and water supply of the community ...plex social questions which are brought home ...practitioner every day of his life. Signor ...embering the saying of Bossuet, "C'est là ...ait les grands hommes," has perused the many ... the great Italian and German statesmen with ...e to those passages in which years of special ...d experience are condensed and crystallised, so to ...regnant apophthegms and memorable sayings; ...ult is a volume of inductions and illustrations ...r the whole field of political and public life, and ...der in possession of guiding principles which, ...es as that we are now passing through, will be ...luable as they are opportune. When the tumult ... of an "appeal to the country" has subsided, and ...h of autumn brings the weary professional man ... he has earned, we can imagine few pleasanter ...fitable *compagnons de voyage* than this compact ...y of the wisdom and the wit of the two great ...tatecraft and "unifiers of empire." Be it re... that in continental parliaments the physician ...geon are far more numerously represented than ..., and that many of the discussions, of which this ...s us the etherialised essence, were provoked or ... the interpellations of medical deputies. A ... the German Chamber, a Tommasi-Crudeli or a ... in the Italian one, cannot fail to imprint their ...ed intellects on the debates in which they take ... is one of the charms of Signor Mariotti's skilful ...n that not only does he make us hear Cavour and ...t their best, but that he enables us to catch the ... far-reaching discussions to which the medical ...r has contributed the scientific thoroughness and ...phic calm.

NOVEL MODES OF BURIAL.

...rature of burial continues to increase as one or ...ification of custom commends itself to some as ...esome or convenient. The latest contribution we ... is from the pen of Colonel T. Martin, formerly ...ommissioner in Bombay and Scinde. This writer, ...osed in certain cases to advocate cremation of the ...rs for various reasons to maintain the practice of ...bject to extensive changes in its principle and ... He does not agree with ourselves in condemning ...serve many of the customs now in use. Far from ... "earth-to-earth" system and the exclusive use ...e coffins, he prefers a form of the latter which is ... durable, though fitted with a valve intended ...derground. An elaborate system of subterranean ... tubes, with shafts attached which rise high ..., is contrived to carry off putrid gases; and the ... whole arrangement is to allow of spontaneous ...on without direct contact of the body with the ..., duration of such a process, we must conclude, ... unlimited. For seaport towns, Colonel Martin ..., a similar method, inasmuch as the coffins are ..., with this difference, that burial takes place ... objections to the earth-to-earth system are two. ..., he observes, the absorption of decaying matter by the soil and the chance of contamination of neighbouring springs by drainage from that soil; and, secondly, the greater risk from contagion where this exists if bodies are carried in lightly-made cases than if they are placed in close coffins. Now, neither of these objections is really valid. It is a standing rule of burial that cemeteries should never be laid out in the neighbourhood of a water-supply; while, on the other hand, filtration of putrid matter in a porous soil in which oxidative processes are rapidly going on is not to be dreaded as a source of contamination for wells at a distance. The infection, again, which hangs about a body after death may in any case be rendered innocuous while it is carried to its last resting-place by antiseptic materials, and these may even be of such a kind as to assist disintegration, if not putrefaction, after interment. With regard to sea-burial, there is always this objection, common to it and cremation, that the body so treated is not recoverable if required for judicial investigation. Taken altogether, the new system is, in our judgment, inferior, alike from its elaborate complexity and in respect of its sanitary promise, to the old, when that is rationally carried out and the mortal dust is freely surrendered to the earth itself.

THE HOSPITAL SATURDAY FUND.

THE thirteenth street collection in connexion with the Hospital Saturday Fund, of which Mr. Samuel Morley is the President, will take place to-day (the 17th inst.), when some 1800 persons will take charge of collecting-boxes. Of these 400 will be placed in the East and West Central districts, under the immediate control of the central office of the fund, and the remainder of London will be mapped out into twenty-four districts for the purposes of collection, each district having its own local committee. The efforts of the board of delegates—mainly working-men themselves—are chiefly directed to increasing the collections in the workshops of the metropolis; and this source of income, systematically conducted throughout the year, yields the larger result, although trade depression explains a considerable diminution in this branch of revenue.

OVERCROWDING AT BERLIN.

STATISTICS have been compiled which give anything but a favourable picture of life among the poor in Berlin. The capital of the German Empire contains about 40,000 houses, and of course a certain number of these are high-class mansions, where only one, or at most two, families reside. But, according to *Das Echo*, 2500 houses are divided into from sixteen to twenty apartments each; then there are 20,000 houses which have from twenty to thirty tenements each, and 1000 that are subdivided into more than thirty lodgings. Among these apartments or tenements there are 75,000 consisting of only one single room, which are inhabited by 270,000 persons; this gives an average of four inmates for each room. The apartments divided into two rooms also number about 75,000, and these are occupied by 360,000 persons. Finally, there are 30,000 apartments of three rooms, holding 140,000 persons. Such figures only feebly show the promiscuousness in which a large proportion of the Berlin population live, for they only give us averages, and individual cases are infinitely worse than the average. The houses in the poorer quarters are five and six storeys high, and built so close to each other that there is insufficient light and air. Filth and repulsive odours are the natural result. Many rooms are furnished with but one bed, which serves indiscriminately for the father, the mother, the children, and sometimes even for a lodger, who pays some trifle towards the rent. Naturally the education of the children is neglected, and Berlin is renowned for the extra-

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ordinary number of juvenile criminals who prowl about its streets. From a sanitary point of view the death-rate of Berlin is one of the highest among the large towns of Europe: it is not difficult to trace the effect to its cause.

DUTIES AND DIFFICULTIES OF POOR-LAW MEDICAL OFFICERS.

OUR attention has been drawn to the report of a meeting of the Steyning Board of Guardians, at which an application was made by Mr. Medcalf for fees for attending two urgent cases (one undoubtedly a pauper case) *without* orders, which led to a long controversy amongst the guardians in reference to payment, ending in their agreeing to pay the fee in respect of the case of the pauper. We may take advantage of this case to make a few suggestions to Poor-law medical officers generally, when placed, as they often are, in similar circumstances. In cases of urgency happening to an undoubted pauper, time not allowing for the procuring of an order from the relieving officer, an overseers' order ought to be obtained; but in very extreme cases, as rupture of bloodvessels, fits, poisonings, drownings, &c., no Poor-law medical officer ought to hesitate to go even without an order. Also in reference to pauper midwifery, it is better for the medical officer to attend urgent cases without order than run the risk of being considered inhumane, as very few boards of guardians would refuse payment under such circumstances. There is no question but that Poor-law medical officers have many difficulties to contend with, from which they are not protected by the Local Government Board or guardians, entailing upon them extra work and anxiety, without adequate, often without any, pecuniary remuneration—a state of things, however, which happens, more or less, to all public men.

TENDON JERK AND MUSCLE JERK.

A PAPER was communicated by Drs. S. Weir Mitchell and Morris J. Lewis to the recent meeting of the Association of American Physicians upon Tendon Jerk and Muscle Jerk in Disease (*Boston Medical and Surgical Journal*, No. 25). They held that the knee phenomenon was a direct muscular response, and not due to reflex action; and showed that every muscular exertion, such as winking, if accurately timed, exaggerates these phenomena. To demonstrate this the patient should lie down with the knee slightly bent. At the time that the tendon is tapped, or just before, the patient is directed to wink, and it will be noticed that the jerk is much increased. This is more beautifully shown in the act of phonation, the patient being directed to count strongly, bringing the whole chest into play at the time the test is applied. A decided sensation, such as heat, cold, or an injury, will increase the responsive power of the muscle or tendon which has been struck. Both the tendon and the muscle jerk are reinforced by irritation of distant parts—a phenomenon which has been attributed to an increase of tone in the muscle. This reinforcement disappears when the muscles are cut off from the spinal centres. Observations upon twenty-three cases of locomotor ataxy were also presented in the paper, the cases being classified according to the degree of swaying movement when the patient is standing with the eyes shut. Four classes are thus distinguished: (1) those in which station was normal, (2) those in which it was slightly impaired, (3) those in which it was greatly impaired, and (4) paralytic cases. In the cases examined, the knee and ankle jerks, and their reinforcement, were absent at the time when the cases came under observation. The changes in the arm jerk seem to advance in the same way as those in the leg jerks, although they came on later. In the paralytic stage the muscle jerk is increased, although the reinforcement is absent. In the first stage of ataxy the tendon jerk is diminished or absent, while the reinforcement is fair; in the subsequent stages both the tendon jerk and its reinforcement are absent. The muscle jerk and its reinforcement continue normal through the first two stages; in the third stage, while the muscle jerk is normal, the reinforcement is absent. In the fourth stage the muscle jerk is increased, in the fifth it is diminished, and in the sixth it is absent as well as the reinforcement. The increase of the muscle jerk late in the disease may be due to some as yet undetermined irritative changes in the muscle. They noted also, in associated movements, that in some cases, if the patient is directed to shut his right hand, the left hand will also shut to a certain extent, and if he is sitting down the leg may be drawn up. This condition becomes more marked, with increase of the ataxy. Another symptom noted was a certain degree of prominence of the eyeballs.

THE SEWERAGE OF RICHMOND.

ANOTHER attempt is about to be made to deal with the vexed question of the sewerage of Richmond, which, in common with neighbouring places, is notorious for the multiplicity of schemes which have been advocated, and for the fact, notwithstanding them all, that it still allows sewage to pass into the Thames. A scheme has been contrived which will include Barnes, Mortlake, Kew, and Petersham. Another public inquiry by a Local Government Board inspector must be held with a view to raising the necessary loan of £96,000; and if we may judge by precedent, and by the amount of opposition which is threatened, leading engineers and authorities on the question of sewage disposal will be brought together by the various promoters and opponents, and another long inquiry will result. But whether the work is to be done by the authorities separately or collectively we trust that steps will before long be taken to remove the sewage from this portion of the Thames.

REMNANT OF PUPILLARY MEMBRANE.

DR. VAN DUYSE, of Liége, has been able to examine microscopically an adult eye presenting a membrane passing in front of the pupil—being, in fact, the remnant of the pupillary membrane of the fœtus. It consisted of a quadrangular film, situated on the anterior surface of the lens, and bound by filaments to the inner circle of the iris. These filaments, under the microscope, appeared to have been capillaries from their endothelial nuclei, and they were composed of fibrillar connective tissue. The central film was composed of connective elements immersed in a transparent substratum; here and there epithelial cells were seen. In the centre of the membrane there was a pyramidal prominence consisting of connective tissue.

FOREIGN MEDICAL APPOINTMENTS.

DR. THEREMIN has been appointed Chief Medical Officer to the St. Petersburg Foundling Hospitals, in place of the late Dr. Frœbelius. Dr. Levashoff, of the Military Medical Academy, has been appointed Professor and Director of the Therapeutic Clinic attached to the University of Kazan. The ordinary Professorship of Psychiatry in the University of Kazan has been conferred on Dr. Bekhtereff. Dr. W. Roux has been appointed Extraordinary Professor of Anatomy in the University of Breslau. Prof. Grashey, of Würzburg, has accepted a "ruf" as Professor of Psychiatry in the University of Munich. We are glad to hear that Professor Bollinger, of Munich, is now sufficiently well to announce the resumption of his lectures. Dr. Carl Gussenbauer, Professor of Surgery, has been elected Rector of the German University of Prague.

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...ARY STATE OF THE BLACK COUNTRY.

...proved causal relation between poverty and ... now strikingly exemplified in the so-called ... stretching between Birmingham and Wolver... the centre of the South Staffordshire iron trade, ... long been in a state of great depression. Dr. ..., an inspector of the Local Government Board, ... last Monday before the Tipton Board of Health to ... grave defects in the local sewerage arrangements. ... at Dudley Port he found scores of houses without ... accommodation, the people compelled to rely for their ... supply on wells near ashpits. Scarlet fever and ... prevailed, and the population generally bore ... of physical weakness and impaired health. The ... of the Board thanked the inspector, and a very ... desire was manifest to do all that was possible to ... evil; but, to quote the official statement, "Tipton ... great state of poverty; people do not pay rent; and ... and landladies, no richer than the tenants, cannot ... in repair, or reimburse the Board if they make ...." In the neighbouring town of Wednesbury also ... poverty, and here a serious epidemic of measles ... for some time, and as yet shows no signs of ... The first death from that disease occurred in ... April 30th. Towards the latter end of May ... was noticeable, and twenty-nine deaths ... have occurred in Wednesbury between June 4th ... By far the largest number of cases arose in ... parts of the town, in which likewise the ... greatest, chiefly as the result of want of treat... early stages. Of the twenty-nine deaths above ... no fewer than twelve were complicated with ..., four with capillary bronchitis, and one with ... Dr. Arthur Underhill and Mr. Walter Garman, ... medical officers of health at Tipton and Wednes..., ... doing the utmost, in conjunction with the local ..., to remedy the evil. The state of things calls ... more than blame. A revival of the iron trade ... put matters right; for to crowds of men in ... peace, as to armies in war, nothing is more fatal ... of the necessaries of life and the undermining ... moral depression.

...DEATH IN AN ASYLUM: HOW?

... of sudden death, either accidental or resulting ... inflicted by some person or persons other than ..., has just occurred at the Surrey County Lunatic ... Wandsworth Common. Dr. Biggs, the medical ..., pronounced the evidence of certain lunatics ... that they had witnessed an assault by attendants ... so far as their mental condition was concerned. ... a jury seem to have doubted this affirmation, ... given the attendants the full benefit of the ... case is obviously one which calls for a more ... inquiry, and we venture to hope the Home ... will order a further investigation. The matter ... be left where it is.

...EICESTER AND VACCINATION.

... lately shown how the boasted immunity of ... from small-pox depends on the revaccination of ... staff. This does not protect the unvac... various ways of life are pretty sure to be ... loathsome disease. The number of unpro... for a harvest of disease, blindness, and ... wasting under the lead of the blind guides ... Out of 2000 children born in the last six ... have been vaccinated. Prosecutions for ... suspended, and the people are acting ...

LARGE BILIARY CALCULUS.

AT the recent meeting of the Paris Société de Thérapeutique, Dr. Bouloumié exhibited a biliary calculus weighing 20 grammes = 5·144 drachms. It was of cylindroid shape, and measured 2 inches in length, 3¼ inches in circumference, and on section 2 inches in the long axis of the exposed surface. The calculus consisted almost entirely of cholesterine, with layers of biliary colouring matter, and a small quantity of salts of lime. The patient, a female aged fifty, had had several attacks of hepatic colic, but made a good recovery.

THE HOSPITAL SUNDAY FUND.

THE sum received at the Mansion House up to Thursday evening last reached £35,000. This amount is £5500 in excess of that paid in at the corresponding period last year. Many contributions have yet to come in, which, we trust, will bring up the fund to a total somewhat commensurate with the size and wealth of the largest and richest city in the world.

TUBERCLE OF THYMUS.

A VERY small child, the issue of healthy parents, died from marasmus forty-two days after birth. At the necropsy, three tubercles each the size of a pea, and a fourth one the size of a nut, were discovered in the thymus gland. Microscopical examination detected the presence of the characteristic bacilli, though not in great numbers. There were no tubercles in any other organs. The child had been fed with boiled cow's milk. Demne, who records the case in the *Fortschritte der Medicin*, No. 9, regards it as one of congenital tuberculosis.

SMALL-POX AT MARSEILLES.

Le Journal de Médecine et de Chirurgie for June reports that the epidemic of small-pox which has prevailed in Marseilles during the last nine months continues to increase in severity, and yet the people seem very averse to vaccination. The disease proved fatal to 953 persons in the first three months of this year, but only 325 were vaccinated in the dispensaries specially established for that purpose in different parts of the city. With such a state of things in the principal Mediterranean seaport, and with cholera on the shores of the Adriatic, our countrymen may well be circumspect in going far south for their summer holidays.

CATHETERISM OF THE URETER.

DR. LÉO WARNOTS, surgeon to the Hospital of Saint Jean, has been awarded the degree of Doctor of Medicine with *la plus grande distinction* by the University of Brussels, for his thesis on "Catheterism of the Ureters in the Female." The author discussed the methods of G. Simon and of Pawlik, collecting a large number of facts in support of his views, and thus contributing to show that this operation may in some cases be of great value where operative interference with the kidneys of a female patient are contemplated.

THE PASTEUR INOCULATIONS.

IN Vienna Dr. Ullmann, assistant to Prof. Albert, has inoculated thirteen persons who had been bitten by animals thought to be rabid. Dr. Barattieri is establishing a Pasteur Institute in Milan. Both Dr. Ullmann and Dr. Barattieri have studied the subject in Paris with M. Pasteur himself.

DR. SEMMOLA, Professor of Therapeutics in the University of Naples, has been raised by Royal Warrant to the dignity of a Senator of the Kingdom of Italy.

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THE Madrid Jennerian Society, which has for some years past been the centre for discussions on questions connected with vaccination arising in the Spanish capital, has ceased to exist—at least as a separate society,—various causes having combined to render its fusion into a more comprehensive scientific body desirable. The Medico-Chirurgical Academy has, after some time spent in negotiations, consented to absorb it, and to constitute a Vaccinological Section. The presidency of the new section has just been conferred, after election, on Señor Serret, editor of *El Genio Medico-Quirurgico.*

THE Administrative Committee of the Cantonal Hospital of Geneva has introduced an innovation in the mode of election of members to its medical staff. The committee determined that a competitive examination should decide which of the candidates were to be appointed. Under this new system M. Goetz was appointed physician, and M. Comte surgeon to the hospital; M. Cordes to be surgeon to the maternity.

MUCH sickness having prevailed amongst the troops occupying the new barracks at Gosport, owing, it is believed, to the foul condition of the old moats hard by, the War Office has ordered the barracks to be closed for two months, the men being directed to remove to the forts outside the town.

SIR W. MAC CORMAC'S "Notes of an Ambulance Surgeon" have recently been translated into Japanese, and the original illustrations have all been faithfully and cleverly reproduced both in the form of lithography and woodcuts. The name of the translator is Brigade-Surgeon Yakoi, of the Imperial Army Hospital, Yeddo.

M. PONCET stated at a recent meeting of the Paris Biological Society that he had always found microbes in chalazæ, which could be cultivated, the culture applied to the conjunctiva of a rabbit setting up a violent inflammation and quickly producing hypopion.

REPORT
OF THE
Lancet Commission
ON THE
POLLUTION OF THE THAMES AT THE HENLEY REGATTA.

THE growing popularity of regattas on the Upper Thames is giving rise to a new sanitary danger which must not be overlooked. Local authorities have not yet fully realised that when an exceptional number of persons congregate together special precautions must be taken. We are always ready to denounce the pilgrimages practised by Eastern populations; but at home our boat-races and our horse-races are so many small Meccas, that endanger alike the health of the visitors and the surrounding inhabitants. By fasting and fatigue the Mahomedan pilgrim increases the risks of his journey. By feasting and over-exertion the English pleasure-seekers and athletes also favour the outbreak of disease. It will be urged that in England the crowd, though immense, is so quickly gathered together, and then so promptly dispersed, that there is no time for any serious evil to arise. Also, if the towns or villages near a great racecourse are overcrowded for a day or two, these localities may profess to be properly administered by competent sanitary authorities and drained in the best way possible. There is, nevertheless, many reasons to doubt the efficiency of sanitary arrangements in towns renowned for their sporting associations. In any case, if the houses on land are under some sort of control, it is only too evident that the increasing number of habitations which float about on the water altogether escape any such supervision.

Formerly a regatta brought a few thousand people to the river-side for the brief space of an afternoon, and naturally no serious consequences were anticipated. But now the Henley Regatta is no longer limited to an afternoon, but it is prolonged for three whole days. People do not merely crowd on the river-bank for a few hours, they come and live on the water for the better part of a week. Not content with filling every house on shore with lodgers and visitors, houses are now built on old barges, and these, tugged up the river, anchored close to each other, have converted the pure stream into a dirty street. One or two house-boats might be allowed, but last week along the length of the course, for a distance of about a mile, these houses, closely packed, were stationed for several days. Here and there we have a steam launch, a large boat, or some other sort of craft; but these vessels, whatever their shape or name, are inhabited, and therefore contribute to the pollution of the river. Most of the house-boats and many of the other craft have closets on board, which drain directly into the water. The law forbids direct drainage into the Thames, but these house-boats openly disregard this law. The various towns and villages situated beyond the intake of Thames water for the drinking-supply of London are put to the greatest trouble and expense in order to dispose of their sewage without polluting the river. The many schemes for dealing with the drainage of the Thames valley, so as to prevent the contamination of the river on which London depends for its supply of potable water, have been discussed over and over again in these columns. Yet while so much trouble is taken, so many financial sacrifices imposed, to settle this difficult and complicated question, an increasing number of mere pleasure-seekers are allowed to set these sanitary precautions at defiance, just at the season of the year when their strict observance is most necessary.

The origin and development of the cholera germ are not yet known. It would be impossible to say what amount of germs is necessary to pollute a river, or how far these organisms would travel down a stream without losing their vitality. But that cholera follows the watercourses was fully demonstrated by the recent epidemic in Spain. Now the cholera has broken out again in Italy, and, of all places, in one which most affects the interests of England. At Brindisi, where travellers to India by the overland route embark and disembark, the cholera is now prevailing. Further, it is evident that a large proportion of persons coming from India belong precisely to the very class most likely to attend festivities such as the Henley Regatta. These persons, by stopping a few hours or days at Brindisi, might bring over with them the germs of cholera—just as, last year, sailors from Barcelona and other ports of Spain brought cholera over to English towns. At Bristol, notably, where a sailor died of Spanish cholera, it was possible to disinfect the drains of his house and prevent the disease travelling further. But if, at the Henley Regatta, anyone living on a house-boat had been seized with cholera, the specific germs would, in all probability, have been discharged into the Thames. What mischief would have ensued we are unable to surmise. It is to be hoped that the dejections of more than one cholera patient are necessary to contaminate a river; but we have no certainty of this immunity. Also, if the germs did not travel down as far as the water intake at Teddington, it must not be forgotten that the water of the Thames is employed on the spot. If most persons have the prudence to avoid drinking this water, their servants do not scruple to use it for washing plates, &c. Hence the presence of cholera on one house-boat might well communicate the disease to other similar crafts floating close by, but lower down the river.

On land at Henley it will be found that the inhabitants drain into cesspools. They suffer, therefore, from all the inconveniences of this system. The wells, as usual, are placed too near to the cesspools, and are consequently often contaminated. Sore-throat, scarlet fever, and diphtheria, are too well known at Henley. Yet these risks, this danger and suffering, are endured because the inhabitants of Henley feel that it is their duty not to drain into the Thames. If a humble cottager living on the banks of the river sought to protect the lives of his children by removing his

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cesspool and substituting a small pipe to drain direct into the Thames, he would be prosecuted. But numerous and fashionable people, who in the superfluity of their wealth can purchase or build house-boats, are allowed to have closets on board that empty into the water which we in London are compelled to drink.

This is not the only grievance. The services of dustmen and scavengers are alike judged superfluous. All the refuse—the offal, garbage, and rubbish resulting from so many picnics and so much feasting—is thrown overboard. The appearance of the river was simply scandalous. Out in the middle of the stream we saw floating slowly away every sort of refuse; a portion of course got entangled between the shore and the boats and there formed unpleasant accumulations. Opposite the "red cottages" on Saturday, the day following the last race, we visited a house-boat and examined the nature of the waste materials floating between this dwelling and the shore. There was a great number of decomposing salad leaves, some rotten fruit, innumerable egg-shells with part of the yellow of the eggs still adhering, several large pieces of bread, the skin of a salmon, a skirt of lamb, stale pieces of fat and meat, some spring onions, innumerable crushed lemons, faded flowers, lobster-shells, bruised tomatoes, and a dead roach. A bucketful of water taken from the midst of this garbage smelt very unpleasant. On applying Nessler's test it gave a deep reaction, pointing to the presence of organic contamination. A few yards lower down the river we met with another dead fish. Perhaps the pollution had proved fatal to these fish. The various creeks down the river, where the action of the current is feeble, were very foul indeed, and we heard many complaints concerning the abominable odours that arise in such places.

Close to the starting-point of the race-course there is a small creek where the water seemed exceptionally foul. Special complaints had been made of the bad odours arising at this particular spot. The water had a curious musty vegetable smell. Without attempting any quantitative analysis, by merely applying Nessler's test the colouration obtained was so intense that it was evident the amount of ammonia must have exceeded a grain per gallon. Indeed, by boiling some of the water with caustic potash, the smell of liberated ammonia was quite distinct. Thus, where the water is comparatively stagnant the amount of organic decomposition noted is enough to account for the most dangerous condition of the surrounding atmosphere; while, even in the open stream, the presence of ammonia can be clearly traced in the water collected round about the house-boats and amidst the garbage which is thrown from these vessels into the river.

That dangers must spring from such a state of affairs is obvious to all, and it is not necessary to point out any individual instance of harm done. But such cases have come under our notice. We have seen and questioned local and other practitioners who have attended cases of malignant sore-throat following closely on exposure to the effluvium which has disturbed garden parties held on the river-bank at the time of the Regatta. It has further been maintained, in our presence, that sore-throats and diarrhœa have affected the rowers who have been exposed to the corruption surrounding the house-boats. At the same time the population on the river is exceptionally healthy. Invalids and delicate persons do not usually participate in regattas, and plenty of out-door exercise will enable the human frame to resist many injurious influences. But this comparative immunity does not justify the contamination of the river.

The Thames, however, might easily be saved from pollution by a few very simple measures. It would, firstly, be necessary to enact a law or bye-law abolishing all closets on board house-boats and other inhabited vessels. It should be the practice to land for sanitary purposes. Secondly, it is absolutely indispensable that the sanitary authorities, on both banks, should come to a mutual agreement for the fitting out of a scavenger boat. This boat would come in the morning and take away from all the floating habitations the dust, the night stools, the refuse and garbage collected during the previous twenty-four hours. When this facility has been provided, then anyone throwing rubbish into the Thames should be prosecuted. A few detectives could watch, and, by making an example of the first cases, the practice would soon be stopped. Neither of these measures would entail any great outlay, and even those most concerned would willingly submit to regulations obviously made in their own interest as well as in the interests of the community at large.

THRUST WOUNDS THROUGH THE ORBIT.

THE roof, and more especially the inner wall of the orbit, is so thin and fragile that a comparatively slight thrust with a pointed or a blunt instrument, like the end of an umbrella or of a walking-stick, may be sufficient to penetrate into the closely contiguous brain substance. Such a case was placed on record in THE LANCET of June 19th by Dr. Campbell Pope and Mr. Rickman Godlee. Aphasia ensued, but under judicious management the patient made an excellent recovery; and the opportunity is a favourable one for reviewing a class of comparatively rare injuries possessing exceptional anatomical and clinical interest.

We have the authority of Sir Prescott Hewett and Mr. Whitaker Hulke for the statement that "in no class of cases is the surgeon more likely to be put off his guard as to the exact nature and extent of the injury. At first, all that may be apparent is the slight injury of the external parts—a trifling wound of the upper lid, and sometimes not even that, for the instrument may have slipped under the lid and left merely a patch of ecchymosis on the conjunctiva. Brain symptoms there may be none. Two or three days may pass over, during which the patient goes about as usual; then brain symptoms make their appearance, sometimes suddenly, and the patient dies in the course of a few hours or days, and the true nature of the case is revealed only by the post-mortem examination."[1] Exactly concordant is the most recent authority, Mr. George Lawson, in Christopher Heath's "Dictionary of Practical Surgery": "One curious fact connected with these punctured fractures of the orbit is that the severe nature of the injury is often overlooked; the external wound may be small, the immediate symptoms may be trifling, and the exact injury is not even surmised." The patient may be able to continue work for some time, then become delirious, comatose, and die, or recover under the most extraordinary circumstances. In THE LANCET, 1837-8, vol. ii., p. 16, Mr. Congreve Selwyn, consulting physician to the Ledbury Dispensary, recorded the case of W. B——, aged four, who fell on the floor whilst eating his dinner. The knife—a common cheese-knife, about 4½ in. long in the blade, and averaging three-quarters of an inch broad—entered the right orbit nearly horizontally to the depth of three inches and a quarter, immediately beneath the superciliary ridge, and penetrating (through the posterior part of the orbital plate of the frontal bone) the substance of the brain, injuring in its course the optic nerve. It required all the father's force to dislodge the knife from its situation. Hæmorrhage was very slight. Some portion of the brain protruded after removal of the knife, and more was discharged on the eighth day after the injury. Some sleeplessness and delirium followed, but under low diet, little or no medical treatment, and the application of strips of adhesive plaster to the wound, healing was complete in six weeks, and the patient was alive and well seventeen years after.

In illustration of the little importance sometimes attached to these orbital thrust wounds at the time of infliction and of their terrible import, no more striking case can be adduced than one here abridged from a letter of Sir Philip Crampton: "In the winter of 1814, a lieutenant in a Highland regiment, when running on a dark night to escape from a shower of rain, came rather violently in contact with an irritable old man, who made a thrust at him with an umbrella, the point of which struck him immediately beneath the left eyebrow. The wound was attended with so little local pain or shock to the system, that the patient walked to my house in Dawson-street (a distance of at least half a mile), and having mentioned the occurrence as one to which, however, he attached no importance, he begged of me to look at the wound in the eyelid, which still continued to bleed slightly. I found a wound of about three-fourths of an inch in length in the upper eyelid, exactly in the seat of the deep fold which is formed in this part by the action of opening the eye and looking upwards. When the eyeball was turned up, there was no appearance of wound, but when the eyelid was drawn downwards the wound gaped, and showed the conjunctiva, which still completely covered the upper portion of the ball of the eye. The vision was quite unimpaired. The wound having been united by two points of

[1] See Holmes' System of Surgery, third edition, vol. i., p. 585-6.

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suture, the patient walked to his lodgings in Grafton-street. I called on him the next morning, and found him at breakfast; he made no complaint but of some stiffness in the eyelid. The following morning, at 7 A.M., I was called to him in a hurry, and found him in very strong convulsions, which continued with short intervals of coma until 8 or 9 o'clock in the evening, when he expired. At the post-mortem examination the brass ferrule of the umbrella, nearly two inches in length, was found to have penetrated through the orbital plate of the frontal bone, and was lodged in the substance of the left hemisphere of the brain; it was embedded in a thin coagulum of blood, which extended into the left lateral ventricle."[2]

An equally formidable injury, though happily unattended with loss of life, was published in THE LANCET for 1862 (vol. i., p. 626) by Mr. W. R. Beaumont, formerly professor of surgery in the University of Toronto. A man while looking on at a rocket being fired felt a terrific blow on the left eye. He walked some thirty yards to a tavern, where he was seen in about ten minutes by Mr. Beaumont. He was sitting in a chair, with pale face and lips and extremely small weak pulse. No expression of pain; no symptom of cerebral lesion. Vision of the eye on the injured side was immediately and completely lost, but the eye itself appeared uninjured. The only mark of injury visible was a thin splinter of wood, not half an inch long, projecting from the orbit immediately above the inner canthus. Mr. Beaumont adds: "I placed the man on the floor, half recumbent, his head and shoulders being supported. I then endeavoured to extract with tolerably strong forceps what I supposed to be a small portion of a rocket shaft, but I found that I could not stir it. I sent for and soon obtained a pair of strong, flat-bladed pliers, with which even I could not move by direct traction the extruded shaft, so tightly was it wedged between the bones through which it had passed. Knowing that the shaft of a rocket is not round like that of an arrow, but square, I was aware of the small extent to which it could be rotated on its axis; still I found on trying to do so that a slight degree of movement on its axis was not impossible, and by turning it several times a few degrees alternately to the right and to the left I at last loosened it, and slowly drew out five inches and a half of the rocket shaft, the transverse section of which proved to be four-tenths of an inch square." A profuse gush of blood followed, but ceased in a few minutes after the application of iced water. The patient did not even faint, and in less than fifteen minutes, without any help, got up from the floor and walked. He suffered severe headache and vomiting during the first twenty-four hours, but not much pain after that. In three days he was dressed and walking about his room. The wound healed very readily, with scarcely any suppuration; no piece of bone came away. There was no paralysis except loss of vision of the left eye and loss of sensation in parts of the infra-orbital nerve. The only treatment adopted was cold water to the head and a few doses of calomel and jalap. Forty days after the accident the man was in good health and perfectly well, excepting left blindness. He continued so when again seen after a lapse of three years, but he complained of his memory being decidedly impaired. As to the exact course which the rocket shaft had taken, Mr. Beaumont adds, "It seemed, as I withdrew it, to have passed almost directly backwards, nearly parallel with the mesian line, apparently through the sphenoidal fissure, and into the base of the middle and posterior lobes of the left hemisphere of the brain; but as it had not killed him, nor even caused any symptoms of cerebral lesion, one can scarcely think that it had taken this direction, especially as all the nerves passing through this aperture had escaped uninjured. . . . . I am sure from the direction of the shaft, as I slowly extracted it, that it had not passed obliquely downwards into the pharynx, and therefore that it must have taken a course either immediately above or below the base of the skull. Under either condition the patient's escape from death renders the case one of the most remarkable in the annals of surgery."

For notes of the following hitherto unpublished case we are indebted to Mr. A. F. Hawkins, obstetric surgeon to the Queen's Hospital, Birmingham. A female pupil (aged three) at a neighbouring Board school fell on the floor while in the act of knitting, and broke one of the needles. Two pieces were found, measuring respectively three-quarters of an inch and four inches and three-quarters, but on joining them and comparing them with the other needle it was evident that a considerable piece was missing. The child seemed dazed for a moment, but then went on with her lessons, the schoolmistress noticing at the time a spot of blood above the eyelid and just under the eyebrow on the right side. The next day the child again attended school, apparently all right, but when she presented herself the following day she did not seem quite so well, and it was deemed prudent to take her to the Queen's Hospital Casualty Department, at the time in charge of Mr. Hawkins. He noticed a small scab where the blood-drop had appeared at the time of the fall, but as the child presented no special symptoms, he advised that she should be taken home and carefully watched, diligent search to be again made for the missing piece of needle, and the child to be brought to the hospital at once if in any way complaining. Next day (fourth from the accident) the child was brought to the hospital with paralysis of the left side, more marked in the upper than in the lower extremity. Mr. Hawkins at once summoned a consultation, which was attended by Mr. Bennett May and Mr. Priestley Smith. The child was placed under chloroform, and an incision made through the eyelid and subjacent tissues in the situation of the original blood spot. At a depth of about three-quarters of an inch the probe came in contact with a hard substance, which was seized with a fine pair of forceps and drawn out, proving to be the missing piece of knitting-needle, of which the annexed woodcut is an exact representation. As the child was lying flat on the table during the operation, it was specially noted that in drawing out the needle it was almost perpendicular to the eye; if the deeper end deviated at all, it was slightly upwards. The symptoms of paralysis continued for ten days, when they began to subside. They then did so rapidly, and the child was well within another week. She continued so when seen a year afterwards.



The concurrent practical teaching of these cases is that great importance must be attached to all wounds, however small and apparently insignificant, in the neighbourhood of the eye as well as in the globe itself, especially if there be the slightest reason to suspect penetration and lodgment of a foreign body. In consequence of the looseness of the soft tissues, and of the bony spaces in the neighbourhood of the eye, it is not difficult to understand that foreign bodies may be driven into, and ensconced in, comparatively safe quarters, though apparently driven into the brain. But in some cases the symptoms, in others the necropsy, place beyond doubt brain penetration in some thrust wounds through the orbit. Immediate extraction is obviously indicated when any portion of the offending agent can be seen or felt, and the last-mentioned case in the series justifies the prudence of cutting down to search for the foreign body, when its presence is strongly indicated by the facts and history of the accident, and by the evolution of nervous phenomena.

GEOGRAPHICAL DISTRIBUTION OF FATAL CANCER DISEASE.

THE recently issued annual report of the Registrar-General for the year 1884 contains some valuable statistics bearing upon the marked increase of the recorded death-rate from cancer during the past thirty-five years, and upon the geographical distribution of this disease. The increase of the mortality from cancer in England and Wales in the ten years 1871-80, compared with the ten years 1851-60, was equal to 62 per cent. among males, and to 43 per cent. among females. It also appears that the increase between these periods, both among males and females, was greater at each successive age period after thirty-five years. The report points out that "the very unequal increase in the male and female cancer mortality seems difficult of explanation on the hypothesis that the general increase has been altogether real, and not in great part only apparent." It is suggested that

[2] The Dublin Quarterly Journal of Medical Science, vol. xi., 1851, p. 362.

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the more probable explanation of this inequality is the fact that "the cancerous affections of males are in a much larger proportion internal or inaccessible than are those of females, and consequently are more difficult of recognition, so that any improvement in medical diagnosis would add more to the male than to the female figures." This argument gives reasonable probability to the supposition that a very considerable, though unknown, proportion of the increase of recorded cancer mortality is really the result of improved diagnosis. With regard to the geographical distribution of fatal cancer, the report gives a table showing the mean annual death-rate from this disease in each of the registration counties in England per 1,000,000 persons, male and female, living during the ten years 1871-80; these rates have been laboriously corrected for variations of age and sex distribution in the county populations, and are therefore strictly comparable. The most noticeable feature of this table is the marked excess of cancer mortality in London; this apparent excess would, however, certainly be lessened, and might disappear, if it were possible to eliminate all those fatal cases imported into London for hospital treatment or operation. A somewhat similar explanation is suggested for the excessive mortality in Devonshire, on the ground that the coast of that county includes so many health-resorts of sick persons. It is pointed out, however, that the corrected cancer death-rates in many of the counties around London also show a considerable excess, indicating that this part of England, especially the Thames valley, is favourable to the development of cancer. It has long and generally been asserted that cancer is specially prevalent in fen districts and in low-lying ground, and the accuracy of this widely accepted opinion is corroborated by these new statistics. The counties of Cambridge, Northampton, Huntingdon, and Bedford all show cancer death-rates considerably above the average; at the same time, however, it appears that in Essex and in Lincolnshire the rate from this disease was below the general English average. It is pointed out that in most of the mining and industrial counties, the cancer death-rate is below the mean rate in agricultural counties; and, further, that almost all the highest county rates occur in the eastern, and most of the lowest in the western, half of the kingdom. There are, however, enough exceptions to these generalisations to forbid their unreserved acceptation. Judged, however, by the recorded facts of the thirty years 1851-80, the highest mortality from this disease is shown in London and the three registration divisions adjoining London; while the divisions with the lowest mortality are the north-western, the north-midland, and the Welsh. In dealing with the figures, and drawing conclusions therefrom as to the geographical distribution of fatal cancer, it should constantly be borne in mind that the value of the recorded facts depends entirely upon the accuracy of the medical diagnosis and certification of the cause of death, as entered in the death register. It may safely be assumed that there is an intimate relation between general accuracy of diagnosis and the proportion of duly certified deaths. In connexion with this, it may be pointed out that the recent proportion of uncertified deaths was only 1·3 per cent. in London, whereas it ranged upwards in the other divisions to 8·5 in the Welsh division. It is possible, therefore, that the recorded excess of cancer mortality in London may be partly due to more accurate diagnosis and certification, and the low mortality in Wales to more or less defective diagnosis and certification.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF INSPECTORS OF THE MEDICAL DEPARTMENT OF THE LOCAL GOVERNMENT BOARD.

On Diphtheria in certain districts in Hertfordshire, by Mr. SWEETING.—This is the last of a series of reports which Mr. Sweeting prepared for the Local Government Board, and it involved investigation into the circumstances of the prevalence of diphtheria in the Hitchin, Bishop's Stortford, and Hemel-Hempstead rural districts, and in the Watford urban district. In the *Hitchin Rural District* the diphtheria mainly affected the village of Whitwell, with its 750 inhabitants. In the epidemic under notice some 58 undoubted attacks of diphtheria came under observation, of which 19 were fatal. The disease was first recognised in August, 1884, but some minor throat ailments had existed before that date, and some fatal attacks of so-called croup had previously occurred in the neighbourhood. But, whatever its origin, the disease lingered in Whitwell up to the end of 1885, when persons were still suffering from the complaint. Milk was excluded as a cause, whereas personal communication between sick and healthy must be regarded as having largely contributed to its spread. Beyond school closure and a little fumigation no action was taken on the part of the authorities to check its prevalence, and no attempt was made by the hire of a cottage or otherwise to provide any means for the isolation of the sick. In the *Bishop's Stortford Rural District* recent diphtheria has been confined to the villages of Braughing and Little Hallingbury. During a first outbreak at Braughing, beginning in December, 1883, eight died; the second outbreak, terminating in August last, only led to one fatal attack. At Little Hallingbury, with a population of 500, there were between June and November, 1885, 63 attacks, of which 11 terminated fatally, the largest prevalence being during August and again in the last week of October. Between the ages of three and thirteen years the percentage of mortality was 25·0; between thirteen and twenty years it was 7·7. The origin of the disease was obscure, for throat affections allied to diphtheria were at the time prevalent in adjoining parishes, and the sanitary circumstances of the first house invaded were bad. The spread of the infection could, however, be easily traced to personal communication; slight cases of non-membranous sore-throat being apparently, in several cases, the links in the chain of diphtheria infection from person to person. But the question of the spread of the infection through the agency of water is also discussed, Dr. Turner, the medical officer of health, having drawn Mr. Sweeting's attention to a curious sequence of cases along the side of a stream which, on the one hand, received sewage from an infected house above, and, on the other, was resorted to for water a little lower down by those who were subsequently attacked. The facts of the case are stated, but it is admitted that they are by no means conclusive. In the *Hemel-Hempstead Rural District*, 13 deaths from throat malady occurred in 1885, school influence largely aiding in its spread, and this especially at Apsley End. In view of this, the health officer advised the closing of the school there, but the advice was not acted on. The actual power of closing a school, subject to an appeal to the Education Department, rests with the sanitary authority, and they can, if they choose, and as they did in this case, disregard the advice of their health officer. In the *Watford Urban District*, diphtheria, which for many previous years had been comparatively absent, caused 28 deaths in 1885; but adding to these the fatal attacks from diseases like "croup," the total fatality amounted to 36. Here, again, there was much obscurity as to the origin of the disease, and locally the question of sewer ventilation was largely identified with the malady. But though the sewers are imperfectly ventilated, there seemed to be an absence of any special link between this condition and the incidence of the disease. No well-considered scheme of school closure was arranged, and the means of isolation available were not such as to secure the stay of the disease by that means. The most remarkable feature about this group of outbreaks is the fact that the disease was widely prevalent over a considerable area of Hertfordshire, and this quite irrespective of the influence of any local conditions that could be recognised. The question of an aerial diffusion and the operation of an atmospheric influence receive support from outbreaks of this character, and this especially when an exhaustive inquiry fails to ascertain the existence of any other cause.

On the Sanitary Condition of the Hollingbourn District, by Dr. PARSONS.—This rural district resembles many others in the country with respect to its imperfect drain and cesspool sewerage, to its common privy and resulting nuisance, and, in part, to its water-supply from wells, which are so situated as to be liable to excremental pollution. The medical officer of health is reported as keeping no journal or notes of his inspection or correspondence, and as making only one general and certain special inspections of his district annually. The information he receives from the registrars is useless, except for mere statistical purposes, and no lists of pauper sickness are supplied to him. In one of the inspector of nuisance's books as many as six or eight months go by without an entry, the duties of the inspectors being,

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however, fairly discharged if account be taken of the multifarious duties which detain them in other directions. Into this district scarlet fever was imported, and it prevailed from November, 1885, to April, 1886. The first case came under notice on Nov. 4th, and one official in Poor-law matters tells another official belonging to the sanitary authority about it, and proposes that food &c. should be supplied. Then the district medical officer is told not to enter the attacks in his medical relief list, but to continue attending them on behalf of the sanitary authority. The disease continuing to spread, a nurse was obtained, and the clerk and inspector of nuisances were to supply all necessaries. No report was prepared by the medical officer of health until Jan. 14th, and then he stated that the cottages affected were quite unfit for human habitation, the well unfit for use, and the ground full of cesspools. No attempt was made to isolate the sick. The story as told seems to be one of faulty administration. It is much to be regretted that conditions of house accommodation, &c., are allowed to remain unreported on until the very condition—namely, disease prevalence—which efficient sanitary administration is intended to prevent has actually been brought about. And then, although this rural sanitary authority seem, in their generosity, to have gone beyond their functions in supplying things which were out of their province, yet they appear to have forgotten that their special duty is to prevent disease. From this point of view, whether the action of one or other of the parties concerned is looked at, the steps taken can, as the report says, "only be regarded as a costly failure." Tents, it appears, are kept at the workhouse "for the isolation of small-pox cases." But when scarlet-fever prevails, a disease which kills a far larger number of human beings than small-pox does, and against which no special means of prevention are available, then the tents seem to be kept locked up. What is really wanted in these rural districts is a small amount of isolation accommodation of a permanent character, and this, it must above all things be remembered, should always be available for use at a moment's notice. Then if each officer, whether Poor-law or sanitary, knows what are his special duties, but little difficulty should arise in checking such a prevalence at the onset.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 5733 births and 3213 deaths were registered during the week ending July 10th. The annual death-rate in these towns, which had been equal to 16·8, 17·0, and 17·6 per 1000 in the preceding three weeks, further rose last week to 18·4. During the thirteen weeks of last quarter the death-rate in these towns averaged only 18·6 per 1000, and was 2·9 below the mean rate in the corresponding periods of the ten years 1876-85. The lowest rates in these towns last week were 11·7 in Wolverhampton, 11·8 in Huddersfield, 12·6 in Brighton, and 13·1 in Sunderland. The rates in the other towns ranged upwards to 22·3 in Cardiff, 23·7 in Blackburn, and 25·2 in Preston. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had steadily increased in the preceding four weeks from 263 to 333, further increased (under the influence of the recent intense heat upon infantile diarrhœa) to 477; they included 225 from diarrhœa, 116 from measles, 58 from whooping-cough, 33 from scarlet fever, 27 from "fever" (principally enteric), 18 from diphtheria, and not one from small-pox. No death from any of these zymotic diseases was recorded last week in Huddersfield or in Halifax, whereas they again caused the highest death-rates in Bolton, Portsmouth, and Preston. The mortality from diarrhœa showed a further considerable increase upon the low rates recorded in recent weeks, and showed the largest excess in Salford, London, and Wolverhampton. Measles caused the highest death-rates in Portsmouth, Bolton, and Preston; and "fever" in Portsmouth, and Cardiff. The deaths from diphtheria in the twenty-eight towns included 14 in London. Small-pox caused no death either in London and its outer ring or in any of the twenty-seven large provincial towns. The number of small-pox patients in the metropolitan hospitals situated in and around London, which had declined in the preceding three weeks from 31 to 14, were 12 on Saturday last; 3 cases were admitted to these hospitals during the week, against 4 and 2 in the previous two weeks. The deaths referred to diseases of the respiratory organs in London, which had been 184, 194, and 197 in the preceding three weeks, declined again last week to 190, and were 17 below the corrected average. The causes of 81, or 2·5 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Leicester, Bristol, Brighton, and in four other smaller towns. The largest proportions of uncertified deaths were registered in Oldham, Sheffield, and Halifax.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 20·2 and 20·8 per 1000 in the preceding two weeks, declined to 19·7 in the week ending July 10th; this rate exceeded, however, by 1·3 the mean rate during the same week in the twenty-eight English towns. The rates in the Scotch towns last week ranged from 14·7 and 16·7 in Dundee and Greenock, to 28·6 in Paisley and 29·5 in Perth. The 471 deaths in the eight towns showed a decline of 43 from the number in the previous week, and included 24 which were referred to diarrhœa, 17 to whooping-cough, 11 to measles, 7 to scarlet fever, 2 to "fever," (typhus, enteric, or simple), 2 to diphtheria, and 1 to small-pox; in all, 64 deaths resulted from these principal zymotic diseases, against 65 and 59 in the preceding two weeks. These 64 deaths were equal to an annual rate of 2·6 per 1000, which was 0·1 below the mean rate from the same diseases in the twenty-eight English towns. The fatal cases of whooping-cough, which had been 21 and 10 in the previous two weeks, rose again last week to 17, of which 14 occurred in Glasgow and 2 in Edinburgh. The deaths from measles, on the other hand, which had been 20 and 15 in the previous two weeks, further fell last week to 11, and included 8 in Edinburgh. The 7 fatal cases of scarlet fever showed a decline of 3 from the number in the previous week, and included 4 in Glasgow and 3 in Edinburgh. The 2 deaths from diphtheria were returned in Edinburgh, and the 2 from "fever" in Glasgow; both numbers were considerably below the average. The death classed to small-pox was certified as chicken-pox, and occurred in Edinburgh. The deaths attributed to diarrhœal diseases, which had increased in the previous four weeks from 7 to 16, further rose last week to 24, of which 7 were returned in Glasgow, 7 in Dundee, and 5 in Edinburgh. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 93, 86, and 77 in the preceding three weeks, further declined last week to 74, but were 13 above the number in the corresponding week of last year. The causes of 61, or nearly 13 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 24·7 and 22·9 per 1000 in the preceding two weeks, rose again to 23·1 in the week ending July 10th. During the thirteen weeks of last quarter the death-rate in the city averaged 25·6; whereas the mean rate during the same period did not exceed 17·2 in London and 19·7 in Edinburgh. The 156 deaths in Dublin last week showed an increase of one upon the number in the previous week, and included 14 which were referred to the principal zymotic diseases, against numbers increasing from 5 to 12 in the preceding four weeks; 4 resulted from scarlet fever, 4 from diarrhœa, 3 from "fever" (typhus, enteric, or simple), 2 from whooping-cough, 1 from measles, and not one either from small-pox or diphtheria. These 14 deaths were equal to an annual rate of 2·1 per 1000, the rates from the same diseases being 3·6 in London and 4·1 in Edinburgh. The fatal cases of scarlet fever and of diarrhœa exceeded the numbers returned in any recent week, while those of "fever" and of whooping-cough were fewer than those in the previous week. Eight inquest cases and 9 deaths from violence were registered; and 59, or more than a third, of the deaths were recorded in public institutions. The deaths of infants and of elderly persons showed a considerable decline from the numbers in the previous week. The causes of 12, or 8 per cent., of the deaths registered during the week were not certified.

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Correspondence.

"Audi alteram partem."

THE APPROPRIATION OF PATIENTS BY CONSULTANTS.

To the Editor of THE LANCET.

SIR,—I read with interest in your issue of July 10th the letter of my friend Mr. Henry Kesteven and your remarks upon the subject of "Consultants *v.* General Practitioners." Isolated examples of the injustice of which Mr. Kesteven complains are unfortunately so common that there are few general practitioners who will not be able from bitter experience fully to endorse all he has said. The evil is an undoubted one; the causes and the remedy are not so clear. Both Mr. Kesteven's letter and your leading article contain, I think, indications of, at any rate, one of the causes of the present state of tension. In former years the class of "consultants" was largely recruited from the successful general practitioners. Having passed through the valley of tribulation himself, the consultant of those days was more in sympathy with the general practitioners; he appreciated their difficulties, and was better able to apply practically the ancient rule which bids us do to others as we would they should do to us. Of this class there are happily still many bright examples left us, but I fear they are fast disappearing, and a new and improved (?) order of men are taking their place. The consultant of the present day belongs as a rule, and especially in London, to a separate caste; his very existence depends upon his holding hospital appointments, and his whole professional training is directed towards obtaining the qualifications necessary to comply with the regulations under which such appointments are held. As a consequence, comparatively few modern consultants have passed through the salutary ordeal of general practice, and that fine feeling of sympathy is to a great extent blunted, or even lost, and that through no fault of the individual, but of the system.

An improvement in the relations at present existing between consultants and general practitioners would, I am sure, soon be observable, were some means found to induce the most able and most successful general practitioners to join the upper ranks of the profession as consultants. For the last few years the tendency has been to exclude them. Hospital and other appointments—the essentials of a modern consultant—are awarded not only for merit and professional skill, but also because the aspirant can place after his name certain cabalistic signs unobtainable by the general practitioner as such. We are now beginning to feel the result of such exclusiveness, and are suffering as a profession as much from the "war of class against class" as the political world.

I am, Sir, yours truly,

J. FREDK. W. SILK.

Victoria House, Highgate Hill, N., July, 1886.

To the Editor of THE LANCET.

SIR,—In your issue of July 10th I read a letter from Mr. Kesteven, and a leader by yourself, on that ever-recurring question—the relationship of the specialist to the generalist. One cannot but sympathise with Mr. Kesteven on his having been the victim of ingratitude at the hands of those to whom he referred his patients; but perhaps he has not allowed quite enough for the operation of that force to which he calls attention—namely, the mendacity of the medium between the practitioner and the consultant—viz., the patient. A plausible explanation would occupy too much of a busy physician's time to verify or disprove, and so, in the push and hustle of work, a patient is examined and the fee pocketed without much thought being given to the original source of the income—to wit, the family practitioner. To one who draws his livelihood from a circumscribed neighbourhood the loss of even one patient is no doubt a consideration, but scarcely a serious consideration; for how many patients does one lose in this way? From a fairly large experience of general practice, I think I may say not many. The key of the situation lies, not in the behaviour of the consultant, but in the confidence of the public, and it is only by the general practitioner gaining in an ever-increasing degree this confidence that he can hope to compete successfully with the consultant. Relieved of responsibility in critical situations, the family practitioner has in some instances become inefficient to meet the crisis, from a long habit of thinking that in such and such a case Mr. A. or Dr. B. can be sent for; others, anxious and quite possibly able to act efficiently, the tradition of his class being unable to cope with difficult cases, withhold that public confidence which confers at once responsibility and status, and conduces to efficiency on the part of the practitioner. In the words of our immortal poet, "It is not in our stars, but in ourselves, that we are underlings," and the remedy of the situation appears to me to lie in the generalist evincing by word and deed his absolute equality with any other section of the profession, rather than by his desiring a perpetual protection from the consultant.

I am, Sir, yours obediently,

Green Lanes, N., July, 1886. ALEXANDER MORISON, M.D.

SPINA BIFIDA CASES.

To the Editor of THE LANCET.

SIR,—Since my last communication to you on this subject, I have operated upon other two cases, one of these on June 10th, which is now contracted and safe, the other only yesterday (July 8th), the result of which cannot be known for two or three weeks. Yesterday also the following letter reached me from Rio de Janeiro, Brazil, dated June 10th, 1886:—

"DEAR SIR,—In THE LANCET of May 8th, I note your letter with reference to the cure of spina bifida by means of the iodo-glycerine fluid. I beg to place at your disposal the following notes of a successful case I had, which was treated solely by your method: Henrique M——, born March 4th, 1885, with a lumbar spina bifida, about the size of a half orange. A strong well-made child, with no other deformity. On March 12th, tumour *in statu quo*. I tapped it with a fine trocar and cannula, and drew off about two drachms of fluid, and then injected about half a drachm of the fluid containing ten grains of iodine and thirty of iodide of potassium to one ounce of glycerine. On withdrawing the cannula I sealed up the puncture with collodion. No injurious effect followed. One week after, the operation was repeated, and likewise a third time. After each operation the coverings became more thickened and corrugated, until a fortnight after the third tapping no trace of fluid was present, and the tumour was reduced to a flattened, fleshy, wrinkled mass. After a lapse of fifteen months it is still further diminished in size, and the child is as plump and lively as possible, showing no sign of weakness anywhere. I regret that my experience of such cases is limited to this case only, but observing your letter above mentioned, and especially the quotation from the *Dublin Medical Journal*, I consider it my duty to inform you of this, another case, in which your method has proved eminently successful.

"Believe me, dear Sir, yours very sincerely,

(Signed) "W. LOUDON STRAIN, M.B. GLAS.,

"Late Resident Assistant, Glasgow Western Infirmary.

"James Morton, M.D."

I may be allowed to call attention to the early age at which this case was treated, of which I entirely approve, and to express the pleasure which such success in the hands of others always gives me.

With thanks to Dr. Strain, I am, &c.,

Glasgow, July 9th, 1886. JAMES MORTON.

THE CHARTERHOUSE SCHOOL.

To the Editor of THE LANCET.

SIR,—The correspondence in *The Times* during the past week respecting diphtheria at the Charterhouse School cannot fail to greatly interest the medical profession. A great deal of an unpleasant nature has come to the surface, but, judging from Mr. Carritt's letter in Wednesday's *Times*, much more lies behind yet unrevealed, which he promises to disclose if the governors of the Charterhouse School will hold an inquiry into the matter. So far as we can now judge, when the boys were going home for their exeat on June 26th, Mr. Carritt was told that measles existed in the school, and was asked if his son might come

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home. When the lad arrived he told his father there were two cases of diphtheria in Mr. Girdlestone's house; one of these died in three days, the other remaining ill till he was able to be moved within the past seven days. The head master, in his letter on Monday, acknowledges these two cases, and says that seven others had sore-throats with diphtheritic tendency. The question raised by Mr. Noble Smith in *The Times* on Wednesday is the chief one, and really means "Who is to blame?" As undoubted diphtheria existed at the time of the exeat, why were not the parents told before the boys went home on June 26th? Why were not these two cases, at any rate, moved to the sanatorium? It appears terrible that they should lie ill on the same floor as the cubicles.

I hear that a consultant was called in some days before the *exeat*, and has been there several times. How is it he has not told us if he found the house free from any suspicion of bad drainage? Did he find the arrangements made for nursing and for preventing the spread of the disease all satisfactory! Did he think only two boys had plain diphtheria? and how many cases of sore-throat, simple or suspicious, did the medical officer report as having occurred in the past few months in the school? Was it by his advice parents were not told of the existence of diphtheria? All these are questions which require replies; and a letter from a consulting physician would set many anxious minds at rest.

Mr. Noble Smith thinks Dr. Clarence Haig-Brown had not full power to enforce his regulations, because the boy was not removed from Mr. Girdlestone's house, and inquires if his recommendations were carried out. Let us hear what those recommendations were, as it is plainly hinted in his letter that there was divided authority.

The medical profession cannot discuss the head-master's treatment of Mr. Carritt; but the other questions raised, especially the sanitary arrangements and the medical management, must interest all of us.

I am, Sir, yours obediently,

July 15th, 1886. M.D., AN OLD PUBLIC SCHOOL MAN.

REMARKABLE CONCOMITANT OF HYDROCELE-TAPPING.

To the Editor of THE LANCET.

SIR,—On reading one of your annotations of July 3rd on a "Remarkable Accident while Tapping a Hydrocele," I thought probably it would not be uninteresting to record the following case, as I am in the same position as M. Loumeau in not finding an example of a similar kind in medical literature.

The Rev. ——, who lived in the north of Devon, regularly visited me twice yearly for more than twenty years for the purpose of being tapped for hydrocele of the right side. His visits in my neighbourhood being always very short, he preferred merely to be relieved of the fluid, and generally about a pint of serum was removed at each tapping. He had an inguinal hernia of the same side. About ten years ago, in the month of July, this gentleman came to me as usual, and, on passing the trocar, to my astonishment only about a tablespoonful of fluid escaped. I concluded I had penetrated a cyst, and might have injured the tunica albuginea. As he was going into Cornwall direct from my house, and would return in three days, I advised no further procedure until he came back. The tapping occurred on a Saturday. On the following Tuesday, he told me that on reaching Penzance he began to feel a stiffness in his right knee, which became painful, but not sufficient to prevent him from helping in clerical duties on Sunday. Large effusion in the joint followed—in fact a perfect hydrops articuli; but I found that the hydrocele had entirely disappeared. Three days' rest, with fomentations &c., quickly relieved the joint. About six months after this, my patient was about to pay his usual visit for the tapping, when, on driving to the nearest railway station, his horse stumbled and he was thrown out of his gig, injuring his right knee, which became very swollen. Again the hydrocele disappeared.

This gentleman has recently died at an advanced age, but for several years after the accident of the gig I used the trocar for his relief. I have mentioned this case to several eminent provincial surgeons, and have been told that, as far as they knew, it was unique.—I am, Sir, yours truly,

EDWIN J. WORTH, M.R.C.S. Eng., &c.

Millbrook, Cornwall, July 7th, 1886.

IRELAND.

(*From our own Correspondent.*)

THE VICE-PRESIDENCY OF THE ROYAL COLLEGE OF SURGEONS.

MR. FITZGIBBON, surgeon to the City of Dublin Hospital, who retired from the contest for the vice-presidency last June in favour of Mr. Corley, considering this gentleman to have prior claim on the electors, will be a candidate for the vice-presidency in 1887. It is rumoured that Mr. Fitzgibbon will be opposed by a gentleman belonging to the hospital with which he is connected.

REPRESENTATION OF THE UNIVERSITY OF DUBLIN IN PARLIAMENT.

Both the late representatives have been re-elected by overwhelming majorities. Although every exertion possible was used by the defeated candidates, they were only able, out of a constituency of some 4000 electors, to obtain fifty-five and fifty-six votes respectively.

REMOVAL OF A FOREIGN BODY IMPACTED IN THE THROAT FOR THREE MONTHS.

A little girl aged three years was recently admitted into the Adelaide Hospital, under the care of Mr. J. Kellock Barton. It appeared that about three months previously the shuttle of a sewing machine had got impacted in her throat close to the epiglottis, and latterly had caused symptoms of distress. On last Friday Mr. Barton tried to remove it with a throat forceps, but from the nature of the foreign body the attempt was unsuccessful, and the next day an operation was undertaken. An incision was made on the left side of the neck passing close to the corner of the hyoid bone, and after a difficult dissection the shuttle was removed. The parts were brought together by sutures, and since the operation the little patient has progressed satisfactorily.

MATER MISERICORDIÆ HOSPITAL.

The new wing is now nearly completed, and is expected to be finished early in August. It forms the third side to the hospital, and will comprise three floors. The total expenses incurred will amount to about £20,000.

LIMERICK WORKHOUSE: CRUELTY TO AN INMATE.

At the Limerick Assizes last week, Mary Gurney, a night nurse in the female department, and Mary Fitzgerald, a pauper assistant, were charged with killing, on the 29th of April last, one Margaret Bourke, an old blind inmate of the Limerick Workhouse Hospital. Evidence was given that the deceased fell out of bed and was allowed to remain on the floor for a considerable time before the accused put her back, and when they did her hands were tied together. Bourke died the next morning, and the jury having found the prisoners guilty, Mr. Justice Johnson sentenced Gurney to two months' imprisonment, and Fitzgerald, who had been some time in prison, to three weeks.

It is rumoured that Dr. F. MacCabe, medical adviser to the General Prisons Board, has been appointed Inspector of Reformatory and Industrial Schools, Ireland.

Dublin, July 18th.

PARIS.

(*From our own Correspondent.*)

THE RELATION OF ORCHITIS AND OVARITIS TO AMYGDALITIS.

DR. JOAL, one of the physicians of Mont-Dore, has lately published a work in which he makes a very important contribution to pathology, in showing the relation that exists between orchitis and ovaritis on the one hand, and amygdalitis on the other. Dr. Joal makes out that during an attack of amygdalitis complications in the genital organs may arise as in other general affections. When these supervene, they are not the result of metastasis, as was formerly supposed, but they are all three produced by one and the same cause—an infectious condition of the economy,—the three maladies named being manifestations of that condition. Lasègue, Bouchard, Landouzy, and Sinéty considered that

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amygdalitis was the expression of a general malady of an infectious nature, but they looked upon orchitis and ovaritis as complications. Dr. Joal, however, proffers the explanation that, the organism being primarily contaminated, bacterian explosions are produced in a secondary manner in divers organs—the tonsils, ovaries, and testicles. The author does not admit the pretended physiological relations that were said to exist between the tonsils and the genital organs, adding that if the tonsils and the testicles are affected at the same time, it is generally during adolescence, at the age when these glands present a functional hyper-excitability. The author founded his arguments on fourteen cases of orchitis, or of ovaritis, which came under his own observation, and which manifested themselves under the influence of the tonsillitic affection, which, in its turn, was the result of an infectious condition of the organism, as mentioned above. This conclusion was arrived at as the genital symptoms could not be attributed to the propagation of a previously existing hyperæmic condition of the neighbouring organs—urethra, bladder, and uterus; nor could they be attributed to traumatism, excessive fatigue, or to menstrual or other genital disorders. Neither could they have been traced to the influence of any general affections, such as typhoid fever, variola, rheumatism, or purulent infection, which are apt to provoke orchitis or ovaritis. The etiology of tonsillitic ovaritis and orchitis has been well studied, and the symptomatology of these diseases has also been well described by the author. The genital manifestations, he says, are independent of the gravity of the tonsillitis, showing themselves ordinarily at the moment when the tonsillitic phenomena are on the decline. The complications, which are rare in childhood, appear principally in adolescence; they are generally unilateral. Orchitis ordinarily terminates in resolution; in one case, however, there was suppuration; in another the testicle was atrophied.

M. PASTEUR.

That cases simulating hydrophobia may now and then occur is not to be wondered at, owing to the sensation caused by M. Pasteur's anti-rabic inoculations. At a recent meeting of the Council of Public Hygiene Dr. Dujardin-Beaumetz gave an account of two such cases that were observed at the Hôtel Dieu. One of the patients admitted to the hospital on the 24th of May presented all the symptoms of alcoholic delirium, but left the hospital two days after, quite cured. He had been bitten fifteen days previously by a dog that was not mad. In one of his fits of delirium, the patient tried to bite the people about him. It was this circumstance that led to the supposition that the man was hydrophobic, but Dr. Dujardin-Beaumetz stated that in all the cases of hydrophobia that came under his observation he never saw hydrophobic patients attempt to bite people about them, and he believed that whenever such symptoms are produced, we have to do, not with hydrophobia, but with alcoholism. He remarked that last year, at the Lariboisière Hospital, a male patient who was affected with rabies bit the attendants, but he was at the same time under the influence of alcoholism, and it was to this latter condition that his tendency to bite must be attributed. The second case was that of a man who was taken to the Hôtel Dieu, stating that he had been bitten some time ago by a dog, and that he felt the symptoms of hydrophobia coming on. It was found, however, that he was simply suffering from some gastric trouble, and four days after his admission he left the hospital perfectly cured. The author observed that this individual had the year previously been admitted to the Necker Hospital, where he also simulated hydrophobia for some days. In concluding his report, Dr. Dujardin-Beaumetz stated that since the 1st of January, 1886, there have been in the department of the Seine ninety persons bitten by dogs known to have been manifestly mad, and that only one of these persons, who had not had recourse to the inoculations practised at the laboratory of M. Pasteur, died from hydrophobia. On this the author makes the following remarks: "One cannot bring this remarkable fact too much to light, in presence of the incessant attacks that are directed against the method of our illustrious colleague. On the one hand, the absolute immunity of all the persons who, after having been bitten by mad dogs during this first half-year, had recourse to the inoculations, and, on the other hand, the verification of only one death, that of the individual who would not submit to this method of treatment, are striking proofs of the certainty and of the efficacy of these inoculations. So that it will not be too much to remind the Parisian population that it will for the future find in these inoculations, when they are opportunely practised, a sure protection against rabic accidents." Dr. Dujardin-Beaumetz added that, according to information that reached him, there had been in London since the 1st of January last seven deaths from hydrophobia. In 1885 the number of deaths from the same disease in London amounted to twenty-six. The number of deaths from hydrophobia in the department of the Seine during the same year was twenty. While on the subject of M. Pasteur's anti-rabic inoculations, I may note certain modifications that have been introduced by him since he first commenced them, and which I have taken from Dr. Grancher's lecture, reported in THE LANCET of last week. The rabbits to be inoculated are put under chloroform during the operation of trephining and inoculation, which are effected on aseptic principles. The wound, instead of being washed out with carbolic acid, which would destroy the virus, is simply moistened with the acid. The bottles in which the spinal cords are preserved are now closed at the lower opening by a piece of cotton-wool, instead of having a tap, as formerly. M. Pasteur practises only ten inoculations, instead of thirteen, as in the case of Meister, his first patient. The inoculations are performed once every day, thus leaving an interval of twenty-four hours after each inoculation. The first inoculation is made with a spinal cord that has been preserved fifteen days, the second with a cord fourteen days old, and so on. The last inoculation is made with a cord six days old. M. Pasteur inoculates from cords which have been preserved for only from one to five days those cases where the wounds resulting from the bites are especially dangerous, on account of the region they occupy, their number, or the death of tissue injured.

Paris, July 13th.

THE SERVICES.

SURGEON-MAJOR EVATT, medical officer to the Royal Military Academy, will vacate his appointment on the staff of that institution next week, and will be succeeded by Surgeon-Major Maxham.

ADMIRALTY. — The following appointments have been made:—Fleet Surgeon Henry F. Norbury, C.B., to the *Impregnable;* Fleet Surgeon Robert H. More, M.D., to Plymouth Hospital; Surgeon Jas. L. Smith, to the *Starling;* and Surgeon and Agent Patrick C. Hockey, to Kilkee.

ARTILLERY VOLUNTEERS.—1st Inverness-shire: Surgeon A. Sclanders, M.D., is granted the honorary rank of Surgeon-Major.

RIFLE VOLUNTEERS.—1st Volunteer Battalion, the Essex Regiment: Acting Surgeon M. H. Grattan resigns his appointment.—1st Sussex: Surgeon Willoughby Furner resigns his commission; Acting Surgeon Douglas William Giffard to be Surgeon.—2nd Volunteer Battalion, the Royal Warwickshire Regiment: Surgeon Clement Dukes, M.D., is granted the honorary rank of Surgeon-Major.—2nd Wiltshire: Acting Surgeon E. N. Carless, to be Surgeon.—2nd Volunteer Battalion, the Worcestershire Regiment: Surgeon W. S. Batten and Honorary Assistant-Surgeon S. Roden, M.D., resign their commissions.

THE VOLUNTEER MEDICAL STAFF CORPS.—Surgeon J. H. Casson is granted the honorary rank of Surgeon-Major.

THE DEAF AND DUMB ASYLUM.—An election of twenty children to the benefits of this institution took place on the 12th inst. The asylum was founded in 1792, and since that date 4743 children have been admitted, leaving 319 now in the institution. Since the year 1811, 1848 boys and girls have been bound to various trades, at a cost of upwards of £17,276. The committee have decided to enlarge the branch asylum at Margate, and they are rebuilding the asylum in the Old Kent-road. At Margate, too, a separate building is being erected for an infirmary.

BELFAST MEDICAL STUDENTS' ASSOCIATION.—The inaugural meeting of this Association was held on the 13th inst., when there was a large attendance of students and medical men of the town. The object of the Association is to promote the interests of the Belfast medical students as regards their professional training.

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Medical News.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—At a meeting of the Court of Examiners, held on the 5th inst. and following days, the undermentioned gentlemen passed the Third Professional Examination of the College:—

John Abbott, James J. Behan, Edward C. Brabazon, Thomas Carr, Thomas R. Cowen, Stafford M. Cox, Eugene Glynn, Arthur S. Goff, Richard J. Hewitt, George L. Johnston, Leonard Kidd, Victor E. Ludlow, Charles C. Lyons, John J. McNaboe, James C. O'Donnell, Pierce H. Power, John H. Reynolds, Michael Shanley, Arthur E. Sprowle, John Stewart, Timothy T. Teahan, James Trant.

Fifty-nine candidates entered for examination; seven withdrew, one was absent, and twenty-five were stopped.

SOCIETY OF APOTHECARIES.—The following gentlemen passed their examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received certificates to practise, on the 8th inst.:—

Agnew, Edward Dalton, Soho-square.
Armstrong, William, Limefield, Kersal, Manchester.
Blake, William Henry, Brondesbury Villas, Kilburn.
Drinkwater, Charles, Memorial Cottage Hospital, Mildmay.
Smith, Percival, Hanley-road, Crouch-hill.

ON the 9th inst. Princess Christian visited University College Hospital and inspected several of the wards.

THE annual inspection of the Leavesden Asylum for Imbeciles by the managers of the Metropolitan Asylums Board took place on the 10th inst.

THE prizes gained by the students of the Bristol Medical School were distributed on the 12th inst. by the Rev. S. W. Wayte, who pointed out that the school was almost, if not quite, the earliest provincial school of medicine in the country.

AT the quarterly meeting of the Directors of the Naval Medical Supplemental Fund held on the 13th inst., Sir W. R. E. Smart, K.C.B., M.D., Inspector-General, in the chair, the sum of £67 was distributed among the several applicants.

DR. GEORGE T. STEVENS, of New York, has been awarded the prize offered by the Académie Royale de Médecine of Belgium for the best elucidation, by clinical facts and by experiments, of the Pathogeny and Therapeutics of Diseases of the Nervous Centres, and especially Epilepsy.

THE CONDITION OF KINGSTON-ON-THAMES, from a sanitary point of view, is the subject of unfavourable comment in the local press. The state of the public sewers in the borough, especially, would appear to stand in need of immediate attention.

MR. ROBERT ROGERS, L.K.Q.C.P.I., L.R.C.S.I., of Falmouth, Jamaica, expired suddenly whilst bathing on the 11th ult. The deceased had practised for upwards of fifteen years in Jamaica, and was highly respected by those with whom he came in contact.

"THE Effects of Tobacco on the Health of Men of Letters, and its Influence on the Future of French Literature," is the theme to be discussed in a series of essays, for the best of which the French Society for the Prevention of the Abuse of Tobacco offers a prize of 1000 francs.

THE combined districts of Leamington, Warwick, Kenilworth, and other places in the Warwick Union, have decided on a site for an infectious hospital. Hitherto a building at the Warwick Workhouse has been resorted to for this purpose, but its Poor-law connexions have materially interfered with its proper use.

PROFESSOR CROCQ OF BRUSSELS.—The senior medical students of the University of Brussels have just presented Professor Crocq with a work of art, "Le Penseur," after Michael Angelo, as a mark of their appreciation of the unceasing kindness with which he has assisted them in their university and clinical studies.

AT the tenth anniversary meeting of the Sanitary Institute of Great Britain, held on the 8th inst. at the Royal Institution, Albemarle-street, Dr. T. Whiteside Hime, medical officer of health for Bradford, delivered an address entitled "Pasteur and Preventive Inoculation against Zymotic Diseases." A vote of thanks to Dr. Hime for his address was proposed by Professor Corfield, and carried.

A SHEFFIELD police-constable and a little girl, having been bitten by a dog suffering from rabies, left on the 10th inst. for Paris to place themselves under the treatment of M. Pasteur.

MEDICO-PSYCHOLOGICAL ASSOCIATION.—The annual general meeting will be held in the rooms of the Medical Society, Chandos-street, Cavendish-square, on Aug. 9th, 1886, under the presidency of G. H. Savage, M.D. In the evening the dinner will take place at "The Ship," Greenwich, at 7 P.M.

DEVONSHIRE HOSPITAL AND BUXTON BATH CHARITY. At the meeting of the Committee of Management of this institution held on the 3rd inst., it was reported that during the first three months of the present year only 280 in-patients were admitted to the hospital, or 56 fewer than had been received during the corresponding three months of the previous year; whereas 847 patients were received during the second three months, bringing the total of the half-year up to 1127, or 11 in excess of the first half-year of 1885. The number of out-patients received was 71. The financial condition of the hospital is fairly satisfactory.

EARLSWOOD ASYLUM FOR IDIOTS.—The annual report of the committee of this institution, which has just been published, states that the income of the past year has fallen short of the previous year by some £2600. The report of the medical superintendent (Dr. Cobbold) is of a satisfactory character, and shows that there were in the asylum on March 31st 378 males and 188 females. The number of new patients admitted was greater than for several years past; this is chiefly due to the fact that no less than forty were elected in April and October. A decided improvement is reported in the class of cases admitted.

TEMPERANCE CONGRESS.—The British and Colonial Temperance Congress began its sittings on the 14th inst. The object of the Congress is to receive information, through written papers and oral communications, regarding (1) the extent of drinking habits in the colonies and dependencies of the British Empire; (2) the regulations in force in those localities for restricting or prohibiting the drink traffic; and (3) the results of efforts put forth by temperance organisations, churches, Sunday schools, educational boards, and other public bodies, for the promotion of total abstinence from intoxicating liquors. The Bishop of London presided, and there was a large attendance at the opening meeting. Papers were read by Dr. Pringle, the Rev. R. H. Bullock, Mr. Gunn, Mr. Barton, and others.

THE magisterial examination into what is known as the Ashton poisoning case was concluded at Stalybridge on Wednesday. The prisoners, Mary Ann Britland and Thomas Dixon, were accused of having caused the deaths of three persons by administering poison. Evidence was given that Dixon's wife and Britland's husband and daughter died within a short time after a brief illness. All displayed symptoms of poisoning. The bodies were exhumed and subjected to analysis, and were found to contain strychnine. It was proved that the female prisoner had made several purchases of "Vermin Killer," one of the ingredients of which is strychnine. The theory of the prosecution was that Dixon's wife and Britland's husband had been removed to make way for a union between the prisoners. The magistrates discharged Dixon, and committed the female prisoner for trial on the capital charge.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

BARRITT, G. LACY, M.R.C.S., L.R.C.P. Lond., has been appointed Honorary Surgeon to the Johnson Hospital, Spalding; and Medical Officer of Health for the Spalding District, vice C. K. Morris, resigned.

BRODRICK, H. EDWARD, M.R.C.S., has been appointed Resident Clinical Assistant to the East London Hospital for Children and Dispensary for Women, Shadwell, E.

BUTLER, FRANCIS WILLIAM, M.R.C.S., L.S.A., has been reappointed Surgeon to the Hearts of Oak Society for the Brighton District.

CARTER, ROWLAND WIMBURN, M.R.C.S., L.S.A., has been appointed Surgeon to the Weymouth and Dorset County Royal Eye Infirmary, vice Simpson, resigned.

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CUFF, ROBERT, M.B.Lond., M.R.C.S., has been appointed Medical Officer for the Workhouse of the Scarborough Union.

FAIRBAIRN, J. BINNIE, M.B.Glas., has been appointed House-Physician to the Glasgow Royal Infirmary.

HEWITT, FREDERIC, B.A., M.D.Cantab., has been appointed Instructor in Anæsthetics at the London Hospital.

LEECH, ARTHUR H., L.S.A., has been appointed Medical Officer for the Second District of the Stow Union.

OGLE, ARTHUR W., M.R.C.S., L.R.C.P., L.S.A., formerly Obstetric House-Physician, has been appointed House-Physician to the Middlesex Hospital.

PERRY, R. C., M.A., M.B.Cantab., M.R.C.S., has been appointed House-Surgeon to the London Hospital.

PURDON, RICHARD J., M.D., M.Ch.R.U.I., has been appointed Visiting-Physician to the Belfast District Lunatic Asylum, vice Henry MacCormac deceased.

SCOTT, W. SAWERS, M.B., C.M., has been appointed Resident House-Surgeon to the Clinical Hospital, Manchester.

WARE, GEORGE STEPHEN, M.R.C.S., L.R.C.P., L.S.A., formerly House-Physician, has been appointed Obstetric House-Physician to the Middlesex Hospital.

WETWAN, WILLIAM A., M.R.C.S., L.S.A., has been appointed Medical Officer for the Workhouse and First District of the Bridlington Union.

Births, Marriages, and Deaths.

BIRTHS.

ATKINSON.—On the 7th inst., at Abbey-hill, Kenilworth, Warwickshire, the wife of Miles C. Atkinson, M.D., of a son.

CHETWOOD.—On the 12th inst., at King-street, Finsbury-square, the wife of William Chetwood, M.R.C.S., of a daughter.

FREEMAN.—On the 3rd inst., at Pangbourne, Reading, the wife of W. T. Freeman, L.R.C.P.Lond., of a daughter.

JOYNT.—On the 18th ult., at Marine-gardens, Hanover-street, Kingston, Jamaica, the wife of Surgeon-Major H. W. Joynt, Army Medical Staff, of a son.

LEWINSON.—On the 7th inst., at 32, New-street, Smethwick, the wife of Louis Lewinson, M.D.Berl., of a son.

PIDCOCK.—On the 6th inst., at Downshire-hill, Hampstead, N.W., the wife of G. Douglas Pidcock, M.A., M.B.Cantab., of a son.

POWELL.—On the 3rd inst., at the Borough Asylum, Nottingham, the wife of Evan Powell, of a son.

RICHARDS.—On the 11th inst., at the County Asylum, Hanwell, the wife of J. Peeke Richards, Medical Superintendent of the Female Department, of a daughter.

MARRIAGES.

BIRCH—KINSMAN.—On the 7th inst., at the Parish Church, West Derby, Richard Birch, M.R.C.S., L.R.C.P., to Anne, only daughter of Major W. A. Kinsman, of The Tower, Sandfield-park, West Derby.

BOWHAY—WOODD.—On the 10th inst., at St. John's, Penge, Albert Bowhay, L.R.C.P.Lond., of Gunnislake, Cornwall, to Edith, daughter of C. G. Woodd, Surgeon, of Penge.

FELL—RICHMOND.—On April 26th, at St. Paul's Cathedral, Wellington, New Zealand, Walter Fell, M.D., of University College, Oxford, and St. Thomas's Hospital, London, to Margaret, third daughter of Mr. Justice Richmond, of Wellington.

FOX—BABINGTON.—On the 8th inst., at the Church of the Holy Trinity, Ilfracombe, Arthur E. W. Fox, M.B., to Emily Frances, youngest daughter of the Rev. Thomas A. Babington, of Cossington, Leicestershire.

HAYWARD—KENDRICK.—On the 6th inst., at All Saints', Brixham, Arthur Ernest Hayward, M.R.C.S., to Catherine Eames, youngest daughter of W. G. Kendrick, of Hillside, Brixham.

HEWER—EVERARD.—On the 13th inst., J. Langton Hewer, M.B., B.S., F.R.C.S., eldest son of John H. Hewer, of 33, Highbury New-park, to Annie M. Everard, eldest daughter of the Rev. George Everard, M.A., Vicar of Christ Church, Dover.

INGOLDBY—WILCOXON.—On the 13th inst., at Albany, W. Australia, Frederick John Ingoldby, M.R.C.S., L.R.C.P., to Annie May, elder daughter of C. Wilcoxon, of Barnes.

TILLY—PRATT.—On the 7th inst., at Holy Trinity, Finchley-road, Alfred Tilly, L.S.A., to Emma Marian, eldest daughter of the late James Boulton Pratt, of Earl's-terrace, Kensington, and the Stock Exchange.

DEATHS.

DUNN.—On May 8th (after a few hours' illness), at Hastings, New Zealand, George Dunn, M.D., J.P., of London, and formerly of Doncaster.

FURNIVALL.—On May 27th, at Hutton, Somerset, William Furnivall, M.R.C.S.Eng., L.S.A., aged 80 years.

GARDNER.—On the 17th ult., at Bareilly (by a fall from his horse), Edward Barton Gardner, Surgeon-Major, H.M.'s Indian Army, Civil Surgeon of Bareilly.

SPEER.—On the 9th inst., at his residence, Salisbury-street, Liverpool, Joseph Speer, L.R.C.P.Ed., L.R.C.S.I., aged 57.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, July 15th, 1886.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
July 9	30·00	N.W.	60	55	111	70	53	...	Bright
,, 10	30·16	S.E.	61	56	112	72	54	·03	Cloudy
,, 11	30 03	W.	65	59	114	75	54	...	Cloudy
,, 12	30·01	S.W.	63	62	89	68	61	·16	Raining
,, 13	29·98	W.	62	59	116	75	53	·31	Cloudy
,, 14	29·43	S.W.	65	63	120	81	55	·19	Cloudy
,, 15	29·80	W.	61	55	93	66	54	...	Cloudy

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

Letters requiring notice must be authenticated by the name and address of the writer.

We cannot undertake to return MSS. not used.

TREATMENT OF ECZEMA.

DR. MED. HAGENA writes to call attention to the benefit of wearing buck leather underclothing, especially by those who may be suffering from eczema. The advantages, he points out, attending the use of that material are that it is softer than cotton or wool, that it diffuses a more equable warmth, and that it therefore averts irritation of the sensitive skin, and assists the process of healing to be set up by the application of an unguent composed chiefly of salicylic acid and lanoline (the Salicylpflastermull of Dr. P. G. Unna).

Mr. Jas. Turton.—Yes, by Shepherd. But perhaps the best book to consult is the Manual for the Medical Staff Corps, published by Messrs. Clowes and Son, Charing-cross, which contains all necessary information for training stretcher bearers and bearer companies.

SYPHILITIC PHARYNGITIS.

To the Editor of THE LANCET.

SIR,—I have a lady patient who has for over twenty years suffered from tertiary syphilis. She has at present a most painful dry pharyngitis, the mucous membrane is dry and sticky, here and there coated with a thick, foul, yellow mucus. This causes much coughing and great difficulty in swallowing anything but fluids. Antisyphilitic treatment, which she has had for many years, now does her no good in this present ailment. An inhalation with a Seigel's spray containing terebene nd pinus sylvestris oil does relieve her, only temporarily however, although it has in great measure healed some nasty deep fissures on both lips and left angle of the mouth. I should esteem it a great kindness if any of your many readers who may have had a similar case to deal with would suggest a line of treatment which might possibly soothe a miserable existence.

I am, Sir, yours faithfully,

July 13th, 1886. MED. DOC.

PRIMARY UNION AFTER SUPRA-PUBIC CYSTOTOMY.

To the Editor of THE LANCET.

SIR,—In your issue of July 3rd, Mr. Parker referred to primary union of the wound after supra-pubic cystotomy (in his case) as probably unique. Mr. Parker will find a similar experience recorded by Dr. L. S. Pilcher in the "Annals of Surgery," February, 1886.

I am, Sir, yours obediently,

Llanberis, N. Wales, July 6th, 1886. J. T.

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A DAY IN THE COUNTRY FOR POOR CHILDREN.

MR. G. HOPKINS, Honorary Superintendent of the East London Mission, 263, Cable-street, St. George's, E., and Mr. A. Alfred Knight, Treasurer of the Hackney Mission, whose address is Knightsville, Lewisham High-road, London, both wish us to commend their schemes for giving poor children a day in the country. All such schemes should be helped by those who can help. When we are all devising holidays for ourselves and children, we should be mindful of those whose means admit of no such pleasure, and many of whom have never seen hay-making or the sea.

An Old Subscriber.—The registration of such foreign degrees as those described by our correspondent cannot take place till June, 1887.

Dr. L. Petit (Paris).—We cannot give a reply until a copy of the journal is before us.

CIRCUMCISION UNDER THE INFLUENCE OF COCAINE.

To the Editor of THE LANCET.

SIR,—I was called on May 29th, 1886, to see J. M——, a boy aged eight years, living at Portland-road, Notting-hill. I found him suffering from paraphimosis, and recommended circumcision. As the parents were quite willing, I operated on the following day (May 30th), having determined on using cocaine, as the boy's heart is diseased. Accordingly, a few minutes before the operation I injected, with a hypodermic syringe, about four drops of a 10 per cent. solution of hydrochlorate of cocaine through the prepuce, close to the corona penis, repeating this on the other side of the corona, and also injecting another five drops through the under portion of the prepuce, still keeping close to the base of the glans. I then directed the mother to hold the foreskin tight for a few minutes, in order to thoroughly anæsthetise—or "cocainise"—the mucous membrane of the prepuce. I then proceeded to circumcise the boy in the usual manner, having first placed a cloth over his eyes. After removing the redundant prepuce, I brought together the skin and mucous membrane with nine catgut sutures. The boy told me—and he is an intelligent lad—that he felt no pain at all, excepting during the insertion of the last two sutures, and then it was so slight that it did not cause him to cry out. I dressed the wound with carbolic oiled lint, and a good recovery was made. On the first evening the patient's temperature was 101·4°; next morning it was normal, and has remained so. The wound healed by first intention, excepting just close to the frænum; that had granulated, but is now quite well. The patient was in bed eight days. As has been observed, there was very little inflammatory œdema after the operation, this being due, in my opinion, to the astringent, as well as locally anæsthetic, property of cocaine. In all, I injected fourteen drops of the 10 per cent. solution, and there were no toxic effects produced.

I am, Sir, your obedient servant,

J. MITFORD ATKINSON, M.B. Lond.,
Medical Officer to No. 3 District, St. Mary Abbott's,
June 21st, 1886. Kensington.

DISTENDED HYMEN OCCLUDING THE VAGINA.

To the Editor of THE LANCET.

SIR,—I send you some particulars of a case at present under my care which may possibly be considered of sufficient interest to merit insertion in the columns of your journal.

On June 8th I was called to see Ada P——, aged thirteen, who was said to have been ill some two or three days, complaining of pain and difficulty in micturition. I found the child in intense pain, and was told that she had not passed urine for eight or ten hours previously to my visit. I examined the abdomen, which was extremely tender to the touch, and found a largely distended bladder. On examining the genitals I discovered a rounded tumour about the size of a small orange apparently protruding from the vagina, but which, on closer examination, proved to be a sac, the walls being formed by a highly distended hymen, which entirely occluded the vaginal orifice. I incised the membrane (which was thick and fleshy), thus affording exit to about half a pint of dark sanguineous fluid of the consistence of treacle. The child obtained immediate relief, and voided the contents of the bladder without difficulty shortly afterwards.

The above condition was wholly unsuspected prior to my visit, although the mother had wondered at the absence of the menstrual flow, the child having regularly presented other symptoms, usually observable during the performance of the menstrual function, for some six or eight months. Believe me, Sir, yours faithfully,

Bedale, June 10th, 1886. THOS. HORSFALL.

MR. A. B. SIMPSON AND THE BIRMINGHAM GUARDIANS.

To the Editor of THE LANCET.

SIR,—May I be permitted to mention through your columns that the Midland Centre of the Medical Defence Union is actively engaging itself in preparing a petition against the authorities' decision in this matter, which it is hoped will be signed by all the medical practitioners and chief ratepayers of the district. I hope to be able to forward you a copy of the petition in due course.

I am, Sir, obediently yours,

CHARLES F. RIDEAL, General Secretary.

The Medical Defence Union (Limited by Guarantee),
17, Bedford-row, W.C., July 13th, 1886.

THE HEAT AND RAINFALL OF INDIA.

A MEMORANDUM has been drawn up by Mr. H. F. Blandford, Meteorological Reporter to the Government of India, which is intended to accompany charts of temperature and rainfall of the country. From this report it appears that the hottest region is really the eastern coast of the Peninsula from Vizagapatam southwards and the plains of the Carnatic and Northern Ceylon. In the Peninsula, or intra-tropical India, except as modified by the elevation of the country, the temperature increases steadily from the coast inland; and the west coast is cooler than the east coast. Scinde and Rajputana are the driest portion of India. May is the hottest month of the year in the greater part of the country, the chief exception being in the Punjaub and Scinde, where, owing to the later setting in of the rains, June is the hotter month. The mean annual rainfall of the whole of India proper is about forty-two inches, varying from an extreme of nearly 500 inches at Cherra Poonjee to about three inches at Jacobabad in the extreme west. Those provinces with an average rainfall of more than fifty inches, and an average variability of less than 12 per cent. on either side of that average, enjoy practical immunity from famine.

SHIP SURGEONS.

To the Editor of THE LANCET.

SIR,—Mr. W. T. Harris, who writes on the above subject in your last week's issue, appears to have overlooked the fact that the letter of "M. A. P." to which he refers had reference to surgeons on Atlantic steamers, not to steamers going Southern voyages. I do not know any North Atlantic steamship line on which the surgeons have "absolute control of their own department." I speak from an experience of over three years. Take, for instance, the daily sanitary inspection of the steerages; this is conducted by the captain, yet when from bad weather or other causes the captain cannot leave the bridge he hands this duty over to the purser, not to the surgeon. Again, take the ships' hospitals; these ought surely to be considered part of the surgeon's department, yet there are few of the Atlantic steamships on which the hospitals are under the surgeons' control; they are constantly used as sleeping berths for stewards or others, and put to various other uses during a voyage, although the law requires that they be kept exclusively for the purpose for which they are intended, and infringements of this law are punishable by heavy fines; yet when have any of these fines been inflicted? If a surgeon mentions these or other infringements of the Board of Trade regulations in the report he has to send to the Emigration Office after each voyage he probably loses his appointment, and his report is very unlikely to reach its destination, as in most of the companies these reports have to be left open and sent to the steamship company's office for approval before being forwarded to the Emigration officer. As to vaccination fees being "a matter of agreement with a company beforehand," in the North Atlantic lines there is never any question about vaccination fees, as these vaccinations are done in compliance with a United States Government regulation, and average 8 or 10 per cent. of all steerage passengers carried. Every steerage passenger has to be examined by the surgeon, who gives to each a printed certificate of vaccination, signed by himself, and vaccinates any who either have not been previously vaccinated or in whom the vaccination marks have become indistinct. As many of these ships carry sometimes up to 1000 steerage passengers, this regulation involves an immense amount of trouble, particularly in bad weather, yet the surgeon gets no remuneration for this beyond his ordinary pay. As to "passengers' fees," an invitation to dine with the patient at his hotel after landing is the most usual way of acknowledging his indebtedness adopted by the Transatlantic passenger, if he considers it necessary to show his gratitude in any way. There are, of course, a few exceptions, but they are not often sufficient to materially augment the £8 or £10 per month which the companies consider sufficient remuneration for their medical officers.—Yours obediently,

Seacombe, Cheshire, July 12th, 1886. W. V. BARRÉ, L.K.Q.C.P., &c.

A READY EXAMINER.

THE following is extracted from *La Presse Méd. Belge*:—

IN THE EXAMINATION ROOM.—*Professor:* What would you do in the case of a uterine fibroma complicated with repeated and profuse hæmorrhages? *Candidate* (without hesitation and with confidence): I should perform oöphorectomy. *Professor:* Very good. I see you are well up in the surgery of the future. But what would you do with the fibroma? *Candidate:* I should leave it. *Professor:* Better still. But if the patient died? *Candidate:* I should bury her.

A Physician.—The case is not very clearly stated. There is a discrepancy as to the date on which the agreement was signed. If it is sent to us with correction, we shall be glad to express our opinion on it.

A CORRECTION.

To the Editor of THE LANCET.

SIR,—In your reference to my article on the "Pharmacognosy of the Nitrites" in your issue of July 10th, p. 87, I observe my name is given as Mr. Armstrong; and, further, the article in question, which appeared in the *Pharmaceutical Journal* and Transactions, was not a lecture delivered in Edinburgh, but one written specially for the journal mentioned.

I have the honour to remain, Sir, your obedient servant,

University of Edinburgh, July 13th, 1886. G. ARMSTRONG ATKINSON.

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THE OVERCROWDING OF THE PROFESSION.

To the Editor of THE LANCET.

SIR,—Any man who now embraces the medical profession as a means of support will (if he is not possessed of sufficient means or luck to get him a practice) find it a matter of no inconsiderable difficulty to get on. The present congested state of the medical market reminds me of a train which, already full, is still besieged by passengers in great numbers trying for places, with no porters to prevent the influx, and plenty of ticket offices invitingly open to give tickets. If legislation curb not by some wholesome laws this influx, and if gentlemen have not common sense, but take a ticket before they see a seat vacant, our lives will become a burden not only to ourselves but in all probability to the State. Trees are too old to be transplanted at forty years; and, unfit for any other calling, because untrained for it. Some of us will have to go under the foundling care of a board of guardians, and end our days mid the wrecks of idle or dissipated lives.

Lately in your pages have complaints appeared relative to the little respect medical men are treated with. One gentleman tells us he was placed with the riff-raff of the vessel at table; he is advised by another to humbug the steward with chaff and he will be treated decently—to play jester to the whilom cabin boy for the treatment due to his profession and services! Truly, a nice occupation for a medical officer. Some time ago a gentleman was offered a ticket for out-door relief by a guardian when he asked for a pension after a life-long service as Poor-law medical officer. These instances are the natural consequences of overcrowding. Anyone who takes the trouble can easily see that the supply is far greater than the demand, if the status of the profession is to be maintained. The Army and Navy have few places to offer, the mercantile marine could nearly sink their ships with the swarms of applicants. All that remains is assistancies—a life that would contrast unfavourably with a coachman's; the work is considerably harder, the pay about the same.

In conclusion, I would say to those who intend entering on the profession, Pause, and think before you pass the Rubicon! To our Legislature, Save us from ourselves, or we perish! Apologising for trespassing on your valuable space,

I remain, Sir, your obedient servant,

John-st., W., July, 1886. GEO. TANDY WILKINSON, L.R.C.S.I., &c.

Cessus.—The Midwifery Licence is obtainable at the Rotunda and Coombe Hospitals, and is recognised as a qualification by the Irish Local Government Board.

AN UNEXPECTED CAUSE OF NUMBNESS OF THE LOWER EXTREMITIES.

To the Editor of THE LANCET.

SIR,—About two months ago I was summoned to a patient who was stated to be suffering from paralysis. On arrival I found a man about forty-six years of age lying in bed, and complaining of numbness of the feet and calves of the legs, even up to the hips, without, however, any loss of either sensory or motor power—that is to say, there was partial suspension of sensory susceptibility in these particular localities. On visiting the patient next day, I found him up and dressed, and noticed a hesitancy in his manner of walking, especially when I asked him to cross the room with his eyes closed. In fact, when he attempted it I had to jump up from my chair to save him from the fireplace. I had attended this patient for years, and there was no history of syphilis to account for all this. His general health was good, and he was a man of abstemious habits. Could it be sclerosis of the posterior or lateral columns of the cord? Could it be due to some tumour or effusion pressing on the cord? Or could it be the result of some peripheral origin, seeing that the patient had frequent attacks of "cramp in the feet"? I asked myself all these questions, when it suddenly struck me that it would not be inappropriate to inspect the premises, which I did, and found, to begin with—which to my mind was quite sufficient, hygienically speaking, at all events—the w.c. completely blocked up, and running over; a state of things which had existed for six weeks. Now, this hardly seems to bear on the case in point; but if it be considered—as I found out—that pails are substitutes for imperfect or useless waterclosets, it comes within the range of possibility that the whole weight of the upper half of the body, at least in such a position and on such a sharp edge, would tend towards the "numbing" of the sciatic and its branches. Anyhow, this patient had to resort to this method of relieving himself, and, as he described it, with extreme difficulty on each occasion, the sharp edges of the pail adhering tenaciously to the skin over the gluteal region. I suggested that the closet should be looked to as an excuse that the pail should be dispensed with. All this I took care was carried out, and about a week ago the patient came to my surgery to thank me. I may add that during the course of the treatment catheterism was necessary, as also were injections to unload the rectum.

I am, Sir, yours faithfully,

London, July 10th, 1886. T. HENRY WAGSTAFFE.

"PONDEROUS BEHESTS."

To the Editor of THE LANCET.

SIR,—Your correspondent, "M.R.," will find in Billroth's Clinical Surgery (published in 1881 by the New Sydenham Society), page 209, a [illegible] with illustration, of a case of enormous hypertrophy of [illegible], and of the course of treatment attempted to be pursued.

I am, Sir, yours obediently,

Peterhead, July 11th, 1886. A. B. BRADY

FREE TRADE IN ALCOHOL.

SINCE the abolition of licensing in France, in 1880, drinking shops have enormously increased. So that France competes with England and Switzerland as an alcohol-consuming country. The Academy of Medicine recommends that the trade in alcohol should be made a State monopoly.

A. G. P.—1. Our correspondent can claim a fee for the midwifery case. Such a fee has frequently been allowed. Whether in any given case the law should be put in motion is a matter for the consideration of the practitioner himself. Law is sometimes a disappointing remedy.—2. It might be legally justifiable to stop the medicine in the case specified; but if the impecuniosity is real, it would be more kind to send it, with an intimation that the patient must apply for further help to the medical officer of the parish.

Mr. Thatcher (Dalston) is troubling himself unnecessarily. As we have already said, the names were obviously fictitious.

Cymro.—No.

PART OF TOOTH-PLATE IMPACTED IN THE ŒSOPHAGUS, AND AFTERWARDS PASSED NATURALLY.

To the Editor of THE LANCET.

SIR,—On June 9th, Mrs. D——, aged sixty-five, came to see me, complaining of great pain in the throat, and difficulty in deglutition, due, she said, to having swallowed a short time before part of her tooth-plate while eating a piece of cake. On manipulating the neck a little below the cricoid cartilage she complained of great pain, especially on the left side. Nothing could be felt in the œsophagus by the finger; but on passing a whalebone probe with a piece of sponge at the end it became arrested at about six inches of its length. A coin-catcher was passed several times, but unsuccessfully; but at last it caught the edge of the plate, and after a fair amount of traction the plate turned and the extractor loosened its hold. Various forceps were then tried, but unsuccessfully, occasionally catching it, but never with sufficient firmness to move it. As some time had been spent in these attempts to extract the plate, and the patient was becoming exhausted, she was allowed two hours' rest, when a further attempt proved equally unsuccessful. It was now decided to postpone any further attempt until the following day, and, if necessary to perform œsophagotomy, after the manner successfully carried out by Sir W. Mac Cormac in the case reported in THE LANCET of May 29th. On seeing the patient on the following morning, she said, to our consternation, that the substance had passed into the stomach. Great pain was still felt on swallowing, but the foreign body had evidently left its former situation. The patient was ordered to keep perfectly quiet and to live on farinaceous food, and it was decided to wait for further symptoms. She was visited daily. She still complained of great pain in the throat and inability to take much food. To our great relief, after a sojourn in the body of three days and three hours, it was passed naturally. It was about the third part of an ordinary tooth-plate, with an ugly hook projecting from one corner, which might have led to serious consequences.

I am, Sir, yours faithfully,

Lincoln, June 15th, 1886. W. J. CANT, M.R.C.S., &c.

DISLOCATION OF CRICOID CARTILAGE.

To the Editor of THE LANCET.

SIR,—I beg to forward you notes of a case which you may perhaps think of sufficient interest to admit into your columns.

During my voyage out here, by the courtesy of the ship's surgeon, I witnessed an accident which I believe to be of rare occurrence. A lady suffering from sea-sickness was confined to her berth, and the stewardess brought her some tea in a spouted feeding-cup. She was lying on her right side, and did not turn round, but simply rotated her head to the left to receive the tea, which the stewardess held to her lips. As she swallowed the first gulp she experienced a suffocating pain in the throat, and gasped for breath. The stewardess immediately sent for the ship's surgeon, who, on seeing the case, requested me to come. The patient was lying on her back, with her chin flexed on the sternum; the face and lips were of a dark purple colour, the hands cold, and respiration rapid, shallow, and of a hard and noisy type. In the middle line in front the lower margin of the thyroid cartilage was found to be unduly prominent, while under its left margin the left side of the cricoid cartilage could be felt tilted up. It was necessary to take immediate steps for the patient's relief; so (with tracheotomy instruments at hand in the event of their being required) the ship's surgeon stood at the patient's side and manipulated the cricoid, while I extended the chin and at the same time rotated the head towards the opposite side, when suddenly there was a sensation as of something giving way, followed by a fit of coughing and vomiting, at the end of which it was found that the parts had regained their normal position, and that the patient could breathe with comfort. The accident I believe to be due to the twisted position of the neck during the action of deglutition.

I am, Sir, yours very truly,

Calcutta, June 19th, 1886. F. C. BUTT.

ERRATUM.—In Mr. Gamgee's letter on John Hunter, page 98 of our last issue, for "Henry" read *Drew* Ottley.

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COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Prof. F. J. Bell, London; Dr. Whipham, London; Dr. Fenwick, London; Mr. W. Whitehead, Manchester; Dr. Norman Kerr, London; Mr. Harper, Barnstaple; Mr. J. H. Wagstaffe; Mr. Barré, Seacombe; Dr. O'Neill, Belfast; Mr. G. A. Atkinson, Edinburgh; Mr. C. H. Eyles, Newhampton; Dr. Wiglesworth, Rainhill; Mr. G. T. Wilkinson, London; Mr. J. E. Wilkinson, Leamington; Mr. P. Dunn, London; Dr. Léon Petit, Paris; Mr. Laffan, Cashel; Col. Martin; Dr. A. Morison, Highbury; Mr. J. S. Nairne, Glasgow; Dr. Bell Taylor; Dr. M. A. Boyd, Dublin; Mr. C. H. Bishop, London; Dr. Silk, Highgate; Mr. A. B. Berry, Penzance; Mr. F. C. Butt, Calcutta; Dr. B. Rake, Herne Hill; Mr. Manby, Swaffham; Mr. Taylor, Buxton; Dr. Lyon, Fence Houses; Mr. Bowen, Birmingham; Mr. Pratt, Darlington; Mr. G. D. Mackintosh, Hallaton; Mr. Lichtenfeld, London; Messrs. Dawson Bros., Montreal; Mr. Easterbrook, Fulham; Messrs. Maw, Son, and Co., London; Mr. Houde, Paris; Miss Beavan, Hay; Mr. Knightley, London; Mrs. Smith, Cheltenham; Mr. Rhodes, Glasgow; Dr. Seaton, Sunbury; Mr. White, Wolverhampton; Dr. W. W. Myers, Takow; Mr. Unsworth, Liverpool; Dr. Chadwick, Heywood; Mr. Buttersfield, Huntingdon; Dr. Fardell, Paris; Mr. Coates, Sirhowy; Messrs. Lee and Nightingale, Liverpool; Mr. Hall, Beverley; Mr. Campbell, Highbury; Mr. Ramsden, Halifax; Mr. Reed, Canterbury; Miss Lion, Highbury; Mr. Newman, Glasgow; Mr. Edmunds, Dalston; Mr. R. Freeman, London; Dr. Lyon, Houghton-le-Spring; Messrs. Haller and Co., London; Mr. Abbs, Dewsbury; Mrs. Mott, Harrow; Mr. Parkes, London; Dr. Shirtliff, Kingston-on-Thames; Dr. Swanton, Colney Hatch; Mr. Scott, Manchester; Dr. Sutcliffe; Mr. T. D. Pryce, Nottingham; Dr. J. Morton, Glasgow; Dr. Albert Wilson, Leytonstone; An M.D.; An Old Subscriber; M. W., Builth; H. S.; H.; Stretton, Kidderminster; R. S. V. P.; Med. Doc.

LETTERS, *each with enclosure*, are also acknowledged from—Sir Henry Thompson, London; Rev. E. P. Phelps, Bournemouth; Mr. Lewinson, Smethwick; Surgeon Morton, Carrick-on-Shannon; Dr. Sanderson, Swansea; Dr. Greves, Liverpool; Mr. Maw, Bradford; Mr. Colman, Leeds; Mrs. Charlton, Darlington; Dr. Foxwell; Messrs. Maclachlan and Co., Edinburgh; Mr. Greenwood, Liverpool; Mr. McGregor, Clayton West; Surg.-Major Dobson, Exeter; Hon. Mrs. Wills, Petersfield; Mr. Richards, Hanwell; Mr. Bigg, London; Mr. Popham; Mr. Luck, Lewes; Dr. Smith, Paddington; Mr. Whitley, Halifax; Mr. Bailey, Accrington; Mr. Jeffrey, Epsom; Mr. Crozier; Miss Carson, Burton-on-Trent; Dr. Lancaster; Dr. Adam, West Malling; Mr. Cowley, Upton-on-Severn; Dr. Johnston, Landport; Dr. Logan, Newcastle-on-Tyne; Mr. Rideal, London; Mr. Morris, Kingsland; Mr. Powne, Chard; Mr. Parry, Ferndale; Mr. Scott, Birmingham; Dr. Somerville, Carsphairn; Mr. Walker; Mr. Luther, Limerick; B., Basingstoke; X. Y. Z., Hackney; Sigma; J. K. L. M.; Mastoid; T. P. C.; Surgeon, Kingston-on Thames; M.R.C.S., Eastbourne; B. C. D.; P. S.; Berks, London; M. W.; Mrs. B., Leamington; Kelvin, Manchester; M. B., Edinburgh; Physician; C. J. G., Preston; Theta; J. D.; A. H. C., Burton-on-Trent; H. K. B.; Doctor, Kingston-on-Thames; M. C., Medicus, Tottenham; M. L. R.; Bayswater; A. F.; A. B. C., Sandwich; O. K.; A.; C. A.; Hele; V.; Companion; M. M.; Z. Z; Dowlais.

Sussex Daily News, Indian Daily News, La Tribune de Genève, Sussex Coast Mercury, Montrose Review, Edinburgh Evening Dispatch, Weekly Dispatch, Leicester Daily Mercury, Advocate of India, Hong Kong Daily Press, Falmouth (Jamaica) Gazette, The Bat, York Herald, &c., have been received.

Medical Diary for the ensuing Week.

Monday, July 19.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.

ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesdays, same hour.

CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2 P.M.

HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.

Tuesday, July 20.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.

CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

Wednesday, July 21.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesdays and Thursdays, 1.30 P.M.

ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department, Tuesdays and Fridays, 9.30 A.M.

ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.

LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.

GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.

KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; and on Friday, 2 P.M.; and Saturday, 1 P.M.

Thursday, July 22.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

Friday, July 23.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Saturday, July 24.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.

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Clinical Lectures
ON
CASES OF DIFFICULT DIAGNOSIS.

By SAMUEL FENWICK, M.D., F.R.C.P.,
PHYSICIAN TO THE LONDON HOSPITAL.

LECTURE VII.

ON GASTRIC AND PERIGASTRIC ABSCESSES.

(*Concluded from page 112.*)

LET us now inquire into the state of health of the subjects of perigastric abscess previous to their final attack of illness. I have been able to collect the history of twenty-four cases as regards this point, and only two of the whole number are said to have previously enjoyed good health. But when the details of the post-mortem examinations of these cases are examined, it is evident that their histories must in this particular have been inaccurate; for in one the perforating ulcer is described as having "round and smooth edges," characters that would only be afforded by an ulcer of some duration; and in the other a cicatrix is described as existing opposite the perforation. With respect to the remaining twenty-two, the great length of time during which the symptoms of gastric ulcer had been experienced is very striking; thus, only two had complained of them for less than one year, eleven had been ill from one to four years, four for periods varying from eight to thirty years, and of five it is recorded "they had suffered for many years." In every case pain of the epigastrium or abdomen had been the chief subject of complaint, and in most there were also signs of dyspepsia; in seven vomiting was a prominent symptom, but in only two is there any mention of hæmatemesis. The absence of hæmorrhage is important, as confirming what we know from the histories of the cases, that the ulcers are usually of long duration; for this symptom is the result of an extension of the disease, and is rarely an accompaniment of an old indolent sore. The symptoms of course varied according to the part of the stomach which was the seat of the sore. For example, in the following rare case, which was admitted into the hospital under the care of Dr. Langdon Down, the ulceration had produced a narrowing of the lower end of the œsophagus, and the symptoms were those of stricture of this part.

CASE 6.—A female, aged forty-two, had been ill for nine months. At first she suffered from difficulty in swallowing, which gradually increased, and for the last two months she has been unable to take any animal food. "When she attempts to eat it retching comes on, but she has no pain except when eating." She was very weak and feeble, and had been losing flesh. Respiration much prolonged at each apex.

Post-mortem examination.—"The peritoneum was covered with recent lymph, and tubercles were scattered over the intestines and mesentery. The stomach was adherent to the left lobe of the liver, and when the adhesions were separated there was thick greenish matter like inspissated pus. The pyloric end of the stomach was not thickened, but there was an ulcer at the œsophageal end the size of a crown-piece, with indurated edges; the œsophageal end was pushed aside, indurated, and bounded by thick tough tissue, and the solid fibrous tissue which surrounded the œsophagus extended for one inch upwards. The upper fourth of the lungs was fibroid, and there were cavities the size of walnuts in them."

As both the lungs and the neighbourhood of the gastric ulcer in the above case were the seat of fibroid thickenings, it is probable that there was some common cause capable of producing it. There was no history of syphilis, but considering how often both the stomach and the lungs are affected by this disease, it is possible that it may have been the cause of the mischief in both. Ordinary tubercular affections are not a common accompaniment of perigastric abscess, for I have only been able to collect five cases in which they existed.

[illegible] of which the patients affected with [illegible] was usually ushered in by severe [illegible] and was of short duration. In seven out of twenty-three cases in which details are afforded, sudden collapse occurred, accompanied or followed, as soon as the collapse passed off, by pain of the abdomen or of the epigastrium, along with tenderness on pressure, distension, and other symptoms of peritonitis. In eleven there was no collapse, but the pain in the epigastrium is recorded as having suddenly become more severe. Rigors are mentioned only in three instances; in one as associated with collapse, and in the others as accompanying severe epigastric pain. Of the five cases in which the formation of the abscess was not ushered in by collapse or increased epigastric pain, one was suffering from phthisis and one from cancer, affording an example of what we have in a former lecture had to point out to you, that abdominal abscesses may occur in persons who are in a very feeble state of health, without any well-marked symptoms. The third case was admitted into hospital with symptoms of pneumothorax, arising from perforation of the diaphragm by the abscess; and you can easily understand how in such a condition the patient may have been unable to afford any distinct history of her former state of health, and consequently the symptoms indicating the formation of an abscess may not have been recorded. In another the first symptoms were severe constipation and vomiting; and the fifth case had for a length of time been affected with an abdominal tumour which suddenly burst into the stomach, and was rapidly followed by fatal exhaustion.

We are justified, then, I think, in concluding that in every case of perigastric abscess, excepting where it occurs in persons affected with phthisis, cancer, or some other chronic exhausting malady, the first formation of the abscess will be accompanied either by collapse and signs of general peritonitis, or by sudden and severe pain of the epigastrium, attended with indications of local peritonitis.

The absence of repeated rigors is worthy of remark, as it may often enable you to exclude this condition where the diagnosis is doubtful. A patient, for example, is at present in my wards who was admitted with severe rigors repeated daily, as in ague. This and the absence of any history of gastric or duodenal ulceration enabled us to exclude local peritonitis; and as he has been for three or four weeks expectorating lung tissue, and there are signs of consolidation at the base of the lung, it is probable, as was at first conjectured, that an abscess in or near the liver has perforated the diaphragm.

On inquiring into the course of perigastric abscess, it will be advisable to separate such as commenced with symptoms of collapse from those in which this was not present. Looking, then, at the collapsed cases, we find that in one instance this condition persisted until death, which took place in twenty-two hours; but it was found on post-mortem examination that the abscess had been present for some time and had burst into the peritoneal cavity. In the others the collapse gradually decreased, and the patient chiefly complained of severe and continuous pain in the abdomen or epigastrium, with tenderness on pressure, distension, and fever. Vomiting was a prominent symptom in one case and diarrhœa in another. In five perforation either of the pleura or pericardium occurred, and in two the patient complained of a sensation as if something had suddenly given way. In five cases in which the duration of life is given, the average of the last illness was thirty days. Details are afforded in nine cases where collapse was not present, and in all severe and continuous pain in the abdomen or epigastrium persisted until death, attended with tenderness on pressure; but there is no record, as we should have expected, of constant vomiting. In one pus was vomited, but there is no notice of hæmatemesis. In five pleurisy was set up: in four of these by perforation of the diaphragm. The average duration of life was less than in the collapsed cases: four died within two weeks, and two lived more than a month after the commencement of the fatal illness. Fever is mentioned in nearly all as a prominent symptom, but I have been able to find only one or two in which the course of the temperature is noted.

Occasionally temporary recovery ensues after the formation of the abscess, and instances are recorded where the patient was able to return to his employment, and was afterwards attacked with general peritonitis arising from rupture of the sac. We may suppose that in such instances the pus had become walled in by fibroid tissue, as in the following, which was admitted into this hospital under the care of Dr. Hughlings Jackson.

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CASE 7.—Male, aged fifty-one. "He met with an accident two years ago, and then vomited blood. He has since suffered from pain of the stomach, not increased by food. For the last week he has suffered constant pain; the abdomen is distended; has had nausea, but no vomiting. The pain is increased by the act of breathing." The next day he is mentioned "as lying on his back and as moving very cautiously; the pain was chiefly in the epigastrium, but he shrieked out directly the abdomen was touched. The lower part of the chest and of the abdomen were quite hard and rigid." On the following day there was noticed a friction sound at the left base.

Post-mortem examination.—"A chronic ulcer of the stomach along the lesser curvature, nearer to the œsophageal end, which had perforated all the coats. Old perforations and adhesion of the stomach to the liver, and an abscess was situated a little above the ulcer. The stomach was firmly adherent to the under surface of the liver, and there was thickening between the left lobe of the liver and the œsophageal end of the stomach and diaphragm. On separating the stomach some pus escaped, and a cavity was opened, bounded above by the diaphragm, on the left by the diaphragm and spleen, on the outer side by the left lobe of the liver, and below by the stomach; so that the abscess was situated chiefly between the diaphragm and the stomach. It was surrounded by fibroid tissue, showing that it had existed for some months. The cavity was about an inch from the floor of the ulcer, being separated from it by fibroid tissue."

It will be observed that the patient complained of pain increased by breathing, and we can readily understand how such would be the case, as the abscess was in immediate contact with the diaphragm. I have not found this symptom noticed as a prominent one in the other histories I have collected, but it is probably not uncommon. In many of those in which perforation into the pleura is mentioned we have unfortunately very scanty details of the symptoms; but in those that are more carefully recorded the patients were suddenly attacked with severe pain of the side and urgent dyspnœa. In one rigors are said to have preceded the chest symptoms, as in Case 2; in another the patient became rapidly unconscious; one complained of a sensation as of "something had given way"; and in all the sudden pain was quickly followed by fever. In one only the pleurisy was accompanied by jaundice, but no light was thrown by the post-mortem examination on the cause of this condition. Where the abscess opened into the pericardium still more striking symptoms were produced. One complained of a feeling "as if something had burst," and all experienced severe pain in the heart's region, accompanied by great dyspnœa; the pulse was very small and rapid, the extremities cold, the patients extremely restless, and death occurred on the third or fourth day after the accident.

Such are the usual symptoms observed in cases of epigastric abscess, but occasionally the ordinary difficulties of diagnosis inseparable from such an obscure disease are increased by the coexistence of some other disorder. For example, a case was admitted under Dr. Sansom in which, on post-mortem examination, the following conditions were discovered:

CASE 8.—"General peritonitis, dilated stomach, and stricture of the pylorus; a large ulcer with sharp edges and a perforation in the centre of its base, and a large cavity between the walls of the stomach and the liver surrounded by organised lymph. There was also a large aneurysm of the abdominal aorta eroding three of the vertebræ, and also fibroid thickening and consolidation at both apices." Unfortunately, the history of this case is lost, but you can readily imagine what a complicated clinical picture it must have presented to the physician, and how impossible it would be to diagnose the state of so many important organs simultaneously affected.

You will observe that there is nothing very distinctive in the symptoms of perigastric abscess, but we shall find that in many instances the physical signs are very characteristic. When we examined the subject of duodenal abscesses, we deferred the consideration of the physical signs accompanying them on account of their similarity with those of perigastric abscesses; and in the remarks I now propose to lay before you I shall include abscesses connected with both of these sections of the digestive tract. In a small number of cases, as has been before mentioned, no communication could be discovered between the ulcer and the abscess, although there was no doubt that the latter was the result of the irritation set up internally. The physical signs in such cases are, of course, somewhat different from those we have before mentioned, as the contents of the abscess consist of fluid only, and gas and liquid do not coexist, as in those that communicate with the interior of the digestive canal.

A tumour capable of being distinguished externally is mentioned in only six of the cases arising from ulceration of the stomach; but it was almost always present where the disease was associated with cancer. The rarity of a tumour in the former class is easily explicable when we remember that in most instances the pus lies very deeply, and is in relation with the diaphragm. But there is, I think, another reason which may account for its being so rarely recorded, and that is the very tense state of the muscles, especially mentioned in Case 2, that almost always accompanies any painful condition of the upper part of the abdominal cavity, rendering its exploration exceedingly difficult. Whenever a tumour was present it was very tender; but in one instance it is stated that slight pressure produced no complaint, whilst deep pressure caused considerable suffering. In each instance the tumour at first felt hard, but this was soon replaced by the sense of fluctuation.

In most the percussion note was at first dull, but afterwards tympanitic, and in all probability this took place on account of the tumour becoming more superficial. In one well-reported instance the sound was at first dull, afterwards tympanitic, then lessened in bulk after an attack of diarrhœa, and finally disappeared, the contents of the abscess having been discharged through the diaphragm. In another the line of dulness varied according to the position of the patient, showing that the cavity was of considerable size, and that it contained both air and liquid. One reporter mentions what is an important sign in the diagnosis of these tumours—viz., that it was immovable both on full inspiration and by external pressure.

There are other signs which will assist you to ascertain the presence of a tumour situated below the diaphragm, whether its contents are only fluid or also contain air. Thus the affected side may be enlarged more than the opposite one, a point which can be determined by measurement or by the eye. Generally the lower ribs are thrown outwards, so that the angle formed by the edge of the hypochondrium and a line drawn from the ensiform cartilage to the umbilicus is larger than that of the opposite side. In a small number of cases the pus was in contact with the ribs, and where such is the case one or more of the intercostal spaces may be discovered to be unusually wide. You have seen lately two instances in which the diagnosis of a hydatid tumour was determined by means of such observations. In each there was no decided epigastric tumour and no bulging in the upper line of the hepatic dulness, but the lower ribs on the right were higher than those of the left side, while the hypochondriac angle and the breadth of one of the intercostal spaces were increased. In each case a deep exploratory puncture was made between the ribs, and the cyst was successfully emptied. When there is a collection of pus situated just below the diaphragm the organs below it are of course depressed. In one instance a tumour was discovered in the region of the spleen, as in Case 2; in another the lower edge of the liver extended a considerable distance below the hypochondrium. This displacement would be a most valuable indication of all subphrenic tumours, were it not, as has been before stated, that the abdominal muscles are usually in such a state of tension that the necessary examination is attended with great difficulty. It is important to bear in mind that the change in the position of the heart is either very slight, or the organ is only tilted upwards by the fluid beneath it. In pleuritic effusion, as you are aware, it is pushed towards the opposite side, but in subphrenic abscess this does not occur. In all cases, unless the abscess is of very small size, the diaphragm is thrust upwards, and the lower lobes of the lung are compressed; consequently, there is dulness on percussion, which is more evident behind than in front. You can distinguish this from a collection of fluid, as the tactile fremitus is increased, and is accompanied by diminished respiration and generally by fine crepitation. In most of the reports the dulness is said to have reached as high as the angle of the scapula, and the line of dulness in front is also stated to have been higher than in the normal condition. I have not met with any remark as to the line of dulness being curved, as is not unfrequently the case in hydatid and other cysts of the

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liver; but this probably arises from the fact that the dulness is the result of the compression of the lung alone, the abscess being more deeply situated than in the case of hepatic cysts.

You must bear in mind that an abscess in connexion with the stomach generally contains both air and liquid, and is therefore in a similar state to a pleura which is the seat of pneumothorax; consequently the sounds, such as amphoric respiration, metallic tinkling, and splashing on succussion, which are usually looked upon as characteristics of the latter, may also present themselves in the former condition. This was first pointed out in a case published by Dr. Barlow and Dr. Wilks as far back as the year 1845, and these observations have been since confirmed by many other observers. The amphoric sounds are, however, generally not confined to the thorax, but can be often heard over the whole abdomen, and, in some instances are audible to the lower border of the spine.

There are no special physical signs when the abscess bursts into the pleural cavity. If it has contained air, the ordinary evidences of pneumothorax present themselves; but if only fluid, then the signs of pleuritic effusion can be

FIG. 2.

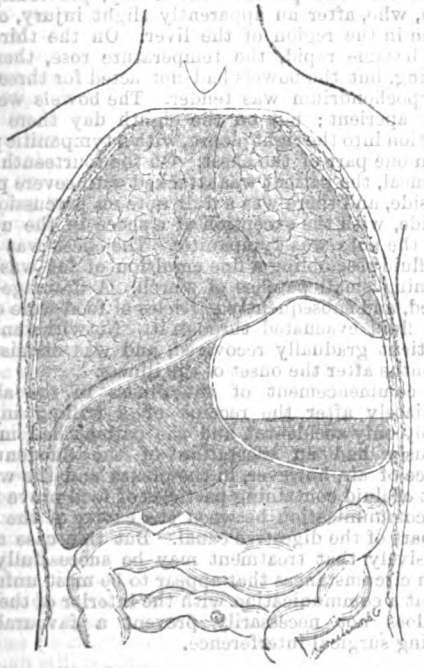


Diagram of Perigastric Abscess. In upper part percussion, movements of chest, inspiration, tactile fremitus, and vocal fremitus all normal; heart raised. In lower part percussion tympanitic; amphoric sounds.

recognised. In one instance, when the chest had been aspirated, the fluid removed was found, on microscopical examination, to contain particles of food, proving of course that the mischief had originated in the digestive canal. Where the abscess opens into a lung previously adherent to the diaphragm, pneumonia is set up, and you may find by microscopical examination particles of lung-structure in the sputa. In the rare cases where a perigastric abscess has burst into the pericardium, physical signs of great interest have been remarked. The pericardium, being distended with air, presented a clear note on percussion, instead of the normal dulness, whilst the motions of the heart were accompanied by a metallic sound, which in some cases was loud enough to be heard by the side of the patient's bed.

As you may readily imagine, there is often great difficulty in the diagnosis of perigastric abscess, and you are liable to confound it with a number of tumours situated in the upper part of the abdomen. You will frequently see in the wards hydatid cysts presenting themselves in the left hypochondriac region, and when they suppurate you may easily mistake a perigastric abscess for one of those tumours. But the history of a hydatid is very characteristic; it is often discovered by accident, and has generally been for a considerable length of time unattended by pain or any other inconvenience excepting such as may arise from its bulk, there has been no previous emaciation or deterioration of the general health, no pain after food or vomiting. A hydatid tumour is always dull on percussion, is not lessened by diarrhœa or vomiting, can be generally shown by careful manipulation to be in connexion with the liver, and, unless adhesions have been extensively formed, it moves with the respiration or by pressure. You are more likely to mistake a perigastric abscess for a hepatic abscess, unless you bear in mind that the latter almost always arises from dysentery or an affection of one of the abdominal organs whose circulation is connected with the portal system. It chiefly occurs in persons who have lived in the tropics, and have been previously healthy; its course is acute, is usually attended with repeated rigors; the tumour is quite dull on percussion, is never tympanitic, and is never accompanied by signs of pneumothorax. As has been already pointed out, in some of the cases of perigastric abscess the signs of pneumothorax have been observed where there has been no perforation of the diaphragm, and consequently a mistake in diagnosis has often been the result. Forty years ago two

FIG. 3.

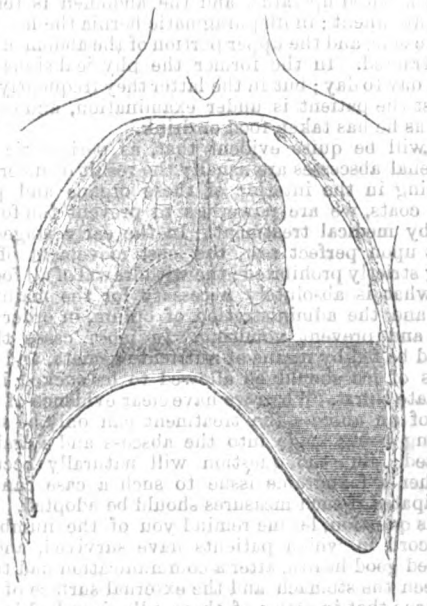


Diagram of Pneumothorax. Everywhere percussion tympanitic; movements of chest, inspiration, tactile fremitus, and vocal fremitus diminished or absent; amphoric sounds; heart displaced.

cases of this kind were correctly diagnosed by Dr. Barlow, and of late the characters distinguishing these conditions have been clearly pointed out by Dr. Leyden. In pneumothorax there is usually a history of cough, dyspnœa, hæmoptysis, or other signs of pulmonary disease; whilst in perigastric abscess the patient has previously complained of pain after food, dyspepsia, or other symptoms pointing to disorder of the digestion. In the former the whole of the affected side is enlarged, the intercostal spaces are flattened, and the movements of the chest are everywhere absent; whilst in the latter only the lower part of the chest is distended, and the upper portion of the affected side moves in breathing. In pneumothorax there is an absence of the respiratory murmur and of the tactile fremitus all over the affected side; whilst in perigastric abscess the respiratory murmur can be heard for some distance down the side, and is audible at a lower point in forced respiration than in ordinary breathing. In addition to this, the amphoric sounds are often audible over the whole abdomen and even to the bottom of the spine in perigastric abscess, instead of being confined to the immediate neighbourhood of the thorax; the heart is generally pushed to the opposite side in pneumothorax, but is only tilted upwards in the case of perigastric abscess. The accompanying diagrams (Figs. 2 and 3) will make these distinctions more plain to you than mere verbal descriptions.

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There is another very rare condition which in some respects resembles perigastric abscess and might lead to a doubt in diagnosis. In diaphragmatic hernia portions of the abdominal viscera find their way into the pleura, which is almost always the left, and you will remember it is also the left side which is commonly affected in perigastric abscess. As the pleura contains organs filled partially or wholly with air, there is also in such cases a tympanitic note over the lower part of the chest, and often a metallic sound when the stethoscope is applied to the part whilst percussion is made near it with the pleximeter. The various amphoric sounds are also audible, as in the case of pneumothorax and of perigastric abscess, where there is a communication between the abscess and the stomach. There are, however, well-marked points of difference between these conditions. Perigastric abscess is preceded by symptoms of ulceration of the stomach; diaphragmatic hernia is mostly the result of injuries, although in some instances it is congenital. The former is always accompanied by severe pain, tenderness of the part and fever; the latter, unless strangulation has taken place, may be without any symptoms, or these may be only temporary—such as dyspnœa directly after food, evidently dependent on the pressure of a distended stomach. In perigastric abscess the heart is tilted upwards, and the abdomen is tense, tender, and prominent; in diaphragmatic hernia the heart is pushed to one side, and the upper portion of the abdomen is flattened or retracted. In the former the physical signs often vary from day to day; but in the latter they frequently alter, even whilst the patient is under examination, and especially as soon as he has taken food or drink.

It will be quite evident that, as perigastric and peri-duodenal abscesses are usually the result of ulceration commencing in the interior of these organs and perforating their coats, we are powerless to prevent the formation of pus by medical treatment. In the early stages we must insist upon perfect rest, the least movement of the body being strictly prohibited; the withdrawal of all food, excepting what is absolutely necessary for the maintenance of life; and the administration of opium, in order to relieve pain and prevent vomiting. In most cases the patient should be fed by means of nutrient enemata, and only small pieces of ice should be allowed to be sucked in order to alleviate thirst. When we have clear evidence of the formation of an abscess, the treatment can only be surgical, an opening being made into the abscess and a drainage-tube inserted. But the question will naturally occur to you whether a favourable issue to such a case can be fairly anticipated if such measures should be adopted. In answer to this question, let me remind you of the number of cases on record in which patients have survived, and, in fact, enjoyed good health, after a communication had taken place between the stomach and the external surface of the body. It is true that in many of these adhesions had been formed between the stomach and the abdominal parietes, but in others it is distinctly stated that an abscess was first discovered in the abdomen, which subsequently burst externally. Cases, again, are on record in which the contents of the abscess seem to have been evacuated through the digestive canal, and the patient recovered. The following very interesting and instructive example is recorded by Dr. Hilton Fagge.

CASE 9.—A man, aged thirty-seven, who had always enjoyed good health, nine months before his admission into Guy's Hospital was kicked by a man on the left side. A swelling formed there, and gradually increased in size. Twelve days after his admission he vomited a small quantity of blood, which recurred next day. The tumour is described "as a rounded mass extending deeply, so that no lower edge to it can be felt. Its inner border reaches the middle line of the body, and it reaches downward to within an inch of the umbilicus. It is perfectly dull except along its inner border. Here there is a tympanitic resonance, less clear, however, than over the adjacent stomach. The heart's impulse cannot be felt below the nipple at all. It is felt above the nipple between the third and fourth ribs, and also above the third rib. On listening to the heart's sounds in this position, they are perfectly natural; but below the nipple very curious gurgling sounds are audible, synchronous with the heart's beats. They are of a metallic or musical quality, the systole being often accompanied by several distinct tinkling sounds." At a subsequent date it is recorded that "the gurgling sounds can now be heard without the aid of the stethoscope, and even at the distance of three feet from the patient, but they are not constant. There is now tympanitic resonance over the tumour, except when he lies on his left side; this causes the disappearance of the tympanitic percussion note." He was discharged from the hospital at his own request, "but he came back some time afterwards, and said that the tumour had suddenly disappeared, having discharged a quantity of matter which I suppose he must have vomited, although there is no note of the fact in the report. On examination it was found that he was right in stating the tumour was no longer to be discovered. The man appeared to be quite well."

Now, although the foregoing case differs from most of those we have before examined, inasmuch as the abscess would seem to have commenced externally to the stomach and to have been the result of an injury, yet the vomiting of blood, the well-marked physical signs, and the eventual disappearance of the tumour after a discharge of pus, seem to prove that there was a communication between the abscess and the stomach, and if so, that cases of perigastric abscess may terminate favourably. But you will remember that in a large proportion of cases perforation of the diaphragm takes place, and pneumothorax or acute pleurisy is set up before the existence of the abscess can be clearly made out. Does this condition, then, admit of recovery? Let me quote you a case of Dr. Tilmann's bearing upon this question.

CASE 10.—The patient was a boy, previously in good health, who, after an apparently slight injury, complained of pain in the region of the liver. On the third day the pulse became rapid, the temperature rose, there was no vomiting, but the bowels had not acted for three days, and the hypochondrium was tender. The bowels were opened by an aperient; but on the eighth day there was some exudation into the right pleura, with a tympanitic percussion note in one part of the chest. On the fourteenth day, after a full meal, the patient was attacked with severe pain of the right side, and there was a dull note on percussion all over that side, with the exception of a space in the upper part, where the note was tympanitic. The chest was aspirated, and a fluid resembling a fine emulsion of fat was removed, containing small patches of starch. A drainage-tube was inserted, and subsequently particles of food were discovered in the fluid evacuated through it. Notwithstanding this, the patient gradually recovered, and was dismissed cured six months after the onset of the illness.

The commencement of the illness in the above case immediately after the receipt of a trifling injury was probably only accidental, and the patient had most likely previously had an ulceration of the duodenum. The presence of air, however, in the pleura and the withdrawal from it of fluid containing particles of food prove that there was a communication between the cavity of the chest and some part of the digestive canal. But this case also shows conclusively that treatment may be successfully adopted even in circumstances that appear to be most unfavourable, and that a communication with the interior of the digestive tube does not necessarily prevent a favourable result following surgical interference.

ABSTRACTS OF

Lectures

ON

RHEUMATISM IN CHILDREN.

Delivered at the Hospital for Sick Children, Great Ormond-street.

BY ANGEL MONEY, M.D., M.R.C.P.

THE lecturer opined that it was legitimate to speak of a children's type of rheumatism. A typical case of rheumatism in a child might be pictured as one that presented in the course of a single attack of the malady the following phenomena: erythemata, nodules of the subcutaneous variety, now so well known, joint affection, endocarditis, and chorea. Dr. Money said that he had seen all these phenomena occur in the course of a single attack of rheumatism in a child. Briefly put, the children's rheumatism might be said to be characterised by the frequency of occurrence of erythemata, nodules, endocarditis, and chorea, and by the slightness of the arthritis and pain, pyrexia and

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sweating. He also advanced the view that arthritis was even of very doubtful occurrence, and considered that the slight effusions about joints met with in the rheumatism of children ought to be regarded as of the nature of a periarthritis, the slight spontaneous pain and not great tenderness certainly not militating against such a view. He was of Dr. T. Barlow's opinion, that effusion into the sheaths of tendons was decidedly a feature of the rheumatism of children. The subcutaneous nodules were regarded as of the first importance in the study of the affection in childhood. Accepting Dr. Barlow's homology between them and the bases of valvular vegetations, he thought we might consider that the changes in the one were in some sense representative of the alterations in the other. It was reasonable to suppose that, so long as the nodules came and went, similar alterations might be taking place in the valvular lesions. He still adhered to his opinion expressed three years ago, that in half the cases of severe rheumatic heart disease in children nodules might be found. The greater frequency of endocarditis in children might be partially accounted for by the slight painfulness of the arthritic manifestations, which did not prevent children suffering from a moderate degree of rheumatism from running about; mechanical strain probably thus played an important part in exciting the "nodular" valvulitis. It was by no means rare to find disease of the valves of the right side of the heart in rheumatic children. In rheumatism, chorea must be regarded, like the nodules, as a symptom, an expression of the disease. Although chorea, that attracted attention, was by no means a universal symptom of rheumatism in children, still it was remarkable, Dr. Money said, in his experience, how very frequently a slight amount of involuntary twitching of the fingers was present. Erythemata were probably even more frequently present than observed, for they were sometimes so fugacious as to be easily missed. Stiff-neck and back-ache were probably affections of the interstitial connective tissue of muscle, and not an affection of the muscular protoplasm proper. He had seen rheumatic nodules develop around a joint which at the time showed decided signs of effusion of the kind usually seen in children.

If we contemplated the course of the various rheumatic phenomena, it would be observed that they all tended to come and go, and in this respect they exhibited a series of degrees of duration beginning with erythemata, which were the least durable, passing on to periarthritis, teno-synovitis, nodules, chorea, and endocarditis. Doubtless, no absolute rule could be laid down in this regard, but the comparison was worthy of entertainment. Was there a single essential lesion in rheumatism? Might we look upon the various rheumatic phenomena as of equivalent order? The cause of rheumatism, whatever it might be, was liable to produce slight localised inflammations, having a remarkable tendency to subside. It was possible that an erythema might be regarded as the essential semeiological rheumatic element. In the skin such a lesion could easily pass away; in subcutaneous tissues its effects might be more marked and more lasting, though still tending to disappear; so with the heart. Could we regard the chorea of rheumatism as the result of multiple erythemata of some part of the motor apparatus of the brain and spinal cord? It was curious that so many of the rheumatic lesions had been ascribed to embolism; it would be easy enough to regard the papular and marginal forms of erythema as due to trifling multiple embolism, just as the purpura had been so explained; likewise the migratory joint affection, as Hueter held; and why not the nodules as well as the chorea? But embolism could hardly explain the nodular valvulitis or beading of valves; nor probably the tendency that sometimes existed for pericarditis to assume a nodular form, as both Dr. Barlow and Dr. Money had actually found at the necropsy of cases of rheumatic disease in children.

In conclusion, Dr. Money considered that the rheumatism of children was one of the most hopeful affections that the medical man could have to treat, provided that the diagnosis was made at an early stage of its development—a very large [illegible]. But the affection might be easily overlooked on account of the slightness of the subjective symptoms. How important was it that a most careful physical examination should be made in all cases of even slight ailments! Some cases of rheumatism of children was so insidious in its operation that it was inconceivable for the disease to be at work [illegible] giving signs either of a subjective or an objective [illegible] that a child has any sign of rheumatism about it should be kept absolutely all day and night in bed. Even if a mere urticaria or erythema be the only sign to be found, the bed should be tried for a day or two and the case watched for other members of the rheumatic series. Whilst holding that erythemata, the nodules, periarthritis, chorea, and heart disease were perhaps most frequently of rheumatic origin in children, Dr. Money allowed fully that any of these symptoms might own several other causes. Not all erythemata and chorea are rheumatic, nor is all periarthritis and endocarditis of rheumatic origin.

The severity of rheumatism in children may be measured by the appearance and clinical development of the nodules. The nodules, both of the subcutaneous tissue and the valves of the heart, are a guide to the degree of rheumatism and to its character. Some kinds of rheumatism resemble the shocks of the interrupted current, and others have more of the continuous character, smouldering in its manner. Dr. Money had seen abundant crops of nodules with signs of genuine heart disease come with the suddenness of a flight of birds, and disappear almost in the same rapid but in a more straggling manner; and these severe attacks may be repeated, leaving the patient somewhat devitalised, yet with prospects of a complete restoration to health. It was quite another thing in the rheumatism that was less intense but more continuous; this was the variety which Dr. Money believed led to further fibrotic changes in the valves, and sometimes in cases of this slowly progressive course the nodules abated some of their tendency to disappear, and remained for weeks and months together. No doubt intermediate stages between these two forms existed.

As to the further treatment of rheumatism, the principles were of the simplest order, but at the bedside many details had to be borne in mind and must be acquired by the practitioner himself, for no amount of lecturing could impart the necessities of treatment of any individual case. Dr. Money had faith in the employment of moderate quantities of bland fluids like barley-water or toast-and-water, to which might be added the alkaline carbonates, the effects of which were probably, he suggested, enhanced by their administration in dilute form. Salicylate of soda or salicine was of value in some cases of rheumatism in children, but in his experience of less value than in adults, whose pain and joint affection were so much more a part of their suffering.

Some of the most disheartening cases that could fall to the lot of the medical practitioner were those which presented a picture of pallid cachexia simulating the appearance of a neglected case of empyema. Here the child may be breathing rapidly, with a dry skin and clubbed fingers; with severe heart disease manifested in the rapid heaving action, loud murmurs, and thrills; with bronchitis, worse in the left lung, and even with patches of pleurisy about the bases of the lungs and elsewhere; with nodules about the ankles and elbows, considerable emaciation, and an almost undiscoverable effusion about two or three joints; and yet with a temperature that does not transcend 101° in the course of the twenty-four hours, and which may for a greater part of the time be not above 99° or even the normal.

NOTES OF A CASE OF EXCISION OF THE LARYNX FOR MALIGNANT DISEASE.

By DAVID NEWMAN, M.D.,

SURGEON IN CHARGE OF THE DEPARTMENT FOR DISEASES OF THE THROAT AND NOSE AT THE ROYAL INFIRMARY, GLASGOW.

THE following is a short report of one of the few successful cases of extirpation of the larynx for carcinomatous disease. It is not possible, even although six months have elapsed since the operation, to state positively that the patient has been cured of his disease; but I think the fact that there is not the least evidence of recurrence, and the circumstance that the patient is rapidly gaining in weight and is now able to follow his occupation, afford us some reason to believe that his chances of complete cure are considerable. The points in his favour are that the disease was strictly limited to the laryngeal cavity, and the fact that not only the epithelioma, but along with it a considerable portion of healthy tissue, was removed, reduces the tendency to recurrence to a minimum.

I believe that the high mortality in complete laryngec-

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tomy has arisen from the fact that the cases have not been carefully selected, and the operation has been performed without sufficient regard to the circumstance whether or not the growth was limited to the cavity of the larynx. For extrinsic carcinomatous disease laryngectomy seems to me unjustifiable, for two reasons—the immediate dangers of the operation are great when not only the larynx but also large masses of glands or portions of neighbouring organs require to be removed, and the possibility of eradicating the disease is extremely small. But while I willingly admit that growths of a cancerous nature, originating in the larynx and spreading beyond it, are not suitable for extirpation for the reasons I have just stated, I do not see why intrinsic carcinomata which have not yet exhibited any evidence of glandular involvement should not be removed with a good prospect of saving the patient.

Laryngeal carcinomata are, as a rule, intrinsic for a lengthened period, and therefore the time during which the operation may be performed with advantage is considerable; but, notwithstanding, it is of the utmost importance that, if the operation is to be performed at all, it should be undertaken as soon as the disease has been recognised, and probably the most certain way of clearing up a doubtful diagnosis is to remove a small portion of the growth by the endo-laryngeal method for microscopic examination. Such a simple operation is practically devoid of danger: if the neoplasm proves to be benign, the operation is but a step for its complete removal; if the growth is malignant, the sooner the fact is ascertained the better. I look forward to the time when very few cases of intrinsic cancer of the larynx will be permitted to involve the lymphatic system without an attempt being made to remove the primary growth.

The patient, J. W——, aged thirty-seven, was admitted into the ward for diseases of the throat and nose, Royal Infirmary, on Jan. 5th, 1886, and tracheotomy was performed on the 14th of that month. The following is the history of the case, as recorded in the ward journal:—About three years ago the patient first noticed a slight hoarseness in speaking, unaccompanied by pain or by any difficulty in swallowing or breathing. The hoarseness commenced about November, 1882, and continued until the following summer, when some improvement took place, but he was not certain whether the voice regained its former condition or not. The following winter (1883-84) his throat again troubled him, became worse than during the preceding year, and since then the disease has gradually developed to the present condition. He now complained of pain over the larynx, extending upwards to the left ear, but not increased by palpation. Aphonia was complete, and there was slight difficulty in deglutition. Digital examination externally did not reveal any alteration in size or form of the larynx, or enlargement of the lymphatic glands. The epiglottis was practically normal, but the aryteno-epiglottidean folds were thickened slightly, and the mucous membrane of the upper part of the larynx was hyperæmic. On the left side, midway between the arytenoid cartilages and the thyroid attachment of the false cords, there was a deep ulcer with a sharply-defined edge anteriorly, but posteriorly the edge was rounded, and the mucous membrane covering it presented a warty appearance. On the right side the mucous membrane was considerably thickened over the false cords; the true vocal cords were completely destroyed by a large ulcer, which extended down as far as the lower margin of the thyroid cartilage, and presented the characteristic appearance of an advancing epithelioma.

Tracheotomy was performed, as I have stated, on Jan. 14th, and on Feb. 1st I made the following note:—The patient stated that for the last few days the pain in deglutition had so increased that he had considerable discomfort in swallowing solid food. For some time back (two months) he had had difficulty in swallowing fluid food, but till lately he had been able to swallow solids without pain or even uneasiness. This change was accounted for by the fact that within the last week the mucous membrane covering the arytenoid cartilages and the inter-arytenoid fold had become considerably indurated, apparently by inflammatory products. The only other change worthy of note was an increase of pain over the larynx and in the left ear. Previously to operating, I asked Dr. Perry to examine the patient, especially as regards the condition of his heart and lungs. These Dr. Perry pronounced as practically normal. Having satisfied myself, by microscopic examination of a portion of it, that the growth was an epithelioma, I asked Drs. Macewen and Knox to assist me in the operation.

In excising the larynx, I made a median incision from the lower edge of the hyoid bone to the tracheotomy wound, which was situated on a level with the second ring of the trachea. The skin and subcutaneous tissues were then dissected from the thyroid cartilage in front, the anterior margin of the thyro-hyoid muscle was exposed, and the substance of the muscle was separated from the upper part of the cartilage by the handle of the knife, while the origin of the muscle from the oblique line on the side of the thyroid cartilage was separated by incision as far back as the pharynx. This was done first on the left, then on the right side. The other muscles—namely, the sterno-thyroid and the inferior constrictors—were then dissected, the edge of the knife being kept close upon the cartilage. The cricoid cartilage was then dissected out and the upper ring of the trachea exposed. When this had been done, the trachea was drawn forwards and upwards, and divided below the first ring. Up to this stage of the operation chloroform had been administered through the tracheotomy tube; but now that the trachea was divided transversely it was necessary to introduce a large-sized tracheal tube (Macewen's), with an indiarubber ring round the end in the trachea, in order to prevent blood from flowing into the air-passages, and also to permit chloroform to be administered at a little distance from the operator. The mucous membrane on the posterior wall of the trachea was then carefully dissected from the œsophagus; the superior cornu and upper part of the left ala of the thyroid were then cut through and separated from the rest of the cartilage, so as to permit the posterior part of the larynx to be more readily dissected from the pharynx. The thyro-hyoid membrane was then divided in front, the epiglottis was divided at its base, and the upper attachments of the larynx were cut through. A small portion of the mucous membrane of the pharynx was taken away along with the arytenoid cartilages. The portion of cartilage which was separated from the thyroid was then removed. All bleeding points having been secured, the trachea was stitched to the lower edge of the wound, and a large-sized tracheotomy tube was fixed in position. The wound was dressed with absorbent cotton-wool sprinkled with iodoform and enclosed in a casement of perforated green silk protective. The patient was then placed in bed, and no food was administered until the evening, when a feeding-tube was introduced into the œsophagus through the upper part of the wound, and retained in position by a piece of sticking-plaster.

In performing this operation, I divided the trachea and removed the larynx from below upwards. Some surgeons, however, prefer to do it in the opposite direction; this is a more tedious method, but it avoids the risk of blood entering the air-passages, on account of the severance of the larynx from the trachea being the last step in the procedure. These advantages are, however, counterbalanced in the method which I adopted by the circumstance that the operation can be performed more rapidly; while, by using a flexible gum-elastic tracheal tube, of sufficient size to fill the trachea, not only can the escape of blood into the lower air-passages be prevented, but the anæsthetic and the hands of the administrator are removed some distance from the field of operation. One point to which I desire to direct attention is the advantage of dividing the thyroid cartilage close to its upper posterior angle. By separating the superior cornu before dissecting the larynx from the œsophagus the operation is greatly facilitated, and the danger of injuring the œsophageal wall or large arteries is removed. Some operators ligature the superior and inferior thyroid arteries, and if necessary the superior laryngeal, or even the hyoid branch of the lingual artery, as a preliminary to the operation of extirpation; but, as far as my experience goes in laryngectomies, the hæmorrhage is by no means great, and can easily be controlled.

During the first few days after the operation the only food administered to the patient was milk, and this was supplied at the rate of three or four pints in the twenty-four hours. When the wound became firm, an artificial phonatory apparatus (Dr. Irvine's modification of Gussenbauer's artificial larynx) was introduced, and the edges of the wound were drawn over the upper or pharyngeal limb by strips of sticking-plaster. The phonatory apparatus was kindly made for me by Dr. J. Cowan Woodburn. The patient has now (July 20th, 1886) been wearing it for more than four months. His articulation is wonderfully good, and, except for its monotony, is not distinguishable from his

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natural voice. The vowels are pronounced with perfect clearness, both when he speaks in a whisper with the reed out or when he attempts phonation. The reed remains silent during ordinary expiration and inspiration, but when the patient makes a slight effort the reed is thrown into vibration, and a pure note is produced which becomes modified in the buccal cavity into articulate speech. He is able to swallow both solid and fluid food without difficulty. On laryngoscopic examination all the parts are found to be perfectly normal and free from inflammatory changes, and the patient is able to follow his regular occupation (that of a confectioner) without inconvenience.

ON

NEURORHEUMA, OR NERVOUS ENERGY.

By W. HALE WHITE, M.D.,
ASSISTANT-PHYSICIAN TO GUY'S HOSPITAL.

WHEN light falls on the retina, or sound on that part of the ear which contains the terminations of the auditory nerves, or heat upon the sensory to heat nerve terminations, or electricity or a blow is applied to the termination of a sensory nerve, a sensation is transmitted to the brain along nerves going to that organ from the various peripheral terminations—as the retina. This may be proved by the simple experiment of cutting the nerve, when it will be found that no sensation reaches the brain on stimulation of the periphery of the nerve—i.e., if the optic nerve be cut, no amount of light falling on the eye will ever make us conscious of light. That something is transmitted along the nerves in each case there can be no manner of doubt. What it is, and how it is transmitted, we know no more than we know of the mode of transmission of electricity along a wire. It may be a vibratory motion, or it may be a fluid flow—that is to say, something emitted from one end of a nerve and transmitted along it to the other; these two views corresponding to the vibratory and emission theories of light. Or it may be that each molecule undergoes some chemical or other change which sets up a similar change in the molecule next to it, and thus the change is transmitted along the nerve. Or, lastly, the mode of transmission may be of such a nature that, with our present mental capacities, we are incapable of appreciating it.

But the fact that we do not know what it is that passes, or how it passes, need not prevent our having a word to express that something passes; as it is at present, we are content with such phrases as nervous current, nervous flow, nervous transmission, nervous energy. It would, however, be thought very cumbersome if, because, in the case of electricity, that particular form of energy is generally found flowing along lines, we were to talk of the wiry flow, the wiry current, wiry transmission, wiry energy. Would it not be better to have some distinctive word for that form of energy which flows along nerves and is stored up in nerve cells? As good a word as any is, I think, "neurorheuma" (that which flows along a nerve), and the derived adjective would be "neurorheumal." The only objection to the word is that rheumatism is derived from the same root; but the fact that the new word has "neuro" prefixed, and the old one has no prefix, but has "tism" affixed, will serve sufficiently to separate them, whilst the difference between the adjectives neurorheumal and rheumatic is very marked. This phraseology would have the great advantage of tending to scientific accuracy of thought, and would also serve to impress upon the mind that the flow along a nerve is nothing but one of the many various ways in which energy can be manifested. Beginners in medical studies often fail to grasp this elementary fact; but if they were told that that form of energy which was peculiar to, and could only be manifested in, nervous structures was called "neurorheuma" they would have a clear conception to begin with, and would appreciate the relation of neurorheuma to other forms of energy. We should then be able to speak of the manifestations of energy as light, heat, electricity, neurorheuma, sound, motion, and so forth. It would also serve to emphasise the doctrine of the conservation of energy, for, as just remarked, it is not sufficiently recognised that the transmission of nervous energy, or, as we should now express it, the passage of neurorheuma, along a nerve is only a form of manifestation of energy. In proof of this, I may mention that Draper, in his Text-book of Medical Physics, in an enumeration of all the forms of energy, leaves out "nervous." Let us hope that the next time an enumeration is made neurorheuma will be included.

Neurorheuma, as it flows along a nerve, is, of course, kinetic; but it may be potential. For example, light falling on the retina is kinetic energy; this becomes transformed at the retina into kinetic neurorheuma, which passes along the optic nerve to the brain, where it is stored up. Let me give a fuller example of the use of the new word. A man, wishing to reproduce exactly as a drawing at home what he sees when he is out, will gaze long at the scene, by which means a large amount of light from it will fall on his retina; this will become converted into a considerable amount of neurorheuma, which, passing along the optic nerve, will be stored up in the brain as potential neurorheuma. When he gets home this will become kinetic neurorheuma, and will flow along his motor nerves to his brain, where it is converted into mechanical motion, with the result that the picture is drawn. It is to be noted that no attempt is here made to give a new explanation of facts; all I wish to show is that the adoption of the new term "neurorheuma" will facilitate the discussion of these matters.

In many respects neurorheuma is a peculiar form of energy, chiefly because it is presumably only capable of being manifested in nervous structures. But this peculiarity is one of degree rather than of kind, for electricity is conducted much better in some materials than others, whilst, as far as we know, neurorheuma has but one good conductor—viz., nerve tissue. Then, owing to the fact that this one good conductor is a living tissue, our power of experimenting with neurorheuma is necessarily limited. We should know very little of electricity if it could only be stored up and conducted in living tissues.

Another point requiring mention is that frequently the result is the same whatever be the stimulus applied, even if the application be not always at the end organ; thus, whether light falls on the retina or the stimulus be a mechanical one applied to the optic nerve the impression upon the mind of the individual is that of light. The discussion of this question is beyond the scope of this note; it does not affect the desirability of the term "neurorheuma," being applied to that form of energy into which in the one case light and in the other motion has been converted. It may be that there are different forms of neurorheuma: such as an optic neurorheuma, capable of transmission only along the optic nerve; an auditory neurorheuma, capable of transmission only along the auditory nerve; olfactory and gustatory, sensory to pain, sensory to heat; motor tactile neurorheuma, capable of transmission only along their respective nerves; to which there ought perhaps to be added trophic, secretory, and calorific neurorheuma, capable of transmission only along trophic, secretory, and calorific nerves respectively. There is much to be said in favour of such a view; it will explain why nervous actions always keep to one path, and also why any stimulation to the optic nerve, for example, causes light. Against such a view there is the fact that the axis-cylinders of these nerves are for the most part insulated by the fatty white substance of Schwann around them, which would be unnecessary if, for instance, a tactile fibre could only convey to the brain tactile neurorheuma; for it would be impossible for the tactile neurorheuma to overflow into a fibre which could only convey painful neurorheuma. But then it may be that the fibres are insulated to prevent the tactile neurorheuma from one tactile nerve fibre overflowing into another tactile nerve fibre. Again, if there be a distinct form of neurorheuma for each nerve, why is there an end organ—as, for example, the retina? But the obvious answer is that the object of the retina is to convert light into neurorheuma; for although a mechanical stimulus applied to the trunk of the optic nerve will cause a sensation of light, no amount of light concentrated on the cut central end of the optic nerve will cause this sensation. Still, although it is at present impossible to decide whether there be one form of neurorheuma which is differentiated by the cerebrum according to its source or destination, or whether there be all the various forms previously enumerated, the latter theory is a very tempting one to adopt, as it would explain many of our difficulties. There cannot be any doubt that the tissue of the brain is undergoing slow but continual change, for arterial blood having a certain chemical composition is being continually conveyed to it, whilst venous blood with an altered chemical composition comes

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away from it; and it is no doubt difficult to understand how, if some molecules are constantly being carried away from the brain and others added to it, the neurorheuma stored up should remain. But may not the process be something of this fashion: as fast as a destructive chemical change goes on in any molecules in which neurorheuma is stored up, it is set free, but is immediately taken up again by the molecules resulting from the constructive chemical change that is continually going on. Possibly the exactitude with which this process takes place determines whether or not memory shall be good, for it undoubtedly might determine whether or not the neurorheuma should remain; so that, in pathological language, we should say that a person with a bad memory was one in whom the neurorheuma was not accurately transferred from the old molecules which were broken down to the new ones which were built up, whilst a person with a good memory was one in whom they were accurately transferred. Broadly speaking, it may be said, that a nerve is alive so long as it is capable of transmitting neurorheuma, and dead when it cannot do so; and probably we should be as near as possible to a correct definition of the distinction between life and death if we said that in the former the cardiac and respiratory nervous systems were capable of transmitting neurorheuma, and in the latter they were not.

My object has not been, however, to discuss these abstruse problems, but merely to suggest that the term "neurorheuma" is an advantageous one, as I hope I have shown by the use of it, and also to throw out the hypothesis that there may be not one but many neurorheumas.

St. Thomas's-street, S.E.

PERORATION TO MY REMINISCENCES OF FIFTY YEARS' STRUGGLE, IN THE FOOTSTEPS OF WILLIAM HARVEY, TO SEARCH OUT CRUCIAL FACTS IN PHYSIOLOGY.

BY T. WHARTON JONES, F.R.C.S., F.R.S.

A NOT uncommon incident in the history of institutions, how good and just soever their object may be, has been the formation of cliques who, having for the time got power into their hands, look to the serving of their own purposes rather than the honest fulfilment of the avowed object of the institutions themselves. John Wicliffe denounced the Church Courts of his time as dens of thieves and larders of hell, and their officers as subtle in malice and covetousness. In Ireland, where the ecclesiastical jurisdiction in Roman Catholic times had been even more corrupt and oppressive than in England or elsewhere, Bishop Bedell, of Kilmore, found, to his sorrow, the Ecclesiastical Courts still unreformed under the Protestant *régime*. Consecrated in September, 1629, he had not long entered on his sacred functions before complaints reached him of oppression and extortion suffered by the poor people in the Ecclesiastical Courts. This was the more grievous, seeing that the cause of complaint was given by the Bishop's own officers, and the wrongs committed in his own name.

In a letter to Archbishop Laud, at the time Bishop of London, Bishop Bedell complains of this oppression exercised by the Court Ecclesiastical, which, said he, "in very truth, my lord, I cannot excuse, and do seek to reform." His attempts at reform, however, stirred up against him the most virulent rage and malice on the part of the officers of Church Courts throughout the country, as well as of the chancellor of his own dioceses of Kilmore and Ardagh in particular. His right reverend brethren, the bishops, whose cause it was equally with his own, though they at first applied to him by way of compliment the saying of the Emperor Theodosius in respect to Ambrose, Archbishop of Milan, "Solus Kilmorensis novit se gerere ut episcopum," gave him no further countenance. This much mortified Bishop Bedell, for had his brethren joined in supporting the cause which so nearly concerned themselves and the well-being of the Church in Ireland, some better result might have accrued. Even Archbishop Usher, whose Court was reputed to be as corrupt as others, if not worse, though he himself was so good a man, yielding to the influence of his chancellor, stood aloof. Turning again, therefore, to Archbishop Laud, Bishop Bedell wrote, saying: "For my part, God is my witness that if I thought I could be excused in conscience for the misgovernment of the people whom God and his Majesty have committed unto me, I could easily submit to be superseded in the exercise of the jurisdiction, though there be left me nothing but the name of it; when, however, the blame also and the shame of religion lie upon it, I hope good men will not account me pragmatical if I be sensible, and desire to fulfil the profession made at my consecration, that *I would be gentle and merciful, for Christ's sake, to poor and needy people and such as be destitute of help.* These poor people do beseech your lordship, and, by you, his Majesty, to pity them. Religion entreats you to remove this scandal—the Church to reform this disorder. I have said and done what I can; I leave the success to God."

Laud's reply to this appeal was sufficiently frank, friendly, and well-considered; but he thought that not much could be done, seeing that all the practitioners of the civil law were combined to resist any reform, whilst the bishops themselves tamely succumbed to the tyranny of their own officers. Under such circumstances, therefore, the said officers, "sotil in malice and covetisse" as they were, prevailed against the generous purpose of the heroic bishop, who was, among the faithless, faithful only found.

Wicliffe knew by experience the persecution which a translator of the Holy Scriptures into the vernacular brought down upon himself, but he could never have believed that in a Reformed Church opposition would have been offered to the translation of the Old Testament into Irish such as that which Bishop Bedell encountered. Indeed, the singular character of the opposition by churchmen; the subsequent narrow escape of the MS. from the hands of the Irish Roman Catholic rebels by the intervention of the Rev. Denis Sheridan, a Protestant minister, head of the Sheridan clan, and ancestral kinsman of Richard Brinsley Sheridan; its preservation for forty or fifty years by Bishop Jones, of Meath, previously Dean of Kilmore; its revision, as a labour of love, by an Irish convert to Protestantism, who had been a Jesuit professor in Spain, and Superior of the Jesuit Mission in Ireland; the eventual publication of the work under the auspices of the Hon. Robert Boyle; and its use, not only in Ireland, but also among the Gaelic-speaking people of the Scottish Highlands for nearly the whole of the eighteenth century,—form a curious history.

Bishop Bedell employed as chief translator a Mr. Murtagh King, who had been recommended to him as an able Irish scholar, and from whom he had himself taken lessons in the language while Provost of Trinity College. The bishop, thus satisfied of the competency of Mr. King to preach the Gospel to an Irish-speaking parish, admitted him to holy orders and collated him to a benefice. The poor man, however, was not only slandered, but positively robbed of his benefice on false pretences, and persecuted, notwithstanding all the protection the bishop could afford him. In a letter to Lord Deputy Wentworth, afterwards Earl of Strafford, urging a restitution to Mr. King of the benefice of which he had been so unjustly deprived, Bishop Bedell thus expressed himself: "The Bishops of Rome themselves, after most formal proceedings, do grant 'restitutionem in integrum,' and acknowledge that 'sententia Romæ sedis potest in melius commutari'"; adding: "My lord, if I understand what is right, divine or human, these be wrongs upon wrongs, which, if they reached only to Mr. King's person were of less consideration; but when through his side that great work, the translation of God's Book, so necessary for both his Majesty's kingdoms, is mortally wounded, pardon me, I beseech your lordship, if I be sensible of it."

In 1640 Bishop Adair of Kilala was, at the instance of the Earl of Strafford, brought before the High Commission Court on the frivolous charge of having spoken apologetically of his countrymen, the Scottish Covenanters, and sentenced to deprivation. At the trial, Bishop Bedell of Kilmore, as a member of the Court, in delivering his judgment, stood out for the most favourable construction of Bishop Adair's conduct, arguing that it involved no spiritual offence nor any error in life or doctrine such as may make a bishop deserving of censure. All the other members of the Court, however, gave their verdict against the Bishop of Kilala. According to what was alleged to have been the secret history of this transaction, the deprivation of Bishop Adair was a thing determined on for the purpose of creating a vacancy in the Irish episcopate for a Scottish bishop who had come to Ireland, a refugee from the anti-prelatic wrath of the Covenanters of Scotland.

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In bravely standing up by himself in defence of a man unjustly prosecuted, Bishop Bedell was checked and chidden for his pains by the higher powers at the time, as a wilful and singular person to differ from the unanimous decision of *so honourable a Court!* Nevertheless, restitution by annulment of the sentence of deprivation passed against Bishop Adair and his appointment to another bishopric was subsequently made by command of King Charles I., when, after the death of Strafford, his Majesty came to be informed of the circumstances of the case.

Whether any reparation was ever made to Mr. Murtagh King does not appear, though it is most likely that he "dropped into the grave unpitied and unknown." A "memorial" of him, however, and that not a "frail" one, still exists in the Irish translation of the Old Testament. The man who was active in despoiling Mr. King of his benefice with the assistance of the corrupt Ecclesiastical Court, in order to get it for himself, was a refugee Scottish episcopalian minister, as was also the accuser of Bishop Adair of Kilala. The fate of these two worthies, however, was different—the former, notwithstanding the incredible injustice of his proceedings, being eventually made a bishop, whereas the latter was beaten to death by a band of Irish rebels.

The instances now related, as well as many others which could be quoted, exemplify how my ancestral cousin, Bishop Bedell of Kilmore, was opposed by falsehood, slander, fraud, forgery, and theft in his endeavours to fulfil the duties of his sacred office. The instances narrated in preceding numbers of THE LANCET, from among my reminiscences of a fifty years' struggle to follow in the footsteps of William Harvey in promoting physiological knowledge in its relations to medical science, may be compared, in a small way, *mutatis mutandis*, to the experiences of Bishop Bedell. The said instances also, I venture to think, warrant me in addressing, as I now do, the General Medical Council, Universities, Colleges of Physicians, Colleges of Surgeons, and all other authorities—whether individuals or bodies corporate—whom it may concern, to protest against the incongruous teachings by which the minds of students of medicine are distracted, and to urge a plea for their better instruction in a knowledge of fundamental facts—such, for example, as the observable mechanism and action of the vessels in the extreme circulation of the blood, regarding which their professors, under the auspices of the authorities I am addressing, seem to be ignorant either from incapacity or wilfulness.

To conclude, let those who think they know, without ever having looked to see, review their supposed knowledge and cast their thoughts over again; and if, in the particulars, they find they have mistaken words and fancies for realities, and accepted the dicta of pretenders instead of the evidence of observed facts, let them correct the record and acknowledge the truth as it is in nature. Moreover, let them remember that he who propagates a delusion, and he who connives at one when already existing, both alike tamper with the truth, and that we must neither lead nor leave men to mistake falsehood for truth. Not to undeceive is to deceive.

Ventnor, Isle of Wight.

ON THE TREATMENT OF ORCHITIS AND EPIDIDYMITIS.

BY FREDERICK W. LOWNDES, M.R.C.S.,
SURGEON TO THE LIVERPOOL LOCK HOSPITAL.

THERE is a sufficient diversity of opinion as to the best treatment of orchitis and epididymitis, the result of acute gonorrhœa, to induce me to give our experiences at the Liverpool Lock Hospital. When I first became surgeon, eleven years ago, I found that the practice adopted in all these cases was that which had been suggested by Mr. Furneaux Jordan in 1869—viz., by painting the affected testicle with a strong solution of nitrate of silver (two drachms to one ounce), at the same time enforcing strict rest in bed and supporting the inflamed organ upon a small pillow, so as to prevent it from hanging down. It had been adopted for some years previously by Messrs. Worthington and McCheane, who were the surgeons to the hospital at the time when Mr. Jordan suggested this mode of treatment, and also by Mr. Chauncy Puzey, who succeeded Mr. Worthington, during the two years of his surgeoncy. I have invariably pursued the same treatment now for eleven years, and so has my colleague, Dr. Armand Bernard, who succeeded Mr. McCheane in 1882, and has thus had four years' experience of the treatment.

At my request the resident superintendent of the hospital, Mr. Serjeant, has given me the following statistics of all the cases of orchitis and epididymitis combined from June 1st, 1875, to June 1st, 1886, an interval of eleven years. The numbers are as follows:—

Years.	Number.
1875 to 1876	32
1876 to 1877	15
1877 to 1878	22
1878 to 1879	28
1879 to 1880	30
1880 to 1881	16
1881 to 1882	31
1882 to 1883	28
1883 to 1884	24
1884 to 1885	18
1885 to 1886	25
Total	269

All these were patients admitted into the hospital; we have no out-patients.

I have always found the treatment I have mentioned most successful. The acute pain, often amounting to agony, is soon subdued, and in the majority of cases the testicle returns to its normal size in the course of a few days. Sometimes a second painting is necessary, but this suffices. In private practice I have always used the same application. When patients can be induced to take absolute rest in bed, the result is equally successful as in the hospital. When, however, patients are compelled to follow their usual occupations, the recovery must obviously be slower, as it is impossible by any suspensory bandages or by handkerchiefs, however skilfully applied, to ensure such perfect rest for the testicle as when the patient is lying in bed. I have heard it argued that rest in bed is sufficient of itself to effect a cure, but a very few cases so treated with spirit lotion as an application has convinced me that it is not so. The immediate effects of the nitrate in allaying the pain are most marked, though for obvious reasons the nitrate must act more powerfully upon the testicle while in a state of quiescence than when constantly moved, however slightly.

Mr. Jordan has informed me that he still pursues the same treatment, having every reason to be satisfied with it. It seems to me to be only just to him to give this very satisfactory proof of the value of the treatment which he originally suggested.

Liverpool.

CASES OF ORBITAL NÆVI TREATED BY ELECTROLYSIS.[1]

BY SIMEON SNELL, L.R.C.P. LOND., M.R.C.S.,
OPHTHALMIC SURGEON TO THE SHEFFIELD GENERAL INFIRMARY AND TO THE INSTITUTION FOR THE BLIND.

THE following instances are good examples of the value of electrolysis in the treatment of nævus. One of them was more confined to the eyelid, but the others extended deeply into the orbit. It would not, I believe, have been easy to treat them with a ligature; and without discussing different methods of treatment, it may be doubted whether any other plan would have resulted in such an absence from deformity as was the case in these instances. A drawback, of course, to the use of electrolysis is that it may be necessary to repeat it several times. A feature in these cases is the similar situation in each.

CASE 1.—Rosina B——, aged three months, came first under my notice at the Sheffield General Infirmary in November, 1881. A nævus, apparently cutaneous, was situated in the upper eyelid, towards the inner angle, at its upper part. This was cauterised with the actual cautery, and the child disappeared. In June, 1882, she again came to me. The nævus had greatly increased in size; it was nearly as large

[1] Read before the Sheffield Medico-Chirurgical Society.

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as a small walnut, and was plainly discernible as a swelling at the upper and inner angle of the orbit, pressing down the lid over the eye, and causing a good deal of deformity; it extended some distance into the orbit. It was determined to treat the case by electrolysis. Treatment was accordingly commenced on May 12th, when the needle was inserted three times; on the 26th and on July 3rd the process was repeated, the number of punctures being the same. At this latter date it was noted that the tumour was less than half its original size. After this it gradually dwindled, but the child, from ill-health, I believe, was only brought occasionally, and then not for active treatment. In 1883, the nævus was greatly reduced in size, and was hardened. On Jan. 22nd and Feb. 5th electrolysis was again resorted to, with the effect of dispersing the swelling. Later the mother came to inform me of the child's death from croup, and asserted that the tumour had quite disappeared.

CASE 2.—Beatrice H——, aged nine months, was first seen in November, 1884. The mother had perceived, in the previous April, a little dark patch at the inner side of the right upper eyelid. At the time of the baby being brought to the infirmary, at the upper and inner angle of the orbit was a purplish swelling about the size of a bean; it only showed itself on the surface, but extended more deeply. The mother thought it had not increased much in size since it was first noticed. On Dec. 1st treatment with electrolysis was commenced, three punctures being made with five cells; on the 8th and 15th, and also on Feb. 3rd, it was repeated. Soon after this last date it had disappeared.

CASE 3.—Jane L. E——, aged about three months, was brought to the infirmary in February, 1885. The nævus in this instance was larger than that in the last, but smaller than in the first-mentioned case. It was situated at the upper end and inner angle of the orbit, and extended deeply. The surface on the eyelid was purplish. The swelling became distended, as the others had done, on the child crying, and refilled after having been dispersed by pressure. It produced a good deal of deformity, and pressed the eyelid down over the eyeball at the inner side. The mother had noticed it only about a month before, and thought it had quickly increased in size. Exterior to it, at a little distance on the upper eyelid, was a small red-coloured cutaneous nævus. Treatment by electrolysis was commenced on Feb. 9th. Eight cells were employed and three punctures made; the superficial nævus was destroyed by the actual cautery. On the 23rd three punctures were made (ten cells); on April 20th, four punctures (twelve cells); on May 11th, four punctures (fifteen cells); and on June 1st, one puncture (fifteen cells), and three punctures (nine cells). The result was excellent.

CASES 4 & 5.—Since writing the above two other cases have been under treatment. Both occurred in young babies. One nævus, the size of an almond, was situated at the inner angle of the orbit, more on the nose than the eyelid. Electrolysis was repeated four times, and it disappeared. The other was as large as a half-crown, and occupied the left lower eyelid at the outer part and the cheek over the malar region. It is disappearing under electrolysis.

From six to ten cells of the battery will generally suffice; in Case 3 more were employed because the power of the instrument was deteriorating. A sufficient strength should be employed that will decompose water readily, and if this be tested before proceeding with the operation, it affords a simple plan of determining which needle to remove and which to keep stationary—the one from which the bubbles freely escape will be the one to use in the first manner.

CAMBRIDGE MEDICAL GRADUATES' CLUB. — The annual meeting and dinner of this Club was held at Caius College, Cambridge, on Saturday last, the 17th inst., Sir George Paget, K.C.B., a Vice-President of the Club, in the chair. Among the guests present at the dinner were the several professors of those collateral branches of science most closely connected with the study of medicine—viz., Prof. Newton (Comparative Anatomy), Prof. MacAlister (Human Anatomy), Prof. Dewar (Natural Experimental Philosophy), and Prof. Roy (Pathology). The Fellows of Cauis College then in residence were also present as guests of the Club, together with Mr. T. Pridgin Teale of Leeds. The principal speakers were the Chairman, Prof. Humphry, Mr. Timothy Holmes, and Mr. Teale. It was announced during the evening that the Club was in a most prosperous condition, having now close upon two hundred members.

THE INSUFFLATION OF IODOFORM INTO THE TRACHEA AFTER TRACHEOTOMY FOR DIPHTHERIA.

BY GEORGE SHIRRES, M.B., C.M.,
LATE RESIDENT ASSISTANT SURGEON, ROYAL INFIRMARY, ABERDEEN.

WERE it not for the fact that after tracheotomy for diphtheria in children death is extremely common from the spread of the membrane down the trachea, the operation would be much more popular than it is at present. It is usually simple and successful enough as an operation, but the continuation of the disease in the trachea renders the final results far from satisfactory. After losing several cases from the above cause, it occurred to me that the insufflation of iodoform into the trachea after the opening of the windpipe might do something towards preventing the appearance of membrane there, and might thereby lessen the probability of death. The experiment proved eminently successful in the following two cases.

CASE 1.—I was called to see a boy aged four years and a half on the night of Nov. 2nd, 1885. I found the case to be typical of the so-called diphtheritic croup. The face was flushed, the glands beneath the angle of the jaw were enlarged, and his breathing was stridulous and performed with great effort. I advised instant tracheotomy, which the parents refused. I prescribed aconite, the use of the steam-kettle, &c., and left him for the night, very doubtful of his chance of life. When I saw him next morning the symptoms were intensified. The face was livid, the eyes staring, and the expression one of extreme anxiety. The sternum and anterior parts of the chest wall were retracted during inspiration. I insisted upon tracheotomy being performed, to which the parents consented, but with reluctance. I left for instruments and assistance, and on my return found the child in the same condition. I placed the patient under chloroform and opened the trachea. A large quantity of blood and membrane were at once expectorated through the wound, and the tube was without much trouble placed in the trachea. After this artificial respiration had to be resorted to, and was continued by my colleague, Dr. Bridger, for fully twenty minutes before respiration was properly established. Two hours after the operation I removed the inner tube, passed a thin insufflator down the outer one, and blew about ten grains of iodoform down the trachea. The child had a slight paroxysm of coughing, and, to judge from the expression of his face, seemed to experience a rather unpleasant sensation, but there was no worse result. The insufflation was repeated every four hours. Next morning I found the tube comparatively clear, but the temperature was 102·5°. Being rather afraid of iodoform poisoning I stopped the insufflation. During the day the tube got frequently clogged with membrane, and had to be removed and cleaned every two or three hours. At night I resumed the insufflation and repeated it every three hours, with excellent effect. At 8 o'clock next morning I was called by the patient's father, who, in attempting to remove the inner tube, had pulled the outer one with it. I found the patient in great distress, breathing through the wound with considerable effort. After some difficulty I reinserted the tube. From that time the patient rapidly recovered, and on the fifth day I removed the tube. The patient is now alive and quite well, with a slight cicatrix over the site of the wound.

CASE 2.—This was a somewhat similar case to the foregoing, although the symptoms were not so well marked. The patient was a little girl three years of age, whom I was called to see on the night of Dec. 10th, 1885. I found the patient suffering from symptoms of suffocation. The breathing was stridulous, the voice scarcely audible, the glands beneath the angle of the jaw enlarged, and the face much flushed. I recommended tracheotomy, and performed the operation that night. After the tube was inserted, I insufflated about fifteen grains of iodoform into the trachea, and repeated this procedure every four hours. The child made an uninterrupted recovery. On the third day I stopped the iodoform, and on the fourth removed the tube. There was no trouble with the wound, and recovery was perfect.

When iodoform is insufflated into the trachea, the cilia of the epithelium on the mucous membrane carry the

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particles of iodoform upwards as far as the larynx, when they are expectorated with the mucus through the tracheotomy tube. I found that the best time to insufflate was just after the act of expiration.

Walterton-road, W.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

LONDON HOSPITAL.

TWO CASES OF FOREIGN BODY REMOVED FROM THE FEMALE BLADDER; OVARIOTOMY FOR THE SECOND TIME; RECOVERY.

(Under the care of Mr. RIVINGTON.)

THE variety of foreign bodies introduced into the female bladder is large—in fact, the majority of calculi in the adult female are formed round some substance which has been introduced into the bladder by the patient. As a rule it is easy to detect and remove them through the urethra, with or without crushing, but occasionally, from the shape of the substance, it is necessary to remove them by vaginal or supra-pubic operation. In the first case it was necessary to perform the former operation, for the hair-pin had transfixed the bladder, and was immovable from the urethra. The third case, that of successful ovariotomy for a second time, is interesting from the fact that such operations are uncommon, it being a rare occurrence for the ovary left in a healthy condition at the first operation to become diseased.

CASE 1. *Calculus in the Bladder of a Female formed round a Hair-pin; Vaginal Lithotomy: Cure.*—Lavinia C——, aged twenty-two, single, was admitted on Nov. 27th, 1885. She complained of incontinence of urine, which had lasted for seven months. On examination, one end of an ordinary but rusted hair-pin was found protruding through the anterior wall of the vagina nearly in the middle line, whilst the other was found protruding rather higher up and to the right. Examination of the bladder with the sound showed that the pin was covered with a considerable incrustation of phosphates. The patient would not admit that she had introduced the hair-pin herself, but stated that eight months previously she had been out with a young man, and that afterwards incontinence came on, and she felt something pricking her. Under an anæsthetic an incision was made through the lower and central aperture caused by the protrusion of the hair-pin through the anterior vaginal wall, and the other limb of the hair-pin was pushed back into the bladder. The two limbs were then pressed together, and the whole mass was withdrawn through the vaginal wound. The opening was sewn up, and a catheter was not retained. The stitches were removed on Dec. 22nd, when it was found that the wound had closed, a small opening, representing the ulcerated aperture caused by the hair-pin, alone remaining. This was refreshed with the nitrate-of-silver stick and closed in a few weeks.

CASE 2. *Pen-holder in Female Bladder; Removal per Urethram; Cure.*—A. H——, aged eighteen, tie-maker, was admitted on Feb. 12th, 1886, suffering from pain and incontinence. It was stated that a pen-holder had accidentally entered the bladder whilst the patient was sitting down on a chair. On Feb. 16th the patient was anæsthetised and placed in the lithotomy position. The sound detected a hard body. The urethra was dilated with the index finger, which encountered the body lying across the bladder transversely to the urethral axis and firmly fixed. Six ounces of warm water having been injected, the pen-holder was shifted from its transverse position by means of the sound and was then seized with forceps and brought into the urethra. Here the nib of the pen caught in a fold of mucous membrane, which had to be nipped across before the pen-holder could be extracted. The instrument was found to be 3½ in. long and was made up of a bone-handled stiletto used in ladies' fancy work, over which a barrel pen nib had been placed. It was partly encrusted with earthy phosphates. After the operation, the urine, which had been thick with pus and mucus, and was alkaline, gradually cleared and became normal, the incontinence ceased, and the patient was discharged on Feb. 25th.

CASE 3. *Ovariotomy for a second time: Recovery.*—S. B——, aged forty-three, married, was admitted under Dr. Down on Nov. 11th, 1885. Three years before she had had an ovarian tumour removed by Mr. James E. Adams, and had made a good recovery. Her abdomen was distended with ascitic fluid, and she suffered severe pain in her chest, abdomen, sides, and back; she hardly ever slept on account of the pain. Tongue furred and moist; no appetite; bowels regular; temperature normal; pulse 100; respiration 40; dyspnœa; circumference at umbilicus 36 in.; urine acid and free from albumen and sugar.

Nov. 14th.—Tapped; 340 ounces of fluid removed, with much relief.

18th.—Great pain in left leg and thigh; œdematous; superficial veins congested; phlebitis of femoral and saphenous veins.

Dec. 4th.—Tapped to 340 ounces. A firm lobulated tumour could then be felt in the right iliac and lumbar regions.

18th.—Ascites increased. Tapped to 335 ounces. Tumour distinct.

Jan. 7th.—Patient in a very critical state, with vomiting and retching. Pulse feeble; expression anxious. Tapped to 25 ounces, with relief.

8th.—Transferred to surgical side for immediate operation, which was performed under the spray. An incision three inches in length proved sufficient for the removal of the tumour after the evacuation of a large quantity of blood-stained ascitic fluid. The tumour itself was as large as a good-sized cocoa-nut, multilocular, and containing one large and three small cysts, of which one was bilocular. The large cyst was smooth outside, but inside was nearly filled up with a nodular papillomatous growth springing from the whole of the inner surface. The small cysts contained similar growths, and in one the growth had burst through the cyst wall and was fungating without any covering. The fungating mass was extremely vascular, and bled on the slightest touch. The growth was contained in the right broad ligament, and the ovary was not distinguishable. The stump of the former pedicle on the left side was examined, and found to be free from disease. The abdominal wall was extremely thin and the patient much reduced at the time of the operation. She recovered without a bad symptom. The temperature did not rise above normal. The wound was dressed for the first time at the end of a week, and was then nearly closed. The patient was discharged well on Feb. 25th.

EDINBURGH ROYAL INFIRMARY.

A CASE OF REMOVAL OF THE ENTIRE LOWER JAW BY THE MOUTH FOR ACUTE NECROSIS; REMARKS.

(Under the care of Prof. ANNANDALE.)

WE are indebted to Mr. Reginald E. Horsley, M.B., C.M., house-surgeon, for the following notes (by permission of Professor Annandale).

H. H——, aged seven, was admitted on Nov. 16th, 1885, suffering from great swelling of the face, and suppuration in connexion with the lower jaw. With the exception of an attack of croup and measles, the latter two years ago, the patient had enjoyed excellent health up to the date of the present attack, which began about ten days previous to admission, the child being at the time apparently in the soundest health. The family history is in every sense good, nor is there any record on either side of scrofula or syphilis. The present attack commenced with acute pain in the region of the last molar tooth on the right side of the lower jaw—i.e., the second molar of the first dentition, which, in common with its fellow of the opposite side, was carious. On Saturday, Nov. 7th, swelling in the region of the tooth mentioned was observed by the father, and two days later the patient, being seized with a rigor and suffering intense pain, became so feverish that he was obliged to remain in bed. On this day the swelling in the gum was noticed to have increased, and three days later burst into the mouth, discharging much pus. Next day, the patient's condition becoming more and more serious, a medical man was called

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in for the first time. The tissues of the gum were now freely incised, and more pus escaped. On the following day, Nov. 14th, one week from the (observed) commencement of the attack, the father noticed a large portion of the lower jaw exposed, and the doctor extracted the two carious molars. Two days later, the lower incisors, being loose, were also extracted, while several other teeth dropped out. The child was then brought to the infirmary.

State on admission.—The lower part of the patient's face was much swollen, the soft parts over the lower jaw being red and glazed in appearance, and extremely tender to the touch. A most offensive discharge of fetid pus and blood oozed continuously from the corners of the mouth. Thorough examination of the jaw was difficult, owing to the swelling and tenderness, and to the fact that the mouth could not be fully opened. The temperature was 100·6°. The same evening the patient was very restless and complained of great pain.

Nov. 17th.—Temperature in the morning 101·6°; rose in the evening to 104·6°. There was much drowsiness; the offensive discharge continued to ooze from the mouth. The treatment consisted of warm fomentations externally, and frequent syringing and washing of the mouth with dilute Condy's fluid.

18th.—Morning temperature 103·2°; evening, 103·4°.

19th.—Morning temperature 105°. The patient being under the influence of chloroform, Professor Annandale made a thorough examination of the inside of the mouth, with the result that the entire lower jaw was found to be necrosed, its whole periosteum separated, and its connexion with the surrounding parts only maintained by some portions of the ligaments at the articulations. These ligamentous attachments being easily separated with the finger, the entire lower jaw, in one complete piece, was drawn out at the mouth, without any cutting or further procedure. Some slight oozing followed the removal of the bone, but this was soon stopped. In the evening the temperature had fallen to 100°, and the patient was comparatively easy.

20th.—Patient decidedly better. Morning temperature 99·4°; evening, 102°.

21st.—Morning temperature 102·4°; evening, 101·6°. Patient complained much of pain in the region of the right ear, from the external meatus of which fetid pus was seen to ooze. Slight diarrhœa.

22nd.—Morning temperature 102·2°; evening, 102°. Patient very restless, and much weaker. The discharge from the ear and the diarrhœa continued and increased.

23rd.—Patient much worse. Hæmorrhage from the mouth controlled by a styptic. In the evening he became delirious, with all the symptoms of meningitis.

24th.—The patient died, his symptoms having become gradually worse.

Post-mortem appearances.—No necropsy was authorised, but examination of the mouth after death revealed an intense and well-nigh complete disorganisation of the gums and soft textures on the floor of the mouth in immediate proximity to the position of the jaw. The periosteum was swollen and puffy, and in no part that could be felt was there any sign of an attempt to regenerate bone. The contour of the face was preserved. Examination of the jaw itself showed it entirely necrosed throughout its whole thickness. None of the teeth were present, all having dropped out or been extracted. On the left side the germ of the permanent molar was seen.

Remarks.—The interesting features of the case are—(1) the rapid and complete necrosis of the entire lower jaw without any apparent cause; and (2) the removal of the jaw, whole and unbroken, through the mouth. With respect to the latter point, the case is probably unique, no instance having been yet recorded of removal of the entire jaw through the mouth without incision or division of the jaw. There are certainly a few instances on record in which, after division of the symphysis, the jaw has been removed in halves, and other cases have been published in which considerable portions of the entire thickness of the jaw have been drawn through the mouth. Here, however, though the patient's mouth was by no means large, the jaw being carefully separated from its ligamentous attachments, was gently rotated, so as to permit the articular ends to be drawn alternately through the mouth. As regards the first point, it may be remarked that, while necrosis of the lower jaw, as the result of phosphorus-poisoning or some inflammation of a semi- or entirely chronic nature, is not without a place in the history of affections of this bone, total destruction of the entire substance in so short a space of time as twelve days or less from the first noted commencement of the disease, is sufficiently rare to be worthy of note. Not the least interesting feature, too, in the case is the apparent absence of any cause, or at least of any of the more usually recognised causes of necrosis. The most careful questioning failed to elicit any history of injury or cold, though, of course either may have acted in originating the disease, and escaped notice in the consideration of the disease itself. Erichsen (vol. ii., p. 577), while enumerating the ordinary causes of necrosis of the lower jaw—blows, salivation by mercury, syphilis, and phosphorus poisoning,—does at the same time admit that he has "seen the disease occur idiopathically in otherwise healthy subjects without any assignable cause." There is, it is true, a history of carious teeth, and the transition from caries of the teeth to alveolar periostitis and thence to necrosis of the jaw is a not infrequent one, but this state of things seems most usually to coexist with a strumous or scrofulous state of the constitution, and in the present case there is no record of such morbid state. Careful examination, however, yields two or three facts which are interesting, even though among them the real force which set the machinery of disease in motion be not discovered. Heath, in his work on Injuries and Diseases of the Jaws (chap. viii., p. 3), remarks, in speaking of necrosis, that "any ulcerative affection of the mouth may lead to necrosis of the jaw." Now the patient's father stated that the child had drunk from a wayside horse-trough in the village, and suggested blood-poisoning by means of a glandered horse. Glanders certainly affects the mouth in common with the rest of the respiratory tract, but there is no evidence to show that glanders and necrosis of the jaw can be regarded as cause and effect, putting aside the fact of the absence of other symptoms of this form of blood-poisoning. The question then arises: Could the disease have originated in some inflammatory action, leading to ulceration of the tissues of the cheek, and ultimately spreading to the alveolar periosteum? No evidence of any such condition exists. Indeed, the evidence is all in the opposite direction. The swelling of the face, which was certainly great, was subsequent to the severe pain (toothache) in the jaw; and the so-called gumboil, noticed by the father, was situated on the inner side of the gum, and not in apposition to the cheek. There remains yet to be considered the question of the cutting of a tooth of the second dentition; and here a ray of light, if a feeble one, seems to fall upon the case. It will be remembered that the germ of the permanent molar was seen in the jaw, and in connexion with this point the following remarks from Wedl may be quoted:—"Periosteal inflammations occurring during the period of dentition are of special importance, since, with children, inflammatory affections generally run a more rapid course than with older people, particularly in an organ in which development takes place within small limits with comparative rapidity. The more extensive the infiltration of the maxillary periosteum, the greater is the danger that a larger portion of the jaw will become necrosed. Children of a scrofulous or tuberculous habit are more liable to the occurrence of necrosis of the jaws, from the fact that in them the infiltration undergoes a speedy degeneration on account of the rapid proliferation of the elementary organs." Tomes also points out the occurrence of necrosis of the jaw during the period of dentition, particularly where a decayed tooth exists in the mouth and the child is of a scrofulous diathesis. Heath, too, remarks (*loc. cit.*) that "acute periostitis of the jaw may arise in young subjects from the cutting of the permanent teeth." Summing up, then, the facts presented, we have:—(*a*) Absence of usual causes; (*b*) absence of inherited scrofula; (*c*) presence of carious teeth; (*d*) appearance of first molar of second dentition. It is probable, then, that the cause of this interesting case may be found in the fact that the usual inflammation consequent on the cutting of a tooth passed to and affected the carious molar of the first dentition; that so alveolar periostitis was set up, leading to extensive necrosis of the lower jaw. But since most leading authorities lay stress upon the presence ordinarily of some constitutional taint, and since, as Erichsen (vol. i., p. 1061) points out, scrofula not necessarily inherited "most commonly declares itself about the period of the second dentition," it is equally possible to admit that a scrofulous taint, unsuspected and hitherto undeclared, lent itself to the

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development of a disease which, notwithstanding the presence of carious teeth of the first and the conjoint cutting of a tooth of the second dentition, might otherwise never have ensued.

ST. VINCENT'S HOSPITAL, DUBLIN.

CASES OF ACUTE RHEUMATISM QUICKLY CURED BY SALICINE; REMARKS.

(Under the care of Dr. QUINLAN.)

THESE cases were reported by Mary Josephine Hannan, ward clerk.

CASE 1.—M. O'N——, wife of a warder in the Dundrum Lunatic Asylum, a strong, well-nourished young woman, aged twenty-six, was admitted on May 21st. She was in a high fever, the temperature being 101·2°, and the pulse 92. She was in great pain, and was sweating profusely. The right knee and right foot were swollen, red, and fluctuating; the left knee was also considerably swollen. She had been ill for three days, the symptoms gradually increasing in severity. She was ordered twenty grains of salicine suspended in milk every two hours, also at once a hypodermic injection of one-fourth of a grain of acetate of morphia.—6 P.M.: Pain somewhat relieved, but temperature had risen to 102·1°. The salicine to be increased to thirty grains every two hours. To repeat the hypodermic injection of morphia at 10 P.M.

May 22nd.—9 A.M.: A rather uneasy night. The left knee and both wrists are swollen, red, and painful. Temperature 103·2°; pulse 104. Considerable perspiration. Patient is unable to move hand or foot. The hypodermic injection of morphia to be repeated and the salicine continued.—6 P.M.: The patient is much relieved. Temperature 102·6°; pulse 96. Not able to move, but not in pain when motionless. To continue the thirty-grain doses of salicine every two hours.—10 P.M.: To take the following draught: twenty grains of chloral hydrate, thirty of bromide of potassium, an ounce and a half of cinnamon water, with a drachm of syrup of orange.

23rd.—9 A.M.: Passed a good night; free from pain, but unable to move. Temperature 102·8°; pulse 108. The salicine to be increased to thirty-five grains every two hours.—6 P.M.: Very much relieved; great fall in the temperature, which is now 101·4°; pulse 100. To repeat the chloral draught. The salicine to be taken during the night, as opportunity arises.

24th.—Passed a very good night; free from pain; temperature 101·6°, pulse 96.—6 P.M.: Going on satisfactorily. Temperature 100·9°; pulse 88. Reduce the salicine to twenty grains every two hours. Repeat the chloral draught.

25th.—Temperature risen to 101·6°; pulse 100. A good deal of pain. To resume the thirty-grain doses of salicine every two hours.—6 P.M.: Temperature 101·2°; pulse 90.

26th.—Greatly improved; quite free from pain. Temperature 99·4°; pulse 78.—6 P.M.: Temperature 99·6°; pulse 76. At 10 P.M., the patient being inclined to sleep, no draught was given.

27th.—Passed a very good night. Temperature normal; pulse 78. Totally free from pain. Twenty-five grains of salicine every three hours.—6 P.M.: Temperature 98·8°; pulse 84. Patient comfortable and free from pain.

28th.—Temperature normal; pulse 76. Able to move limbs slightly. Swelling of joints beginning to diminish. Thirty grains of salicine every four hours.

During the 29th, 30th, and 31st the pulse and temperature continued normal, and the articular swelling disappeared.

June 1st.—Patient able to sit up in bed. To continue the thirty-grain doses of salicine three times a day.

4th.—Patient convalescent and able to get up. To continue the salicine night and morning for a week.

CASE 2.—M. M——, aged thirteen, a schoolgirl, was admitted on June 10th, suffering from acute rheumatic symptoms. She was very feverish; temperature 101·1°; pulse 92. Right knee swollen, fluctuating, and painful, but not red. Could not move the right foot, which was somewhat swollen; sweating a good deal. Ordered ten grains of salicine every third hour.

June 11th.—Rather better. Right knee and foot in the same condition. Temperature 100°; pulse 88. Perspiration ceased. Had slept well. To continue salicine.

12th.—Greatly improved. Temperature 99·4°; pulse 84. Able to move the right knee and foot a little.

13th.—Had slept well. Temperature and pulse normal. Able to move the right leg freely. Ordered to sit up in bed, and to continue the salicine three times a day.

15th.—Convalescent. To get up. To continue the salicine night and morning for one week.

Remarks.—The first case was of a very acute type, and increased in severity after the patient's admission to hospital. The temperature, the pulse, and the symptoms generally were kept in complete control by the salicine, the administration of which was strictly regulated by the clinical thermometer. Under the old methods of treatment it would probably have run on to five or six weeks, and possibly might have been attended with cardiac complications. In the present instance complete relief was obtained in a week and convalescence in a fortnight. The heart was carefully examined with the stethoscope morning and evening with a view to the early detection of any heart lesion, but nothing of the kind was met with. From the fact of the patient lying perfectly quiet in the horizontal position, and being more or less under the influence of morphia (to gain time while the salicine was acting), cardiac mischief might advance to a considerable extent without the patient noticing any difficulty in this respect. To prevent relapse the salicine was continued for three weeks after convalescence; first, three times, then twice, and finally once a day. The second case was of a mild character, and presented no difficulties in treatment. There is no doubt, however, that its progress was considerably abridged by the salicine treatment, which appeared at once to control the rheumatic symptoms, which in the beginning were, as far as the right knee was concerned, rather severe.

Medical Societies.

ACADEMY OF MEDICINE IN IRELAND.

Intra-uterine Polypus.—The Curette in the Diagnosis and Treatment of Intra-uterine Disease.—Labial Hæmatoma.

A MEETING of the Obstetrical Section was held on May 7th.

Dr. BYRNE exhibited a small intra-uterine polypus lately removed from a pluripara, aged thirty-seven, under his care in St. Vincent's Hospital. The dilatation of the cervical canal was commenced with sea-tangle tents and finished by Hegar's dilators, and the polypus removed by an écraseur.

In the adjourned discussion on Dr. W. J. Smyly's paper on the Curette in the Diagnosis and Treatment of Intra-uterine Disease, Dr. ATTHILL said that some years since he had been stoutly opposed to the use of the curette. Now, however, he had changed his opinion, as well as others which he formerly entertained. He now looked on the curette as a most useful instrument, and freely employed it in many cases. The principal question was, ought they to use the curette as a diagnostic means without previous dilatation of the uterus, or ought they to dilate the uterus first and use the curette afterwards? He believed, however, that the instrument was appropriate only to a certain proportion of cases. If the patient were a woman who had had several children, and who had a patulous cervix through which a finger could be thrust, and if she were suffering from a thickened and unhealthy mucous membrane, a small curette might be introduced without any anæsthetic, and the bleeding part removed. Generally, there should be dilatation first and then the use of the curette; but there were cases in which the curette, without previous dilatation, as a diagnostic process, was justifiable and advisable. In many cases it was impossible by any digital examination to ascertain what was the exact condition of the fundus. He believed that, for twenty years, in no case in which there was hæmorrhage, and in which he found no polypus, had he applied nitric acid without first using the curette. He agreed with Dr. Smyly that the curette *per se* was safer than dilatation. With a soft cervix dilatation was perfectly safe, provided antiseptic precautions were used. But there was danger in dilatation if attempted rapidly with a rigid cervix, neglecting antiseptic precautions. Most serious symptoms resulted from attempts to dilate the uterus where there was an exceedingly rigid cervix. He would

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almost prefer to divide the cervix in such cases. Dr. Smyly objected to the use of powerful caustics, for three reasons—namely, that they necessitated previous dilatation, that their action was rendered uncertain by the discharges, and that they destroyed the tissues. But for many years he (Dr. Atthill) had used nitric acid very generally without dilatation; and whenever he used the curette his practice was to apply nitric acid or some other agent at the end of four or five days, and through a cannula. He now frequently used intra-uterine injections, usually iodised phenol or iodine, though in his earlier lectures he denounced the introduction of any fluid into the uterus.—The PRESIDENT said there appeared to be a general concensus of opinion in favour of using the curette in the manner recommended by Dr. Smyly. Nevertheless, he wished to say that he dissented from the views which Dr. Smyly had so temperately put forward. He was of opinion that the curette was a very dangerous instrument and liable to great abuse, and one from which no diagnostic information could possibly be derived. He could see no therapeutic or diagnostic advantage to be derived from scraping a mucous membrane with the curette. Was such a therapeutic agency recommended in the case of any other mucous membrane in an inflamed state by way of soothing or relieving the inflammation? If the mucous membrane of the bladder were in a state of inflammation, he could not conceive that it would be relieved by scraping. He thought that recovery in the cases in which the curette had been employed had taken place in spite of its use, and that the beneficial results were due to the additional treatment that had always been adopted.—Dr. NEVILLE said he concurred in Dr. Smyly's views as to the curette. There was considerable experience of the utility of scraping other mucous membranes besides that of the uterus. The scraping of granular eyelids was an old and very efficient practice. Such treatment was founded on rational grounds, and the amount of success which had attended it proved that it was good.—Dr. SMYLY, in reply, said the points he laid stress on were the use of the curette in diagnosis, and its use as compared with other methods of treatment. Dilatation was not necessary in every case before applying the curette, although it might be in cases where polypus existed. The great majority of cases of hæmorrhage were connected with disease of the mucous membrane, and diagnosis by the curette should be limited, as far as possible, to the mucous membrane. He believed the curette to be a more accurate instrument of diagnosis than the finger. In all the cases mentioned in his paper he meant to convey that he removed mucous membrane.

Dr. DILL read a communication on a case of Labial Hæmatoma. The patient was a primipara, aged twenty-one, and her labour had been completed without artificial aid. Shortly after delivery her medical attendant noticed a rapidly growing tumour in the right labium. This tumour, when seen by Dr. Dill an hour subsequently, had attained a size somewhat larger than that of a large fœtal head. On the internal surface of the tumour—i.e., within the vulva—the finger came upon a thin membranous covering which immediately ruptured, exposing a huge cavity filled with a quantity of clotted blood. After removal of the clots the cavity was filled with pledgets of lint soaked in carbolic solution, and the whole made as secure and comfortable as possible. No further hæmorrhage resulted, and the patient gradually rallied from the shock, which had been very severe. The ecchymosis resulting from this hæmatoma extended round the buttocks, and as far down the right thigh as the knee: it also spread over the abdomen on both sides as high as the level of the umbilicus, and on the right side almost into the axilla. Frequent changes of dressings were required at first, and much comfort was afforded by hot stupes and poultices. Hot antiseptic irrigations were employed twice daily, and the patient rapidly gained ground after the first fortnight, being finally completely restored to health. Dr. Dill had seen several cases of labial hæmatoma in his practice, but never one of the size recorded, nor one which had caused such severe symptoms in the way of pain and collapse.—Dr. Atthill said these cases were generally divisible according as the blood was entirely poured out into the labial tissues, or those in which the hæmatoma burst and profuse external hæmorrhage ensued. "Dr. Dill's case, he thought, was one of the former class, in which the blood was poured into the soft parts and coagulated there. It was remarkable for the very unusual size attained by the resulting blood-tumour.

FORFARSHIRE MEDICAL ASSOCIATION.

THE twenty-ninth annual meeting of the members of this Association was held on the 8th inst. at Montrose Asylum, when office-bearers for the ensuing year were chosen as follows:—President: Dr. Lawrence (Brechin). Vice-Presidents: Dr. John Mackie, jun. (Brechin), and Dr. Greig (Dundee). Secretary: Dr. Stalker (Dundee). Treasurer: Dr. Reid (Dundee).

Dr. HOWDEN then read a paper on Hospital Sanitary Arrangements, which he illustrated by means of several excellent diagrams. The author, at the outset, remarked that he did not propose to discuss hospital sanitation generally, his object being to draw attention to defective sanitary arrangements which might exist in hospitals and asylums, and to point out how these might be remedied. He thought he might safely affirm that no hospital or asylum built twenty or more years ago would, in its original arrangements, be found to be altogether in accord with modern sanitary views. To illustrate the errors that were committed thirty years ago he need not go beyond the walls of that institution in which they were met, though he thought it not unlikely that errors of a similar nature might be found to exist in other institutions of a similar date. The introduction of water into a dwelling was not always an unmixed good, and had, indeed, owing to the ignorance of the architect or the carelessness of workmen, often been followed by serious evils to the health of the inmates. Even to this day architects were fain to conceal water-cisterns in dark and most inaccessible parts of the roof. Pipes of all kinds were hidden from sight, and too often sewer drains were brought under floors and joined with soil-pipes in situations where they could have no security that the connexions were properly closed. Situated as Montrose Asylum was, at a distance from any general system of town drainage, utilisation of the sewage by irrigation or precipitation was almost a necessity. Irrigation as carried on thirty years ago implied the collection of the sewage in a large cesspool, whence the more liquid part of it was pumped on the land. As was the practice, they made a large cesspool, into which the sewers were run directly without any attempt to trap or disconnect them from the house. Sewage, when conveyed directly to the land in well-ventilated drains, was almost odourless, because it had no time to undergo decomposition. A very different material, however, was sewage when allowed to become stagnant in a cesspool, where it undergoes changes involving the liberation of sewage gas, which, in their case, found its way into the house whenever there was a defective drain. In laying the original drains several mistakes were made. The pipes were much too large—12 inches in diameter,—so that they could never be properly flushed. The work was done carelessly by a contractor, who sometimes neglected to allow a proper fall for the pipes, and often left lumps of cement projecting from the inside of the facet, so as to obstruct the passage of solid matters. Connexions and disconnexions were often incomplete, joints were left open, and pieces of old drains now disused were not removed. Drains of all kinds passed from the back of the building to the front, intercepting in their course soil-pipes inside the building. The main soil-pipes, which were of lead, were closed in recessed flues in the wall, and, as was afterwards discovered, the slip joints were in some cases not even closed. Not unfrequently the branch pipes were not trapped, so that they formed efficient ventilators to the drains into the wards. Some of the w.c. traps were conducted into a horizontal lead soil-pipe, which was unventilated, and as a consequence the sewer gas perforated the upper portions of it; but as the whole arrangements were carefully boxed in, no one was the wiser save for the bad smells and the abundance of rats which swarmed in all directions. After detailing the improvements which of late years have been made in the drainage of the institution, Dr. Howden proceeded to review the interior arrangements, in the course of which he remarked that with regard to concealed pipes, it was well known that water-pipes were often cut by rats, and the plumbers' theory was that they gnawed the pipes, to get at the water. That he believed to be quite a fallacy. They did not require to leave their drain in search of their favourite beverage. They cut the water-pipe simply because it obstructed their passage, and so, in like manner, if it happened to be a gas-pipe which was in their way they would cut it, thereby causing unknown waste of gas, and

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infinite risk from fire; for the gas, unlike the water, did not show itself, but found its way up the back of the plaster to the roof, or passed under floors and even into chimneys. In concluding, the author said he considered it of the utmost importance that the managers of every hospital and asylum should possess an accurate plan of the sewers, drains, and other sanitary arrangements of the institutions under their charge. Without that he knew from experience that alterations made to remedy evils often multiplied and aggravated them, and as one generation of officials passed away so did much valuable knowledge, unless it was carefully recorded on an accurate plan. Of late years public attention had been thoroughly aroused to the dangers of defective sanitary conditions in private houses. Sanitary inspectors had been appointed, sanitary associations formed, and sanitary institutions established; engineers and plumbers vied with each other in the contrivance of clever sanitary appliances; even architects were beginning to recognise the fact that their customers nowadays actually expect that a house shall be a healthy dwelling; and it was not too much to expect that the medical profession, which had always led the van in sanitary reform, should require that their patients, when congregated together in large numbers under one roof, should have the full advantage of those healthy surroundings which were considered so important in private dwellings.

The members of the Association were afterwards entertained to dinner by the directors of the asylum, when between fifty and sixty gentlemen sat down, Dr. Howden presiding.

Reviews and Notices of Books.

A Manual of Surgery. In Treatises by Various Authors. Edited by FREDERICK TREVES, F.R.C.S., Surgeon to, and Lecturer on Surgery at, the London Hospital. In Three Volumes. London: Cassell and Co. 1886.

THE three small, handy volumes of which this work consists are the result of the labours of no less than thirty-three writers, including the editor. All of them are surgeons more or less known to the profession as authorities on the subjects of which they treat, or whose names are guarantees of the excellence of the treatises written by them. The volumes contain about six hundred pages, and each is the size of the clinical manuals issued by the same firm of publishers. From the size of the volumes it has evidently been difficult for the writers to limit their treatises to the number of pages allotted to them; some of the treatises, in fact, appear to be abridged from works already written by the authors, which occupy the space of one of the volumes of the Manual. The title of the work is somewhat misleading until the preface has been read. There it is stated that "the three volumes of which it is composed are concerned mainly with the clinical, diagnostic, and therapeutic aspects of surgery. The general principles of operative surgery are dealt with, but the technical details of the various procedures are omitted, with the exception of such as concern what may be called special operations—namely, tracheotomy, gastrostomy, nephrectomy, ovariotomy, and the like. In similar manner, pathology is discussed only in so far as it affects the clinical phases and the intelligible treatment of surgical disease." As this is a Manual of Surgery intended for the use of the student and the practitioner, it would have been better to have included information regarding the operations ordinarily required sufficient to have enabled the former to pass his examinations and prepare himself for practice, and the latter to go for reference when in any doubt as to the special operative treatment of any particular case under his care. As it is, the use of this Manual must be supplemented by at least two others—one on pathology and the other on operative surgery. Looking at the work from the standpoint given in the preface, we acknowledge that the treatises are well, though unequally written, as might be expected. Indeed it would be almost impossible to find at present any work in which the subjects treated of are written more clearly or concisely.

The first volume contains treatises on the process of repair, general injuries and their results, wounds, contusions, abscesses, ulcers, gangrene, the general principles of operative surgery, anæsthesia, shock, tetanus, erysipelas, pyæmia and septicæmia, traumatic fever, hectic, gunshot wounds, the effects of heat, traumatic delirium, hysteria, scrofula and tuberculosis, rickets, hæmophilia, syphilis, gonorrhœa, tumours, injuries and diseases of bloodvessels, aneurysm, injuries and diseases of the lymphatics and nerves, surgical affections of the skin, scurvy, and animal poisons. The first paper is on the process of repair. It contains also a short account of the germ theory and the general principles of antiseptic treatment. It is clearly written, with the exception of the following paragraph, which requires alteration, as in its present form it hardly conveys the right impression:—"An injury is the result of the application of an irritant. The irritant may be applied directly to the part or indirectly. In the latter case it acts through the nervous system. For example, abscess of one of the cervical glands may result directly from a twist or strain of the neck, or *indirectly* from the irritation of a carious tooth, one of the commonest causes of abscess in that region. Or, again, a swollen testicle may result directly from a blow, or *indirectly* from a gonorrhœa." The italics are ours. Ten pages only are given to the general principles of operative surgery, which is treated of in a practical manner. We wish it had been a longer paper. Surely it is hardly necessary to devote nearly six pages in the third volume to the subject of extraction of teeth, when only ten are given to such a wide subject as operative surgery. The paper on anæsthesia is complete, and we agree in the main with the author, but advise the use of ether in routine practice for the adjustment of fractures. Those on syphilis, tumours, injuries and diseases of the bloodvessels, and aneurysm are good and practical, the one on the circulatory system being especially clear and well arranged. The absence of illustrations in the article on tumours detracts from the value of the paper, and contrasts with the article on animal poisons at the end of the volume, where there are several. The part which treats of injuries and diseases of the lymphatic and nervous systems will be read with pleasure. In the latter is a good account of Charcot's disease.

The second volume treats of fractures, but we note that fractures of the skull, spine, and ribs are dealt with in the injuries of the special regions to which they belong. The author dwells upon the treatment of fractures of the lower extremity by plaster-of-Paris splints; this is important, as they are coming into such general use. Diseases of the bones occupy about fifty pages; we dissent from the author, however, when he says that in the osseous lesions of congenital syphilis local treatment is uncalled for, the treatment by splints being so often necessary to give the part rest, and to prevent deformity. Injuries of joints, including dislocations, and diseases of the joints, take up space which is carefully and well utilised. In the description of the latter the author discusses some of those affections of the joints usually described as medical—e.g., gout and rheumatism,—which are apt to be forgotten by the practitioner when they affect one of the larger joints. Several of the illustrations in the work might with advantage be omitted in the next edition, and this remark applies especially to one which is found in the article on orthopædic surgery, "Talipes Calcaneus: the Foot before and after section of the Tendo Achillis." It is misleading and confuses the student, who would be apt to get the impression that that is the proper treatment of the deformity. Injuries and diseases of the head, spine, and neck are discussed, and the volume ends with papers on diseases of the nose, ear, and eye, which are tersely and well described. We notice that the author of the paper on

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diseases of the neck arranges goitre into congestive and neoplastic, not following the usual classification.

In the third volume we find clearly written treatises on the surgery of the chest, affections of the mouth, palate, tongue, and tonsil (the latter opens with a clear description of the way in which malformations of the mouth and neck arise), diseases of the jaws, dental surgery (in which article we should like to have found more information regarding the temporary treatment of painful conditions so often met with in general practice), injuries and diseases of the œsophagus and abdomen, hernia, diseases of the rectum, breast, genito-urinary organs, and kidney. The treatise on hernia is thoroughly and clearly put together; that on the female generative organs, one of the articles written by the editor, is marked by characteristic excellence. The other articles, especially that on the kidney, contain in a condensed form the latest views on the subject, both from a clinical and an operative standpoint, and in that on the kidney the author is permitted to describe the operative treatment of the diseases on which he has already written.

At the end of each volume there is a short index, that at the end of the third including those of the first two volumes. The editor has had a difficult task to accomplish in the production of this work, and we congratulate him on the successful result.

OUR LIBRARY TABLE.

A Manual of Medical Jurisprudence. By ALFRED SWAINE TAYLOR, M.D., F.R.S. Eleventh Edition. Edited by THOMAS STEVENSON, M.D. Lond. Pp. 837. London: J. & A. Churchill. 1886.—That the above manual has reached the eleventh edition is in itself trustworthy evidence of its intrinsic merit and the favour in which it is held by the profession. The lamented death of its illustrious author has necessitated that the work of revision should fall into other hands, and, fortunately, the publishers have been able to secure the aid of Dr. Stevenson, whose practical acquaintance with the subject, especially in its toxicological aspect, is recognised and appreciated by practitioner and student alike. The style of the book remains unaltered, but many passages have been condensed, obsolete ones have been omitted, and "much additional matter has been introduced." We notice a succinct account of the Lamson case of poisoning by aconitine. Had the edition been delayed in its appearance for a short time, it would doubtless have contained a history of the trial (reported in this journal) which recently took place at the Old Bailey, where two persons were indicted for having compassed the death of a third by means of *liquid* chloroform. In the "List of Cases Cited," a ready aid to the reader, as it is separate from the general index, no mention is made of the "Euston-square Mystery." This is to be regretted, since the case, amongst other features of forensic interest, furnished valuable evidence on the question of personal identity. From a careful perusal, we can say without hesitation that we know of no similar work in our own or any other language in which the practical as distinguished from the theoretical aspect of the study of medical jurisprudence is handled with the same aim and attainment. The description of the methods of procedure to be followed for the collection and rendering of evidence is especially good.

What is Consumption? By G. W. HAMBLETON. London: J. and A. Churchill. 1886.—The answer supplied by the author of this *brochure* to the question stated in its title is a simple one. He rejects one after another all previously accepted theories upon the nature of phthisis, from the bacillus backwards, and arrives at the conclusion that the essential underlying cause is diminished pulmonary capacity induced by artificial modes of life, sedentary occupations, tight clothing, and the like. In his view, then, consumption is not only an acquired disease, but one which by due attention to the conditions favouring natural physical development might be eradicated. The very simplicity of the doctrine constitutes its chief attraction, and as the thesis is maintained with commendable brevity our readers might do worse than make themselves acquainted with it. The author himself is very strongly impressed with the truth of his doctrine.

An Account of a West Indian Sanatorium, and a Guide to Barbadoes. By the Rev. J. H. SUTTON MOXLY, Chaplain to the Forces. Pp. 209. London: Sampson Low and Co. 1886.—This volume was written in anticipation of the Indian and Colonial Exhibition, the author being desirous of bringing to notice "the great salubrity of the island, and the beneficial effects on invalids of a brief visit to the place." It appears to be a good guide-book to the various places worth visiting in the island, but we have failed to find in it any information which would justify the recommendation of Barbadoes as a sanatorium, beyond the statement of the author that he has convinced himself "of the wonderful salubrity of the island, and of its peculiar fitness, especially during the winter months and those of spring and early summer, as a place of resort for invalids suffering from pulmonary or throat affections, or from general debility." He also asserts that it is the healthiest station at which British troops are quartered, a statement which we believe to be quite incorrect. His own description of the sanitary condition of the island is by no means reassuring. "There is no system of drainage in Barbadoes outside the garrison. Bridgetown itself is undrained; old-fashioned cesspits serving, or being supposed to serve, to convey the sewage, by infiltration, to the sea." In the country districts matters are still worse, for the water-supply is derived from wells and from surface streams and ponds "whose condition is often loathsome." The author states, however, that active measures are now being taken to ensure an abundant supply of pure water being brought within reach of every household. The state of the profession in Barbadoes is eminently unsatisfactory. Speaking of the medical practitioners, our author says: "There are many mere charlatans; men who, having spent their youth behind the counter of a general store or in similar employment, have gone to America for a few months, and, returning with 'bogus' degrees, or, those of some unknown 'college,' set up as physicians and surgeons, and trade chiefly upon the simplicity of the lower classes and negroes." By an Act which was recently passed, a three years' course of medical study is required before anyone is allowed to practise, "but the terms of the Act are somewhat lax and indecisive as to what constitutes a course of study of medicine"; it is, however, a step in the right direction. We regret to observe that the author does not appear to have appreciated the value of an index to his work.

New South Wales and Victoria in 1885. By DOUGLAS M. GANE. Pp. 207. London: Sampson Low and Co. 1886.—We cannot say that this volume has added to our knowledge of the Australian colonies. A chapter on "Australia, and the Voyage thither, considered in regard to Consumption," appears to have been written under the impression that it is by no means unusual "carelessly" to advise invalids in an advanced stage of consumption to take a voyage to Australia in the hope of regaining health. If this impression were correct the somewhat sensational description of the risks and discomforts of the voyage under such circumstances might do good; but, as we believe it to be quite erroneous, we can only regret that the author did not take a little trouble to ascertain the truth before bringing a charge of ignorance and carelessness against the profession. The chapter on "Fortune-seekers and their Chances" may be read with advantage by any young men who think of emigrating to Australia with the notion hat fortunes are made there

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more easily than they are at home." The most interesting chapters in the book are the last two, which treat respectively of sport on the Blue Mountains of New South Wales and on the plains of the interior.

El Himen en México. Estudio hecho con unas Observaciones presentadas en la Cathedra de Medicina Legal en la Escuelade de Medicina el año de 1882. Por FRANCISCO A. FLORES. (The Hymen in Mexico. A Study with Observations made in the Chair of Forensic Medicine in 1882.)—Dr. Flores finds that the organ in question varies in form according to the age of the individual. Thus the labial form occurs in 35 per cent. under ten, and in 26 per cent. above that age; while the annular form occurs in 32 per cent. both of cases under and of those over ten years of age. The semilunar form is found in 16 per cent. under ten and 24 per cent. above ten; the fringed in 2 per cent. under ten and 5 per cent. above ten; the horse-shoe form in 2 per cent. under ten and 5 per cent. above ten; the various anomalous forms described by the writer as biperforate, imperforate, operculated horseshoe, trifoliate, multifoliate, and corolliform, were found in 10 per cent. under ten and in 4 per cent. above that age. His theory is that the membrane is originally formed from the two oviducts, and is always in the first instance entire, reabsorption subsequently taking place, usually commencing at the junction of the two primitive halves, and continuing to progress till puberty or even beyond it. The anomalous forms are, he thinks, due to a twisted condition of the primitive tubes, which causes the line of junction to be directed obliquely with reference to the middle line of the body. The work is written in a fairly scientific spirit; but some of the plates might surely have been made somewhat less realistic without detracting from their technical value for questions of a medico-legal nature.

A Manual of the Diseases of the Eye. By C. MACNAMARA. Translated into Bengali by LAL MADHUB MOOKERJEE, L.M.S., F.C.U., Teacher of Ophthalmic Medicine and Surgery in the Campbell Medical School. Calcutta, 1885.—The appearance of this work must be regarded as a high compliment to Mr. Macnamara, and no doubt he will consider it to be so. It will at least serve to spread a knowledge of sound medicine and surgery as applied to the eye amongst the natives of India, and will enable them to judge of the advantages of European knowledge and skill over the rude methods we believe to be still in use in many of the more remote regions.

Handbook for Medical Officers of the Army. By J. BUCKLEY, Q.M., Medical Staff Corps. Pp. 47. Aldershot: J. May. 1886.—This is a small work compiled by the adjutant at the depôt of the Medical Staff Corps at Aldershot, which must be very useful as an *aide-mémoire* to the army medical officers. It gives in the smallest possible space the necessary instructions respecting squad, company, battalion, and stretcher-bearer drill; questions on military law, discipline, &c., and a summary of Section 3 of the medical regulations. It has been drawn up entirely from official sources, and contains a great amount of useful information in a very condensed form. It cannot fail to prove a useful departmental handbook.

The Journal of Physiology. Edited by MICHAEL FOSTER. Vol. VII., Part 3. Cambridge Scientific Instrument Company's Works, St. Tibb's-row, Cambridge—This part contains—(1) Bayliss and Bradford on the Electrical Phenomena accompanying Secretion in the Skin of the Frog; (2) J. W. Barrett on the Distribution of Bloodvessels in the Retinæ of Mammals; (3) C. A. MacMunn on the Presence of Hæmatoporphyrin in the Integument of Certain Invertebrates (with a plate); (4) M. Greenwood on the Digestive Process in some Rhizopods; (5) S. Politzer on Curara (with a plate), and Kuhn on the Physiological Action of Peptones and [illegible]

Cookery for the Sick and Convalescent, with directions for the preparation of Poultices, Fomentations, &c. By BARBARA THOMSON. Pp. 76. Edinburgh: Blackwood. 1886.—This small book will, we believe, be found very useful, containing as it does a large number of receipts, with full and clear instructions for the preparation of appetising and nourishing food for the sick and convalescent. It has evidently been drawn up with care, and is the work of an experienced hand. We would suggest, however, that in any future edition it would be advantageous, especially where wine and other stimulants are concerned, to substitute the number of ounces for the variable and indefinite quantity of a teacupful or wineglassful. In the receipt for calf-foot jelly we find it stated that "brandy may be substituted for the sherry, or half of each may be used," without any intimation of the quantity of the more potent stimulant which would represent the "half an English pint of sherry" previously ordered. It would also be an improvement if the amount of jelly to which the wine is to be added were stated, as at present it appears to be rather indefinite. The "hints for those who provide for the sick" are excellent, and there is a good index to the book.

The Birmingham Medical Review, June, 1886. Edited by ROBERT SAUNDBY and ARTHUR FOXWELL.—Dr. W. Leah thinks that general paralysis of the insane is a kind of system disease of the brain, and advocates its essential ganglionic origin as opposed to the interstitial view. Dr. Sackling writes on amblyopia due to cortical disease. The various reports on diseases of the digestive system, abdominal and pelvic surgery, surgery, medical pathology, and therapeutics, which have characterised the past few numbers of this Review, deserve to be commended as decided steps in the right direction; the brevity of the notes will suit the scanty leisure of general practitioners.

Vorlesungen über Pharmacologie. By Dr. C. BINZ. Third Part. Berlin: A. Hirschwald. 1886.—This is the concluding part of Dr. Binz's work on Pharmacology. It deals with bismuth, silver, mercury, antiseptics, quinine, salicylic acid, resorcin, kairin, thallin, prussic acid, anthelmintics, fatty oils, glycerine, gums, &c. The work is of the most laborious and exhaustive kind, and is sure to meet with the success it deserves.

New Inventions.

A MIDWIFERY SATCHEL FOR THE SADDLE.

PERHAPS a description of a leather case for midwifery instruments and bottles, which I have recently had made for myself, will be of use to some country practitioners who do most of their work on horseback. The case is made of the best pigskin, and is fifteen inches long by eleven inches in circumference; it is oval at the ends, and is closed by three straps, and attached to the front of the off-side of the saddle by two encircling bands of leather. Its contents are as follows:—One three-ounce bottle of chloroform, two one-ounce bottles containing ergot and turpentine, one half-ounce bottle of Bonjean's solution of ergotin for subcutaneous injection, a small bottle of Savory and Moore's gelatine discs of morphia, hypodermic syringe in case, a pair of probe-pointed scissors, a book of curved needles with stout silk sutures, a Higginson's syringe with vaginal pipe, a gum-elastic catheter, and a pair of Simpson's long forceps. All the instruments and bottles fit in perfectly, and can be taken out for use as quickly as from the ordinary obstetric bag. It is not at all in the way when riding. The case was made for me by Mr. Bowden, saddler, Medbourne, near Market Harborough.

GEORGE D. MACKINTOSH.

Hallaton, Uppingham, July 12th, 1886.

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THE LANCET.

LONDON: SATURDAY, JULY 24, 1886.

AN action recently brought by a gentleman in Huddersfield against the Mayor and Corporation of that borough, in their capacity as suppliers of the public water-service, has been three times before a court of law, and has recently terminated in a judgment delivered in the House of Lords, which, for the time being, decides an important question in connexion with the responsibilities attaching to water companies. The case will be known as that of MILNES *v.* the Mayor, &c., of Huddersfield; Mr. MILNES bringing his action against the defendants for injury to his health by reason of lead-poisoning, due to lead contained in the water as supplied to his house from the public service. No question whatever arose as to the fact that some special solvent of lead had acted upon the lead service-pipes and had produced the results in question. But the Corporation denied that they had any responsibility as to any results which were brought about by the service-pipes, their Act of Parliament simply requiring them to lay down pipes in every part of the town, and to deliver by means of these pipes a supply of pure and wholesome water sufficient for the domestic use of all the inhabitants, and to furnish such supply to any inhabitant for his domestic purposes. Their duty ended, they contended, when they kept in their mains such a supply as was specified, and if injury happened to the water after it left the mains, by reason of the use of lead service-pipes or otherwise, the responsibility for any resulting mischief could not rest with them. This view had already been upheld in two courts of law, and against it Mr. MILNES appealed to the House of Lords. Lord SELBORNE and Lord WATSON would have reversed the decision, but the majority of the Court were in favour of upholding it. Indeed, Lord SELBORNE took a common-sense view of the subject—a view, however, which in the opinion of the majority of the law lords was not strictly the legal one. He contended that the object of all Water Acts was that the consumers should be supplied with water fit for drinking, and not with a substance that might be poisonous to those consuming it; and also that the Legislature must have contemplated the introduction and supply of water into the houses of the consumers by the usual means—namely, by service-pipes passing from the mains into the interior of the dwellings. And if water could not pass through those various means of supply without becoming poisonous, it could not be regarded as fulfilling the primary objects for which the supply was required. It is true that the legal property in the service-pipes vested in the consumer, but, as Lord SELBORNE stated, this was a matter of but trivial importance unless the consumer was free to decide the material of which they were to be made. But unfortunately the service-pipes under the general Act, though laid down at the cost of the consumer, were to be of a strength "and material approved by the undertakers, and to be laid down under the superintendence of their officers." And so also, by the special Act for Huddersfield, absolute power was given to the Corporation as undertakers to "prescribe the size, nature, strength and materials," &c., of all consumers' pipes. The respondents maintained their rights of control under these Acts, and they exercised the powers vested in them by prescribing lead as the necessary material for the service-pipes; in fact, they themselves supplied and laid down the lead pipes. Under these circumstances Lord SELBORNE maintained that the Corporation had failed to fulfil their statutory obligation affording a wholesome water for the consumers—and this although the water in the public mains was admittedly wholesome and free from lead.

But, as already stated, the majority of the Court held a different opinion. Lord BRAMWELL contended that the water as supplied by the undertakers to the complainant was from the main; that the water as delivered from that main by the Corporation was wholesome, as required; and that if anything went wrong with it afterwards, it was not the fault of the defendants' water, but that of the consumer's pipe. And so it comes to this, that although a water company can under bye-law deprive the inhabitant, at whose expense they carry out the plumber's work, of all discretion as to the materials of which his service-pipes are to be made, yet they may disclaim all responsibility for any untoward results following on their action in this matter. This must now be regarded as being the law on this subject, and the only remaining remedy is to get the law altered.

The Huddersfield case presents, quite apart from its legal aspects, several very interesting phases. The methods by which soft waters occasionally, and at times at long intervals, suddenly acquire the property of taking up lead in quantities sufficing to produce symptoms of plumbism, are still very obscure, but it is probable that in the case of some waters derived from moor-land, the formation of the acids leading to this result may be due to the decomposition, under certain exceptional conditions, of vegetable matters. Several such cases have recently occurred, and we may shortly have an opportunity of referring to this aspect of the question.

SINCE the unusual course followed by the head master of the Charterhouse School in the case of Mr. CARRITT'S son was brought to public notice, a number of letters have appeared on the subject. But although they have cleared up some points, they still leave others in an unsatisfactory state. It appears that the house master of the boy retained him in the house contrary to the wish of the medical officer of the school; but the reason for this seems to have been that the infirmary was already occupied by some cases of measles, and we presume it was considered that less risk would be run by isolating the boy in the master's house than by introducing such a case among the boys in the infirmary. The isolation is stated to have been as complete as it could have been made under the circumstances. One of the masters, Mr. PAGE, has written what he doubtless considers a defence of the school, and so it is as regards some statements which appeared under the signature of "Censor"; but he has not attempted any explanation of the silence of the house master regarding the cases of diphtheria, when he told the boy to write about the existence of measles in the house. Nor has he said anything in defence of Dr. HAIG-BROWN'S decision in

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forbidding the return of the boy to the school if taken home from the house in which the cases of diphtheria had occurred, and where one of the convalescents was still resident. The removal of the boy may have been deemed to have arisen from over-anxiety on the part of Mr. CARRITT; but it was surely an over-anxiety which, under all the circumstances, deserved some consideration on the part of the head master.

Until the receipt of Dr. C. HAIG-BROWN's letter, published in another column, and which arrived as we were going to press, we were left without any satisfactory information as to whether the prevalence of this diphtheritic affection (for we must include under this term the cases also of sore-throat) was confined to one or more houses, or whether it was general over the school; nor has anything been said with regard to an inquiry into its causes and the means to be adopted to prevent its recurrence, beyond the general statement by Mr. PAGE that "the steps which are being already taken with a view to the thorough examination of all the houses and the remedying of any defects will, it is hoped, ensure even greater healthiness in the future." That some such inquiry was much needed is obvious from the remark made by Sir ARTHUR CLAY that "the real trouble is the defective drainage of a portion of the school, and until this is remedied constantly recurring outbreaks of disease may be expected. The question has long been under discussion, but no effective action has been taken."

It is very satisfactory to find that general testimony is borne to the zeal and efficiency of Dr. CLARENCE HAIG-BROWN, the medical officer of the school. But the discussion has given rise to some important questions regarding the position held by the medical officer of a public school, the responsibility which should attach to the appointment, and the power with which he should be invested. It appears that at the Charterhouse School the nomination of the medical officer rests with the masters. This is clearly a mistake; he ought to be entirely independent of them, as he may frequently have occasion to interfere with the arrangements which they have made, and which he may consider likely to prove injurious to the boys. He should be selected for the post by the governors, to them alone should he be responsible for the manner in which he discharges his duties, and to them he should have the power of a direct appeal when his recommendations are neglected or over-ruled by the masters; nay more, we think he should be bound to report every such case. This would have the double advantage of causing him to exercise a judicious caution in making recommendations, while it would at the same time tend to prevent any unjustifiable opposition on the part of the masters. The Council of the Medical Officers of Schools Association has drawn up a code of rules for the prevention of infectious diseases in schools. We are not prepared to say that we think these ought to be adopted in all public schools, but it would be most desirable that the medical officer of each school should draw up a code of rules for the medical service of that one to which he is attached, and that he should obtain the sanction of the governors to its adoption, with instructions to report to them any neglect or refusal to comply with it. We feel that it would be useless to ask for more than power to carry out his views with regard to the sanitary arrangements of a school or any such public establishment; but his position should be clearly independent of the masters, and free from all risk of interference on their part, while he should have it in his power to appeal for support, when he deems it necessary, to the governing body, from whom his appointment should emanate, and to whom alone he ought to be responsible. He should be required to make periodical reports on the health of the boys, and invariably to include remarks on the sanitary condition of the school and of the houses, and suggestions for any alterations or improvements which he may consider advisable from a sanitary point of view in the interests of the boys.

EVERY student of medicine knows, when he is questioned on the subject, that there is no hard-and-fast line between the normal and the abnormal; that physiology runs into pathology. It is a mistake to describe life as a very slight process of inflammation, though in a certain curious fashion it may be so considered. Normal nutrition contains within itself the elements of inflammation, which is, in fact, an exaggerated and perverted condition of healthy tissue and vascular action. Whenever differences in degree are the subject of discussion, there is fertile ground for paradoxical statements.

The transition between healthy mental action and delirium is an almost imperceptible one, as is likewise the gradation between normal movements and abnormal ones. The mind is considerably exercised to understand how it is that involuntary movements should be so near akin to paralysis, or absolute want of movement. This department is perhaps one of the most instructive in the whole range of disease. We may examine it a little more closely. Take a normal ganglion cell of the motor kind in the spinal cord. Contemplate its healthy mode of existence. It responds only to stimuli from a special part of the cortex of the brain or from a certain region of the body, with both of which it is in special relation. Increase its irritability, by any of the numerous means, to a considerable extent, and it will discharge its energy "spontaneously." A lesser grade of irritability will render it liable to be discharged on the slightest provocation. Of course this is an illustration of disease, yet how little it apparently differs from a state of health. Although the phenomenon of "irritable weakness" has long been recognised, yet we are inclined to think that it is still insufficiently acknowledged in practice. Actual diseases of the spinal cord afford abundant illustration of the principle. As an example we may consider the "knee-jerk." There are good grounds for believing that the disappearance of this phenomenon is always preceded by a state of exaggeration, transient no doubt in many instances. Weakness of the heart shows itself much more by an increase in the rate of its action, although one might *a priori* be disposed to think that its debility ought to be manifested in the display of less energy. Strange as it may seem, *a priori* thinking is not far wrong even here, if we do but define what is meant by strength. The strongest man, like the most powerful or healthy nerve cell, is to be gauged by the power of self-control and by the deliberateness of actions. The truly strong man about to perform an act effects his object with the expenditure of the least amount of force necessary under the circumstances. The heart, with its work to do, acts in the same economic manner if it be in a state of

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health. In febrile states it wastes its forces, acts more quickly, but with less efficiency. And yet this principle of irritability associated with weakness is not found under all circumstances. We have examples of progressive loss of strength without manifestations of increased action. If we attempt to look for uniformity of method in disease we shall be disappointed, or have to search deeply before we arrive at the uniformity of principle on which nature presumably acts. An inquiry into the mechanism by which weakness goes hand in hand with increase of irritability will reveal that there are really two forces at least at work. In the case of the heart the motor nerve cells are under the control of other nerve centres, debility of which is probably the cause of the excessive number of discharges of the former. Probably a similar explanation holds good for the other examples of "irritable weakness," including most cases of mental derangement.

ON Saturday last a number of medical officers of health in the metropolis accompanied the Ambulance Committee of the Metropolitan Asylums Board to inspect the ambulance arrangements for the removal of cases of small-pox. London is so large, and its sanitary work so divided, that, except for this and similar opportunities given by the Managers, the officers whose primary duty is that of preventing disease, would know but little of the important machinery which is depended upon for the limitation of the spread of infectious maladies.

It is not many years since that Londoners were in the habit of using public street conveyances for the removal of the infectious sick; and even when legislation discouraged this procedure, no other vehicles were available but the somewhat ill-constructed ambulances of the Poor-law authorities. It is true that some of the sanitary authorities, more advanced than their fellows, possessed themselves of special carriages for the removal of infectious persons; but certainly in one instance, if not in others, the inconvenience attending the horsing of these vehicles led to the conveyance being used rather for the purpose of exhibition than for that for which it was at first intended. These difficulties were clearly appreciated by the Royal Commission on Fever and Small-pox Hospitals, who recommended that the ambulances should be under the control of the hospital-providing authority, whose responsibility for the care of the sick should thus begin at the patient's home instead of at the doors of the hospital.

The Managers of the Metropolitan Asylums Board have freely accepted the duty which has been imposed upon them, and have organised a service which is unparalleled for its efficiency, and of which London may well be proud. This duty from force of circumstances is not limited to the removal of sick persons from one part of London to another, but includes the far more difficult task of relieving London of infection from small-pox, and conveying the sufferers to a distance outside the metropolis, where their aggregation is not attended by the unfortunate results which arise from the hospital treatment of such cases in London. If the profession had been told only a few years ago that it was proposed to convey persons in the acute stage of small-pox some twenty miles from their home, the idea would have been scouted as an impossibility; but the Managers have contrived to solve this problem, and to remove patients this long distance, not only to the great advantage of the metropolis but without injury to the sufferers.

The Managers have constructed three ambulance stations in connexion with, or rather adjoining, their eastern, western, and south-eastern hospitals. These stations are entirely distinct from the hospitals near which they are placed, and are, so far as the officers are concerned, under entirely separate management; in each are placed a number of admirably constructed ambulances, in which the sick can be removed with the least possible inconvenience; there are, moreover, coachmen, male attendants, and nurses, who accompany each vehicle whenever requisite. Each station is in telephonic communication with the central office, and this office is also in telephonic communication with the offices of the district authorities, with the different hospitals, both on land and water, and with wharves upon the banks of the river. Absolutely within five or six minutes after information has been received from any of the parochial offices of the need for removal of an infected person, an ambulance is on its way from the nearest station to fetch the sufferer. Should the case be one of small-pox which can be removed outside London, the patient is conveyed to one of the wharves. Of these wharves there are three—one, the Western Wharf, which is just approaching completion, is situated in Fulham; another, the South Wharf, in Southwark; the third, the North Wharf, at Poplar. At each of these points is stationed one of three ambulance steamers, two of which were constructed specially for this service, the third having been altered to fit it for its present use. Two of these steamers, the *Maltese Cross* and the *Albert Victor*, contain accommodation for thirty-two patients each; the third, the *Red Cross*, for thirty patients. The planning of these vessels is so excellent, and the furnishing so complete, that the patient is at once received into a perfect hospital; his journey, so far as any fatigue is concerned, ends from the moment he is placed on board. He immediately comes under the care of a medical man and of nurses, and is fed and tended as carefully as if he were resident in one of the land hospitals. Of his voyage down the river he is not conscious, for the steady passage of the vessel through the water is barely perceptible to anyone lying in the well-arranged wards. Later, he reaches the hospital ships at Long Reach, where he has the best of opportunities for his recovery. We recently described in some detail the construction and ventilation of these vessels, and we have now only to add that the arrangements are now supplemented by their being furnished with the electric light, which is supplied from the shore, by complete laundry and disinfecting appliances in a building which is also on the shore, and near to which is erected a large dwelling for the accommodation of nurses, who are thus able to live in reasonable comfort, without exposing the patients to danger of disturbance from their close proximity to a large number of persons in the more restricted space of the hospital ships.

Under these circumstances the risk to London from small-pox is greatly reduced, and the removal of the sick is accomplished without the least inconvenience or prejudice to the patient's recovery. The greatest credit is due to the Managers for this great public service rendered

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to the metropolis. Mr. SCOVELL, the chairman of the Ambulance Committee, may regard with much satisfaction the completion of this difficult task, in which we are glad to be able to report that well-known members of our own profession—Surgeon-General BOSTOCK, Drs. FOWLER, LATHAM, and MILLER—have taken an important part.

THE Report of our Commission on the Pollution of the Thames at the Henley Regatta has attracted considerable attention, and it is very generally admitted that it is an anomaly to prevent by stringent legislation the passage into the Thames of the refuse and excreta from a single house, and at the same time to permit a floating town made up of house-boats and other river craft, to pollute the river day after day by means of all its filth, both liquid and solid. One of the principal reasons which led to special legislation for the river Thames was the fact that London derives the greater portion of its water-supply from the river, and it is obvious that the existing legislation must be imperfect in the extreme if it allows the refuse of some hundreds of people to be cast into the stream, and this simply because the population in question do not happen to live on shore at the time when they cause the pollution referred to. It must also be remembered that legislation in this matter has been made the more stringent because of the special danger attaching to the consumption of a water which has been contaminated by human excreta, and having regard to the fact that the filth cast into the Thames by river boats above Teddington tends to find its way into the vicinity of the intakes of the London water companies, it is the more important that the subject to which we have directed attention should be effectually dealt with.

We are fully aware of the difficulty of asserting without hesitation, as regards any special form of refuse, that it would be capable of producing injurious effects if it ultimately came to be mingled with the water in the public mains; we are as yet ignorant as to the precise form and quantity of filth which is necessary to bring about mischievous results. But it is precisely because of our ignorance in this matter that our regulations dealing with the subject should be exceptionally stringent; and the only safe plan is to regard all excremental refuse as potentially poisonous, and to deal with it accordingly. Recent experience has also taught us the need for especial caution in this matter. The chemist has failed to detect anything wrong with water to which choleraic discharges and filtrates of enteric fever discharges have been added in quantities exceeding those which there is strong reason to believe have led to the production of epidemic disease amongst consumers of water-services which have become accidentally contaminated. And not only so, but in such cases as the severe epidemics of enteric fever at Over Darwen and at Caterham, we have learnt that comparatively small quantities of specifically diseased discharges have, even when mingled with very large bodies of water, conveyed disease on a wide scale. In the Caterham case, for example, a portion of the discharges of a single patient were mingled with so large a quantity of water that the attempt of the company to pump the well dry failed even materially to lower the water level—and this although their machinery was kept at work day and night; and yet the water contained the infective material in sufficient quantity to convey disease to several hundreds of the water consumers. The fact is that in these contagia we are dealing with particulate matter capable, under certain conditions, of rapid development and reproduction, and there is no reason for assuming that these favourable conditions are always absent in the river Thames. Quite the contrary: infected streams have before now led to evils as great as those to which we have referred in connexion with infected reservoirs and deep wells, and for this reason those who are responsible for the state of the Thames in relation to the London water service should see that some measures are taken to deal with the evil which our Commission has brought under notice. Possibly the most appropriate plan would be to bring river craft above, if not also below, Teddington Lock under somewhat similar restrictions as canal boats are now subjected to. Under the principal Act relating to the latter class of boats the Local Government Board have power to make regulations relating, amongst other things, to the "general healthiness and convenience of accommodation of the boat.....for promoting cleanliness....." and "for preventing the spread of infectious diseases" by such boats. Possibly the precise terms of the Act might need modification to meet the case of pleasure-boats on the Thames, but it is by no means unlikely that in the provisions of the Acts as to canal boats, and in the staff of officials which is held to be necessary for their enforcement, the basis for such action as may be needed by way of supplement to the existing powers of the Thames Conservancy may be found.

Annotations.

"Ne quid nimis."

INTERMEDIATE M.B. EXAMINATION AT THE UNIVERSITY OF LONDON.

THE success of the experiment of holding two Pass Preliminary Scientific M.B. Examinations in the year has induced the Senate of the University to move still further in advance, and the official minutes now announce that the Intermediate M.B. will also be held twice a year—viz, in July (as at present) and in January. The first examination in January, which will be for a pass only, will be held in 1888, so that time may be afforded to duly publish the new scheme. We need hardly point out that this change will add greatly to the facilities for taking the M.B. degree, is altogether on the lines we have so constantly urged, and was a necessary sequel to the holding of the earlier examination twice annually. At the same time the Senate resolved on a further alteration, which will again bring the two examinations more closely into accord. As now at the Preliminary Scientific, so after the present year at the Intermediate M.B. in July, the candidate will have to elect between taking the pass and the honours papers, which will be distributed on the same day and hour. In other words, candidates for honours will not have to write the pass papers and must take the risk of failure, whilst those who take the pass papers necessarily exclude themselves from honours. In cases in which candidates elect to write the papers for honours and fall short of that standard, the examiners will exercise a discretion as to recommending them for an ordinary pass. There is a little difficulty in carrying out this change, but we believe it works very satisfactorily at the Preliminary Scientific. In and after 1887 the written

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examination will commence on the second Monday in July, and the practical and *viva voce* examinations in the week commencing with the fourth Monday. The written part will therefore be a fortnight earlier than at present.

THE ELECTION OF DIRECT REPRESENTATIVES.

THE new Medical Act says that the manner in which the election of direct representatives of the profession shall be conducted is to depend on regulations to be made by the Privy Council. These regulations are not yet completed, and in the present state of political parties a little time may elapse before they are ready for publication. But we may assume that the Privy Council regulations will only have reference to matters of detail—of time and place, and mode by which the voting-papers may most safely reach their destination, &c. They will leave much to the judgment of the profession, and especially of those members who may aspire to election or be put forward by their brethren. While the Privy Council is considering its regulations and the profession is showing a very wise slowness in nominating its representatives, it is a good time to consider the way in which the election should *not* be conducted. Generally speaking, the method of procedure should differ as far as possible from that of an ordinary parliamentary or municipal election. Canvassing should be discouraged or even prohibited, and all the ordinary arts by which candidates misrepresent the issues at stake, by which they elevate themselves and disparage their opponents, must be considered excluded and unworthy. It is desirable, however, that the profession, by the men it chooses and by the methods it pursues, should give evidence of the wisdom and propriety of the concession of direct representation. *Mutatis mutandis*, the election of the Council of the College of Surgeons might be taken as a guide. The differences are that the voters in the one case will amount to as many thousands as in the other case to hundreds, and that the election to the Medical Council will be by voting-papers sent out by and at the expense of the Branch Council of the particular division of the kingdom to each registered practitioner, and returnable to the medical registrar for that division. Nevertheless, the principles ought to be the same. The absence of all coarse methods of electioneering should be insisted on, and those who resort to them should be left out in the cold altogether. The profession is under no delusion as to the powers of the Medical Council, even refreshed, as it is to be, by direct representatives. It may be trusted to act accordingly.

THE CHOLERA EPIDEMIC IN SOUTHERN EUROPE.

WHILST cholera is still widely prevalent in certain portions of Southern Italy, the epidemic appears during the past few days to have been checked in intensity; and this change has been observed in connexion with a diminution in the temperature, which during the previous week had been exceptionally high and oppressive. During the week ending the 19th inst., there were 52 cases and 27 deaths in the town of Brindisi, 287 cases and 107 deaths at Francavilla Fontana, 115 cases and 49 deaths at Latiano, and, in addition to this, several other places in the province of Brindisi were almost continuously affected. Indeed, the daily number of cases and deaths in the province during the week in question have been as high as 115 and 46 respectively, but latterly they have fallen to about 70 and less than 20. Amongst the other places most affected may be mentioned San Vito Dei Normanni, San Donaci, San Pancrazio, and Oria; also Erchie and Manduria in the province of Leece. The disease was also announced to have again undergone extension in the province of Bari, but no details of this have come to hand. The outbreak in Francavilla Fontana is the most striking feature of the epidemic up to the present date, this town having suffered, in proportion to its population, more severely than almost any place which has been attacked in the peninsula since 1884, and certainly more severely than Naples during the epidemic in that city two years ago. The disease, too, is more persistently maintained in Francavilla Fontana and in Latiano than in any other portion of the kingdom. In the north of Italy the disease appears to be still limited to Venice and to Codigoro in the province of Ferrara. In Venice the fresh cases and deaths during the week ending June 19th have been 7 and 6 respectively, and in Codigoro they were 39 and 14. Reviewing the progress of cholera in Italy during the past week, it must be admitted that the disease, whilst very severe in the localities affected, has not extended itself on so wide a scale as was to have been expected. And it is possible that if the temperature during the next few weeks does not become excessive, no very serious extension may take place. Italy has suffered severely during two consecutive summers, and the present year may be exhibiting a decline previous to the disappearance of the epidemic. This view receives confirmation from the failure of the disease to make headway in the northern part of the peninsula. On the Austrian coast of the Adriatic cholera is still limited to Trieste and Fiume. The records from both places are somewhat broken, and during the week ending the 19th inst. only 19 cases and 8 deaths have been reported from Trieste, and 21 cases and 10 deaths from Fiume. In the latter place, which was first attacked about the beginning of the fourth week in June, 75 cases and 47 deaths have taken place up to the date to which this week's records extend, and on the 14th inst. it was reported that the population were suffering a good deal from panic, and that a large number of the inhabitants had already left the place. In all the towns and localities affected both in Italy and in Austria the officials are endeavouring to reassure the populations, and in Italy the calm behaviour of the people stands out in striking contrast to that which has heretofore been exhibited, especially in Southern Italy. Sanitary measures of a certain sort are also being carried out, and some immediate good may be expected to result. But hitherto these measures have, in the main, been of a temporary character, and except in so far as the works which have been carried out, or which are in contemplation, in a few large cities such as Naples, are concerned, we have as yet not heard of any substantial progress being made towards the prevention of a similar occurrence in the future.

EARLY OPERATIVE TREATMENT OF MORBUS COXÆ.

THE April Bulletin of the Royal Academy of Medicine of Rome reports the presentation, by Dr. P. Postemski, of three boys with hip-disease. Two cases had been treated by the expectant method—counter-irritation and extension, douching and immobility. Abscesses and sinuses formed, and recovery, with considerable deformity, only occurred after the treatment had been persisted in—in one case for two, in the other for four years. In the third case early excision of the head of the femur was followed by rapid recovery. The operation was performed through a semi-lunar incision behind the great trochanter. The joint contained purulent serum, and was the seat of fungus synovitis. Only a few erosions were visible on the head of the bone. After removing it, the neck of the femur was rounded and refitted into the acetabulum, previously cleaned out by scraping. Drainage, union by interrupted suture, extension, and sublimate dressings were not disturbed for twenty-nine days, when union by first intention was ascertained. All the dressings were removed on the thirty-fifth day. At the end of eight weeks the patient was able

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to walk on crutches, and he could dispense with them when presented to the Academy. The case is unquestionably one of deep interest, but its progress at a later stage must be noted before a correct judgment can be formed. Assuming the issue to be entirely favourable, the advice to excise the head of the bone in the early stage of hip-disease raises grave questions. Granted that the danger of the operation is much less in children than in adults, and that the proportion of recoveries is largest when excision is practised before the joint is completely disorganised, two results of experience are specially noteworthy. A large proportion of hip-joint patients do well under appropriate constitutional and local treatment; and excision of the hip is an operation involving risk to life, without the certainty of a strong and useful limb.

THE "SATURDAY REVIEW" EXCITED.

We are sorry for the Saturday Reviewer who, having indited an article entitled "The Relation of Insanity to Sin," and finding his essay criticised in our columns, is thrown into such a paroxysm of indignant excitement that he straightway pens another article entitled "A Medical Wiseacre," wherein he makes confusion worse confounded. The amenities of journalism are not best maintained by calling names, and we are a little surprised that any article with such a heading as that just quoted should have escaped the editorial eye in control of a periodical usually well conducted; but let that pass. Our concern is with the objection of the writer, not with his style, albeit that, to quote a famous criticism, certainly "lacks finish." This is how the objection runs: "The proposition which we adduced was that in questions of sin, as in questions of crime, the mere wickedness of the acts done was not in itself good evidence whereon to base the defence of madness, except in so far as it could stand the test of the two questions, 'Did he know that what he was doing was wrong? If he did, could he help doing it?' Upon this the wiseacre in THE LANCET finds himself 'compelled by the facts of the case to join issue, and contend that a man may know he is doing wrong, and do it without obligation or impulse of any sort, and yet be insane.' This so-called 'joinder of issue' is, to carry on the legal metaphor, bad on the face of it. It does not contradict what was said on the other side, and it asserts what nobody ever denied." We must be excused for differing from our censor and suggesting that it not only joins issue, but puts the proposition laid down out of consideration. The *Saturday Review* is discussing the relations of sin and insanity, and the questions set out are those laid down by authority as tests for responsibility in cases of alleged insanity, or in which madness is pleaded in defence of a person doing some act which is classed as criminal. And the two questions propounded as tests are shown to be ridiculous. They will neither stand apart nor together. There is simply nothing more to be said on the subject, because it is nothing to the point whether the man knew what he was doing to be wrong or did not know it, and it is nothing to the point whether, knowing or not knowing the nature of the act he performed, he did it because he could not help it, or, being able to help it, he did it because he chose to do it. The question of sanity or insanity is not to be inferred either from the nature of a deed done or the degree of knowledge, or of independence of the person doing it. The question whether or not a person who has done something, good, bad, or indifferent, must turn upon his state of mind, which is a matter wholly apart from his actions. A mad man may do an act good in itself, or a sane man may do a mad act. Mind and conduct are different and often stand apart, particularly in such mental states as constitute what we call disease. This is the sum of the matter at issue, and we say that our "joinder" was perfectly good in so far as our contemporary was writing on the subject named at the head of the column. If the Saturday Reviewer does not see this he must have unconsciously suppressed a term of his syllogism. Meanwhile what does he mean by the following slightly discordant statements: "It would, in his" (i.e., the medical wiseacre's) "judgment, have been more accurate to specify crime instead of speaking vaguely of sin. Here he is in error. It would have been, not more, but less, accurate to specify crime, because we were not writing about *crime*." Mark this, and then read the following: "Lawyers say, Mad people who do not know what they are doing, or who cannot help doing wrong, shall not be punished. Doctors say, But that is an insufficient definition of madness. No one, except doctors, ever said it was a definition of madness at all. It is a definition of *criminality*, and criminality is a question with which doctors are not in the least concerned." Surely our friend is a little mixed. The article was entitled "The Relation of Insanity to Sin." We suggested that it would have been better to have said crime than sin. He objected that he was "not writing about crime," and now he objects that he was not talking about insanity or madness, but about *criminality!* Where are we? Where is he, or—where ought he to be?

THE CEREBELLUM AND THE OLIVARY BODY.

ONE of the most interesting communications in the current number of the *Journal of Mental Science* is a clinical note by Mr. W. Dudley. The case is that of a man aged sixty-two, in whose *left* cerebellar hemisphere was an area of softening occupying the central part and including the corpus dentatum—the, so to speak, olivary body of the cerebellum. The *right* olivary body presented a gelatinous appearance, and its convoluted grey matter seemed absent. The microscopical examination revealed a great contrast between the olivary bodies. The left one was normal; the grey matter of the right exhibited but few nerve cells, though abundance of coarse granular matter, probably the remains of atrophied cells. No tract of degeneration was detected in the medulla or spinal cord. In the case in question there was considerable difficulty of articulation, which may have been due to the atrophy of the olivary body. The crossed connexion of the cerebellum and olivary bodies appears to be illustrated by this case, for it does not seem likely that the lesions were coincident; nevertheless, there were foci of softening in other parts of the brain.

"CLEVERNESS."

IN early life the thoughtful mind is puzzled by many things difficult to be understood. As thoughtfulness belongs to every normal child, it follows that most of us have been puzzled to explain satisfactorily what is meant by being clever. We all like to be credited with the possession of something that excites admiration, and many a child jumps at anything that will bring him some small measure of notice above his fellows. This trait in the human character is one of a very useful order, but occasionally, like everything else, it carries mischief in its train. Even the most mediocre intellect is occasionally the seat of some sort of cleverness. In certain natures a little praise is a dangerous reward, for flattered vanity works hard for distinctions that do not rightly belong to it. Sometimes vain minds give way to the strain brought upon them by their own inordinate love of being thought "clever." The term "cleverness," as it is now used, must be held to be of most indefinite meaning. How are we to compare the cleverness of different men? The physiologist apparently alone

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would be capable of doing this, for he attaches a physiological meaning of some definiteness to every mental act. He might say that the clever pianist had better brain tissue, that allowed of more perfect activity of certain visual centres and the corresponding motor paths by which written music is translated into movements and their attendant sounds. As the brain is a sort of representative parliament, it is easily conceivable how some of the representatives should be more efficient than others. In other words, some parts of human brains are more perfect than others. Some people have "ears" for music, whilst it is notorious that some clever men are unable to appreciate musical sounds.

DRINKING-WATER FOR VESSELS IN THE PORT OF LONDON.

THE supply of pure water to ships is at all times of the greatest importance, and especially so during hot weather. From a report issued by Dr. Collingridge on the subject we learn that many of the dock companies supply shipping direct from the water company's mains by means of hose. In the river, however, and the London, St. Katharine's, East and West India, and Commercial docks, water is carried by means of special barges, which derive their supply from the East London Water Company. Inasmuch as such barges are liable to contamination, it is satisfactory to know that they are under constant inspection by the Port Sanitary Authority, and that thorough cleansing is required at stated intervals. At the Thames Police Court last week the Samaritan Water Company were summoned by an inspector for neglecting such cleansing and repairs, and an order was issued by the magistrate with costs. The Port Sanitary Authority are endeavouring to induce the dock companies to take the supply of water into their own hands, and thus minimise the danger of pollution.

TUBERCULOUS MILK.

A SERIES of researches and experiments in testing milk and its infectious qualities in the case of tuberculous cows has been published in a Scandinavian journal by Drs. Bang and V. Storch. Dr. Bang found that milk both from the tuberculous portion of the udder and the healthy portion contains bacilli, and always produces tuberculosis in rabbits inoculated with it; also that milk from tuberculous cows without diseased udders was not infectious in some cases, but in others it contained bacilli and produced tuberculosis by inoculation. On further investigation it was found that all the animals thus experimented on developed typical artificial tuberculosis. Milk containing bacilli was then put into a centrifugal cream-producing apparatus, and when the vessel was made to revolve most of the bacilli collected in the film adhering to the periphery of the vessel; but the cream itself contained a certain number, and produced tuberculosis by inoculation. Again, the cream, after exposure in a dish for some time, was found to contain bacilli, the acidity having no destructive influence on them. Butter made from such cream was infectious. Heating to a temperature of 60°C. was found to lessen to a great extent the noxious properties; heating to 70°C. in many cases destroyed infection, but not in all. Dr. Storch, in his chemical examination of milk from tuberculous udders, found that that from the diseased portion of the gland had a strong alkaline reaction; at the commencement of the disease it resembled healthy milk in appearance, but in the later stages it was thin, watery, and yellowish-brown; the milk from the healthy portion, on the other hand, was thick and of creamy consistence. In milk from the diseased part an increase of water and albumen was found, whilst there was a decrease of milk, sugar, and fat. From the healthy portion of the same gland the milk was found to be more concentrated, the albumen and water being diminished, whilst the fat, milk, and sugar were increased. The ash obtained from the milk in the sound portion was not abnormal, but in that from the milk in the diseased part a great decrease of calcareous matter was observed and an increase of soda. Dr. Storch endeavours to explain these phenomena by suggesting that probably milk, sugar, and fat are formed in the udder, and albumen and water in the cells of the gland.

THE INTERNATIONAL MEDICAL CONGRESS.

OUR latest information is to the effect that the arrangements for the great International Congress at Washington are progressing favourably. In the case of many of our European brethren the occasion of a visit to the United States will be a unique one in their lives. We have not yet reached that familiarity with the Atlantic which is such an attainment in our American brothers,—

> Qui siccis oculis monstra natantia,
> Qui vidit mare turgidum.

Nevertheless, many on this side are anxious to return the visits so generously made from the other. And whatever the discomforts of the voyage or the severity of the *mal de mer*, we are likely to have the advantage of much brotherly assistance and advice. It may mark a new era in the treatment of sea-sickness, when so many zealous physicians and surgeons are set in competition for their own relief. Be this as it may, great preparations are being made in Washington and elsewhere, and it only remains for Europe to see that the guests are forthcoming. It is the great element in all such gatherings that they be well "furnished with guests," and we would now urge on the profession and its leaders that they will do a great service by an early decision to attend, and still more by an early intimation of it to those concerned. There are American physicians who have visited England annually for thirty or forty years, and on rare occasions perhaps more than once in the year. The late Dr. Flint, whose absence will be acutely felt at Brighton this year and at Washington next, had come of late years to think nothing so refreshing as a run to the old home of his forefathers. Let us reciprocate the compliment on this high occasion, and make the very Atlantic the measure of our desire to cultivate international science and friendship.

SUMMER DIARRHŒA IN THE LARGEST ENGLISH TOWNS.

THE recorded death-rate from diarrhœa in the twenty-eight large English towns dealt with in the Registrar-General's Weekly Return, under the influence of the low temperature during the greater part of June, continued exceptionally low during that month. The warmer weather that set in on the 26th ult., and the remarkably hot period of five days from the 3rd to the 7th inst., however, have caused the usual increase of mortality from this cause. During the seven weeks ending July 3rd, the deaths from diarrhœa in the twenty-eight towns slowly increased from 27 to 86, but rose in the following two weeks to 222 and 411 respectively. Of the latter two numbers, 156 and 315 were recorded in London, which, as is generally the case, is one of the first of the large towns to suffer in this way from the advent of hot weather. It should be remembered that during these epidemics of summer diarrhœa about 82 per cent. of the fatal cases occur among infants under one year of age, and about 14 per cent. among children aged between one and five years, only 4 per cent. of the total cases occurring among children and adults aged over five years. It may be noticed that the mean temperature was below the average on each of the ten days ending with Saturday last (17th inst.), and that therefore the increased

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mortality from this cause recorded in the week ending 17th may be mainly attributed to the short hot period that ended on the 7th. In the week ending last Saturday the annual death-rate from diarrhœa averaged 2·4 per 1000 in the twenty-eight towns, but was equal to 4·0 in London, while it did not exceed 1·0 in the twenty-seven provincial towns. No death was attributed to diarrhœa during last week in Brighton, Wolverhampton, Bolton, Huddersfield, or Halifax; the highest rates in the provincial towns being 1·6 in Birmingham and Sunderland, 1·8 in Blackburn, 2·9 in Bradford, and 3·4 in Leicester. In addition to the 411 deaths referred to diarrhœa last week in these twenty-eight large towns, 20 were certified from choleraic diarrhœa, infantile cholera, or English cholera; of these, 17 occurred in London, 1 in Preston, 1 in Bradford, and 1 in Newcastle-upon-Tyne.

CHOLERA SCARES.

IT has come to be the fashion to be "frightened of cholera" just at the commencement of the annual touring season, when the inclination is strong upon us to start instantly for foreign scenes and climes. The hotel-keepers of the United Kingdom (of Scotland in particular) have had cause to be thankful for these cholera scares in recent years; for, beyond question, a great many families were deterred from crossing to the Continent last year and the year before by fear of the fell disease, which seemed to have settled itself in Spain and Italy, and threatened to extend its baneful influence over the surrounding countries, even if it did not fasten its grip on our own shores. Again there is "cholera on the Continent," and once more we are scared. What is the truth about the situation? We take it to be simply this: there is undoubtedly peril of the disease abroad, and, unless there be some urgent necessity for visiting the localities where cholera has shown itself, better far to avoid the danger, slight though it may be, of contracting the malady. The probabilities of infection are always greater for visitors to a place and community where disease exists than for members of the resident population, if the conditions of life be the same. Cholera is chiefly, though not exclusively, communicated through water. It is, therefore, obvious that the water of a district in which cholera exists ought not to be drank. At the same time nothing is worse than to diminish the quantity of fluid consumed in warm weather, or when taking more than the habitual amount of muscular exercise. The débris of tissue waste has to be washed away, and the kidney offers the only legitimate mode of exit. Fluid passed through the skin by perspiration had better be counted as loss for economic purposes. Its *chief* value relates to temperature rather than excretion, and for practical health purposes the aim should be to pass off excreta through the kidney, which is not only never overworked by exosmosis of an unirritating fluid holding solids in a state of extreme dilution, but is itself cleansed by normal "flushing." Pure water is the best of all possible agents for promoting the renal excretion, but to drink water in a cholera-stricken district is to drink death. What, then, is to be done? It has been recommended, and very properly, to boil the water used. It is not enough to heat it, the boiling-point must be actually reached, and to make sure of rendering organic poisons inert the boiling should be continued for some little time. Black tea added, with a dash of lemon-juice, will render the boiled water palatable and serviceable, and then it may be taken freely without fear, and with advantage. Meanwhile, it is not much use taking this precaution if we eat recklessly of dishes compounded by the French or Italian cook with water which has not been boiled. This is too often forgotten. In short, soups and other warm food compounded or cooked with water which has not been raised quite to the boiling-point ought to be refused. The roast and genuinely "boiled," the broiled, and—if it be possible as a matter of taste—the baked may be used, but nothing that has not necessarily been heated to 212° F., or above it, should be taken. For the rest, cleanliness, moderation, and the avoidance of over-fatigue or nerve excitation are the best preservatives. It is vain to go abroad for health, and tempt perils of disease. If what is sought can be found in a healthy resort abroad—or even at home,—nothing but a spirit of recklessness could induce anyone to enter a district in which cholera has appeared or in close communication with any locality where it exists.

THE GENERAL HOSPITAL, JERSEY.

WE have already noticed the case of this hospital as affected by the lamented death of the late Dr. Chas. Le Vesconte Godfray. Hitherto the hospital has been served by only one honorary medical officer. It so happens that the last two incumbents were very able men—viz., Mr. Jones and Dr. Godfray. But it is rarely well with hospitals, any more than with States, when there is in them but one man. There is a want of life, of healthy rivalry, of comparison and competition, and variety. Besides, it is well to distribute the advantage of hospital work and practice. All these considerations weighed strongly with the profession, who almost unanimously urged the appointment of a proper staff. We regret to say that the hospital committee has not accepted this view, but propose to work the hospital by a very singular arrangement—a paid house-surgeon, an honorary officer, who is to have medical and surgical superintendence of the whole establishment. The committee must have great faith in some one man who is to be equal to all surgical and medical cases. But he is not to be quite his own master. He is to be looked after by a council of five practitioners, with whom he is to confer "in all serious cases and in all serious operations." We never heard of such an arrangement. It seems eminently an illustration of the way how *not* to do it, and it will be a matter of regret, we think, if any practitioners are found to give their sanction to such an unusual and unpractical arrangement.

MORBID GERMS IN WATER.

THE close connexion which often exists between drinking-water and the contagion of various diseases is unfortunately too well known to call for fresh announcement. A multitude of plans for purifying household water prove its general recognition. In all these the directing principle aims at the exclusion of organic matter, the source of chemical changes which nourish the omnipresent elements of infection. With regard to morbific germs themselves, it is more than doubtful if any system of filtration can directly destroy or exclude them. It is true that they may be killed by oxygenation, but the power or duration of this process in domestic filtration can seldom, if ever, be relied upon for the purpose. Yet filters form an effectual check to disease the germs of which are conveyed by water. The object still chiefly to be aimed at is therefore to starve out these injurious atoms by removing their organic pabulum. In reasoning thus, however, we imply that disease germs will only develop in water containing organic material, and not in that which is free from it; nor are we without experimental evidence in support of this view. Among investigations into this subject the most recent is that carried out by Messrs. Crookes, Tidy, and Odling on various London waters. Small quantities of culture fluid containing bacillus anthracis were introduced into household waters of different mineral composition, but free alike from organic impurity. In each case the germ remained active for a short time until pro-

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bably its food-supply was used up, and the water was infective when added to a sterilised culture medium. After a few hours it lost this property. Thus it appears to be proved that bacillus anthracis, at all events, does not flourish in pure water, and we may probably regard it as being in this respect a test example of the behaviour of other morbid germs. These facts are encouraging since they show that a wholesome water-supply is possible even for the poorest, filter or none, if that in the mains is good and the domestic cistern is uncontaminated by dust or sewer air.

THE MEDICAL MEMBERS OF PARLIAMENT.

THE result of the recent General Election has proved fatal to the candidature of several members of our profession who occupied seats in the last Parliament, and offered themselves for re-election to the forthcoming one. The following have been unseated after a contest:—Dr. Foster, for Chester; Mr. Mitchell Henry, for one of the Glasgow Divisions; Mr. Vanderbyl, for Portsmouth; and Mr. Pilkington, for Southport. Dr. K. J. O'Doherty, who formerly sat for North Meath, did not offer himself as a candidate, private business in one of the colonies claiming his attention. The following have succeeded in retaining their seats:—Sir Guyer Hunter, for the Central Division of Hackney; Dr. C. Cameron, for the College Division of Glasgow; Mr. J. Dillon, for East Mayo; Mr. R. B. Finlay, for Inverness District; Dr. Farquharson, for West Aberdeenshire; Sir J. Trevor Lawrence, for the Reigate Division of Surrey; Dr. R. Macdonald, for Ross and Cromarty; Mr. C. R. D. Tanner, for Mid Cork; Mr. J. E. Kenny, for South Cork; and Mr. G. B. Clark, for Caithness-shire. All the new medical candidates, four in number, suffered defeat:—Surgeon-Major Evatt was unsuccessful at Woolwich, Mr. Lawson Tait at Birmingham, Mr. Willis at Battersea, and Dr. Alfred Carpenter, who last year contested the Reigate Division of Surrey, at North Bristol.

MEASLES AT MARLBOROUGH COLLEGE.

AN outbreak of measles at Marlborough College just at the present time, when Charterhouse School is under discussion, has already led to a critical notice in the public press. We have therefore made inquiry at the College, and learn that the disease was introduced among the pupils by a boy who had evidently contracted measles at home, and who first showed symptoms of it some twelve weeks ago, a fortnight after his return to school. He was at once isolated in the sanatorium; but a fortnight later one more boy developed the disease, and a further fortnight later five more cases occurred, four in the same house as that occupied by the first case and one in the College. All the cases were isolated as soon as the boys sickened, but, as is usual with measles, the disease continued to spread, and during the last sixteen days it has been general throughout the school, from thirty to forty boys being in the sanatorium at one time. Altogether seventy boys have been attacked, and there are now only twelve left who have not suffered previously from this affection, and who are therefore regarded as susceptible. A correspondent of the *Daily Telegraph*, whose son is at Marlborough College, complains that notice had not been sent to him of this appearance of disease. The school authorities have, we are informed, communicated with the parents of boys who were believed to be susceptible, but this was not done until the disease had become generally diffused; and we think in all such cases the parents ought to be informed at once, so that, if they so please, they may remove their sons. There may often be difficulty in determining the exact moment when it is necessary to inform parents of the presence of epidemic disease in a school, but we hold very strongly the opinion that when the isolation of the first case has not prevented the development of others, parents should no longer be kept in ignorance of what is taking place and the risks to which their sons are exposed. There is the double question of risk to the boys themselves and of the risks to their brothers and sisters when they return home, and parents should therefore freely decide for themselves whether their children should remain at school or return home. It is satisfactory to learn that under the care of Dr. Penny no deaths have occurred, and that all the boys who are now ill are progressing favourably.

MICROCOCCUS IN BRONCHO-PNEUMONIA.

SOME researches on the micro-organisms of lobular pneumonia have been made by M. Pipping at the suggestion of Friedländer. In seven cases of fourteen examined, a micrococcus has been detected in variable numbers, having a great resemblance to the pneumococcus. The majority of the organisms were grouped in pairs or in chains. In three cases the oval cocci were surrounded by a very distinct capsule. Many of these capsules contained two or more cocci. These cases were uncomplicated by any acute disease. One was associated with carcinoma of the pylorus; the second with multiple cold abscesses of the hips; and the third with arterio-sclerosis and senile atrophy. The author gives a detailed description of the histology and of the experimental cultivations and inoculations with the pneumonic products of the said three cases. The preliminary inoculations in mice, rabbits, and guinea-pigs have yielded results that are in harmony with those obtained by Friedländer in the case of the coccus of lobar pneumonia. In four other cases of pneumonia of recent date M. Pipping discovered cocci having some resemblance to the pneumococcus, but differing in the absence of a capsule. Attempts at cultivation proved futile in two cases, and in the other two led to the development of several species of bacteria, but of none with a capsule. Seven cases yielded negative results. The author concludes that the encapsuled coccus regarded as special to lobar pneumonia is equally the pathogenic agent of some varieties of broncho-pneumonia.

THE METROPOLITAN IMPROVEMENTS IN SOHO.

IT is always pleasant to think that we may have had a share in bringing about any great public good, and we confess to a feeling of no small satisfaction whenever we pass through the new street or see the recent improvements which the Metropolitan Board of Works has effected in Soho. It is now exactly twelve years since THE LANCET appointed a select commission to inquire into the state of the dwellings of the poor in the metropolis, and our commissioner commenced his work with a description of the state of overcrowding in the district of Soho, one of the most insanitary districts in the metropolis. This account of life in Soho attracted no little attention outside the profession. It was quoted more than once in the House of Commons, then engaged in passing the Artisans and Labourers' Dwellings Acts, and was freely commented upon in the daily and weekly press. We shall therefore hardly be accused of presumption if we claim to have had a considerable share in calling public attention to the necessity of rebuilding this squalid quarter. The Metropolitan Board of Works deserve public thanks for their spirited course of action, and no improvements which have been effected of late years have been more needed or more judiciously carried out. Beginning at Piccadilly-circus, where by the demolition of an island of second-rate houses a magnificent "Place" has been formed, the new Shaftesbury-avenue runs north-east, traversing the worst parts of Soho and demolishing the notorious Dudley-street, and emerges in Oxford-street opposite the termination of Hart-street, where it meets the new road which has been

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made from the extreme east of London to that spot. Shaftesbury-avenue in its course has let in much light and air where most they were wanted, and has necessarily brought increased potentiality for health with it. To it there are subsidiary improvements. A fine thoroughfare has replaced Newport-market, and the "Sandringham-buildings" cover the ground previously occupied by a rookery. Then, again, an approach to Oxford-street is being made from Trafalgar-square. One side of St. Martin's-place exists no more, Hemming's-row is among the things that have been, a network of slums behind Leicester-square has been demolished, and very soon the facilities of transit from Trafalgar-square to Oxford-street will be greatly increased. In the train of these welcome improvements come health and architectural beauty, and there is every reason to suppose that the enhanced value of the cleared ground will to a great extent save the ratepayers' pockets. We heartily hope that this may be the case.

THE RECTORIAL ELECTION IN THE UNIVERSITY OF BRUSSELS.

ALTHOUGH it was the turn of the Faculty of Medicine to provide the Rector of the University of Brussels this year, it had been decided, in consequence of disputes which have been for some time past agitating the medical professors, that the legal faculty should take the turn so as to allow time for the air on the medical side to become calmer before the next rectorial election. At the last moment, however, it seems that this apparently most sensible arrangement was broken through, the medical faculty taking its proper turn, M. Depaire receiving 29 votes, M. Crocq 6, and M. Prins 1. *La Presse Médicale Belge* says that there is some mystery about the matter, and cannot understand how the "surprise" had been arranged.

HOSPITAL SATURDAY IN LONDON.

SATURDAY was rather a wet day, but this did not daunt the fair ladies who held the boxes for the street collection. Their cheerful kindness deserves a good reward. What, however, the Saturday movement wants is organisation for a weekly penny from the working men of London. Till that is secured, we shall not have a collection worthy of them or of their obligations to the hospitals. The number of collection boxes used on Saturday was larger than in previous years, and additional means of advertising the fund were made use of by the Committee. Amongst other donations received by the secretary is the sum of £40 5*s.* from the manager of the Coffee Tavern Company, being the day's takings at their tavern at the Indian and Colonial Exhibition. Some jewelry has been forwarded by a lady to be sold, and the proceeds devoted to the fund.

THE CEREBRAL LOBES OF FISHES.

THE cerebral lobes of fishes seem useless so far as the ordinary life of these animals goes. Herr Steiner, of Heidelberg, published at the beginning of the year, an interesting account of the effects of ablation of the cerebral lobes of various fishes. M. Vulpian has since re-investigated the subject, and has arrived at substantially the same conclusions as Steiner. A full statement of the experiments may be read in *La Revue Médicale*, No. 93. It is concluded that the "will" of various fishes is retained in undiminished force, even after the loss of their cerebral lobes; that not only does voluntary power persist, but also that its voluntary manifestations appear to be identical and indistinguishable from those of fishes whose brains are intact. Moreover, as has long been taught, the visual functions seem to be perfectly performed in the absence of the parts of the brain that correspond to the hemispheres of man. There is "nothing new" in all this. But it is well that investigations should be repeated from time to time in the light of newly-acquired knowledge. The vision and "will" of fishes must be widely different from the similarly designated functions in man; though we may readily grant that the difference is rather in degree than in kind.

SUMMER HOLIDAYS FOR THE POOR.

NOTHING in modern philanthropy is more commendable than the anxiety of the wealthy, as the holiday season comes round, to see that the poor have a holiday too. Our daily contemporaries have found time and space even in the excitement of recent weeks to press the claims of churches and societies which cater for the poor in this matter. We cannot express the value we set on such schemes. To take the poor—children or adults—out of their alleys and courts and drop them in a village or at a farmhouse, among cows, trees, green fields, hay-making, in fresh air, or in sight of the sea, is not only to improve their health, but to give them new faith in God and in God-like people. The selection of a particular institution is a secondary matter. But if anybody wants to double the zest of his own holiday, he will secure the end best by such a contribution as he can, with a little self-sacrifice, afford to one of the many funds to which we refer. Some of these institutions are in great pecuniary want. The Convalescent Home, Hall's-green, Sevenoaks, Weald, Kent, complains "that our beds are not half filled, not having sufficient funds to provide food," &c.

NEURALGIA OF THE PUDIC NERVE.

PROFESSOR ADAMKIEWICZ mentions in the Polish journal *Medycyna* a somewhat rare case of neuralgia affecting the pudic nerve. The neuralgias of the ovary and uterus in women and of the seminal ducts in men are, he says, usually described as neuralgiæ pudendo-hæmorrhoidales, but they have not been well worked out. The present case is interesting because the nerve affected arises from the pelvic plexus. Three years ago the patient began to suffer two months after her second confinement with painful spasm of the urethra whenever she attempted to micturate; sometimes, indeed, this spasm prevented her from voiding her urine. Afterwards the pain spread to the vesical region and became more and more frequent, so that at last the woman was scarcely ever free from it. Every movement of the body and any irritation or excitement increased it, and induced a desire to micturate. Morphia and absolute rest in bed produced some alleviation only. A painful spot was found where the gluteus maximus crosses the tuberosity of the ischium, and another on the inner surface of the ascending ramus of the ischium. The treatment adopted was electrical, the anode of a constant current battery being placed between the tuberosity and the spine of the ischium, and the cathode on the sacrum. After daily applications of a few minutes' duration for three months the patient was completely cured.

HOSPITAL SATURDAY IN BIRMINGHAM.

A MEETING of the General Committee of the Birmingham Hospital Saturday movement was held at the Council House last Wednesday evening. The total of this year's collection, amounting to £6821 17*s.* 11*d.*, was divided, after deducting £334 6*s.* for expenses, and reserving £87 11*s.* 11*d.* Some idea of the substantial help derived from this source by the Birmingham medical charities may be formed from the principal cheques which have been handed over by the Treasurer—to the General Hospital, £2151 8*s.* 4*d.*; to the Queen's Hospital, £1201 14*s.* 5*d.*; the General Dispensary, £715 10*s.* 6*d.*; the Children's Hospital, £577 2*s.* 4*d.*; &c.

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TEMPERANCE LEGISLATION.

ATTENTION has been once again drawn to the great evils inflicted on our race and on those who live under its rule, otherwise mainly beneficent, by drunkenness. The question of treatment has already been frequently discussed, and not without result in a large diminution in the prevalence of this fatal habit. The subject, as taken up at the recent Temperance Congress, extends over a wider field, and will bear still further consideration. As to the theory of temperance, our own views are in accord with those most frequently published and with physiological teaching —namely, that alcohol is to be used to satisfy a necessity, not a desire; and that its occasional and sparing use at the table cannot, on scientific grounds, be condemned as if it were an actual poison. We are disposed, accordingly, to discourage the general use of stimulants allowed by custom, and to devote them to the need of persons in weakened health. Discouragement is no doubt a somewhat vague term. From the medical standpoint it is strictly equivalent to dissuasion; but if it is to act as a practical check upon drunkenness, it must, at all events sometimes, mean more than this. Local option and the compulsory restraint of inebriates are methods included in this extended meaning which have been freely discussed by the members of the Congress. It is significant with regard to the latter that restraint of a somewhat vigorous kind has been legally applied for years in many of our most flourishing colonies, apparently with the best effects, and without engendering any of that feeling of injustice which might have followed such a marked coercion of the individual. The hint is not to be neglected. It should do much to influence public opinion at home in favour of a legislative movement in this direction. Those who oppose this benevolent compulsion can hardly plead the liberty of the subject of intoxication. An occasional relapse into drunken indulgence might not, indeed, justify his prolonged detention, but we have to consider further stages of alcoholism. Where the habit is formed, will and business capacity utterly unreliable, and particularly where the well-being of others is being drawn into the vortex of disaster, the drunkard is no longer merely an offender against social rule but an invalid, and restraint implies no tyranny, but is his only means of cure and the safeguard of his family. With due precautions against abuse, we should therefore advocate a measure which would considerably strengthen the imperfect provisions of our Habitual Drunkards Act.

THE DOCTORATE IN BUENOS AYRES.

A CORRESPONDENT of the *Revista Argentina de Ciencias Médicas* complains bitterly of the imperfect and irregular way in which the Buenos Ayres Faculty of Medicine examines the theses presented by candidates for the degree of Doctor. To begin with, it is extremely difficult, says the writer, to get together an examination commission at all, and when this has been accomplished and the candidate presents himself for the purpose of defending his propositions, it may be seen that none of the members of the commission have found time to read even the title-page of the dissertation which the candidate has published. The exercise under these circumstances, if they really are as stated by the writer, can hardly fail to degenerate into a farce.

DAMP TENTS AT WIMBLEDON.

THERE is a good deal to be said for the system which requires that Volunteers while engaged in military manœuvres should "rough it" like soldiers on active service. The Volunteer force is for the time being an army in the field. It is, after all, only practising some of the habits and usages which belong to it as a professional body, and these its members must acquire if they are to be relied upon in case of a national emergency. The rough open-air life of such occasions is fitted to invigorate rather than to weaken men of ordinarily strong physique, and none who cannot be thus described should engage in it. It is different with such gatherings as the Wimbledon Meeting. There is but one work to be done, and that demands for its successful execution a steadiness of head and hand, and a freedom from uneasiness generally, which are incompatible with the inconvenience of a wet-clad life on wet ground, and the frequent rheumatic consequences of such a life. A Volunteer marksman writes to ask that wooden flooring, one of the allowed luxuries of the Common, should be made a regular part of the furniture of all tents in use there at the present time. In the circumstances—a great shooting crisis in uncertain British weather—his request seems only reasonable, if the question as to funds can be satisfactorily answered.

PROPOSED CONJOINT EXAMINING SCHEME FOR IRELAND.

THE joint committee of the Royal College of Surgeons and the College of Physicians, Ireland, have made great progress with the scheme for a conjoint examination between the two Colleges, on the basis of the London Colleges. The fees for the diploma will, it is believed, remain as at present. The Council of the Royal College of Surgeons need not refer the matter to the Fellows for adoption, but will probably submit the scheme when completed to a meeting of the College. The Apothecaries' Hall has been excluded, an arrangement very unwillingly agreed to by the College of Surgeons.

TREATMENT OF THE BITES OF RABID DOGS.

THE chief surgeon to the Metropolitan police, Mr. Mackellar, has issued a circular to the divisional surgeons advising that in cases of bites of dogs reported to be rabid the following treatment should be adopted:—"When possible a ligature to be applied above the part bitten; prompt and thorough suction of the wound, freely washing with water, and the application of absolute phenol (pure carbolic acid). The individual sucking the wound (usually the patient himself) to spit out all the matter so sucked, and to freely wash out the mouth with water. Should the wound be a punctured wound, make a crucial incision, promote and encourage bleeding, and treat as above." The circular adds that the use of nitrate of silver is to be condemned as inefficient, and that the phenol is painful only for a few minutes.

VIEWING REMAINS.

THE most that can possibly be said in favour of keeping up the absurd custom of compelling coroners' juries to "view" the remains of the subjects of inquest is that it is an ancient usage. No conceivable purpose is answered or even assumed, as the object of the inquiry is not to determine the *fact*, but to ascertain the "cause" of the death. If, however, it were necessary that those who serve on juries should be exposed to this disgusting and often dangerous ordeal, there would not be any excuse for increasing the risk incurred by neglect of the most ordinary sanitary precautions. The manner in which this neglect is practised at some of the metropolitan mortuaries would seem to be marvellous. The Home Office ought to be moved in the matter. It is useless remonstrating with local authorities. Better not waste precious time, but go at once to head-quarters to obtain the reform urgently needed.

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FOREIGN UNIVERSITIES AND PROFESSORSHIPS.

DR. JOSEPH FORSTER, Professor of Hygiene in Amsterdam, has been elected a member of the Netherlands Academy of Sciences.

The University of Bern has at present both a Medical Rector, Professor Pflüger (Ophthalmology), and a Medical Dean, Professor Kronecker (Physiology).

The Academy of Lausanne, which has hitherto only possessed three medical professorships—viz., Anatomy, Physiology, and Histology, held respectively by Professors Bugnion, Herzen, and Löwenthal,—is now likely to be transformed into a complete university, the means having been furnished by a Russian, who has bequeathed a sum of money to the town for this purpose.

Dr. H. Fol, Professor of Embryology in Geneva, has resigned his post. He has issued a pamphlet explaining the circumstances which have induced him to take this step. The Professor has published various researches on malformations, a human embryo, and notably one on a micro-organism found in the spinal cord of rabid animals.

MEDICAL DOCUMENTS.

THE Medical Council, at their recent session, resolved to form a Library of Reference, to consist of Acts of Parliament, Parliamentary Reports and Bills, edicts, charters, statutes, and calendars, statistical records, books, pamphlets, or documents relating to medical education, examination, qualification, and registration, or to the government of the profession at home or in any foreign country or our own colonies. The Council will gratefully receive and acknowledge any presents of this kind. It is intended that every registered practitioner shall have access to this library.

HYDATID OF THE LUNG PRODUCING NO SYMPTOMS.

A SPECIMEN of hydatid cyst of the lung was shown at a recent meeting of the Paris Anatomical Society by M. Limpéropoulo. It was situated in the parenchyma, and was about the size of a large nut, the wall being thick and containing calcareous granules. No symptom of this foreign body's existence in the lung was observed during life, beyond some chronic bronchitis and emphysema from which the patient suffered. There were, besides, cardiac hypertrophy and interstitial nephritis.

THE DENTAL HOSPITAL.

WE understand that at the recent election at the Dental Hospital of London a gentleman was selected to fill the vacancy on the staff who merely holds the licence in dental surgery of the Royal College of Surgeons, notwithstanding that there was amongst the candidates at least one having in addition the M.R.C.S. and L.R.C.P. As we have always maintained that the dental surgeon should, like his *confrères* the ophthalmic and aural surgeons, be a qualified member of the procession first and a specialist afterwards, we regret that a departure from this important principle should have occurred at such a prominent teaching centre as the above-named institution.

TUBERCLE BACILLI IN URINE.

BIZZOZERO'S "Archivio per le Scienze Mediche" (vol. x., n. 19, p. 417) contains a memoir by Dr. Marpurgo under the title "Colonies of the Bacilli of Tuberculosis in Urine." The patient was first seen on the 7th January ult. by Professor de Giovanni in Padua, and he diagnosed renal tuberculosis. The urine (sp. gr. 1026, slightly albuminous) contained large numbers of bacilli, corresponding in every particular with those described by Koch as characteristic of tubercle.

VACATION COURSES AT MUNICH.

THE University of Munich announces a series of vacation courses for practitioners, beginning on September 30th and concluding on October 27th. The subjects include histology, pathological anatomy, post-mortems, bacteriology, medical diagnosis, chemical diagnosis, new methods of treatment, clinical microscopy, children's diseases, laryngoscopy, dermatology and syphilis, surgery, bandaging, orthopædics, ophthalmoscopy, midwifery operations, gynæcological operations, vaginal examinations, and hygienic examination methods. Communications may be addressed to Herrn Privat Docent Dr. Stumpf, Sonnenstrasse, No. 16, München.

DIPHTHERIA IN THE MATERNITY WARDS IN MADRID.

THE Spanish medical journals report that the epidemic of diphtheria which is now prevailing in the capital, having proved fatal to a number of children and some adults, has more recently invaded the gynæcological and maternity wards of the clinical hospital of the College of San Carlos, the sanitary arrangements of which are well known to be exceedingly defective. Numbers of the parturient patients are stated to be suffering from angina diphtheritica of a very fatal character, resisting all the most approved methods of treatment.

THE FUNCTION OF THE TONSILS.

DR. R. HINGSTON FOX, in an interesting article on the Functions of the Tonsils in the twentieth volume of the *Journal of Anatomy and Physiology*, expresses the opinion that these glands belong to the digestive and not the respiratory tract, and that their function is to reabsorb certain constituents of the saliva in the intervals of meals which would otherwise be wasted. He thinks that the view of their having an absorbing function is further supported by the strong evidence of the power of the tonsils to absorb morbid poisons directly from the saliva.

ESERINE AND PILOCARPINE FOR GLAUCOMA.

IT has been objected against eserine that it increases the intra-ocular pressure whilst contracting the pupil; pilocarpine, on the other hand, is said to lower the intra-ocular tension. These myotics have been set against one another in the treatment of some cases of glaucoma. Schlegel has made some experiments on the intra-ocular tension, and arrives at the conclusion that the alkaloid of jaborandi also increases the tension.

HOSPITAL SUNDAY FUND.

THE amount received up to the evening of the 22nd inst. was £36,679, being nearly £5000 in excess of the total sum paid into the Fund last year. Collections yet to be paid in will, we trust, show a still greater increase.

REPORTS relative to the health of the British troops in Egypt up to the 18th ult., just received, show that the total number then remaining in hospital at Assouan was 256, and during the week the deaths had been 27, including 20 from sunstroke or heat, 5 from enteric fever, and 1 from dysentery. Ten per cent. of the troops were sick, exclusive of those invalided.

C. SHERRINGTON, M.B. of Cambridge University, and Rolla E. Rouse, M.D. of London University, have proceeded to Italy, at the request of the Royal Society and the Scientific Research Committee of the British Medical Association, to investigate the causes of the present epidemic of cholera.

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THE Medical School of Mexico, having only recently lost by death three of its professors, Dra. Velasco, Montes de Oca, and Ortega, has now to deplore the decease of the senior member of its staff, Dr. Rafael Lucio, who has been connected with the school since its resuscitation in 1833. Dr. Lucio enjoyed a large practice, and his opinion was greatly sought after even at long distances from the capital, both by practitioners and patients. *El Observador Médico* says that it will be impossible to fill the place now so unhappily left vacant.

THE INTERNATIONAL RECORD OF CHARITIES AND CORRECTION is the title of a New York monthly publication, the first five numbers of which have reached us. It aims to fill an unoccupied place in the world, no journal of precisely similar character and scope having ever been published. To those interested (and few are not) in the causes and remedy of social evils—poverty, ignorance, disease, vice, and crime—its columns are certain to prove attractive.

THE vacancies in the medical staff of King's College Hospital, occasioned by the resignation of Dr. George Johnson and the death of Mr. Royes Bell, have been filled by the appointment of Norman Dalton, M.D., as Assistant-Physician, and A. Boyce Barrow, M.B., F.R.C.S., as Assistant-Surgeon.

Pharmacology, Therapeutics, and Dietetics.

SICILIAN CORVO WINES. (R. JAMIESON, EDINBURGH.)

THESE wines (white and red) have been recently introduced as rivals to the French clarets, which they much resemble. They are pure natural wines, and are well suited for any cases in which the corresponding French wines are ordered, over which, moreover, they have some distinct advantages. The red wine is a good tonic, slightly astringent, and adapted for cases of atonic dyspepsia. It has a delicate bouquet, and may be taken by itself or diluted with an equal quantity of water. The amount of alcohol is not in excess—in fact, is less than in most ordinary clarets. The white wine is a stronger and richer wine, contains more sugar, and is gently laxative. It might be advantageously ordered in cases in which constipation is present. Altogether we have been very strongly impressed with the excellence of the Corvo wines.

RHUS RADICANS.

Señor Fernando Altamirando, writing in the Mexican journal *El Observador Médico* on a plant called locally the Guau or the Mala Mujer, the scientific name of which is Rhus Radicans, states that its active principle is of a peculiarly volatile nature, and relates the case of a man who, after collecting and cutting the plant up, complained of chills and a feeling of extreme fatigue, and subsequently developed a rash, at first erythematous and afterwards pustular, affecting chiefly the groins, axillæ, and other parts where the sudorific glands are most numerous. The action of the exhalation from the plant could not well have been direct, as the parts chiefly affected were covered with clothes, and so the writer suggests that the active principle must have entered by the respiratory passages, being then carried by the blood to the skin, where its action became manifest. He advises that preparations of the drug should be made from the freshly-cut plant and its juice, and that all the collecting should be done before sunrise. The tincture might be made use of, but the extract must necessarily be inactive—as, indeed, it has proved itself, having been experimented on by Dr. Dominguez. In case of accidental poisoning, such as in the patient mentioned, the indications would be to produce diaphoresis and to maintain the skin in a state of moisture. In order to prevent toxic effects, those who gather or manipulate the plant should be careful not to breathe air which has passed over it, but should keep to windward of it.

ARBUTIN.

Dr. Borisoff of St. Petersburg, having recently examined "the pharmacological action of arbutin, a glucoside obtained from the leaves of Uva ursi," by means of experiments on dogs and frogs, finds that it has a decided diuretic effect, due to stimulation of the epithelium of the Malpighian bodies and urinary tubules of the kidney, and to increased circulation of blood through the kidneys. Though large doses of arbutin exercise a paralysing effect on the brain of the frog, little general disturbance is caused by the drug in warm-blooded animals, even if given in considerable doses. It exercises a distinct antiseptic influence in lessening the formation of pus in cases of purulent inflammation of the bladder and kidney. Dr. Borisoff thinks this drug may be found of much use in practice. He would give larger doses than those which have been suggested by some writers—e.g., M. Levine. He would commence with from one to two grammes (fifteen to thirty grains), given several times a day in powder or dissolved in water. He has made a diligent search through the scientific journals of all nations for the literature of the subject, and has collected no less than forty-three different articles, mostly from German sources, but with a few American and Russian exceptions.

HYPODERMIC INJECTION OF CARBOLIC ACID IN ERYSIPELAS.

In the venereal wards, under the care of Dr. Montes de Oca, in Buenos Ayres, considerable success has been obtained in cases of erysipelas by the injection of a 2 per cent. solution of carbolic acid, as recommended by Hueter, Boeckel, and Sukowenkoff. Care was taken to introduce the carbolic acid as near as possible to the part attacked. In one case where a patient with syphilitic cachexia had been attacked for the second time, six injections, two being given daily, served to limit the affection to the right ear, which was the part affected, and to entirely prevent its spreading further.

PILIGANINE.

M. Laborde recently presented to the Paris Biological Society a note from M. Bardet on the action of piliganine, one of the alkaloids of the piligan. It is stated to be a convulsive poison with a strong emeto-cathartic action. M. Brown-Séquard remarked that it must therefore be an exception to the rule, for all known convulsive poisons were devoid of action on the digestive canal. M. Grimaux explained that the convulsive effects had been obtained from the alkaloid, while the gastro-intestinal effects had been produced by an infusion of the piligan, so that it was not clear that the infusion contained the alkaloid; indeed, it might have contained some other alkaloid belonging to the same plant.

ON

PASTEUR AND PROTECTIVE INOCULATIONS AGAINST ZYMOTIC DISEASE.

BY T. WHITESIDE HIME, A.B., M.B. DUB., &c.

AN address on the above subject was delivered on Thursday, the 8th inst., at the Royal Institution, Albemarle-street. Dr. Hime observed at the commencement of his address that it seemed to him appropriate that the Royal Institution, which was indissolubly connected with the brilliant researches of Davy, Faraday, and Tyndall in physical science, should be selected as the place for the consideration of the no less remarkable discoveries of Pasteur in another field of labour. If this age had been distinguished as one in which the physical forces are being rendered the docile servitors of man's comfort and convenience, it was no less markedly characterised as the age in which some of the deadly foes of human life, and of the lives of animals most valuable to man, had been not only brought to light but subdued. The object of the address was to trace the connexion between the various studies carried out by Pasteur, and show that, intricate as may be the labyrinth leading from his early studies on alcoholic fermentation to his latest and most astonishing investigations as to preventive inoculations against rabies, still there is a thread which guides safely along the difficult

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path. The discovery of the anti-rabic inoculation was not his greatest, though it undoubtedly is that which has attracted most attention. This fact was probably due to the horrible fascination associated with rabies, arising partly from the cruel uncertainty as to what may ensue after a bite, partly from the sudden onset when the disease does break out, largely to the terrible fact that practically every person in whom the symptoms of rabies were once developed might be regarded as condemned to death without hope of reprieve. Estimated according to the actual deaths resulting from it, hydrophobia would be a very insignificant disease. The deaths during the thirty-eight years ending 1884 in England numbered 884. During the ten years ending 1860 they were 98, during the next ten years 143, and during the ten years ending 1880 they had increased to 477—a very sensible increase. After a brief biographical notice of Pasteur, who is now in his sixty-fourth year, and was born in Dole, in the east of France, Dr. Hime stated that his earlier works were purely chemical, his studies having been especially devoted to that branch of science. But he was soon engaged in that path of research which he has ever since been following. His anti-rabic inoculations should not be regarded as an isolated discovery unassociated with any kindred one, and altogether without precedent. It was, on the contrary, a logical and natural outcome of his preceding investigations; and there is reason to hope that future discoveries in the same direction will be made. Nor was this method his first or his greatest discovery. Indeed, being a natural induction from earlier work of his, the source from which the anti-rabic method has flowed must be regarded as a greater discovery still. The phenomena of alcoholic fermentation are as old as Adam; yet never until Pasteur had investigated the subject was it known that they are the result of the vital action of the ferment. The meaningless and unscientific theory of action "by contact" had been considered by Berzelius and Mitscherlich a sufficiently satisfactory source from which to derive the process of fermentation; while Liebig considered that the effects (fermentation) were due, not to the physiological action of the plant, but to some mysterious influence exercised by the dead ferment on the fermentable matter. By showing that yeast will grow in a solution of entirely inorganic matter, he proved that the multiplication of the yeast, essential to fermentation, is a purely physiological process, and is not the result of any special function of dead organic matter with which it may be in contact. His studies in this important direction completely annihilated the theory of spontaneous generation occurring in our present age. By delicate experiments, which at the time were wonderfully original, but now are familiar to thousands, he showed that putrefaction and fermentation could be entirely prevented by the exclusion of the microbes (ferments) so abundant in the air, when once the fermentable or putrescible substance had been sterilised. This exclusion is effectually secured by causing the air to filter through cotton-wool before it comes in contact with the organic matter. Having established the necessity for microbic action in such processes as fermentation, Pasteur first utilised this knowledge in treating what may be termed the diseases of vinegar, wine, &c., these being articles of great commercial value in France. He showed that the "turning" of vinegar, which led to the loss of vast quantities of the material and great pecuniary loss, was due to the action of a special ferment, which, absent from good vinegar, was always present in the vinegar which went bad; and further, he showed how it could be destroyed, and that if the vinegar was sterilised of this ferment it would keep good. Much damage was suffered from the "turning" of wine—some becoming bitter, others ropy, &c. Pasteur showed that these morbid conditions were the result of the activity of a ferment, which could be killed by raising the wine to a temperature of 130° to 140°F., the flavour, appearance, and keeping power of the liquid not being in the least deteriorated. The microbes which effect these destructive changes in vinegar, wine, beer, and, as we see in every-day life, in every form of organic matter, are present in the air. The blood and other tissues of the body are capable of providing nutriment to some of them, not to others. Some, when injected into the living blood, even in millions, speedily perish, no trace being found after a few hours. It has been shown, in a very important study by Wysskowitch [1] that such organisms are not eliminated through the kidneys, as has commonly been supposed, but that the liver and spleen are the organs where they are to be found last. Other organisms, when thus introduced into the blood, find there all the conditions favourable to their growth and multiplication, and they multiply with such incredible rapidity, and penetrate into every region of the body, so that the normal and regular action of the various organs and tissues of the body is interfered with, and we have a condition of disease established. That these organisms are not omnipresent is seen from the common experience that they do not attack, for example, the whole surface of a fermentable substance at once. Putrefaction, which is simply a form of fermentation with disengagement of offensive gases, does not attack the whole surface of a piece of meat, but begins at certain points.

The marked similarity between the phenomena noticeable in certain diseases of men and animals and the commonest form of fermentation had long been observed and commented on. Professor Henle, in a remarkable work on Pathology, published in 1841, reviewed these analogous changes, and from purely theoretical grounds drew the conclusion that the cause of such disease must be living organisms. It was from similar reasoning that Dr. Farr applied the term "zymotic" or fermentive to them, a term which had been almost universally adopted. If a minute quantity of yeast be added to (inoculated on) a solution of sugar, and be kept moderately warm, the sugar will gradually disappear, while the yeast will grow, and ultimately it will be found that the whole mass of the fluid has undergone some change which deprives it of the power of fermenting again; to borrow a medical term, it has become "protected" or "refractory" against further inoculation with yeast. When a person is inoculated with small-pox, gradually the whole mass of the body becomes infected, the virus penetrating from the point of inoculation, the temperature rises, and there ensue symptoms of general disturbance; there is multiplication and increase of the quantity of virus introduced; and as the patient gets better, it is found that he has undergone some change which renders him proof against further inoculation with the virus—he is "protected" or "refractory." The enormous growth in the quantity of virus which occurs when, in consequence of the inoculation of the size of a pin's head, there is produced a copious confluent eruption, compels the belief that this increase is due to a real growth of an organism; and the virus can be propagated in this way *ad infinitum*. Now a chemical compound cannot be "growy." A definite quantity of carbon will combine with a certain proportion of oxygen, and then carbonic acid will be produced; but there will be no more carbon in the resulting carbonic acid than was added to the oxygen. The virus, however, has enormously increased, and it will always multiply when inoculated on suitable soil. Inoculation which had been largely practised to acquire protection against severe attacks of small-pox had to be abandoned and forbidden by law, as it led to an increase of the disease throughout the country. Although the inoculated persons had a very mild attack, still they had genuine small-pox, and could infect others with the worst form. About this time Jenner's great discovery was made. This was not that persons who had been infected with cow-pox escaped variola (the dairy folk of Gloucestershire were able to teach him that fact), but the fact that matter taken from a human being suffering from cow-pox might be used for vaccinating another human being without having recourse to the cow, and that, in fact, after the first vaccination the cow was no longer needed, the humanised lymph being as protective as the original. This was Jenner's great discovery. To perpetuate it Pasteur applied the term "vaccin" to the protective material which he had been able to prepare so as to provide against other diseases. The inefficiency of the protection sometimes afforded by vaccination Dr. Hime considered due to the imperfect performance of the operation, and especially to the insufficient quantity of lymph used. The protection acquired by those with four good cicatrices was known to be enormously greater than that of persons with one. And our present knowledge proves that the struggle for existence which the inoculated organisms must undergo may readily lead to their destruction. If there are not a sufficient number, therefore, they cannot multiply and produce the necessary specific infection. It was when investigating fowl cholera that Pasteur first found that a microbe was the specific cause of the disease. He discovered, further, that it could be propagated outside

[1] Archiv f. Hygiene, B. I.

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the fowl's body in sterilised material, and after two generations of such cultures the virus did not lose its specific characters or intensity if each culture was made from the preceding one at short intervals. If a delay of a few days occurred the virus became weaker, and it could then be obtained of various degrees of virulence, some fatally strong, others so attenuated that a bird inoculated with it only had a trifling illness—but, happy discovery, this trifling ailment protected it against subsequent inoculation with the strongest virus. But he further discovered that the virus could be cultivated of each degree of intensity without altering its strength: the weakest could be cultivated as well as the strongest, and that of any intermediate strength equally. If the weakest virus were cultivated by passing through a series of little birds, it again acquired fatal properties. These remarkable discoveries threw an entirely new light on certain phenomena, and additional and invaluable information was derived from his next investigations, which were into the nature of a destructive disease of silkworms, called "Pebrine," which was threatening almost the very existence of the worm in France and elsewhere. He ultimately, after years of investigation, proved that the disease is due to a microbe, and that if the infected eggs be destroyed only healthy worms will be hatched. He showed that the disease could be propagated by eating infected eggs, or by inoculation through scratches, and was hereditary where infected eggs were laid. The selection of infected eggs was an easy thing. Could disease of higher animals and of man be only traced in this way to their specific cause, and be eradicated? The gradual perfecting of methods of research, and the increased knowledge of processes of disease analogous to those of higher animals, gave every reason for hope. England could boast that Pasteur's discoveries were first utilised for the direct benefit of man by an Englishman, Lister's magnificent antiseptic system having been the direct outcome of Pasteur's work. What suffering, how many lives have been saved by the practice of antiseptic surgery as devised by Lister?

(To be concluded.)

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Hexham Rural District.—Dr. Maclagan has submitted to this authority his twelfth annual report on the sanitary condition of the Hexam Rural District, and, like its predecessors, that for 1885 gives evidence of the excellent supervision to which the district is subjected. The annual death-rate from 1874 to 1877 was some 20 per 1000, whereas during the past five years it has varied from 15·5 to 16·8. But even this latter rate is properly regarded as one that should be further reduced, and it is especially in the direction of a diminution in the amount of infantile mortality that the improvement should be sought. Dr. Maclagan hence discusses the causes of the needless mortality amongst children, and referring especially to the system of insurance of infants' lives, he points out that the idea that Christian men and women should profit, even in the slightest degree, from the death of their children is nothing less than horrible; and without imputing any criminal intention on the part of parents, he is quite certain that infant insurance leads to great carelessness, perhaps unintentional, in the rearing of their little ones. Another cause of excessive infant death in the district is the use of so-called soothing syrups containing opium.

Sevenoaks Urban and Rural Districts.—Against an average death-rate of 16·4 per 1000 during the past ten years, that for 1885, in the urban district, was only 14·3; and the amount of infectious disease is at its lowest ebb. Not a death from scarlet fever has occurred for four years in the town; and whilst measles was somewhat prevalent, diphtheria and fever caused each one death only. Mr. Butterfield is also able to record progress in sanitary administration, and the fact that the infectious hospital is maintained in readiness for the purposes to which it should be put. In the *rural district* the death-rate reached 16·3 per 1000. Small-pox led to a serious outbreak at Ide Hill; the disease being imported by hop-pickers. In the absence of a hospital, nurses from the Dover Institute were placed in charge of the infected houses, which, for the purposes of the Public Health Act, may be regarded as having constituted temporary infectious hospitals. Much useful sanitary work was accomplished during the year. The authority, however, successfully opposed the extension of the West Kent Water Company's mains into their district, there being an implied engagement that they would themselves make proper provision in this respect. We hope soon to see evidence of the fulfilment of the expressed intention, for the localities in the chalk hills are sadly in need of a proper and sufficient supply.

Tunbridge Rural District.—This, together with the two preceding districts, forms part of the West Kent Combination, for which Mr. Butterfield acts as health officer. The death-rate for 1885 was 17·7 per 1000, this being higher than in previous years, and the mortality included 13 deaths from diphtheria and 7 from measles. The diphtheria commenced by a fatal attack of "diphtheritic croup" at Brenchley, and by Oct. 11th 5 deaths had occurred. The schools were to be opened the next day, but this was ultimately put off till the 19th, when, no fresh cases having occurred, school work was recommenced. But the weather proved stormy and wet, and several children caught colds, which, according to Mr. Butterfield, predisposed them to infection. Anyhow, by the end of the week 5 children had diphtheria, the cases being more widely scattered than they had been hitherto. In all 16 cases and 9 deaths took place in Brenchley alone. Viewing the epidemic as a whole, Mr. Butterfield adverts to the fact that the points of interest to be noted are the persistent nature of the infection, which may lie latent until favouring seasonable influences cause a rapid diffusion of specific germs, the marked effect of contact in schools, and also the ease with which the poison seemed to be transported from place to place by persons apparently uninfected. He also holds it to be probable that a person who has once had diphtheria may continue to redevelop the disease for a considerable time, thus confirming the view which has recently been put forward by Dr. Astley Gresswell.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns 5929 births and 3426 deaths were registered during the week ending July 17th. The annual death-rate in these towns, which had slowly increased in the preceding four weeks, from 16·8 to 18·4, further rose last week to 19·7. During the thirteen weeks of last quarter the death-rate in these towns averaged only 18·6 per 1000, and was 2·9 below the mean rate in the corresponding periods of the ten years 1876-85. The lowest rates in these towns last week were 12·1 in Brighton, 13·0 in Huddersfield, 13·9 in Hull, and 14·2 in Derby. The rates in the other towns ranged upwards to 21·9 in Newcastle-upon-Tyne, 22·7 in Blackburn, 24·7 in Preston, and 24·8 in Manchester. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had steadily increased in the preceding five weeks from 263 to 474, further rose last week, under the influence of the greater mortality from infantile diarrhœa, to 652; they included 411 from diarrhœa, 93 from measles, 50 from whooping-cough, 41 from scarlet fever, 39 from "fever" (principally enteric), 17 from diphtheria, and 1 from small-pox. No death from any of these zymotic diseases was recorded last week either in Wolverhampton or in Halifax; whereas they caused the highest death-rates in Bradford, Blackburn, Leicester, and Preston. The mortality from diarrhœa showed a further general increase; the largest excess occurred in Blackburn, Bradford, Leicester, and London. Measles caused the highest death-rates in Blackburn, Bolton, and Preston; whooping-cough in Preston; scarlet fever in Salford and Oldham; and "fever" in Nottingham, Portsmouth, Plymouth, and Cardiff. The seventeen deaths from diphtheria in the twenty-eight towns included 14 in London. Small-pox caused 1 death among the residents of London and 1 in Liverpool, but not one in any of the twenty-six other large provincial towns. The number of small-pox patients in the metropolitan hospitals situated in and around London, which had declined in the preceding four weeks from 31 to 12, were 13 on Saturday last; 3 cases were admitted to these hospitals during the week, corresponding with the number in the previous week. The

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deaths referred to diseases of the respiratory organs in London, which had been 197 and 190 in the preceding two weeks, further declined last week to 167, and were 37 below the corrected average. The causes of 60, or 1·8 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Hull, Nottingham, Leicester, Portsmouth, and in seven other smaller towns. The largest proportions of uncertified deaths were registered in Blackburn, Halifax, and Bristol.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 20·8 and 19·0 per 1000 in the preceding two weeks, was 19·2 in the week ending July 17th; this rate was 0·5 below the mean rate during the same week in the twenty-eight English towns. The rates in the Scotch towns last week ranged from 8·2 and 13·9 in Perth and Greenock, to 21·7 in Glasgow and 23·4 in Paisley. The 475 deaths in the eight towns showed an increase of 4 upon the number in the previous week, and included 27 which were referred to diarrhœa, 18 to whooping-cough, 10 to measles, 7 to scarlet fever, 4 to "fever" (typhus, enteric, or simple), 1 to diphtheria, and 1 to small-pox; in all, 68 deaths resulted from these principal zymotic diseases, against 59 and 64 in the preceding two weeks. These 68 deaths were equal to an annual rate of 2·8 per 1000, which was 1·0 below the mean rate from the same diseases in the twenty-eight English towns. The fatal cases of whooping-cough, which had been 10 and 17 in the previous two weeks, further rose last week to 18, of which 14 occurred in Glasgow and 3 in Edinburgh. The deaths attributed to diarrhœa, which had steadily increased in the preceding five weeks from 7 to 24, further rose last week to 27, and exceeded the number returned in the corresponding week of last year by 6; they included 14 in Glasgow, 6 in Dundee, and 4 in Paisley. The 10 deaths from measles showed a further slight decline from the numbers in recent weeks; 5 occurred in Edinburgh, 3 in Leith, and 2 in Glasgow. The 7 fatal cases of scarlet fever, including 5 in Glasgow, corresponded with the number in the previous week. The deaths from "fever" and diphtheria were not numerous, and were below the average. The reported death from small-pox was a death attributed to chicken-pox in Glasgow. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had declined in the preceding four weeks from 93 to 74, further fell last week to 73, but exceeded by 2 the number in the corresponding week of last year. The causes of 59, or more than 12 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 22·9 and 23·1 per 1000 in the preceding two weeks, declined to 19·7 in the week ending July 17th. During the thirteen weeks of last quarter the death-rate in the city averaged 25·6; whereas the mean rate during the same period did not exceed 17·2 in London and 19·7 in Edinburgh. The 183 deaths in Dublin last week showed a decline of 23 from the number in the previous week, and included 11 which were referred to the principal zymotic diseases, against 12 and 10 in the preceding two weeks; 5 resulted from "fever" (typhus, enteric, or simple), 4 from diarrhœa, 1 from scarlet fever, 1 from diphtheria, and not one either from small-pox, measles, or whooping-cough. These 11 deaths were equal to an annual rate of 1·6 per 1000, the rates from the same diseases being 5·4 in London and 2·5 in Edinburgh. The 5 fatal cases of "fever" showed an increase upon the low numbers returned in any recent weeks; and those of diarrhœa corresponded with the number in the previous week. Seven inquest cases and 8 deaths from violence were registered; and 36 (a marked decline from recent weekly numbers) were recorded in public institutions. The deaths of infants were fewer than in the previous week of this year, while those of elderly persons showed an increase upon the low number in the preceding week. The causes of 13, or nearly 10 per cent., of the deaths registered during the week were not certified.

MORTALITY IN METROPOLITAN SANITARY AREAS.

The general death-rate in London has been unprecedentedly low, and averaged only 17·2 per 1000 during the thirteen weeks of last quarter. This rate was not only the lowest on record for London in the second quarter of the year, but was 3·5 per 1000 below the mean rate in the corresponding periods of the ten years 1876-85. The last weekly return of the Registrar-General contains a table which affords the means of comparing the varying rates of mortality that prevailed during last quarter in the several metropolitan sanitary areas; all the deaths that occurred in the various public institutions having been referred to the areas from which the deceased inmates had been admitted. It appears that, after this distribution, whereas the death-rate was so low as 15·6 in the west and north groups of districts, it was 16·8 in the south districts, 18·4 in the east, and 22·2 in the central. If the local death-rates be calculated in still greater detail, it appears that the following sanitary areas showed excessive rates. The death-rate during the thirteen weeks of last quarter was equal to 22·3 in the Strand, 22·4 in St. Giles's, 23·9 in St. George's, Southwark, 24·6 in St. George's-in-the-East, 25·5 in Holborn, and 27·5 in St. Luke's. It is evident, therefore, that, low as the general London rate was during last quarter, there were no less than six sanitary districts in which the mortality was markedly excessive, not only when compared with the abnormally low rates of last quarter, but when put in comparison with ordinary urban death-rates. These six districts include a large proportion of the most over-crowded and insanitary slums of the metropolis, but none the less are their high death-rates a disgrace to London, throwing a grave responsibility upon their sanitary authorities. With reference to the distribution of fatal zymotic disease in London during last quarter, it may be noted that only 9 deaths from small-pox occurred among the residents of London; of these 2 belonged to St. Pancras, 2 to St. George's, Southwark, and 2 to Lambeth. Measles mortality showed the largest excess in Fulham, St. Luke's, Shoreditch, Camberwell, Greenwich, and Plumstead sanitary areas. One of the most noteworthy results of improved sanitary organisation in London in recent years has been the remarkable decline in the mortality from scarlet fever, and during last quarter only 102 deaths from this disease occurred among the residents of London, the corrected average number being 401. It should be pointed out, however, that 50 of these deaths belonged to East London, the greatest mortality occurring in Mile-end Old Town, where the smallest proportion of cases are sent for isolation in the Metropolitan Asylum Hospitals. Enteric fever mortality has shown a still larger decline in recent years than scarlet fever, and this decline is fully as marked in London as in the rest of England and Wales; the mortality from this disease in London last quarter showed the largest excess in the South districts, especially in Camberwell. The 2 fatal cases of typhus belonged to the crowded portions of Marylebone and of St. George's, Southwark. The successful sanitary experience of recent years points conclusively to the fact that the control of zymotic disease is literally in the hands of sanitary authorities, and of the ratepayers who elect them.

THE SERVICES.

INDIA OFFICE.—The Queen has approved of the retirement from Her Majesty's Indian Military Forces of the undermentioned officers:—Brigade Surgeon William Henry Morgan, of the Madras Medical Establishment; Brigade Surgeon Henry Robert Lawrence McDougall, M.D., of the Bombay Medical Establishment; Surgeon-Major Henry Elmsley Busteed, M.D., of the Madras Medical Establishment. The following officers have been granted a step of honorary rank on retirement:—Brigade Surgeon William Henry Morgan, of the Madras Medical Establishment, and Brigade Surgeon Henry Robert Lawrence McDougall, M.D., of the Bombay Medical Establishment, to be Deputy Surgeons-General; Surgeon-Major James Kelly, of the Bengal Medical Establishment, and Surgeon-Major Henry Elmsley Busteed, M.D., of the Madras Medical Establishment, to be Brigade Surgeons.

ADMIRALTY.—The following appointments have been made:—Surgeon Francis M. Puddicombe, to the *Asia;* Surgeon William W. Pryor, additional, to the *Indus;* Surgeon Graham E. Kennedy, to the *Medina;* Surgeon John M. M'Donnell, to the *Medway;* Surgeon John G. Webb, to the *Spey;* Surgeon Martin H. Stock, to the *Tees;* and Surgeon Edward A. Spiller, to the Haslar Hospital (temporary).

ARTILLERY VOLUNTEERS.—1st Ayrshire and Galloway:

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Surgeon R. B. Erskine is granted the honorary rank of Surgeon-Major.—1st Devonshire: Peter Maury Deas, Gent., M.D., to be Acting Surgeon.

ENGINEER VOLUNTEERS.—1st Cheshire: Surgeon and Honorary Surgeon-Major C. H. Higgins, M.D., resigns his commission; also is permitted to retain his rank, and to continue to wear the uniform of the corps on his retirement.

RIFLE VOLUNTEERS.—1st Dorsetshire: Acting Surgeon C. W. Parkinson to be Surgeon.—1st Volunteer Battalion, the Hampshire Regiment: Surgeon B. N. Earle is granted the honorary rank of Surgeon-Major.

Correspondence.

"Audi alteram partem."

THE CHARTERHOUSE SCHOOL.

To the Editor of THE LANCET.

SIR,—In consequence of your notice this week, and for the benefit of those amongst your readers who are interested, I think it well to acquaint you with the details of all cases of sore-throat which have occurred at Charterhouse since the present term commenced, on May 14th. They are divisible into three series:—

1. From May 14th to June 10th four cases of sore-throat came before me for treatment; one catarrhal pharyngitis, three subacute tonsillitis, occurring in different houses and attended with no complication.

2. On June 10th I was called upon to see a case in one of the eleven boarding-houses, which I immediately diagnosed as diphtheria. Two days later a second case of undoubted diphtheria (the boy occupying the next cubicle to the first) occurred in the same house; and within two more days I saw eight other sore-throats elsewhere, which had no local manifestation of diphtheria save congestion (i.e., no membrane), but all their owners had albuminuria. The simple fact of sore-throat being associated with albuminuria was sufficiently striking, and the persistence of the albumen for several days with a subfebrile temperature, taken together with the presence of two marked cases of diphtheria in another part of the school, left no room for doubt as to the nature of the eight sore-throats. These occurred in three separate houses—five in one, two in another, and one in a third. As yet no case has developed any of the paralytic phenomena which are apt to supervene upon diphtheria.

3. Since June 14th I have seen nine cases of sore-throat, one being acute tonsillitis, four mild tonsillitis, and four simple pharyngitis. None have been associated with albuminuria, only three with any rise of temperature, and their distribution has not been specially localised.

It is unnecessary for me to state how the cases of diphtheria were managed; this has been clearly enough brought to light by the recent correspondence in *The Times*, notably in the letters of Dr. Bristowe and Mr. Noble Smith. Suffice it to say, that every case occurring between June 10th and 14th was called diphtheria, and the immediate removal of each from the boarding-house recommended; that the heavy responsibility he was taking upon himself was impressed upon each house master concerned; that each was urged to acquaint the friends of his sick pupils with the nature of their illness; and that it was earnestly advised that the general *exeat* on June 26th should be stopped, not on account of measles, but on account of diphtheria.

But I am anxious to explain that I have long discarded the term "diphtheritic sore-throat" as a dissimulation; all sore-throats are diphtheria or not diphtheria. And so deeply am I impressed with the feeling that an exceedingly mild sore-throat may be the means of conveying diphtheria, that at Charterhouse I am in the habit of advising the isolation of every case of sore-throat, whatever its species. Hitherto my powers have been limited to giving advice; I am in hopes that the recent stir will secure for the future its acceptance by those few house masters whose wisdom has led them to act in opposition to it.

Inasmuch as the head-master has asked for the services of the Local Government Board, I see no present need for publicly discussing the etiology of the outbreak.

In conclusion, allow me to express, through your columns, my sense of deep gratitude to those medical friends who have felt it necessary to support me by their testimony on the present occasion.—I am, Sir, yours faithfully,

C. HAIG-BROWN, M.D.,
July 18th, 1886. Medical Officer at Charterhouse School.

THE APPROPRIATION OF PATIENTS BY CONSULTANTS.

To the Editor of THE LANCET.

SIR,—I have read with much interest the correspondence in your columns relative to the absorption of patients by consultants. Perhaps you will allow me to state how the matter appears to an experienced patient. To begin with, I absolutely deny that I am in any way the property of the general practitioner who usually attends me. When my digestion goes astray, or my respiratory organs are attacked by the cold, or I think that my kidneys are out of order, I send for him, conduct a joint examination of myself and my secretions with him, and take his medicine. When more serious and obscure ailments seize me I either send for him with a view of settling on the consultant to be resorted to, or I go straight to the consultant and take his advice, afterwards telling my usual attendant what I have been doing and what advice I have received. If I propose a joint consultation between him and the consultant, I usually observe that it vexes him, and that if he goes it is at a sacrifice of time, patience, and, I suppose, money. He has usually said: "Go yourself, and say so-and-so," giving me some technical details and phrases in which he thinks me imperfect. Our relations are affectionate and enduring, but I have never surrendered my liberty of roaming over the whole profession for advice if I consider that my physical interests require it. I cannot understand how any general practitioner in fair practice can find it worth his while to attend a patient to a consultation in the consultant's quarter, unless he happens to live in that quarter himself. As to the cry of graspingness which has been raised on behalf of the general practitioner, my experience is that in London it is far more profitable in the long run to be a general practitioner in a good neighbourhood than a consultant, however, strong his professional position, unless he happens to be a society physician or a crack operator. I happen to have known a good deal of the behind-the-scenes misery of men occupying a position of national, and indeed international, fame, who are being worried and skinned alive by money lenders to keep up a position in hopes of attracting paying patients who never come.

I am, Sir, your obedient servant,

July 21st, 1886. AN EXPERIENCED PATIENT.

THE PREVENTIVE TREATMENT OF SYPHILIS (?)

To the Editor of THE LANCET.

SIR,—The case published by Mr. Jennings in THE LANCET of the 17th inst. is instructive, as showing how very easily a lesion on the penis, due to some other cause, may be mistaken for a hard chancre. In the case reported there can be no doubt that scabies was present. The absence of evidence of that disease in the interdigital clefts is far from being uncommon, even in well-marked instances. In very young children the buttocks are often the parts earliest attacked.

In the second edition of his "Epitome" Tilbury Fox has stated: "Two or three cases of scabies limited to the penis have recently come under our notice." "In two, suppurating buboes were produced by the irritation, and the disease was thought to be syphilitic." "The diagnosis was rendered easy ..... by the absence of any concomitant evidence of syphilis."

The supposed chancre had apparently been destroyed before the case was seen by Sir William Jenner. The diagnosis of syphilis rested, therefore, upon Mr. Jennings. Accepting his version of the facts, Sir William was no doubt justified in suggesting "the free exhibition of mercury internally."

Now for the evidence of syphilis:—

1. The supposed chancre appeared nearly three weeks after suspicious connexion. "The lymphatic glands in both inguinal regions were slightly enlarged. The physical condition of the lesion on the penis led me to consider it a

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hard chancre not yet arrived at maturity." I should be glad to know whether the lymphatic glands are usually or ever affected within "three or four days" of the appearance of the sore? and whether a sore in the "immature" stage has ever been known to cause such enlargement? On the other hand, it is common to find glandular enlargement as the result of the intense irritation set up by the *acarus*, and there is no reason why such should not have been the origin of the enlargement in this case.

2. "The internal use of mercury was discontinued after six weeks." Why? The customary period for administering mercury after a suspicious sore is considerably longer than that number of months, and in this case mercury was given "in order to combat the effects of any portion of syphilitic virus already absorbed." However, in spite of this, the patient soon regained his usual health, and "none of the secondary manifestations of syphilis have appeared." Probably the result would have been the same if the treatment had been restricted to the judicious application of sulphur ointment.

The only conclusions I can draw, therefore, are: 1. That the enlargement of the inguinal glands resulted from some irritation other than that of an *immature* syphilitic sore. 2. That the sore was not syphilitic at all, but was merely an extension of the scabies from the "loins, buttocks," or neighbouring parts. 3. That the appearance of the nodule "at the precise spot" where the penis had been abraded was a mere coincidence. 4. That the semi-indurated, raised nodules, with surrounding inflammatory zones, so often seen in scabies, may, when seen in suspicious spots, not infrequently be mistaken for chancres, and may thus subject the patient to the application of a cautery and to a free exhibition of mercurials.

I am, Sir, yours faithfully,

Pall-mall East, July 19th, 1886. ARTHUR HARRIES, M.D.

To the Editor of THE LANCET.

SIR,—In a letter under the above heading in your issue of the 17th inst., Mr. Jennings claims to have succeeded in curing syphilis, but I venture to think that he has failed to prove his contention. On reading his letter, the first question which naturally rises is this, Was the single case on which he bases his opinion really one of syphilis? The diagnosis of this disease from the chancre is a matter of great difficulty, and is often impossible. Although in his case the glands were enlarged, we are not told whether they exhibited the characteristic specific *induration;* while, on the other hand, the irritation of the scabies might have caused them to enlarge temporarily. The absence of other diagnostic signs certainly leaves it a matter of doubt whether he was really dealing with a case of syphilis or not. But if we accept the case as one of syphilis, Mr. Jennings has surely confused the issue by the use of mercury, for it is an accepted fact that if mercury be given in the primary stage, it may abort the secondary symptoms, though sooner or later signs of the syphilis will appear. The patient would require to be kept under observation for years—for a lifetime—if we are to be sure that the syphilis has been cured. Syphilis is not a continuous disease, but is liable to varying periods of activity and quiescence, periods the length of which may be affected by treatment. The primary sore is the local manifestation of a general disease which has existed for several weeks before the appearance of the chancre, so that Mr. Jennings' "prevention of syphilis" would seem in any case to be a misnomer, while the "cure" is open to doubt. The poison having entered the body several weeks before, can it reasonably be expected that the destruction of the chancre will cure the disease? Why should not the enlarged glands be also attacked by the thermo-cautery? Hill applied nitric acid to a torn frænum twelve hours after connexion, and Diday applied caustic to a chancre six hours after its appearance, yet in both secondary symptoms followed. But, after all, the treatment suggested is hardly new, for as far back as 1840 it was proposed to cut out the chancre. I have seen the chancre cut out in several cases, and I have myself removed it more than once, but in all the cases the secondary symptoms followed in due course. Kölliker has reported eight cases where the chancre was early excised, in five of which syphilis followed, and in the remaining three cases we may claim some allowance for errors in diagnosis which are certain to occur even with the most careful observer. This, then, is a more thorough test than Mr. Jennings' solitary case. The removal of the chancre, it has been asserted, modifies the subsequent syphilis, but this, I think, is still *sub judice.*

I trust the advice given in Mr. Jennings' letter will not be extensively acted upon until some more rigid experiment has demonstrated the accuracy of the deductions it contains. Were it widely followed, we should soon have the cautery applied to every venereal sore, and it would cause some patients much unnecessary pain and anxiety, while to others it would impart a feeling of security which subsequent events might prove to have been false.

I am, Sir, yours faithfully,

R. MCKENZIE JOHNSTON, M.D., F.R.C.S.Ed.

Edinburgh, July 20th, 1886.

To the Editor of THE LANCET.

SIR,—I read with interest the notes on "The Preventive Treatment of Syphilis," by Mr. C. E. Jennings, in your issue of July 17th. I have met with five cases presenting signs similar, in so far as regards danger of specific poisoning, to the one he describes. In all of my cases there was a hard elevated nodule on the dorsum of the penis of the consistence of fibro-cartilage, and sufficient pain and inflammation surrounding the new growth to cause the patient to seek advice. The lympathic glands in one or other inguinal region were in every case enlarged and painful on pressure. The nodules in my cases were about the size of split peas, distinctly circumscribed, but thinner at the margins than at the centre, and varied in position from the root of the penis to immediately behind the corona. All of my cases followed doubtful sexual intercourse, the periods of incubation ranging from ten to twenty days. At the time the first case of this description came under my notice I had under observation a case of gonorrhœa in which, as not infrequently happens, a hard thin plate-like body, about one-eighth of an inch in length and rather less in breadth, had developed in two days, and encircled the urethra immediately behind the frænum. The similarity in feeling of the two growths led me to think that probably they were of a similar nature, and that, although the nodule on the dorsum of the penis was due to a poison which had gained admittance into the system during impure intercourse, the virus was not that of syphilis. I accordingly ordered no antisyphilitic remedies. The nodule gradually disappeared, and was not followed by any secondary symptoms. I treated the other cases in a similar manner, with a like result.

I am, Sir, yours faithfully,

Llandudno, July 20th, 1886. JAMES CRAIG, M.B.

LIVERPOOL.

(From our own Correspondent.)

THREATENED WATER FAMINE.

OWING to the long-continued hot weather, with absence of rain, we are again threatened with a water famine, and, greatly to the inconvenience of the inhabitants, the authorities have recently placed the city upon a half-service, which means that the supply of water is limited to the hours of from 5 A.M. to 5 P.M. Fortunately, a heavy thunderstorm has occurred to-day, and we are likely to have more rain. It is greatly to be hoped that the constant service will soon be renewed.

THE ELECTION OF MR. REGINALD HARRISON.

The news of Mr. Harrison's election to one of the vacant seats on the Council of the Royal College of Surgeons was received with great satisfaction in local medical circles. Admitting freely all the great services which the metropolitan Fellows have rendered to the profession in general and the College in particular, the presence of provincial Fellows on the Council of the latter is an arrangement, the justice of which has long been also admitted; and as Birmingham, Leeds, and Manchester have each for years had a representative, it is felt that it is now high time that Liverpool had also its local representative. Mr. Harrison is still in his prime, and it is hoped has a long and distinguished career before him.

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THE GREEK GIPSIES.

A number of Greek gipsies arrived a few days since at the terminus of the Cheshire lines railway, which from its situation is called the Central Station, *en route* for America. But when their condition was known to the managers of the steamer by which they were to have been conveyed, the latter refused to take them. They accordingly "squatted" upon one of the platforms of the station, to the imminent danger of creating, by their dirty habits, an epidemic among themselves, and of subsequently infecting all who had to use the station. Fortunately this peril was averted by the firmness and promptitude of the railway authorities, aided by the Greek consul, who succeeded in finding them accommodation at the Zoological Gardens, Walton—a not inappropriate residence for such very insanitary lodgers.

ENTERTAINMENT AT THE ROYAL INFIRMARY.

On the 16th inst. another of these very pleasing entertainments, which have been more frequent of late, was held at the Royal Infirmary. It consisted of the "Mikado," performed by the members of St. Peter's Cathedral Church choir, led by Miss Harrison, who presided at the piano. A large number of ladies and gentlemen were present, in addition to the patients and nurses, and all greatly appreciated the performance, which was frequently applauded. Considering the monotonous lives led by the patients, nurses, and other officials of the infirmary, these entertainments, which form a pleasing break in the daily round of duty, cannot be too highly commended, and are deserving of every encouragement.

Liverpool, July 21st.

NORTHERN COUNTIES NOTES.

(From our own Correspondent.)

THE NEW FLOATING HOSPITAL FOR THE TYNE.

THE new floating hospital for the Tyne is now nearly complete. It is built from the designs of Mr. W. G. Laws, our city engineer, and it is expected to be launched on Bank Holiday, August the 2nd, when our port sanitary authority hope to be favoured with the presence of the President of the Local Government Board. The structure is unique of its kind, and is admirably adapted for the purposes for which it is intended. It is constructed on ten cylindrical iron pontoons with hemispherical ends. The buoyancy of each pontoon is 53½ tons, so that the floating power of the hospital is equal to 535 tons. The pontoons are 70 feet long and six in diameter, and resemble huge boilers. Upon each pontoon there are seven "saddles," which support a strong framework of iron consisting of longitudinal rolled girders. These girders are braced together by diagonal T iron, and upon them is carried a deck of creasoted timber, which supports a platform. Upon this deck or platform the superstructure of the hospital and its adjuncts are erected. The deck is partly occupied by three main buildings, six smaller structures, and a mortuary. The main buildings are each 65 feet long, 23½ feet wide, and about 20 feet high. These are each divided into two hospital wards, one of which will contain six and the other four beds. They are spacious, light, and airy apartments, having large windows and special means of ventilation. The interior is lined with polished pine in narrow strips. In each ward there is a central shaft through the roof, fitted in Mr. Kite's patent ventilator, for carrying off the vitiated air. Near the floors there is a series of ventilators for the admission of fresh air, and under the floor of each compartment an air space of about 10 inches. Between the surface of the river and the platform is a space of 4 feet. There will be a perfectly free current of air. The rise and fall of the tides, and the currents produced by the spaces between the pontoons, will prevent the possibility of any impurity existing beneath the hospital. Between the two wards of each hospital is an apartment for the nurses. These apartments are fitted with glazed doors on either side, so that the nurses can command a complete view of each ward. There are also entrances from the deck to the different wards. The main buildings are so arranged that they can be completely isolated. The platform is 140 ft. long and 80 ft. wide, and there is ample space in front of the buildings for the recreation of the convalescent patients. The space between the pontoons is 14½ feet from centre to centre. These curious-looking structures have attracted much attention from passengers on the river, and many speculations have been advanced as to the means of launching, but it is stated by those competent to judge that this can be safely and easily accomplished, and that only a gale of wind would prevent the success of the operation. When launched the hospital will be taken to the berth prepared for it at Jarrow.

POISONING CASES IN THE NORTH.

An inquest has been held at Swalwell, county of Durham, upon a child nine months old, who swallowed some flowers of a wayside plant. This unfortunately turned out to be monkshood, and the usual fatal symptoms of poisoning by aconite were observed.

A woman at Newbiggin-by-the-Sea attempted to commit suicide recently by steeping a quantity of matches in coffee and drinking it. The stomach-pump, however, was promptly used by Dr. Cunningham, and with success. I think if it were more generally known that this instrument was likely to be used in all cases of this nature, it would to some extent deter from these mad attempts at self-destruction now so common amongst weak-minded females in the north.

Newcastle-on-Tyne, July 12th.

BELFAST.

(From our own Correspondent.)

BELFAST MEDICAL STUDENTS' ASSOCIATION.

THE inaugural meeting of this Association was held in Queen's College, Belfast, last week, the Rev. President Porter, D.D., in the chair. The object of this Association is to promote the interests of the medical students as regards their professional training. The President of the College said it gave him extreme pleasure to have an opportunity of meeting a number of the medical students, and to find that they had instituted that Association. He was sure, looking at the objects they had before them, they would do a great deal of good, not merely to themselves individually as students, but to the College and the cause of medical education throughout the north of Ireland. He urged them to increase their efforts in order to keep up the *locus standi* of Queen's College; and, in conclusion, said he would do all in his power for the Association, in order to promote the welfare of the students; and he ventured to predict that it would have a wide and prosperous existence in the future. After Dr. O'Neill (President of the Association), Dr. Lindsay, Dr. Byers, and Dr. Esler had spoken, the meeting concluded with a vote of thanks to the President of the College for his kindness in taking the chair. This Association, which owes its origin in great part to the unceasing energy and enthusiasm of Dr. Henry O'Neill, will be of immense benefit to the medical students in the future, and the kindly interest taken in it by the President has done much to ensure its success.

ANNUAL MEETINGS OF THE MEDICAL SOCIETIES.

The annual meeting of the North of Ireland Branch of the British Medical Association was held in the Royal Hospital on Thursday, July 8th; the principal business being the election of office-bearers for the ensuing year. Mr. John Fagan was appointed president, and Dr. Moore secretary (in place of Dr. Dempsey, who has resigned). In the evening the members dined at the Royal Avenue Hotel, the President in the chair, when those present had a very agreeable reunion. On the previous day, at the annual meeting of the Ulster Medical Society, Dr. Whitla was elected president, Dr. Lindsay secretary, and Dr. Coates treasurer for the coming year.

THE ROYAL HOSPITAL.

The summer session came to a conclusion last week, and most of the students have now left town. During the past two months the surgeons have had a very busy and anxious time. Owing to the unfortunate riots in June, and again last week, a large number of serious gunshot wounds have been admitted to the wards; while, in connexion with the terrible railway accident near Portadown, a good many cases of severe injury were brought to the Royal Hospital. Among these there were cases of head and abdominal injury, affections of joints, simple and compound fractures, &c.

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There has been a change in the resident staff owing to the resignation of Dr. S. Smith, house-physician. Dr. Calwell was appointed in his place, and Dr. Shuldham Dunlop has taken the post of house-surgeon—viz., Dr. Calwell. The students attending the hospital presented Dr. Smith with a handsome clock, barometer, and a set of bronzes.

DEATH OF DR. M'WHA.

I am sorry to have to announce the death of Dr. W. R. B. M'Wha. He had obtained an appointment as medical officer in connexion with a tea plantation in India, and had been there only a few days when the unfortunate event occurred. Little is as yet known of the circumstances, as a telegram received in Belfast simply stated that he was drowned while out shooting. Dr. M'Wha was most popular both at school and at College, and being a man of considerable ability and good professional training, his friends looked forward to his having a distinguished professional career. The deceased gentleman was a splendid athlete. As a football player he had few superiors in Belfast, as was shown when he played for Ireland against England, Scotland, and Wales. He was also a member of the Irish lacrosse team. Previously to receiving his appointment in India Dr. M'Wha was one of the resident surgeons in the Union Infirmary. Great sympathy is felt for his bereaved relatives.

THE BELFAST HOSPITAL FOR SKIN DISEASES.

The annual report presented at the last meeting of this institution shows that during the past year 1005 patients were treated at the hospital, thirty-one of whom were in-patients; and that there has been a steady increase in the number of patients since the foundation of the hospital in 1865. Since this date 19,318 cases of skin disease have been treated. The receipts from all sources during the year were £322 9*s.* 7*d.*, and the expenditure £316 19*s.* 4*d.*, leaving a small balance to the credit of the institution.

Belfast, July 19th.

PARIS.

(*From our own Correspondent.*)

PROTEST AGAINST VIVISECTION.

THE *Official Journal* has published the resolution of the Committee appointed by the Chamber of Deputies to report on a petition forwarded by Dr. Combet of Lyons, in which the petitioner states that experiments on living animals as a simple means of instruction is a cruel practice, and absolutely useless, in which opinion he is supported by several professors of the Faculty. He therefore demands that a law be passed to interdict in the faculties and schools of medicine the practice of vivisection and operations for study on living animals. The Commission believed that there might be too many operations of vivisection performed without any practical utility, and that therefore it would be better to put a stop to some of the abuses of unnecessary cruelty. The Commission, however, cannot admit, with the petitioner, that these experiments are altogether useless to the progress of science. Consequently the Commission is of opinion that the operations of vivisection should be restricted to cases determined only by the necessities of science.

THE TREATMENT OF NEPHRITIS.

It is admitted in practice that nephritis in patients suffering from scarlet fever is not always in relation to the gravity of the eruptive disease. Prof. Jaccoud, following the example of Dr. Musatti, who established the fact that milk diet, instituted at the commencement of the malady, is the best remedy to prevent renal complications, employed the same treatment with great success. According to certain writers, renal albuminuria resulting from scarlet fever is very prevalent in some epidemics, and the number of cases observed has been known to mount up to 50 per cent.—including both slight and grave cases; but Professor since adopting this method, has never had a single renal albuminuria. According to him, the real treatment of this complication consists in the ...tion of milk from the first day of the malady, ...ting for the appearance of albumen in the urine. ...should be given, both as food and medicine— ... per day if possible. Dr. Musatti condemns the ...should both in scarlet fever, not only on account of the difficulties attending this mode of treatment, but also from the collapse and other complications that may be produced.

APPOINTMENTS.

The vacancy caused by the death of Dr. Legrand du Saulle at the Infirmary for the Insane at the Prefecture of Police has been filled by Dr. Paul Garnier, who had discharged the functions of first assistant at the infirmary.

Dr. Bouchard, Professor of General Pathology and Therapeutics at the Paris Faculty of Medicine, has been elected, almost unanimously, member of the Academy of Medicine in the section of Medical Pathology, having as competitors Drs. Damaschino and Dieulafoy.

ERRATUM.—In the last line of the Paris letter of last week, the word "death" should be *depth*.

Paris, July 20th.

THE FOREIGN HOSPITALS AT CONSTANTINOPLE.

(*From a Correspondent.*)

THE Constantinople correspondent of the *Journal des Débats* has been contributing a series of letters about the hospitals belonging to the different foreign Powers in that city. There are seven of them in all—viz., the Austro-Hungarian, the English, the French, the German, the Greek, the Italian, and the Russian; and a brief description of each, taken in alphabetical order, will be read with interest.

The Austro-Hungarian hospital, the only foreign one upon the southern side of Pera, has not a building of its own, but rents for about £380 a year a large three-storeyed house with a fine view of the Golden Horn and Stamboul. This hospital has forty-seven beds and five private rooms for female patients. The patients who can afford to pay are charged 3*s.* a day, and the expenses for the past year amounted to £1200, the difference between the amount received and the total cost being made up by a tax of 2½*d.* per ton paid by all Austro-Hungarian vessels which come to Constantinople, and in return for which the sailors are treated free of charge. The number of patients who passed through the hospital last year was 208 men and 29 women, the proportion of deaths being 43, or 5·48 per cent. Four attendants (three male and one female) are attached to the hospital; and there is a resident physician, with a salary of £160 per annum.

The English maritime hospital at Galata is a substantial building with two storeys, and though erected at the time of the Crimean war it looks as good as new. There is an indescribable air of comfort about it, and the bedding is exceptionally good, while there is an abundance of water in the building, with baths and washhouses upon the ground-floor, an apparatus for rescuing the patients in the event of fire upon the second storey, and two very ingenious contrivances for ensuring that the medicine has been given at the proper hour. The cost of maintenance and of the linen is borne by the Turkish Ministry of Public Works, while a charge of a penny per ton on the 2000 English vessels which enter the port every year more than covers the rest of the expenditure. There are only two private rooms in the hospital, the occupants of which pay 4*s.* a day, but all the other patients are treated gratuitously. The hospital contains sixty beds, distributed over six wards, and only male patients are admitted, the total for last year being 238, of whom only 6, or 3 per cent., died. The cost of each patient is estimated at 5*s.* a day, and the ordinary meals consist of tea and bread-and-butter in the morning and at 4 o'clock; soup and meat at noon, and again at 6 in the evening. There were 526 out-patients last year. Two doctors are attached to the hospital, one of whom is resident; while there are three trained nurses, one of whom learnt her business in a London hospital.

There are two French hospitals at Constantinople, though one of them, the municipal hospital, is so far Turkish that it is kept up by the municipality of Constantinople. It is, however, under the care of six French Sisters of Mercy, who, with very slender resources, manage to maintain forty beds. The total number of patients last year in this hospital, which is situated at Top-Hané, was 902, and the deaths amounted to 63, or rather more than 7 per cent., the high rate of mortality being attributed to the neglect of the Turkish authorities to keep the building in proper order or supply the necessaries for the patients. The Hôpital de la

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Paix, situate at Chichli, in the suburbs of the city, is also under the care of Sisters of St. Vincent de Paul, and it dates from the time of the Crimean war, when the Sultan gave them a large piece of land and a sum of £2000, with which they founded a hospital, and also received a few insane persons. They have since been able to build a separate asylum for the insane. The hospital as it now is consists of a large building with two wings, and contains 44 male and 28 female patients of all nationalities; these being divided into four classes, who pay at the rate of £8, £6, £4½, and £3 (Turkish) per month. Annexed to this hospital is a pavilion with twenty beds for male and ten for female patients, and special wards for ophthalmic complaints, the occupants of which pay from 10*s.* to 2*s.* 6*d.* a day. There is also an orphanage and a crèche attached to this hospital, containing 130 children; and the Sisters of St. Vincent de Paul also have charge of the almshouses for the aged, which are placed under the protection of all the Catholic Powers, each of which in turn takes over the management of it for a twelvemonth. These almshouses were founded just half a century ago, and they consist of forty-two cottages, each with two rooms, and now accommodating fifty-five men and twenty-five women. The expenses for last year were £1400, and of this about half is defrayed by the rent of shops upon the ground floor of the houses which face the street. The remainder is made up by grants of charitable societies, and by contributions from a few of the inmates who can afford to pay something towards their maintenance.

The German hospital is the one which costs the least to the Government, as very few except paying patients are received there. The establishment of this hospital dates from 1844, when, at the funeral of a German subject who had died at Constantinople through having failed to secure medical relief, a collection was made for the construction of a small wooden hospital. A few years later a charitable association was founded by the Germans; but it was not until 1875 that the present hospital was built at Taxim, upon the heights of Pera, the money for its erection (about £18,000) being provided by the German Government. The situation of this hospital, which commands a view of the coast of Asia Minor, the Sea of Marmora, and part of Stamboul, of itself contributes, to use the expression of Dr. Mordtmann, one of the physicians attached to it, "to hasten the recovery of our patients." The hospital has four storeys and is surrounded by large gardens, while it has accommodation for a hundred patients in six wards and twenty separate rooms, the charge being from 3*s.* to 5*s.* a day. There is also a pavilion, built of wood, for the patients suffering from contagious diseases, and this was provided by Prince von Reuss, formerly German ambassador at Constantinople. Three doctors and three deaconesses are attached to the hospital, which last year received 620 patients of fifteen different nationalities, the deaths numbering 48, or about 8 per cent. The average daily cost of each patient was about 2*s.*

The Greek hospital at Balukle, outside Stamboul, is nearly a mile from the city, and though from a sanitary point of view its situation is good, the distance tells against it very much in certain cases. It is the largest of all the foreign hospitals, comprising four separate establishments—the hospital properly so called, the asylum for the insane, the orphanage, and the almshouses for the old and the infirm. Founded in 1837, the hospital has been gradually enlarged, and is now administered by a committee of twelve Greek merchants residing at Constantinople. A committee of five ladies has the management of the kitchens, still-rooms, and washhouses, and the hospital has accommodation for 350 patients, who occupy seven wards and six private rooms, in the latter of which the charge for treatment is about 4*s.* a day. There is a very good pharmacy, at which drugs are supplied to out-patients at cost price, and the staff consists of two resident physicians, two visiting physicians, seventy-two attendants, nurses, &c. In the course of last year the hospital received 2481 male and 238 female patients, this being exclusive of those treated in the lunatic asylum, the orphanage, and the almshouses; but the deaths numbered 442, or over 15 per cent. This high rate of mortality is attributed to the fact that a great number of the patients were suffering from fever and other malignant affections, and that the Greeks have such a prejudice against hospitals that they will not make use of them save at the last extremity. Although the Turkish Government allows the hospital 1 cwt. of meat and 1½ cwt. of bread per day, the expenses for the past year, including a sum of £2000 for paying off the building debt, amounted to over £14,000, but the different resources which the committee command enable them to meet this expenditure without much difficulty.

The Italian hospital, which dates from 1876, is situated upon the eminence of Top-Hané, overlooking the sea, and it is a two-storey building with a large garden, having more the appearance of a private villa than of a hospital, and cost about £12,000. It has upon the first floor a ward with ten beds for women and three private rooms; upon the second floor, a ward with twenty beds for men and five private rooms, in addition to a ward with twelve beds for persons suffering from syphilitic complaints. There is a lift for each floor, with waterclosets and dressing-rooms, while the building is well ventilated, and has an abundant supply of soft and salt water. The staff consists of two doctors, four attendants, and fourteen Sisters of the Immaculate Conception. About ten free consultations are given every day, and the other patients pay about 5*s.* if received in private rooms, and half that sum in the wards, foreigners being charged about a quarter more. The hospital received last year 309 male and 41 female patients, the number of deaths being 28, or about 8 per cent.; and the average daily cost per patient was rather more than 1*s.* 6*d.* The paying patients contributed about £400 to the total expenditure, the remainder being defrayed by the Italian Minister of Foreign Affairs.

The last of the seven foreign hospitals is that of Russia, the foundation of which is somewhat remarkable. An Armenian living at Constantinople, but a Russian subject, had supplied the Turkish armies with forage during the Crimean War, and had failed to obtain payment. General Ignatieff, when Russian ambassador at Constantinople, obtained payment for his claim upon condition that he subscribed a quarter of the amount received towards the building of a Russian hospital. This the Armenian, who as a Russian subject had no business to supply the enemy, readily agreed to, and the £8000 which he paid over to General Ignatieff went towards the erection of the large hospital with three floors, and a wooden pavilion for use in the summer, which Russian subjects can now avail themselves of at Constantinople. The hospital is a very wealthy one, for the late Czar made it a donation of 100,000 roubles, and one of the princesses of the Imperial family gave linen for forty beds. The hospital also receives a sum of 1*d.* per ton upon all Russian vessels coming to Constantinople, and the fees upon the issue of all passports. It contains five wards of from three to twelve beds, each patient paying at the rate of 4*s.* a day. It is very well fitted up, with double windows and baths upon each floor, but the temperature is rather too high. No persons suffering from contagious or mental diseases are received. The staff consists of a resident physician and six Sisters of Charity. In the course of last year the number of patients was 283, the deaths numbering 23, or 8·50 per cent.

Among the French hospitals might also have been included the establishment known as the Hôpital Gérémie, but it was at first more of a convalescent home than a hospital in the strict sense of the term, the money for endowing it having been bequeathed about thirteen years ago by M. Gérémie, who left special directions as to how the money was to be employed. Since then it has been converted into a general hospital, and is now open to paying patients of all creeds, having received last year 141 male and 71 female patients, the rate of mortality being 8 per cent. The hospital is situated upon the heights of Ainali-Tchesmé, and has five wards each with eight beds, and five private rooms, or thirty-two beds in all. The hospital is under the charge of the Lazarists of St. Benedict, and has a staff of four physicians, who give their services gratuitously. There is also the civil and maritime French hospital at Taxim, which, though admirably administered internally by the nineteen Sisters of St. Vincent de Paul and the twelve nurses attached to it, is in a very dilapidated condition outside, and is so short of funds that it has only one doctor for eighty-six beds. Still, the French have, upon the whole, more charitable establishments than any other nation at Constantinople, for there is a girls' school and a dispensary attached to the Taxim hospital, while the two homes of Our Lady of Providence and Tchehun-Boslon, both conducted by the Sisters of St. Vincent de Paul, relieved during the past year 1500 men and 1300 women of different nationalities.

(To be continued.)

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Obituary.

JAMES ALEXANDER EAMES, M.D.

WITH considerable regret we record the death of a respected member of the profession, which took place on the 17th inst. Dr. Eames was the resident medical superintendent of the Cork District Lunatic Asylum. A few weeks since he was attacked with a cervical anthrax, and although from the first his illness was serious and painful, his medical advisers—Dr. Hobart, Dr. E. Townsend, and Deputy Inspector-General Eames—had a favourable opinion, and believed he would recover. On the morning of Friday, the 16th inst., however, he relapsed, and died the following day. Dr. Eames studied at the Meath Hospital, Dublin, and at the medical school of the Royal College of Surgeons, and acted as an assistant-surgeon in the Crimean war, for which he held a medal and clasp and the Turkish medal. He afterwards devoted his entire attention to the study of mental diseases, and after some time was appointed resident medical superintendent of Donegal Lunatic Asylum. On the death of Dr. Power, of the Cork Asylum, about thirteen years since, Dr. Eames, mainly through the influence of the Duke of Cambridge, whom he attended when wounded in the Crimea, was elected to the vacancy, and the chief improvements in that asylum are to be attributed to Dr. Eames, whose untimely decease will be a great loss to the institution. He was president of the Medico-Psychological Association, honorary member of the Société Médicale Mentale de Belgique, and lecturer on Psychological Medicine in Queen's College, Cork. The deceased was a Fellow of the Royal College of Surgeons in Ireland. Among his surgical contributions to medical literature may be mentioned the following: "Successful Removal of entire Penis and Scrotum;" "Case of Trephining, Recovery;" "Rare and Complicated Luxation of Ankle-joint without Fracture of either Malleolus." Dr. Eames's death will be regretted by a large circle of friends.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted Members of the College at a meeting of the Court of Examiners on July 19th:

Bewley, Thomas Theodore, M.B. Trin. Coll. Dub., Booterstown.
Brazil, Walter Henry, L.S.A., Bolton.
Drinkwater, Charles, L.S.A., Mildmay-park.
Finley, Frederick Gault, M.D. McGill, Montreal.
Fraser, Nutting Stewart, M.B. Edin., St. John's, Newfoundland.
Gregory, Alfred John, L.S.A., St. John's.
Kennard, Charles Poole, M.B. Edin., Highworth.
Morris, Edward, L.S.A., West Kensington-park.
O'Connor, Charles Patrick, M.B. Durh., March.
Rawnsley, Gerald Thomas, L.S.A., Russell-square.
Smith, John William, M.B. Edin., Lancaster.
Sugden, Edward Scott, M.B. Durh., Battersea-park-road.
Vost, William, M.B. Glasg., Glasgow.

Admitted on the 20th inst.:—

Coad, John Edwin, M.B. Durh., York.
Dawson, Rankine, M.D. McGill, St. George's Club.
Edwards, Percy, L.S.A., Grafton-street West.
Fenton, Charles Francis, L.R.C.P. Lond., Romford.
Hackett, Harry Eugene, L.R.C.P. Lond., Manchester.
Jardine, Robert, M.B. Edin., New Brunswick.
Jones, Thomas Joseph, M.B. Edin., Ross, Herefordshire.
Lister, Joseph Jackson, L.S.A., Leytonstone.
Marquis, Duncan, M.B. Glasg., Marchmont-street.
Ruddock, William James, M.B. Durh., Newcastle-on-Tyne.
Sutherland, George Alexander, M.B. Edin., Aberdeen.
Taylor, Lot Albert, Birmingham.
White, Francis Silva, L.S.A., Lexham-gardens.

Admitted on the 20th inst.:—

Brice, Frederick Augustus, L.S.A., Paignton.
Deane, Edward, L.R.C.P. Lond., Trinity-square.
Duke, Allan Forrester, Folkestone.
Elliott, William Henry Wilson, L.S.A., Chislehurst.
Gault, Arthur Henry, L.R.C.P. Lond., Stockport.
Grayfoot, Blenmar Buhôt, L.R.C.P. Edin., Barbadoes.
Hentsch, George Frederick, L.R.C.P. Lond., Bedford-row.
Holt, Maurice Percy, L.S.A., Putney.
Lindow, Albert, L.S.A., Wolverton.
Manning, Philip Percy, M.B. Durh., Hammersmith.
Penton, R. Hugh, L.R.C.P. Lond., King's County, co. Dublin.
Pocock, Herbert Innes, L.R.C.P. Lond., Bristol.
Vincent, John Francis, L.R.C.P. Lond., Melbourne.

The library and museum will be closed on Tuesday and Wednesday, the 27th and 28th inst., for the purposes of the First Examination of the Examining Board in England.

SOCIETY OF APOTHECARIES.—The following gentlemen passed their examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received certificates to practise, on the 15th inst.:—

Brice, Frederick Augustus, Croft Lodge, Paignton, S. Devon.
Compton, William H., Brighton-road, Avenue, Southampton.
Hicks, Edward Harman, Connaught-road, Folkestone.
Holt, Maurice Percy Cue, Upper Parkfield, Putney.
Jones, John Owen, Malvern House, Dolgelly.
Jones, Sydney Harold, George-street, Hanover-square.
Lindow, Albert, Woberton, Bucks.
Payne, W. Arthur, M.R.C.S., Pentre, Uchaf, Oswestry.
Solly, Ernest, Heathfield, Congleton.

THE Library of the Royal Medical and Chirurgical Society will be closed during the month of August.

SIR A. R. THOMPSON, Lieut.-Governor of Bengal, laid the foundation-stone of the Ezra Hospital at Calcutta this week.

THE Drapers' Company have voted 100 guineas towards the building fund of the Tottenham Hospital. This is the second donation given by the company.

ON the 15th inst., the corner stone of a new ward at the Rotherham Hospital was laid with full Masonic honours. The cost of the extension is estimated at £1000.

THE annual meeting of the supporters of the Ardwick and Ancoats Hospital and Dispensary was held on the 21st. inst, when a fairly satisfactory financial report was presented.

AT Ludlow on the 20th inst., Mr. John Adley, a former mayor of that place, was in his garden attending to his bees, when they swarmed upon him, stinging him so severely that he died before medical assistance arrived.

THE Liebig Monument Fund amounts to 25,000 dollars, and the monument will be erected in Ziessed, a small Hessian University town where Liebig first won fame as a lecturer on chemistry.

PROPOSED HYGIENIC INSTITUTE IN VIENNA.—It had been proposed to build a large Hygienic Institute in Vienna, but, unfortunately, the means are not forthcoming at present, so the project is necessarily in abeyance.

DR. MAX BRUBERGER.—The death is announced in Berlin of Staff Surgeon Dr. Max Bruberger, who has been for many years one of the editors of the German military medical journal.

A SUPERANNUATION allowance of £120 has been awarded to Mr. Beardshaw, the retiring medical officer for the No. 2 district of the Leeds Union.

HOSPITAL SUNDAY.—The Lord Mayor has received, at the request of the Prince of Wales, through Sir P. Cunliffe-Owen, a cheque for £100 for the Hospital Sunday Fund, being the amount received up to the present time in Dr. James Aveling's "Mechanical Begging Boxes" at the Colonial and Indian Exhibition.

GREAT NORTHERN CENTRAL HOSPITAL.—At the half-yearly meeting of the general council of this institution on the 15th inst., it was stated that a contract for building the new hospital in the Holloway-road, amounting to £40,300, had been accepted, and as the need of the new buildings was very pressing the work would be commenced at once. Not one-fourth of the sum required has as yet been subscribed.

ANNUAL INSPECTION OF THE VOLUNTEER MEDICAL STAFF CORPS.—On Saturday, July 17th, the principal medical officer of the Home District, Sir James Hanbury, K.C.B., held his annual inspection of this corps. He was accompanied by Surgeon H. R. O. Cross, Grenadier Guards. The members of the corps mustered to the number of 296. In their full dress kit they looked imposing. Since last year the physique of the men seems to have improved considerably. Sir James made a most minute inspection of the corps, and had each company paraded before him, and every officer had to come out in front of his company and drill the men. The following manœuvres were gone through:—Wheeling into line, open order for inspection, marching past in column, formation of a bearer company, rendering first aid in the field, waggon loading, &c. The inspecting officer finally congratulated the commandant, officers, and men on their smart appearance and on the way in which they had gone through the severe test to which he had submitted them.

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PRESENTATIONS.—J. Oswald Lane, M.D. Cantab. &c., has been presented with a clock, pencil case, &c. by the pupils and nurses of the Northampton Infirmary on his resigning the post of house-surgeon to that institution, which he has held more than four years.——On the 12th inst. a number of members of the late Ambulance Class held in connexion with the 2nd Volunteer Battalion (the Queen's Own), Royal West Kent Regiment, conducted by Surgeon-Major Purvis, presented him with a walking-stick bearing the regimental crest and motto and a suitable inscription.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

BINDLOSS, EDMUND FREDERICK, M.R.C.S., L.R.C.P.Lond., has been appointed Medical Officer to the Deptford West District, vice C. H. Leftwich, resigned.

BREMNER, JAMES, M.B., C.M.Aber., has been appointed Medical Officer to the Parish of Resolis, Ross-shire.

BRITTON, THOMAS, M.D., M.R.C.S., L.S.A., S.Sc.Cert. Camb., has been appointed Honorary Consulting Physician to the Halifax Infirmary, on his resignation as Honorary Physician and Honorary Medical Officer to the Harrogate Bath Hospital, vice Somerville, deceased.

BURTON, S. HERBERT, M.B.Lond., M.R.C.S., has been appointed Medical Officer of Health for the Henstead Rural Sanitary District, Norfolk, vice Pitt, whose appointment has expired.

CROWTHER, GEORGE DOBSON, L.R.C.P., L.R.C.S Ed., L.S.A., has been appointed Honorary Medical Officer to the Halifax Infirmary.

EASON, A. M., L.R.C.S., L.R.C.P.Ed., has been appointed Medical Officer of Health for the Lytham Urban Sanitary District, and for the Preston Port Sanitary District, vice Fisher, resigned.

GOUGH, J. HARLEY, M.R.C.S., L.R.C.P.Lond., has been appointed House-Surgeon to the Wolverhampton and South Staffordshire General Hospital, vice Batterham, resigned.

MACKELLAR, ALEX. O., M.D., M.Ch. Q.U.I., F.R.C.S., has been appointed Surgeon to St. Thomas's Hospital, vice Mason, deceased.

PARKER, G. ROGER, L.R.C.P.Lond., M.R.C.S., has been appointed Medical Officer of Health for the Lancaster Rural Sanitary District, vice Harker, resigned.

RAKE, HERBERT V., M.R.C.S., L.S.A., has been appointed Medical Officer of Health for the Fordingbridge Rural Sanitary District.

SANTI, P. R. W., M.R.C.S., L.R.C.P., has been appointed Resident Assistant to the Wolverhampton and Staffordshire General Hospital.

STEPHENSON, SYDNEY H. A., M.B.Edin., has been appointed Clinical Assistant to the Royal Westminster Ophthalmic Hospital, King William-street, W.C.

THOMAS, W. J., M.B., C.M.Edin., has been appointed Senior House-Surgeon to the Halifax Infirmary, vice G. D. Crowther, appointed Honorary Medical Officer.

TRUMAN, O. E., M.A.Cantab., M.R.C.S., L.D.S., has been appointed Dental Surgeon to St. Thomas's Hospital, vice Ranger, resigned.

Births, Marriages, and Deaths.

BIRTHS.

COOKE.—On the 10th inst., at Warrior-square, St. Leonards-on-Sea, the wife of John Cooke, M.B.Lond., of a daughter.

DUKE.—On the 14th inst., at 16, Pevensey-road, St. Leonards, the wife of Edgar Duke, M.R.C.S., of a daughter.

HORNE.—On the 14th inst., at Victoria-terrace, Stockton-on-Tees, the wife of Thomas Horne, L.R.C.P.Ed., L.R.C.S.Ed., L.M., of a son.

NORTON.—On the 15th inst., at Upper Gloucester-place, the wife of G. Everitt Norton, M.R.C.S., of a daughter.

PATERSON.—On the 19th inst., at 13, Cheyne-gardens, Chelsea, the wife of A. Gordon Paterson, M.B., C.M., of a son.

THOMPSON.—On the 15th inst., at Cavendish-square, the wife of E. Symes Thompson, M.D., F.R.C.P., of a daughter.

MARRIAGE.

DAVIS—CANDLER.—On the 14th inst., at the Wesleyan Church, Brixton-hill, Charles Daniel Davis, M.R.C.S., L.D.S.Eng., to Nellie, daughter of George Candler, of Newlands, Brixton.

DEATHS.

GWYNNE.—On the 16th inst., at Holloway, Ruby Imogen Ethelwyn, only child of John Hickling Gwynne, aged 10 months.

JAMESON.—On the 6th inst., at Lympstone House, Lympstone, Devonshire, Thomas Ross Jameson, M.D., Inspector General of Hospitals.

NASH.—On the 15th inst., at Royston, Cambs., Frederic Nash, M.R.C.S., of Todmorden, in his 50th year.

RANSFORD.—On the 11th inst., at St. Cross Hospital, Winchester, Chas. Ransford, M.D.Edin., F.R.C.P., L.R.C.S., aged 78.

N.B.—*A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.*

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, July 22nd, 1886.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
July 16	29·75	W.	62	58	114	73	53	·02	Cloudy
,, 17	30·04	S.W.	64	60	84	69	57	...	Cloudy
,, 18	29·88	E.	67	62	120	81	58	·23	Hazy
,, 19	29·79	W.	67	64	112	72	61	...	Overcast
,, 20	30·05	W.	65	61	121	77	56	·28	Cloudy
,, 21	29·89	S.E.	73	68	124	85	61	...	Hazy
,, 22	29·88	W.	69	63	111	73	62	...	Cloudy

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

We cannot undertake to return MSS. not used.

THE DICTIONARY OF PRACTICAL SURGERY.

Mr. Paul Swain writes to enter a demurrer against our criticism of his assertion that "the application of nitrate of silver to the prostatic urethra is of service in the treatment of that most pernicious habit." Mr. Swain desires to point out that the application in question was suggested as a cure for one of the frequent results of masturbation—viz., nocturnal emissions, and that if he is wrong he has erred in good company, as Messrs. Erichsen, Bryant, and Humphry have, in their writings, advocated the same procedure.

Enquirer.—The Education Department has decided that whenever a certificate is required in explanation of the absence of a child from school, the cost of the certificate is to be defrayed by the School Board.

PERIODICAL BILIOUS ATTACKS.

To the Editor of THE LANCET.

SIR,—I have a lady patient, aged thirty, who has for some years been suffering from severe bilious attacks, each attack coming on regularly at intervals of three or four weeks, and with the same premonitory symptoms—viz., feeling of lassitude, nausea, severe headache, dizziness, muscæ volitantes, followed by copious vomiting of bilious matter. A day or two afterwards she seems quite herself again. She was treated with mineral acids, mercury, podophyllin, &c., but with negative results. Can this be due to stricture of the duct, the result of inflammatory thickening of the mucous membrane? I should esteem it a great kindness if any of your many readers could suggest a remedy whereby the patient might be relieved of these attacks.

I am, Sir, yours faithfully,

Ipswich, July 21st, 1886. L.R.C.P.

A NEW SOLVENT OF URINARY CALCULI.

AT a recent meeting of the French Therapeutical Society a specimen of pichü, or piché, was shown by M. Limousin. In its native country (Chili) it was believed to disintegrate urinary calculi. M. Limousin expressed the belief that piché acted especially on the mucin, which held together the different elements of calculi and dissolved it, and lessened vesical catarrh, a belief which, in consequence of the resin it contained, was shared and confirmed by M. Dujardin-Beaumetz. A fluid extract has been prepared, of which four dessertspoonfuls represent thirty grammes of the plant, the dose generally administered in twenty-four hours.

Mr. R. Hingston Fox.—Very soon.

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GUNTHORPE NATURAL MERINO HOSIERY.

IN our notice of this clothing material last week, the address of the manufacturers was given imperfectly. It should have been Messrs. Rogers, Black, and Co., Stoney-street, Nottingham, and 21, Aldermanbury, London, E.C.

Physician.—We wished for a complete and clear statement of all the facts and dates.

Dr. Althaus.—Very shortly.

AMERICAN MEDICAL SCHOOLS.

To the Editor of THE LANCET.

SIR,—It is by no means uninteresting to a medical man "abroad" to observe his own country and its institutions through the eyes of foreign authorities. And while we must confess to much that was questionable in the past, it appears at present that the case of medical education in the United States is hardly put with fulness—if, indeed, with fairness. As the effete doctrines of the early Church yet serve as the sceptic's best weapons, so now do the allegations which I here rehearse rise against the "American system." We are charged with "inadequate preparation," opening the schools to crude and undisciplined minds; with a "too short and narrow curriculum," giving insufficient and unbalanced foundation for so serious and important a superstructure; with "poverty of clinical advantages," committing students to an unpractical, and therefore untrue, view of their future duties; with "the full degree conferred by any of the too numerous colleges after such a course." Truly a sad catalogue of errors, if applicable now and generally to the institutions of any country. But a knowledge of all the circumstances will ensure material alteration in the scope of these charges, and a much closer approximation to the truth. Though I write without statistics at hand, and only from a general acquaintance with the facts acquired by long professional observation, I venture to state that more than half the American graduates have for many years gone out from the three great medical centres, New York, Philadelphia, and Boston, whither have gravitated for the same period the greater lights of the profession as practitioners, teachers, &c. These men, many of them of humble birth, self-taught, having elevated themselves to a great and noble success, do not forget their own origins, and are slow to place impediments in the way of those who have the same aspirations, the same difficult ascent to make. Hence, the moderate requirements of the preliminary examination to be followed in these schools by instruction not easily surpassed in breadth and accuracy, I am bold to say, whether it be didactic or clinical. Here hospitals are numerous and abounding in every variety of material. At Yale and the Cincinnati, Chicago, Michigan, St. Louis, and New Orleans schools the same is true, excepting the restrictions arising from moderate hospital accommodation, which will always vary with population. Here at least a third of the whole number of annual graduates receive their diplomas, and in most of these schools the final or "pass" examination covers the entire field of study, determining the solid acquirements of the student, rather than what he may have "crammed" during the weeks previous. In some cases the "State Medical Society" exercises a wholesome supervision, its delegates taking active part in the oral tests applied to scholarship. Post-graduate courses are often open to the more ambitious student, and to such practitioners of long-standing as may desire henceforth to restrict their work to special lines. To "graduate into a specialty" is not with us *en règle*. It is the "mushroom school" which gives rise to offences as rank in the nostrils of American as in those of foreign physicians. These spring up in the growing towns of the vast West, partly the offspring of local ambitions and rivalries, partly from a local demand for a not too costly medical instruction, made by the pupils and assistants of neighbouring practitioners, or by youths who labour two-thirds of the year to earn the means of defraying the cost of a winter's tutelage in medicine. Few of these ever graduate, and if they do few fail to seek their diplomas at a more legitimate fountain-head. The schools themselves meet with early graves, though their example and warning are not long heeded. It is true that all who graduate from these State-chartered schools receive the degree of M.D. and are styled "doctors," but in no country in the world does a man so soon find his proper level, whatever his profession or diplomas. It is the absence of social caste, the subordination of influence to real merit, the general indifference to titles, the knowledge that, after all, success must be fought for, which make the American physician so oblivious of the initialed distinctions that obtain in England and elsewhere.

After all is said, in these days, when science is of ommon birth and acknowledges no single foster-mother, we may safely claim to be known by our fruits, and one may proudly point to the just and able criticisms of your own columns upon works of American origin for highest testimony to the value and volume of American professional attainment and culture.

I am, Sir, yours faithfully,

Ilford, Essex. H. W. JONES, M.A., M.D. (U.S.A.)

"SYPHILITIC PHARYNGITIS."

To the Editor of THE LANCET.

SIR,—Your correspondent, "Med. Doc.," writes requesting suggestions for a special chronic syphilitic case in which all the usual remedies have failed. I would suggest the trial of succus alterans (McDade), prepared by Lilley and Co. There is much medical testimony in its favour, and the formula is given with the medicine. It would be interesting to report the result in THE LANCET.—I am, Sir, yours faithfully,

July 20th, 1886. H. G. S.

A SIGN OF DEATH.

AT a recent meeting of the Société Médicale d'Amiens, M. Lessenne mentioned the following as a simple and trustworthy sign of death. After pricking the skin with a needle the puncture remains open, just as when a piece of leather is pricked. On the living body, on the contrary, even if the blood does not come to the surface, as would happen if the person were hysterical, the pin-prick closes at once, and does not leave the slightest trace.

A General Practitioner.—The charges are reasonable, and, if the patient is so too, our correspondent should have no trouble.

OUR POLICE DRESS.

To the Editor of THE LANCET.

SIR,—I am glad you have called the attention of the public to the urgent necessity of providing a summer garment for our police. I am happy in reporting that in this county our defenders of life and property are enjoying the luxury of freedom from a Siberian costume which weakens the body and impedes respiration. For many years I have advocated this sanitary improvement, which has received the approval of medical authorities; and I am at a loss to understand why all the counties in England should not participate in the same privilege which has been conferred on the county of Somerset. I suppose the tyranny of routine blocks the way to reform. Rural "letter-carriers" equally deserve our sympathy, and they ought to be supplied with some "relief dress" when the thermometer stands, as it does this day, at 100° in the sun. Poor fellows! No wonder the farmers occasionally volunteer a drink of cider for these thirsty souls as they travel life's dusty journey; and if the draught could be supplemented with a trifle of bread and cheese it would be all the better for the "postal stomach." These sons of toil not only carry heavy bags of letters and newspapers, but are handicapped with parcel-post consignments, weighing from 10 lb. to 11 lb. of fish, flesh, and fowl. I know a rural post-carrier who walks, heavily laden, eighteen miles a day. At one time he was a well-to-do shoemaker, but boot and shoe machinery and competition took the bread out of his mouth. The dignity of labour is well illustrated in the daily life of this worthy disciple of St. Crispin. I wish he could look forward in his old age to a retiring pension. Hoping that this appeal will reach the authorities in Scotland Yard and the General Post Office,

I am, Sir, yours faithfully,

ARTHUR KINGLAKE,
Justice of the Peace for Somerset.

Haines Hill, Taunton, July 20th, 1886.

HYDATID DISEASE IN VICTORIA.

HYDATID DISEASE has so rapidly increased in Victoria that the Central Board of Health have issued a circular to all local boards pointing out the danger of drinking open natural waters to which dogs and other animals have access unless the water be first well boiled. The number of deaths from hydatid disease in Victoria during 1884 was fifty-nine.

"CIRCUMCISION UNDER THE INFLUENCE OF COCAINE."

To the Editor of THE LANCET.

SIR,—With reference to the interesting case of circumcision reported in your last issue as having been performed under the influence of cocaine by Dr. Atkinson, I beg to send you short notes from my case-book of two cases I operated upon last year with similar success.

CASE 1.—Jan. 13th, 1885. H. G——, aged nine. Sixteen minutes after injecting into the prepuce five minims of a 2 per cent. solution of cocaine in two places, and after smearing the prepuce all over twice with the solution, the operation was completed without the little patient suffering any pain.

CASE 2.—Feb. 12th, 1885. A. C——, aged four. The same steps were followed in this case, and an equal absence of pain during the operation was noted.

I have also performed the operation of removing a piece of skin from the lower lid for entropion with success, under the influence of cocaine, in an old woman aged sixty-seven. The same amount was injected as in the cases of circumcision, and the operation performed without causing any pain twenty minutes after the first injection.

It is well that such cases as the above should be from time to time reported in your valuable journal, as I feel convinced that the use of cocaine by the general practitioner is not so extended as is warranted by its well-authenticated anæsthetic properties.

I am, Sir, your obedient servant,

WM. THOS. JACKMAN, M.R.C.S., &c.

Coggeshall, Essex, July 17th, 1886.

PRINCIPALS AND ASSISTANTS.

L.R.C.P. & S. complains of the way in which he, as an assistant, was treated by his principal with regard to the mode of dismissal—viz., with only one week's notice. "L.R.C.P. & S." suggests that assistants upon engagement should make certain that a month's notice will be allowed before their services are dispensed with.

W. H. Munro, M.A., M.D. &c.—The gentleman referred to has no legal right to use the title mentioned on the strength of the qualifications named. But we hesitate to advise our correspondent to commence litigation. Law for almost anything is a doubtful remedy; for the use of false and misleading titles it is especially so.

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ERRATA.—The latter clause of the last sentence but one in Dr. Morison's letter published last week, page 147, should read thus: "*In* others, anxious and quite possibly able to act efficiently, the tradition of his class, being unable to cope with difficult cases, withholds that public confidence," &c.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Poore, London; Dr. Steavenson, London; Dr. Aveling, London; Mr. E. D. Bower, Gloucester; Dr. McK. Johnston, Edinburgh; Mr. Vickers, London; Mr. Craig, Llandudno; Dr. Strain, Mexico; Messrs. Griffin and Co., London; Dr. J. H. M. Martin, Blackburn; Mr. Allen, Bury St. Edmunds; Mr. Cookson, Eastbourne; Dr. Ward, Leeds; Dr. Alder Smith, London; Mr. A. Kinglake, Taunton; Mr. R. Parker, Liverpool; Dr. Haig-Brown, Godalming; Mr. C. F. Bryan, Leicester; Dr. Seaton, Sunbury; Major Colwell, Portsmouth; Messrs. Bates, Hendy, and Co., London; Dr. Bond, Gloucester; Messrs. Walker and Co., Egham; Mr. Fuge, Taunton; Mr. Logan, Carlisle; Mr. Baron, Manchester; Mr. Normandy, London; Dr. Hime, Bradford; Mr. E. Ward, Leeds; Mr. Juler, London; Dr. Ward, Stevengate; Dr. Fenton Jones, London; Dr. J. B. Hamilton, Lucknow; Dr. Anderson, Culter Cullen; Dr. Roundtree, Colombo; Dr. Quinlan, Dublin; Mr. Praeger, Victoria; Mr. P. Swain, Plymouth; Dr. Fenwick, London; Mr. H. Power, London; Mr. T. E. Marston, Welshpool; Dr. R. T. Cooper, London; Mr. Leisching, Streud; Mr. Jefferson, Ripon; Dr. Arthur Harries, London; Mr. A. W. Clark, Wisbech; Mr. A. T. Sibbald, Richmond; Dr. W. Ewart, London; Messrs. Putnam's Sons, New York; Dr. Cook, London; Dr. Skerrett, Bristol; Messrs. Allen and Hanburys, London; Dr. Croke, Hull; Dr. Campbell; Mr. Hopkinson, Notts; Mr. Gibson, Aberystwith; Mr. R. Owen, London; Dr. Hayem, Paris; Mr. Lankester; Mr. Wilson, London; Mr. Lewis; Mr. Scarr, Brighton; Dr. Symes, Halifax; Mr. Solomon, York; Dr. Adam, West Malling; Mr. Robinson, Sheffield; Dr. James, Winslow; Mr. Birchall, Liverpool; Dr. A. Morison, Highbury; Mr. G. B. Jesse; Durham; A General Practitioner; An Experienced Patient; R. H.; B. R., Rugby; Matron, Canterbury; J. C. C., Liverpool; M. E. L., Saxmundham; L.R.C.P. & S.; F. E. S.

LETTERS, *each with enclosure*, are also acknowledged from—Mr. Galey, Tipperary; Mr. Hopkinson, Nottingham; Messrs. Black, Edinburgh; Dr. Lediard, Carlisle; Mr. Fox, Bristol; Mr. Mackay, Esk; Mr. D. Foote, Rotherham; Dr. McCormac, Huddersfield; Messrs. Eason and Sons, Dublin; Mr. Ramsden, Halifax; Mr. Nutall, Bury; Dr. Jones, Treherbert; Dr. Dobrashan, Pera; Mr. Crosier, Lytham; Messrs. Green and Son, Beverley; Mr. Heywood, Ashton-under-Lyne; Mr. Pode, Ivy Bridge; Mr. Laskay, Hambrook; Mr. Morgan, Treherbert; Mr. Duke, St. Leonards; Mr. Winchworth; Mrs. Spencer, Sheffield; Mr. White, Wolverhampton; Mr. Gwynne, Bermondsey; Mr. Pritchard, Eastbourne; Mr. Wigglesworth; H. Sigeon, Bournemouth; Omega; E.; Beta; Surgeon; Medicus, Brixham; Box, Uttoxeter; Medicus, London; W. T., Loftus; Student, Glasgow; Zeta; C. D. M.; C. B., Whitechapel; Medicus, Aberdeen; T. H., Manchester; M. W., Tottenham; H. B., Mitcham; Surgeon, London; B.A.; Medicus; Cato, Blackpool; H. S.; C., Hoxton; Veritas, Leeds; J. R.; J. P., Camberwell.

North Star, Cape Argus, Egyptian Gazette, Kentish Mercury, Cork Daily Herald, Venice News, The Bat, International Record of Charities and Correction, Fifty Years' Progress (Special Number of "Imperial Federation") &c., have been received.

Medical Diary for the ensuing Week.

Monday, July 26.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesdays, same hour.
CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2 P.M.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.

Tuesday, July 27.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.
CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

Wednesday, July 28.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesdays and Thursdays, 1.30 P.M.
ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department, Tuesdays and Fridays, 9.30 A.M.
ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.
LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.
GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.
KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; and on Friday, 2 P.M.; and Saturday, 1 P.M.

Thursday, July 29.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

Friday, July 30.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Saturday, July 31.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.

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Quarter Page	1	10	0
Half a Page	2	15	0
An entire Page	5	5	0

The Publisher cannot hold himself responsible for the return of testimonials, &c., sent to the office in reply to advertisements; copies only should be forwarded.

NOTICE.—Advertisers are requested to observe that it is contrary to the Postal Regulations to receive at Post-offices letters addressed to initials only.

An original and novel feature of "THE LANCET General Advertiser" is a special Index to Advertisements on page 2, which not only affords a ready means of finding any notice, but is in itself an *additional* advertisement.

Advertisements (to ensure insertion the same week) should be delivered at the Office not later than Wednesday, accompanied by a remittance.

Answers are now received at this Office, by special arrangement, to Advertisements appearing in THE LANCET.

Terms for Serial Insertions may be obtained of the Publisher, to whom all letters relating to Advertisements or Subscriptions should be addressed.

Advertisements are now received at all Messrs. W. H. Smith and Son's Railway Bookstalls throughout the United Kingdom and all other Advertising Agents.

Agent for the Advertising Department in France—J. ASTIER, 66, Rue Caumartin, Paris.

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Lectures
ON
DISEASES OF THE LACRYMAL APPARATUS.

Delivered at the Royal College of Surgeons.

BY HENRY POWER, F.R.C.S.

LECTURE I.—PART I.

DISEASES OF THE LACRYMAL GLAND.

GENTLEMEN,—The diseases of the lacrymal organs have attracted the attention of surgeons and physicians from the most remote periods, for it was impossible that inflammations and tumours of these parts, with their attendant symptoms of pain and redness, closure of the lids, temporary loss of vision and oftentimes severe constitutional symptoms, could be overlooked; and we accordingly find that the oldest practitioners with whose writings we are acquainted—Galen, Celsus—nay, even Hippocrates himself—described the symptoms, devised means of relief for the acute kind, and suggested various proceedings to prevent their recurrence.

The lacrymal apparatus is of a very complicated nature; the causes leading to disease in it are very diverse; the conditions presented vary greatly in different cases, and require for their treatment a corresponding knowledge and intelligence on the part of the surgeon. It is not surprising, then, that the treatment adopted, from limited experience in one class of cases by one surgeon, should be found wholly inadequate and inefficient by others in a different class; and hence has arisen a wealth of remedial means, and such an armamentarium of instruments as is scarcely to be equalled in any other department of surgery—a sure sign of uncertainty in their application and disappointment in their effects.

An additional reason for the unsatisfactory nature of our treatment of lacrymal disease is to be found in the circumstance that we possess very little information in regard to the morbid conditions which accompany or cause the diseases that are so familiar to us. I think I am correct in saying that neither in this museum nor in any other belonging to the great schools of the metropolis, with the exception of St. Bartholomew's, is there a single preparation showing the normal or diseased condition of the lacrymal apparatus. Lacrymal disease does not prove fatal, and when it has been known to exist, the condition of the lacrymal gland, sac, and duct has not been investigated, because such an examination would involve very considerable disfigurement of the face. Nothing, in fact, can show more clearly the great importance, in the scientific development of medicine and surgery, of a thorough knowledge of pathology. If we possessed such knowledge in the case of lacrymal disease, our treatment, which is now purely empirical, would at least become rational, and the various plans of treatment which have been found occasionally to prove successful, and very frequently to fail, would be applied in those cases only for which they were especially adapted.

A few facts in regard to the statistics of lacrymal disease may be mentioned. Taking three years, and using the numerous tables of various ophthalmic institutions and practitioners in Michel's *Jahresbericht*, it appears that the proportion of lacrymal diseases of all forms to other diseases of the eye in a total of 500,000 is about 3 per cent. This may be taken as well assured, though special observers vary in their statements from 2 per cent.[1] to 6 per cent.[2] The records of the books of St. Bartholomew's Hospital show that during the ten years from Jan. 1st, 1874, to Dec. 31st, 1883, the total number of in-patients was—males 1685, females 1430. The number of cases of lacrymal disease amongst the males was 27, or 1·6 per cent. The number of cases of lacrymal disease amongst the females was 61, or 4·26 per cent. Taking both sexes together, the proportion is 2·8 per cent. The records of the out-patient book show that during the same period there were in attendance 2337 males and 1934 females. Disease of the lacrymal apparatus was noted in 71 males and in 119 females, or 3·16 per cent. of the males and 6 per cent. of the females, or together 4·58; but some of these were probably discharged in-patients who were directed, on leaving the hospital, to return in order that treatment might be continued. The diseases of the lacrymal gland appeared to be more prevalent in some years than in others. Thus, whilst there were 8 cases in 1874, 12 in 1875, 11 in 1876, and 11 in 1877, in 1878 the number rose to 38, and in 1879 there were 32 cases; in 1880 the number fell again to 11, in 1881 it was 17, in 1882 it rose to 33, and in 1883 it was 17.

It is acknowledged by all who have compared the numbers that women are much more subject to lacrymal disease than men, the proportion being about two or even three to one. Thus, Nieden found in his practice 62·1 per cent. of females and 37·9 of males; v. Hasner, 74·5 per cent. of females and 25·5 of males; Schirmer, 67·0 per cent. of females and 33·0 of males. The cause of this disposition on the part of women is not easy to explain. Men are certainly more exposed to variations of weather; but then their activity is greater, and we may refer the difference with some probability to the sedentary occupations of women, to their greater proclivity to tears, and perhaps to the smaller calibre of all the ducts.

Nieden has advanced evidence to show that there is a hereditary tendency to lacrymal disease in all its forms—epiphora, stricture, and dacryocysto-blennorrhœa. In 9 per cent. of all lacrymal affections parents and children were affected, and the proportion in which the hereditary transmission occurred from mother to child was 63·3 per cent., whilst from father to child it was only 36·7 per cent. There was thus shown to be a special predisposition in children whose mothers had been affected. All authors agree that the lacrymal organs of the left side are more liable than those of the right. The following table shows the proportion in percentages:

	v. Hasner.		Schirmer.		Mooren.	Nieden.
Both eyes	11·8	...	29·3	...	13·7	58·0
Right eye	32·2 } 82·2		26·6 } 70·7	...	86·3 }	26·2 } 42·0
Left eye	56·0 }		45·1 }			15·8 }

The nomenclature of the different affections of the lacrymal apparatus varies so much that it is difficult to draw any conclusions as to their relative frequency. For example, in the very complete statistics issued by the Presbyterian Eye, Ear, and Throat Charity in the States, there were 148 cases of abscess of the sac in 939 cases of lacrymal disease occurring amongst 22,335 general patients. Mooren, on the other hand, amongst 32,425 ophthalmic patients, only met with one case of dacryo-cystitis, which, if not a typographical error, is remarkable.

Having made these preliminary observations, I think that this lecture may be profitably devoted to the diseases of the lacrymal gland. I do not propose to enter into minute detail in regard to its structure, because when I had the honour of being the Arris and Gale Lecturer in this place I gave as fully as I was able the results of modern histological research. Nevertheless, it may be worth while to recapitulate the chief points of interest in regard to the anatomy and physiology of the gland and its secretion. In the first place, then, the lacrymal gland is divisible into two parts: a larger solid bean-shaped body, occupying the hollow in the outer part of the orbital plate of the frontal bone; and a smaller, thinner, or flattened portion, separated from the former by a fibrous septum, and lying in front of and beneath it. The former is the ganglion innominata of Galen, the latter the accessory gland of Rosenmüller, and they are sometimes named the orbital and palpebral portions of the gland. The orbital plate of bone is curiously cancellous in some skulls at the part where it has been in immediate relation with the gland, as is well shown in this negro's skull. [No. 1225, Negro, Hunterian Museum.]

The histological characters of the orbital portion of the lacrymal gland are those of an albuminous gland. In the fresh state the cells are so crowded with granules that their limits are not easily defined, though they may be rendered distinct by the addition of dilute acetic or chromic acid.

[1] Hasner: Beiträge zur Anat. und Phys. des Thränenableitungs apparat. Prague, 1850, p. 66. [2] Wecker, 1st edition.

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They possess an oval nucleus. The cell protoplasm is finely fibrillated. When stimulated (Reichel[3]) the cells, like those of the albuminous glands generally, become smaller and more granular. Heidenhain[4] remarks that the excretory ducts of the lacrymal gland differ from those of other albuminous glands in the absence of the usual rod-like character of the cells. In many parts there are blind tubes lined with columnar epithelium. The glands are fairly supplied with bloodvessels, the chief artery being a special branch of the ophthalmic. The nerves supplying the gland are derived from the fifth and sympathetic, as well as perhaps from the subcutaneus malæ; and Boll describes both medullated and plain nerve fibres running to the alveoli, whilst numerous branched cells are found between the alveoli, the communication of the processes of which form a kind of plexus. Under ordinary circumstances the orbital portion of the glands acts only very slightly or not at all. On the other hand, there is pathological evidence to show that the palpebral portion always secretes and aids in maintaining the brightness and polish of the cornea. The secretion of tears can be called forth by exposure of the nerves in the orbit and stimulation by electricity or other means. Usually, however, it results from reflex stimulation, either through the sensory branches of the fifth distributed to the conjunctiva or nose, or through the optic nerve, on exposure of the eye to a bright light, by strong irritation of almost any sensory nerve, by mental emotion, and by any condition causing flushing of blood to the head. Stimulation of the sympathetic causes the secretion to become cloudy. Section of the fifth has been observed to be followed by paralytic secretion.

The quantity of tears secreted is believed by Magaard[5] to be at the rate of one drop per twenty minutes. They are clear, watery, alkaline, and of saline taste. The composition of the tears probably varies in different people, but the fluid usually contains only 1 per cent. of solids, the chief salt being sodium chloride.

Luxation.—That, well protected as the lacrymal gland is, it may be luxated either by external violence or by disease developing in the deeper parts of the orbit, is demonstrated in various cases that have been reported. One of these is given by Dr. Rampoldi[6], in which a blow with a stick in the temporo-parietal region was followed in the course of a month by the formation of a retro-bulbar abscess. An opening was made at the upper and inner part of the orbit and the pus evacuated; a drainage-tube was inserted and antiseptic injections employed. The exophthalmos subsided, and there was no impairment of vision. Osteo-periostitis with a fistulous passage formed, and gradually ectropion took place; the lid became quite everted, and so much retraction occurred that the gland was gradually luxated from its position and drawn down till it appeared beneath the conjunctiva. Finding that he could not replace it, M. Rampoldi destroyed it by the plan suggested by Borelli to remove staphyloma. A case has been recorded by Snell,[7] and another has been met with by v. Graefe,[8] in which prolapse of the gland occurred as the result of an injury. It is to be noted that in such cases the ablation of the gland is not to be taken as a matter of course, for v. Graefe replaced it in its natural position, applied a suture or two to the eyelid, and cured the patient.

Dacryo-adenalgia.—Persistent pain of the lacrymal gland, long ago diagnosed and described by Schmidt under the term "dacryo-adenalgia," is characterised by severe tension and lancinating pain in the region of the gland. Intolerance of light is experienced, but there is or may be no suffusion of the conjunctiva. The chief symptom appears to be great increase in the quantity of secretion discharged, which in one instance reported by A. Schmidt amounted in twenty-four hours to no less than 2 lb. 7½ oz. In such cases the lids are apt to become sore. A scrofulous inflammation of the globe of the eye extending to the gland may be the primary cause of this lesion. The affection increases gradually in intensity, and it has no tendency to run into suppuration. It occurs most frequently in children, in women, especially in the puerperal state, and may be the consequence of undeveloped gout. The conditions that cause or, at least, intensify it are exposure to bright light, disturbance of the cutaneous or other secretory organ, mental excitement, and great variations of temperature. The prognosis is, on the whole, favourable; but the affection is liable to become chronic, and relapses are apt to occur.

The treatment consists in the application of heat, care being taken not to arrest the secretion too suddenly lest violent inflammation supervene. Hence, warm ethereal or spirituous applications are best, especially poultices of ethereal plants, infrication of mercury and of camphor, with or without opium. The general treatment is of still greater importance, and the remedies applied must be adapted to restore the bodily health of the patient. Locally, a solution of five grains of watery extract of opium to an ounce of water, with spirit of chamomile, compresses of lukewarm water, renewed every hour, and poultices of alum or zinc sulphate, are the applications recommended by the authors I have mentioned.

I have seen one case of this disease in a stout woman aged sixty. The pain was accompanied by violent itching, which caused her to rub the eyebrow so much that she had rubbed off all the hairs. She attended the hospital at intervals for several years and a great variety of remedies were tried for her, both local and general, but without effect. No cause could be ascertained for the affection.

Dacryo-adenitis.—Inflammation of the lacrymal gland is undoubtedly a rare disease, both in its acute and chronic form. Arlt[9] states that he has never seen a case of it. Desmarres[10] observes that in a large practice extending over many years no example had fallen under his notice. Deval,[11] perhaps with more accuracy, states that he has never been able to diagnose a case. Hirschberg[12] says that he only saw one case of suppurative inflammation of the gland in 22,000 cases. Galezowski,[13] during the four years he was chef de clinique to Desmarres, saw no example of it. Lawrence[14] observes: "I do not remember having seen either of these affections" (acute or chronic inflammation), and he thinks he must have either overlooked diseases of this organ which have been noticed by others or have mistaken them for other affections. Nevertheless, in support of his own observation, he goes on to say that in twelve of the annual reports of diseases treated at the London Ophthalmic Infirmary, embracing a total of 40,000 cases, the lacrymal gland is not even mentioned in the list of diseases. There is only one case of abscess of the lacrymal gland referred to in the indices of the Royal London Ophthalmic Hospital Reports. Beer, whose practice was very large, only saw it a few times in the course of twenty-seven years. Velpeau, commenting on the exceptional rarity of inflammation of the lacrymal gland, compares it with the pancreas in this respect. He had seen three cases of the disease.

It is not difficult to assign reasons why inflammation of this gland should be of exceptional occurrence, for it occupies a position that is remarkably protected both from injury and from cold. Then, again, the product of its secretion is of so limpid and watery a character that concretions from inspissation or deposition are extremely rare, whilst it is discharged by ducts which, though very fine, are yet numerous, and perhaps communicate, so that there is little risk of the secretion being retained. Indeed, an arrest of the discharge of tears, either by constriction or occlusion of the ducts, is very rarely seen even by those who have large opportunities of treating ophthalmic diseases, and I only know of one instance where congenital absence of tears has been observed. This case was a child exhibited by Mr. Stanford Morton to the Ophthalmological Society on Jan. 10th, 1884. No tears had ever been seen to flow from the right eye. The difficulty that is experienced in diagnosing inflammatory affections of this gland from inflammation of the lids and of the connective tissue of the orbit, hinted at by Mr. Lawrence, is occasioned by the depth at which it is situated below the surface, and by the swelling of the lids which accompanies any inflammation at the upper and outer part of the orbit, which renders it difficult to determine whether the gland is really swollen or not. Nevertheless, however rare in the practice of some surgeons, it has occurred with much greater frequency in that of others. Schmidt, for example, who wrote a treatise on the diseases of the lacry-

[3] Arch. f. Mik. Anat., B. xvii., p. 1.
[4] Handbuch der Physiologie, B. v., p. 90.
[5] Virchow's Archiv, B. lxxxix, p. 258. See also Gad., Dubois Reymond's Archiv, Supp., 1883, p. 72.
[6] Annali d'Ottal., an. xiii., fasc. 1.
[7] Ophth. Rev., vol. i.
[8] Archiv f. Ophth., 1866, B. xii., p. 224.
[9] Lehrbuch.
[10] Traité des Maladies des Yeux. 1854, p. 262.
[11] Maladies des Yeux.
[12] American Journal of Ophthalmology, 1879, p. 369.
[13] Recueil d'Ophth., 1881, p. 65.
[14] Treatise on Diseases of the Eye, 1844, p. 798.

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mal organs, met with and described many cases; Todd had the same fortune; Travers[15] says that the gland often suppurates in children. Lawrence, in alluding to these cases, sarcastically observes that he has met with some recorded cases in which inflammation and suppuration of the lacrymal gland are *said* to have occurred. "The mischief began in these instances with a blow. I believe them to have been merely abscesses of the lid; at least, I see no circumstances to prove that the lacrymal gland was involved in the affection."

Galezowski, in the memoirs just referred to, reports nine cases that have occurred under his observation, and he notices that they presented an epidemic character; for whilst he only saw one case in each of the years 1869, 1873, and 1880, there were no less than six in 1875, and in this year mumps was prevalent. It is probable that this affords some clue to the varied experience of different surgeons, and some support is given to it by the history of a case reported in the Transactions of the American Society of Ophthalmology two years ago by Pooley,[16] which is suggestive in this direction. The interesting and unusual feature in this case was the occurrence of an acute inflammation of the gland during the course of an acute diphtheritic inflammation of the other eye, raising the question in my mind whether it might not have been caused by septic absorption. In the discussion which followed the reading of Dr. Pooley's paper, however, Dr. Knapp observed that the cases he had seen had no infectious origin, and in the majority of cases there was no conjunctival complication.

In acute inflammation of the lacrymal gland, the patient, after suffering from chills and general malaise for a day or two, experiences sharp lancinating pains in the region of the gland, extending over the side of the head and towards the parotid gland, which is usually swollen and tender. The conjunctiva is either dry or moister than natural, and the swelling of the gland causes the globe of the eye to be displaced downwards and inwards, so that squinting and diplopia occur. Any rolling movement of it is painful, and it is sensitive and tense. There is usually considerable redness and swelling of the upper lid, especially near the outer angle, and this occasions a mechanical ptosis, the patient being unable to raise the lid. It is tender to the touch. In the earlier period of the disease the margin of the gland can be recognised as a hard resistant border, with a groove between it and the margin of the orbit, and at this period, on raising the upper lid, the gland may be seen to project into the conjunctival sinus. At a later period the swelling of the lid is too great to allow the gland to be either felt or seen. The conjunctiva is generally red, inflamed, and chemosed, especially near the outer canthus. If the disease develop rapidly, the symptoms described by some authors probably occur—such, for example, as cerebral excitement, sleeplessness and delirium, which have been attributed in part to the pain, and in part to the implication of the dura mater. Himly,[17] who speaks as though the affection were of common occurrence, remarks that the symptoms of the acute stage are followed by a period when the acute stabbing pain ceases, whilst the tension still remains extraordinarily great and a feeling of pressure and of cold is experienced. The pressure of the swollen gland interferes with the function of the optic nerve, and photopsiæ or luminous phenomena and impairment of vision have been noticed, both probably arising from mechanical pressure upon the optic nerve. After a few days suppuration takes place, and gives rise to a feeling of fluctuation beneath the skin and orbicularis, through which it ultimately bursts near the outer angle or into the conjunctival sac.

The causes to which it has been attributed are rheumatism, sudden exposure to cold, especially in gouty subjects—as, for example, immersion in cold water whilst heated and perspiring; and Schmidt, Travers, and Galezowski consider that children of a scrofulous habit of body between the ages of seven and twenty are especially liable to it. In Galezowski's seven cases, however, the ages were sixteen, twenty-six, twenty-six, twenty-seven, forty-eight, and fifty-six—ages which do not bear out the above statement. Of these cases four were males and three females. I have seen three cases at least, and these were all in women; one was twenty-four, the second thirty-four, and the third forty. Acute inflammation of the gland has been observed to recur. Fulton[18] gives a case of acute primary inflammation of the lacrymal gland occurring twice in the same individual. The patient was a woman aged twenty. No cause could be assigned for the affection. An interval of three years occurred between the attacks. Both attacks subsided under general and local antiphlogistic treatment: leeches, hot compresses, and iodide of potassium. In some fortunate cases the inflammation terminates in resolution, and the patient suffers no further inconvenience, the swelling gradually diminishing, and the eye, if affected, resuming its function. In other instances the acute inflammation subsides, but is succeeded by chronic enlargement and tenderness. In still other cases suppuration takes place in the course of a week, and recovery follows, though usually with some secondary trouble, such as the formation of a fistula or a puckered cicatrix and retraction of the upper lid, and not unfrequently considerable impairment of vision.

As regards treatment, the abortive plan may be tried in the early stages of the inflammation, with the view of preventing the occurrence of suppuration. An emetic may be administered, and after it has acted a mixture containing quinine and iodide of potassium should be prescribed. Locally, the best means to employ are six or eight leeches to the eyelid, and lotions containing belladonna and acetate of lead, or the upper lid may be brushed over two or three times with iodine tincture. When the pain is very severe opium should be given. When it is clear that pus has formed, the earlier it is opened the better for the patient. As already stated, a delicate sense of touch is required to recognise the presence of pus when deeply seated and covered by such a tissue as the œdematous eyelid, and little benefit accrues from plunging a knife into the gland whilst the abscess is still immature. Travers[19] states that the abscess, when it has maturated, may be conveniently discharged beneath the lid with a narrow curved bistoury. Himly,[20] on the other hand, recommends that the abscess be opened through the skin with a lancet, the flat surface of which is kept parallel with the fibres of the orbicularis; and he maintains that owing to the swelling of the lid it is seldom possible to open it through the conjunctival sinus, though he was on one occasion able to accomplish it. A tent soaked in boracic acid may be left in the wound, even when it has been opened under very strict antiseptic methods, in order that the cavity of the abscess may granulate from the bottom. In many instances the inflammation has been so violent that the margin of the orbit or the orbital plate of the frontal bone is necrosed, and the abscess, instead of healing completely, ends in the formation of a fistulous passage, into which a probe may often be passed for a considerable depth, and then strikes on rough and exposed bone. Under these circumstances a free incision should be made, and the diseased bone brought into view, and if possible gouged or rasped away. When, however, the orbital plate of the frontal bone is necrosed, it must be left alone till it has completely separated. It must be remembered that the plate is very thin, that the substance of the brain cortex is in very close proximity, and that laceration of the surface, or its penetration by splinters of bone, or even the mere entrance of pus into the vessels and into the cavity of the cranium, might be attended with fatal results. In some cases the fistulous opening appears to communicate with one of the ducts of the gland, and in that case a minute opening appears upon the skin or upon the conjunctival surface, from and through which a clear transparent fluid constantly distils in drops. This affection is termed "dacryops," or true lacrymal fistula.

Non-suppurative acute dacryo-adenitis, which has been termed "mumps of the lacrymal glands," is also rare. Hirschberg reports a case occurring in a girl aged fifteen. There were bilateral swelling and injection of the upper lid, without chemosis or lacrymation. The swollen glands could be distinguished by palpation. Poultices and iodide of potassium were prescribed. Moderate chemosis subsequently occurred, and the right globe was displaced, causing diplopia. This state was persistent. The chronic form, according to Hirschfeld,[21] is not so exceedingly rare, but is generally secondary. It originates in scrofulous patients

[15] Synopsis, 1824, p. 233.
[16] Trans. Amer. Ophth. Soc., 1884, and Archives of Ophthalmology, vol. xiv., p. 162.
[17] Die Krankheiten des Auges, B. I., 1843, p. 279.
[18] Archives of Ophthalmology, vol. xiv., p. 161.
[19] Loc. cit., p. 233.
[20] Loc. cit., p. 279.
[21] Amer. Arch. of Ophth., 1879, p. 369.

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with protracted keratitis and profuse lacrymation. A reddish, tongue-shaped swelling, with granular surface, becomes visible between the upper lid and the eyeball towards the outer canthus when the patient rotates the eye downwards whilst the lid is raised.

TONSILLITIS, AND ITS RELATION TO SCARLATINA AND DIPHTHERIA.[1]

BY R. HINGSTON FOX, M.D., M.R.C.P.

INFLAMMATIONS of the tonsils present manifold varieties and gradations. It is convenient to include in the general term "tonsillitis" some forms of inflamed throat in which the implication of the tonsil is a less striking feature. The tonsils do not stand alone, but the mucous membrane in their vicinity is studded with nodules of similar structure—i.e., of lymphatic tissue; these are most abundant on the back of the tongue at its root, but exist also on the sides of the faucial aperture. The presence of these lymphatic organs is an especial characteristic of the fauces, and inflammations of the fauces, involving these structures generally, may well be included in the forms of tonsillitis. Catarrh of the fauces, however, such as is associated with nasal and pharyngeal catarrh, will not be considered here; it involves the tonsil little, if at all, and occurs in a different class of subjects from that affected by ordinary tonsillitis. Passing over the specific varieties, due to syphilis, tubercle, variola, &c., we meet commonly with certain clinical types of tonsillitis. By *true quinsy* I mean the recurrent "inflammatory sore-throat" (Trousseau), which results in abscess in or (more often) about *one* tonsil. The sudden onset, acute pyrexia, and rapid inflammatory œdema are distinctive features. We come next to the common tonsillitis, long since clearly described by Dr. Anstie,[2] who distinguished it from the suppurative form. The term "follicular" is often applied to this affection, being derived from the fact that the crypts on the surface of the tonsils, formerly called follicles, are often plugged with exudation (hence "spotted throat"); it is a bad designation, since the word "follicle" is now more often applied to the nodules of lymphoid tissue of which the gland consists. The name "septic tonsillitis" is provisionally adopted here.

A family of four children (age from four to eight years) began to ail three or four days after their return from the seaside in September, 1884. The eldest girl was affected with headache, sore-throat, coated tongue, and loss of appetite. The other three children followed. Each was slightly feverish, the highest morning temperature (in the mouth) being 100·1°, 100°, 99°, and 100·8°. The fauces were red, both tonsils were swollen, and in one case they presented little pocky eminences. Within a fortnight all were well. Some of these children have at various times suffered from sore-throats, true diphtheria, severe mumps, and rheumatism, as well as chronic enlargement of the tonsils. In searching for the cause of the tonsillitis, it transpired that, on their arrival at home, the children had drunk greedily from a covered in-door cistern in which the water had stood stagnant and tepid for several weeks.

These cases exemplify the leading features of septic tonsillitis in a mild form; its attacking a group of persons in one household, often children; the brief pyrexia; both tonsils are attacked at once, being swollen and reddened, and they may present small yellowish or greyish white patches. There is not the acute infiltration of the surrounding tissues seen in true quinsy. The cause seemed in these cases to be derived from impure drinking-water. Dr. Anstie attributed the affection to defective drainage or ventilation. As a rule there is no evidence of communication from one person to another.

This disease has now and then prevailed in extensive outbreaks—either in a certain district, or in a school or other large institution. Instances of the first are reported by Dr. F. P. Atkinson and others,[3] and by several French writers (Morell Mackenzie); of the second, by Mr. G. A. Cardew of Cheltenham,[4] and by Dr. Haig-Brown of Godalming in a paper lately read before the Association of Medical Officers of Schools. Is there any connexion between septic tonsillitis and true quinsy? Most English writers still make no distinction between them. Yet in typical cases they appear wholly distinct. Suppuration perhaps occurs in rare cases of the former affection, but this would not prove any connexion with true quinsy.

Tonsillitis, often of a severe type, is a prominent symptom in both scarlatina and diphtheria. This will be again referred to.

We pass on to cases of a more mixed and doubtful character. In the Proceedings of the Medical Society of London[5] outbreaks of "infectious sore-throat" are described by Drs. Farquharson, Routh, and Crisp. Dr. Routh's 46 cases occurred in a public institution in which the drinking-water was impure. Three types were distinguished—simple cynanche, sore-throat with diphtheritic patches, and scarlatina. Dr. Crisp's outbreak was located in Chelsea along the river-side, and was attributed to the opening of some large drains. There were 42 cases of "mild scarlatina," mainly in children, and 56 cases of "epidemic sore-throat" with large inflamed tonsils, mainly in adults who had had scarlatina already. Outbreaks of this mixed character have been described in several of Mr. W. H. Power's reports,[6] and by Mr. Hartnoll[7] of Exeter; others have been recorded by Dr. Bond[8] of Gloucester, Dr. Mantle[9] of Chester-le-Street, and Dr. J. Craig[10] of Llandudno. The last three accord with the description of "pseudo-diphtheritis" given by Dr. H. Ashby of Manchester in the *Practitioner* (vol. xxxi., p. 414).

These records show that it is not uncommon, in the presence of faults in the air or water supply, for temporary outbreaks of mixed forms of tonsillitis to occur, sometimes infectious in their character. Cases which would commonly be described as scarlatina and as diphtheria, with others of mere tonsillitis, are found together, with cases of a mixed type, wellnigh impossible to assign to either of the former classes, and all apparently depending upon a common cause. Or the latter type may alone be present (pseudo-diphtheritis). Such outbreaks seem to hold an intermediate position between tonsillitis and the specific fevers. This leads me to the following proposition: that scarlatina and diphtheria may be regarded as essentially forms of tonsillitis which have acquired infective characters; that is, they differ from other forms of tonsillitis in having the power of *infecting the system* generally, and producing the phenomena of a specific disease. In speaking of these diseases as forms of tonsillitis, I would not do so in any narrow sense. They belong probably to that large class of diseases whose poisons reach the blood by way of the lymphatic system, their distinguishing character being that they are prone to enter that system through the tonsil, setting up tonsillitis. In ordinary tonsillitis the poison scarcely gets further than the tonsil. The term "poison" is here used as a convenient expression for the organic *materies morbi*, capable of multiplication, and including (it is probable) both a bacterium and the products of its growth.

I digress here to say a few words on the functions of the tonsils in health. These organs consist of a mass of closed sacs or nodules, identical in structure with those of the solitary and Peyer's glands, and indeed of the ordinary lymphatic glands of the body. Some small mucous glands open into the crypts on the surface (Landois), but these are quite insignificant. The old view that the tonsils are secreting organs is untenable, since their structure is that of absorbent glands in general, aggregations of leucocytes enclosed in retiform tissue. Their functions also must be of the absorbent kind. In the July number of the *Journal of Anatomy and Physiology* I show some grounds for believing that this absorbent function is connected with the saliva; that from the constant slow stream of salivary fluid which is passing over their surface during the intervals between meals, the tonsils, being themselves nurseries of young leucocytes, absorb certain elements to minister to the growth of the white cells. This theory is not in any way essential to the present argument, but if true it would afford an interesting parallel, showing how closely pathological processes follow on the lines of physiology. Thus, in

[1] Abridged from a paper read before the Medical Society of London, April 5th, 1886.
[2] THE LANCET, 1867, vol. i., p. 392.
[3] Ibid., 1883, vol. i., pp. 29, 80, 81.
[4] Brit. Med. Journ., 1884, vol. i., p. 600.
[5] Vol. i., p. 124; vol. ii., p. 35; vol. iii., pp. 27, 112.
[6] THE LANCET, 1883, vol. ii., pp. 21, 376.
[7] Ibid., 1884, vol. i., p. 538.
[8] Ibid., p. 216.
[9] See Dr. Mantle's paper in British Medical Journal, 1885, vol. ii., p. 960. Dr. Mantle informs me that he sees many such cases, unequivocally infectious, occurring "in a crowded colliery district ..... houses too crowded and badly ventilated, and drainage very defective."
[10] British Medical Journal, 1886, vol. i., p. 110.

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health, food matter, perhaps a ferment, would be absorbed from the saliva and stimulate the tonsil to healthy activity. In disease, a poison, perhaps also a ferment, is absorbed from the saliva[11] and over-stimulates the tonsil; there is over-activity, multiplication of ill-formed cells, and other phenomena of inflammation.

To resume, the poison of septic tonsillitis gives rise to the clinical signs of a process of this kind, and little more. The products of its growth do, indeed, enter the system, and cause some brief constitutional disturbance; but the living poison itself has little power of overcoming the resistance of the tissues. The system is not infected by it; it soon dies or loses its toxic properties, being incapable of reproducing itself in the human body to any great extent, if at all. Other poisons of the same class, but better adapted for living in the human organism, thrive therein, infecting the system generally, and producing symptoms of graver character and longer duration—in fact, running through the course of a specific fever (scarlatina or diphtheria). Such a poison is able to go on reproducing itself in the human tissues for a considerable period, and without losing its poisonous properties, so that by the time it is (to adopt Dr. Fagge's expression) destroyed by the pyrexia which it has set up it has caused the series of lesions belonging to the specific fever. It has also by this time become enormously multiplied, and particles of the tissues containing the poison being shed and communicated to other human beings, set on foot in them like processes, being, in fact, *contagia*. Now, in the power which the poison possesses of so far overcoming the resistance of the tissues of the human body as to reproduce itself largely therein without marked deterioration, so that offspring remotely removed from the original stock still produce the same effects in the tissues of a fresh human subject,—in this power may we not recognise the characteristic of a *species* of disease? Some affections—e.g., various forms of infectious sore-throat—possess this power in a limited degree, and chiefly when associated with septic conditions (as the presence of putrefying matter in air or water, &c.); but scarlatina has apparently an indefinite power of reproduction, and largely independent of septic conditions. In accordance with the doctrines of evolution, we may suppose that the specific poison has been gradually developed from the group of non-specific poisons of tonsillitis, which present a varying capacity of infecting the system.

The above scheme contains much that is hypothetical, but it furnishes an explanation of the facts already stated, especially of the occurrence of "intermediate forms." Some further facts will now be added in support of the theory. It is a frequent observation, made by Trousseau and by many others since, that common tonsillitis is very prevalent when either scarlatina or diphtheria is epidemic. Again, all these diseases are often either dependent for their spread on septic conditions, or are more active under such conditions. Some believe that scarlatina occasionally arises *de novo* under such circumstances,[12] whilst many consider that diphtheria so arises.[13] "A striking feature of scarlatina is the great variability of its symptoms and of its course" (Fagge). Tonsillitis is, I submit, the most constant of its symptoms. It is notorious that in mild, scarcely recognised cases of scarlatina sore-throat is the only symptom observed. Yet such cases often communicate the disease.[14] In other rare cases it is stated that a rash has been present, and no affection of the throat. Space will not admit of reference to the literature of this subject; I will only say that there is fair ground for question whether a tonsillitis, too slight to cause any complaint, did not exist in all such cases. In some cases of scarlatina, again, we see the tonsils covered with a thick membranous investment. Thomas and others say that true diphtheria is then concurrent. Niemeyer, Senator, and I think most English authorities, hold, on the other hand, that diphtheritic pharyngitis may be the result of the scarlatinal poison alone. Whichever view be taken, there appears to be a close connexion between these two diseases.

Diphtheria has been classed as in an intermediate position between specific zymotic fevers and common local inflammatory diseases (Parsons), and some have even assigned it to the latter category. At any rate, it has not, as a specific fever, acquired the stability of scarlatina, measles, &c.[15] Oertels (in Ziemssen's Cyclopædia) and Loeffler have ably maintained that the process in diphtheria is at first entirely local, the constitutional effects being due to a poison developed at the seat of attack—i.e., at the fauces in ordinary diphtheria. The primary local lesion also presents great variety. Senator[16] describes four chief types, ranging from simple catarrh to fibrinous exudation. Yet the peculiar paralytic sequelæ may follow in cases where the throat lesion was so slight as to be unrecognised.[17] Some have maintained that ordinary tonsillitis is in rare instances followed by these paralyses.[18] Such cases surely belong to diphtheria; nevertheless, the statement illustrates our present point—the closeness with which this disease approaches to ordinary tonsillitis,—so that there is hardly a line of demarcation between them.

In "surgical scarlatina," the disease is said to be contracted by inoculation of the highly absorbent surface of recent wounds. Such a surface may afford facilities for the entrance of the poison into the lymphatic system; this would not controvert the more usual entry at the tonsils. (The notion that the infection may be received by the unbroken skin is now generally abandoned.) Diphtheria of other mucous surfaces and of wounds presents us, perhaps, with a parallel condition to that last mentioned. Whether in such cases the fauces are afterwards affected is a question not yet fully settled.

This necessarily brief treatment of a large subject may seem inadequate. The theory advanced is an honest attempt to explain existing facts.

[11] On the entrance of the virus of a specific fever into the system by becoming mixed with the saliva, see Dr. T. K. Chambers, in "Lectures chiefly Clinical," p. 74. Cf. Simon, in "Quain's Dictionary," p. 290.
[12] Mahomed, in THE LANCET, 1884, vol. i., p. 901; Vacher, ib., p. 868.
[13] Parsons, ib., p. 1165, at the Epidemiological Society.
[14] Hutchinson's "Pedigree of Disease," p. 57.
[15] Dr. Thorne Thorne at the Roy. Med.-Chir Soc., May, 1879.
[16] Germ. Clin. Lect., 2nd series, New Syd. Soc., p. 406.
[17] Tweedy, THE LANCET, vol. i., 1884, p. 1073.
[18] Pepper, System of Medicine, Philadelphia; also Senator.

ABDOMINAL SECTION FOR DISPLACED HERNIA.

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SOME years ago I assisted in the performance of an operation upon a young man who was suffering from intestinal obstruction. There was a history of congenital hernia, which had always been reducible. He had himself reduced it two days before, and had vomited almost continually ever since. The scrotal tissues were redundant, thickened, and lax; and the spermatic cord was obscured as by a hernial sac, which could not be separated from the testis, the latter being drawn up towards the external abdominal ring. There was a little fulness above the internal abdominal ring, with tenderness on pressure. Invagination of the scrotum through the inguinal canal showed that it was capacious, and that both the rings were much enlarged, but gave no further help in the diagnosis. It was decided to explore the inguinal region. The sac of a congenital hernia was opened, but, in spite of a free inguinal incision, the operator was unable to reach anything which could throw any further light upon the case; and it was with extreme difficulty that I, with considerably greater length of finger, could reach and bring down a knuckle of strangled bowel, and the patient was in some danger of remaining unrelieved. He made a good recovery.

The recorded cases of displaced hernia which have been relieved by operation are still comparatively few in number; and this fact alone would suggest the publication of the following case, even if it possessed no features of special interest; but I think that the method of operation, upon which I propose to offer a few remarks, is worth consideration, apart from the mere transference of the wound from the groin to the middle line of the abdomen. This, however, in itself is a gain; for although wounds of the peritoneum are not regarded with quite the same awe as formerly, we strive as far as possible, for reasons antiseptic, to keep them, in common with all wounds, away from the natural orifices of the body, and in situations where they can be easily, efficiently, and securely dressed. The notes of the case have been selected from the report of Mr. E. G. F. Morris, house-surgeon, and have been kindly arranged by Mr. Mayo, the resident surgical officer.

"James B——, aged fifty-nine, was admitted at noon on

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July 5th, 1885, suffering from symptoms of intestinal obstruction. He was a healthy-looking out-door labourer of fine physique, and said he had been the subject of a large rupture on the right side for the last fifteen years, and that on two occasions during the last two years it had become temporarily irreducible after unusual exertion, the irreducibility being accompanied by vomiting and constipation, but he was relieved by rest and opium, followed by taxis. With these exceptions the rupture had always been easily reducible. His medical attendant, who brought him to the infirmary, gave the following history of his present seizure. On June 27th (eight days before admission) he was suddenly attacked by a severe pain in the right groin whilst gardening, the hernia being down at the time. He reduced it without using more than customary force, and without observing anything unusual in its condition, either before or during reduction. But the pain was not relieved, and vomiting shortly afterwards set in, whereupon he sent for his doctor, who upon examination could make out nothing except an empty hernial sac occupying the right side of the scrotum and the inguinal canal. A dose of morphia was administered, which entirely relieved the symptoms, and the patient remained at work in apparent health until July 2nd, when there was a recurrence of pain and vomiting, which were again relieved by morphia. During this interval the hernia had not been perceptible. On July 3rd the symptoms again recurred, and a little fulness was detected in the region of the internal abdominal ring, which, however, disappeared under manipulation, and he felt easier. The bowels not having acted, an enema was given, which produced a scanty scybalous evacuation. At midday on the 4th he felt quite well, and a dose of castor oil was administered. At 5 P.M. he was again attacked with pain and vomiting. At 9 P.M. the localised fulness in the abdomen was again perceptible, but gentle massage caused its disappearance, together with the symptoms, which remained in total abeyance until 3 A.M. the following day, when they returned with marked aggravation, and he was brought to the infirmary, experiencing another complete remission before he arrived.

"On admission the man complained only of a little uneasiness, scarcely amounting to pain, which he referred somewhat vaguely to the right iliac fossa. Otherwise he seemed in good condition, presenting a bright and cheerful aspect, with a fresh colour, and cool, comfortable skin; pulse and respiration tranquil and natural. The tongue was slightly furred in the centre, but there was no vomiting, which had ceased an hour before. There had been no passage of fæces or flatus for two days. The abdomen was examined, with negative results. There was no distension or tenderness, neither could any abnormal masses or unusual resistance be detected anywhere, and the respiratory movements were full and free. The scrotum was very lax, and the right side was occupied by an empty hernial sac, which extended almost as low as the testis. Upon invaginating the scrotum and sac, the tip of the finger could be easily pushed through the inguinal canal to a point within the abdominal cavity, quite an inch beyond the internal ring. The rings and canal were much enlarged and free from obstruction, and no indication of hernia, tumour, or resistance of any kind could be detected within the abdomen. There was no other external hernia. Rectal examination revealed a slight fulness in the pelvis on the right side, but of so indefinite a character that little importance was attached to it, even in face of the fairly reasonable assumption of reduction *en masse*. In the total abeyance of symptoms, and having regard to the good general condition of the patient, operative interference was discarded as unjustifiable for the time being; but during the afternoon vomiting came on again, grew steadily worse, and towards evening became distinctly stercoraceous. Mr. Ward was again summoned, and decided to perform an exploratory laparotomy.

"Under ether, and with full antiseptic precautions, a median vertical incision about two inches in length was made midway between the umbilicus and pubes. Upon introducing a finger, the condition of things was at once recognised. Tracing the parietal peritoneum towards the inguinal region, the finger was arrested about two inches from the internal abdominal ring, at a point in line with it and the umbilicus. Here it was found that a portion of small intestine passed through an aperture about large enough to admit the index finger, and presenting a thickened tough margin. Judging by the amount of included mesentery, a considerable length of bowel had passed through the opening, and it was firmly held. The parietal peritoneum was obviously extensively stripped, for this constricting ring could be moved freely for a considerable distance in all directions, and, in fact, could be brought within view at the abdominal wound without much tension or any further stripping. Extending towards the pelvis, beneath the peritoneum, was a soft, rounded swelling about the size of an orange. An attempt was now made to withdraw the intestine by traction, but this was found to be impossible. The stricture was therefore freely divided, and then, with some little difficulty, the bowel was slowly teased out of its prison. It was swollen and deepened in colour, but of good polish and in sound condition. On further examination, it was found that when the finger was introduced into the mouth and neck of the sac it could be passed in two directions: on the outer side along the inguinal canal, lined by peritoneum; and on the inner side, through a rent in the neck of the sac, into an irregular cavity, limited on the one side by the outer surface of the stripped peritoneum, and on the other by the pelvic fascia, and it was into this cavity that the intestine had been displaced. It was laid open from end to end by a prolongation of the former incision. This was done in order to minimise the risk of further entanglement. After ascertaining that there was no hæmorrhage, the abdominal incision was closed by means of three deep sutures of wire, with intermediate ones of catgut, and an antiseptic dressing was applied.

"The subsequent history may be summarised as follows: The symptoms were at once relieved; flatus passed almost immediately after the operation; the bowels acted freely and spontaneously on the second day; and the temperature remained normal throughout. The wound was found to be healed, and the sutures were removed at the first dressing, which was on the fifth day. On the ninth day the patient was up and ready to go home, but was detained for the adjustment of a suitable truss. He went home on July 18th."

A noticeable feature in the history of the case was its close resemblance in every point to the classical descriptions of this condition: an oblique inguinal hernia of long standing; the patient in the habit of reducing it himself; the hernia reduced by the patient at the time of the accident, without anything unusual being noticed; and subsequently the irregularity, and for a time the comparative mildness, of the symptoms, with prolonged intermissions. I believe that it is next to impossible for reduction *en masse* to occur under the taxis of a surgeon who has been instructed in the merest rudiments of his art; and that it is always caused by forcible squeezing, and pushing and kneading over the fundus of the tumour, without any steadying or support of its neck; and after frequently observing patients go through this performance by way of demonstrating how a hernia should *not* be reduced, my chief wonder is that, displacement being possible, it is not an occurrence of much greater frequency.

With regard to the operation, it appears to me that the arguments in favour of a median abdominal incision infinitely outweigh any that can be urged against it. It makes the operation simple, easy, precise, and safe. There is no danger of wounding any large vessels or important anatomical structure; the trifling hæmorrhage is within view and absolutely under control; the diagnosis is either verified or negatived at once without difficulty, and if it should prove to have been at fault the abdominal cavity may be thoroughly explored for other causes of obstruction; besides this, the constricting band is much more easily reached and divided. Luke's description of the operation, which he performed almost half a century ago, is practically copied into all the modern text-books, and a few extracts from it may illustrate its disadvantages:—"An opening between three and four inches in extent was made.....The canal was next laid open by a division of the tendon of the external oblique muscle.....freely dividing the margin of the internal ring.....The sac should in all instances be opened, and its neck freely divided.....The extensive division of the abdominal parietes rendered extra precautions necessary against reprotrusion of the intestines."

But it is argued that this exploratory operation does not necessarily involve incision of the peritoneum before reduction *en masse* can be negatived. This may be true, but in that case what is gained? The patient has been subjected to an operation which in itself is not devoid of danger, which must necessarily reduce his powers, which has advanced the agnosis by a mere fragment of negative

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evidence, and which has left him unrelieved. What then, surgically speaking, remains? Laparotomy. If, however, a displaced hernia should be found, it can only be relieved by a peritoneal section in a situation where its risks are greater and its management more difficult. It may be said against laparotomy that it precludes any attempt at radical cure; but this, under such circumstances, is surely a minor consideration; and it is interesting to notice that the patient whose case is described above has not yet been troubled by any reappearance of his hernia. If the gut should be gangrenous, opening the sac into the general peritoneal cavity would appear to mean certain death from septic peritonitis; but we have apparently not yet thoroughly explored the resources of antiseptics, peritoneal irrigation, and enterorrhaphy; and I am not aware that there is any case on record in which a patient suffering from displaced hernia in which gangrene had supervened has ever recovered under any method of treatment.

Leeds.

THE

DISTRIBUTION OF PYÆMIC ABSCESSES.

BY STEPHEN PAGET, F.R.C.S.

IN THE LANCET of April 17th I published sixty cases of that form of parotitis which is secondary to some abdominal or pelvic lesion. This parotitis is very seldom accompanied by any other similar lesion; it is not evidence of true pyæmia, and it usually ends in recovery. There is reason for thinking that its connexion with the abdomen and pelvis is due to the lymphatic system.

Wishing next to see whether, in true pyæmia, the distribution of the secondary lesions is in any way related to the site and nature of the primary lesion, I analysed more than 500 recorded cases of pyæmia. They show clearly that the distribution of abscesses in pyæmia is not merely a matter of chance. Thus, abscess of the liver is related to fracture or section of a bone; pleurisy and pericarditis are more common after injuries of the limbs than after injuries of the head or of the trunk; certain lesions are plainly grouped together in certain sets of cases. It is hard to see how these facts could be explained as mere results of embolism. In all embolism, the emboli, wherever they are first formed, must all start fair again from the heart, after passing through the lung-capillaries; all have exactly the same chance of being lodged in this or that particular organ. If, then, the distribution of pyæmic abscesses is not haphazard, but subject to certain rules and combinations, these abscesses must be due, not to septic embolism alone, but to something else as well. This "something else" is probably a certain state of the tissues themselves, or of the lymphatic system. Perhaps pyæmia may here be compared to syphilis; in syphilis there is the constitutional disease, and also a special liability of certain tissues to the disease, and a special state of the lymphatics, shown by the general glandular enlargement. So in pyæmia, the state of the tissues themselves, and of the lymphatics, may work together with septic embolism in producing suppuration.

The importance of the lymphatics in pyæmia is well shown in Dr. Tilt's paper on "Lymphangitis in Pelvic Pathology" (Obstetrical Society, xvi.). It is easy among my 500 cases to pick out many where the serous and synovial membranes, which are really parts of the lymphatic system, have borne the whole brunt of the disease. Perhaps their importance may show itself if we take the questions which most naturally suggest themselves as to the pathology of the disease, and consider them with the help of the tabulated cases.

I. In pyæmia, does previous disease or weakness of any organ make it more liable to abscess? Thus Guthrie says: "I conceive the viscera in each person most predisposed to disease will be the most likely to be affected." Travers says: "In a person of phthisical diathesis the weight of the injury would fall upon the lungs, whereas in one subject to hepatic congestion it would probably fall upon the organs included in the system of the vena porta." And Lawrence says much the same. Evidence is not easily found in support of these views, but there *is* some evidence that a simple fracture or subcutaneous injury is likely to suppurate if the poison of pyæmia gets at it. This was shown by the experiments of Chauveau, Loeffler, and others, and by the following cases:—

1. Primary amputation of right thigh. Pyæmia; death. Post-mortem: "Une fracture de la côte, dont le malade ne s'était aucunement plaint. Le foyer de la fracture est rempli de pus louable et sans odeur." (Sédillot.)
2. Amputation of thigh. Pyæmia; death. Post-mortem: "The fourth rib was found fractured, and a small quantity of pus external to the pleura costalis." (Balfour.)
3. Fracture of both legs and of sternum: Amputation of right leg. Pyæmia; death. Post-mortem: "Left saphena vein full of pus; fracture of sternum bathed in dirty pus." (Path. Soc., xxx.)
4. Scalp wound with fractured skull; fracture of sternum. Pyæmia; death. Post-mortem: "Suppuration in portions of the fractured sternum." (Wilks.)
5. Compound fracture of right leg; fracture of humerus and of ribs. Amputation of leg; death. Post-mortem: "Suppuration round the fractured humerus; no visceral abscesses." (Wilks.)
6. Fracture of lower jaw. Pyæmia; death. Post-mortem: "Suppuration round simple fractures of thigh, humerus, and ribs." (Path. Soc., xxx.)
7. Venesection; phlebitis. Pyæmia; death. "A large abscess formed rapidly in the leg, at the spot where the patient had received a trivial injury just before the venesection." (Castelnau and Ducrest.)

II. Is there such a thing as a predisposition to pyæmia? Dr. Moxon says, "There must be something very special in the constitution of the person." But Braidwood says, "The majority of the victims are the healthiest of our race." Certainly, in some cases the rapidity and extent of the suppuration are astonishing: they seem to run to abscesses, to have a real "prédisposition à la purulence." Yet this may be due to some admixture of pyæmia with scrofula. Mr. Hewett's case is interesting here: A gentleman who recovered from pyæmia after tonsillitis died, four years later, from pyæmia after removal of a wart.

III. Is pyæmia from a slight wound worse than from a bad one? Mr. Bryant says: "After trivial accidents the pathological results were far more severe than after grave accidents. Suppuration involved a larger number of glands, as the liver, the kidneys, the spleen, and the heart." Dr. Chevers says much the same. My cases show a different result, as follows:—

		Liver.	Spleen.	Kidneys.
Severe injury of a limb, such as amputation, excision, compd. fracture (195 cases).	Marked disease	55	29	13
	Congestion &c.	15	19	14
Slight injury of a limb, such as venesection, or dissection wound, or whitlow (45 cases).	Marked disease	1	1	0
	Congestion &c.	0	2	1

This is roughly reckoned; but it is evidently opposed to the view taken by Mr. Bryant.

IV. The state of the heart in pyæmia. Dr. Wilks says of his large collection of cases: "In several cases it will be seen that the heart has been affected by purulent deposits; and it will be noticed that this occurred only in the very worst forms of the disease, and especially where a diffused abscess in a limb had been the source of the mischief." The heart is a muscle; and some muscles are more liable to pyæmic abscess than others. But perhaps it is not safe to argue from other muscles to the "musculus nobilissimus." The 500 cases appear to show that true abscess of the heart in pyæmia is most common after some lesion of the lower limb. Thus, in 97 cases of pyæmia from some genito-urinary lesion, not one had true abscess of the heart. One had purulent infiltration of the mitral valve; one had mottling of the heart, with softening patches; six had ecchymosis of the heart. But ecchymosis may proceed from very different causes—as from poisoning by strychnia, &c. In 77 cases of pyæmia from some lesion of the head or neck, 3 had true abscess, 3 had ulcerated valves, and 3 had ecchymosis. In 96 cases of pyæmia from lesion of the upper limb, 4 had true abscess, 1 had myocarditis, and 4 had ecchymosis. In 243 cases of pyæmia from lesion of the lower limb, no less than 21 had true abscess, 2 myocarditis, 4 ulcerated valves, and 9 ecchymosis. Thus abscess of the heart wall seems to be most common in pyæmia when the primary lesion is of the lower limb. The primary lesion was not, in all the cases, severe: in one it was a sore on the heel; in another it was a

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scratch on the foot. It is certain that pyæmia which starts from the lower limb does, as a rule, have a severe course, affecting many organs and many joints. Perhaps this fact is related to the fact that pyæmia does, to begin with, choose wounds of the lower limbs for its primary seat more often than wounds of any other part. Thus, in the American war, the statistics were as follows:—

After wounds of the lower limb, pyæmia occurred in			18·1	per 1000
,,	,,	upper limb,	,, 10·4	,,
,,	,,	trunk	,, 5·9	,,
,,	,,	head and neck	,, 2·5	,,

It seems natural that the poison which has entered the body at its favourite site should act with the full measure of its severity.

V. In pyæmia, is the inflammation of the serous membranes due merely to extension of inflammation from the viscera underneath? Thus Dr. Wilks says, "Inflammations of the serous membranes are altogether secondary to the inflammation of the tissues which the serous membrane covers." And Sédillot says much the same. It is hard to see why pleurisy and pericarditis in pyæmia should not be independent of pneumonia and myocarditis, just as the effusions into the joints are independent of the heads of the bones, or just as ordinary pleurisy and pericarditis are independent of pneumonia and myocarditis. Cases are not rare where there are large effusions into the pleuræ, but nothing wrong noticed in the lungs; and where there is pericarditis, but nothing wrong noticed in the heart. My 500 cases give the following figures:—

Cases of heart disease, no mention of pericardial disease ...	35
Cases of pericardial disease, no mention of heart disease ...	31
Cases where both heart and pericardium were diseased ...	25
Cases of lung disease, no mention of pleura	202
Cases of pleural disease, no mention of lungs	21
Cases where both lungs and pleuræ were diseased	191

Of course there are cases where the serous inflammations do result only from underlying inflammation, and are proportionate to it. But the following cases show that serous inflammations in pyæmia may occur separately:—

1. Wrist disease (male, aged forty-three). Post-mortem: Lungs healthy. In the right pleura two pints and a half of semi-purulent fluid; in the left pleura three pints. Pus in right knee. Spleen dark and soft. Veins healthy. (Path. Soc., xxx.)
2. Chilblains on fingers, phlebitis (female, aged thirty-six). Post-mortem: Pleurisy same side; bloody fluid in pericardium; serous meningitis. (Ribes.)
3. Injury to hip-joint at birth; death in seven days. Post-mortem: Pleura on same side filled with pus; abscess over wrist. (*Med. Times and Gaz.*, 1863.)
4. Purulent otitis. Post-mortem: A pound of puriform fluid in the opposite pleura; the lung collapsed. (Abercrombie.)
5. Purulent otitis (male, aged thirty). Post-mortem: Pleurisy on same side; pericarditis; peritonitis; abscess in opposite lung; abscesses in liver. (R. Reynolds, "System of Medicine.")
6. Dissection wound of finger. Post-mortem: Lungs congested; eight ounces of bloody fluid in each pleura; serum in pericardium; serous meningitis. Pus on knee in same side; ecchymoses of kidneys and intestines. (Travers.)

There are many more cases like these. Pleurisy, pericarditis, and meningitis seem to group themselves together, and to occur in association with effusions into the joints and into the synovial sheaths of the tendons, rather than with visceral abscesses.

VI. The favourite sites of abscess in pyæmia. First, of course, the lungs. Next, among the muscles, the pectorals and the calf muscles suffer most often—about one case in thirty. Abscess of the pectoral muscle appears in some cases to be due to the spread of suppuration from the axilla or neck, or from around the shoulder-joint or the sterno-clavicular joint. But in others it seems to begin in the muscle, or between the major and the minor, or beneath both. The following cases show this:—

1. Gonorrhœa (male, aged twenty-two). Effusions into various joints; pericarditis; large abscess in pectoral region, involving shoulder-joint. (St. Barthol. Hosp. Reports, vol. iii.)
2. Fractured base (male, aged fifty-four). Abscesses in liver and kidneys; an enormous abscess under the pectoral muscle. (Lebert.)
3. Venesection of right arm; purulent clot in vein. Lungs hepatised; pleurisy; meningitis; thick greenish pus in interfibrillar tissue of right pectoral muscle. (Arnott.)
4. Gangrene of left leg after old gunshot wound; pus in veins. Abscess, apex of left lung; meningitis: large abscess under pectoralis major. (Ribes.)
5. Necrosis of left femur. Large abscess in course of pectoral muscles. (Guthrie.)
6. Necrosis of left femur. Lungs, heart, and kidney all diseased. Abscesses in the pectoral muscles. Path. Soc. xxx.)
7. Amputation of left great toe (male, aged forty-one). Pus in veins. Abscesses in lungs; an enormous abscess under left pectoral, passing down into axilla. (Sédillot.)

I have notes of fourteen or fifteen cases of this kind of abscess.

Abscess of the calf seems to begin in or near the soleus. It is to be observed that in three-fourths of the cases where it occurred there was also suppuration in one or both of the upper limbs. Among sixteen or eighteen cases are the following:—

1. Puerperal fever. Abscess of left axilla; abscess of left calf; destructive suppuration of left eye. (Marshall Hall.)
2. Injury of vagina; erysipelas. Abscesses over shoulder, in elbow, and in each calf; superficial abscesses elsewhere. (*Med. Times and Gaz.*, 1863.)
3. Scalp-wound with fracture. Abscesses of liver, lungs, and abdominal wall; large abscess in arm; large abscess in leg. (Wilks.)
4. Amputation of right thigh. Abscess under left soleus, close to interosseous ligament. (Guthrie.)
5. Amputation of left foot. Abscesses of left lung; abscess near right elbow; abscess in right calf. (Wilks.)
6. Excision of varicose vein, right leg. Abscess of right lung; meningitis; inflammation of both eyes; intramuscular abscesses in both forearms; deep abscess in left leg. (Arnott.)

Another favourite site of abscess in pyæmia is the back of the hand. This abscess is not due to suppuration in the wrist-joint or in the finger-joints; it seems to begin in or around the synovial sheaths of the extensor tendons. I have notes of 16 cases, and it is interesting that 12 were on the left hand and only 4 on the right. Of these 16, one or two were not "abscesses," but "pustules" or "vesicles"; still, I venture to include them. There is some reason for thinking that this abscess at the back of the hand is related to the state of the lymphatic system. It is in relation to a synovial membrane, and in a part of the body where the lymph spaces are extraordinarily large; it is found along with other synovial and serous effusions rather than with visceral abscesses; it seems, by its preference for the left hand, to be not merely due to haphazard embolism; and, lastly, it seems, like parotitis, to be in some way influenced by the site of the primary lesion. In one very interesting case of chorea, ending fatally, in which I made a post-mortem, I found double parotid abscess, and one at the back of the left hand, and no other evidence of pyæmia. The following are also interesting examples of this lesion:—

1. Delivery; endometritis. Abscess at back of left hand, with sloughing; pus up the forearm: no trace of disease in bloodvessels. (Lee.)
2. Delivery: abscess in lung; meningitis. Abscess in extensor sheaths of both hands. A case of lymphangitis. (Tilt.)
3. Cystotomy for a foreign body. Both knees full of pus; pus in left elbow and in sheaths of extensor tendons of left hand. (Path. Soc., xxx.)
4. Removal of part of right clavicle; pleurisy: pericarditis. Pus in left sterno-clavicular joint; pus in sheaths of left extensor tendons. Veins normal. (THE LANCET, 1864.)
5. Fracture of right ulna. Abscesses in lungs and in liver; pericarditis; meningitis; pus in right elbow and shoulder; abscess at back of left hand. (Amer. War, vol. iii.)
6. Wound of right finger; purulent infiltration of right arm; veins diseased. Abscess of left lung; pericarditis: abscess at back of left hand. (Amer. War.)

There is one more special lesion of great interest—inflammation of the eyeball. I have notes of 18 cases. Like the

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inflammation of the back of the hand, it shows a marked preference for the left side over the right; like it, a very large proportion of the cases have followed uterine disease. These facts, with what we know of parotitis, may make us inclined to think that septic embolism alone does not fully explain this lesion. This ophthalmitis must be distinguished both from phlegmonous inflammation of the orbital cellular tissue and from inflammation extending into the orbit from the base of the brain. It is true inflammation of the globe itself, with subretinal effusion and purulent infiltration of the vitreous. It is beautifully described in Bowman's "Diseases of the Eye." The best examples are Marshall Hall's six cases after delivery, all of the left eye; also the following:—

1. Mrs. E—— (aged thirty-five). Three weeks after delivery, right phlegmasia dolens; three weeks later, pyæmia, with destructive inflammation of both eyes. Post-mortem: Pus in left lung; two pints of purulent fluid in left pleura; plugging of veins of limb.
2. Mrs. —— (aged thirty). Delivery; peritonitis. Inflammation of left eye. No post-mortem. (Mackenzie.)
3. Mrs. ——. Delivery: adherent placenta. Meningitis; inflammation of right eye. (Mackenzie.)
4. Arnott's case, quoted above.
5. Venesection for pleurisy (male, aged thirty-five). Meningitis; destructive inflammation of both eyes. (Mackenzie.)
6. Abscess in right leg (male, aged eighteen). Swollen and painful joints; pus in left knee. Destructive left ophthalmia; pus round both globes, especially left. Sinuses healthy. (Wilks.)

Admirable descriptions of this lesion are to be read in the *Archives of Ophthalmology*, vols. ix. and xi. There is abundant evidence that septic embolism may cause it, but I venture to think that the state of the eye itself, or of the lymphatic system, may in some of the cases co-operate with the work of embolism and predispose the eye to suppuration.

VII. Section of the bones, as influencing the production of abscess of the liver. I was struck by finding how much more common abscess in the liver is, after division of the bones of limbs, than after other injuries. Sédillot says: "Nous avons été frappés d'une sorte de coincidence entre les suppurations du foie et les altérations du système osseux chez beaucoup de nos pyoémiques. Un vénérien, atteint d'une ostéite du pubis avec infection purulente, avait des abcès du foie: plusieurs amputés, dont les os étaient malades, nous offrirent les mêmes lésions." My tables run as follows:—

		Abscess (not counting congestion &c.)		
		Liver.	Spleen.	Kidneys.
Injury or disease of medulla.	Upper limb (52 cases).	20	8	2
	Lower limb (165 cases).	36	20	4
Necrosis, in most cases acute.	Upper limb (4 cases).	0	1	3
	Lower limb (34 cases).	2	4	14
Suppurative arthritis.	Upper limb (2 cases).	0	0	0
	Lower limb (17 cases).	4	3	5
Injury or disease of soft parts only.	Upper limb (40 cases).	4	0	3
	Lower limb (22 cases).	0	3	5

Putting the two limbs together, we have—

	Abscess (not counting congestion &c.)		
	Liver.	Spleen.	Kidneys.
Injury or disease of medulla: amputation, compound fracture, caries (217 cases)	56	28	6
Necrosis (38 cases)	2	5	17
Suppurative arthritis (19 cases)	4	3	5
Injury or disease of soft parts only (66 cases)	4	3	8

This seems to prove that abscess of the liver and of the spleen is promoted, in pyæmia, by injury or disease of the medulla of the bones. Now, the medulla of bones is part and parcel of the lymphatic system, and so is the spleen. Do we not see here another instance of the influence of the lymphatic system in the distribution of pyæmic abscesses? The association of abscess of the kidneys with acute necrosis is also important.

ON TINNITUS AURIUM AND ITS TREATMENT BY ELECTRICITY.

BY JULIUS ALTHAUS, M.D., M.R.C.P.,
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TINNITUS AURIUM, when loud and continuous, is one of the most distressing affections, and apt to greatly depress the tone of the mind and of the whole nervous system of the patient. St. John Roosa[1] mentions the case of a gentleman who consulted him for it, and received an unfavourable opinion as to recovery; and who thereupon said that, if he thought it correct, he would put an end to his existence which he did a few months afterwards by blowing out his brains! The same author speaks of another patient who committed suicide on account of this symptom; and most practitioners must have met with cases in which all enjoyment of life has been destroyed, the patient's temper soured, and his power of work greatly reduced, through tinnitus. This symptom is probably always produced by increased pressure on the labyrinth, and therefore occurs in a variety of affections of the external, middle, and internal ear, and in the neighbourhood, giving rise to this undue pressure. Sir William Dalby[2] says that, when it is due to some curable local cause, it rapidly disappears with its removal; but that when it occompanies deafness in nervous affections, it is often the more troublesome symptom of the two, and less amenable to treatment.

The fact that we are able, by a judicious and careful application of electricity, to cure or relieve a considerable proportion of this latter class of cases, where there is no coarse lesion giving rise to the undue pressure, but where this latter is probably owing to disturbed vaso-motor influence, is either ignored or doubted in most of the best works on aural diseases. This unfavourable opinion of the authorities is undoubtedly owing to the circumstance that there is perhaps no other complaint the successful treatment of which by means of electricity requires so much special knowledge of the physiological effects of that agent, such delicate adjustment of apparatus, and such technical skill in manipulating the same, as tinnitus of nervous origin; while, on the other hand, a haphazard application of electricity, even by those who are tolerably well acquainted with the other more common uses of the battery, is likely to do rather harm than good, and the chance of thereby accomplishing a cure must be considered as exceedingly remote. I do not intend in this paper to give an account of the researches of Brenner, Hagen, Moos, Erb, and others, which have opened up this subject, but proceed at once to the narration of a well-marked case of tinnitus of vaso-motor origin which was recently under my care, and in which the beneficial influence of a carefully adjusted electric treatment was strikingly displayed.

S. N——, a merchant, aged thirty-five, married, and father of two children, consulted me in October last, and informed me that about two years ago he had, in consequence of unusually hard work and great anxiety in business, got into a low state of health, with dyspepsia, constipation of the bowels, and considerable mental depression. While in this condition he heard one morning, on awakening, a curious noise in his left ear as if a kettle was boiling there, and had a feeling of giddiness on changing the position of his head. The noise continued, and in the course of a few days became much louder, so as to resemble the breaking of the waves on the sea-shore, and the hearing of the same ear became much impaired. The patient was treated with alteratives, strychnia, iodide and bromide of potassium, &c., and was eventually advised to take a long holiday. From this he returned rather better, but after having been in business again for a few days the trouble returned worse than before. Further treatment did not improve the condition, and matters at last began to assume a serious aspect, inasmuch as the patient's power of application was very much diminished, his confidence in himself almost gone, and the irritability of his temper so extreme that his family as well as his associates in business found the greatest difficulty in bearing with him. Under these circumstances the question was mooted whether he should not give up business, at least for

[1] The Diseases of the Ear (London, 1865), p. 344.
[2] Quain's Dictionary of Medicine (London, 1882), p. 1636.

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a time, and take a voyage to Australia; and it was chiefly with regard to this latter point that I was eventually consulted.

On examination, the patient had a sallow complexion, an anxious expression, a pale tremulous tongue, and a feeble pulse. He answered questions in a hasty, abrupt manner, stated that he had lost all confidence in his powers, and complained bitterly of the dreadful trouble caused to him by the noise in the head, which was incessant throughout the day. He described it as the roaring of the breakers on the seashore. He felt giddy whenever he turned his head quickly round, stooped, or blew his nose. There was a decided degree of deafness of the left ear, where the ticking of a watch could not be perceived, while the tuning-fork was only very dimly heard when held close to the meatus. With the right ear the same watch was quite plainly heard, and the tuning-fork at a distance of three inches and a half.

I now proceeded to the galvanic examination of the auditory nerve, according to Brenner's method as modified by Erb, which gave the following results:—

1. *Current-strength:* 1½ *milliampères.*

Right ear.	Left ear.
Ca Cl[3] no sound	Tinnitus increased.
Ca Sta ,,	Ditto.
Ca O ,,	As before.
An Cl ,,	Diminished.
An Sta ,,	Ditto.
An O ,,	As before.

2. *Current-strength:* 3 *milliampères.*

Right ear.	Left ear.
Ca Cl produces a short hissing sound, other arrangements being ineffectual.	Same qualitative reaction as in 1, but effect of Ca Cl and An Sta much more marked.

3. *Current-strength:* 5 *milliampères.*

Right ear.	Left ear.
Ca Cl gives a strong hissing sound, An O a slighter do.; other arrangements ineffectual: fulness in head and giddiness in closing and opening.	Same reaction as in 2, except that with An Sta the tinnitus is almost entirely stilled, and that the patient can only just hear it by giving the closest attention, as if it were occurring at a considerable distance.

It appeared from this that the healthy right ear gave the normal galvanic formula of the auditory nerve, while, on the contrary, in the affected left ear that condition was found which Brenner has described as simple galvanic hyperæsthesia of the auditory nerve, in which there is exaggerated response to Ca Cl, Ca Sta, and An O; while An Cl and An Sta tend to still the noise. These galvanic tests seem to show that there is no coarse lesion in the different portions of the ear or its neighbourhood, as tinnitus owing to such is apparently uninfluenced by the application of electricity.

Having discovered that the stationary action of the anode arrested the noise almost completely for the time being, I gave a favourable prognosis, and advised a course of galvanic treatment, which was carried out in the following manner. A well-moistened medium-sized anode was placed on the left external meatus, and a similar cathode on the palm of the right hand; a current of five milliampères was used, and allowed to pass for five minutes. During this time the tinnitus gradually diminished, and eventually ceased altogether. The current was then, by the aid of the rheostat, gradually reduced in strength; but when it had been diminished by the interpolation of fifteen resistances, the tinnitus suddenly started afresh, and I therefore found it necessary to increase the galvanic force again for obtaining another cessation of the noise. This was accomplished in two minutes, and the same strength was then allowed to act for another minute. After this the current was very gradually reduced by the successive interpolation of fifty-one resistances. In this way the prejudicial effect of the anode opening, which causes increase of tinnitus in ordinary hyperæsthesia of the auditory nerve, was as much as possible circumvented. The whole application lasted about twenty minutes, was unattended by pain or giddiness, and at the end of it the tinnitus had entirely disappeared. At his next visit the patient informed me that the noise had only been in abeyance for an hour, that it had then returned, and the day after been much the same as before. A second application, on the same lines as the first, arrested the tinnitus again, and, with the exception of a singular sensation as if some bubbles were bursting in his ear, the next day was passed very comfortably. The patient felt in the best of spirits, could eat his meals with relish, had more confidence in his powers, and slept well. About ten days afterwards, after an unusually hard day's work, the noise reappeared for a short time, but had ceased of itself next morning. The patient had altogether nine applications of electricity, after which he felt so well that there appeared to be no need for further treatment. I have recently heard that there has been no return of the tinnitus and vertigo, and that the hearing of the left ear was likewise much improved.

There is another class of cases of tinnitus in which Brenner has shown that the normal response of the auditory nerve to the continuous current is reversed—that is to say, the anode, instead of diminishing the noise, increases it, while the stationary cathode tends to arrest it. Cases also occur in which various other deviations from the normal formula take place, into which space prevents me from entering here. The chief rule for treatment must be to utilise that arrangement for treatment which is found effectual in arresting the noise, regard being had at the same time to a gradual reduction of current-strength, and, if necessary, a fresh increase after diminution. It is therefore of paramount importance not to proceed by routine, but to ascertain as accurately as possible the physiological response of the suffering nerve to the voltaic current in each individual case of tinnitus of vaso-motor origin previous to the beginning of a galvanic treatment.

Harley-street.

[3] Ca Cl = Cathode closing; Ca Sta = Cathode stationary; Ca O = Cathode opening; An Cl = Anode closing; An Sta = Anode stationary; An O = Anode

CHILDBED FEVER; ITS CAUSES AND PREVENTION: A LIFE'S HISTORY.

BY THEODORE DUKA, M.D., F.R.C.S. ENG.

THE name of Semmelweis was brought to notice in England by an article in the Transactions of the Royal Medical and Chirurgical Society for 1849. Dr. Routh, its author, was then fresh from Vienna, and gave a concise account of what he had seen there. Semmelweis's labours have been frequently spoken of since in medical literature, both in the English press and on the Continent, but a full sketch of his life and studies has only now been supplied in an elaborate monograph by Dr. Jacob Bruck, a member of the Board of Health at Buda-Pesth. To my mind it forms a most interesting piece of medical study—indeed, it belongs to the epoch-making productions of medical history.

Ignatius Philippus Semmelweis, a Hungarian, was born on July 17th, 1818, in the city of Buda, where his father was engaged in mercantile pursuits. There were four brothers, of whom Ignatius was the youngest. At the age of nineteen, when entering as an undergraduate at the University of Vienna, his parents urged Semmelweis to study law, but after hearing a lecture on anatomy, to which he was accidentally invited by a young friend, Semmelweis decided to abandon law and to devote himself to the study of medicine. The Vienna school was becoming famous, at that time under Professors Rokitansky, Skoda, and Hebra, who spread the fame of the Imperial University far and wide. His first year of study was spent at Vienna, the second and third at the University of Pesth; for the remaining two years Semmelweis returned to Vienna, where he graduated as Doctor of Medicine on April 4th, 1844, taking for his thesis "De Vita Plantarum." In two years more he obtained diplomas in midwifery and as Doctor in Surgery. Semmelweis's time and energies were henceforth entirely devoted to medicine. Having previously attracted the notice of Skoda and Rokitansky as an intelligent, industrious, and energetic student, they now honoured him with their friendship and goodwill. Skoda, in particular, took a prominent part in encouraging Semmelweis in his investigations, and Rokitansky's pathological laboratory was opened to him. For some time Semmelweis remained undecided as to what special branch he would pursue; he ultimately selected diseases of women, but not until his

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cherished hopes of becoming Skoda's assistant had been frustrated. To this coveted post Dr. Löbl was appointed, who in consequence of seniority had a preferential claim. Professor Klein was at that time at the head of the maternity department, and in June, 1844, Semmelweis applied for an assistant's appointment in the women's clinique. In the early part of 1846 he was thus appointed on probation for six months, at the expiration of which period he was confirmed in his office as regular assistant professor in the maternity branch. In this way Semmelweis became one of the staff in the General Hospital at Vienna. This gigantic institution was built by the Emperor Joseph and opened in 1784, the maternity department being then placed under Dr. Simon Zeller. In 1789 the famed Dr. Boër succeeded, and continued in his appointment for a period of thirty-three years. During the first thirty-nine years of its existence there were 71,395 admissions into the maternity, with 897 casualties, giving a death-rate of 1·25. Alarming outbreaks of puerperal fever seldom occurred during this period, but when they did occur, Professor Späth tells us, they caused intense anxiety and vexation to Dr. Boër; yet the insignificance of these attacks may be compared, says Semmelweis, to small hillocks, because "the hecatombs which were later witnessed stand forth like a Chimborazo." And truly alarming became the records of mortality under Professor Klein; the ratio was hardly ever under 5·03, and sometimes rose as high as 7·45. No change was effected in these unfavourable returns, when a new wing was opened, into which Dr. Klein's patients had been transferred. Among the epidemic outbreaks causing great havoc among the child-bearing women at the hospital, the most fatal was that which occurred in October, 1841, lasting without intermission for twenty months—that is, till May, 1843. Of 5139 parturient women 829 died, giving the terrible death-rate of more than 16 per cent. Moreover, these numbers did not entirely represent the magnitude of the actual mortality, because they do not comprise those cases which had been transferred to the physicians' wards owing to complications. The mortality of the newborn infants was in proportion to that of the mothers.

The Clinique No. 1 was under Dr. Klein; No. 2 was under the care of Dr. Bartsch. In both instruction was imparted to students and midwives, and there was no marked difference in the death-rate; but after the Government decided that Dr. Klein's clinique should be apportioned to students and that of Dr. Bartsch to midwives exclusively, a change in the returns became very apparent. During six years—viz., from 1841 to 1846 inclusive—the mortality in the students' clinique stood at 9·29; in that of the midwives at 3·38 only. The great fatality in the students' clinique, therefore, attracted the early notice not only of the Director but of the University professors, and eventually of the Government also. One commission of inquiry followed another, but none could exactly determine the cause of the high rate of mortality. All kinds of explanation were given and recommendations made, which led, however, to no satisfactory results. Among other things, a special objection was taken to foreign students, whose number had, in consequence, been reduced from forty-two to twenty. Some of the measures adopted only proved of temporary avail, and the bad name of Dr. Klein's clinique spread to such an extent that, according to Semmelweis's statement, patients, on finding themselves among the inmates of the dreaded clinique, fell on their knees, and with clasped hands begged to be allowed to return to their homes. Occurrences like these made a profound impression, and the sound of bells which used to be rung in the wards when the priest was administering the last sacrament to the dying—a circumstance unfortunately of almost daily occurrence—told with increasing effect on the sensitive mind of Semmelweis. "I myself was terror-stricken" (these are his words); "when I heard the sound of the bells at my door a deep sigh rose in my breast for the unfortunate mother who was the victim to a cause hitherto unknown; this worked on me as a fresh incentive that I should, to the best of my ability, endeavour to discover the mysterious agent." And a conviction grew day by day that the previous fatality in the Clinique No. 1 could in nowise be accounted for by the hitherto adopted etiology of [illegible]

[illegible] common sense alike precluded the view [illegible] death-rate was solely due to "atmospheric, [illegible] influences." Semmelweis therefore put the [illegible] In what manner can any circumstance [illegible] in connexion with the unknown cause, which acts so disastrously in the Clinique No. 1, whilst in the Clinique No. 2 the puerperæ are so much more favourably circumstanced? He saw that if the fatality had depended on atmospheric changes merely, the fatal fever ought to manifest itself not in the clinique alone, but in other parts of the city. Strangely enough, just at the time when the death-rate was so alarming in the hospital, neither in Vienna nor in the neighbourhood was there any aggravation in the condition of those liable to childbed fever. Semmelweis noticed also that the seasons had no influence on the origin or termination of the malady. He noticed, lastly, that when the clinique was closed no fatal cases occurred elsewhere; and experience taught him already that, if deliveries took place outside the walls of the hospital, such patients remained free from fatal attacks. This made it self-evident that the cause of mortality must be looked for in local—that is, in endemic—conditions. But, whilst Semmelweis was perfectly convinced of this, he was unable to accept the explanations which had been brought forward as to such endemicity. It was suggested that *overcrowding* was to blame, but this could not be the cause, since Clinique No. 2, although much smaller, contained by comparison many more patients than Clinique No. 1. Moreover, there was proof that the large number of fever cases was in noway dependent upon the larger or smaller number of admissions. Again, it was alleged that, as the building in which the wards of Clinique No. 1 were situated had served for the accouchement of many thousand patients already, and might therefore be reasonably considered as already contaminated, therefore the greater frequency of fatal cases was to be expected; but the Clinique No. 2 had been made use of in a similar manner, yet its death-rate never rose so high as in the other wards. It was said also that the notoriously bad name of the Clinique No. 1 had so injuriously affected the minds of the patients through fear and anxiety that it also had a great deal to do with the unfavourable result; it was even mentioned that the appearance of the priest walking through the wards to the dying patients had an ominous influence on the rest; still Semmelweis was convinced that none of these surmises could be accepted as a satisfactory explanation. He noticed that such patients in the Clinique No. 1 whose labour lasted from twenty-four to forty-eight hours or longer died almost without an exception, whilst in the other clinique the circumstance of protracted labour in no way produced such an effect. It seemed also very strange that women who were delivered *before* arrival at the hospital—and there were no less than 100 such cases on record—presented a very insignificant death-rate, and so did those who suffered from premature labour. Yet another circumstance seemed inexplicable—namely, that a whole row of patients lying side by side should simultaneously be attacked in Dr. Klein's clinique, whilst no such untoward occurrence had taken place in Clinique No. 2. Semmelweis describes his perplexity in the following words: "The fatal termination of almost all the cases of protracted labour, and the immunity from fever in those who were admitted after delivery, seemed to controvert the theory that the fatality of the Clinique No. 1. was to be attributed to local endemic causes, as was suggested. Again, when I consider the wholesale attacks of patients lying side by side, a circumstance not noticed in the other clinique, where the treatment was in no way more skilful or more conscientious; lastly, the disfavour with which all those were looked upon who were in any way connected with the unfortunate clinique; all these produced a state of mind which rendered my life anything but enviable." Everything seemed uncertain and enigmatical; the suggestions could not appease his doubts; what was positive and self-evident in the matter, meanwhile, was the large number of the dying and of the dead. In his endeavours to minimise the mortality, Semmelweis had recourse to most extraordinary expedients. Dr. Markusovszky watched his proceedings, and narrates how the patients were kept lying on their left side, simply because such was the practice in the other clinique; how he tried to change the details of his treatment, and with what subterfuges he kept away Professor Klein from serious cases, having observed that the Professor's examination was not always conducted with sufficient gentleness and care; how he kept a careful watch over the mortality records of the whole maternity department, in which he was aided by his friend Dr. Lautner, the able assistant to Professor Rokitansky. All this, however, led to no result.

In the midst of these inquiries Semmelweis was called upon to vacate his temporary appointment in favour of

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a senior; he therefore prepared for a journey abroad to study the experience of other schools, especially those of Great Britain, the Rotunda of Dublin being one of the first he intended to visit. In March following, the chair he had recently quitted again became vacant, and Semmelweis was appointed to occupy it for two years as assistant professor to Dr. Klein. While scarcely in possession of the chair, the sad intelligence of the death of his friend, Prof. Kolletschka, reached him. The Professor fell a victim to the results of a dissection wound, causing phlebitis, aggravated by pleurisy, pericarditis, peritoneal and cerebral complications, with secondary abscesses. The sad history of the young physician's case made a deep impression on Semmelweis. He says, "Kolletschka's fatal symptoms unveiled to my mind an identity with those I had so often noticed on the deathbed of puerperal cases."[1] The more he thought of Kolletschka's illness, the more he saw reason to conclude that his surmises were correct. The cause of Kolletschka's death, he said, was poisoning by decomposed particles of a dead body; if, therefore, his symptoms were similar to those of the disease which carries off so many women in puerperal condition, then similar causes must exist here as existed in Kolletschka's case. After further research, Semmelweis felt able at last to explain what had seemed so obscure. The prevailing tendency of anatomical studies at Vienna impelled the professors, their assistants, and the students to devote much time to the dissecting-rooms. After dissecting it was customary to wash the soiled hands with soap and water, which was insufficient, as the cadaverous smell emanating from the hands of the dissectors evidently proved that particles of decomposing matter were still adhering to the nails and fingers. These were brought in contact with the genital organs of the parturients during examinations, giving an opportunity for the absorption of septicæmic poison by a process similar to that which happened in Kolletschka's case.

The time had now arrived for Semmelweis to enunciate his doctrine of septicæmic poisoning, and at the same time he pointed out the prophylactic process by the use of antiseptic applications. Starting from this point of view, Semmelweis issued orders in May, 1847, that in the Clinique No. 1 every person, before proceeding to examine any patient, should thoroughly wash his hands with liquid chlorine or chlorinated lime-water. The result of this rule was soon manifest, since in the month of May the percentage of mortality stood at 12·24. By the following November and December the number was reduced to 3·04. In October a very striking incident occurred. A parturient woman suffering from cancer of the uterus was admitted; twelve patients were examined after her; all, except one, suffered from childbed fever, and died. In November eight fatal cases resulted from infection, caused by a patient suffering from caries of the knee giving off offensive emanations which contaminated the air of the ward. Taught by experience based on the above facts, Semmelweis declared that not particles from dead bodies alone, but any material in a state of decomposition proceeding from a living organism, even air contaminated from such sources, may generate symptoms of puerperal fever. Scrupulous attention to the use of disinfectants, combined with separation of patients affected with the disease, brought about the most encouraging results; in the second year of the experiment the death-rate fell to 1·27 per cent., which was even more favourable than the returns of the Clinique No. 2. By the light of his discovery Semmelweis was now in a position to solve all those problems which remained so long unexplained. In the Clinique No. 2 midwives only were employed to attend on patients; they had nothing to do with dissecting and post-mortem examinations; the patients therefore were not exposed to infection from those sources. Again, women who were admitted after their confinement was over were spared the examination, and so were those who suffered from premature labour, being cases not adapted for clinical instruction, and therefore did not share the fate of those who were delivered in the hospital, and during labour frequently examined and exposed to infection. The use of chlorine changed matters entirely. Skoda advised that Semmelweis and Lautner should perform experiments on newly delivered rabbits. The result showed that in these animals symptoms like those in the human subject were produced under exposure to cadaveric infection.

[1] Ætiologie, p. 53.

Semmelweis now thought that the time had arrived when his views should be made generally known. With this object he consulted first his old friends and well-wishers, especially Rokitansky, Skoda, and a few of the rising physicians of Vienna, like Hebra and Helm. The arguments brought forward were quite convincing to all. Skoda declared "that there was not a shadow of a doubt that the truth will carry conviction to everybody's judgment."[2] Communications were made from several quarters to eminent gynæcologists abroad—to men like Dr. Michaelis of Kiel, to Levy of Copenhagen, to Hendrichs of Amsterdam, to Schmidt of Berlin, and to Simpson of Edinburgh. Dr. Arnett read a paper before the Académie de Médécine in Paris; and in England, as mentioned already, Dr. Routh gave a succinct account of his experiences in Vienna. Hebra called the special attention of the profession to the result of Semmelweis's researches in the *Zeitschrift* for December, 1847, and April, 1848, in which mention was made of the approval of the new treatment by Professors Michaelis and Tilanus, who considered the importance of this discovery to be equal to that of Jenner. Hebra was followed by Haller, senior physician and officiating director of the Vienna Hospital, in expounding Semmelweis's theory and experience. He read a paper before the Medical Society of Vienna on Feb. 23rd, 1849, in which he makes the following remarkable observations: "The importance of these experiences for the welfare of the maternity department, and for the hospitals in general, *but particularly for the surgical wards, is beyond calculation, and not merely worthy of consideration by all men of science, but worthy also of special appreciation by the Government*" (the italics are mine.) Haller's words, in alluding to antiseptic surgery, remained unheeded until several decades had passed, and Lister successfully brought into practice what Haller faintly foresaw would some day confer incalculable benefits on humanity.

(To be concluded.)

CASE OF ERYTHEMA NODOSUM OCCURRING WITH SUBACUTE ARTICULAR RHEUMATISM.

BY R. GLASGOW PATTESON, B.A., M.B., B.CH., UNIV. DUB.

THE recent discussion at the Clinical Society as to the connexion between erythema nodosum and rheumatism was one of much interest and suggestiveness. Dr. Stephen Mackenzie, who has carefully investigated the subject, on that occasion adduced a large amount of evidence in favour of the relationship; but in only 17 out of 108 cases examined by him were symptoms of acute or subacute rheumatism present during the attack of erythema; and in only 2 out of these 17 cases did the symptoms of the two diseases appear concurrently. The following case may therefore prove of interest from its evident rarity.

B. M——, a domestic servant, aged nineteen, first noticed pains in her ankles when she awoke on the morning of April 26th. She stated she was quite well on going to bed the previous night, and did not at first pay any attention to the pain, as she thought she had caught cold the week before by substituting a light dress for the heavier one she had been previously wearing. During the day the pains extended up her legs, on the front of which she now noticed some red and painful spots, excessively tender to the touch. The pains increased much in intensity, and the next day the knees became affected as well, so that she was hardly able to get through her work. On the 28th she was quite unfit for work, and when I saw her in the evening her condition was as follows. She complained of pains in the ankles, in the knees (especially the right), and in the wrists, all of which joints were red, swollen, and tender. There was some slight effusion into the right knee-joint. There was no gastric disturbance, no fever, and the pulse was strong and quiet. A well-marked eruption of erythema nodosum was present on both legs. On the front of the left leg about the junction of the upper and middle thirds of the tibia was a raised oval patch, tense and shining, of a vivid redness in

[2] Zeitschrift der K. K. Gesellschaft der Aerzte in Wien. Jahrgang vi., B. i., p. 107.

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the central portion and fading away gradually in the surrounding skin. It was about 1½ in. in length by ¾ in. in breadth, and its long axis lay parallel to the tibial crest. A somewhat smaller but exactly similar patch existed on the opposite leg about the middle of the tibial crest; and many smaller but less distinctly oval spots, presenting similar characteristics, were scattered over the anterior surfaces of both legs. They were very tender and painful, and both limbs felt hotter than normal, but there was no general elevation of the body temperature. The patient was a stout healthy girl, had never been previously ill, except when a child with measles, and there was no history, as far as she knew, of rheumatism in her family. She was ordered to stay in bed; the joints were wrapped in wool; and sodium salicylate was given in fifteen-grain doses every third hour.

April 29th.—The patient slept well, and felt better this morning, but still complained of pains shooting about the various larger joints. She was bathed in profuse perspiration, so that she had to be placed between blankets; but there was no fever, the temperature in the axilla being 98·6° F.; pulse 88; the heart sounds normal. No further spots were noticed on the legs, but a few patches of acne pustulosa and of tinea versicolor were observed on the chest. Evening temperature 99·4°; pulse 90.

30th.—The pains have almost ceased, the eruption of erythema is less painful, and the bright redness is fading. The spots have now changed to a dark colour in the centre, with only a marginal zone of redness, but are still distinctly elevated. There was profuse perspiration during the night, but less during the day. The effusion which was present in the right knee-joint has been absorbed. Evening temperature 98·7°; pulse 80.

May 1st.—The smaller patches on the legs have now subsided, and are only visible as slight discolourations under the skin; but the two larger ones on the crests of the tibia are still slightly raised, and have assumed a dark-greenish colour. The swellings of the joints have disappeared, and there is no pain in them either at rest or on movement. The profuse sweating has stopped. The salicylate was restricted to one dose (fifteen grains) night and morning. Heart normal; also the temperature.

May 2nd.—Sat up for a few hours yesterday evening, and feels no bad effects. The spots have now sunk to the level of the surrounding skin, but present a distinct yellowish discolouration. From this date she progressed satisfactorily for some days, but on the 7th a recurrence of the pains, accompanied with a fresh eruption of the erythema, occurred. The pains rapidly subsided under the influence of the salicylate combined with rest, and the spots of erythema gradually disappeared, passing through the same phases as in the first attack. There was no recurrence after this, and, except for slight pains felt in the ankles after any over-exertion, she was practically well. The heart was unaffected throughout both attacks. A short change to the country completed the cure.

As points of interest in the case, we may notice the concurrent appearance of the erythema and the articular rheumatism; the absence of any history of previous rheumatism on the part of the patient, or in her family (if reliable); and the rapid subsidence of the rheumatic symptoms. Whether this latter result is to be attributed to the rest in bed or to the sodium salicylate administered I will not undertake to say.

SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.—The Quarterly Court of the above Society was held at 53, Berners-street, on July 14th, at 8 P.M. Dr. Iliff, vice-president, was in the chair. One member was elected, the resignations of two were accepted, four were reported as having ceased to be members, and the deaths of five were announced. Three fresh applications for grants were read from three widows, and assistance at the rate of £25, £35, and £50 per annum was given to them. The deaths of two widows were reported; one had been in receipt of £40 per annum since 1858, the other of £35 per annum since 1864. Grants amounting to £[illegible] were made to the sixty-two widows, the nine orphans on the books, and the three orphans on the Copeland Fund. The expenses of the quarter were about £37. A legacy of £300 from the late Dr. Harvey Owen was announced by the treasurer.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. THOMAS'S HOSPITAL.

TWO CASES OF FRACTURE OF THE BASE OF THE SKULL; RECOVERY.

(Under the care of Sir W. MAC CORMAC.)

IN THE LANCET for Jan. 16th of this year, p. 105, we published notes of a case of fracture of the base of the skull with extensive fracture of the bones of the face, followed by paralysis of the external rectus and optic neuritis. The first of the following two cases may well be read in connexion with that, for in extent of injury received, subsequent development of symptoms, and result, there is great similarity between the two. The case which we now publish, however, was complicated by the presence of a discharge from the ear of old standing, and probably of fetid character, for it was not long before the hæmorrhage from the ear, which ensued on the fracture, gave way to a profuse and very offensive purulent discharge (a similar discharge flowed from the nose), giving cause to fear the onset of septic meningitis or of pyæmia, a fear which was not allayed by the inflammatory swelling of the face and the formation of points of suppuration in or near the fractured facial bones. That basal meningitis ensued would appear from the condition of the eyes, but that it was of septic character is disproved by the temperature record and the result. These, also with the fact that the suppuration was limited to the fractures of the facial bones, and the absence of constitutional symptoms, negative pyæmia. The second case is chiefly remarkable for the very large quantity of cerebro-spinal fluid which flowed from the ear, which commenced soon after the injury and continued for ten days. That it was cerebro-spinal fluid was proved by chemical examination, the large quantity collected making it easy to apply tests. From the account it would appear that the cerebral symptoms were comparatively slight, severe headache being the most marked. It would come under the heading of the first group of cases (as arranged by Hewett), in which watery discharge from the ear occurs, and indicates fracture through the internal auditory meatus. It is usually a grave symptom.

CASE 1. *Fracture of the Base of the Skull, of the Bones of the Face, and Left Ulna; Suppuration at the points of fracture; Optic Neuritis; Recovery.*—G. D——, aged nine, a schoolboy, was admitted into Leopold ward on March 15th, 1885, at 5 P.M., having been knocked down and run over by a carriage and pair about three-quarters of an hour previously. At the same time his companion, who had likewise been run over by the same carriage, was admitted with fractured base, but only lived two hours. When seen, the boy was quite unconscious, bleeding profusely from the right ear and both nostrils. The pupils were contracted, the left being smaller than the right. The eyelids and the surrounding parts were bruised and swollen, and there was hæmorrhage under the left conjunctiva. The right mastoid process was bruised. There was fracture of the nasal bones, of the superior maxillæ with some separation, of the lower jaw in front of the left incisor tooth, the right half being displaced downwards. The left ulna was broken in the middle of the shaft, there being free movement, with crepitus and considerable bruising of the part. The temperature was 95°, and the patient was suffering from shock. He had marked paralysis of the left side of the face. The head was shaved and an ice-bag applied to it. Two grains of calomel were administered. Anterior and posterior splints were applied to the forearm.

March 16th.—The calomel had acted and the patient was better, answering "Yes" and "No" to questions, but was very irritable. Pulse 136; temperature still low (97°). The discharge from both the nose and ears was purulent and very offensive. On inquiry it was found that the boy had

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a discharge from the ears before the accident, which had existed since childhood. There has been no vomiting since admission.

17th.—The tissues over the right mastoid process are œdematous. The left eye is almost closed by swelling. Ophthalmoscopic examination of the right fundus showed commencing optic neuritis with retinal hæmorrhages. Pulse 120. Temperature 98°; last night, 95·6°.

18th.—The patient is more irritable. The scalp and forehead are very œdematous, and there is a well-marked depression on the left side of the frontal bone. There is more discharge from the nostrils. Temperature 100·6°.

19th (evening).—The patient is more conscious and complains of headache, is very drowsy, less irritable, and has been quiet during the day. The left eye is closed by œdema, which extends to the left side of the face. The right optic disc is much swollen. The tongue is very dry, the mouth being kept open for respiration, as the nostrils are blocked by the discharge. Bowels acting freely after medicine. Passes urine when induced to do so, otherwise retains it, as much as thirty ounces having been passed at one time. Pulse 104; respiration quiet. Breath very offensive.

21st.—The inflammatory œdema has spread down the left side of the face, which is fixed by it. Is quite sensible, and answers questions when roused; complains of headache, and is drowsy. Pulse 96. Ordered five minims of tincture of opium every six hours.

23rd.—The swelling on the left side of the face is less, and he is able to open the left eye slightly. Left facial paralysis very marked. Tongue very dry. He slept after a small quantity of morphia administered subcutaneously, but was whining occasionally during the night. Pulse 88. There is slight occasional twitching of the right side of the face.

24th.—The facial paralysis is less marked, and there is no twitching of the right side of the face. Pulse 76, quiet and full. Temperature 99° to 99·8°; last night, 100·2°.

26th.—Has continued to improve. The discharge from the nostrils has almost ceased, but that from the right ear is profuse. The inflammatory swelling of the face has much diminished, and the patient opens the left eye. There is fluctuation in the upper eyelid.

28th.—The facial paralysis is still very marked. There is paralysis of the right external rectus muscle with considerable internal squint. The left eye turns inwards when he attempts to look upwards; the right acts normally in that direction. There is now suppuration over the right mastoid process, behind the ear, in the left upper eyelid, and under the symphysis menti on the left side, which does not apparently communicate with the fracture of the lower jaw, there being a free discharge of pus from that into the mouth. Temperature, morning, 98·2°; evening, 98·8°.

April 3rd.—Hammond's splint was applied to the jaw, chloroform being administered for that purpose. There is a hole in the posterior part of the hard palate admitting the finger, and two pieces of necrosed bone were removed from the roof of the mouth.

4th.—The abscesses below the jaw and behind the right ear were incised.

11th.—He is now emaciated and pale; sleeps well, but sometimes cries out in his sleep; an occasional dose of tincture of opium (five minims) is required. He is very deaf on both sides, only hearing a watch on contact. For the last fortnight there has been at intervals an offensive discharge from the left ear. The discharge from the right continues, and also that from the incision over the mastoid process, water passing from one to the other on syringing. An abscess has formed over the left malar bone. The paralysis of the face and eye is still marked. The patient takes food well. Aperients are occasionally required.

17th.—Ophthalmoscopical examination of the eye showed the right disc to be pale, with little if any swelling, but outline indistinct. Vessels only slightly tortuous.

23rd.—The eyes can be moved in any direction, and there is still an external squint visible.

May 2nd.—Splints removed from the forearm; union good.

5th.—The boy is now able to sit up in bed and feed himself, all the wounds being healed excepting the one over the fractured jaw.

18th.—There is not much change in the facial paralysis. The right eye usually looks upwards and inwards, but both eyes can be moved in any direction. The hole in the hard palate has almost healed. There is still a sinus over the seat of the fracture of the lower jaw.

This sinus closed before the patient left (June 3rd), but the facial paralysis persisted. He was still deaf. He was in the hospital eighty days. The highest temperature during this time was 102° on the evening of April 21st.

CASE 2. *Fracture of the Base of the Skull; Continuous Discharge of Cerebro-spinal Fluid from the Ear for ten days; Recovery.*—B. G——, aged twenty-five, a carpenter, was admitted into the Leopold ward, under the care of Sir W. Mac Cormac, on July 2nd, 1885. A short time before admission a plank fell on the back of his head, knocking him down and rendering him insensible for ten minutes. He bled from the right ear profusely. When examined he was found to have a red mark on the back of the head where he had been struck. His pupils were equal and acting to light. He was quite conscious, complaining only of headache and vomiting (which was severe), lasting until the following morning, when it ceased. There was a profuse discharge of watery fluid tinged with blood flowing from the right ear; temperature 95·8°. His head was shaved, an ice-bag applied to the head, and a smart purgative administered.

July 3rd.—Retention of urine; the urine drawn off twice a day with the catheter, any straining causing the discharge from the ear to flow more freely. Bowels acting. Temperature, morning, 98·8°; evening, 101·8°.

4th.—Complains of a splitting headache. Tongue furred and white. The temperature rose from 101·4° at 2 A.M. to 104° at 8 P.M.

6th.—The discharge from the ear is very profuse, saturating the pillow. During the course of two hours and a half, no less than one pint and a half of fluid, having a greenish tinge and the reactions of cerebro-spinal fluid, flowed from the right ear.

7th.—The headache, which is chiefly occipital, is now comparatively slight. He is much improved and quite intelligent. Pupils equal and acting to light. The fluid is not flowing so freely; it is still clear. He only hears a watch on contact. There is slight extravasation over the right mastoid process. Tongue furred and white. Bowels acting after medicine.

10th.—Headache less. He can sleep without a chloral draught, which has been required on other nights. Pulse 72.

12th.—The discharge from the ear ceased in the afternoon. The temperature, which had been 100° at noon, rose to 103° in the evening; it has usually reached 103° or passed this point in the evening.

13th.—The eyes were examined with the ophthalmoscope. There was no optic neuritis, but a peculiar rosy appearance of the fundus, without evident dilatation of vessels.

15th.—He was not so well after the discharge ceased, there being much headache and pain in the back of the neck and flushing of the face. The headache was very severe, making him cry out with the pain. He became delirious and noisy. Pupils continued equal, and acted to light. Last night and this morning he has been better, having very slight pain excepting on sudden movement, which immediately brings it on.

18th.—There is now no pain or headache, but only slight and momentary giddiness if the patient bends forward. He is otherwise quite well.

24th.—There is now very slight giddiness on bending forward.

On the 14th the lowest temperature recorded since admission (99°) was registered; on the 15th it reached 101°, and on the 16th 100°. After this it did not again exceed 99° on the 18th, becoming normal on the 19th, and continuing so. The man was in the hospital fifty-five days.

MELBOURNE HOSPITAL, AUSTRALIA.

CASE OF SIMULTANEOUS AMPUTATION OF THE RIGHT THIGH AND DISARTICULATION OF THE LEFT KNEE FOR RAILWAY INJURY; RECOVERY.

(Under the care of Mr. R. A. STIRLING.)

THIS case is put on record as an instance of singular tenacity of life under injuries which usually prove rapidly fatal.

John S——, aged nineteen, was admitted at midnight on Dec. 18th, 1885. An hour previously, while engaged shunting on the Government railways, which are situated a mile from the hospital, he had fallen on the rails, was struck by the buffers of a carriage in motion, and sustained, through the wheels passing over him, a compound comminuted

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fracture of the lower part of the right thigh and the upper part of the left leg, with extensive laceration of the soft parts. Hæmorrhage had been profuse, and on admission he was suffering much from shock, but was sensible and could speak in a whisper.

The patient, a strong-looking, very muscular lad, was given a few whiffs of the A.C.E. mixture, and in this incompletely anæsthetic state the right thigh was amputated in the usual way at the junction of the middle and lower thirds, with skin flaps and circular muscles. During this operation the pulse flagged much, although not more than a few drops of blood were lost. Enemata of peptonised beef-tea and brandy, with hypodermic injections of ether, were given. While an assistant was dressing the stump disarticulation at the left knee-joint was performed, the injury being confined to the leg, and the soft parts, though in a doubtful state as regards bruising, still warranting the hope of vitality. Mr. Pollock's method by the long anterior flap was most suitable. The patella and cartilages were retained. The second procedure added little to the shock, and little blood was lost. All the large vessels were tied with kangaroo tendon prepared after Mr. Girdlestone's plan. Antiseptic precautions and dressings were used for the first but not for the second operation, as to save time I dressed the knee-stump with carbolic oil and opium dressing. In an hour and five minutes from admission the patient was in bed in the ward.

At 10 A.M. the next morning his temperature was normal and pulse 120. He suffered from persistent vomiting for several days, retaining nothing but a little thick gruel, and being fed by enemata. The progress towards convalescence was retarded by the buffer injuries of the left side, including fracture of the sixth and seventh ribs and emphysema. There was no tendency of any of the flaps to slough, and the left stump healed quicker than the right. He was discharged on Feb. 15th, 1886, with soundly healed stumps, and when last seen was growing very stout.

Medical Societies.

SOCIETY OF MEDICAL MEN QUALIFIED IN SANITARY SCIENCE.

THE inaugural and first annual meeting of the Society was held at the Holborn Restaurant on July 22nd, the President, Sir Joseph Fayrer, K.C.S.I., being in the chair. Before the Council's Annual Report was read and other business had been done the President delivered the following address:—

"Gentlemen,—I have to congratulate you, on this the first annual meeting of the Society of Medical Men qualified in Sanitary Science, on the success which has already attended the efforts you have made towards the foundation of a Society which promises, on the one hand, to be productive of great benefit to the profession by ensuring the due recognition of your rights and privileges, and to the public, on the other, by guaranteeing the diffusion of sanitary knowledge, and the practical application of the laws which govern the protection of health, the preservation from disease, and indicate the most efficient means of dealing with it should it arise. It is an assertion of your rights and duties as medical men not merely to treat disease, but to deal with all that tends to prevent it, as well as to preserve health. This obviously paramount duty of medical men has too long been lost sight of, but the time has come when it may no longer be ignored, and it is but right that in civil life—as already, indeed, happens in the public services—sanitary science, as applied to the preservation of public health, should be under medical guidance and control. The ninety-five medical men who have already specially qualified themselves for these duties, and who form the nucleus of this Society, are, we may hope, the pioneers of a movement which will ultimately receive great extension and include all medical men in the scope of its operations, and gradually but surely vindicate the principle that the prevention of disease and the preservation of health are an integral part of the duties of the physician, as is the treatment of disease. Your Society, which took its rise so recently as April of the current year, has already made most satisfactory progress, and numbers on its rolls nearly half of the medical men who hold certificates of qualification in sanitary science from the various bodies entitled to grant these diplomas, and twelve honorary members eminently distinguished in sanitary science. We trust, and there is a good reason for expressing a confident hope that it will be so, that many others will join the Society, and that its prosperity and utility will be thereby thoroughly established and confirmed. It appears that of the whole body of the medical profession, 200 only are now qualified in sanitary science, and of these 175 are in the United Kingdom. Let us hope that the numbers will rapidly increase. Of the 95 members of the Society, there are in London 35; provinces, 46; Scotland, 7; Ireland, 6; and in Australia, 1. Of these, the University of Cambridge supplies 60 per cent.; University of Edinburgh, 12 per cent.; University of Dublin, 7 per cent.; University of London, 5 per cent.; Royal College of Physicians, Edinburgh, 5 per cent.; King and Queen's College of Physicians, Ireland, 4 per cent.; Royal College of Physicians, London, 3 per cent.; University of Glasgow, 2 per cent.; University of Oxford, 1 per cent.; and University of Durham, 1 per cent. The objects proposed and set forth in the preamble of your rules are such as must commend themselves to all. I am much pleased to congratulate you on having attained the first object—registration of sanitary science qualifications, as seen by Section 21 of the Medical Act, 1886, just passed. The second of the objects named will naturally follow as a result. These, as the others, have to be worked out in the future, and I think I see in the energy and tact which have carried out the scheme so far and so satisfactorily evidence and assurance that the two latter clauses will continue to be the aim and object of the Society, raising it to so much importance that its influence for good will spread far and wide. It appears to me that the organisation of the Society is well devised, and bears evidence of much careful thought and knowledge of the objects aimed at. The rules are simple, practical, and calculated to carry on the work without friction or confusion. The general management is entrusted to a Council well selected, which has already held seven meetings, and is subject to such changes and variations in its *personnel*, as experience has shown conduces generally to the efficient working of a governing body. I cannot refrain from observing that the Society is especially indebted to certain of its members for the progress it has made, and for the practical business-like character it has assumed. It would be an unpardonable omission were I to neglect to say how truly we all recognise and cordially acknowledge the untiring and well-directed energies of our indefatigable honorary secretary, Mr. Cooney; of our chairman of Council, Dr. W. R. Smith; of Dr. Joseph Smith, Dr. Sykes, and others whose efforts in and out of the Council have done so much for the Society. We can only, in thanking them, say that we trust their energetic efforts will be unremitting and their interest unabated in the Society, which already owes them so much. In conclusion, I have only to add that I return you my best thanks for the honour you have done me in electing me to be your President, and to assure you that it will always be a great pleasure to me to do anything in my power to forward the interests of the Society."

Letters of apology and inability to attend were received from Sir Douglas Maclagan, Sir Charles Cameron, Professor Gairdner, Drs. Thorne Thorne, Barry, Hinckes Bird, Campbell Munro, and others.

After the annual meeting, the members and their friends dined together at the Holborn Restaurant, in celebration of the inauguration of the Society, and in honour of its primary object being so speedily obtained—viz., the State recognition of public health qualifications in the new Medical Bill.

CAMBRIDGE MEDICAL SOCIETY.

AT the meeting on June 4th, J. B. Bradbury, M.D., President, in the chair, the following communications were made:—

The Medical and Surgical Treatment of Fibro-myoma Uteri.—Mr. J. KNOWSLEY THORNTON (London) commenced with some remarks on the general medical and dietetic treatment of patients suffering from uterine fibro-myoma; objecting to the use of stimulants and iron, and urging the value of ergot employed between the periods, and the reasons against its use during the flow. Surgical aid could often be avoided by judicious diet, medicine, and mode of life. He then proceeded to give in detail three cases upon which he

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had recently operated, to illustrate the difficulties in differential diagnosis between solid ovarian tumours and fibro-myomata, and between cystic ovarian tumours and fibro-cysts of the uterus, using the tumours (which he had on the table) to demonstrate the various points as he discussed the cases. His conclusions were: 1. That some ovarian cysts, from their method of growth and the way in which they stretch out the layers of the broad ligament, uterus, and bladder, cannot be differentiated from uterine tumours. 2. That some uterine fibro-cysts, especially if complicated by solid fibro-myomata, cannot be differentiated from ovarian cysts. 3. That some pedunculate fibro-myomata grow so fast, cause such emaciation and so little hæmorrhage, that they cannot be differentiated from solid ovarian sarcomata. 4. That the ovarian cysts, which burrow deeply in the cellular tissue round the uterus, are slow and uncertain in their growth, are often causes of considerable pain and distress, are apt to give rise to inflammatory action, which, if allowed to recur from time to time, renders their removal extremely difficult, and, from their seat, are especially liable to interfere with the action of the kidneys and lead to serious inflammatory or cystic changes in these organs. 5. That in view of the impossibility of exact diagnosis in some cases, exploratory operation should be advised whenever there is danger of interference with the ureters by intra-pelvic pressure, whenever the presence of the tumour gives rise to recurrent attacks of pelvic inflammation, and whenever other symptoms indicate operation. 6. That the operator who undertakes to perform ovariotomy must be prepared to find himself face to face with the most formidable hysterectomy which it is possible to perform, and therefore no one should undertake these operations without being fully provided with the appliances necessary for the completion of such exceptional cases. In his concluding remarks, he dwelt upon the impossibility, when operating for fibro-myoma, of deciding beforehand whether the case was suitable for hysterectomy or for the removal of the uterine appendages, and then referred to some practical points in the performance of these operations. He had operated eighty-eight times for uterine fibro-myoma, and seventy-four of the patients were alive and well, eleven of the deaths having occurred in the first half of the cases and only three in the second half.

Operation on Movable Kidney.—Mr. FRANCIS read the notes of a case of movable kidney, associated with pyonephrosis, which was under the care of Professor Humphry in Addenbrooke's Hospital. The left kidney was about twice the natural size, and could be easily felt from the front of the abdomen, and moved slightly upwards and downwards and considerably from before backwards; it impinged against the abdominal wall in the erect position, forming a slight eminence; a considerable amount of pus was passed in the urine; the mobility of the kidney caused no discomfort at all and the general condition of the patient was very good. The patient was a tailoress, aged twenty-six, leading a sedentary life. The abdominal walls were firm and natural; and there was no history of the recognised predisposing causes of movable kidney. The condition of the uterus was not ascertained, but there were no uterine symptoms. For many years she had had cutting pains in the urethra during micturition, and occasional pains in the lumbar regions, especially on the left side. Five years before she had passed a small stone; lately she had passed a few clots of blood, and for a month previously there had been pus in the urine. The movable kidney she had noticed for a fortnight. On March 30th, 1886, an exploration was performed in the loin by the usual nephrotomy incision, and the kidney forced backwards into the wound with some difficulty, owing to its extreme mobility; the pelvis of the ureter was found much enlarged, and was incised in two places and a large amount of pus escaped; no stone was felt in the calices, nor on probing the kidney with a needle. A bent tube was passed through the incisions into the pelvis of the ureter, which served to moor the kidney and drain the pelvis. The perinephric fat was natural in amount and consistency, and the peritoneum was not seen during the operation. The wound healed completely in a few weeks, leaving no fistula; the mobility of the kidney was much lessened, but there was no diminution in the amount of pus in the urine.

THE wife of a labourer of Milton, near Northampton, recently gave birth to four children. Three were still-born, and the other survived only a few hours. The mother also expired the same day.

Reviews and Notices of Books.

On Diseases of the Lungs and Pleuræ, including Consumption. By R. DOUGLAS POWELL, M.D. Lond. Third Edition. London: H. K. Lewis. 1886.

IN few departments is our medical literature so rich as in that of pulmonary disease, reflecting therein the preponderating prevalence of such affections amongst the dwellers in our variable British climate. The classical treatises of Williams and of Walshe, of Fuller and of Bennett, are amongst the fruits of the study to which these diseases have been subjected; and in welcoming the present work, which the author has considerably revised and extended, we think that it deserves to rank beside those of well-established fame. It is no demerit that the author abstains to a large extent from overburdening the text with speculative opinions and elaborate analyses. This method of dealing with disease may well be left for the most part to the erudition of the Continental professors. Dr. Powell has chosen the more practically valuable path of personal experience, and his book is in consequence all the more useful and readable. It opens with a chapter upon the anatomy and functions of the lungs, in the course of which we find fully discussed the important part played in the respiratory mechanism by the elasticity of the chest walls, a subject which had received but scant attention until Dr. Powell himself made his observations upon it. Another chapter is devoted to the physical examination of the chest, comprising a lucid exposition of the *rationale* of physical signs, aided by a useful table of definitions and synonyms. We note, in passing, that a twofold origin is ascribed to the vesicular murmur—namely, a glottic bruit and a number of minor bruits produced at the openings of the pulmonary alveoli; whilst all other breath-sounds are referred to modifications of the bruit produced at the glottis. The chapters devoted to pleurisy, pneumonia, and phthisis are especially noticeable for the precision and care with which the facts are presented, and the clearness with which the views are expressed. The subject of asthma, complicated and difficult as it is, especially in regard to its etiology, is one which Dr. Powell treats in a systematic manner, and his remarks upon the treatment of this affection are evidently based upon a wide experience. Bronchitis, emphysema, pneumothorax, contraction and dilatation of bronchi, pulmonary abscess and gangrene, hæmoptysis, hydatid of the lung, and other topics, all receive separate consideration.

The limits of this notice will not allow us to do more than glance at the salient features of a few of these chapters. For instance, in dealing with pleural effusion, the author is very successful in showing what signs are essential and what non-essential to a correct diagnosis, and we know of no work of this class where these distinctions are so succinctly and plainly described. Upon the treatment of pleural effusion and empyema Dr. Powell is as methodical and explicit in directions as any surgeon could be, and it is plain that all he writes is the outcome of his own experience. Indeed, the intrusion of surgery into thoracic disease is further illustrated in another chapter, which is devoted to the surgical treatment of pulmonary cavities. We may commend Dr. Powell's remarks on this head, especially on the difficulties of discriminating pleural from pulmonary cavities, and the inutility of attempting to drain tubercular vomicæ, to those who would too ardently advocate an undiscriminating interference. That much remains to be done in this direction few will be disposed to deny; but hitherto the records are too scanty to show how far it is advisable to go. Upon the subject of pneumonia, the author evidently concurs in the doctrine that it is a specific disease—like rheumatism and erysipelas; but at the same time he hesitates to admit that the

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pneumococcus is anything more than an epiphyte. Attention is drawn, however, to the records of cases of infectious and contagious pneumonia, and the inference is gathered that there are several types or forms of the acute disease. We note that he approves of the application of cold (packing or bathing) in cases of pneumonia where the pyrexia is high, and his advice respecting the treatment during resolution is judicious and timely. The subject of phthisis, as may naturally be expected, is dealt with in considerable detail. The pathological factors in the disease are distinguished as (1) inflammatory, (2) tubercle, (3) impaired respiratory movement, and (4) bacterial organisms; and although the constant concomitance of the bacillus is recognised, it is clear from the position taken by Dr. Powell that he is somewhat sceptical as to its holding the very definite etiological relation to phthisis that has been assigned to it. But the description of the forms of the disease which is given by the author is based as much upon clinical facts as upon the ultimate pathological states; and herein he has rendered a good service by reminding us that the course taken by phthisis is by no means uniform and harmonious, but most chequered and disorderly. The value of prophylaxis, and especially of climatic treatment, is strongly insisted on; and, indeed, there is throughout all the advice given a tone of "sweet reasonableness" coupled with hopefulness, calculated to aid the practitioner in taking less gloomy views upon the outlook of the cases he has to treat. In fine, then, we commend this book as one which should be in the hands of every practitioner. It is plainly the outcome of wide experience, and it has been written in a thoughtful and practical manner, so that no one who studies its pages can fail to derive therefrom much that will stand him in good stead at the bedside.

The First Appendix to the Medical Digest, including the years 1882-85 and early part of 1886. By RICHARD NEALE, M.D. Lond. London: Ledger, Smith, and Co. 1886.

EVERY medical man who has an aspiration beyond mere rule-of-thumb practice, and every student of medical literature, will welcome the publication of the first appendix to Dr. Neale's valuable "Medical Digest." The work, it will be remembered, first appeared in the year 1877, under the auspices of the New Sydenham Society. The second edition, considerably enlarged, was published in the year 1882; and now, after an interval of four years, an appendix is issued, consisting of nearly two hundred and fifty pages of printed matter, and containing several thousand additional references. The entire work comprises a tolerably complete, classified reference-index to the principal English medical periodicals for the last forty years. Originally undertaken for the author's individual benefit, and without any thought of future publication, it has by slow degrees grown into an important work of reference, almost indispensable to every intelligent practitioner and every earnest student of medicine. In the hands of such it will be found to supply a ready means of information regarding all the more important discoveries, doctrines, and modes of treatment in the various departments of medicine during the time which it covers. The book contains considerably over 12,000 separate references, and probably more than ten times as many distinct entries. It supplies at once an index to medical literature for the last forty years, and a summary of its results. It is chiefly with reference to the latter characteristic that the author has selected the title "Medical Digest." There were doubtless many who from the first recognised the great value of Dr. Neale's labours; but there is reason to think that the significance and importance of these labours have not yet been so fully appreciated as they deserve.

In spite of the great amount of thought, time, and money necessarily expended in preparing and printing such a work, it will be seen that everything has been done to make the "Digest" reasonably accessible to most medical men. The undertaking is so useful and so commendable that we would fain hope there need be no risk of its discontinuance from lack of sufficient and suitable support.

Die Rhabditiden und ihre Medicinische Bedentung. Von Dr. L. OERLEY. Berlin: 1886.

DR. LADISLAUS OERLEY of Buda-Pesth, who is well known as a student of nematoid worms, has published an interesting and important monograph on the Rhabditidæ. This group of ordinarily free-living worms has attracted considerable attention from the belief that they were the cause of the fever epidemic on board the school-ship *Cornwall* in the autumn of 1879. One of the boys attacked by the fever died, and after two months his body, as our readers will remember, was exhumed and dissected. In the muscles of the body Dr. Power recognised the presence of a round worm which he called a trichina; later, Professor Bastian applied to the organism the name of Pelodera setigera; and the late Dr. T. Spencer Cobbold called it Rhabditis cornwalli. On his visit to this country in 1881, Dr. Oerley visited the place of burial, and obtained from the ground a number of examples of a free-living round worm; this he recognised to be the Rhabditis terricola described by Dujardin in 1845; and the English helminthologists were convinced by him that they had given new names to an already named form. With regard to the life history of Rhabditidæ, Dr. Oerley is able to show that they cannot live in the intestines of mammals; or, in other words, they may be eaten with impunity by man. This being so, it is clear that the Rhabditis was not the cause of the *Cornwall* epidemic. Rhabditis, in fact, like Anguillula, is a form which always lives a free life, and it might therefore, as it is now by Dr. Oerley, be separated from those rhabditiform genera—Angiostomum and Rhabdonema—in which one stage is parasitic and hermaphrodite, and the other free and dicecious. Of these latter or heterogeneous forms, the most interesting to the physician is Rhabdonema strongyloides, for it is the cause of Cochin-China diarrhœa, although, indeed, it is not, unfortunately, confined to that or even to tropical countries, having been found in Italy, Switzerland, and Hungary. Dr. Oerley gives an account of what is known as to this form, and makes corrections of various previously received opinions. The physician who desires to make himself acquainted with the bibliography, the method of investigation, the principles of classification, the specific characters, or the life histories of these little known and obscure worms, will find Dr. Oerley's work a useful and indeed necessary assistance in his labours.

THE LATE DR. MOXON.

To the Editor of THE LANCET.

SIR,—I shall be obliged by your affording me space for a few lines expressive of my deep sorrow and regret at learning of the sudden death of Dr. Moxon. As I have left London earlier than usual I am without particulars of this sad occurrence. Guy's has indeed been very unfortunate in the loss of two men so distinguished and so well fitted to advance her interests as Dr. Fagge and Dr. Moxon, and both cut down in the noontide of a growing and deserved fame. Dr. Moxon had carefully cultivated his finely discriminating intellect, and his writings evince exact observation and the keenest perception. When his reasonings and conclusions did not compel assent, they never failed to arouse and quicken attention, and to throw light upon the question at issue. His death will call forth a wide expression of the deepest sympathy.

I am, Sir, your obedient servant,

Cresswell Hall, Morpeth, July 26th, 1886. WILLIAM W. GULL.

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THE LANCET.

LONDON: SATURDAY, JULY 31, 1886.

CERTAIN reports prepared by Her Majesty's consuls in different foreign countries are periodically selected for publication by the Foreign Office in an official volume, and some of those recently issued have a medical interest, because they give some account of the cholera in various portions of Southern Europe during the past year. Commencing with France, we find that at Marseilles the epidemics of 1884 and 1885 brought about a state of almost unexampled commercial depression. But the consul is of opinion that Marseilles has itself very much to blame for its recurring epidemics by neglecting sanitary precautions. When disease is prevalent there, promises of improvement seem to abound, and when the scare is over nothing is done. The drainage system he describes as very bad, the main sewers opening into the docks where the vessels lie, and bringing about a state of offensiveness and nuisance which no person who has not had the misfortune of experiencing it can form any idea of, especially during the nights in summer. The landing of invalids and time-expired men from Tonquin, where cholera has prevailed, has been a constant additional source of alarm, and it is to be hoped that certain special arrangements with a view to secure disembarkation without danger to the city, which were promised some time back, will be carried out in earnest. The present year is stated to have commenced badly for Marseilles, small-pox, lung disease, and typhoid fever being prevalent.

From Spain there are several interesting consular reports. In Barcelona, it is stated, depression of trade and industry was most marked. Anything like stability was upset on the recurrence of cholera in 1885, when the paralysation was so great that all business came to a standstill, owing to the flight of the wealthy families and the consequent closing of the factories and the dismissal of the factory hands. In this way the retail traders were deprived of their usual custom, and the entire population suffered. Curiously enough, however, there was some improvement later on, owing to the inroad of families from Valencia and Murcia, where the disease was still more rife. Added to these evils, thousands of vine plants were destroyed by frost in the beginning of the year, and floods and phylloxera still further contributed to disaster. In all, 1318 fatal attacks of cholera took place in Barcelona during 1885.

The report from the vice-consul at Seville gives an account of one of those eccentricities of administration in connexion with quarantine which, in the eyes of all unprejudiced persons, must go to show how vexatious that useless proceeding can be made. Seville was apparently free from cholera, but, as is well known, it lies inland up the river Guadalquivir. All vessels going up to Seville are compelled to call at San Lucar, a port town at the mouth of the river, and situated in the province of Cadiz, where cholera was prevalent. The result was that vessels from England and other non-infected countries were compelled to present their "manifests" at the port of an infected province, and having done so they were at once regarded as suspect, and not allowed to enter Seville without being detained for "observation" in the river. Innumerable protests, it is stated, were made against this arbitrary detention, but all to no purpose. This result can easily be understood if account be taken of the feelings of the population as shown by their attitude in connexion with land quarantine. All passengers, it appears, arriving even from the neighbouring villages, had to undergo a farce of fumigation, and those coming from or passing into any infected province had to submit to five days' quarantine in a lazaretto fitted up in a ruined convent outside Seville, and destitute of everything but the bare necessaries of life. According to the vice-consul, the Home Secretary sent several orders from Madrid to do away with this illegal lazaretto, and changed the civil governor twice each new one being sent with orders to enforce the stoppage of the unlawful quarantine, and each having to resign on account of the determined attitude of opposition displayed by the population. Finally, the municipality resigned in a body, and the populace one night went to the extent of stoning the governor's official residence. So matters remained until the middle of October, when the epidemic was at an end.

The consul for the district of Malaga also, judging from his experience during the past year, raises a protest against the existing quarantine system. He trusts that, as the result of the late epidemic, the Spaniards may come to learn the uselessness of their measures in this respect, and may be induced to treat foreign shipping in a more liberal and practical manner in the future. The result of their lazarettos and cordons must, it is hoped, have shown them that such precautions are quite unworthy of the faith that was so generally placed in them. Indeed, it is explained how they were worse than useless, whilst the loss and expense inflicted on shipping were incalculable. In short, the references to cholera in the volume under consideration show how the disease was associated with grave sanitary default, and how futile were the efforts to stay its progress in so far as these were limited to restrictions of a quarantine character. England may, in view of this renewed experience, rest satisfied in the assurance that with the organised system of inspection along her coast line, coupled with a steadily progressing improvement in the general sanitary state of the whole community, she is far more secure against the spread of cholera than those amongst her neighbours who prefer to neglect sanitation, and then hurry to spend their money on the useless and utterly unremunerative processes of cordons and lazaretto detentions.

BEYOND question many of our needs are factitious. We have created not a few of the demands it is most difficult to supply, just as we have actively, though not perhaps intentionally, undertaken many of the obligations we find it irksome to discharge. At first sight it may appear that the need for a respite from habitual labour and temporary change of surroundings which recurs to most of us every year is of this nature. There are, however, grounds for believing that this is not the truth, but that wholly independent of custom and even of civilisation, a change in the

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mode and place of living for a brief space about once each year is indicated by nature. PLUTARCH mentions the habit of going to the sea for a few weeks annually as prevalent among nearly all communities having access to the coast, even though their migration were a somewhat formidable one. In short, it would seem that change is one of the expediencies, if not the necessities, of healthy living; and no doubt the demand for fresh air has been greatly increased by the formation of populous districts wherein the conditions of life are rendered less natural than rude health requires. Probably the need will increase as time goes on, and those are happy who are able, and sufficiently intelligent, to make the annual holiday as great a relief from the fetters of habit, and as much a stimulus to recuperative nutrition, as it ought to be.

Where to go is *the* question of the hour. We have no intention of anticipating, or even suggesting, the answer. The point raised is a more important one than it is generally considered, and the issue is one that ought to be determined seriously, and as far as possible on purely personal grounds, in each individual case. The first condition of success in the use of change as a relief and restorative is to make the particular change effected not merely complete, but physiological in its adaptation to the special needs of the organism. This is too much left to chance, and, except as regards the movements of avowed invalids, the trusted adviser on matters of health is too seldom consulted. We are strongly of opinion that if the greatest benefit is to be secured, the practitioner ought always to be asked to give advice on the subject, and that, being asked, it should be his aim to search out the particular needs and capabilities of the nerves, blood, muscles, and the organic system generally, and to adjust the remedy of change to the requirements of the person before him not less carefully than he would select the ingredients, determine the proportions, and compose the totality of a prescription for drugs. There is far too much recklessness in this matter. The general notion that change is good prevails, and the manner in which the life is to be varied and the surroundings changed is treated with indifference, even when some small care may be bestowed on the locality and climate.

There are great and grave risks in all travelling. Setting aside the chances of accident, there are the haste and toil of the journey, the peril of exposure to cold by damp beds at hotels and in lodgings (a *very* common cause of illness—far more common than is generally supposed), the danger of infection by contact with the sick or convalescent, of blood-poisoning by impure or contaminated water, of indigestible, or otherwise bad, food. These risks to health ought not to be under-estimated. Many a weakly or susceptible person, going from home jaded, is seriously injured by the contingencies of travel, particularly on the Continent. Speaking generally, we incline to say that it is safer and better for English folk to travel in this country than abroad. Of course, the change is more complete when the surroundings are entirely different, and there is much to be said in favour of a trip to "foreign parts" if there be sufficient vital power to resist and overcome the antagonism of perils by sea and land; but [illegible] safer, when practicable, to go away for a week's rest and [illegible] to some known and trusted place of [illegible] than to the Continent, than to rush directly into the midst of dangers when the organism is exhausted and depressed by the monotony of life and work at home. The delay suggested will be more than compensated by the increased preparedness to undertake and enjoy travel after a week of rest and fresh air in the home country.

A common mistake into which tourists fall is the notion that notwithstanding they may be unaccustomed to great muscular activity at home, they must needs be fit for severe exercise in walking, and even climbing mountains, as soon as they go from home, even though they are at that very time specially exhausted. How many failures to derive benefit, and even break-downs and deaths, are due to this blunder! Travelling is fatiguing to all, and particularly to those who are unaccustomed to it; and yet in the quest for health many otherwise sensible persons are induced to encounter the exhausting effects of long and toilsome journeys, often to their serious detriment. A pedestrian or mountain-climber needs careful training for his task if he has not been in training for some months; and even long travelling by railroad calls for some preliminary exercise of a moderate kind to lead up to the continuous toil.

Our immediate purpose will be answered if these few general remarks should have the effect of directing attention to the subject of change, and if they induce those who seek the benefits it is believed to be capable of affording, and those who advise on the subject, to give the questions involved fuller and more detailed consideration. It is not only disappointing, but humiliating, to find disease, or even death, when laboriously seeking for health, and yet that is the untoward experience of too many who are more energetic than wise in the way they utilise the annual holiday season.

THE progress made in the study of Bacteriology is one of the most remarkable facts of modern science. By far the greatest part of our knowledge respecting the nature of these protophytic organisms has been gained within the past decade, and even a shorter span of years embraces the period during which most of the microbes of disease have been discovered and investigated. Every year brings with it a fresh addition to the sum of knowledge upon the subject and already so much has been gained that the diffusion of such knowledge is taking place far beyond the limits of the laboratory and the physician's study. As an instance of this may be cited the extremely interesting volume which forms the latest addition to the series of International Scientific handbooks[1]—a series that contains so much that is useful and that has a real educational value. M. TROUESSART'S work on Microbes, Ferments, and Moulds will do much to enlighten the reading public upon matters which not very long ago were considered as the somewhat precarious property of a few scientific enthusiasts. Bacteriology has a firmer footing now; and the publication of such a work as the recently issued collection of memoirs by KOCH and colleagues by the New Sydenham Society has brough this within the reach of the English student many of the most important inquiries that have gone to strengthen the position and establish the value of this line of research. In this country, also, we have an increasing band of workers, who are adding important facts, and confirming

[1] Published by Messrs. Kegan Paul and Co.

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statements already elsewhere made, and thus aiding in the sure but certain work of discovery of the nature of specific disease. The methods of research are comparatively simple, but from the very nature of the subject they require the exercise of the greatest skill and patience. It is not possible for everyone to be a bacteriologist. Life is too short to allow of the pursuit of such a subject to be carried on by those who are busied with the concerns of active professional work. Everything, therefore, which enables the bacteriologist to spread the knowledge of the facts he studies is of advantage, for it enables those who cannot, by force of circumstances pursue this study in practice to at least comprehend the facts and their bearings in relation to disease. The application of photography is one of these methods, and its development in respect to microscopical work is in fair way to be much advanced. Hitherto photomicrography has hardly come up to expectation. Theoretically its advantage over the pen and pencil sketch even when aided by the camera lucida should be great. To have a permanent reproduction of a microscopical specimen faithfully rendered, without any intervention of the microscopist's own interpretation, should be a great gain; but the photographs have mostly been lacking in the sharpness of outline and clearness of detail which the specimen itself presents to the eye. Prof. KOCH has long employed photography to render visible to others the forms of bacteria that are to be discovered in disease. We have now in this country the same work being undertaken, with every advantage of new processes, by such competent hands as those of Mr. CROOKSHANK and Dr. H. GIBBES. Mr. CROOKSHANK'S large collection of photomicrographs has been exhibited at the Royal Society, the Microscopical and Pathological Societies, and on many other occasions, and has called forth well-deserved encomiums. They form at present part of the Photographic Exhibition at Glasgow, and Mr. CROOKSHANK claims for them that they are taken from specimens irrespective of the staining reagent and mounting medium employed; and they are mostly taken with high powers, such as 1-25th in. objective, and even higher. Permanent autotypes, printed in various colours, facilitate the reproduction of the actual appearance of the specimens, and by enlarging from the original negatives a very considerable degree of magnification is attained. Both Mr. CROOKSHANK and Dr. GIBBES deserve credit for showing what may be done by photography, and their work suggests a very useful extension of the process in anatomical and pathological investigations.

WE have received a copy of the regulations drawn up by Dr. C. HAIG-BROWN, and approved by the head master, for the management of the sick of the school, and especially for the steps to be taken in cases of infectious disease. They appear to have been very carefully prepared, and fully justify the opinion we have expressed of the advantage which would arise from having such a code prepared for each school by the medical officer in charge. It also reveals to us the fact that on the present occasion some, at least, of the masters have acted in disregard of the instructions issued under the authority of the head master. The first regulation provides that "if during term time a boy fall ill with an infectious disorder, he must be immediately removed from the house in which he boards, to the sanatorium, in the school ambulance-cab." In the list of diseases requiring isolation, attached to the rules, diphtheria is included. How, then, did it happen that the two cases which occurred in the house where young CARRITT was boarded were not at once removed? We were informed by Dr. BRISTOWE, in his letter to *The Times*, that the retention in the boarding-house was in opposition to the wishes of the medical officer. With whom, then, does the responsibility lie? With the head master or the house master, or with both? Such an occurrence bears strongly in favour of our view that the medical officer of a school should not only have the power to appeal, but be bound to bring to the notice of the governing body any such disregard of sanitary regulations which had been submitted to and approved by it. We give elsewhere a copy of the resolutions passed at a special meeting of the Council of the Medical Officers of Schools Association. We cannot say that we think them in all respects judicious. It appears to us that if carried out they would invest the medical officer with an amount of power which, unless exercised with great judgment, would prove injurious, and might introduce a considerable amount of discord into the school. Dr. C. HAIG-BROWN'S regulations, on the contrary, seem well suited to the purpose and to provide for almost every contingency, if only there were adequate means in existence for enforcing them when necessary.

Annotations.

"Ne quid nimis."

THE CHOLERA EPIDEMIC IN SOUTHERN EUROPE.

IT is not easy correctly to interpret the significance, as regards the future, of the cholera intelligence received for the week ending July 27th. In so far as Austria is concerned, the positive news is still limited to Trieste and Fiume. From both towns the information is intermittent, but the disease would appear from the latest intelligence to be maintained, the daily number of deaths varying from 1 to 4 at Trieste and from 1 to 6 at Fiume. Trieste is, however, stated to be much more free than hitherto from the conditions favourable to the spread of the disease, great activity having been displayed by the sanitary authorities. During the week there was rumour of an appearance of cholera in villages in Hungary. So far, no confirmatory news as to this has been received, and it is to be hoped that the rumour was incorrect, for there are many portions of Hungary that could not withstand the importation of the cholera contagium. From Italy we learn that in several of the localities hitherto affected there has been a diminution in the number of cholera cases and deaths; and if we may judge by the published returns, this would appear to be correct, especially as regards the province of Brindisi and the adjoining neighbourhood. In Brindisi town, however, two or three deaths occur daily, and in Francavilla Fontana the fatal attacks have day by day varied from 1 to 4. Other towns, such as Latiano, are also still affected; and, lastly, 26 cases and 9 deaths are reported from Manduria. In the north, the returns as to the city of Venice came to a somewhat suspicious termination two or three days before the departure of the King and Queen for that place, but in the province of Venice the disease still continues. Thus, 42 cases and 20 deaths are reported as having occurred there in the forty-eight hours ending mid-day on July 26th. In the neighbouring province of Ferrara a considerable diffusion

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in the area affected occurred about July 23rd, the towns of Comacchio, Massafiscaglia, Porto Maggiore, Copparo, and Pieve di Cento, nearly all lying close to the swampy sea inlet on the eastern coast of the province, being implicated; and a few days later intelligence was received that the disease had also appeared in the provinces of Treviso, Vicenza, Padua, and Udine, as many as 128 fatal cases occurring in forty-eight hours. In the city of Bologna, too, 14 cases and 7 deaths took place during the same period. Thus, whilst a diminution may have taken place in localities previously infected, the area of distribution of the disease has been materially widened, and this in the face of an intense heat. The most hopeful sign is the diminution we have referred to as having taken place in the south, where the heat is exceptional in its intensity.

THE CHOICE OF DIRECT REPRESENTATIVES.

WE are glad to notice the absence of any indications of undue haste in the selection of candidates for the Medical Council. The reasons for much consideration are clear, and have been already stated. The most obvious of these is the disproportion between the number of places to be filled and the number of fit persons for them. In every county of England, Scotland, and Ireland there are many men whom we should like to see elected, and whose judgment and experience would be a valuable element in the deliberations of the Council. But five only can be chosen to represent 26,000 practitioners. As the representation can only be small, it is desirable that it should be real. All are agreed that the official, the consultant, and the teaching elements are already fully represented in the Council. What is conspicuous is the absence of the general practitioner or of members of the profession who have shown themselves in real touch and sympathy with him. Those who have worked hardest and most effectually for the direct representation of the profession should now combine to secure the supply of this want in the Council. The regulations for the conduct of the election are not yet published by the Privy Council. We shall not fail to give our readers early intimation of their tenour. Meantime, it is important that the profession in different parts of the country, roughly perhaps in England—dividing itself into different electoral areas,—as is already done for Scotland and Ireland by the Act, should give some sign of its disposition in the matter of persons. We shall be glad to receive early information in this direction.

SYPHILITIC CHOREA.

A YOUNG MAN in Buenos Ayres, who by his strange contortions had excited the curiosity of the passers-by, recently came under the care of Dr. Franceschi, who was somewhat puzzled by the symptoms. The movements were of a choreic nature, the most characteristic being a contortion of the thoracic abdominal and pelvic muscles. The patient's condition became so grave that he could not move out of his room. For a month various methods of treatment were unsuccessfully employed—electricity, sulphur baths, strychnine, hyoscyamine, &c. A consultation was then arranged with Drs. Valdes and Alcorta. The first of these gentlemen remembered having treated the patient six months previously for a chancre, which at the time was not thought to be syphilitic, and had not been treated by mercurials. There were no enlarged inguinal glands or other marks of syphilis; however, it was decided that the chorea might be of syphilitic origin, and therefore Ricord's pills (green iodide of mercury), inunction over the spine of a mercurial and croton ointment, together with Van Swieten's solution (perchloride of mercury) and vinum ferri, were prescribed. In three days salivation occurred, and simultaneously with it the choreic convulsions disappeared. The mercurial treatment was then discontinued, but it was found necessary to resume it, for the convulsions soon began to recur. The salivation subsequently became so distressing that the mercury was again stopped, and the convulsions returned, though not so severely as before. Mercurial and iodide treatment was continued for six months, at the end of which time the patient was completely cured. Dr. Franceschi considers this case especially instructive, as, though various predisposing causes are usually named in connexion with chorea, neither syphilis nor mercurial treatment is mentioned, as far as he can find, by Bouchut, Graves, Jaccoud, Diday, Tardieu, or Trousseau. It has, on the contrary, been stated that mercurialisation may act as a factor in its etiology; here, however, is a case in which mercury cured it. The author seems to think that perhaps a hereditary syphilitic taint may sometimes have some effect on the development of chorea, and that, if so, mercury would be the best form of treatment to adopt.

FLUSHING DRAINS WITH SEA-WATER.

WITHIN the last decade Yarmouth has succeeded in reducing its annual death-rate from 23·02 to 19·03 per 1000, and its zymotic death-rate from 4·6 to 2·28. This is a great success considering the difficulties presented to the authority by the natural disadvantages of the situation, and the fact that Yarmouth is a commercial town and port as well as a health-resort. The difficulties of the site, as pointed out by our sanitary commissioner who visited the town in 1875, consisted chiefly in the perfectly flat nature of the district, rendering it difficult to get sufficient fall for the drainage, and impossible to discharge the sewage at points above sea-level. These two factors led at that time to considerable damming back of the sewage matter, and at times to tremendous pressure of sewer air within the sewers and house-drains. The earliest action of the sanitary authority was to relieve as far as possible this dangerous condition of things, first by the free erection of ventilating shafts in those parts of the town in which the pressure of sewer air was most felt, and then by endeavouring to prevent the deposition of sewage within the drains themselves by means of constant and systematic flushing. The cost of this flushing with fresh water is of course considerable, and we are pleased to find that a scheme has been suggested, and is likely to be carried out, whereby the sewers will be flushed by means of sea-water to the amount of 25,000,000 gallons annually. Automatic flushing-tanks containing 1500 gallons will be placed along the main thoroughfares and daily discharged into the sewers, whilst provision is also made for watering the streets in the central parts of the town by means of hose, as in Paris and Brussels. It is estimated that about 160,000 gallons of water will thus be passed through the sewers each day during the height of the season. When this scheme is thoroughly carried out we shall no doubt find the death-rate decline still further. One of the elements of the old high mortality of this town, however, still continues, and that is the excessive mortality amongst illegitimate children. Like all seaports, the illegitimate birth-rate at Great Yarmouth is high, and among these unfortunates under one year of age there is a death-rate of 32·9 per cent. How many reach maturity it is difficult to say, but that this mortality is caused by any special unhealthiness of the town is contradicted by the fact that the death-rate among children of more happy parentage was only 12·8 per cent. The sanitary authority having pointed out the existence of this blot on the town, it is only necessary that steps should be taken to remedy the evil, for it is undoubtedly one cause of the death-rate of Yarmouth being higher still than it should be, and in these days of sanitary competition no watering-

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place can afford to lose a point in the game. The sanitary authorities are deserving of every credit for what they have already done, and in inaugurating a system of drain flushing and street watering with sea-water they are setting an example to other seaside resorts.

THE PRINCE OF WALES.

THIS nation is especially happy in its princes. The lamented Consort of our gracious Queen set a noble example of active concern for the happiness and prosperity of the people, and his sons are walking in his steps. The Prince of Wales, not simply as heir to the Crown, but as the first of English gentlemen, has made it the business of his life to strive by every means in his power to promote the enlightenment and progress of the Queen's subjects. It would be fulsome, and might be mistaken for mere adulation, to set down all we honestly feel, and what we are sure the masses of the population feel, on this subject. We do not believe there is a more genuinely popular man in the country, apart from his illustrious rank, than the eldest son of our august Sovereign, and for the very reason that the people in their hearts know that he really loves and cares for them. His Consort gracefully shares his labours, and her endeavours are loyally and lovingly appreciated. It is therefore with great satisfaction that we observe the inauguration of a movement, originating with a few actively benevolent and enterprising men who have participated in the Prince's care for the people, to make some suitable acknowledgment, in the shape of a testimonial, of the services rendered by the Prince of Wales to the peaceful, domestic, and commercial interests of the country. The movement has taken its rise in connexion with the Indian and Colonial Exhibition, which we owe directly to the thought and enterprise of His Royal Highness, but it should be understood that this great service rendered by the Prince to the people is only the culminating point in a long course of active endeavours for their good. We most heartily wish the movement success, and we trust it will reach proportions worthy of its object, and making it a fitting expression of the people's will. The following noblemen and gentlemen have been named as a subcommittee to carry out the details of the scheme: Earl Cadogan, Earl of Rosebery, Field-Marshal Lord Napier of Magdala, G.C.B., G.C.S.I., the Lord Mayor of London, the Right Hon. Sir John Rose, Bart., G.C.M.G., and Sir Robert G. W. Herbert, K.C.B.

THE LONDON CONVALESCENT HOSPITAL.

ACTIVE steps are being taken to carry out this scheme (inaugurated at a Mansion House meeting last year), which is a comprehensive measure dealing with the want which is very generally felt for an increase of accommodation for the convalescent poor and working classes of London and its suburban neighbourhood. A special feature of the movement is that ample provision will be made for a very large class of patients at present wholly unprovided for—that is to say, for those who, recovering from sickness or accident, still need a continuance of medical or surgical aid. The administration of the hospital will be carried on with the practical assistance of gentlemen of the medical profession connected with the leading London hospitals, who have already taken a prominent part in the deliberations of the Council, which is composed of a large number of the influential clergy, doctors, and laity of London, and is under the direction of Earl Cowper as chairman, Sir Spencer Wells as vice-chairman, and Sir J. Risdon Bennett as chairman of the Executive Committee. An essential principle in the constitution of the institution is that every encouragement should be given to the working classes to assist themselves as far as they are able, and consequently, as a general rule, a small weekly payment will be exacted from the patients; on the other hand, careful provision has been made for the free admission of those who from extreme poverty are entirely unable to help themselves. Before making any public appeal for funds, it has been thought better to secure the support of such among the wealthy and influential who might be found to approve the scheme, and already very liberal donations have been promised.

IMPORTANT JUDGMENT AS TO PRIVY NUISANCES.

MR. ILIFFE opens his annual report for 1885 by stating an important case recently decided in the Court of Queen's Bench. The justices of Derby had made an order that certain privies which were a nuisance should be dealt with in a specified manner, so as to avoid the recurrence of the nuisance, and the appellant appealed on the ground that he was prepared to abate the nuisance in his own way, and that this was all that the justices had power to order him to do. Mr. Justice Day, however, pointed out that the justices could order works to be done in compliance with the requisition of a notice "or otherwise to abate the nuisance," and the justices had acted on the alternative. They were clearly in no way bound to allow the person complained of to do only that which he might think fit to abate the nuisance. So, also, Mr. Justice A. L. Smith held that the justices had power under Section 96 of the Public Health Act to order structural alterations, and negatively it had been decided that they were not obliged to give an alternative to the person complained of, so that he might abate the nuisance in his own way. The appeal was therefore dismissed. In the case in question the justices had ordered the appellant to convert the privies complained of into proper pan waterclosets, and to connect them with the main drains, and this requirement has, quite apart from the appellant's ability to remedy the nuisance in any other way, been upheld as legal, and has hence to be complied with. Very similar circumstances had already been brought before the Queen's Bench in a previous case, and with the same result, but this case will probably settle the matter finally, and in towns where the authorities are convinced that a nuisance can only be remedied in a certain way, they have only to issue a notice specifying the manner in which the works are to be executed, and to prove their requirements to be well founded, in order to procure an order directing the execution of the actual works which they have specified as necessary to prevent the recurrence of the nuisance. The case will be known as that of Whitaker (app.) *v.* Derby U.S.A. (resp.).

PUERPERAL TETANUS.

DR. W. NETZEL mentions in the *Hygeia* a case of puerperal tetanus. The patient was a woman of twenty-five, a primipara, who was brought to the lying-in hospital by a midwife a day and a half after labour had commenced. The fœtus was dead, and its large head locked in the pelvis. The os uteri was 5 centim. in diameter, thick and rigid. Perforation was resorted to. The fœtus and placenta were expelled spontaneously five hours later. The cavity of the uterus was washed out with a 3 per cent. solution of carbolic acid. The temperature rose on the fourth day and the lochia became putrid. Intra-uterine injections of a 3 per cent. solution of carbolic acid were used, and the vagina was washed out with sublimate. On the eighth day trismus and stiffness of the neck appeared. The following day there was stiffness in the shoulder and spasmodic contractions of the facial muscles, with painful spasms. The temperature was 41° C.; pulse 140. The woman died at mid-day. Chloral had been given and subcutaneous injec-

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tions of morphia and curare. On making a post-mortem examination, an ulcer was found in the cervix reaching through the uterine walls to the peritoneum. There was parenchymatous degeneration of several organs. Dr. Netzel considered the tetanus in this case to be a symptom of general septic infection.

DRINK IN THE BUILDING TRADE.

THE modern practice of erecting in our principal cities huge buildings with iron columns and girders of many tons' weight necessarily entails commensurate risks on those who are engaged in the works. Cranes and derricks, self-stopping pulley-blocks, and thoroughly tested chains, while economising labour, tend to minimise the number of accidents, but also to aggravate their destructive power when they do occur. It is truly wonderful to see a granite pillar or an iron girder lifted and swung round over any part of a building area, and then deposited accurately and smoothly on any given point with singularly little help from comparatively few men. But how necessary that every one of them should be at his best, cool-headed and steady-handed. When a crash does take place, the explanation is generally found in some flaw in the machinery; but it is to be feared that every now and then an oversight or a slip on the part of one of the men may be the first cause of the break-down. It is only just to bear in mind that the building trade is a very laborious one, and that a large proportion of the men engaged in it are distinguished amongst artisans for intelligence, sobriety, and thrift. But just as the strength of the chains and ropes employed is only equal to that of the weakest link or strand, so at a critical moment the efficiency of a band of workers is only equal to that of the individual man; one failing may imperil all. Dust and labour, often over-long hours in working under contract against time, make men thirsty and tired; and if anyone watches a great building, he often sees men slip out for a drink at the nearest public-house. It is only occasionally that the building area can be completely enclosed and placed under the charge of a trusty gatekeeper, but something might always be done to provide the men on the ground with cooling and invigorating drinks. Cocoa, lime-juice, or oatmeal could be dispensed for a comparative trifle, and, failing these, a large water-filter and a few earthern cups might be a great comfort, and avert the temptation of rushing to the beer-barrel and the spirit-vat with a parched tongue and an empty stomach. The men, timely refreshed, would work longer and with greater power and safety, and when an accident did happen, as may sometimes be unavoidable, it would be a satisfaction to feel that at the critical moment every man was at his best, mentally and physically.

BACTERIOLOGY AT BRIGHTON.

AN extended illustration of bacteriology will be given this year at the annual meeting of the British Medical Association in the section of Public Medicine. The arrangements have been entrusted to Mr. Edgar Crookshank, and the result will doubtless interest many who have not hitherto had an opportunity of acquiring some practical acquaintance with this interesting branch of science. The demonstrations will be held in the spacious building of the School of Science and Art, and the rooms will be open from 10 A.M. to 1 P.M. on August 10th, 11th, 12th, and 13th. In Room A there will be an exhibition of bacteriological apparatus. A complete set of apparatus of the German pattern will be supplied by Becker and Co. Sterilisers, incubators, and various apparatus of English make will be shown by Messrs. Griffin and Son. Microtomes and histological apparatus will be exhibited by Messrs. R. and J. Beck; and the list will be completed with apparatus and materials supplied by Mr. Crookshank. In Room B there will be a demonstration of some sixty cultivations of micro-organisms in various media. Dr. Penrose will assist in the preparation and demonstration of the cultivations. In Room C there will be a demonstration of preparations of bacteria and other micro-organisms of pathological interest under about fifty microscopes. In addition to assistance from private sources, the latter will be supplied by the following firms: Mr. C. Baker of Holborn (with immersion objectives by Zeiss, Reichert, and Leitz); Messrs. Surft and Son, who will also show their new lamp for high power work; Messrs. R. and J. Beck; and Messrs. Powell and Lealand. In Room D there will be shown photo-micrographic apparatus, and a large collection of photographs of bacteria and other micro-organisms taken by Mr. Crookshank. The photographs comprise silver, ferro-prussiate, platinotype, and Eastman bromide paper prints autotype reproductions in special colours, original negatives transparencies, and enlargements.

M. PASTEUR'S CRITICS.

ROOM for criticism of M. Pasteur's prophylactic method of treatment of hydrophobia unquestionably exists, and has been freely occupied. Several writers of eminence have taken up strong positions against the method. The British Hydrophobia Commission may be, in a sense, regarded as a critic. At home and abroad, criticism, not always tempered with good judgment, has been hurled at the head of the renowned Pasteur. The proper attitude to adopt is one of simple watching and waiting whilst those most qualified to investigate and judge are examining the methods and observing the results of the treatment. Men really competent to decide on the methods and results are, we think, few in number, and must be so, for the investigation requires certain skill and knowledge which have had to be acquired at the cost of much assiduity during the past few years, since this department of high pathology is of recent growth. At the same time, we do not wish to imply that any scientific man of common sense should not be allowed to consider the logic of the matter. Mr. Vincent Richards, in an able pamphlet which has just reached us, has exhibited great shrewdness of argument in his criticism of M. Pasteur. But whilst we admire the force of Mr. Richards' logic, made more valuable by his scientific attainments, we cannot but think that his language is scarcely temperate and his arguments not conducive to the advancement of science.

SANITARY BURIAL.

A PAMPHLET by Mr. Frederick Lowndes on Burial Reform in and around Liverpool deals in a concise but instructive manner with the leading points of this important question. Statistics which are quoted with reference to the space available for interments in the various district cemeteries are sufficient to justify the statement that it is at least highly desirable that ground for burial should be economised. It naturally follows that methods now in common use, including the massive coffin, whether of lead or oak, and every form of vault, receive from the author a common condemnation. He is, we are pleased to note, an uncompromising advocate for the earth-to-earth system of burial. By adopting this plan, with due allowance of time for the free action of decay, it should be possible to use one grave for the successive interments of several dead persons without any risk of unwholesome consequences to the living—a point which is also brought out in the present paper. While acknowledging, however, the general fitness of the earth as man's last resting-place, provided only that no ponderous casing intervenes, Mr. Lowndes has evidently a leaning towards cremation. We do not quite follow him when he asks for this process a permissive legality. Such a standing has

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already been assigned to it. What it still lacks is the direct approval of law. This, it has been often contended, should be allowed on the mere guarantee of certification of the cause of death. With such an opinion we cannot agree, nor can we admit that the post-mortem evidence of crime is to be made little of because, in the words of this paper, it is merely corroborative. It is difficult to see how it should form the first step in a judicial inquiry, but this does not impair its great value in confirming or opposing an established suspicion.

BRIGADE SURGEONS IN INDIA.

ALTHOUGH we cannot agree with all the statements put forth by the brigade surgeons in India in their claims to consideration, we think they have really good reason to complain that they have been unfairly treated. While the rank has been nominally recognised, the advantages of increased pay and allowances have been withheld. The change from the regimental to the station hospital system was the means of effecting a very considerable pecuniary saving to the Indian Government, but it was attended with increased responsibility and additional work on the part of the medical officers in charge of these hospitals. For this, however, no compensation has been given, nor has any addition been made to the pay, allowances, or pension of the officers on whom this charge has devolved. In the present state of Indian finance it is essential that every legitimate economy should be practised; but this does not justify throwing upon officers increased work and responsibility with reduced allowances. The change of system deprived medical officers of the allowances for being in charge of regiments, and added very materially to the work of those in charge of hospitals. Surely, then, some part at least of the saving effected in the one case should be applied to compensate for the increased labour and responsibility involved in the other. It is unfortunate, in our opinion, that the officers who have drawn up a "statement of claims of brigade surgeons" did not confine themselves to these real grievances, for we cannot but think that they have weakened their position by the introduction of exaggerated statements regarding the system of promotion by selection and the nature of the examinations which surgeons-major are required to undergo previous to selection. The medical officers have a very strong claim for "a staff allowance" when in charge of a station hospital, and there is no lack of precedents for such an allowance being granted when a change in departmental arrangements has carried with it, as in the present instance, much additional work and increased responsibility.

VERY LARGE BILIARY CALCULUS.

DR. ARTHUR HASSALL was recently called in consultation, in conjunction with Mr. Edward Newton, by Dr. Martemucci, of San Remo, to a case of intestinal obstruction. This obstinately resisted all modes of treatment for some days, but at length a copious evacuation was obtained; this was fortunately carefully examined, and in it a large stone-like body was found. It was smooth and polished on the surface, of a brown colour and of an ovoid form; it was 44 millimetres (1·73 in.) in length, and 23 millimetres (0·90 in.) in diameter. It weighed 16 grammes (247 grains), but the weight was not taken till a day or two after it was voided, when it had become considerably lighter from the evaporation of contained water. When broken into, it was found to be colourless, transparent, and beautifully crystalline, the crystals being concentrically arranged. On analysis, it was ascertained to consist entirely of cholesterine. The patient was at no time jaundiced, although the urine contained bile acids. The remarkable points of this case are the magnitude of the calculus, and the fact that it actually gave rise to obstinate intestinal obstruction. Cholesterine is readily affected by heat, and Dr. Hassall has thrown out the suggestion that possibly the escape of the calculus from the cystic duct might in such cases be facilitated by the slight softening and consequent moulding occasioned by the prolonged heat to which it was subjected while in the body.

EXTENSION OF TEMPERANCE.

WE have repeatedly had occasion to notice the papers of Lady John Manners on social subjects. Few ladies do more good or make more useful contributions to the arguments for simple, sober, cheerful habits. The *Church of England Temperance Chronicle* contains a short but very sensible article on "The Gradual Extension of Temperance Principles and Societies," arguing chiefly against the use of brandy and other stimulants by women for slight attacks of indisposition. Lady Manners has lived much in Germany, and says that an intelligent German woman, who for many years has known English people of all classes, said to her, "There's one thing surprises me: English women, if they do not feel well, so often take brandy. We have no such custom. We think it must make them worse." The habit of taking a little alcohol for the relief of various sensations is certainly less common among intelligent women than it used to be, but it is still too much so. It cannot be too much condemned. The use of hot tea or coffee and of hot applications is infinitely wiser. We commend Lady Manners' paper to all readers. She remarks, on the subject of Army Temperance Work, that the German Government does not provide its soldiers with beer, wine, or spirits, and that they are remarkably sober. Thanks to such men as the late and ever-to-be lamented Dr. Parkes, and Lord Wolseley, we are much more chary now of giving our own soldiers stimulants, and with much advantage.

THE RIVER LEA.

STATEMENTS in the public press bear witness to the fact that the condition of the river Lea below the sewage works at Tottenham is greatly improved. The recent agitation has not, therefore, been wanting in success, and the result shows sufficiently clearly how much can be done by local authorities when they are compelled by public opinion to exercise the powers they possess. Major Flower, the engineer to the Lea Conservancy, has, in a letter addressed to Mr. Hanson of Wakefield, expressed on behalf of his board their "unqualified delight at the changed condition of the river Lea" below the sewage works at Tottenham. This improvement he attributes to the method devised by Mr. Hanson of treating the Tottenham sewage by black ash waste. The effluent from the Tottenham sewage works still flows into the river, but its condition is entirely changed, and it is stated to be free from any secondary decomposition.

LONDON DUSTBINS.

THE *Engineer* pleads for a more frequent removal of house refuse during the hot weather than once in every fortnight, and comments on the complaint of a correspondent that the use of a galvanised iron receptacle adds to the offensive condition of its contents. It suggests whether decomposition is not favoured by the closeness with which the refuse is packed and the greater heat of the foul atmosphere in the metallic box. This objection does not appear to be well considered; there is no reason why the refuse should be more closely pressed together than in a larger dustbin; the limitation in the size of the receptacle simply indicates the need for more frequent removal; and if the metal has a

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tendency to become heated, this is guarded against by placing it in some position where it is not exposed to the direct rays of the sun. Metal dustbins have one marked advantage over brick: the porosity of the latter causes them readily to absorb the moisture and gases given off by the contents, and the dustbin under these circumstances becomes itself a source of nuisance. Our own opinion is certainly that the impervious material of which metal dustbins are made, and which enables them to be movable, is far more advantageous to health than the fixed brick dustbins, of which London now possesses too many.

EQUIVOCAL CAUSE OF DEATH.

ON July 14th an inquest was held at St. George's Workhouse, Buckingham Palace-road, concerning the death of a flower-girl, named Ellen McCormack, aged seventeen. Deceased left her home to follow her avocation on July 10th at 5 o'clock in the morning, and at 2 in the afternoon she was discovered by the police sitting on some steps, speechless and "apparently drunk." A medical man who passed by is reported to have said she was intoxicated. On being taken to the police-station the divisional surgeon's assistant found her in a dying condition. At the post-mortem examination no alcohol was detected in the stomach. The lungs were much congested. Death is said to have been due to mucus lodging in the windpipe during the act of vomiting. The father of the girl deposed that she had been a teetotaller all her life. As regards the immediate cause of death, there seems little doubt it was from suffocation; but the question naturally arises, How was the congestion of the lungs brought about? To say the least, it is rare for a person to die from mucus passing into the windpipe whilst vomiting, unless at the time there was something to interfere with expectoration, such as narcotism, or some mechanical impediment to the clearance of the air-passages. If the girl had taken alcohol in excess the matter would have been easy of solution, especially as she was unaccustomed to the poison. We do not lay much stress on the statement of the policeman that the vomit smelled like alcohol, since the odour of the contents of the stomach is apt at times to mislead even experienced practitioners. We should like to know upon what grounds the doctor who first saw the deceased based his conclusion that the latter was drunk. Without assuming anyone of blame in the matter, we cannot help thinking that the case may have been one of vomiting caused by some acute disease—e.g., pneumonia. The jury were practically bound to return a verdict in accordance with the medical evidence. This verdict may have been a record of the truth, but from the information at present before us we cannot help expressing our mistrust. If the testimony of the parents of the deceased can be relied upon, it seems strange she should have taken a fatal dose the first time she tasted alcohol.

HYSTERECTOMY AND NEPHRECTOMY.

La Gazzetta degli Ospitali (July 21st) reports a successful operation by Professor Calderini, of Parma, for the removal of the entire uterus. The organ had been completely prolapsed for some time, and was the seat of multiple subperitoneal myomata. The temperature after the operation never exceeded 37·7° C. Of six vaginal hysterectomies, four were successful in the hands of Professor d'Antona of Naples. This operator has devoted much attention to renal surgery. He prefers lumbar to abdominal nephrectomy, and thus summarises the statistical results of the two operations up to this date. In 111 lumbar nephrectomies the percentage of mortality has been 39·93, whereas the abdominal method [illegible] is said to have yielded a death-rate of 50 per cent.

QUALIFICATIONS IN SANITARY SCIENCE.

THE first annual meeting of the Society of Medical Men qualified in Sanitary Science has been held, and the President, Sir Joseph Fayrer, has delivered an interesting address, of which we print a summary in another column, and which will give an impetus to the new Association. A great success has already been achieved by the Society in obtaining the registration of Sanitary Science qualifications; the members are now engaged in the promotion of the second of their objects, the obtaining of better recognition of the value of such qualifications as an evidence of special knowledge in the department of public health by the various sanitary authorities. Their desire is praiseworthy, for the circumstances which often lead authorities to elect health officers are not always those which imply the promotion of sanitary work in their districts; if people can be taught, as we hope they may, by the slow process of education, that a skilled and energetic officer is of value to the community, the newly formed Society will have conferred a great boon upon the public.

THE POPULATION OF PARIS.

THE rate of increase of population does not appear to be governed by any fixed laws. Paris has only added 16,000 to her population in the course of five years. Is this a matter for congratulation or the reverse? Looking at the state of poverty in the gayest city in the world, we think that Paris is to be congratulated on her want of fecundity. But, regarded in another light, this slow increase may not be a favourable condition. A population that neither increases nor diminishes may be vigorous and capable of holding its own in the international struggle of existence, but the chances are against this supposition. Excessive fecundity, on the other hand, may not be a spring or sign of strength. Too rapid growth taxes the resources of a nation, and may prove too much for them, thus becoming a source of weakness. A large population of sickly or puny individuals living in a fertile country would soon be exterminated; for unopposed strength knows no peaceful international laws. The slow increase of population in Paris need excite no apprehension if the health of her individuals is not below the normal. Indeed, nothing can be learnt from the mere rate of growth of a population as to its state of health. Moreover, we cannot judge accurately of the strength of a nation by the state of its urban population. Fluctuation is rampant in the metropolis of most countries; the numbers may remain the same. Cities are characterised by the presence of the greatest and hardest workers, and any falling out of the ranks of these is quickly replaced by those who can take their place.

THE PECULIAR PEOPLE.

WHEN one of the Peculiar People has a child, which its own father describes as a peculiar child, the force of peculiarity can scarcely be carried further. When the unlucky child, in addition to the misfortune of having for its father one of the Peculiar People, has to run the gauntlet of the following diseases—measles in January, whooping-cough afterwards, followed by low fever, this succeeded by diarrhœa, and, a week afterwards, convulsions,—we do not need to assume much "peculiarity" in the child to account for its death, either by meningitis, as Dr. Jones of Blackfriars-road said, or any other lesion. The shame is that a poor child should have to go through all this without the benefit of medical help. Dr. Jones may be quite right in saying that meningitis—we presume tubercular—is incurable; but he will not deny that, if the child had had the benefit of medical advice for its measles in January and its later ailments, the chances of the occurrence of menin-

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gitis might have been diminished. The jury quite approved of the censure and warning expressed by the coroner. It is to be regretted that the parent was not committed for manslaughter. This is the only way to get such people to realise the gravity of their neglect and stupidity.

THE DARLINGTON HOSPITAL.

WE regret to learn from statements in the local press that serious difficulties have arisen in connexion with the management of the Darlington Hospital. It seems that for some time past there have been disagreements between the medical staff and the matron, and that a majority of the Executive Committee has so managed affairs that the entire honorary medical staff has resigned. We are not in a position to enter fully upon the points in dispute, but the pass to which matters have been brought is of itself a heavy condemnation of the management of the hospital. It is stated by the late senior physician that his patients did not receive the diets he ordered them, and that many of them left on account of the improper and insufficient food they received. Complaints made by the staff are stated not to have been fully or impartially investigated. Nurses and servants have found their positions untenable or have been dismissed, and the house-surgeon has been discharged in a peremptory manner. We hope the subscribers to the hospital will insist on taking whatever steps may be necessary to prevent a recurrence of such a state of things. Without wishing to insist unduly on the weight that should be given to the advice of the medical staff, we must assert that the two essentials of every hospital are patients and doctors, and that the managing committee, nurses, and lay officials are all subsidiary. The full recognition of this fact ought not to lead to any jealousy on the one hand, or to any overbearing conduct on the other, and it is the key to the successful conduct of a hospital. The supporters of the Darlington charity may be sure of this, that the greatest loss the hospital can sustain is the loss of experienced and able medical officers.

MEDICAL EDUCATION IN CHINA.

THE difficulties in the way of educating the natives of China to any satisfactory degree in the knowledge of scientific medicine are very great, involving the dispossession of their minds of the crudities and absurdities of their traditions on such matters, the necessity of instructing them in one of the European languages in which there is a medical literature, and the securing of clinical opportunities—to say nothing of the task of cultivating in them a truly scientific spirit of inquiry. That the difficulties are as great as represented is evidenced by the fact that even the assistants in the European hospitals in China have never been able to acquire more than a certain manual dexterity. To Dr. Wykeham Myers, the surgeon in charge of the David Manson Memorial Hospital at Takow, Formosa, belongs the honour of an experiment which, if successful, will lead to the replacement by Western medicine of the crude and unscientific system followed by the Chinese professors of the healing art. Some four years ago he endeavoured to found a medical school, in which the student should have a similar education and pass as nearly as possible similar examinations as medical students in Great Britain. After two years of failure Dr. Myers succeeded in his project, and last May he had the gratification of presenting to a board of examiners composed of surgeons of the British army and navy and colonial medical officers, with one native who is well educated in chemistry, two native students, who succeeded in passing a searching examination in anatomy, physiology, elementary surgery, and chemistry: one obtaining 72·6 and the other 70·5 per cent. of the possible marks. Such a result is highly satisfactory, and must amply repay Dr. Myers for his self-denial, labour, and perseverance in the face of obstacles during the past few years; for it cannot be doubted that the school which he has been instrumental in founding will prove the seed which will germinate into a vast reform in China. Of course the grand object is to get the Chinese Government to take over the school. To this end its promoter must steadily work; and doubtless, now that he can show more than promises, considerable headway will speedily be made.

THE POLICE AND THE DOGS.

LOVERS of dogs should not forget their obligations to their fellow-beings. The danger of dogs being at large is not an imaginary one. The report of the Chief Commissioner of Police is worthy of careful perusal. It is not true that the majority of dogs slaughtered by the police were healthy. During the week ending the 10th inst., 17 dogs were killed by the police. Of this number, 5 were actually suffering from rabies, 7 had epilepsy, 2 had some kind of fits, 1 had convulsions, 1 was ferocious, and 1 was not examined. This is the greatest number killed in one week since July 1st, 1885. In the year 1885 the police captured over 25,000 dogs; 365 of these showed signs of rabies at the time of capture; and 60 which did not appear to be mad at the time developed signs of madness after arrival at the Dog's Home, and were then killed. Owners of dogs in London would be doing a kindness to their canine friends if they never allowed their dogs to go for an airing in the streets without some kind of attendance. We yield to no one in our love for the brute creation, but the laws of the country must be obeyed. Surely one human life is of more account than any number of dogs.

VACCINATION IN SWITZERLAND.

THE remission of the law enforcing compulsory vaccination in Switzerland, which was brought about by the clamour of the public, has already begun to bear fruit. The canton of Zurich was during 1881-84 entirely free from small-pox deaths. In the first quarter of 1885, however, there was a small-pox mortality of 6, in the second and third of 14, and in the fourth of 38 per 1000 deaths from all causes. In the first quarter of the present year the small-pox mortality in Zurich was 85. A Berlin journal remarks that it is instructive to compare the small-pox mortalities in Germany and France. During 1885 in twenty-one German towns, where vaccination is compulsory, and where the population is about four and a half millions, there were 27 deaths from variola; while in fifteen French towns with a similar aggregate population, where vaccination is not obligatory, the deaths from the same disease were 866, or thirty-two times as many.

ALLEGED DEATHS FROM VACCINATION.

A CORRESPONDENT of a contemporary claims that vaccination has caused the deaths of two children: the one an infant aged four months, who was vaccinated on June 15th and died of convulsions on July 18th; the other a child, aged five months, who was vaccinated on the 6th inst. and died on the 19th. Both these children suffered from diarrhœa, and in both the medical attendant registered the death as due to this cause. But the children had been vaccinated, and this in the minds of some people is always held to be responsible for any adverse symptom which may occur subsequently to the operation. When it is recollected that the majority of children who are born are vaccinated within the first three months of life, it is inevitable that many children dying at this period of life must succumb *after* vaccination, and thus afford opportunity to those who are opposed to vaccination to quote this operation as the cause of death.

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METROPOLITAN HOSPITAL SUNDAY FUND.

THE total amount received at the Mansion House on behalf of the above Fund had on Thursday evening last (including a second donation of £1000 from Dr. Wakley) reached £39,121. As compared with the receipts at the corresponding period last year this sum represents an excess of nearly £5000. It is fully believed that at the meeting of the Council for distribution this (Friday) afternoon the total amount will reach £40,000.

THE LATE DR. MOXON.

BY the death of Dr. Walter Moxon, which occurred suddenly on the 21st inst., the medical profession loses a distinguished leader, a brilliant writer, an eloquent speaker, and an unsurpassed teacher. Esteemed by all with whom he came in contact, his untimely decease is keenly mourned by his professional and private friends. In our next issue we purpose giving a detailed *résumé* of his life and work.

"A BOY WITH CAT'S EYES."

A CASE with this heading is reported as now exciting the attention of the oculists of Chicago. Mrs. Quinn, of 471, Wells-street, recently visited the State Eye and Ear Infirmary in company with her son, who possesses the peculiar power of seeing in the dark. One of the surgeons, Dr. Charles F. Sinclair, called in several other oculists to examine the anomaly. The boy was taken into a dark room, and various tests were applied. The eyeballs glistened like balls of fire. The larger portion of the iris is missing, only a small portion being visible on the outer side of each eye. When taken into a dark room an immediate expansion takes place which enables the boy to see perfectly. A strong light blinds him, and from this same peculiarity the boy is able to see objects at a distance with much more clearness than those close at hand. It seems to be a case of coloboma of the iris and choroid, with defective development of pigment, and perhaps with a hyper-sensitive retina.

"DRUNK OR DYING?"

How long will this trite question continue to be a reproach to the police? The circumstances under which it arises have been enumerated *ad nauseam*. The suggestion contained in a letter by Dr. Groth to a contemporary is a valuable one, but hardly practicable. In every case of doubt the individual who has been "run in" should be treated as though his were a case of serious illness, and a competent medical opinion sought and obtained. If the police surgeon cannot be found, some neighbouring medical man should be summoned. Police constables could not be taught how to diagnose drunkenness from other states of unconsciousness; this is a matter often requiring considerable medical skill, and even then not always determinable at first sight.

POISONOUS VEGETABLES.

STRAWBERRIES raised on soil manured with the most offensive material are said to be as delicious as others. Speaking generally, the nature of the soil, provided it be of sufficient richness, exercises little influence on the nature of its vegetable products. Asparagus, however, grown in certain localities in France, has caused those who have partaken of it to suffer from colic and diarrhœa. It was ascertained that this asparagus was impregnated with minute amounts of sulphide of carbon. But the chief wonder is that animal and vegetable life should possess such remarkable powers of discrimination as generally to reject poisonous matter, all proofs to the contrary notwithstanding.

TYPHOID FEVER AT LANCING COLLEGE AND SHOREHAM.

AN outbreak of typhoid fever has, we regret to state, recently occurred at Lancing College and Shoreham. An investigation is, we learn, being made into the causes of the epidemic.

FROM the report of the examination made by Colonel Sir Francis Bolton of the water supplied by the several metropolitan water companies during the month of June, it appears that the water derived from the Thames contained in nearly every case rather more organic matter than in the previous month's samples, although the absolute amount present was not excessive and scarcely differed from that found in the same month of last year. Of the water taken from the Lea that distributed by the New River Company was, as regards freedom from organic matter, second only to the best of the deep-well waters, whilst the East London Company's supply ranked in this respect with the best samples of the Thames derived waters. All the samples were clear and bright on delivery.

WE understand that the authorities of St. George's Hospital are making a considerable enlargement of the school premises in connexion with that institution, chiefly for the purpose of providing the necessary laboratories for the teaching of physiology in accordance with the increased requirements of the present day. This department is now placed under the superintendence of Dr. Délépine.

AT a meeting of the Pontypridd Rural Sanitary Authority on the 23rd inst., a serious outbreak of measles in Gilgach Goch was reported, the number of cases being 250. Several of the cases had terminated fatally. A water famine had also occurred in the same place, and the complaints of the inhabitants against the rural authority are bitter.

THE anatomical, zoological, and mineralogical collections hitherto located in the palace of the University of Berlin will shortly be transferred to the new Museum of Natural History, a sumptuous edifice in advanced process of erection in the Invalidenstrasse.

MR. JOHN LOFTHOUSE, a well-known practitioner at Rochdale, died at his residence in that town on the 25th inst. The diseased was a member of the Rochdale Town Council and School Board, and one of the medical officers of the local infirmary.

M. BOUCHARD has managed to induce cataract in rabbits by introducing naphthaline into the digestive canal. The quantity required for the purpose was a daily dose equal to a thousandth part of the animal's weight.

INFORMATION has been received that the sanitary inspection of ships sailing to the United States ports from the port of Liverpool is to be resumed.

THE death is announced of Mr. William Gardner, who for the past half-century has practised in Painswick, near Stroud. The deceased was in his eightieth year.

"FEAR" (*La Peur*) is the subject of an elaborate psychological study by Charles Richet in the *Revue des Deux Mondes* of the 1st inst.

DR. DRESCHFELD will deliver the Bradshawe Lecture at the Royal College of Physicians of London, on Wednesday, Aug. 18th, at 4 P.M. The subject will be "On Diabetic Coma."

DR. JIRUS of Agram has been selected for the chair of Pharmacology in the Bohemian Faculty of Medicine in Prague.

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REPORT
OF
The Lancet Sanitary Commission
ON
MARLBOROUGH COLLEGE.

ELEVEN years ago we reported at some length upon the sanitary condition of Marlborough College, and we stated that it decidedly took the lead of certain other public schools with regard to the excellence of its sanitary arrangements. The recent prevalence of measles at the College has led us again to inspect the school; and, in criticising its arrangements anew, it must be borne in mind that medical and sanitary thought have developed in the interval, and that such observations as we have to make will have reference to the views of a more recent time.

There are now 577 boys attending the school, of whom 368 are resident in the school buildings, 198 in out-boarding houses, and some dozen boys, day scholars, living in the town. The buildings, with slight modification, are much as they were when our Commissioner reported in 1875, and, taken as a whole, it may be said that they well answer the purpose for which they are intended. The chief buildings in which pupils resident in the school dwell are known as Houses A, B, and C, House A being occupied by boys under fourteen years of age, who constitute the Lower School; Houses B and C are occupied by boys above this age. In the first of these houses, the number of boys in the different dormitories range from 12 to 16. In the smallest of the rooms, containing 12 boys, there is a floor-space for each bed of 49·5 square feet and an air-space of 569 cubic feet. In the smallest of the dormitories, containing 16 beds, there is a floor-space of 55 square feet and an air-space of 632·2 cubic feet. For the older boys in Houses B and C the dormitories contain from 5 to 22 beds, and the floor and cubic space allotted to each is much the same, but in some dormitories they fall short of this amount by fully 100 cubic feet, while in others the amount is greater. It is noteworthy that the College was inspected by Dr. Bristowe in 1868, when, in a report he presented to the governing body, he commented on the overcrowding of the dormitories which then existed. It will be seen from the figures given above that the allowance of air-space still falls short of that which is thought to be necessary by some authorities, among whom we would mention Dr. Clement Dukes, who recently recommended that the allowance of air-space in dormitories should be not less than 800 cubic feet for each boy. Much attention has been given to the ventilation of the Marlborough dormitories, an arrangement existing in each for the removal of the warmer and vitiated air which rises to the ceiling.

The drainage must be regarded as in a transitional state. Much has undoubtedly been done to ventilate soil-pipes and to disconnect from the drains the wastes of sinks and baths, yet still much remains to be done. The College buildings drain eventually into two brick barrel drains—the one having a diameter of three feet, and which is entirely outside the buildings; the other having a diameter of two feet, and which was formerly outside the buildings, but, owing to the extension of the latter, has now come to pass beneath certain class-rooms, and beneath the Bradleian Hall, where meetings are held. Special precautions have been taken to render this drain impervious; it is bedded in concrete and cement, and the floors of the buildings are made of the same material, over which is placed a closely-boarded floor. After traversing a considerable distance, and after the latter has received the drainage of the head master's house, the two drains meet in a cesspool near the river, situated over 400 feet from the College buildings. This cesspool is divided into two parts, a trap being inserted between the two; from the second of these parts is an overflow into a subsidence tank, from which the effluent escapes into the river Kennett. A ventilating opening is provided for the two-foot drain, but the passage of air is somewhat prevented by the opening being obstructed by a number of trays containing charcoal. The three-foot drain is not ventilated, except so far as it may derive some slight current of air admitted into the two-foot drain and through the cesspool.

The effluent at the time of our visit was discoloured, probably from the drains containing washings from the work which was going on in the building; but the water in its neighbourhood was darkened, and smelt slightly offensively, bubbles of gas escaping to the surface. This part of the river is not frequented by the boys, but some modification and reconstruction was certainly indicated. Within the buildings are only waterclosets used by the boys at night, and one or two by the women in charge of the houses. With the exception of one of the latter and of three for the boys in House C, all have direct external ventilation. A few of the fittings are of the old pan form, and are awaiting removal. As already stated, the more effectual ventilation of the soil-pipes, by carrying them above the roof external to the building without diminution of their calibre, is being done, and work for this purpose was being carried on at the time of our visit. For day purposes the boys use in common a number of waterclosets and urinals, the former of the trough kind, situated outside the building, and connected with them is the necessary machinery for flushing. The drainage of the sanatorium is entirely distinct from that of the other buildings; the drain passes into a cesspool in its proximity, and from this there is an overflow into the town drain. The arrangements here are open to some criticism: first, for the reason that the cesspool is unventilated, and there does not appear to be any trap in the drain which runs into it; and, secondly, because the ventilating-pipes from the soil-pipes are situated within the building, and there is some uncertainty as to whether the bath and sink wastes are disconnected before entering the drain. Before leaving the subject of drainage, reference must be made to a cesspool receiving the drainage from a watercloset near the laundry, and which is situated within thirty feet of the well which supplies the whole school buildings with water. Precautions have been taken to make this cesspool water-tight, but it must be admitted that a receptacle for the retention of excremental matter should not be in this situation. The water-supply, apart from this, is excellent: the well is over twenty-six feet deep in the chalk, and the supply is abundant, the water being pumped into a reservoir on the top of a neighbouring hill, whence it is distributed to the various houses.

The sanatorium, of which the drainage has been described, consists of a number of rooms having from two or three to seven beds in each, and providing accommodation for forty boys and, if necessary, a few more. The rooms open into common passages, and for this reason it is not conveniently arranged for the treatment of more than one kind of infectious disease at the same time. The waterclosets open directly into these corridors, and have no intervening chambers; the fittings in some require alteration, for they are of the old pan kind. In the basement is a disinfecting chamber, containing an oven heated by gas, which is not self-regulating. The disinfecting arrangements cannot be considered complete, for there is no separate provision for the washing of the infected linen; such linen is placed at once in a tank containing a disinfectant, and precautions are taken in its manipulation in the general laundry.

Reference must be made to the out-boarding houses in which many of the boys are resident; these are each in the occupation of a master, three of whom take charge of fifty boys each, the others of smaller numbers. Generally the houses resemble each other, and contain good-sized dormitories, small studies for the use of the boys during the day, and an excellent room in which they take their breakfast and tea, dinner being served in the hall of the College. The soil-pipes here are situated within the buildings, but steps are being taken for the alteration of their position. The drains pass into cesspools in the gardens, having an overflow into the river.

It would be improper to omit mention of the excellent gymnasia in connexion with the College and out-boarding houses, the fives-courts and racket-courts, and the opportunities for bathing afforded by a large pool of running water in the College grounds; this is really part of an old moat, to which water has been laid on from some distance up the river, and where every boy is taught to swim.

The care of the boys themselves is of the best, their sports are shared in by the masters, and every effort is made to preserve a healthy tone amongst them. They are under the constant supervision of the medical officer, Dr. Penny,

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whose personal knowledge of each boy and his requirements is an important factor in the preservation of their health; constantly in their midst, he is able, as at the time of our visit, to restrict from too severe exercise a boy who has just recovered from some ailment, and to enforce the warmer clothing of another who has but recently left the sick room.

Much may be said for Marlborough College; it has not, however, entirely remedied the faults of construction of all its older buildings of thirty or forty years ago, and especially does its drainage fall short of such perfection as is now aimed at by institutions which would have their means for the excremental refuse regarded as models—such perfection as may be said to be typically represented in the London Fever and Homerton Hospitals. For this purpose the governors would do well to seek advice. The College has for some years been fortunate in its freedom from scarlet fever, diphtheria, and enteric fever; diphtheria is never known to have occurred there; of enteric fever, one boy only is said to have suffered, and in this instance the disease was not contracted at school. Since an outbreak of scarlet fever in 1877, only one case, we are told, has occurred. This record speaks well for the healthiness of the school, and it certainly behoves the school authorities to see that this reputation is maintained.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns 5728 births and 3521 deaths were registered during the week ending July 24th. The annual death-rate in these towns, which had increased in the preceding five weeks, from 16·8 to 19·7, further rose last week to 20·2. During the first three weeks of the current quarter the death-rate in these towns averaged 19·4 per 1000, and was 1·3 below the mean rate in the corresponding periods of the ten years 1876–85. The lowest rates in these towns last week were 7·8 in Wolverhampton, 13·1 in Derby, 14·0 in Bradford, and 14·2 in Hull. The rates in the other towns ranged upwards to 23·7 in Preston, 24·2 in Manchester, 24·3 in Leicester, and 24·6 in Birkenhead. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had steadily increased in the preceding six weeks, under the influence of the rising mortality from infantile diarrhœa, from 263 to 652, further rose last week to 754; they included 505 from diarrhœa, 80 from measles, 66 from whooping-cough, 36 from "fever" (principally enteric), 36 from scarlet fever, 25 from diphtheria, and not one from small-pox. No death from any of these zymotic diseases was recorded last week in Derby; while they caused the highest death-rates in Portsmouth, Cardiff, and Preston. The mortality from diarrhœa showed a further general increase, the largest excess occurring in Leeds, Leicester, Cardiff, and London. Measles caused the highest death-rates in Portsmouth and Preston; whooping-cough in Halifax and Preston, and "fever" in Brighton and Cardiff. The 25 deaths from diphtheria in the twenty-eight towns included 11 in London and 8 in Birmingham. Small-pox caused no death either in London and its outer ring, or in any of the twenty-seven large provincial towns. The number of small-pox patients in the metropolitan hospitals situated in and around London, which had been 12 and 13 on the preceding two Saturdays, had declined to 11 at the end of last week; 2 cases were admitted to these hospitals during the week, against 3 in each of the previous two weeks. The deaths referred to diseases of the respiratory organs in London, which had been 197, 190, and 167 in the preceding three weeks, further declined last week to 162, and were 31 below the corrected average. The causes of 74, or 2·1 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Leicester, Portsmouth, Brighton, and in five other smaller towns. The highest proportions of uncertified deaths were registered in Bolton, Halifax, and Sheffield.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns which had been 19·1 and 19·2 per 1000 in the preceding two weeks, further rose to 19·8 in the week ending July 24th; this rate was, however, 0·4 below the mean rate during the same week in the twenty-eight English towns. The rates in the Scotch towns last week ranged from 14·1 and 14·8 in Leith and Perth, to 23·5 in Glasgow and 26·0 in Paisley. The 489 deaths in the eight towns showed an increase of 14 upon the numbers in the two previous weeks, and included 33 which were referred to diarrhœa, 18 to whooping-cough, 7 to scarlet fever, 4 to "fever" (typhus, enteric, or simple), 3 to measles, and not one either to small-pox or diphtheria; in all, 65 deaths resulted from these principal zymotic diseases, against 64 and 68 in the preceding two weeks. These 65 deaths were equal to an annual rate of 2·6 per 1000, which was 1·7 below the mean rate from the same diseases in the twenty-eight English towns. The deaths referred to diarrhœa, which had been 16, 24, and 33 in the previous three weeks, further rose last week to 33, of which 10 occurred in Glasgow, 9 in Dundee, and 4 in Paisley. The annual death-rate from diarrhœa in these Scotch towns last week did not, however, average more than 1·4 per 1000, whereas the mean rate from the same cause in the twenty-eight English towns was 2·9. The 18 fatal cases of whooping-cough corresponded with the number in the previous week, and included 17 that occurred in Glasgow. The 7 deaths from scarlet fever corresponded with the number returned in each of the previous two weeks; 5 were returned in Glasgow. Two of the 4 deaths referred to "fever" occurred in Glasgow, and 2 of the 3 fatal cases of measles in Leith. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had declined in the preceding five weeks from 93 to 73, further fell last week to 67, and were 15 below the number returned in the corresponding week of last year. The causes of 80, or rather more than 16 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 23·1 and 19·7 per 1000 in the preceding two weeks, rose again to 21·0 in the week ending July 24th. During the first three weeks of the current quarter the death-rate in the city averaged 21·3; while the mean rate during the same period did not exceed 20·7 in London and 18·5 in Edinburgh. The 142 deaths in Dublin last week showed an increase of 9 upon the number in the previous week, and included 12 which were referred to the principal zymotic diseases, against 14 and 11 in the preceding two weeks; 5 resulted from diarrhœa, 4 from "fever," 2 from whooping-cough, 1 from scarlet fever, and not one either from small-pox, measles, or diphtheria. These 12 deaths were equal to an annual rate of 1·8 per 1000, the rates from the same diseases being 6·0 in London and 1·2 in Edinburgh. The 5 deaths attributed to diarrhœa showed a further slight increase upon those returned in recent weeks; but they were below the average for the season. The 4 deaths from "fever" were within one of the number in the previous week. Five inquest cases and 5 deaths from violence were registered; and 46, or nearly one-third of the deaths, were recorded in public institutions. The deaths of infants showed a considerable increase upon the low number in the previous week, while those of elderly persons showed no variation. The causes of 13, or nearly 9 per cent., of the deaths registered during the week were not certified.

THE SERVICES.

WAR OFFICE.—Army Medical Staff: Deputy Surgeon-General Joseph John Thompson is granted retired pay, with the honorary rank of Surgeon-General.

ADMIRALTY.—Staff Surgeon William John Rankin, M.D., has been promoted to the rank of Fleet Surgeon in Her Majesty's Fleet.

The following appointments have been made:—Staff Surgeon William Brown, to the *Ruby*; Staff Surgeon James D'A. Harvey, to the *President*, additional; and Surgeons A. Gesham (Staff) and H. J. C. Todd, to the *Assistance*, additional, for temporary service with Royal Marines.

RIFLE VOLUNTEERS.—1st West Riding of Yorkshire: Frederick Shann, Gent., to be Acting Surgeon.—2nd Wiltshire: Acting Surgeon C. K. Hitchcock resigns his commission.

THE VOLUNTEER MEDICAL STAFF CORPS.—London Companies: William Wellington Lake, Gent., to be Surgeon.

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Correspondence.

"Audi alteram partem."

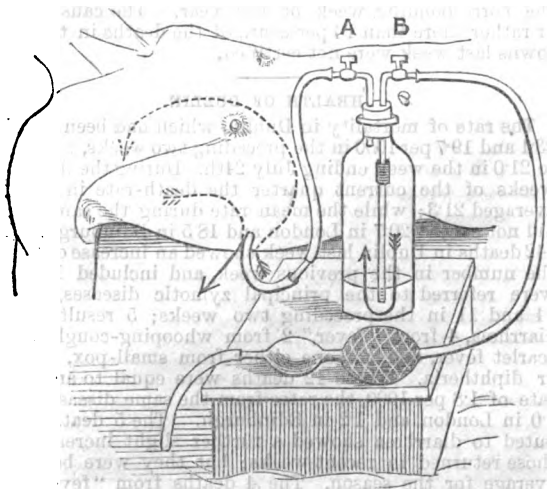
TREATMENT OF EMPYEMA BY PERFLATION.

To the Editor of THE LANCET.

SIR,—Permit me, through your widely circulated columns, to invite a trial by the profession of a simple method which I have employed with success in the treatment of empyema. My original case being meant for publication at some distant date, I am anxious meanwhile not to delay the wider applications of a treatment which may prove useful to many, and which requires to be tested in a more extensive field than that of my own practice.

Perflation (*Anglice*, "through blast"), as applied in empyema, has the following objects:—(1) the avoidance of all fluid injections, and of the irritation which, as foreign substances, they cannot fail to excite; (2) the evacuation (in the absolute sense) of the pleura, a cavity seldom emptied by fluid injections. The accompanying diagram illustrates the mode of application sufficiently clearly to obviate the necessity for a lengthy description. It should be stated, however, that strict antiseptic precautions and dressings, and the employment of an efficient disinfecting spray are essential parts of the treatment.

The apparatus required is at hand in every hospital, or can be obtained at the shortest notice from any chemist. It



consists of (1) Richardson's bellows; (2) indiarubber tubing; (3) a bottle about 8 in. high, to contain, to the depth of 1½ in., (4) a solution of carbolic acid, 1 in 10; (5) a good cork perforated by two tubes—the one, barely projecting within the bottle, to be connected with the chest, the other of sufficient length to dip not more than ½ in. below the surface of the solution for connexion with the bellows. Potain's cork here depicted can readily be fitted for the purpose in view, and will be found most convenient; the tap B is superfluous; tap A may be used, as originally suggested to me by Mr. R. F. Benham, whenever it is desired to raise the pressure within the bottle, although in the absence of a tap an ordinary clip or pressure from the fingers will answer as well.

The treatment is applicable at any stage of a suppurating empyema. Where two openings have been made, one is utilised for the entrance of air; the other (lower) opening serves as exit. In such a case reflux of air by the side of the tube inserted into the upper opening must be prevented by a broad flange attached to the tube, or by the firm application around the latter of a moistened pad. It is, however, an advantage of my method that in any ordinary case a second opening is unnecessary. A single good-sized opening will allow sufficient room for the air-supplying tube and also for the escape of the contents of the cavity. Once having grasped the principle of the procedure, each operator will be the best judge of the exact size of the incision required. The tube may be inserted (to a depth of several inches) and perflation begun as soon as the spontaneous flow of pus has ceased, and the same process is to be repeated at each dressing.

The principles underlying the method are the following: 1. Whereas fluids obey gravitation, air will diffuse into every nook and cranny. 2. Whilst an injected fluid stream strikes few spots only, leaving other parts uninfluenced, the current of air will transmit in every direction even fractions of its own pressure. 3. Whilst water merely dilutes fluids and suspends light solids, any fluid or detached solid will sink in air. It follows that if the patient be so placed that the wound strictly coincides with the most dependent spot of the cavity to be drained, any fluid or solid will either escape at the opening or plug it. If a plug be thus formed whilst the bellows are worked continuously, pressure will rise behind the plug and probably expel it. Plugs of this kind are habitually furnished by fragments of necrosed lung, by blood-clots, and by purulent false membranes. I possess evidence of the efficacy of the air-blast in detaching false membranes which had resisted a long course of irrigation; to their presence is probably due the protracted suppuration of many empyemas.

It is unnecessary for me to encroach upon your valuable space with remarks on the merits of the "dry treatment" of suppurating surfaces, or on the surgical value of local ventilation. These topics are reserved for future discussion. I would only add that the favourable results I have obtained in empyema lead me to expect that deep-seated abscesses or suppurating cavities beyond the reach of the finger may, without danger, and with probable benefit, be submitted to the treatment I have sketched. I shall watch for the verdict of surgeons who may be tempted to put the method to a practical test, and I shall be happy to furnish any further explanations to those who may honour me with their inquiries. I remain, Sir, your humble servant,

Curzon-street, Mayfair, July 20th, 1886. WM. EWART.

P.S.—The average duration of each perflation has been ten minutes; on one occasion it exceeded three-quarters of an hour. I have not hitherto observed any carboluria, neither has there been the slightest complaint of pain, discomfort, or internal draught. In the intervals between the dressings a stout drainage-tube should provide for the continued patency of the wound, and the opening should be sealed by an air-tight dressing of medicated wool, which will for the time convert the chest into a closed cavity and afford an opportunity for the expansion of the lung.

THE VITALITY OF PATHOGENIC MICRO-ORGANISMS IN WATER.

To the Editor of THE LANCET.

SIR,—Messrs. Crookes, Odling, and Tidy having recently published the results of some experiments which they have made on the vitality of the bacillus anthracis in London water, I should like to offer the following remarks:—

The behaviour of various pathogenic micro-organisms in water has, during the past three years, formed the subject of experiments by several authors, including Koch, Cornil and Babès, Nicati and Rietsch. Within the last two months no less than three papers bearing on this subject have been published, two of them in Germany, by Drs. Wolffhügel and Meade Bolton respectively; whilst the third, by myself, on the "Multiplication of Micro-organisms," was communicated to the Royal Society at their meeting in June last. In this paper I have recorded a large number of experiments made both with the mixtures or organisms found in various natural waters, as well as with three well-characterised forms which are associated with disease—viz., Koch's comma spirillum of Asiatic cholera, Finkler-Prior's comma spirillum of European cholera, and the bacillus pyocyaneus which produces the greenish-blue colouring matter frequently present in abscesses. The methods of research which have been independently selected both by Wolffhügel, Meade Bolton, and myself are identical, and consist in the examination, by gelatine-plate cultivation, of water purposely impregnated with the organisms in question. This method is obviously the one which most recommends itself for the purpose, as it not only enables one to ascertain the presence or absence of the organisms, but also of quantitatively following their multiplication or reduction. I may mention that these three organisms present great differences in their behaviour under similar circumstances; thus the bacillus pyocyaneus is possessed

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of far greater vitality in water than either of the other two, its presence being demonstrable even in distilled water after fifty-three days in numbers exceeding manifold those originally introduced. Koch's comma spirillum, on the other hand, was in the purest forms of potable water no longer demonstrable after the ninth day, whilst in London sewage it was found in largely multiplied numbers after twenty-nine days, yet Finkler's spirillum could in no case be detected after the first day, and frequently not even on the day of inoculation. A curious phenomenon, which my experiments, as well as those of Wolffhügel and Meade Bolton, have brought to light, is that when organisms of this kind, which are not the natural inhabitants of the water, are introduced into this medium, a large proportion of them are frequently at first destroyed, a greater or less multiplication in their numbers often subsequently taking place. The bacillus anthracis, as is well known to bacteriologists, appears in two very distinct forms, the bacillus-form and the spore-form, and these present very great differences in their powers of endurance, the former being destroyed with comparative ease, whilst the spores are remarkable for their vitality. Mr. Crookes and his colleagues have apparently experimented with the bacillus-form of anthrax only, which they state is rapidly destroyed when introduced into London water, but Dr. Meade Bolton, who has dealt with anthrax in both its forms, has shown that the spores of anthrax retain their vitality even in distilled water for upwards of ninety days, and that it is only the bacilli which rapidly perish in some kinds of potable water. In polluted well-water, Meade Bolton has also shown that even the bacilli are persistent for upwards of ninety days and the spores for nearly a year, whilst Wolffhügel has found that in polluted river water (the river Panke in Berlin), even when diluted tenfold with distilled water, the anthrax bacilli undergo extensive multiplication.

I am, Sir, faithfully yours,

PERCY F. FRANKLAND.

Normal School of Science, South Kensington Museum, July 26th, 1886.

MEDICAL OFFICERS OF SCHOOLS ASSOCIATION.

To the Editor of THE LANCET.

SIR,—We are authorised to communicate to you for publication the accompanying resolutions, which were passed at a special meeting of the Council of the Medical Officers of Schools Association, held in London on July 22nd.

We remain, Sir, yours faithfully,

WILLIAM S. SAVORY, President.
ALDER SMITH,
CHARLES E. SHELLY, } Hon. Secs., M.O.S.A.

1. "A most important precaution towards the prevention of, and the dealing with, infectious diseases in schools is *undivided medical responsibility*. Therefore the medical officer, and he only, should have the entire school under his daily care and medical supervision. He should have full control regarding the entrance into the school of all boys who are known to have recently had any illness, or to have been exposed to infection, as also over the whole arrangements for isolation, nursing, quarantine, and disinfection." (Page 9.)

2. "The medical officer of a public school ought to be appointed by, and should be "responsible only to, the governing body." [Whatever its actual composition in different cases, the governing body is here taken to include the head master of the school.] (Page 9.)

3. "It should be the duty of the medical officer to at once report in writing to the responsible authorities the existence of any sanitary defects, and to suggest such remedial measures as appear to him to be necessary. (Page 9.)

4. "Every large school should possess a good detached infirmary, to which *all* cases of illness should be sent—no matter in whose 'house' they may occur—and where infectious cases can be thoroughly isolated.....It is of the utmost importance that the infectious wards be *completely* isolated from the rest of the building. And if practicable, there should be a separate building for infectious diseases." (Page 11.)

5. "Every case of infectious disease" which occurs in a school "should be immediately isolated in the infectious ward, and the latter should therefore always be in readiness." (Page 17.)

6. "In the opinion of the Council a serious outbreak of infectious disease in a school affords a sufficient justification for the temporary removal of healthy children by their parents or guardians if they should see fit to do so. Should the outbreak be not only serious in itself—as of typhoid fever or of diphtheria for example,—but dependent upon some sanitary defect which cannot be immediately remedied, or if its origin appear doubtful, then it would be desirable to dismiss the school." (*Vide* Page 21—xxii., 3.)

7. "In any case of serious illness the parents or guardians of the pupil should be at once informed of it. The Council also deem it most desirable that, in replying to inquiries made by parents with respect to any case of serious illness occurring in a school, the precise terms used by the medical officer in describing the nature or the progress of the malady should be communicated either directly by him or through the house master."

8. "The general sanitary arrangements of any school—if not certainly known to be in accord with modern sanitary science—should be thoroughly inspected by a competent person, and all defects at once remedied." (Page 1.)

9. The Council are of opinion that good would result if an official inquiry were instituted into the measures which are taken in our large schools for the prevention of infectious diseases and for the medical care of the pupils.

[illegible] inverted commas are taken from and the pages [illegible] "Prevention of Infectious Diseases in Schools," [illegible]

THE RECENT CASE OF POISONING BY COMMON SORREL (RUMEX ACETOSA).

To the Editor of THE LANCET.

SIR,—Having made the post-mortem examination on the boy E. Arthur Geary, at the request of Mr. Clarke of Gravelly Hill, who attended him during life, I feel it incumbent upon me to supply you with particulars of the case. Common sorrel is not generally known to be poisonous, and is not mentioned in ordinary text-books on poisons. It is not mentioned by Guy and Ferrier, Blyth, Woodman and Tidy, in Ziemssen's Cyclopædia, or in recent editions of Taylor's work on poisons; but it is mentioned in the first edition of Taylor's work (1847), where a fatal case is mentioned, and reference made to two cases of severe illness following the eating of sorrel recorded in the *London Medical Gazette* (vol. xl., p. 69). Mr. Clarke has supplied me with his notes of the case, which are as follows:—

"I was summoned to see E. Arthur Geary, a boy aged five, at 10 A.M. on June 12th. He had been perfectly well up to the present attack. At once seeing the critical condition of the boy, I desired the presence of their own medical attendant. He not being at home, Mr. Fairley of Aston was sent for, and arrived at about 11 o'clock. The patient was being nursed by a neighbour, and was unconscious, the face cold and pale, forehead moist, extremities cold, respiration slow, pulse frequent and feeble. The prostration was great. There was no convulsion. The conjunctiva was only slightly sensitive to touch; the pupils small, but not markedly contracted, but later on they dilated. I learned from the father that the patient had been drinking soapy water which had collected in the soap-bowl underneath the perforated dish that held the soap. I also learned from a neighbour that he had been eating a large quantity of the flowering stalks of the common green sorrel (Rumex acetosa) the night before, followed by a meal of plum-cake. He then went to bed, and on the following morning he was seen drinking from the soap-bowl, and in a short time afterwards he fainted. The servant carried him downstairs to his father, who gave him an emetic of salt-and-water, but the emetic had not acted when I saw the boy. I at once placed him on the bed and produced vomiting with a feather, and he ejected about three-quarters of a pint of colourless, odourless, transparent fluid, containing very little mucus, but no blood and no shreds of mucous membrane. I administered a teaspoonful of vinegar, diluted, in order to neutralise the alkalinity of the soap, and gave him an enema of brandy; ordered hot bottles to the limbs and body and a mustard plaster to the heart. He shortly after passed a copious liquid motion, and his pulse was feeble and intermittent. Mr. Fairley now arrived. Upon examining the motion, which was green in colour, we found it to contain a large quantity of stalks, ribbed like the stalks of

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sorrel. Small quantities of brandy were administered by the mouth, and brandy was given per rectum; chalk also was administered. At 2 P.M., when I left the patient, there were signs of reaction in the pulse, which was fuller, soft, and 120 per minute. I saw the patient again at 5 P.M.; he was still unconscious and collapsed. Vomiting and purging had been frequent during my absence. He died about 5.30 P.M., seven hours and a half after I first saw him."

The necropsy was performed by myself on June 14th, forty-nine hours after death. Rigor mortis was well marked. There was no trace of external injury. The lips were cyanosed, but there was no erosion or staining. No erosion or staining could be observed on the tongue or mucous membrane of the mouth and throat. The dura mater was tense, but healthy, as were the other membranes of the brain, except that the veins of the pia mater were very turgid. The brain itself was congested, but otherwise perfectly healthy. The stomach was empty, and, except for a small patch of congestion near the pylorus, was healthy. The small intestine contained yellowish fluid material containing stalks of some vegetable partially digested. These stalks were ribbed, and were about the size of sorrel stalks, some of which were 2½ in. long. The heart was flaccid and empty, otherwise normal. The lungs were a little congested at the base and along the posterior border. The liver and kidneys were congested. The condition of the heart and the visceral congestion observed were compatible with and pointed to death from collapse. Mr. Fairley was of opinion that death was due to the sorrel, the poisonous effect of which was accentuated by the soap-and-water. I expressed agreement with him, but suggested that the vomit, urine, contents of intestine, the soap-and-water, and portions of the viscera should be preserved, Mr. Clarke wisely having secured the vomit and the soapy water. These have been analysed by Dr. Bostock Hill, the county analyst and Professor of Toxicology at Queen's College, who informs me that he cannot detect any oxalic acid or any other poison in any of them. The soap-and-water was a very weak solution of soap, and not at all poisonous.

What was the cause of death in this case? The boy, in perfect health previously, ate a large quantity of sorrel at about 7 P.M.; he was quite well after that, and complained of no pain or nausea, but in the morning he evidently felt ill and thirsty, or he would not have attempted to drink soapy water. He drank about four ounces of the water, and was found a few minutes after on the floor, almost insensible. It appears to me that slow poisoning must have been going on all night, and that the swallowing of fluid was followed by a fresh absorption of the poison, which caused immediate collapse, his getting out of bed also hastening it. Any speculation as to the chemical action between the soap-and-water and the sorrel helps us very little in explaining the collapse immediately following its ingestion, seeing that the soda salt, if formed, is only very slightly more soluble than the potash salt. Mitscherlich estimated that the proportion of binoxalate of potassium present is ·75 per cent. of the fresh plant, and that an ounce of fresh sorrel contains about three grains of that salt. It seems impossible that such a small quantity of binoxalate of potassium—even supposing that the child ate two or three ounces of the plant, which would be a great deal—could prove fatal. It may be that there is some other poisonous substance present not known. The case, in my opinion, was one of death from poisoning by sorrel, and this opinion is confirmed by the fact that a playmate of the boy, who had also eaten sorrel, was very ill for two or three days.

I am, Sir, yours faithfully,

C. W. SUCKLING, M.D. Lond., M.R.C.P.

Birmingham, July 23rd, 1886.

MEDICAL INSPECTION OF PUBLIC SCHOOLS.

To the Editor of THE LANCET.

SIR,—You have from time to time suggested the establishment of some system of medical inspection of our public schools. As a rule, parents know very little of the schools to which they entrust their children. In the case of a boy destined for a public school, he is not a free agent in the matter, but goes wherever his parents choose to send him. The choice is often made in the absence of an intimate knowledge of the institution. The father has been to the same school twenty years before, or some friend's child may have done well there, or the master into whose house the boy is sent may be personally known to the parents, or the boy may have earned a right to go to a particular school by scholarship. Under any of these circumstances the boy passes from parental care into the charge of comparative strangers. He becomes an instrument for the double purpose of supplying a source of income to the house master or the school, and affording a means for the experimental cultivation of whatever intellectual powers he may possess. Vigorous health and intellectualism in the schoolboy should go together. The winner in the race, as a rule, is he who can sustain the longest effort. Our lunatic asylums, our prisons, and our factories are subjected to regular inspection over and above that given by the local officers, and some similar regular inspection of all public and private schools should take place. It would be unreasonable to expect that a body of such highly intellectual men as the "house masters" at our public schools should yield to the solitary authority of their medical attendant in matters of sanitation. They know full well that experience limited to the sanitation of a public school is very inadequate. Nor would it be reasonable to expect the governing body of a public school to give an authority to the medical attendant—often a very young man—which might clash with that of the head or house master's. The house masters are, as a rule, only subordinate to the head master and governing authority in matters of education. The house masters are, in fact, proprietors of private boarding-houses, limiting their boarders to boys educated at the school in which they teach, and, like householders in general, are very sensitive on points of sanitation. If every public and private school were required to be registered, a system of regular inspection might be instituted. This should be by medical officers appointed by the Government. The authority thus instituted would be independent of the governing body and the masters, and would effect a much-needed improvement in the sanitary and medical arrangements of our public and private schools.

It appears to be very commonly lost sight of that masters of boarding-houses at our public schools are at liberty to choose their own medical attendant, and that it is not within the power either of the governors or the head master to interfere with their rights. For more than twenty years I had charge of an average of 400 public school boys, and have therefore had some insight into the subject, or I would not venture to trespass on your space.

I remain, Sir, yours obediently,

July 28th, 1886. A GENERAL PRACTITIONER.

THE "HOMES" OF THE WINDSOR POOR.

To the Editor of THE LANCET.

SIR,—The good hope there was here in March last that the Windsor poor were about to be delivered from their slums, and were at last to be offered "human homes," is, I fear, sick unto death. I will give you the facts, and you and your readers can then diagnose the case for yourselves.

George IV., William IV., the late Prince Consort, and Queen Victoria have successively been interested in bringing about the demolition of Windsor's slums, and yet these moral plague-spots remain—some of the worst and most openly convicted of them—unto this day, not only a local scandal, but, as notorious to all men, a public disgrace. THE LANCET has vigorously arraigned them; indeed, every newspaper outside the Royal borough, beginning with *The Times*, has delivered itself against the notorious reproach of Windsor. In March last a meeting was convened at the Town Hall here, with the Mayor in the chair, to devise a way out of the evil, and thus to lay the scandal. At this meeting, at which I was present, Mr. Richardson Gardner, M.P., explained the provisions of a scheme for the better housing of the poor in the Bier-lane district. In regard to this scheme, it was announced that three of the Royal Princes had very readily consented to act as patrons. The further consideration of this scheme was adjourned for a month, that it might be seen how far the Corporation of Windsor would, in that period, elect to go in aid of its development. An influential member of the Town Council—none other, indeed, than the ex-Mayor—subsequently did move for a Town Improvements Committee, and the motion of Mr. Oberlin Harris was agreed to. The immediate aim of this committee was to facilitate the making of roads through dark and forbidding districts, needing, physically and morally, to be thus opened up. From that day to this I have seen

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nothing and heard nothing of Mr. Richardson Gardner's scheme. Whether it be alive or whether it be dead nobody seems to know. I do not say this to reproach Mr. Richardson Gardner, for I believe he is now anxiously resolved to do his utmost to abolish the moral cesspools of Windsor. So far as has come within my knowledge, he does not at present possess a house in the Royal borough that is not a human home. I have also every reason to believe that a majority of the Corporation are only too ready to help to put an end to this odious scandal. We have thus the Royal Family, the borough member, a well-informed majority of the Corporation, and a unanimous outside public opinion seeking to rid Windsor of the taint and reproach of its slums—slums that are as angry sores suppurating in the busy life of its chief street, socially and morally, consigning to a living death the dwellers amongst these tombs; and yet this rank barbarism promises to outlive the fiftieth year of the beneficent reign of such a queen as Queen Victoria. Whether it be that the public spirit which in March last seemed able to carry all before it is puling and palsied; whether it were only a spasmodic seizure which has been succeeded by total paralysis; or whether the mountain was, peradventure, in labour, not even with the proverbial result, for it has not had the strength to bring forth, I cannot tell. Perhaps THE LANCET can.—Yours faithfully,

ARTHUR ROBINS, M.A.,
Rector of Holy Trinity, Windsor; Chaplain to the Queen, the Prince of Wales, and H.M.'s Household Troops.
Holy Trinity Rectory, Windsor, July, 1886.

THE PREVENTIVE TREATMENT OF SYPHILIS.

To the Editor of THE LANCET.

SIR,—My object in publishing the case of Mr. A. B. C. was to afford a contrast to the ordinary treatment of early syphilis, which I believe to be opposed to the best interests of the patients, and which might be described as follows:—A surgeon, upon seeing a patient with a primary chancre, is frequently perplexed—especially if he lack much experience in the diagnosis of syphilis, or if the lesion be immature and its physical characters not strongly pronounced—as to the recognition of the disease before him. Only too often the advice given is to wait until the diagnosis is concluded satisfactorily by the appearance of secondary symptoms before resorting to specific treatment. A sore-throat and corona veneris having appeared in due course, the patient is now informed that he certainly *is* the subject of syphilis, and that its virus really *was* implanted some weeks previously—that is, just before he applied for treatment. An eighteen months' or two years' course of mercurial treatment is now rigorously prescribed, and the subject of the experimental diagnosis comforted by being told that the delay consequent thereon has not materially retarded or diminished his prospect of a cure (in about two years' time). Surely a consideration of the pathogenesis of syphilis shows that the converse is the right line of practice. Every reasonable practitioner knows very well that the earlier the treatment of syphilis is commenced, so much the better is the prognosis, and that therefore to withhold specific remedies for the sake of establishing scientific observations is equivalent to conducting an experiment highly detrimental to the patient.

Making full allowance for the conflicting evidence which still envelops the theory of the absorption of the virus, I incline to the view that the system is not perfectly invaded by the poison before the maturation of the chancre, and that its thorough destruction of it, whilst immature, will modify if not arrest, specific contamination. In the case of Mr. A. B. C., I was morally convinced from the history, coupled with the physical condition presented, that I had dealt with an immature chancre, and Sir William Jenner, who saw the patient with me, accepted this view as correct. Drs. [illegible] Johnston, and Craig (who did *not* see the patient) think otherwise. But the idea of withholding specific treatment never occurred to Sir William Jenner or myself, and I am quite sure Mr. A. B. C. would not have desired such course in order that an opportunity for the appearance of secondary phenomena might have been afforded to establish the diagnosis to the satisfaction of anyone who might be sceptical upon the subject. Permit me to suggest that the destruction of a primary chancre with the actual cautery, the growth being previously painted with a solution of cocaine, is a very trifling surgical procedure; and I should think that to excise the infected lymphatic glands also would, in some cases, be a most rational mode of treatment. The criticisms offered by the gentlemen referred to, although very interesting, have little bearing upon the point at issue. It seemed to me that the publication of a solitary case might possibly prove of benefit to the profession and community, as being descriptive of a simple plan which could be tested without delay by any practitioner who might incline to imitate the practice.

I am, Sir, yours faithfully,

CHAS. E. JENNINGS.
Park-street, Grosvenor-square, W., July 28th, 1886.

"THRUST WOUNDS THROUGH THE ORBIT."

To the Editor of THE LANCET.

SIR,—In the special article on "Thrust Wounds through the Orbit" in last week's LANCET, I notice that no reference is made to the possibility of death occurring from a wound through the orbit of the internal carotid artery, where it curves round the side of the body of the sphenoid bone immediately behind the optic foramen. Curiously enough also, I have not been able to find any mention of this accident in any of the well-known works on ophthalmic or general surgery, nor in the article on "Injuries of the Orbit" in "Heath's Dictionary of Surgery." The only two cases of the kind which I can find recorded are one by Nélaton, which is referred to by Mr. Treves in his excellent work on "Surgical Applied Anatomy," and one which I published myself some years ago, and which is quoted in Dr. Neale's "Medical Digest." In this instance, during a quarrel a man received a thrust in the eye from an umbrella, blood flowed copiously from the wound, and the man was immediately taken to the Gloucester Infirmary, which is distant not more than about four minutes' walk from the place where the accident happened. I saw him directly after his admission, but he was then dead. His face and clothes were covered with blood, but after wiping this away and making a careful examination of the head, face, and neck, and body generally, no wound could be discovered which would account for such copious bleeding, nor, in fact, was there any external evidence to show what was the cause of death. There was a slight laceration of the conjunctiva on the inner side of the left eye, but no wound of the eye itself, nor of the skin of the eyelids. With the exception of the injury to the conjunctiva, there was no wound to be found on any part of the body. By direction of the coroner a post-mortem examination was made, and a careful dissection of the orbit showed a wound of the internal carotid artery at the bend which the vessel makes just behind the optic foramen; the optic nerve was divided, and a piece of the brass ferrule of the umbrella was found lying loose in the tissues at the back of the orbit. There was no wound of the eyeball itself, nor any injury to the brain or inner wall of the orbit, but there was a fracture through the lesser wing of the sphenoid.

The puzzling feature of this case was the enormous quantity of blood which had, from the account of the bystanders and the appearance of the clothes of the patient, evidently been lost, without there being any external wound apparently sufficient to account for it. This rare accident is, I think, of sufficient anatomical and surgical interest to warrant publication of this note of it, as supplementary to the interesting cases in your special article of last week.

I am, Sir, yours faithfully,

ERNEST D. BOWER,
July 20th, 1886. Ophthal. Surgeon, Gloucester Gen. Infirm.

ADELAIDE JUBILEE INTERNATIONAL EXHIBITION.—Advance copies of the regulations for next year's South Australian Exhibition, to be opened in Adelaide on June 20th, 1887, have been issued. The age of the colony being coeval with the reign of Her Majesty, the title "Jubilee Exhibition" indicates in a double sense the design of its promoters. The exhibits are divided into seven departments and over 700 classes. Seven classes are devoted to medicine and surgery, six to vegetable products used as food, and seven to chemical manufactures. The Exhibition promises to prove a most interesting one, and it is to be hoped that it will meet with the support, both at home and abroad, which it undoubtedly deserves.

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MANCHESTER.

(From our own Correspondent.)

THE ROYAL INFIRMARY.

THE annual report of the Royal Infirmary, to be presented to the trustees on the 29th, has just been issued, and gives particulars of the year's work of the parent institution and its allied branches. The total number of patients under treatment at the infirmary, the Cheadle Convalescent Hospital, and the Fever Hospital has been 33,895, an increase of about 3000 on the previous year, due to greater numbers of out and home patients; the in-patients at each place having been less than the previous year. The Board attribute this increase to the abolition of recommendations in the admission to treatment of the out and home patients. The total expenditure has been at the infirmary £17,010; the in-patients here numbered 4414. The expenditure at the Convalescent Hospital has been £5360 for a total of 1345 patients, averaging £4 as the total cost per patient, as against £2 18s. in the previous year. At the Fever Hospital 841 patients have been admitted, and the expenditure has reached £5943, averaging something over £7 per patient, as compared with £5 9s. in the preceding year. At the latter hospital considerable additions have been made to the buildings, two new blocks have been erected capable of accommodating seventy-two patients, and a new building has been erected for the nursing staff capable of holding fifty nurses, though it is to be hoped that Manchester is not going to have an outbreak of epidemic disease necessitating the employment of fifty nurses at one hospital.

ANCOATS HOSPITAL.

On the 21st inst. the annual meeting of the Ancoats Hospital was held. This charity is steadily making progress in the face of much difficulty, and its occupied beds increase yearly in number. Much of its success is due to the untiring interest of its hon. secretary, Mr. Alexander Forrest.

BRITISH MEDICAL ASSOCIATION.

The arrangements for the meeting of the British Association in this city next year are now well in hand. A most influential local committee has been formed, and a guarantee fund not to exceed £10,000 in now being raised. The little difficulties which arose in the first instance are all smoothed down, and at a meeting held yesterday, the mayor, Mr. Alderman Goldschmidt, was appointed chairman of the General Committee and Mr. Alderman Thompson chairman of the Executive Committee.

PROPOSED INDUSTRIAL EXHIBITION.

Next year promises to be a red-letter one for Cottonopolis, as a scheme is now in progress for holding a large industrial exhibition, £60,000 having already been promised towards a guarantee fund for the same; and a still more important undertaking, it is hoped, will be commenced—viz., the ship canal, if the temporary check it has sustained is satisfactorily overcome.

VICTORIA UNIVERSITY.

Numerous applications have been made to this university for courses of lectures to be delivered on the plan of the Cambridge courses. At present no definite scheme has been drawn up by the Victoria University, but the authorities will, as far as feasible, arrange for a number to be given during the coming winter, as a continuation of those commenced last year in various districts.

STRYCHNIA POISONING.

An unusual case of poisoning by strychnine has occupied much attention during the present assizes. A woman at Ashton, by means of "mice poison," has poisoned her husband, her daughter, and a neighbour's wife. The evidence, which was chiefly circumstantial, left no doubt as to her guilt, and she is now lying under sentence of death. Two of the bodies were exhumed; these both showed rigor mortis some weeks after burial; arsenic was proved to be present, but no strychnia. In the third case (the one for which she was actually tried) both substances were found, and physiological confirmation was obtained by the action of the strychnine on frogs and mice.

Manchester, July 27th.

NORTHERN COUNTIES NOTES.

(From our own Correspondent.)

THE NEWCASTLE HOSPITAL SUNDAY FUND.

AT a late meeting of the committee of the Hospital Sunday Fund it was mentioned that the total amount collected here since the commencement of the movement had reached £51,200, and that it was a fitting time to recognise the services of their hon. secretary, Mr. R. Henry Holmes, and to signify to him in some way their approbation of his indefatigable labours. Mr. Holmes, it was stated, was most reluctant to accept any testimonial; but ultimately it was agreed to present Mrs. Holmes with a portrait of her husband, and each member of the committee to be also provided with a large cabinet-sized photograph. Never was a recognition of this nature better earned or deserved, Mr. Holmes being at once the originator, and to some extent the life, of the movement, for the interest he has shown at the commencement has never flagged.

"A PLEA FOR THE DOCTORS."

A kind-hearted writer in the *Newcastle Weekly Chronicle* says that "a few weeks ago there was an announcement in some of the papers that a lady of Liverpool, Mrs. Charles Furner, had assigned to trustees the sum of £20,000 for a fund for retired Liverpool clergymen, to allow them £200 a year. All honour to the lady for her munificent gift and loving care for the clergyman, but there is another class of men who need similar help in their declining years—I mean the doctors, some of whom have borne the heat and burden of the day for twenty or thirty years; liable to be called out at any hour of the night; sometimes paid, more often not; striving always to pay their own debts (for they are honourable men as a rule), yet at times scarcely knowing how to do so through lack of honour amongst some of their patients. Often weary in body and overtaxed in mind, what wonder that they often break down at the age of sixty, while many men at that age are still fresh and vigorous. The writer personally knows such a case, one who at sixty-five is, through severe illness, thoroughly broken down in health, and will not be able to work much in future, yet with next to nothing to fall back upon. Always tender-hearted and generous in the past, never refusing help to others in time of need, upright and honourable in all his transactions, he is now weak and ill, and over-burdened with care about the future. What an estimable boon would a pension like Mrs. Furner's be to such a man! It would relieve him of corroding care, and make his last days serenely happy."

SANITARY MATTERS AT WHITBY.

Dr. Herbert reports of this favourite northern health resort that there is now an entire absence of zymotic diseases in the district, and that the town was never in a more healthy condition. The 100th annual meeting of the Whitby Public Dispensary has just been held, when it was stated that 975 cases had been treated during the year, and of these 892 had been discharged cured or relieved. Dr. Tinley was appointed at the same meeting one of the hon. physicians of the institution.

NARROW ESCAPE OF A SURGEON.

An accident occurred at Wallsend on Saturday last, whereby Dr. Frederick Mears, of Gateshead, nearly lost his life. He was riding to Tynemouth to attend a muster of the Volunteer Corps. At Walker Gate his horse took fright at a passing train, and dashed along the turnpike road at a furious rate. The rider lost control over the animal, and great consternation prevailed at Wallsend when the horse and rider galloped through the whole length of the crowded High-street. When opposite the Café, the horse dashed with great force against a lamp-post, and fell dead on the spot. Dr. Mears escaped with a rather severe shaking and some slight contusions. He never lost his presence of mind, but kept shouting to the crowd to clear the way as the animal galloped furiously along the street.

Newcastle-on-Tyne, July 26th.

THE Grand Cross of Isabel the Catholic has been conferred upon Señor Don Estéban Sanchez Ocaña, body physician to the Queen of Spain.

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EDINBURGH.

(From our own Correspondent.)

CLOSE OF THE SUMMER SESSION.

THE classes held during the summer session in the University and Extra-mural Medical Schools closed last week, and the great bulk of student life has vanished from the city for a season. Professional examinations, however, are detaining both teachers and candidates for a time in town; the final examinations at the University and at the Colleges are just completed, and the first and second intermediate examination at the former are at present in progress. The results of the final examination at the University have been very satisfactory this year; the standard of ability has proved to be a high one, of 280 candidates more than 220 having passed, who will proceed to the degrees of M.B. and C.M. at the annual graduation ceremonial next week. In both the intermediate examinations the proportion of rejections is very much larger than in this, but as the returns from these are not yet complete, it is impossible to compare the ratio of proportionate success in each. Excluding in each case candidates who do not appear for the first time at the several examinations, I believe the proportion of successful candidates will be approximately in the first one quarter, in the second one half, and in the final examination three-quarters, of the total number of competitors.

A NEW MEDICAL SOCIETY.

Under the name of the Edinburgh Pathological Club a new society for the discussion of medical topics has been inaugurated. I understand that its constitution is based on the principle which has produced such admirable results in the case of the Pathological Society of Glasgow, which meets at short intervals under the presidency of Prof. Gairdner. The membership is to be closely circumscribed as regards numbers, and whilst the term "pathological" in its title is to be interpreted in a comprehensive sense, the topics introduced are to be exclusively such as are capable of discussion on a basis of experimental science. The new Club will meet monthly during the winter session.

EXPERIMENTAL WORK IN EDINBURGH.

Since my reference three weeks ago to the state of preparedness for experimental work afforded by the completion of the University laboratories, an appointment has been made which shows that this fact is now generally recognised, and along with it the equally important matter that Edinburgh can produce workers ready to make good use of these opportunities. The Grocers' Company of London have awarded one of their Triennial Research Scholarships to Dr. G. Sims Woodhead, to enable him to prosecute researches in morbid anatomy and pathology. In accepting this appointment, Dr. Woodhead resigns the post of Senior Demonstrator of Pathology under Professor Greenfield, which he has occupied for several years with great acceptance, and the laborious duties of which he has discharged with indefatigable energy. He has already shown power as an author and investigator, and now that he is relieved from the strain of several hours' routine teaching daily, his merits in these respects will come yet more into prominence, as his whole energies will be now diverted into the more profitable channels of experimental research. In addition to his present appointment, Dr. Woodhead holds that of Joint Pathologist to the Infirmary (with Dr. Bruce), which gives him the control of most extensive supplies of material suitable to the purposes of the scholarship.

HONOUR TO AN EDINBURGH DOCTOR.

Dr. Arthur Mitchell, LL.D., one of Her Majesty's Commissioners in Lunacy, has been gazetted as a Companion of the Order of the Bath, Civil Division. Dr. Mitchell is well known, apart from his special eminence in mental science, as a distinguished antiquarian, and holds the post of Professor of Ancient History to the Royal Scottish Academy.

Edinburgh, July 28th.

MEDICAL MAGISTRATE. — The name of Andrew Marshall, M.D., appears in a list of gentlemen who have just been placed on the Commission of the Peace for the borough of Preston.

IRELAND.

(From our own Correspondent.)

ROYAL UNIVERSITY OF IRELAND.

THE extensive additions to this University commenced about two years since will very soon be completed, and when handed over to the authorities of the university the building may be regarded as one of the most complete and efficient of its kind. The anatomical room is 120 ft. long by 30 ft. wide, and the preparation room attached is complete in every respect, several new features in this department having been introduced. The physical laboratory is 90 ft. by 30 ft., while the physiology department adjoining is 57 ft. by 30 ft. wide, the roof being of pitch pine varnished. The chemical laboratory is well equipped, and close to it is a hall 58 ft. by 10 ft. wide for the study of histology. The lavatories are considered perfect, and in connexion with them is a smoking-room 60 ft. by 30 ft. A new feature is a rarefying shaft running from the weather course over the brickwork to the top 85 ft. high, which is intended to remove the fumes from the students' working benches. The tower attached is an imposing structure, and is 120 ft. in height. At a meeting of Convocation, held this week, among the business transacted was that of electing two representatives in the Senate of the University for the ensuing three years. There were four candidates nominated—viz., Messrs. Arthur Hill Curtis, James J. Shaw, M. J. Farrelly, and T. P. O'Connor, M.P. The two first-named gentlemen were elected, the voting being as follows:—Mr. Curtis 348, Mr. Shaw 315, Mr. Farrelly 226, Mr. O'Connor 161.

BOARD OF SUPERINTENDENCE OF DUBLIN HOSPITALS.

The twenty-eighth annual report of the Board of Superintendence of the Dublin Hospitals which receive aid from Parliament has recently been issued. There are nine hospitals, which have a sum of nearly £16,000 distributed among them; and of these institutions three are general hospitals, two midwifery, one ophthalmic, one fever, and one special hospital for the treatment of venereal diseases. The patients treated in these institutions for the year ending March last numbered 9503, and of these 443 died, or a mortality of 5·29 per cent. on those cases treated to a termination. Of the three general hospitals, the mortality on the cases treated to a termination was lowest in the Richmond, which result reflects great credit on the medical staff and managers of that institution, more especially as the building is one which has many defects in its construction and arrangements. Contrasting next the two midwifery institutions, as regards the mortality of patients admitted and the expenditure, there is a considerable difference which is worth noting. The Rotundo Lying-in Hospital had a mortality among the labour cases of only ·58 per cent., as compared with a death-rate of 2·63 per cent. in the Coombe Hospital. The average annual cost per bed for maintenance and for establishment in the Rotundo Hospital was £50 12*s.* 4¾*d.*, and in the Coombe Hospital £65 0*s.* 5¾*d.*, or a difference per bed of £14 8*s.* 1*d.* between institutions admitting the same class of cases. It may here be remarked that of the hospitals receiving a Parliamentary grant the most economically worked in these particulars is the Hospital for Incurables (£26 12*s.* 4¾*d.*), and the highest the Cork-street Fever Hospital (£79 19*s.* 3½*d.*)

CORK-STREET FEVER HOSPITAL.

It appears from the report for the past year, ending March last, that the decrease in the number of patients admitted, as compared with the previous two years, was due to the diminished prevalence during the year of typhus fever, scarlatina, measles, and pneumonia. The only cases of small-pox were imported from England, and every precaution was taken in the hospital, when a case was admitted, to prevent the spread of contagion. I am informed that two of the visiting medical staff are paid out of the funds of the hospital—a circumstance which, if correct, would appear to call for some alteration.

THE SPIDDAL TRAGEDY.

Mr. Terence B. Brodie, medical officer of Spiddal Dispensary, situated about eight miles from Galway, who recently shot his wife dead, was last week, before the Lord Chief Baron, found incapable of pleading, medical evidence showing that

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he is suffering from alcoholic insanity. He had for some time been addicted to stimulants, and had an attack of delirium tremens previously to the sad occurrence.

THE LATE DR. EAMES OF CORK.

The remains of this much-lamented member of the profession were interred in the New Cemetery last week, the funeral being attended by some of the most influential citizens. The members of the medical profession present walked in front of the coffin, which was covered with wreaths, one of which was sent by H.R.H. the Duke of Cambridge.

LUNATIC ASYLUM APPOINTMENTS.

By the retirement of Dr. Lalor, who has held the post of resident medical superintendent of the Richmond Lunatic Asylum, Dublin, for so many years, a vacancy has arisen, which has been filled up by the appointment of Dr. Conolly Norman, the medical superintendent of Monaghan Asylum. The late Dr. Eames, of the Cork Lunatic Asylum, has been succeeded by Dr. Jameson Dwyer, of Mullingar Lunatic Asylum.

In consequence of the overcrowded state of Santry churchyard, a sworn inquiry was held last week as regards its sanitary condition, and as a result of the evidence tendered it will be closed against any further interments.

Dr. Charles E. Ryan, of Emly House, Tipperary, has been placed on the Commission of the Peace for co. Tipperary.

Dublin, July 27th.

PARIS.

(*From our own Correspondent.*)

THE TREATMENT OF RABIES WITH HOANG-NAN.

ACCORDING to the *Gazette Médicale de Nantes*, twenty-four cases of rabies have been treated with Hoang-nan by Dr. Barthélemy and several other medical men of that city or of the department. The first case so treated was in the month of March, 1882, the last in April, 1885. Ten times, at least, the bites, which were most frequently multiple, were situated on the hands, once on the hand and on the face. In the majority of cases cauterisation was completely omitted, or practised several hours or even several days after, with agents little active, such as liquid ammonia or a solution of carbolic acid. Two of the patients, who were closely observed by Dr. Barthélemy,—viz., a man of thirty and a lad of sixteen—presented symptoms of rabic mania: persistent insomnia, anxiety, nocturnal agitation, the desire to run, hallucinations, barking, &c. However, none of these persons felt hydrophobic, nor have any of them, to this date, succumbed. The duration of this preventive treatment was, on an average, twelve days. The total dose of the powder of hoang-nan ingested during this time, varied in adults from six to eight grammes. It was scarcely necessary to go beyond one gramme per day to obtain the physiological effects of the medicine—exaggeration of the reflexes, cramps, rigidity, slight trismus. The maximum dose was arrived at progressively, and in some cases the treatment was terminated by gradually decreasing doses. From the above cases the author deduces either that rabies is communicated much more rarely to the human species than is generally admitted, or that the hoang-nan, administered progressively to the physiological effects *during the period of incubation*, sufficiently and efficaciously modifies the nervous system and the entire economy to prevent the evolution of the rabic virus.

M. PASTEUR.

Another victim to hydrophobia, after having been submitted to M. Pasteur's anti-rabic treatment, has been reported. The subject was a young girl of eleven years of age, who was bitten at Chassagne, in the department of the Jura, on April 27th last. She was taken to M. Pasteur's laboratory nine days after. During the fifteen days she remained in Paris she went through the usual inoculations, with ten bouillons of progressive strength; after which she was declared cured and sent back to her family. On June 13th the girl presented the first symptoms of hydrophobia and refused all nourishment. She afterwards presented in succession all the other symptoms, and died on June 17th in a fit of extreme violence. And still another patient of M. Pasteur's is reported to have just died. The patient was a Russian woman, who was bitten by a wolf, and, after having undergone the usual inoculations at the laboratory, returned to her home, where she soon after succumbed to hydrophobia. This death is the fourteenth out of fifty-four persons bitten by wolves, which would give an average mortality of 26 per cent., which is about the average given in recent statistics of deaths from the bites of wolves. Intelligence has just been received from St. Petersburg to the following effect:—On the 3rd and 4th of May last, seven persons (five children and two women) were bitten by a mad dog in the district. They were immediately sent to Paris under the care of Dr. Winow, to be treated according to Pasteur's method. Of the seven patients, three have died since their return to Russia. Dr. Ferreira dos Santos, Professor at the Faculty of Medicine of Rio de Janeiro, and Director of the Hospital of Santa-Casa, has been commissioned by the Emperor of Brazil to proceed to Paris to study M. Pasteur's anti-rabic method with a view of establishing a similar institution in that country. Dr. Ferreira dos Santos is charged to hand to M. Pasteur, with a letter from the Emperor, the Grand Cross of the Order of the Rose.

THE NIGHT SUPPLY OF DRUGS.

As a complement to the night medical service established some time since in Paris, and which has been found very useful, the Municipal Council has decided on creating a night service for the supply of drugs. A list of pharmaciens, who have volunteered for such service, is posted up at the different police-stations, where patients may apply for medical aid, and the medicine, prescribed by a doctor told off for the purpose, may be obtained gratis from a pharmacien on the list, but those who are able to pay will be charged cost price, and one franc and a half extra for the trouble of being attended to at night.

RETIREMENT OF PROFESSORS.

M. Gavarret, Professor of Medical Physics, M. Hardy, Professor of Clinical Medicine, and M. Sappey, Professor of Anatomy at the Faculty of Medicine, Paris, having reached the limit of age, have been placed on the retired list.

Paris, July 28th.

ROYAL COLLEGE OF PHYSICIANS.

AT the ordinary meeting of the Fellows of the Royal College of Physicians, held on the 29th inst., the President, Sir W. Jenner, Bart., in the chair, four gentlemen were admitted to the membership of the College, and the licence was granted to seventy-seven candidates who had been successful at the recent examination.

A communication was read from the Society of Apothecaries asking the College to consider the advisability of allowing the Society to combine with the two Colleges for examination purposes, and pointing out that if this step were not taken, the Society would, under the new Medical Act, be enabled to nominate assistant examiners and confer a statutory diploma; that the Colleges of Physicians and Surgeons would thereby be exposed to very serious competition. A similar letter has been addressed to the Royal College of Surgeons. The consideration of the subject was referred to a special committee to be nominated by the Presidents of the two Colleges.

The College seal was affixed to a deed of agreement between the two Colleges in respect to their conjoined undertakings.

The quarterly report of the Finance Committee and the annual reports of the Library Committee and of the Curators of the Museum were read and adopted.

On the recommendation of the Committee of Management, it was resolved to accept certificates of attendance upon the classes of chemistry, physiology, and anatomy at the University of Adelaide from candidates for the diplomas.

The election of Censors and College officers then took place, the list being as follows:—

Censors: Drs. Handfield Jones, Bristowe, W. H. Dickinson, and James Andrew. Treasurer: Sir Dyce Duckworth. Registrar: Sir Henry Pitman. Harveian Librarian: Dr. Munk. Assistant Registrar: Dr. Edward Liveing. Curators of the Museum: Drs. Wegg, Beale, Bastian, and Curnow. Finance Committee: Dr. Hare, Dr. Wm. Wood, and Sir Edw.

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Sieveking. Examiners in Chemistry and Chemical Physics: Drs. Thomas Stevenson, Bernays, W. J. Russell, A. Dupré, and William Foster, F.C.S. Examiners in Materia Medica, Medical Botany, and Pharmacy: Drs. Mitchell Bruce, Frederick Taylor, Murrell, Tirard, and D. B. Lees. Examiners in Elementary Physiology: Drs. William Ewart and V. D. Harris. Examiners in Physiology: Drs. Allchin, Wooldridge, and Professor Schäfer. Examiners in Osteology and Anatomy: Dr. James Anderson and Mr. Henry Morris. Examiners in Medical Anatomy and Principles and Practice of Medicine: Drs. Beale, W. H. Stone, Sturges, Sutton, Cheadle, Pye-Smith, Whipham, Bastian, Cayley, and Sir Dyce Duckworth. Examiners in Midwifery and Diseases peculiar to Women: Drs. Priestley, Gervis, Galabin, and Watt Black. Examiners in Surgical Anatomy and Principles and Practice of Surgery: Messrs. George Pollock, Morrant Baker, Marcus Beck, and Sir William MacCormac. Examiners in Hygiene: Drs. Thomas Stevenson, Corfield, Ballard, and Thorne Thorne.

A vote of thanks to Dr. Allchin for his services as assistant registrar during the past three years was unanimously passed, on the motion of Sir Dyce Duckworth, seconded by Sir Henry Pitman.

Obituary.

JOHN ARTHUR POWER, M.A. CANTAB., M.R.C.P.L.

THE death of John Arthur Power, which took place suddenly at his residence at Bedford on June 9th last, removes a man who in his particular line was as well known and successful as any man in the profession. For some forty years, at first by himself, afterwards in conjuction with his brother, Wm. Henry Power, and again, since his brother's death, by himself, Mr. Power carried on the tutorial classes which have made his name familiar to hundreds of members of the medical profession; in fact, there is hardly a corner of the globe frequented by Englishmen in which former members of the Power classes are not to be found. The deceased gentleman's grandfather, Dr. John Power, was a medical practitioner of repute at Lichfield. His father, also Dr. John Power, was a physician and obstetrician of considerable repute—an acute observer still referred to as an authority.

John Arthur Power was educated at Merchant Taylors School, whence he proceeded with a scholarship to Clare College (then Clare Hall), Cambridge. Here he took his B.A. degree in 1832, being bracketed 9th wrangler and placed at the top of the third class in classics. Among those who graduated the same year were Dr. Cookson, the late master of Peterhouse, Dr. Thompson, the present master of Trinity, the late Dean Alford of Canterbury, Bishop Harold Browne of Ely and Winchester, Thos. Webster, of patent law celebrity, Robt. Potts, the editor of Euclid, and Shillito, the consummate Greek scholar. Power afterwards proceeded to the degrees of M.A. and L.M., and became senior Fellow of his college. Later on he became M.R.C.P.L. Several other members of his family at or about the same time held university honours at Cambridge. An uncle, the Rev. Joseph Power, 10th wrangler (1821), became Fellow of Trinity Hall, Fellow of Clare, and University librarian. Another uncle, Sir Alfred Power, K.C.B., late Vice-President of the Local Government Board in Ireland, was Fellow and is now honorary Fellow of Downing; while a cousin, the Rev. John Power, 8th wrangler in 1841, was Fellow and tutor and subsequently master of Pembroke College.

The deceased gentleman was a man of very considerable scientific attainments, with a great aptitude for imparting information. He was an accomplished botanist, zoologist, and one of the most prominent of English entomologists. In this branch of natural history he was an acknowledged authority, and his collection of British coleoptera is one of the most complete in existence. Though never in active general practice, he was frequently called in consultation by his old pupils, and kept fully abreast of the times in medical knowledge; in fact, he was generally in advance of them. Long before the anti-zymotic treatment of disease—now almost universally accepted by the profession—was known [illegible] had enunciated the theory, and in conjunction with his life-long friend and pupil, Dr. Wilkinson of Sydenham, had proved its accuracy by practice. He was also— [illegible] for all active work by a severe stroke of paralysis in January, 1882—for many years medical officer to the Sovereign Insurance Office. He was notably a kind-hearted man, a genial companion, a good friend, and had in a high degree the power of attracting the confidence and affection of those with whom he was brought in contact. He leaves a widow, two sons, and six daughters.

MR. FRANCIS SLAUGHTER ROGERS, M.R.C.S., L.A.C.

ON Sunday, the 18th inst., after a lengthened period of ill-health, which had compelled his retirement from practice some seven years ago, died Mr. Francis Slaughter Rogers, of Westmeon, Petersfield, Hants, within a few weeks of the completion of his seventy-fifth year. Mr. Rogers was the seventh child of the late George Vining Rogers, who practised in the same village for upwards of forty years, and who, solely from the resources of such practice, brought up and sent out into the world thirteen sons and three daughters, one being Professor Thorold Rogers, late M.P. for Bermondsey, and another, Dr. Joseph Rogers of London, of sanitary and Poor-law celebrity.

Mr. F. Rogers was educated at the Webb-street School of Medicine by the Brothers Grainger and the late Dr. Robert Lee. In his day he had the run of the conjoint hospitals of Guy's and St. Thomas, an opportunity he turned to good account. He joined his father's practice in 1835, and in 1841 succeeded to the whole of it. He was far above the average of provincial general practitioners; a bold and skilful operator, and of rare judgment in the diagnosis of disease. He therefore merited and retained the confidence of a large circle of patients and friends. By the retirement of Mr. Francis Rogers from practice the connexion of the family with Westmeon, which had lasted unbroken for over a hundred years, came to an end, his grandfather, father, and himself having continuously resided in Westmeon or its vicinity for the whole of that lengthened period.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted Members of the College at a meeting of the Court of Examiners on July 22nd:

Baker, William Henry, Clapham.
Crossley, Ely Wilkinson, L.R.C.P.L., Greetland, Yorks.
Gilkes, Ernest Osmond, L.R.C.P.L., Dulwich.
Harger, Frank Arnold, Barnes.
Haynes, Edward James Ambrose, L.R.C.P.L., Greenwich.
Hutcheson, James, L.R.C.P. Lond., Edinburgh.
Lewis, Percy George, L.S.A., Lincoln's-inn-fields.
Percival, Archibald Stanley, Woking.
Permewan, William, Redruth.

Admitted on the 23rd inst.:—

Bahadhurji, Kaikosro Nasarvanji, West Norwood.
Barclay, Wilfred Martin, Clifton, Bristol.
Blancard, Joinville Toby, L.R.C.P.L., Middleton-square.
Blaxland, Ernest Gregory, L.R.C.P.L., Sydney, N.S.W.
Cave, Frank Evans, L.R.C.P.L., Lee.
Close, John Borrill, L.S.A., Hull.
Cottam, Francis Henry, Crumpsall, near Manchester.
Coombe, Russell, West Kensington.
Cranstoun, Charles Bruce, M.B. Durh., Ludlow, Salop.
Drew, Henry William, Blackman-street.
Gledden, Alfred Maitland, Hornsey-lane.
Goullet, Charles Arthur, L.R.C.P.L., St. John's Wood.
Howse, Neville Reginald, Barking-road.
Nott, Arthur Holbrook, Devizes.
Rickards, Henry William, Russell-square.
Rivers, William Halse Rivers, Offham, Kent.
Robinson, Bernard, L.R.C.P.L., West Kensington.
Smith, Henry Archbold, Leeds.
Thompson, James Edwin, Northwich.

Admitted on the 26th inst.:—

Branson, Herbert William, L.R.C.P.L., Westbourne-park.
Brock, Ernest Henry, South Norwood.
Castle, Charles Wigram Marshall, L.S.A., Blackheath.
Comber, Charles Thomas Thornton, L.R.C.P.L., Kew.
Fisher, Theodore, Greenwich.
Goodale, Henry, Argyll-road.
Hawkins, Francis Stanhope, Trinity-square.
Hamer, William Heaton, Highgate.
Holder, Sydney Ernest, Adelaide, South Australia.
Kelsall, Henry Truman, Westward Ho!
Nihill, John Edward, Melbourne.
Potts, Frank Reginald Henry, Amersham.
Seville, Charles Frederick, L.S.A., Manchester.
Smith, Henry Sandford, Surbiton.
Waite, Davis Allan, Hampstead.
Wilbe, Richard Haydock Wiffin, Finchley-road.

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Admitted on the 27th inst.:—

Booth, Oscar Milner, Thorner, near Leeds.
Castle, Bernard, Guildford-place.
Clarke, William Frederick, Lincoln.
Farrow, Frederick, Ardwick, Manchester.
Fisher, William Teaton, L.R.C.P.L., Bembridge, Isle of Wight.
Harrop, George Burton, Stalybridge.
Hounsell, Frederick Claude, Bessboro'-gardens.
Hinde, Alfred Buckley, L.R.C.P.L., Guernsey.
Owen, John Vaughan, Machynllett.
Routh, William, Wandsworth.
Sandol, John Warden, Bodmin.
Sunder, Charles Edward, Regent's-park.
Tomkins, Alfred John, Clifton, Bristol.
Yolland, John Horatio, L.S.A., Birkenhead.

ROYAL COLLEGE OF PHYSICIANS IN IRELAND.—At the July examinations the following obtained the licences in Medicine and Midwifery of the College:—

MEDICINE.—Julia Maria Brinck, John Evans, John Edward Foster, P. T. Bolger, Frederick William Burnett, Charles James Connihan, Robert Hankam Cox, John Thomas Crincon, James Edward Joseph Duffy, Victor Edward Fenton, Michael Joseph Geary, Godfrey Goodman, Sinclair A. Long, J. Best McBride, Philip M. McDermott, Francis Joseph McGuire, William Kirkpatrick MacRobert, Cornelius Riordan Moloney, Patrick Thomas Morressy, Jeremiah Edward Nally, William Porritt, Everard Marcus Power, Herbert Newman Pallan, John Rafter, Charles Augustus Ridal, Alfred John Septimus Roe, William Livingstone Ross, Charles Scatchard, John C. Sellars, Edward Ernest Smith, James Henry Stewart, William Francis Stritch, Charles Philip Tennant, Perceval John Ternall, Frederick Whitfield Thornton, Thomas Fowler Wade, Thomas Williams, Robert James Wood, David Thomas Wylie, E. Yeates, John Thomas Yoakley.

MIDWIFERY.—Harvey Moore Brabazon, Robert H. Cox, James E. Duffy, Michael J. Geary, Godfrey Goodman, John Best McBride, C. R. Moloney, Wm. Norman Murphy, Jeremiah Edward Nally, William Porritt, Charles Augustus Ridal, Wm. Livingstone Ross, John C. Sellars, Edward Ernest Smith, William F. Stritch, Thomas Williams, Robert J. Wood, David T. Wylie, Edward Yeates.

The under-mentioned have been admitted Members:—

Otho Galgey; William John Read Raluaford.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—The following, having recently passed their final examination for the Letters Testimonial, have been admitted Licentiates of the College:—

Ormsby Burkitt, Charles J. Connihan, James D. O'Dowd Egan, Francis E. Gahagan, Timothy H. Hannigan, Gerald Lake, David M. Lindsay, John J. Myres, John J. O'Connell, Edward B. Pooley, Walter Swan, George Woods.

Thirty-two candidates entered for examination; two withdrew, two were absent, and sixteen were rejected.

At a Supplemental Examination, held on the 19th inst., the undernamed were admitted Licentiates of the College:—

James E. Duffey, William S. D. Exeter Jordan, and F. W. Monsell.

SOCIETY OF APOTHECARIES.—The following gentlemen passed their examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received certificates to practise, on the 22nd inst.:—

Armitage, Joseph Hartman, Montreal, Canada.
Close, John Borrill, Florence-avenue, Hull.
Hawkins, Frank Sidney, M.R.C.S., Berkeley-square, Bristol.
Williams, James Francis, Montreal, Canada.

THE death is announced of Dr. Cajetan Anton Kranz, chief vaccination physician in Bavaria.

THE sanitary staff of Clerkenwell have seized 12,000 bad eggs; and as the Sanitary Act provides for the prosecution of vendors of "fish, flesh, or fowl unfit for human consumption," counsel's opinion is being taken as to which of these heads the eggs can be placed under.

SMALL-POX has appeared at Kirkby Stephen, Westmoreland, causing some alarm in the district. The sufferers have been removed to the fever hospital in connexion with the workhouse. The desirability of building a hospital for patients suffering from infectious diseases is to be discussed by the local authorities.

WORCESTER INFIRMARY.—This institution has been very fortunate lately in the receipt of large donations and bequests of money, and a new wing is about to be added to the building. One anonymous donor has given £5000 on condition that his name shall not be divulged during his lifetime.

CATERHAM IMBECILE ASYLUM.—On the 24th inst., the members of the Metropolitan Asylums Board paid their annual visit to this asylum, and thus concluded the circle of summer inspections of the institutions under its charge. The asylum, which is built upon the block system, contains accommodation for 2050 patients, and during the sixteen years it has been built nearly 4000 lunatics have been received. The result of the inspection is reported to be satisfactory.

UNIVERSITY COLLEGE, LONDON.—Mr. J. M. Horsburgh has been appointed secretary, to enter upon his duties on October 1st.

AT an inquest held at Liverpool on the 27th inst., on the body of a man who had died in the Southern Hospital, the jury returned a verdict of death by misadventure in the administering of chloroform.

ACCIDENT AT THE NEW MEDICAL EXAMINATION HALL. On Thursday a part of the material, consisting of several large blocks of stone, ready to be placed in the new building, fell from the top of the western side of the structure on to the scaffolding, which was so damaged as to become dangerous to passers-by. Fortunately, no one was injured, as the scaffolding at the time was unoccupied.

NEW LUNATIC ASYLUM.—At a meeting of Middlesex magistrates on the 22nd inst. it was resolved, on the motion of Mr. A. W. Gadesden, that the agreement entered into by a special committee appointed to provide an additional asylum for pauper lunatics for the purchase of a part of the Claybury Hall Estate, Woodford, Essex, consisting of 250 acres, for £36,000, be approved and confirmed.

VOLUNTEER MEDICAL STAFF CORPS.—The first annual competition for the subscription challenge shield took place on the 24th inst. at Wellington Barracks, and resulted in a victory for the No. 4 (lay) company, Surgeon-Major J. Hornsey Casson commanding. This competition is the outcome of the exertions of the adjutant of the corps, Surgeon Lees Hall, who has done much to promote the welfare of the corps. Surgeon-Major T. Faris, of the Victoria Hospital, Netley, acted as judging officer.

HOSPITAL SATURDAY FUND.—The amounts which have up to the present time reached the central office on behalf of this fund show a considerable falling off as compared with last year's street collection—a condition of affairs attributable, without doubt, to the extremely unfavourable weather which prevailed at the time of the appeal. The deficiency amounts to some £500 or £600. A larger number of institutions have, we learn, applied to participate in the fund than heretofore.

ESSEX AND HERTS BENEVOLENT MEDICAL SOCIETY.—The 100th anniversary court of audit of this Society was held on the 20th inst., when grants amounting to £330 were made. According to the rules, medical men desirous of becoming members must do so within three years after their settling in the counties of Essex and Hertford, but at this meeting it was resolved that the year 1887 be considered as a year of grace, in which medical men having resided in these counties for periods exceeding three years may be admitted as members of the Society upon payment of an entrance fee of one guinea for every year of residence exceeding three. This resolution will, it is hoped, have the effect of largely increasing the Society.

OPPOSITION TO PASTEUR.—On the 25th inst., at a meeting held at Paris and presided over by Dr. Chassaing, a municipal councillor, the methods of M. Pasteur were attacked by several medical men and veterinary surgeons. One speaker, M. Paul Bouiller, contended that microbes were not the agents but simply the products of decomposition. The very same microbes found by the Professor in mad dogs could be equally obtained from the bodies of persons who had died of consumption. Dr. Bouiller concluded by challenging Professor Pasteur to be bitten by a really mad dog. He (Dr. Bouiller) would submit to be bitten by the same animal. It would then be seen that the Professor would go mad, and that he (Dr. Bouiller) would have cured himself by simple cauterisation.

WATER SOFTENING.—On the 24th inst. a visit by the mayors and members of several corporations and a number of borough and other engineers and gentlemen interested in water-supply and sanitary matters was made to the waterworks at Henley-on-Thames to inspect the water softening and purifying apparatus erected there in 1882 by the Atkins Filter and Engineering Company. The whole of the town water-supply is treated by the process, which consists in softening the water by means of lime, and filtering it within the compass of a machine house. The system, which has worked satisfactorily, has recently been carried out for treating the water-supply at Wellingborough, and has also been adopted by the corporation of Southampton for softening and filtering the whole town supply of between two and three million gallons per diem.

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Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

BATTEN, H. A. W., L.R.C.S., L.R.C.P.Ed., has been appointed Medical Officer for the First District of the Petersfield Union.

BUSH, P. A. A., M.R.C.S., L.R.C.P.Ed., has been appointed Medical Officer for the Bishopstone District of the Wilton Union.

CHUBB, WILLIAM L., M.R.C.S., L.R.C.P.Ed., has been appointed Medical Officer for the Sandgate District of the Elham Union.

CLARKE, ARTHUR C., L.K.Q.C.P.I., L.R.C.S.I., has been appointed Medical Officer for the Middleton Cheney District of the Banbury Union.

DALY, ED. O., M.A., M.D.Oxon, M.R.C.P.Lond., has been appointed Honorary Physician to the Hull Royal Infirmary, vice Owen Daly, resigned.

DALY, OWEN, B.A., M.D., F.R.C.P.Lond., has been appointed Honorary Consulting-Physician to the Hull Royal Infirmary.

DAVIDSON, P., M.A., M.B., has been appointed Honorary Physician to the Liverpool Infirmary for Children, vice E. H. Greves, resigned.

FLETCHER, FREDERICK A. C., L.R.C.S., L.R.C.P.Ed., has been appointed Medical Officer for the Kildwick District of the Skipton Union.

HOVELL, T. MARK, F.R.C.S.Ed., has been appointed Lecturer on Diseases of the Throat at the London Hospital Medical College.

LEES, W. JOSEPH, M.D., F.R.C.S.E., has been appointed Honorary Consulting-Surgeon to the Hull Royal Infirmary.

LYON, ADAM C., M.D., C.M.Aber., has been appointed Medical Officer for the Scrooby District of the East Retford Union.

PEYTHERICH, JOHN, M.D. St. And., M.R.C.S., has been appointed a Public Vaccinator for the Parish of Liverpool, vice Speer, deceased.

STEEVES, G. WALKER, B.A., M.D., M.R.C.S., has been appointed U.S. Sanitary Inspector at the Port of Liverpool.

Births, Marriages, and Deaths.

BIRTHS.

BARTON.—On the 15th inst., at Brookwood, Surrey, the wife of Jas. E. Barton, M.R.C.S., of a daughter.

JAKINS.—On the 22nd inst., at 9, Osnaburgh-street, Regent's-park, the wife of Percy S. Jakins, M.R.C.S., of a son.

MOULLIN.—On the 27th inst., at Highgate, the wife of C. W. Mansell Moullin, F.R.C.S., of Wimpole-street, W., of a son.

SIMPSON.—On the 25th inst., at Midlothian, the wife of Prof. Simpson, of Edinburgh, of a son.

TIPPETTS.—On the 11th inst., at Abingdon, Barbadoes, the wife of Deputy Surgeon-General A. M. Tippetts, Medical Staff, of a daughter.

MARRIAGES.

DALTON—HODGES.—On the 21st inst., at St. Andrew's, Derby, Charles Bernard Dalton, M.R.C.S., of Derby, to Kate, eldest daughter of William Henry Hodges, of Ash Tree House, Derby.

MORLEY—SAVAGE.—On the 21st inst., at Woodford, Richard Basil Morley, M.R.C.S., L.R.C.P., to Elizabeth, daughter of William Savage, Esq., J.P., of Port Elizabeth, South Africa, and of Woodford, Essex.

WILMOTT—GUNESON.—On the 24th inst., at St. Saviour's Church, Eastbourne, Edmund Willett, M.D., to Harriette, widow of Alfred Knight Gregson, of Lowlynn, Northumberland.

WILLIAMS—NICHOLS.—At St. Pancras Church, Montagu Wm. Williams, M.B.C.S., L.R.C.P., &c., of High-cross-street, Leicester, to Ida Mary, eldest daughter of D. Cubitt Nichols, of 31, Brunswick-square, W.C.

WILLIAMSON—MILLER.—On the 22nd inst., at the Cathedral, Newcastle-on-Tyne, George Edward Williamson, F.R.C.S., to Minnie, only daughter of Thos. R. Miller.

DEATHS.

JERVIS.—On the 18th inst., at his residence, Henley-on-Thames, Thos. Wilkinson, late Surgeon of the 36th Regiment in the Peninsular War, in his 97th year.

[illegible].—On April 1st, at Gloucester-road, Kew, Sydney Herbert Campbell Kilmansegge, late Surgeon, P. and O. Company.

MOXON.—On the 21st inst., at Finsbury-circus, Walter Moxon, M.D., Physician to Guy's Hospital, aged 50.

[illegible].—On the 23rd inst., at Waterloo-road, Dublin (suddenly), [illegible] Trevedell, M.D., Surgeon-General, in his 71st year.

[illegible].—On the 25th inst., at his residence, Church-view, Bootle, near Liverpool, Richard Jackson Tudor, F.R.C.S., aged 86.

[illegible].—On the 22nd inst., at Cambrian-villas, Queen's-road, [illegible] Richard Warwick, F.R.C.S.E., in his 81st year.

[illegible].—On the 16th inst., at 52, Rodney-street, Liverpool, Mary [illegible] Wilson, M.D., aged 52.

[illegible] is charged for the Insertion of Notices of Births, Marriages, and Deaths.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, July 29th, 1886.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
July 23	29·77	S.W.	65	61	82	66	60	...	Cloudy
,, 24	29·61	W.	65	61	106	71	60	·27	Cloudy
,, 25	29·61	W.	62	60	105	72	56	·05	Cloudy
,, 26	29·56	W.	62	58	117	71	55	·60	Cloudy
,, 27	29·73	N.W.	57	55	101	64	55	·02	Cloudy
,, 28	30·11	N.W.	57	53	106	67	49	...	Cloudy
,, 29	30·10	S.W.	62	58	84	66	54	...	Cloudy

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

We cannot undertake to return MSS. not used.

DON QUIXOTE FROM A MEDICAL POINT OF VIEW.

DR. DON EMILIO PI Y MOLIST, who is described as the "doyen" of Spanish alienists, has recently published a work, entitled "The Beauties of Don Quixote from a Medico-psychological Point of View, with General Remarks on Madness and a New Commentary on the Immortal Novel," with which the profession in Spain are greatly delighted, and a grand banquet has just been given to Dr. Pi in Barcelona, as a mark of the appreciation of his professional brethren of the work referred to. As "the immortal novel" is read by thousands of foreigners, it is to be hoped that someone will have the goodness to translate Dr. Pi's new work into some language more universally read than Spanish.

"THE INSUFFLATION OF IODOFORM INTO THE TRACHEA AFTER TRACHEOTOMY FOR DIPHTHERIA."

To the Editor of THE LANCET.

SIR,—In your issue of July 24th appears a paper by Mr. George Shirres, M.B., headed as above. No mention is made in the notes of the two cases as to the state of the urine, or whether any paralytic phenomena supervened. Nor is it shown whether other cases occurred in connexion with either of those recorded. The grounds therefore for the diagnosis appear to me to be insufficient, and in the absence of these data the value of the method recommended must still remain doubtful. I hope Mr. Shirres will favour us with some statement in reference to the questions raised by me.

I am, Sir, your obedient servant,

LEWIS W. MARSHALL, M.D.,
Hon. Surgeon, Children's Hospital.

Nottingham, July 26th, 1886.

N.B.—The whole period of convalescence seems to be exceptionally short, and the time during which a tube was required is very much so in my experience.

LUNATIC ASYLUMS IN SWITZERLAND.

To the Editor of THE LANCET.

SIR,—I am anxious for information about lunatic asylums in Switzerland, and do not know how to obtain it. Perhaps some reader of THE LANCET could tell me at what places in Switzerland such asylums are to be found. This would greatly oblige me.

Believe me, Sir, faithfully yours,

July 24th, 1886. F. F. G.

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FLIES AS SANITARY INSPECTORS.

THE *Sanitarian* records an instance of flies acting as sanitary inspectors. In one of the rooms of a residence in an American city offensive odours were detected, but their exact source could not be located. The carpets were raised, and a carpenter was engaged to take up the entire floor. At this moment a visitor suggested that an appeal be made to the instinct of the fly. Two "blue-bottles" were accordingly brought from a neighbouring stable, and the doors and windows of the room closed. The flies soon settled upon one of the cracks in the floor, and when the boards were raised at this point a decomposed rat was found.

Mr. C. R. Davidson.—1. We do not know.—2. Dr. D. Powell's work (Lewis, 16s.).

Mr. T. Forster's paper is marked for early insertion.

"NEURORHEUMA."

To the Editor of THE LANCET.

SIR,—I think it was in THE LANCET that I read, a few years ago, an article in which the increasing manufacture of new-fangled names, barbarously fashioned from the Greek and Latin, was strongly deprecated; and aspiring youths, such as juvenile physicians and physiologists, had administered to them some sound advice about giving more attention to the understanding and use of old English. Now, when we are threatened with so terrible a jaw-breaker as "neurorheuma"—which reminds one of our old friend, "truly rural," the famous speech-test for drunkenness—as a substitute for the well-understood "nervous energy," it is time to enter a protest against innovations which are as absurd as they are useless. Dr. White desires to help the learner; but I think he is putting a hindrance in the learner's way. To students "neurorheuma" will have as little meaning as the chorus "tooral-looral," and not half the fun. I have often been pained to see the student get more and more confused and addle-brained while trying to translate into English some of our more recent class-books, especially those treating of physiology and eye diseases. In class-books on other subjects of study authors, for the most part, endeavour to make matters simple and easy for the learner; but in the study of medicine the unfortunate student is becoming with every advancing year more hampered by the encumbered style of authors, or rather, compilers, whose sentences are often a mere jargon of words derived from Latin or Greek. And yet that science can be dealt with by the use of simple language may be seen in such works as Faraday's Researches, Herschel's Astronomy, Arnot's Physics, Draper's Physiology, and Watson's Practice of Medicine. In some of the earlier numbers of *Good Words* there are articles by Sir J. Herschel on abstruse subjects in astronomy; and if those articles had not been written in plain and popular language they would not have been admitted into a popular journal.

But Dr. White's "neurorheuma" is not scientifically exact. He gives neurorheuma as meaning "that which flows along a nerve." But nervous energy, *alias* neurorheuma, is not alone in flowing along a nerve; there are molecular changes, physical, chemical, and vital, quite distinct from nervous energy, which continually go on throughout the whole nerve tissue. "That which flows along a nerve" is therefore too vague a phrase to define the nature of nervous energy. Dr. White's remarks about the absurdity of calling electricity the "wiry flow," the "wiry current," &c., are right enough. But the same remarks do not hold good when applied to nervous energy; for electricity can be transmitted through various kinds of matter besides metallic wire, whereas nervous energy is that peculiar form of energy which the nerves alone convey; and therefore the term "nervous energy" is a most appropriate one to employ until we shall have learned something more about the nature of the various forms of energy (heat, light, electricity, &c.) and their relation one to another. Within the last few years many additions have been made to our knowledge on this subject; and it is well to wait for further knowledge before committing ourselves to the use of so vague a term as "neurorheuma."

Many deep thinkers have tried to answer the question, What is life?—with as much result as Pilate had from his query about truth. Dr. White, however, has found, at least to his own satisfaction, the solution of the question, and the best possible definition of life. According to him, it is the capability of the cardiac and respiratory systems to transmit "neurorheuma." It is to be hoped that his readers will see through this definition without their "mind's eye" becoming troubled with *rheum*, and that the science of biology will be greatly advanced thereby.

I am, Sir, your obedient servant,

July 26th, 1886. THORBURN PATERSON.

"PERIODICAL BILIOUS ATTACKS."

To the Editor of THE LANCET.

SIR,—In response to the appeal of your correspondent, "L.R.C.P." (July 24th), regarding a case of periodical bilious attacks, I would suggest two "working hypotheses." The first is based upon the length of interval between the attacks, and suspects the menstrual nisus, with disorder of some of the pelvic viscera and attendant reflex disturbance of the ganglionic system. The second refers to a possible malarial origin, so long an interval, with regularity of attack, being matters of not infrequent occurrence where such agencies are rife. Here, too, the influence of heredity may be an interesting factor as regards etiology and prognosis. I am, Sir, very respectfully yours,

Ilford, Essex, July 26th, 1886. H. JONES, M.D. (U.S.A.)

THE BLACKBURN AND EAST LANCASHIRE INFIRMARY.

OUR attention has been directed to a controversy which has arisen between the Board of Management and the medical staff of the above institution, and which has been set forth by letters that have appeared in the *Blackburn Times* from the board on the one hand and the medical officers on the other. The main point in dispute appears to be whether it is necessary or desirable that the dispenser to the infirmary should possess a legal medical qualification. The view taken by the medical staff on this question is an affirmative one, whilst the board express an opposite opinion, and, in a kind of manifesto, resent the interference of the staff in the general management of the charity. A good deal of feeling seems to have been imported into the controversy, arising, we apprehend, from some peculiarity in the mode of working of the internal affairs of the infirmary. Speaking generally, however, we may say that, though, as a rule, it is not regarded as essential that a dispenser should be a registered practitioner, yet it must be conceded that the medical staff of a hospital are the best judges of what may be required to render thoroughly efficient the medical and surgical treatment of the patients who enter its walls, and that they are justified in seeking to express their views on the matter in any legitimate way.

R. H.—Yes. In cases where the rupture can be easily kept under control by a truss, the best kind to wear is one having a pad composed of ivory, celluloid, or vulcanite. The spring of the truss should be covered with celluloid or vulcanite, or nickel-plated and then covered, the cover being easily changed. As a rule, those pads which are composed of indiarubber soon wear out. Any instrument-maker will supply the truss.

THE USE OF COCAINE IN CIRCUMCISION.

To the Editor of THE LANCET.

SIR,—I send you short notes of a case in which cocaine proved a complete success. The operation being a common one, and very painful, is now rendered painless by the harmless procedure of subcutaneously injecting a solution of the muriate of cocaine.

Two days ago, on shore at Halifax, I performed the minor operation of circumcision on an adult aged twenty-four, using cocaine as a local anæsthetic. Two grains dissolved in ten minims of water were injected into the prepuce, one grain (five minims) on either side, and in a few minutes the operation was completed. The patient sat up and watched the proceedings with interest. The effect of the drug was most satisfactory, the operation being painless.

I am, Sir, yours obediently,

A. G. P. GIPPS, L.R.C.P., &c.

H.M.S. *Bellerophon*, at Halifax, July 12th, 1886.

To the Editor of THE LANCET.

SIR,—In your issue of July 17th is a letter from Mr. Atkinson of Kensington, describing a case of circumcision under the influence of cocaine, and I notice another in your issue of the 24th from Mr. Jackman of Coggeshall. The following brief notes bear out their experience.

A short time ago I determined to circumcise myself, and commenced to incise the prepuce; but this I found extremely painful. I then well painted the prepuce, both inside and out, with a 4 per cent. solution of hydrochlorate of cocaine, and injected into the prepuce in front a few drops of it; but I found that the insertion of the needle and subsequent injection caused me a good deal of pain, and I did not repeat it. After waiting a few minutes I proceeded to cut again, and found that the anterior part of the prepuce was quite anæsthetised, though cutting through the posterior part was very painful work. I then inserted six catgut sutures, and, with the exception of some venous hæmorrhage thirty-six hours after, and which was easily stopped, the result has been satisfactory. Nevertheless, if I possessed a second prepuce requiring removal, I think I should obtain the aid of a professional brother, and not repeat the experience of being both operator and patient at the same time. I am, Sir, yours obediently,

July 26th, 1886. L.R.C.P. Lond.

SAD FATE OF A GERMAN PRACTITIONER IN SOUTH AMERICA.

THE German residents in Bolivia, wishing to obtain the services of a resident practitioner of their own nationality, recently agreed to guarantee some £600 a year towards his support, and to allow him, besides attending the subscribers, to practise privately. A suitable gentleman was obtained, but unfortunately he shortly afterwards became insane. No satisfactory asylum being available in Bolivia, the German colonists tried to send him to Europe for treatment; but, though they offered a free return passage and a liberal recompense, they were unable to find anyone who would take charge of the unfortunate doctor. However, from want of sufficient attendance, he managed to escape, and nothing was heard of him till, three days later, a party of Indians brought him back with both his legs crushed. He was still alive, but was evidently fatally injured.

Dr. W. Thorburn (Rusholme).—The charts are printed and published by H. Silverlock, London.

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CULTURE OF VACCINE IN MUSHROOM JELLY.

EXPERIMENTS have recently been made by the Finnish Medical Society in the cultivation of artificial lymph in sterilised mushroom jelly. The artificial lymph has also been dried and used for vaccination. A child was exhibited at one of the meetings who had been vaccinated by the artificial lymph in the arm. There were nine vesicles in three rows. They were all well developed, and did not present any dissimilarity, although two rows had been produced with lymph taken from different parts of the culture glass, and the third row with dried lymph from the same glass. Former experiments had not been so successful, owing to the resistance of the lymph to the effects of drying. The cultivation of the lymph has now been brought to a more satisfactory point.

Enquirer.—In the absence of an agreement, we think three months notice should be given.

THE ARMY MEDICAL STAFF.

To the Editor of THE LANCET.

SIR,—I am glad to see that in some recent issues of the medical papers attention has been called to the pay of the junior army surgeons in India. The young surgeon is induced to enter the service under the fond delusion that he is to receive pay at the rate of £200 per annum, with the allowances of a staff captain, which altogether amounts to nearly £300 per annum. This he undoubtedly receives during the few months he is allowed to remain at home; but on arriving in India (usually within his first year of service) he finds that though he continues to wear the badges of rank of a captain, according to the Indian Army Regulations he ranks with a lieutenant for the first six years of his service, and draws the allowances of that rank only, which, together with his pay, amount to 317½ rupees per month (value of exchange being 1s. 5½d. the rupee); this is 132½ rupees less than the pay of a regimental captain, 82½ rupees less than that of a junior veterinary surgeon, and actually 7½ rupees less than the pay of a young subaltern on becoming a probationer for the Indian Staff Corps. But this injustice fades into insignificance when compared with what follows after the surgeon attains five years' service. At home after this period of service his pay is augmented by £50 per annum (equivalent to 58 rupees 5 annas per month), while in India he gets the overwhelming addition of 18 rupees 4 annas per month, being at a loss of 40 rupees 1 anna for the privilege of serving in that unhealthy climate. Nor is this all. At home, when travelling on duty, the surgeon receives an allowance of 10s. per day, while in India not only does he receive no such allowance, but has to provide himself with tents and transport for his baggage. Again, though the nature of his duties always necessitates his being mounted, he is not allowed horse allowance, except when actually marching with troops, though (I suppose as a sort of grim joke) the dress regulations authorise him to wear spurs.

I hope you will find space to publish these few facts, if only in justice to intending candidates, who, I am sure, are about to enter the service, as many have done, under false impressions.

I am, Sir, yours faithfully,

July, 1886. ONE WHO SPEAKS FROM BITTER EXPERIENCE.

"AN APPEAL."

To the Editor of THE LANCET.

SIR,—Referring to my appeal in THE LANCET of June 26th and the list of subscriptions you kindly inserted on July 10th, I have since received the following sums, and trust that those of your readers who have not yet contributed will not overlook this very deserving case.

I am, Sir, yours faithfully,

R. FITZROY BENHAM.

Abercorn House, Baron's Court, London, S.W., July 27th, 1886.

Previously announced ...	£31	8	0	Dr. W. P. Brabazon ...	£1	0	0
Leopold de Rothschild, Esq.	3	3	0	M.D. Lond.	1	0	0
Sir W. Jenner, Bart. ...	2	2	0	A Friend	1	0	0
W. M. B.	2	2	0	S. A. Ager, Esq.	1	0	0
Professor Anderson ...	2	0	0	W. C. Bland, Esq.... ...	1	0	0
Dr. Barr Meadows ...	1	1	0	J. Bell, Esq...	0	10	6
Dr. Reginald Bager ...	1	1	0	K., Taunton	0	10	6
Dr. F. R.	1	1	0	Dr. R. Keer Johnson ...	0	10	0
J. W. Barry, Esq.. ...	1	1	0	Dr. W. J. Martin	0	10	0
Dr. G. W. Balfour ...	1	0	0	R. G. Combe, Esq. ...	0	10	0
				Smaller sums	0	10	6

TOUTING PRACTICE IN LEICESTER.

A CARD sent us from Leicester is very unprofessional. It appears to be indiscriminately circulated, and offers attendance in general cases, with "special departments in throat cases and in diseases of women," on low terms. The names appended to the card are "Dr. Dickson, Physician and Surgeon. Assistant, Mr. Anderson." It is dated from 2, Foundry-square, Belgrave Gate, Leicester. It is to be regretted that Mr. Dickson did not consult the Colleges from which he obtained his diploma before resorting to such advertising methods.

Enquirers.—Until the College alters its Bye-laws the title of "Dr." cannot be used on the ground of the qualification mentioned. "Physician and Surgeon" are the proper titles to indicate the qualifications.

BLACKBERRIES.

A CORRESPONDENT writes:—"Perhaps one of the most interesting problems is the inquiry into the reasons why certain plants and animals have been chosen for cultivation by man, and others, apparently quite as suitable, rejected. The blackberry has not found favour. Attempts are at present being made to introduce varieties of this fruit, which, both by appearance and flavour, seems suitable for cultivation. Unfortunately, the blackberry, though dear as a remembrance of our youth, when all things were more or less digestible, does not commend itself to our riper years, from its tendency, either raw or cooked, to produce intestinal irritation. An examination of the numerous seeds in a ripe blackberry shows them to be, not as in currants, gooseberries, &c., smooth and polished, but covered all over with curved Arabesque patterns with sharp edges, forming a very pretty "common object for the microscope" with a low power, but in masses in the intestines undoubtedly out of place. Until, therefore, our gardeners can give us a smooth-seeded blackberry, it is wise to use the blackberry only for the preparation of jelly, after the manner of red currant jelly, or as blackberry vinegar. In these, the seeds being rejected, the delicious flavour of the fruit can be enjoyed without fear of colic or dysentery."

M.D.—We regret we cannot assist our correspondent in the way he desires.

Student should apply to the Secretary of the College.

COCAINE IN AMPUTATION OF FINGERS.

To the Editor of THE LANCET.

SIR,—Seeing in last week's issue of THE LANCET reports of some cases of circumcision under the influence of cocaine, I thought it might be interesting to relate an instance which recently came under my observation, in evidence of the utility of this anæsthetic agent in amputation of the fingers.

The patient was a woman aged about thirty-five. After the injection of five minims of a 4 per cent. solution in three places (fifteen minims in all) around the site of amputation, the operation was performed without the slightest discomfort to the patient, she being engaged in conversation meanwhile with a friend. It was found necessary to remove a portion of the second phalanx with the bone forceps, and even this evoked no sign of pain, the patient stating that she heard the bone go, but felt nothing. The operation throughout, including the application of torsion to a small artery, of two wire sutures and dressing complete, was performed quite painlessly and without any reapplication of the cocaine.

I am, Sir, yours obediently,

B. ATHERDEN THOMPSON.

Westminster Hospital, S.W., July 24th, 1886.

TWINS.

To the Editor of THE LANCET.

SIR,—Perhaps some of your readers may be interested to read the following notes of an, at least to me, unusual case.

A. T—— sent for me to attend her in her second confinement on Saturday last, at 7 P.M. After a very powerless labour, the first of twins was born at 11.20. I could just feel the membranes with vertex of the second child, but could not reach well enough to rupture them had I desired. After putting on a binder and waiting an hour or so without any evidence of uterine action, I gave several successive doses of ergot, but without any result. I waited till 4 A.M. on Sunday, and then left, as there was absolutely no pain, and no hæmorrhage or any other indication for immediate interference. I was glad also to have the opportunity of looking in the books to see what was the correct thing to do in such cases. I could not get any definite opinion as to the necessity of waiting or not, so I left matters as they were, and continued to be until Monday at 8 P.M. The patient had slept well and eaten well, and I could hear the fœtal heart. The only indication for delivering seemed to be the state of the funis of the first child, which was changing colour, and I thought, considering the sultry weather, it was unadvisable to wait any longer. Having given a few more doses of ergot, I was able to rupture the membranes, and at 12.15 A.M. on Tuesday I delivered the second child with forceps put on at the brim. There seemed to be no reason for the lingering course of the second birth beyond the powerless pains. Twelve hours after all was well with mother and children, either of which latter would have been a respectable single birth.—I am, Sir, yours truly,

July 27th, 1886. *E.*

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Sir W. W. Gull, London; Dr. J. S. Billings, London; Surgeon-General Moore, Bombay; Mr. Thos. Smith, Lonnon; Dr. Fenwick, London; Dr. P. F. Frankland, London; Dr. Suckling, Birmingham; Mr. J. K. Barton, Dublin; Mr. T. Laffan, Cashel.; Messrs. Callard and Bowser, London; Dr. A. Thompson, Ulverstone; Mr. Burdett, London; Mr. A. Bruce, Edinburgh; Rev. J. C. Bell, Marlborough; Dr. J. B. Wilkinson, Leamington; Mr. Blackett, London; Dr. Lovett, London; Dr. Martin Oxley, Liverpool; Mr. R. A. Stirling, Heidelberg; Rev. F. Burnside, Hertford; Dr. Saundby, Birmingham; Dr. Attfield, London; Mr. T.

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LETTERS, *each with enclosure*, are also acknowledged from—Dr. Jones, Ilford; Dr. Powell, London; Dr. Habershon, London; Mr. Collins, London; Mr. Kenny, Derby; Mr. Fox, Coundon; Miss Robinson, Hillmertin; Mr. Woollett, Southwold; Mrs. Pritchard, Eastbourne; Mr. Hughes, Hanau; Miss Holme, Edinburgh; Mr. Ling, Saxmundham; Mr. Dixon, Durham; Dr. Croke, Hull; Messrs. Schweitzer and Co., London; Mr. Ellis, Newcastle-on-Tyne; Messrs. Jevons and Co., Liverpool; Mr. Turner; Mr. Roberts, London; Mr. Gibson, Aberystwith; Mr. Murray, Perth; Mr. Fenwick, Ilkley; Mr. Faircote, Poplington; Dr. Marshall; Dr. Warters, Hull; Mr. Rhodes, Bronfield; Mr. Wells, London; Mr. Heygate, Cosham; Mr. Newcombe, Ancoats; Mr. Ellis, Birmingham; Mr. Jacobs; Mr. Cornish, Birmingham; Mr. Cox, London; Mr. Iles, Fairfield; Mr. Dukes, Rugby; Mr. Tapsell, Devonport; Mr. Marshall, Grantham; Major Colwell, Portsmouth; Dr. Eberle, Thirsk; Mr. Colman, Leeds; Mr. Coath, Burmantoft; Miss Carson, Burton-on-Trent; Mr. Greenhill, Great Wisley; Mr. Rhydill, London; Dr. East, London; Dr. Gramshaw, Walton-on-the-Naze; Mr. King, Lancaster; Alpha, Liverpool; Zeta; M.R.C.P.; Leo, Aberdeen; X.; C. J. E., Bristol; X. Y. Z.; A. M., Manchester; G. H., Vauxhall; T. M. O., Huddersfield; Medicus, Hereford; H. C. C.; T. F. B.; D., Eastbourne; Medicus, Manchester; Z. A.; Maxilla, Hertford; M.D., Huddersfield; Secretary, Manchester; D. D., London; Nurse, Clapham; W. S., Tunbridge Wells; Beta; Patent; B. C.

Richmond Herald, Venice News, North Star, Hong Kong Daily Press, Night and Day, &c., have been received.

Medical Diary for the ensuing Week.

Monday, August 2.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.

ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesdays, same hour.

CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2 P.M.

HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.

Tuesday, August 3.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.

CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

Wednesday, August 4.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesdays and Thursdays, 1.30 P.M.

ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department, Tuesdays and Fridays, 9.30 A.M.

ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.

LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.

GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.

KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; and on Friday, 2 P.M.; and Saturday, 1 P.M.

Thursday, August 5.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

Friday, August 6.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Saturday, August 7.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.

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Lectures
ON
DISEASES OF THE LACRYMAL APPARATUS.

Delivered at the Royal College of Surgeons.

BY HENRY POWER, F.R.C.S.

LECTURE I.—PART II.
DISEASES OF THE LACRYMAL GLAND.

Fistulæ.—Fistulæ of the ducts of the lacrymal gland are occasionally congenitally present. A typical case is recorded by Steinheim,[1] who observed it in a girl fourteen years of age, and gives the following description of it. On the outer third of the right upper lid, four or five lines from the edge, a little funnel-shaped opening lined with hairs resembling those of the eyelashes ran upwards under the skin. From this opening tears continually trickled and fell in large drops over the cheek. The little opening was so concealed that even after removal of the hairs it could not be seen, but a fine sound could be passed in two or three lines. Compression of the opening by forceps, one limb of which was passed under the lid, showed that the duct ran upwards and outwards. This condition had existed from birth. Such fistulæ almost invariably open by the skin, but Jarjavay [2] has reported one case that fell under his observation in which the passage opened by the conjunctiva. As a rule, fistulæ of the ducts of the gland proceed from injuries in which cicatrisation has been imperfectly accomplished, or from the extension of disease from adjoining parts. Thus Jarjavay[3] records a case where after the cicatrisation of a wound of the right side with a dagger a small opening was left, which communicated with a sac the size of a small almond. When tears were excited to flow the tumour enlarged, and by pressure and manipulation a stream of clear fluid could be made to exude. Arlt[4] has noticed a case where one of the ducts appears to have been opened by the advance of a rodent ulcer. Such fistulæ are very difficult to heal, and many methods have been tried to effect their obliteration. Beer[5] gives one case in which he effected a cure by a means that for some reason, though successful here, he does not recommend to be repeated in other cases of a similar nature. The fistula was five millimetres long, and the patient was a healthy young peasant. Beer heated a knitting-needle red hot, and buried it quickly in the passage, rotating it two or three times; complete recovery took place. By others the galvano-cautery and various caustics have been tried. Sir W. Bowman's case, reported in the first volume of the Ophthalmic Reports, has become classical, and several have been cured by the same proceeding. It essentially consisted in converting a fistula opening cutaneously into one opening by the conjunctiva. A threaded needle was passed through the external opening and a little way up the passage, and was then made to perforate the conjunctiva; a second needle on the same thread was passed straight through the lid at the external orifice, and the two ends were tied so that they included a portion of the conjunctiva. The edges of the external orifice were refreshed and a cure resulted.

Cysts.—Cysts of the lacrymal gland seem to be divisible into two classes—viz., retention cysts and hydatid cysts. Retention cysts result from the closure of the external orifice of one of the excretory ducts, and this may occur from injury or from some inflammatory affection of the conjunctiva. The tumour is usually of small size, but interferes with the movements of the globe, and the patient applies for relief. On raising or everting the upper lid and directing the patient to look downwards and inwards, a semi-transparent bluish swelling appears. On pressure it is found to be elastic, and the conjunctiva glides over it. Occasionally it may be made to discharge its contents, which are watery, and contain a small proportion of albumen. Such a tumour is named a "dacryops." There is usually very little pain or inflammatory trouble. In von Graefe's case there was a slight access of inflammation about once a fortnight, when the tension of the retained fluid seemed to burst through some obstruction and relief was obtained. The disease is chronic.

Dubreuil[6] has reported a typical case of cyst of one of the excretory ducts of the lacrymal gland. The patient, a woman aged thirty-five, presented a tumour between the eye and the eyelid of the size of a nut. It was covered with the conjunctiva, and was a little redder at its lower part than above. On raising the lid it projected strongly; on closing the lid it retreated. It had existed for a year, arose without apparent cause, and was fluctuating, translucent, and indolent. It augmented in size when she wept, but there was no diminution in the visible quantity of tears. Vision was good, and the movements of the globe were only slightly impeded. Dubreuil everted the lid, made an incision parallel to the border, and reflected the thin conjunctiva. The cyst was then opened, giving exit to a spoonful of serous fluid. The anterior wall of the tumour was cut away with curved scissors; slight swelling followed, and complete recovery ensued. The epithelium was columnar, showing it to be part of the duct.

Injection of the sac with diluted tincture of iodine has been tried, but there is considerable risk of acute inflammation of the surrounding tissue—an inflammation that may seriously interfere with the movements of the globe and with vision, and is not, therefore, to be recommended.

Of *hydatids* of the lacrymal gland no one has treated better than Chelius,[7] who remarks that these cause by their pressure on the eye the same troubles that result from other tumours, although from their usually rapid development the troubles become more marked, and vary in accordance with the presence or not of inflammation. If the globe be inflamed, the patient experiences at first a feeling of weight and tension at the back of the eye, which becomes very troublesome in the course of from eight to fourteen days, especially when the eye is moved. The patient feels as if the eye were being constantly pressed forward, but Chelius is particular to remark that neither the form of the globe nor of the eyelids is affected, nor are the functions of the eye impaired. The sense of pressure increases to pain extending over half the head. The globe begins to be really protruded and the surface becomes dry. Retinal troubles are felt, fiery sparks and colours, temporary loss of vision, and diplopia. In the fourth week the pain is unbearable, and constitutional disturbance results from the attendant loss of appetite and sleep. The globe protrudes so that the lids cannot be closed. If the finger is passed between the margin of the orbit and the globe, no distinct tumour but a general sense of hardness is felt. Vision fails, the eye becomes hazy and flaccid like that of a dead man, and indeed death itself is not far off, supervening with the symptoms of apoplexy, and the patient dying with coma. If exophthalmos occur early, the general symptoms and pain are less severe, but the eye is lost early with hypopyon. In regard to treatment, early evacuation and removal are to be adopted, and the cavity should be stuffed with charpie. The cyst presents at the mouth of the wound and can be extracted, and the wound then heals. Wharton Jones has recorded one case of this disease, Fehre a second, and, according to Abadie, Benedict a third. I cannot say I have seen any case in which the presence of a hydatid cyst has been demonstrated, and it is a rarely mentioned disease in recent journals. One case is given in M. Galezowski's *Recueil d'Opthalmologie* for 1885, ser. iii., an. viii.; but the reference in the index is incorrect, and I have not been able to find it in the body of the volume. It is headed "Hydatique (Kyste) substitué à la Glande Lacrymale." But the symptoms given by Chelius and others are fully supported by the record of numerous cases of hydatid cysts of the orbit given by Dion,[8] who practised in Algeria, where hydatid cysts appear to be of common occurrence. The disease is not mentioned by Stellwag, von Carion, Deval, nor by many other writers.

[1] Monatsblätter für Augenheilk., B. xiii., p. 303; and Boston Med. Jour., 1875, p. 560.
[2] Mém. de la Société de Chirurgie, t. iii., 1853, p. 501.
[3] Gaz. des Hôpit., 1854, No. 324.
[4] Die Krankheit. des Thränenorgans. 1868, p. 153.
[5] Lehre von den Augenkrankheiten, Wien, 1817, p. 186.
[6] Gaz. des Hôpitaux, 1870, p. 369.
[7] Handbuch der Augenheilk., 1839, vol. ii., p. 443.
[8] Brit. Med. Journ., 1864, p. 676.
[9] Galezowski's Recueil, 1884, p. 6.

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Arlt[10] states that he has met with one case of atrophy of the gland in the dead body, and in this it appeared to result from obliteration of the ducts consequent upon trachoma. I have not been able to find any other instance of this affection.

Syphilitic inflammation of the lacrymal gland has been occasionally noticed. Thus Dr. Bull[11] reports a case of this lesion which occurred in a patient who was deeply syphilised, and ultimately died from meningitis and syphilitic tumours of the dura mater. On examination, the lacrymal gland was found to be hypertrophied and inflamed, in consequence of inflammation and general infiltration of the tissues of the orbit, which, again, was dependent on diffuse orbital periostitis. There was a high degree of exophthalmos, and enucleation of the eye and the evisceration of the orbit were required to calm the excessive pain. The lacrymal gland was hypertrophied; but this hypertrophy was only due to a hyperplasia of the elements of the areolar tissue, and not of the glandular tissue.

An analogous case has been given by Mr. Streatfeild,[12] whose early death we have so recently had to deplore. In this case the inflammation seems to have originated in the gland itself. A nodulated swelling occupied the position of the gland, which was well defined in its outline, and was accompanied with slight redness both of the skin and of the conjunctivæ. There was some tenderness on pressure. The patient was suffering from a specific skin affection, and, though he denied it, there was otherwise good reason for believing he had suffered from syphilis. In this case the results of treatment were exceedingly satisfactory, as the tumour quickly disappeared under the influence of blue pill and potassium iodide.

Tumours.—The lacrymal gland is liable to tumours of various kinds, some being of a malignant, others of a benign, nature. Mr. Savory[13] has described a case of tumour, probably of a malignant type, connected with the lacrymal gland, in a man aged seventy-eight. It had lasted for two years and a half from the time when chemosis first occurred, till it had developed to the size of an egg and protruded from the orbit, pushing aside and concealing the globe. On examination after death the eye was found near the centre of the mass, which, from the description given, appears to have been of the nature of what would now be called round-celled sarcoma. The lacrymal gland was not discoverable. In this, as in many other similar cases, it is difficult to determine whether the gland was primarily or secondarily attacked.

Harlan,[14] of Philadelphia, describes a case of sarcoma of the gland in a man aged seventy. The tumour was as large as an egg, and projected from the outer part of the right upper eyelid. It had been noticed for four years. The lid was closed, and the globe was immovable, and dislocated downwards and forwards. No pain had been experienced, and the health was otherwise good. After extirpation of the tumour it was found to be an enlarged lacrymal gland, and microscopical examination showed that it was a sarcoma.

Mollière and Chandelux[15] describe a case in which a peculiar form of epithelioma was presented, to which they have applied the term "intra-acinous colloid epithelioma." The patient was only fifteen years of age. Pain and swelling without obvious cause were observed. The globe was pushed to one side by the growth of the tumour. The mass was extirpated, and cicatrisation was complete in eight days. Recurrence of the growth occurred at the end of nine months, and again at the end of ten months. The tumour penetrated deeply into the orbit, and the pre-auricular ganglion was affected. No further operation was performed, and the tumour slowly enlarged in size. An examination of the tumour showed that it was intra-acinous and of the nature of an epithelioma.

White[16] has recently recorded the successful removal of a tumour of the lacrymal gland, which he has named, from its histological characters, "myxo-adeno-sarcoma." It occurred in a woman aged sixty, and had been growing for a year. The globe was pressed downwards, and was inflamed. The left disc was reddened, and vision reduced to $\frac{5}{60}$. It was removed by an incision made along the outer third of the left orbit, and was firmly attached to the periosteum and conjunctiva. It measured an inch and a quarter in length and three-quarters of an inch broad. A drainage-tube was inserted for a few days, and in three weeks it had entirely healed. Histological examination showed connective tissue variable in amount in different parts; cells also irregularly distributed; the characteristic form of myxomatous tissue in abundance in all parts; and, lastly, cylinders and alveoli lined with cells in the characteristic arrangement of adenoma.

To these may be added a remarkable case of cartilaginous tumour of the lacrymal gland which occurred in September, 1873, in St. Bartholomew's Hospital, under the care of Mr. Vernon. When admitted the patient presented a hard, well-defined, elastic tumour at the outer and upper part of the left orbit. The vision of the left eye was reduced to $\frac{2}{60}$. The tension was somewhat less than normal. The conjunctiva was congested, and there was optic neuritis. Mr. Vernon removed the tumour easily by an incision made parallel to and just below the orbital border. A month after the operation there was ptosis with some optic neuritis. The eye, which had previously been considerably depressed, had nearly recovered its normal position, and the vision had improved to $\frac{1}{8}$. The superior and external recti remained inefficient. An examination of the tumour showed that the gland was invaded or pervaded by a cartilaginous growth. It is now preserved in the museum of the hospital.

A similar case has been reported by Mr. Todd in the Dublin Hospital Reports, and one by Dr. O'Beirne. In the former the tumour had lobes, with deep fissures between them, and contained cartilaginous cysts filled with glairy fluid, the interspaces containing a firm fatty substance traversed by a fine membranous band. In Dr. O'Beirne's case the surface of the tumour was granular, and the interior of the gland was occupied with cartilage, from which septa passed to the circumference.

Becker[17] expressed the opinion that all those forms of tumour of the lacrymal gland named simple hypertrophy, adenoma, adenoid, colloid sarcoma, myxoma, fungus medullaris, and encephaloid cancer, were but different stages of the same morbid growth. He thought they all commenced as adenomas, and that the forms of degeneration above named were subsequent changes. Some cases that have been reported seem to support this view. Thus Arlt[18] gives a case of adenoma of the gland which before coming under his care had been twice removed. On being cut into it proved to be of soft consistence, and was removed piecemeal. Sections showed anastomosing hollow cell cylinders traversing a light tissue consisting of fibrillæ, long spindle cells, stellate cells, and a few round cells. Some months after the removal symptoms occurred which appeared to show that a tumour had formed in the cranial cavity, and therefore rendering it probable that it had really been a malignant tumour.

The removal of the lacrymal gland, as M. Badal,[19] of Bordeaux, has recently observed in an elaborate paper on this subject, may be undertaken for various reasons: sometimes on account of disease of its substance, or of the presence of some tumour surrounding or invading it; sometimes to open a path to the deeper parts of the orbit with as little damage to the subsequent movements of the eye as possible; lastly, it may be performed with the express object of abolishing its secretion and of freeing the patient from the discomfort of a constant overflow of tears, which he believes to be often due to the reflexly-excited excessive secretion of this gland. The anatomical disposition of the parts is of considerable importance. If, as Gosselin and Tillaud believe, the canals of the orbital and palpebral portions are distinct and independent, the removal of the portion implicated will effect a cure; but if the ducts of these parts intercommunicate, as Sappey maintains, then the extirpation of a portion of the gland will prove both unsatisfactory and ineffective. Badal reports the particulars of a very interesting case, in which in consequence of disease ectropion of the upper left lid had taken place, exposing the ducts of the gland, which numbered from eighteen to twenty. The plan adopted by Zachariah Lawrence to remove the gland was to make an incision extending along the outer third of the margin of the orbit, just below the eyebrow. Halpin, in order to avoid the presence of a cicatrix, shaved the eyebrow and then depressed the skin, making the incision follow the line of the orbital border. Tillaux (and I here quote from the recent paper on this subject by Badal[20]), drawing attention to the fact that the fibrous investment of the gland is formed above by the periosteum, recommends

[10] Die Krankheit. des Auges, 1863, B. iii., p. 390.
[11] New York Med. Jour., April, 1882, p. 369.
[12] Brit. Med. Jour., 1882, vol. ii., p. 633.
[13] Med. Times and Gaz., Feb. 21st, 1857.
[14] Transactions of the American Ophthalmological Soc. July 28th, 1852.
[15] Lyon Méd., t. xxxv., 1880, p. 325 and 361.
[16] Archives of Ophthalmology, 1882, p. 62.
[17] Ber. über d. Augenk. d. Wiener Universität, 1863-1865.
[18] Archives of Ophthalmology.
[19] Archives d'Ophthalmologie, 1885, p. 388.
[20] Ibid., p. 396.

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that the operator, after having divided the soft parts as far as the orbital border, should cut through the periosteum at this point, separate it from the upper wall of the orbit, and then depress it in order to penetrate into the orbit. The granules of the lacrymal gland immediately come into view through the attenuated periosteum, and can be extirpated with facility. There would seem, however, to be some danger of causing necrosis of the bone by this proceeding, apart from the possible fracture of the superior wall of the orbit and injury to the gland, which at this point is sufficiently thin.

In all these methods the section is made through the skin, but Velpeau pursued another plan. He divided the external commissure, reverted the upper lid, and cut through the conjunctiva at the level of the oculo-palpebral fold. The drawback to the several plans in which the skin is divided is the likelihood of injury to the levator palpebræ superioris, and consequent ptosis, or to the external rectus, and even to the temporal artery. Once exposed, it is easy to plunge a hook into the substance of the gland and enucleate it with a few touches of a scalpel or with the curved scissors. Badal considers Velpeau's plan decidedly the best. The cut, when the lid is replaced, is remote from the surface, and it is only necessary to place a suture at the external commissure to prevent deformity. The hæmorrhage is usually trifling, and can be stopped by cold and slight pressure; it may, however, be troublesome, and in that case the clot should be cleared out and an attempt made to seize and twist the lacrymal artery. Suppuration is rare.

It must be remembered that both in Tillaud's and in Z. Lawrence's method, care must be taken to avoid injury to the levator palpebræ, as ptosis has been known to occur; and it has been thought necessary to caution the operator against inflicting injury upon either the external rectus or the temporal artery. Badal greatly prefers Velpeau's method, which, he says, has enabled him to remove many tumours from the orbit with facility; and he has had no instance under his care of vicious cicatrisation of the wound. He considers that union by the first intention is the rule.

The formation of calcareous masses or dacryoliths has, as might be expected, been very rarely observed. Schirmer[21] only mentions two cases. Samelsohn is the first who has demonstrated the fact anatomically. In an infant aged three months and a half, whose left eye watered, the anterior lobule of the lacrymal gland was found to be hypertrophied, of a bluish-red colour, and presented a concretion at the bottom of a cup-shaped depression of a brilliant white colour firmly embedded in the tissue of the gland, and which, when extracted with forceps, weighed six milligrammes. A micrographic and microchemical investigation made by Bodewig satisfied Samelsohn that such concretions do not proceed from the precipitation of the salts of the tears alone, but that there is a true neoplasia, which, being rich in lime, carbonates, and phosphates, leads to calcification and ossification (osteo-chondroma).

Velpeau enumerates the following cases in which extirpation of the gland had been performed in or before his time:—Spry, Daviel, and Guérin (*Bull. des Sci. Méd.*, t. xix, p. 64); then those of Warner, Schmidt, Beer, Rudthorfer, Travers, Mackenzie, Todd, and O'Beirne (*Archiv. Gén. de Méd.*, Janv. 1831, p. 84); Duval de Rennes ("Roux Mélanges," p. 160), and Lawrence (THE LANCET, 1828, vol. ii., p. 410). The treatment he adopts or recommends to be adopted in cases of acute inflammation of the gland is certainly exceedingly active, consisting in bleeding once, twice, or three times from the arm, the daily application of from fifteen to thirty leeches to the temple, and the local application of either cold compresses or hot poultices; if such vigorous measures cannot be borne, at a later period recourse may be had to purgatives, to counter-irritation, and mercurial inunction to the brow and temple. If an abscess forms, it should be opened as soon as possible. Velpeau states that he has met with three cases in each of which a large abscess formed within six days.

Whether the secretion of the gland undergoes material alterations in disease has not been satisfactorily determined. It is certain that in some cases the tears may long continue to flow over the cheeks as a consequence of obstructed ducts without materially reddening the skin; and, on the other hand, the tears might almost be regarded as possessing in some instances an acrid quality, as they redden and excoriate the surface of the cheek over which they run.

[21] Centralblatt f. prakt. Augenheilk., 1880; and Annal. d'Oculist., t. lxxxv, p. 182. Graefe: Samisch., B. viii., p. 14.

Clinical Lecture
ON
A CASE OF ALCOHOLIC PARAPLEGIA.

Delivered at the General Hospital, Birmingham.

BY ROBERT SAUNDBY, M.D. EDIN.,
PHYSICIAN TO THE HOSPITAL.

GENTLEMEN,—The subject of my lecture this morning is a married woman, aged twenty-eight, who was admitted into Ward X on Feb. 8th, suffering from paralysis of the lower extremities. Her medical attendant, Mr. Proffitt of Burton, has kindly furnished me with the following valuable notes of her previous history.

He writes: "I have known Mrs. Y—— for about six years. During the first two years she lived in a private house, and during 1881, 1882, and 1883 her confinements were about all I had to attend her for. On May 19th, 1884, I was called to see her and her husband in the night. They had been thrown out of a trap. She was suffering from a bad sprain of the left ankle and knee, with some bruising of the calf and a rather bad scalp wound. She had then been for some time the landlady of a small public-house. The scalp wound took a month to heal, and she had a sharp attack of synovitis of the knee-joint. The ankle-joint gave a good deal of trouble, the bone becoming a good deal thickened, for which it was treated with Scott's dressing, and it would, I think, be the end of July, 1884, before she began to get about again with a limp. After a time she got well of that, but there was still a good deal of thickening and pain left. Shortly after the injury there was a great *deal of contraction of the muscles of the calf, drawing up the heel*, and accompanied by considerable pain. After ceasing to attend her for the above I was called upon occasionally to prescribe, and the impression gradually forced itself on my mind that she was becoming addicted to drink. She has never, however, had an attack of delirium tremens. It was in August, 1885, that the trouble with her legs began. After a visit to the seaside she called me in, complaining of pain and of loss of power in the legs, being only able to get about with assistance or by clinging to the furniture. Her memory was bad, her temper irritable, and she was *constantly drinking spirits*. She had changed a good deal in appearance, and was much wasted. From this time to the 27th of October her legs got worse, and on that date I saw her in consultation with Dr. W. Lowe, of this town. We found one leg more wasted than the other; sensation diminished in the skin in some parts, about normal in others; and great tenderness in the muscles on pressure. She could not use her legs at all, and had to be carried about in a chair. Shortly after Dr. Lowe's visit the contraction of the knee-joints came on; and her bowels, which had not given any trouble before, became very torpid, necessitating the removal of a mass of hardened fæces. *Her drinking habits continued, and were very bad.* About the time of Dr. Lowe's visit there had been some numbness and pain in one hand, and some startings and twitchings in the legs. From that time she has remained about the same; if anything, a little improvement has taken place." Mr. Proffitt adds in a postscript, "From the first it seemed to me that the muscles of the anterior part of the leg and thigh were the most affected with paralysis. She could not get her toe off the ground, and she could not kick; but she could, and I think she can now, flex the leg on the thigh and use the muscles of the calf."

I will not repeat the details of the previous history as gathered by us, except to note that her previous health had been good with the exception of scarlatina and an abscess behind the ear when a child, and that she attributes the onset of the paralysis to a chill caught while staying too long in the sea at Llandudno. The next day, she says, she had pains in the feet and toes, and walked with difficulty. She never was hysterical or nervous. Menstruation stopped after the visit to Llandudno, and did not return till ten days before admission, when she was again unwell. She was very sick for the first two months. Her father is alive, but rheumatic; her mother and all her brothers and sisters are alive and well. She tells us that there has been no instance of

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nervous disease in her family. She has two children, who are in good health. I ought to mention that the contraction mentioned by Mr. Proffitt as occurring after the accident disappeared completely, and that before her visit to Llandudno she could walk quite well. On admission she appeared a well-developed, well-nourished young woman. She has a fair, fresh complexion, with light hair and blue eyes. She lies mostly on the right side, the knees flexed, with the feet extended. She reads and does crochet work for her amusement—both, she tells us, as well as ever. Her temperature is normal; pulse 84, regular and full; respiration 20. The heart, lungs, liver, and spleen are normal. Menstruation occurred normally ten days before admission. The bladder and rectum perform their functions regularly and without pain. The urine is acid, sp. gr. 1022, contains a faint trace of albumen and a large quantity of indican, and it deposits phosphates and vaginal epithelium; the daily quantity is from forty to fifty ounces. Her intelligence and special senses appear to be unaffected. The fundus of both eyes is normal; there is no colour-blindness or loss of pupillary reflex to light. She protrudes her tongue well, but it is distinctly tremulous. Her sensation to touch and pain seems everywhere undiminished. There is some hyperæsthesia of the skin of the trunk, and great hyperæsthesia of the muscles of the lower extremities, great pain being apparently caused by grasping the calf muscles of either leg. The spine is normal to sight and touch, and is not tender anywhere. The upper extremities are quite normal, though some time ago there was some numbness of the left hand. At present sensation, motion, and electrical reactions are quite normal. There is no tendency to drop-wrist. The lower extremities are usually flexed and adducted, the feet, however, being always extended in the talipes equinus position. She can flex and extend the thighs upon the abdomen, and flex the legs on the thighs, but she cannot extend the legs beyond an angle of 120°, nor can this be done by employing any reasonable amount of force, while the attempts cause acute pain. In both popliteal spaces there is a mass of œdema the size of an orange. The anterior muscles of the thighs are wasted. There is no patellar reflex. The muscles of the legs are wasted, and the calf muscles are very flabby. She can extend her toes very feebly, but has no power of moving the ankle-joints, nor can they be dorsiflexed by passive movement, though they move laterally quite readily. The skin of the feet is moist with perspiration, and on their inner aspects there is a papular rash, which looks like hyperæmia of the sweat glands. She complains of alternate feelings of heat and cold in the feet. The whole of the wasted muscles show loss of faradaic contractility. Their galvanic excitability is much diminished, but not altered—that is to say, the kathodal stimulus is still greater than the anodal. The use of the constant current appeared to cause great pain. The cutaneous reflexes are all present; there is no ankle clonus, and patellar reflex, as already stated, is quite absent in both legs.

This patient is clearly suffering from atrophic spastic paralysis of the lower extremities; but we must go a step further, and inquire what is the pathology of the disease—what is the seat of the lesion, and what is its nature. The wasting and loss of electrical reactions of the muscles, with the absence of patellar reflex, are the great features of the case, and these enable us at once to exclude hysteria, which may present a perfect picture of ordinary spastic paraplegia. There is also absolute want of any evidence of hysteria in the history or manner of the patient. The distribution of the paralysis in the lower extremities, and the absence of any cerebral symptoms justify us in looking lower than the encephalon for the seat of the lesion. Spinal meningitis or a transverse lesion of the cord would cause pain, anæsthesia, bladder and rectum troubles, or bedsores, none of which are present. If it is a spinal affection, it must be what is called a systemic lesion, picking out and attacking certain anatomical elements only of the cord. A lesion of the posterior columns does not at all fit the case, as we should not expect to find wasting, paralysis, loss of electrical reaction in the muscles, or rigidity of joints; while we might expect girdle pain, loss of pupillary reflex, and some anæsthesia. But it is not so easy to dismiss the suggestion that the lesion may be seated in the anterior horns of grey matter, extending to the adjacent white columns. Acute anterior poliomyelitis is [illegible] as the cause of the essential paralysis of [illegible] disease occurs sometimes, though not [illegible] frequently, in adults. We know that it is characterised by paralysis, rapid wasting of muscles, loss of electrical contractility, followed by contractions and loss of tendon reflexes. But before we decide to accept this explanation, I would like to sketch for you the clinical picture of alcoholic paralysis, as it has been described by recent writers, and which, perhaps, does not find a place in the text-books you have read.

The earliest account of alcoholic paralysis, according to Dr. Dreschfeld, was by Dr. Jackson of Boston in 1822, but the first European writer on the subject was Dr. Magnus Huss of Stockholm, in 1849. Later on, Lancereaux and Leudet in France, and Wilks in England, recognised and wrote upon this disorder. Dr. Wilks mentions it in his Lectures on Diseases of the Nervous System, published in 1878. Within the last few years a good many cases have been published, and much has been learnt respecting its clinical history and pathology from the writings of Glynn, Broadbent, Déjérine, Hun, Dreschfeld, and others. It is also described in Dr. Ross's recent Handbook of the Diseases of the Nervous System (J. and A. Churchill, 1886), and it is now established as a form of paralysis, with definite clinical history, symptoms, and morbid anatomy.

Alcoholic paralysis occurs chiefly, but not always, in females, and according to Charcot (though I think this is doubtful) only in those with neuropathic tendencies—of course, too, only in those who indulge in immoderate and prolonged abuse of alcohol. Its onset is gradual, commencing with pains in the legs and some loss of power. The patient walks with uncertain gait, using a stick or helping herself by the furniture, and in this stage there is a strong resemblance to locomotor ataxy, which is strengthened by the loss of tendon reflexes. There is usually some anæsthesia or hyperæsthesia, and a very marked symptom is *the hyperæsthesia of the muscular masses*. The paralysis affects chiefly the extensors, and is followed by wasting and loss of electrical contractility, with, we are told, perversion of the normal galvanic excitability, the anodal stimulus equalling or exceeding that of the kathode. Vaso-motor disturbances, œdema cutaneous eruptions, and sensations of heat or cold are often present in the affected limbs. The upper extremities may be attacked, the earlier signs being numbness and a tendency to drop-wrist. The researches of Déjérine and Moeli have proved that the brain and spinal cord are intact, the lesion being seated in the peripheral nerves. Up to quite recently this lesion was said to be what is called Wallerian degeneration, named after a former distinguished teacher of this school. It is identical with the changes seen in the peripheral part of a nerve two months after it has been divided. These are disappearance of the axis cylinders and breaking up of the myelin or medullary sheath, which runs together to form globules, the outline of the nerve tubes becoming irregular or moniliform. Recently M. Gombault has described the primary lesion of the nerve as an inflammation of the myelin, which becomes granular with its nuclei increased, while the axis cylinder remains intact. To this lesion he gives the name of "periaxial segmentary neuritis." The Wallerian degeneration occurs as a result of this lesion.

It will be at once admitted that our case presents in most particulars a striking resemblance to this description. But there are three points in which it does not altogether conform, and I must not omit to point these out to you. You will recollect that our patient ascribes her illness to a chill caught while bathing. I do not think we can accept this statement as complete evidence, but it must go for what it is worth. In the second place, she speaks of the shock as occurring suddenly, and though Mr. Proffitt's account shows that the loss of power was gradual, yet she fixes a very precise date to the occurrence of the first symptoms in a manner that does not agree with the usual mode of onset as described by writers on alcoholic paralysis. Lastly, we have contractures and rigidity of the knees and ankles. It is admitted by some writers that contractures may occur, but they are very exceptional, and, as a general rule, their presence should make you hesitate to accept a diagnosis of peripheral paralysis.

All modern writers speak of the reaction of degeneration as present. By this they mean that the contraction obtained on stimulating the muscle with the galvanic current is greater on anodal (positive pole) than on kathodal (negative pole) closure, or, as they express it, A.C.C. is greater than K.C.C. I tested this point very carefully, and found that, while galvanic excitability was certainly diminished, no qualitative change existed; and I would take this opportunity

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of telling you that in my experience this much-talked-of sign is neither certain nor trustworthy. The great pain complained of from the use of the galvanic current was probably due to the hyperæsthesia of the muscles giving rise to painful spasms when contracting; the faradaic current, which is ordinarily much more painful, failing to excite the muscles at all, caused no complaint.

After duly weighing all the evidence, and allowing full consideration to the facts just stated, I have concluded that a diagnosis of alcoholic paralysis is the most consistent and most tenable. My experience of this disease is limited to two other cases. One I saw only once in consultation with my friend Dr. Drummond of this town. She was an old woman living by herself as landlady of a small beer-house. She had an enlarged liver and bronchitis, and, I heard, died not long afterwards. The other was a young woman who was admitted into this hospital under my care, and who made a very speedy recovery when removed from all possibility of procuring alcohol. Neither of them afford any information which can throw light upon the present case.

I would draw your special attention to the diagnostic significance of the painfulness or hyperæsthesia of the muscular masses. I cannot assert that this symptom is absolute proof of alcoholism, but it is of the highest value in directing your suspicions in that direction. The vaso-motor disturbances, sweating œdema, &c., are also of importance, and are well marked in this case. The presence of a large amount of indican in the urine is not of special importance. We look for it usually, and find it frequently, in association with torpid action of the bowels. Indican is derived by oxidation from indol, a product of the pancreatic digestion of albumen. It is absorbed from the intestine into the blood, and excreted by the kidneys.

I can only speak very doubtfully about the prognosis. Not seen such happy examples as Dr. Wilks gives, such as was my patient of last year, and those fatal cases recorded by Dr. Broadbent, there must be a long intermediate series. I consider the presence of contractures to be most serious in view of the prospect of our patient regaining the use of her limbs. We have tried without success to remedy the faulty position by extension and massage. Besides these means, our treatment has included galvanism and, for internal medication, strychnia in gradually increasing doses. She has shown great tolerance for this drug, as she is now taking twenty minims of solution of strychnia three times a day without inconvenience, and I must add without much benefit, although her general appearance has considerably improved since admission.

AN EASY METHOD OF DISTINGUISHING THE SOLUTIONS OF CARBOLIC ACID USED IN SURGERY.

By MATTHEW HAY, M.D.,
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Since the epoch-making introduction of antiseptic surgery by Lister, carbolic acid has continued to maintain its position of supremacy as the best of all antiseptics for general surgical purposes. Though it has been shown to be by no means the most potent of the antiseptics, yet it possesses various advantages in surgical use which the more active members of this important pharmacological group do without. It has been hard pressed now and again by new competitors for the favour of surgeons, and in some hospitals has been for a while almost completely driven from the field; but in nearly every case, after a longer or shorter time, it has been reinstated in its old place. It is somewhat curious to observe, in this age of scientific progress, when every year is adding enormously to our knowledge of organic compounds, both from the chemical and the therapeutical standpoint, that in the two most surprising and important advances in practical [illegible] this century or any other has seen—viz., [illegible] and anæsthetic surgery—those substances [illegible] usually used in connection with these methods [illegible] should still hold the foremost place [illegible] acknowledged on all sides as extremely probable [illegible] perfect and generally useful antiseptic than carbolic acid is discoverable, and it is equally freely admitted that it is possible to find a more safe and reliable anæsthetic than chloroform and ether; yet, in spite of many worthy attempts, these substances have not yet to any large extent been supplanted. It may be that prejudice inclines us to the use of the substances which are so bound up with the origin of these advances. But I think it may be more true to say that the great care with which Lister chose his antiseptic and Simpson and his fellow-workers their anæsthetic did away with any probability of better agents being discovered for many years to come. It is thus greatly to their credit that the substances they first employed are in use still. This smaller credit is of course completely overshadowed by the greater which attaches to the discovery of the principle or the method.

This is a needless digression, unless it be to show that, as carbolic acid has not yet been displaced as an antiseptic, and may not be for some years, the immediate subject of this communication is not likely to lose its value so soon as published. The two strengths of the solution of carbolic acid in common use among those who practise antiseptic surgery are, as everyone knows, one of the acid in twenty parts of water (or a 5 per cent. solution), and one in forty parts (or a 2½ per cent. solution). These solutions are used for somewhat different purposes, and I take it that it is generally of some importance that the one should not be substituted for the other—the more so, as carbolic acid is not a very powerful antiseptic, and moderate dilution of it annuls its action. Now, as labels will drop off occasionally, or even the apothecary may supply by accident the weaker instead of the stronger solution, it may be sometimes desirable to be able to readily distinguish the solutions. The surgeon can thus have some check on the possible caprice of the dispenser, and begin his operation with the same confidence in the fitness of his weapons that the soldier possesses when he enters battle, knowing that his rifle or sword has recently withstood the armourer's test. The reagent which I have to propose for the distinction of the solutions is a saturated solution of chloride of sodium. If such a solution is added in about equal quantity to a 5 per cent. solution of pure crystalline carbonic acid, the mixture becomes milky and opalescent, and the milkiness does not disappear on shaking; whereas, if added to a 2½ per cent. solution, the mixture remains perfectly clear. The opalescence is due to the separation of carbolic acid in the form of minute drops. Chloride of sodium has a greater affinity for water than carbolic acid has, hence it is capable of displacing carbolic acid from its solution. This happens, however, only when the solution of carbolic acid is of sufficient strength. Otherwise they remain side by side in complete solution. In preparing the saline solution, it is preferable to use the pure crystalline sodic chloride employed in laboratories. This is quite a cheap substance. The advantage which this possesses over many of the ordinary varieties of common salt is that it forms a perfectly clear solution on being shaken with water, even though a large amount of undissolved salt be still present, the crystals quickly sinking to the bottom of the vessel in which the solution is being made. On the other hand, a solution of ordinary salt has often a muddy appearance, which only disappears after filtration or long standing. There is no other objection to the use of ordinary salt. The saturated solution can be prepared in quantity and kept at hand as an ordinary reagent, or it can be prepared each time as it is required. A small quantity can be made in less than two minutes, by placing some of the crystals in a test-tube, adding about an equal bulk of water, and shaking vigorously, slightly heating to 40° or 50° C., then cooling under the stream from a water-tap, still shaking, to about 15° C. (60° F.). The heat facilitates the solution without very appreciably increasing the amount of the dissolved salt as compared with that dissolved at the ordinary atmospheric temperature. It is a peculiarity of common salt that its solubility is very slightly raised by heating. It is essential to cool the solution before mixing it with the carbolic solution, for, if it be hot, the carbolic acid will not be precipitated but will remain in solution. It is needless to give directions for the preparation of the salt solution in bulk; it can be done in the usual way. It is only necessary to keep the bottle containing it in a place where its temperature is not likely in winter to be reduced to very near the freezing point; otherwise the strength of the solution may be weakened by the deposition of the salt.

In performing the test, it is advisable to add the carbolic solution to the salt solution—say in the test-tube,—not the

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salt solution to the carbolic solution. If the addition be made slowly, drop by drop, it will be observed that each drop produces a small white cloud of separated carbolic acid, which disappears at once with a single shake of the test-tube until the carbolic solution added is equal to about one-fourth part of the salt solution, when the separated acid no longer disappears on shaking. With every further addition of the carbolic solution the amount of separated acid increases, the fluid meanwhile becoming more and more opaque. The density is greatest when from three-fourth to four-fifth parts of the carbolic solution have been added to one part of the salt solution. With further addition of the solution the acid begins to be redissolved and the milkiness to disappear, and the mixture becomes almost perfectly transparent when about two parts of the solution have been added. I have thus described in detail the progress of the changes observed in mixing the solutions with the object of emphasising the need of mixing them in proper proportion. If either too little or too much carbolic solution be added to the salt solution no permanent precipitate of the acid will be obtained. Further, if the temperature of the mixture is above 23° or 24° C. (74° F.), the carbolic acid remains in solution, the solubility of the acid rapidly increasing with the rise of temperature. Should it happen, as it rarely does in this climate, that the temperature of the room is above 24° C., the mixture can be readily cooled by tap-water, or by the evaporation of a few drops of ether or alcohol on the outside of the test-tube in which the mixture is placed. It is necessary, in performing the test, to use test-tubes or glasses which have been previously well dried. A residue of water in the test-tube may prevent the reaction, as will be made evident immediately. It may be well to remark that, on adding a 2½ per cent. solution of carbolic acid, a slight haziness is sometimes perceptible as a drop falls into the salt solution, but this instantly disappears.

The question now naturally arises how far can a 5 per cent. (1 in 20) solution of carbolic acid be diluted before it ceases to give the reaction? It is interesting to find that the addition of quite a small quantity of water is enough to prevent the reaction; that is, no separation of carbolic acid is obtained which does not disappear on slight shaking. For it always happens that when the stronger solutions of carbolic acid are employed, they give as each drop falls into the saline solution a distinct cloud, but this is at once dissolved on being diffused by shaking through the mass of the mixture. If the strength of the solution be lowered to 4·6 per cent. (1 in 21·7), the reaction is not obtained unless the temperature of the mixture is below 8° or 9° C (47° F.); if lowered to 4·5 per cent., the reaction fails unless the temperature is below 4° or 5° C. (40° F.) A 4·8 per cent. solution gives the reaction quite distinctly, though less so than a 5 per cent. solution, unless the temperature is beyond 18° C. (64° F.) Hence, only a solution of greater strength than about 4·8 per cent. (1 in 20·8) can be trusted to give the reaction at the ordinary average temperature of the atmosphere in this country. A solution weaker than 4·5 per cent. (1 in 22·2) will not give the reaction, though the temperature approach zero. It happens frequently that, for convenience, chemists prepare the carbolic solutions from liquid carbolic acid—that is, acid containing usually about 10 per cent. of water; and at least one of the best known makers of the acid states on the label affixed to the bottle that, in dispensing the acid, the water may be disregarded. If chemists follow this instruction, and a 5 per cent. solution be prepared by *weight*, it will contain only 4·5 per cent. of pure acid, and will therefore not give the above reaction. If it be prepared by *volume*, as is likely in many cases, then, as the specific gravity of the liquid carbolic acid is greater than that of water, being about 1068 (I found one specimen of Calvert's to be 1070), a solution of greater strength is obtained, containing about 4·82 per cent. of acid, and therefore of sufficient concentration to give the reaction. It is thus quite easy to distinguish by means of the reaction carbolic solutions made from liquid and from crystalline carbolic acid, if both have been made by weight.

If it is desired to render the sodic chloride solution more sensitive, it can be readily done by saturating it with carbolic acid. I find that a saturated solution of the chloride at 15° C. is still capable of dissolving carbolic acid to the extent of about 0·95 per cent., or, roughly, 1 per cent. Such a solution is best prepared by dissolving the salt to saturation in a 1 per cent. solution of carbolic acid. When the solution has become fully saturated, it will have a hazy appearance, from the separation of a little carbolic acid; this can be readily removed by filtration. If this solution be used instead of the simple salt solution, then it will be found to precipitate the carbolic acid more freely than the other, and, in the case of solutions stronger than 4·5 per cent., at any temperature under 32° to 35° C. (93° F.); but this increase in the sensitiveness of the reagent is gained at the expense of diminishing its value for the purpose of distinguishing carbolic solutions slightly weaker than 5 per cent. from those which are stronger. The reagent is now capable of precipitating carbolic acid in any solution stronger than 3½ per cent. In solutions weaker than 3 per cent.—therefore in a 2½ per cent. (1 in 40) solution—no precipitate is formed, or, if it is, it at once disappears on shaking. If the surgeon wishes merely to possess a reagent which will readily, and at any ordinary atmospheric temperature, enable him to distinguish a 5 per cent. from a 2½ per cent. solution of carbolic acid, the carbolised salt solution is decidedly preferable to the simple salt solution.

There is still another way in which chloride of sodium may be employed—viz., for the distinguishing of very strong and very weak solutions of carbolic acid—not the usual surgical solutions. It depends on the fact, which I have ascertained, that while a perfectly saturated solution of the salt is still capable of dissolving about 1 per cent. of carbolic acid without separation or displacement of the salt, yet a perfectly saturated solution of carbolic acid cannot dissolve more than the fragment of a crystal of the salt without the acid beginning to separate. Hence, if, on dissolving a small crystal or two of common salt in a solution of carbolic acid, the fluid becomes opalescent, and the opalescence does not appear on shaking, the solution is a saturated one—that is, it contains about 7½ per cent. of acid. If, on the other hand, no opalescence appears, not even when so much salt has been dissolved in the carbolic solution, by shaking and slight heating and subsequent cooling, as that the solution has become saturated with the salt, then the original solution contains less than 1 per cent. of acid.

It is perhaps desirable, in conclusion, to briefly summarise the contents of this communication. The three reagents suggested are:—1. A saturated solution of chloride of sodium. This precipitates carbolic acid from solutions stronger than 4·8 to 5 per cent. at a temperature not exceeding 18° to 24° C. (64° to 75° F.). It causes no permanent precipitate in weaker solutions. 2. A carbolised saturated solution of carbolic acid. This precipitates carbolic acid from solutions stronger than 3½ per cent., and it does so, in the case of solutions above 4½ per cent., at any temperature below 32° to 35° C. (90° to 95° F.). It gives no permanent precipitate with weaker solutions. This is the best reagent for the simple distinction of the usual surgical solutions—2½ and 5 per cent. 3. Solid chloride of sodium. A small crystal of this precipitates carbolic acid from a saturated solution; whereas, when dissolved even to saturation in a weaker carbolic solution than 1 per cent., it gives no precipitate.

CASE OF SUPRA-PUBIC LITHOTOMY.

REMOVAL OF A STONE WEIGHING 24½ OZ.; RECOVERY.

By THOMAS SMITH, F.R.C.S.,
SURGEON TO ST. BARTHOLOMEW'S HOSPITAL.

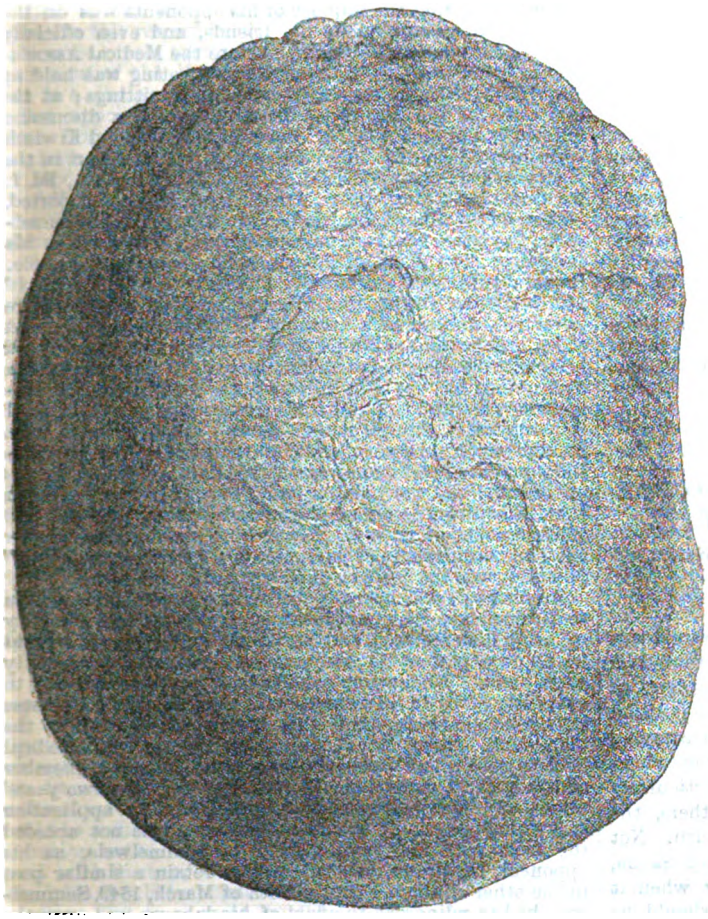
W. K——, an artilleryman, aged forty-three, was admitted into St. Bartholomew's Hospital on April 14th, 1886. He had served as a soldier in India and throughout the Abyssinian campaign, and was engaged in his military duties until a week or two before admission. For the last ten weeks he had passed his urine more frequently than usual, rising five or six times by night for this purpose. More recently he had been unable to retain his urine completely, especially when lying down. He has always micturated in a good stream, and without difficulty or pain; he never passed any blood, but for some time he had observed a little shreddy mucus in the urine. The only inconvenience he was suffering from was increased frequency of micturition and some slight pain over the pubes. He had never been sounded. The urine was neutral, sp. gr. 1010; it contained a trace of albumen and a little flocculent mucus. About fifty ounces was passed in the twenty-four

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hours. He is a large-framed man, of spare habit and fairly healthy appearance.

On examining through the rectum, a densely, hard, rounded swelling could be felt in the situation of the prostate; on the first examination it was thought to be a tumour growing in the prostate, and it was not until an anæsthetic had been given and a sound introduced that its real nature was ascertained. It was found to be slightly movable, and could be felt between the finger in the rectum and the hand over the pubes. The sound would not enter the bladder, but readily struck the stone at the vesical orifice of the urethra.

For a short time the bladder was washed out daily with a boracic acid solution, and on April 22nd the supra-pubic operation was performed. The urine being drawn off as far as possible with a red rubber catheter, about ten ounces of the boro-glyceride solution were injected and a tape tied round the penis; this proceeding brought the bladder into such prominence above the pubes that the use of the rectal bag was dispensed with. An incision four



Exact size of stone. Weight 24½ oz.

or five inches long was made in the mesial line and the bladder exposed at the lowest part, all bleeding vessels being secured as they were divided. All veins in the immediate neighbourhood of the incision were also tied and divided, especially those in the loose tissue behind the pubes. The abdominal wound being held widely open by retractors, all tissues down to the level of the bladder were pushed upwards and held by a blunt double hook. The bladder was first opened at the lowest part, the wound being enlarged to the extent of four inches by a probe-pointed bistoury. The bladder wound was held apart by retractors, so that its cavity was widely opened and the stone freely exposed. The muscular wall of the bladder was much hypertrophied, being three-quarters of an inch in thickness; it bled pretty freely when divided. The stone, which was somewhat disc-shaped, lay in the middle line, with its broad surface upwards, and fitted closely the surrounding parts. On making pressure from the rectum, the stone revolved so as to present its thinner edge and to allow the insertion of large lithotomy forceps. It was extracted with very moderate force. The mucous membrane of the bladder presented a healthy appearance; it was neither ulcerated nor abraded. The bladder wound was closed with seven deep sutures of carbolised silk, passing through the whole thickness of the muscular substance, and six or seven more superficial sutures of carbolised catgut. A space was left just above the pubes for the introduction of a red rubber catheter, and this was tied in, one end protruding at the abdominal wound, the other being carried out through the penis; several holes were cut in that part of the catheter which lay in the cavity of the bladder. The upper two-thirds of the abdominal wound was closed with silver sutures, the whole surface was dusted with iodoform, and the cavity behind the pubes was filled with small pieces of sponge separated from the wound surface by carbolised oil lint, so as to stop all oozing of blood; the whole was covered with iodoform gauze.

For a few hours after the operation it was necessary to syringe pretty frequently through the abdominal end of the catheter to keep it free from blood-clots; afterwards this was done twice a day. The patient suffered scarcely any pain after the operation and during his convalescence, except when the wound was dressed. That part of the abdominal wound which was sutured united at once. The bladder wound, so far as could be seen, did not unite at once; the lowest part of this wound and that in the abdominal wall were evidently bruised by the retractors; their surfaces separated in shreddy sloughs, and retarded convalescence so far as the healing of the wound went. The temperature rose once to 102° on the second day; next day it fell to 100°; and after a week it became almost normal, and remained so throughout. On May 13th the patient was able to leave his bed, and two days later the catheter was removed. On the 22nd he went out of doors. On June 1st he went back to bed, and had a catheter tied in, as there was still a sinus open above the pubes, which could be kept closed by plaster drawn across the abdomen for days. On July 16th the edges of the wound were pared, silver sutures introduced, and a catheter tied in.

The stone removed weighed 24½ oz.; it was ovoid in shape, and consisted of phosphates externally, with a large oxalate nucleus. On section it was found to be dense in structure, and regularly laminated. It was certainly a heavy stone for its size. The accompanying illustration is drawn to scale, and represents exactly the transverse and longitudinal diameters; it measured 13 in. in its largest circumference, and 9½ in. in its smallest.

The above account has been given somewhat in detail, since there is need of a larger recorded experience of supra-pubic lithotomy to determine certain points of practice, both in the actual performance of the operation and in the after-treatment. The unusual size of the stone enabled me to dispense with the use of the rectal bag; the pelvic portion of the bladder being occupied by the stone, a very moderate distension with fluid sufficed to bring the bladder into prominence above the pubes. The wound in this case was of necessity very large. The extra space was gained by increasing the length of the incision rather than by any transverse division of the tendons of the recti muscles, and it is an open question which proceeding least impairs the strength of the abdominal wall. The veins in the loose fat behind the pubes were tied and divided, as possibly giving greater security against secondary hæmorrhage—an accident which has been known to occur in more than one instance. The bladder was sutured after Petersen's method, the wound being closed, except at its lowest point where space was left for the introduction of a catheter. It is doubtful if this be the best plan to adopt; Sir H. Thompson, whose experience of the hypogastric operation since its revival is the largest on record, does not employ any suture at all, and, as I understand, has met with no difficulty in the closing of the wound. Such difficulties, however, do occur. In my own case three months after the lithotomy, I closed

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a supra-pubic fistula with silver sutures. In Mr. Barwell's case the wound was as long as three months in completely closing; and lately I heard of a patient who was admitted into Professor Billroth's wards for a fistula the results of a supra-pubic operation performed eight months before. Mr. Robert Parker has recently recorded a case of suture of the entire wound in the bladder followed by immediate union; and he suggests that in young subjects, where the tissues are healthy, an attempt to secure primary union should be made by carefully suturing the bladder. It would be greatly to the comfort of the patient if the bladder wound could be closed at the time of the operation, and it is to be hoped that a larger experience may lead to improvements in this respect. In the case here recorded the bladder wound was little likely to have united even if entirely closed by sutures, since the edges were of necessity somewhat roughly treated, owing to the size of the stone. Yet it seemed to me possible that the wound would never have united if left entirely unsutured; it was four inches in length, and without some sutures the edges could easily have overlapped and made union almost impossible.

With regard to the size of the stone. I believe this to be the largest that has been extracted during life, and certainly it is the largest that has been removed with complete recovery of the patient. Very few larger calculi have been removed after death. Professor Humphry and Mr. Holmes have recorded instances of calculi removed after death—one weighing 33 oz., the other 25 oz. Mr. Rivington extracted a stone almost as large as in the case here recorded; but his patient did not ultimately survive, though he recovered from the operation. In Sir Henry Thompson's case the stone weighed 14 oz., and the patient completely recovered. Dr. Rutherford Morrison has recently recorded a case where he removed a stone weighing 22½ oz., the patient dying on the thirteenth day.

The almost complete absence of the characteristic symptoms of stone in this patient was a remarkable feature in the case, though in this respect it does not stand alone, for in other instances of very large calculi the same peculiarity has been observed, though in a far less degree.

Stratford-place, W.

CHILDBED FEVER; ITS CAUSES AND PREVENTION: A LIFE'S HISTORY.

By THEODORE DUKA, M.D., F.R.C.S. Eng.

(*Concluded from page 208.*)

THE third great man who spoke out for Semmelweis was Skoda; not heeding unpleasant occurrences, he stood firm by what he considered right. Strange to say, as long as Semmelweis was content to labour in a subordinate position as assistant to Dr. Klein, he was left undisturbed in carrying out his efforts of improvement; but the moment his views had become a topic of public attention, and particularly when Semmelweis's name was spoken of by others, the aspect of affairs regarding him took a different turn. Not only himself, but his friends, and particularly Skoda, became objects of malevolent attacks, especially when it was proposed by the latter that a commission should be appointed to investigate and report upon Semmelweis's treatment; to this the professors agreed, and the members named. Dr. Klein, however, entered a protest against these proposals, and the Government was moved to forbid further proceedings. Semmelweis hereupon simply remarks that this step against himself on the part of his master "remains unaccountable." Dr. Bruck, however, does not hesitate to stamp the interference as "narrowminded and petty, the probable outcome of selfishness and vanity." "At that time," says Dr. Koranyi, "there were really two schools at Vienna: one was the official school, which sat in easy chairs, but of which the [illegible] nothing; the other school was that which made a mark on the period of its existence, but it was placed in the background, and worked quietly in the clinique and laboratory [illegible] went [illegible] Academy of [illegible] important paper on [illegible] facts [illegible] which were the natural outcome of Semmelweis's labours. The Academy approved Skoda's speech, and caused it to be embodied in the *Sitzungs Berichte* for October, 1849. Separate copies of it were ordered to be printed and widely circulated. Skoda mentioned also the necessity of certain experiments to be performed on animals; the Academy at once made a grant of 200 florins for Semmelweis and Bruck to carry them out.

The important communications of Hebra, Haller, and especially of Skoda, awakened a profound interest throughout the profession. An important discussion ensued, in which Scanzoni, Kiwisch, and Seyfert took part; these denied all importance to Semmelweis's discoveries. Scanzoni especially contended that the cause of puerperal fever is to be sought in atmospheric conditions. From this it was evident that the opinion enunciated by several authorities was not as favourable to Semmelweis's views as was expected. The disappointment he felt keenly, because the impulse to his investigations was his warm sympathy with the sufferers. He was not a literary man, as he more than once expressed, and never cared to appear in the press; but when he saw that the number of his opponents was on the increase he was urged by his friends, and even officially requested, to deliver a discourse before the Medical Association in defence of his opinions. The meeting was held on May 15th, 1850, and continued over three sittings; at the invitation of the President, Dr. Rokitansky, a discussion followed; the objections of Scanzoni, Seyfert, and Kiwisch were refuted one by one. Referring to the report in the *Zeitschrift*, Jahrgang vi., Bd. ii., and Jahrgang vii., Bd. i., we find that Chiari, Helm, Arneth, and Hayne supported, whilst, on the other hand, Zipfl and Lumpe opposed, Semmelweis; the latter speakers particularly called in question his statistics. The result of the discussion was, on the whole, favourable to the lecturer. We find in the "Transactions" Dr. Herzfelder stating that "Semmelweis's discoveries were to be looked upon as a triumph to scientific inquiry, and that the objections of Zipfl, Lumpe, Seyfert, and Scanzoni had been entirely disposed of by Semmelweis." But the triumph thus gained has not been followed up. Semmelweis, unfortunately, omitted to publish his paper; the short reports of the secretariat, though correct enough in the abstract, were insufficient in substance, and could not cope with the carefully prepared and widely circulated communications of his opponents; and the opinion found favour in the profession that, in addition to actual poisoning by decomposing animal substances, there must be "something else" to account for epidemic occurrences of puerperal fever. This "something," however, was the *ignotum quid*, the unknown agent.

Semmelweis was not satisfied with the partial concession to his doctrine; he would insist upon the absolute necessity of using disinfectants, and under no circumstances would he allow a patient to be examined unless with perfectly clean hands. Under such conditions it was essential not to spare any effort in advocating the new doctrine. Adverse circumstances prevented this being done. When the memorable three days' discussion before the Medical Society took place Semmelweis was no longer a member of the medical staff of the Vienna Hospital. His two years' tenure of office had already expired, and an application that his appointment should be extended was not acceded to; this was the more galling to Semmelweis, as his opponent, Dr. Braun, was allowed to retain a similar post in the other clinique. On the 20th of March, 1849, Semmelweis had to relinquish the field of his labours, and even the humble request of being allowed to establish himself as a *privat docent* connected with the University was negatived by the authorities. Nothing daunted, he made another trial to obtain his end, and, after waiting eight months, he was gazetted as a *privat docent*, but with the strange proviso that no demonstration would be permitted on the living body. This unexpected restriction Semmelweis looked upon, very justly, as a personal slight; yet, for the sake of the cause he had so much at heart, he would probably have accepted his position if fresh annoyances had not rendered his stay in Vienna intolerable. He left the Imperial city for good, returned to Hungary, his native country, and established himself in Pesth. The cause of the unworthy treatment which drove Semmelweis away from Vienna was due, according to Dr. Fleischer, to political circumstances which unhappily prevailed at that time, and influenced the medical profession as well. His sudden departure from Vienna in October, 1850, marks a turning-point in Semmelweis's life history. The unfair treatment experienced at the very place where he justly hoped for appreciation and

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reward embittered his mind, so that the very wish for further exertion seems to have been crushed in him. He remained indifferent as to the fate of his discoveries just at the very time when it seemed so important to propound them by word and writing.

Smarting under keen disappointment, and finding his own native land desolate and suffering under the recent national disaster, Semmelweis remained silent for years. This silence was almost fatal to the furtherance of his own opinions, which, as all knew, shook the old doctrines to their very foundation, and therefore produced passionate opposition. Semmelweis's exertions and the advocacy of his friends seemed to come to nothing; the battle-field was left in the possession of those who maintained that outbreaks of puerperal fever were solely due to epidemiological causes. The period between 1850 and 1860, which Semmelweis spent at Pesth, was a period of deep mourning of his defeated nation. The foreign military authorities looked with suspicion on the smallest sign of life, social, scientific, or political, among the Hungarians. The author's pecuniary resources had, moreover, been exhausted during his life in Vienna. After arriving in Pesth, his great object was to be attached to one of the cliniques, and he was the more anxious in this respect because he was informed that, owing to the same causes that prevailed at Vienna, the maternity department of the Hungarian University had to be closed twice in a single year. After repeated applications he was at last appointed honorary obstetric physician to the Rokus Hospital. The statistics of the institution show that during six years of his tenure of office, between 1851 and 1856, the rate of mortality was under 1 per cent.—viz., 0·85.

On the death of Professor Birley, Semmelweis was appointed to the chair of Midwifery at the University of Pesth. This promotion gave great satisfaction to his friends and the public. The condition of the maternity as to space and management was unsatisfactory; Semmelweis undertook to reorganise it. The surroundings of the clinique were most objectionable; he urged that a better building be provided. The anatomical dissecting-room on the ground floor, just under the midwifery wards, he insisted on closing at once, and made an urgent demand for a sufficient supply of bedding and linen. These and similar requests he never ceased to urge upon the authorities. He exercised the strictest discipline in demanding unconditional observance of antiseptic precautions. The many petty annoyances to which his official position subjected him, added to the utter disregard and misrepresentation of his views by some of the leading obstetricians on the Continent, proved particularly irksome and depressing to Semmelweis's sensitive nature. He eventually arrived at the conclusion that it would be a "crime" to remain silent any longer. "I am convinced," he says, "that since 1847 thousands of mothers and infants perished who might be living still, had I counteracted all the mischievous opinions that have been put forth with respect to puerperal fever. If now, after twelve years, we put the question, whether my teaching has fulfilled its object or not, the answer is very disheartening to me; it was not propounded sufficiently at first, but its substance was known, and one might have expected that to professional men, whose duty it is to save life, such indications would be sufficient in inducing them to lend serious consideration to the subject. This is a disease about which all speak with dismay, so when doubts were cleared away the principles should be unanimously recognised and adopted in practice. Yet in a great number of the lecture-rooms of to-day philippics are being delivered against my views, teaching the purely epidemic nature of the source of puerperal fever; from this it follows that successive crowds of septic inoculators are sent out on the public, and who can tell when we shall see the last midwife and country doctor cease to spread infection through ignorant malpractice?" These bitter words are sufficiently characteristic of the author's mental condition. When he began to write his great work "Die Ätiologie," he said in the preface: "Providence has chosen me as the exponent of the truths contained in this book. It is my bounden duty to stand up for them. I was inclined to give up the hope that the importance of the question would make it superfluous for me to fight for it. But I must not now take into account my inclinations; I have to consider only the lives of patients, who can take no part in [illegible] whether I be in the right and my opponents [illegible]. These words were written as if under a pre[illegible] and which was soon to follow.

The great work "Die Ätiologie" began slowly, but by degrees its progress developed rapidly, one sheet followed another quickly, and the monograph, which was estimated at six sheets, swelled into a book.

The conclusions to which Semmelweis arrived may be summed up in the following:—In every case where puerperal fever exists the cause is absorption of decomposed animal matter poisoning the blood. It follows therefore that it is due, not to any specific miasma or malaria, but that it is a septicæmic and a pyæmic condition. As a rule, the cause of the disease is introduced from without—externa infection; hence the origin of these fatal epidemics, which are preventable. In a few rare instances, when the membranes or placenta are in part retained and undergo decomposition, supposing that injury was inflicted on the parturient organs by instruments or otherwise, these may also serve to poison the blood. Such cases of self-contamination cannot, according to Semmelweis, be prevented. The rate of mortality from this cause he estimates at 1 per cent.

Some authors speak of topical inflammations during the puerperal state, and describe symptoms of circumscribed metritis, endometritis, metrophlebitis, oöphoritis, colpatis puerperalis, &c., as distinct affections not referable to blood poisoning. Semmelweis's experience does not admit the correctness of such theory, because he regards all such affections as proceeding from the same source, and as being preventable by the use of antiseptic measures, the milder affections being less severe manifestations of the same morbid process. So impressed was he of the paramount importance of the part played by septic poison, and of the necessity of using disinfectants, that he wrote as follows: "We beseech, therefore, all Governments to enact laws having for their object the saving of the lives of females, who are being decimated at present; to prevent this, the fatal virus should not be brought in contact with the yet unborn organisms—a calamity which, unhappily, is practised by those very hands whose duty it is to do all they can to preserve life." Semmelweis further proposes that the midwives and practitioners in attendance be bound down by a "special oath" faithfully to carry out the prescribed rules of treatment. Removal of maternity wards from insanitary surroundings, great care and gentleness in using instruments, scrupulous attention to general cleanliness, and frequent use of antiseptics in every form—these are the points the author insists upon. He refutes, sometimes with vehement invective, the opinions and arguments of his opponents, especially those of Scanzoni, Carl Braun, Zipfl, and Lumpe, some of whom he accuses of deliberate malevolence by systematically perverting his statements.

The book "Die Ätiologie" is a noble monument of the results of careful inquiry. The author expresses the hope that, as regards puerperal fever, his discoveries may not be regarded with less favour than were those of Jenner in another field. But it required time for sufficient notice being accorded to this work. Most of the data adduced by his opponents seemed unexplainable by the light of the new theory, and thus they endeavoured to stamp Semmelweis's labours as not worthy of serious consideration. Dr. Breisky especially criticised him with severity. To these strictures a telling answer was given by Dr. Markusovszky when he says: "The study of the etiology of puerperal fever is doubtless not yet cleared up; it would not have been so even then if the infection by decomposed organic matter had been generally accepted as the true cause. What Professor Semmelweis adduces is merely a preliminary definition of the origin of the disease, since its very elements—viz., pyæmia, the process of absorption (septicæmia), and the febrile manifestations—are matters for further investigation." Many other circumstances besides these kept Semmelweis in perpetual anxiety. His wards in the hospital were situated above those of the surgical patients. Against an arrangement so dangerous he never ceased to protest. In 1860 erysipelas and gangrene broke out in the wards below, and several deaths occurred in the maternity in consequence. This affected Semmelweis greatly, because he feared that this accidental death-rate would be cited as telling against his own treatment.

There remains but little to add, and what there is is a sad, if common, story. Semmelweis felt that he had grasped a great truth, which had been gradually evolved out of a long series of observations and much concentrated thought. It required far more robustness of intellect and character than Semmelweis possessed to front the opposition which his doctrines evoked, and to bear up against the delayed hopes

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and disappointments that he had to encounter. To him their truth seemed so clear and unequivocal that opposition appeared to be nothing but the offspring of prejudice, almost vindictive in type. Semmelweis became introspective, desponding, irritable, and at last unreasonable. He had indomitable industry, a sagacious insight amounting almost to genius, but he had little of that fortitude which enables a man to *labour* and *to wait*.

Apart from his special study of puerperal fever, Semmelweis devoted attention to other branches of gynæcology. He performed ovariotomy, and wrote on uterine hæmorrhages, and on the treatment of fibrous tumours. But his mind was ever preoccupied by his favourite subject, to which he loved to allude in the course of his lectures on other matters. The long-continued stretch upon his mind left indelible marks on an impressionable temperament. Often, when speaking to his class, his excitement rose to such a degree as to cause alarm to those around him. A peculiarity of his conduct, the changeable temper, forgetfulness and carelessness, which characterised him of late, occasioned grave misgivings in the minds of his family and friends. The total break-down soon followed. In July, 1865, as he was about to make a report to the Committee of Professors concerning an appointment which was to be filled up, instead of doing this, in the presence of the assembly he took out of his pocket a piece of paper and read out a solemn oath which he proposed that every midwife and practitioner should be compelled to take. This unlooked-for incident produced consternation among his colleagues; there could be no longer any doubt as to the real state of his mind. All those present accompanied him home to his wife and family. After a few weeks the malady assumed a serious aspect, which rendered treatment in a private house impossible. Medical friends advised placing him in an asylum, and he was removed to Vienna on the 20th of July, 1865. Here he spent the few remaining weeks of his life, death releasing him from his sufferings on the 17th of August, in the forty-seventh year of his age. The proximate cause of his end was not cerebral disease, but that very affection—pyæmia—to the elucidation of which he had devoted the best years of his life. Before symptoms of mental derangement had set in, he performed an operation on a new-born infant, and inflicted a wound on his right hand; the injury was followed by a whitlow, and eventually blood-poisoning ensued. Semmelweis's remains were taken to their last resting-place from that very hospital in which he first made those observations the beneficent result of which will ever remain the glory of his name.

As time passes, the details of the struggle of bygone days are no longer seen in the same light as they were by those who took part in them: the judgment of posterity will be the result of calm reflection. Semmelweis, so full of sympathy for the sufferings of others, struggled unceasingly under unfavourable circumstances, till at last his body and mind succumbed under the heavy strain. He was laid in an untimely grave. But Semmelweis's sufferings were not purposeless. No better acknowledgment did he expect as the reward of his long sufferings than is expressed in the words of Dr. Dohrn in the last number of the *Zeitschrift zur Geburtshülfe und Gynækologie* (Band xii., Heft i., 1886), where he says, in speaking of statistics of puerperal fever: "We see that we in Germany have left those sad days far behind us, and that, as far as our public institutions (of maternity) are concerned, the severe judgment of Semmelweis is no longer applicable to them.....Nobody will deny Semmelweis's merit of having brought about an amelioration of former circumstances."

His biographer desires to place prominently on record the all-important fact that cadaveric infection alone, as some would have it understood, was not, in Semmelweis's opinion, the sole cause of puerperal fever; but, to quote Hebra's words of 1850, "infection with noxious discharges, emanating from living organisms, is likewise considered to be productive of childbed fever."

Nevern-square, South Kensington.

THE Duke of Connaught, who some time ago expressed his readiness to lay the memorial stone of the new circular ward hospital in course of construction at White Rock, Hastings, has written to the committee expressing his regret that, owing to his forthcoming departure for India, he will be unable to undertake the duty.

CASE OF

LABOUR FOLLOWED BY SUPPRESSION OF URINE.

BY J. T. WILLIAMS, M.R.C.S. ENG., L.R.C.P. ED.,
LATE ASSISTANT-SURGEON TO THE TREDEGAR IRONWORKS, MON.

ON Friday, March 26th, 1886, at 7 A.M., I was called to attend Mrs. G——, a primipara, whom I had never seen before. On my arrival the child was born dead, the labour having been very rapid at the last. The child was fully formed, and appeared to be about full time. The patient was just twenty-two, and seemed very quiet and easy—in fact, rather apathetic, as she evinced no sorrow at the death of the child. She was rather pasty in appearance, but not strikingly so. Having given the usual directions as to diet &c., I left her, promising to call again the same evening.

On my second visit I found her very comfortable, and to all appearance going on well. On inquiry, however, I found that she had vomited several times since the labour, and that she had passed no urine. The patient, however, complained of no pain over the bladder, and on percussion I could not make out any urine in it. I ordered hot fomentations over that region, and told the friends to let me know if she had any great pain, and I would come immediately and draw off the urine. I ordered her soda-water and diluents of that description.

March 27th.—I found that she had still voided no urine, and that there was no pain. She had vomited two or three times since my visit. I passed a catheter, and on its entrance into the bladder only about three drops came away. I then withdrew the instrument, passed a stilette through it, and reintroduced it, but no urine exuded. I now examined the patient very carefully. There was no history of renal disease in her or her family. She had never had scarlet fever. Her mother, who was the nurse, said that she had always been healthy and very lively. She had been married only four months. Temperature 99°; pulse 88; tongue dry, with yellowish fur on it; skin hot and dry. She was now more pasty in appearance than when I saw her first. The patient's manner was markedly quiet and uncomplaining. Her heart was weak and her lungs healthy. The lochia still continued, but were slight in quantity; the appetite was bad; the bowels not open; there was no anasarca or headache; pupils active. I ordered hot fomentations to the loins, soda-water and such-like diluents to drink, and an ounce of the following mixture to be taken every four hours: tincture of digitalis, two drachms; nitrate of potash, two drachms and a half; spirit of nitrous ether, three drachms; solution of acetate of ammonia, two drachms; water to eight ounces. I also gave her a drachm of compound jalap powder.

28th. I called in the morning, and found the patient in much the same state, except that she had a very slight amount of dyspnœa. On examination I could find no signs at the base of the lungs of œdema or congestion. Her heart was the same as the day before. She had passed about four drops of urine. There was no pain in any part of the body. Her skin was becoming more and more sallow and pasty. On my visit in the afternoon, in company with another medical man, she was in the same condition as when I left her in the morning. We passed the catheter again, and drew off about half an ounce of urine. She was kept on the same mixture, and the soda-water &c. Diet was very light. The urine contained about one-sixth albumen, and was clear and pale. We could not take the specific gravity, as the quantity was not sufficient.

29th.—The bowels had been freely open twice since my last visit, but still no urine had been passed, and there was no pain over either the vesical or the lumbar region. The skin was still very dry. The only thing that the patient complained of was weakness. Temperature 99·1°; pulse 88. The tongue still had yellow fur on it. No dyspnœa at all. She had slept very well every night since her confinement. There was no anasarca, and the heart was working fairly well. I had warned the relatives of the gravity of the case, and had, in fact, told them that I thought she would not recover. It was hard to make them see that it was so serious, as the patient was to all appearance not in any great danger, so uncomplaining was she and with so few symptoms. In the evening there was no change. I passed the catheter and

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drew off about one ounce and a half of urine, which was pale and clear, and on examination afterwards found it contained a considerable quantity of blood-colouring matter, with a very few hyaline casts and a large quantity of spheroidal epithelial cells like renal epithelium; sp. gr. 1020; albumen one-eighth. The bowels had not been open since I left in the morning. I gave her another drachm of the compound jalap powder, and kept her on the diluents and diuretic mixture, with the same light diet; hot fomentations to her loins as before. The milk had appeared in the breasts now.

30th.—It was now the fifth day after her confinement, and during that time the urine drawn off and passed was about two ounces. Her bowels had acted twice. This morning I found her weaker, and she had passed a very restless night. Her breathing was not at all impaired, and the heart worked fairly well. Temperature 99°; pulse 86. Tongue covered with the same yellow fur, but not quite so much. She had vomited once since the evening before. Lochia continued. Her appetite was very bad, and her mother found it difficult to get her to take anything. I proposed a consultation with another medical man, to which the relatives agreed. Accordingly at 6 P.M. I went with Dr. S——, and found that the patient had had an action of the bowels, once freely, since my last visit, but she had voided no urine, nor could we on percussion make out any in the bladder. She talked more cheerily than usual to-night, and seemed in better spirits; otherwise there was not the slightest change in her. Pulse 86; temperature 99·1°; tongue still covered with yellow fur. The same treatment was pursued, and we left about 7 P.M. At 9 P.M. I was called again to see her by her father, who told me that he thought his daughter had fainted. I thought perhaps she was comatose, so I took some pilocarpine with me, but on my arrival I found her dead. Her mother said that since we left the house she had appeared quite cheerful, that she had passed about a wineglassful of urine, and that her bowels had acted. She asked her mother to hold her in her arms, and it was while in this position that she turned on one side and died almost instantaneously. There was no convulsion of any sort. This is all I could get from the mother.

The appearance post mortem presented nothing very extraordinary. I could not obtain a necropsy, which I should much like to have done. I should be much obliged for any suggestions as to the pathology &c. of this as a complication of parturition. Ought any very prompt measures to have been taken at the onset of the disease, although so few symptoms presented themselves?

Widecombe, Devon.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

A CASE OF CONGENITAL DISLOCATION OF RADIUS.

By R. HERLIS, M.B.

J. H——, aged eight years, was brought to me by his mother, and I was asked to look at his left arm. At first the only abnormality I noticed was a swelling on the outer and anterior part of the forearm just below the elbow; but on a slight movement of the arm the head of the radius slipped out of place, and I was led to examine the case more closely, with the following result: The left radius is generally in its dislocated position, and if reduced any slight motion will throw it out of place again, especially pronation. In complete flexion the dislocation is reduced; it can easily be reduced by manipulation in any position of the forearm, as the joint is so loose and there is some lateral movement possible in the humero-ulnar articulation. The right radius is partially dislocated—that is to say, only about one-fifth of the circumference of the head rotates on the external condyle of the humerus, the rest projecting behind and to the outer side of the joint. This dislocation is irreducible—at any rate, unless considerable force were employed. The external humeral condyles on both sides appear to be unusually small, hence the difficulty of retaining the dislocated bone on the left side in position. The dislocation therefore is similar on both sides, being outward and backward. When the arms are extended there is a considerable projection on the outer and upper part of both forearms, produced partly by the outward dislocation and partly by the disproportionate development of the supinator longus. All the normal movements can be performed by both forearms, but pronation and supination, especially the latter, are very weak, and their place is usually taken by movements of flexion and extension. The patient seldom uses his right arm, which is less muscular than the left. The existence of some deformity has been noticed by the parents since his first year, and even from birth. There is no history of any accident to the boy or to the mother during gestation, or at delivery, which was normal. The boy is fairly well developed; his incisor teeth are very irregular, the two upper lateral or central ones being absent. He is loose-jointed. His manner is very restless, and has been since an attack of chorea three years ago, which chiefly affected his left arm and lasted one year. He is very backward in his education, scarcely knowing his alphabet. The patient's mother is healthy, and has had no miscarriages. The father is of strumous appearance and subject to styes. The brother, the only other child, has interstitial keratitis.

Remarks.—I believe the dislocations to be congenital, because they are symmetrical, and because they have been noticed almost since birth, and there is no history of accident to account for their appearance. The defective development of the teeth, bones, and joints, the backward intellect, and the attack of chorea seem to support the theory which refers congenital dislocations to lesions of the central nervous system.

Nottingham.

A CASE OF PARAMETRIC PHLEGMON FOLLOWING HYDATIDIFORM MOLE.

By G. HENRY BROWNE,

SURGEON, WAENAVON AND CLYDACH-MERTHYR COLLERIES.

MRS. X——, aged thirty-two, a thin, pale woman, multipara, ceased menstruating on June 24th. Six weeks from this date flooding set in without assignable cause, which was checked by ergot and opium. A month later still the hæmorrhage recurred, and was again checked by the usual remedies. The patient had no further trouble till Oct. 4th, when an urgent message came for me to see her about 1 A.M. that morning. On arrival I found her suffering from very profuse hæmorrhage, the abdomen presenting the size of a seven months' pregnancy, but doughy on palpation, while per vaginam the os, soft and dilatable, was expanded to the size of a florin. From this condition of the parts I diagnosed hydatidiform mole, which diagnosis was subsequently confirmed by a portion coming away having the characteristic white-grape appearance. Ergot was given and a Barnes' bag used to avert hæmorrhage and dilate, severe pains almost immediately coming on. In about twenty minutes I removed the bag, when an enormous quantity of the cysts, nearly amounting to six pints, was expelled. The hæmorrhage at this time was extreme, and ergot was again resorted to with brandy, while with my left hand I grasped the uterus, which alternately contracted and relaxed, and with my right passed a few grains of iron-alum up to the os; immediate contraction then ensued and no further hæmorrhage occurred. From the great loss of blood the patient sank to the lowest ebb, being at one time almost pulseless, but rallied under the use of stimulants. When seen again at 11 A.M. her state was somewhat improved, pulse stronger, and temperature normal, and she was then ordered teaspoonful doses every hour of essence of beef (Lion brand), with a mixture containing ten minims of solution of extract of ergot, ammonia, and bark every four hours. Nothing untoward happened until eight days later on, when the patient was seized with a rigor soon after my morning visit, the lochia ceasing and the temperature rising to 101°, with a pulse of 104. She now complained for the first time of severe pain in the right groin, and on examination I found a large tumour, hard, inelastic, and dull to percussion, filling the whole of the right iliac fossa. I enjoined absolute rest in bed, treated the tumour locally with poultices and a liniment of iodide of potassium, belladonna, and glycerine, and gave her ten grains of quinine imme-

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diately, with ammonia and bark every four hours. Next morning the temperature had fallen to 98·6°, but rose again at night to 101°, and in this manner continued hectic till October 23rd, the patient's strength during that period being supported by Richard's essence of beef, brandy and egg mixture, essence of malt, and beef-tea, besides taking ammonia and bark. Enemata of defibrinated blood were also used, from which great benefit was derived. The tumour up to this date had presented no perceptible alteration in size or hardness, but to my great surprise, on examining it, I found it diminished to less than half its original bulk, and this diminution continued without intermission—the patient's strength increasing in a proportionate degree—until at the end of three weeks (Nov. 14th) it was no longer palpable.

The points in this case which seem to me most worthy of interest are—the immediate action of the iron alum in arresting hæmorrhage, the sudden diminution in size of the phlegmon, and the great benefit obtained from enemata of defibrinated blood given daily during a fortnight when the anæmia was most marked.

Brynmawr, S. Wales.

RETRACTION OF THE PENIS.

By THOS. F. RAVEN, L.R.C.P., &c.

I SHOULD have published the following singular case some two years ago had I not feared that the strange details would be received with incredulity, but since a similar but more strongly marked example of the same condition has recently been recorded by Dr. Ivanoff in a Russian medical journal, I do not hesitate to bring my own experience forward.

A. B——, a healthy, steady, single man, aged twenty-seven years, shortly after he had gone to bed one night, felt a sensation of cold in the region of the penis. He was agitated to find that the organ, a fairly developed one, was rapidly shrinking, and was, he thought, finally retiring. He at once gave the alarm, and I was hastily summoned from my bed to attend him. I found him highly nervous and alarmed. The penis had almost disappeared, the glans being just perceptible under the pubic arch. The skin of the penis alone was visible, and looking as it does when the organ is buried in a hydrocele, or, in an extreme degree, as it does after death by drowning. I reassured him, and gave him some ammonia, and found next day that the natural state of things had returned. But he remained weak and nervous for some days. He could give no explanation of the occurrence, and the unnatural condition has never returned. The circumstances of this case were not of so distressful a character as those related by Dr. Ivanoff. In his case the penis had bodily disappeared, and was recaptured only after prolonged manipulation. Even then the patient seems to have distrusted its tendency to remain in its natural position, for he had tied a string around it above the glans, in order that it should not again escape him. In this instance, too, the result was satisfactory, but the tendency to retraction was not finally subdued until the patient had been six days under treatment. He was a peasant, aged twenty-three, a married man with a family.

Broadstairs.

MEDICAL STUDENTS IN SWISS UNIVERSITIES.—The number of medical students in Switzerland appears to be increasing. During the present summer session the total is 675, including 81 women, who are admitted in Berne, Geneva, Zurich, and the preparatory school of Lausanne, but not in Basle. In Berne there are no less than 40 female students; some of the assistants' posts are filled by women. It is remarked that their exercises, or degree theses, are usually selected from theoretical subjects—such as anatomy, physiology, pathological anatomy, and pharmacology,—rather than from practical medicine and surgery. The increase in the number of students is due almost entirely to an accession from Switzerland itself, the number of foreigners (192) being much the same as in former years. Of the 81 female students, only 10 are of Swiss nationality.

AT an inquest held recently on the body of a lunatic who had committed suicide by leaping into a deep pond in the grounds of the County Down Asylum, Downpatrick, the jury very wisely recommended that a wall should be built round the pond.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

LONDON HOSPITAL.

TWO CASES OF OPERATION BY SÉDILLOT'S METHOD FOR REMOVAL OF EPITHELIOMA OF THE TONGUE; RECOVERY IN BOTH.

(Under the care of Mr. WALTER RIVINGTON.)

DURING the last few months we have given examples of the removal of malignant growths from the tongue by various methods, and in the following two cases will be found a description of the removal of such by what is known as Sédillot's operation. It is not necessary to add to the description of the operation, nor to say more as to the class of cases in which it is applicable, these being chiefly those in which the floor of the mouth is involved as well as the tongue. If non-union after division of the jaw in the middle line were a frequent occurrence, it would be a serious bar to the performance of this operation; but this is not common, and probably the union is only delayed in these cases.

CASE 1.—Jas. W. P——, aged sixty, printer, was admitted on Dec. 7th, 1885. He noticed a small lump in his tongue early in October. At first he did not pay any attention to it, but finding that it did not disperse, he consulted a doctor, who advised him to come to the hospital. For some months before observing the lump he suffered from pain referred to the temporal region. The only history of cancer in the family consisted in the fact that an aunt of his had cancer of the breast at sixty years of age; she was operated on and lived to seventy without return of the disease. The patient had smoked continuously for twenty years, using a clay pipe, most frequently on the left side, occasionally on the right or in the centre of the mouth. On inspection, a hard irregular ulcer was seen on the left side of the tongue extending into the floor of the mouth. The surrounding hardness extended beneath the mucous membrane as far as the middle line of the tongue, invaded the floor of the mouth, and reached outwards to the inferior maxilla. There were some old decayed teeth opposite the ulcerated portion of the growth, and the part was tender and bled readily on being touched. No enlarged glands could be detected. There was no history of syphilis or addiction to alcohol. Owing to the invasion of the floor of the mouth and the close proximity of the growth to the jaw, it was decided to perform Sédillot's operation by division of the inferior maxilla. The operation was performed on Dec. 16th. An incision was made in the middle line from the border of the lower lip to the hyoid bone, the jaw cleared slightly, drilled with two sets of holes, sawn through vertically, and the halves drawn asunder. The genio-hyoglossi and the mucous membrane were divided, and the left sublingual gland removed. After clearing the tongue as far as the base, a wire-rope écraseur was applied close to the epiglottis, the division of the tongue occupying twenty minutes. A ligature was put through the stump that was left, the jaw wired, and the soft parts stitched. A drainage-tube was inserted and brought out below the jaw. Two or three small arteries were tied, but there was no bleeding from either lingual or coronaries. Not more than half an ounce of blood was lost during the whole operation or afterwards. Subsequently the mouth was thickly powdered with iodoform, and the patient fed by nutrient enemata and suppositories. The mouth was carefully sponged out with an antiseptic solution every half-hour through the day. The wound in the soft parts healed by first intention. The jaw did not show any signs of union for some time, and the wires were allowed to remain. Before he left the hospital the union was rather firmer, but the halves were readily movable. The temperature rose to 100° for three days after the operation, but afterwards continued normal. He was discharged and went into the country on March 15th, 1886, quite well, the union still

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being fibrous and the isthmus faucium contracted. He was seen early in June; the jaw was then quite firm. A lump had appeared on the left side of the neck underneath the sterno-mastoid. The mouth was free from recurrence of the growth.

CASE 2.—Henry H——, aged sixty-one, cab-driver, was admitted on Feb. 23rd, 1886. The patient's family is healthy and strong. He himself had syphilis forty-five years back, and a year ago some kind of skin disease; otherwise he had always been strong and healthy. Four months ago he noticed that his tongue was sore and painful on the left side; his teeth were very "scraggy" on that side. He was a constant smoker, but always held the pipe in the middle of his mouth. He gave up smoking, but the ulceration spread and became so painful that he could neither eat nor drink with comfort. He had been losing weight all the time. On admission the whole of the left side of the tongue from tip to root was ulcerated, the base of the ulcer being indurated, the edges nodular and everted, and the surface covered with a yellow coating. There was an enlarged submaxillary gland on the left side of the neck. As the growth extended deeply beneath the tongue and beyond its limits, Sédillot's operation was selected, and performed on March 3rd, precisely in the same way as in the previous case. After the removal of the tongue with the écraseur, a portion of growth was found reaching back on the left side beyond the point of section, and as far as the anterior pillar of the fauces. This had to be dissected out. Paquelin's cautery was used, but the lingual artery was not sealed, bled freely, and was secured by a ligature. There was more hæmorrhage than in the previous case, and the operation lasted much longer, as he took the anæsthetic badly. The floor of the mouth was powdered with iodoform, and the external wound dressed with iodoform and wood-wool pads. After the operation the patient was fed with nutrient enemata for a few days; the mouth was washed out every half-hour with Condy's fluid, and kept powdered with iodoform. On the third and following days he was fed by the œsophageal tube, a quart of a mixture of beef-tea and milk being injected into the stomach night and morning. All stitches were removed. Several attempts were made to get the patient to swallow his food, but it was impossible, as it collected in the great pit in the floor of the mouth, and ran out of the drainage-tube. Accordingly the tube was removed, and the sinus touched with nitrate of silver on March 16th. He had fits of great restlessness, getting out of bed and throwing the chairs about. He repeatedly asked for his clothes, and made up his bundle to go home. He was very dirty in his habits. Nevertheless he made a good recovery, and in a few weeks was discharged well. The union between the halves of the jaw was only fibrous when he left the hospital, as in the previous case. He has not been seen since that time.

WEST LONDON HOSPITAL.

CASE OF ENTERIC FEVER, FATAL ON ABOUT THE SEVENTIETH DAY FROM PERFORATION; SYMPTOMS OF PERITONITIS EXISTING FIFTY DAYS; NECROPSY; REMARKS.

(Under the care of Dr. DONALD W. CHARLES HOOD.)

WE are indebted for the following notes to Dr. Harper and Mr. Taylor.

A. R——, general servant, applied at the out-patient room of Dr. Ball on the afternoon of April 27th, 1886. The patient complained of pain over the region of the abdomen. Dr. Ball, finding much swelling of the abdomen and severe constitutional disturbance, ordered her admission. He diagnosed enteric fever with probable perforation.

On admission the patient was noted as being a fair, delicate-looking girl, aged nineteen. Her history, as far as it could be ascertained, was as follows: She had been feeling very poorly for about three weeks, though able to do her work. She had lost her appetite, and had had attacks of vomiting and griping abdominal pains. Within the last day or so these pains had much increased, and she noticed that her abdomen was swollen; and in consequence she sought advice at the hospital. No exact report with regard to the state of the bowels could be obtained; for at one time the patient stated that they had been confined, and at another that she had suffered from diarrhœa. The girl was too ill to give a satisfactory history, and none could be given by her friends. The abdomen was much distended; it was dull in the lower flanks, and a slight thrill could be felt on making gentle percussion; the distension obliterated both iliac and hypochondriac depressions. The pulse was 96, temperature 101·4°, and respiration 24. The patient was very deaf and listless. She lay on her back with her legs drawn up. She did not appear to suffer from pain, and passed most of her time in sleep, taking her nourishment without difficulty. The tongue was much coated and dry.

The following day the symptoms were increased in severity, the abdomen being more distended and tympanitic, and the presence of fluid being easily demonstrated. The pulse was 106 and the temperature 103°. The bowels acted naturally. For the next few days there was but little change, but on May 8th, being eleven days after admission, there was a decided remission in the severity of the attack; the abdomen became less tense and swollen, the thrill was completely lost, and the temperature and pulse both fell; the patient was bright and cheerful in manner, lost her deafness, asked for books, took interest in her surroundings, lay comfortably on her side, and appeared to be better in every way. The remission in the intensity of the symptoms continued for about eight days, but during this time the irregularity in her temperature gave cause for much anxiety; on May 13th it was noted as being 99°, but it rose again the following day and presented an irregular zigzag course until death. From May 13th till June 8th the symptoms presented no striking variation; the patient appeared fairly comfortable, and persisted in saying she felt much better. The bowels acted naturally; there was little or no abdominal pain; the distension was much less, though still evident. On the evening of June 7th (forty days after admission) the temperature suddenly rose to 104·8°, the patient had an attack of vomiting, and on the following morning complained of severe pain over the lower part of the abdomen. Swelling and tympanites quickly followed. The vomiting was the most distressing symptom. The temperature gradually fell until the morning of the 11th, when it reached 99°; it rose again on that evening to 103°, and did not again fall below 100°. The patient remained in this state for the following six days, sinking from exhaustion on June 13th, the forty-seventh day after her admission, and, as far as could be judged, about the seventieth of her fever.

At the post-mortem examination made by Mr. Percy Dunn, the abdominal cavity was found full of purulent fluid containing fæcal matter, the fetor of which was extreme. There was general thickening of the peritoneum, and adhesion of neighbouring organs. Scattered over the intestines were recent, as well as old, signs of peritonitis. A large circumscribed collection of pus was found lying between the liver and the diaphragm. On examining the lower portion of the ileum, three of Peyer's patches showed unmistakable signs of old typhous process, the patches being indurated and thickened, and one of them was distinctly cicatrised. Close to the ileo-cæcal valve was an irregularly shaped shaggy perforation, the perforated portion abutting on to a Peyer's patch which had still an ulcerating surface. For three or four inches at the lower part of the ileum the bowel was found closely adherent to a corresponding loop of small intestine. Their adjacent coats were firmly adherent, and so closely agglutinated together as to present the appearance of a double cylinder without any apparent intercommunication.

Remarks by Dr. HOOD.—The condition of the patient on admission was such as to warrant the diagnosis of enteric fever with perforation. As week after week passed by, I felt some diffidence in adhering to this diagnosis, and I felt more disposed to look upon the case as one of some local trouble complicating the peritoneal cavity. The post-mortem cleared up the matter, and demonstrated conclusively that the first attack of abdominal pain and peritonitis had been caused by perforation of a typhoid ulcer, and I conclude it was at this period of the illness that the inflammatory action had been started which eventually led to adhesion between the two adjacent layers of ileum. The inflammatory mischief slowly smouldered on day after day, until a second perforation set up fatal peritonitis.

SALFORD ROYAL HOSPITAL.

CASE OF UNUSUALLY LARGE CALCULUS REMOVED FROM A GIRL PER URETHRAM.

(Under the care of Mr. ANDREW BOUTFLOWER.)

H. H—— aged twenty-one, was admitted on Jan. 11th, 1886. She complained of total incontinence of urine, accompanied with great pain. On examination, a very large calculus was felt through the vaginal wall of the

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bladder. At the age of ten she suffered from morbus coxæ; abscesses formed in the groin and gluteal region, with extensive sinuses, frequently discharging small pieces of bone, which had for a long while been completely healed. Since that time she had been perfectly well, with the exception that twelve months ago she menstruated irregularly, and had to get up frequently at night to urinate, which was always accompanied with difficulty and a bearing-down pain. This condition gradually became worse; the urine became white and thick, and had to be passed every hour; latterly complete incontinence had supervened.

When admitted she was much emaciated; the urine was alkaline, with heavy phosphatic deposit. An operation was performed on Jan. 16th. After rapid dilatation of the urethra with the fingers, the intention was to introduce a lithotrite and crush, but this was found difficult to accomplish. The bladder was tightly contracted round the stone, and injection of the bladder was useless. Owing to this contracted condition it was found impossible to grasp the stone with a lithotrite without including mucous membrane. A pair of lithotomy forceps was therefore introduced, and with gentle traction, but not without considerable difficulty, the stone was extracted, the procedure causing some laceration of the urethra. The stone weighs 2½ oz.; it measures 2⅜ in. in length by 1¾ in. in width, and is nearly 4 in. in circumference.

For the first ten days after the operation the patient progressed most favourably; after this some septicæmic symptoms developed, but these have passed away, and she is now quite well. Some degree of incontinence still exists, but it is hoped that this discomfort may gradually subside.

Remarks by Mr. BOUTFLOWER.—It is always easy to be wise after the event, but I have no hesitation in saying that if such an unusual case ever came under my care again, I should certainly remove the calculus either by the supra-pubic or vaginal lithotomy.[1]

Medical Societies.

ACADEMY OF MEDICINE IN IRELAND.

Pyo-pneumothorax.—Displacement of the Heart.—Acute Pericarditis.—Horse-shoe Kidney.

A MEETING of the Pathological Section was held on May 14th.

Dr. WALLACE BEATTY exhibited the lungs from a case of Left Pyo-pneumothorax secondary to Phthisis. The patient, a young man aged twenty, had been in the Adelaide Hospital last July for a few days with symptoms of pulmonary phthisis and stethoscopic evidence of that disease in the upper lobes of both lungs. On Oct. 24th he was seized, when coughing, with a severe pain below the left clavicle, causing a sensation as though his left lung was breaking in two. He was admitted into hospital on Oct. 27th. On admission, the characteristic signs of left pneumothorax were present, and after a few weeks fluid was effused into the lower part of the pleural cavity, as was evidenced by percussion dulness at the left base and succussion splash. There were physical signs of excavation in the upper lobe of the right lung. The patient lived six months after the occurrence of the pneumothorax. On post-mortem examination, the left half of the diaphragm was found depressed, convex downwards, and extending an inch and a half below the lower border of, the left costal arch. It had doubled the left lobe of the liver upon itself. The right half of the diaphragm was in its normal position. Gas escaped from the left pleural cavity on its being opened; that cavity contained about five pints of odourless pus. The pleura was much thickened. The left lung was carnified, very small, and pressed up against its root, except at the upper part anteriorly, where adhesions bound it to the chest wall. At the inner surface in its upper part a circular opening or ulcer was found, in diameter about the size of a sixpence, shallow in its posterior half, where there was a minute pin-hole perforation; in its anterior half it was about a quarter of an inch deep, and subdivided by bands of lung tissue. The upper lobe of the right lung presented numerous cavities, the lung tissue between the cavities being consolidated. The only healthy surface the patient had was that of the lower lobe of the right lung.—Dr. FINNY said he saw the patient twice through the kindness of the authorities of the Adelaide Hospital. The first time was early in December, and the physical signs of pyo-pneumothorax were then very well marked on the left side, but he did not remember seeing any marked signs of the disease on the right side.—Dr. HENRY KENNEDY said that in the majority of cases this disease occurred on the left side, and such had been his experience. Except in two cases, he had never failed at a post-mortem to find out where the opening was. It generally occurred at the base of the upper lobe, immediately under where the attachment of the lobe ceased and false adhesions began. They knew that adhesions took place in this disease long before the occurrence of the event which caused the pneumothorax; and, according to his experience, it was immediately below where these adhesions ceased, and at the base of the upper lobe, that the opening might be found. As to the duration of the disease, in the present case, it was unquestionably unusual that it should have lasted so long.—Dr. BEATTY, in reply, said perhaps he had been wrong in not tapping the left side of the chest; but when the patient first came to the hospital there was no fluid in the pleural cavity. Afterwards a small quantity of fluid was effused; and as there was marked evidence of the upper part of the right lung being diseased, he thought that, both lungs being diseased, tapping would hardly prolong the patient's life.

Dr. C. J. NIXON communicated a case of Displacement of the Heart in Aortic Patency, and exhibited the specimen. It was the heart of a man of about sixty years of age, who was admitted into the Mater Misericordiæ Hospital with the physical signs of aortic patency. On examining his chest with the stethoscope, an extremely well-marked hissing murmur, diastolic—or rather post-diastolic—in time, and having its maximal point of intensity at a line connecting the two fifth costal cartilages—in other words, a little above the base of the ensiform cartilage on the left side—was heard. That murmur was not audible at the apex of the heart. Travelling upwards towards the aortic area the murmur ceased, and over that area, and above the systolic murmur, was heard a well-pronounced aortic sound. In the carotid arteries a loud, hoarse, systolic murmur, which was followed by a distinctly marked aortic second sound, was noted. He pointed out to Dr. MacSwiney the peculiarity in the physical signs, which was that they had a very well-marked murmur of aortic regurgitation, having its maximal intensity at the base of the ensiform cartilage at the left side; and yet over the area proper there was a distinctly marked aortic second sound, and the aortic second sound was heard in the carotid arteries. He pointed out that it rarely happened that the aortic murmur of regurgitation was not a substitution sound—that it was only in exceptional cases that the murmur of regurgitation and the aortic second sound were both heard well marked. The difficulty in such cases was to determine whether the sound was an aortic or a pulmonic sound. The aortic second sound was most clearly pronounced in the carotid arteries. With regard to the explanations which were given of the contemporaneous occurrence of this sound and of the murmur of regurgitation, one was the theory of Dr. Hayden, that in cases of commencing aortic incompetency, the aortic segments might be sufficiently sound to produce by their tension a clearly defined second sound, which yet might be represented by a murmur following that second sound. The murmur in the present case was clearly post-diastolic, and seemed to correspond with what was heard in the cases of aortic patency described by Gairdner, where the sternum acted as a sounding-board, and conveyed the murmur of aortic regurgitation downwards, so that it was best heard over the base of the ensiform cartilage. At the apex of the heart the first sound was feebly pronounced, and the aortic diastolic murmur was heard indistinctly. The impulse beat of the heart was about an inch to the left side of the nipple, in the fifth intercostal space. The apex beat of the heart, in place of being displaced downwards, was slightly upwards, but considerably to the left of the nipple-line. There was in the epigastrium a par-epigastric impulse of very marked intensity. The course of the case was rather rapid, and the man, on making some slight exertion in bed, fell back and died. The heart was found to be greatly enlarged. The walls of the left ventricle were considerably hypertrophied, and its cavity dilated. The

[1] These notes were read, and the calculus shown, before the Manchester Medical Society on March 3rd, 1886.

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hypertrophy of the musculi papillares was more or less in correspondence with the hypertrophy of the walls of the ventricle itself. The aortic valve segments did not appear to be very much altered by disease. They were smooth on the surface and fairly competent, but there was at certain points enormous thickening of the valvular attachments, and the thickening was almost cartilaginous in density. On applying the usual water-test, the valves were found to be incompetent, but not to any marked extent. The right ventricle and the right side of the heart generally were considerably dilated, and the walls of the left ventricle were hypertrophied. The first point in connexion with the case was that the pathological appearances explained the physical signs. The aortic valve flaps were in themselves texurally sound enough to produce by their tension a clear and well-defined aortic second sound. That was the condition that existed in the case. The thickening of the attachments of the valve flaps to the aortic zone produced a certain amount of contraction of the orifice, giving rise to the systolic murmur; and the slight amount of incompetency of the valves led to the murmur of regurgitation. The next point of interest was the position of the apex beat of the heart. Many years ago he heard Sir Dominic Corrigan lecture on the alteration in the position of the heart which occurred in the disease with which his name was associated—namely, aortic patency. He held that there were two displacements occurring in the disease. One took place in its earlier stages, resulting from the constant regurgitation of blood from the aorta to the ventricle, and the subsequent changes that ensued upon the incapacity of the ventricle, and was a displacement of the heart downwards. Afterwards, according to Corrigan, the displacement of the heart downwards was arrested by the diaphragm, and the heart underwent a rotation by which its apex was twisted upwards towards the left side. He did not think this explanation true. In the first stages of the disease they had the usual displacement of the apex beat which followed the hypertrophied and dilated left ventricle—that was, a displacement of the apex of the heart downwards and slightly to the left side. But after that an enormous distension of the ventricle took place, and then they had certain influences produced by that condition of the ventricle on the circulation through the left auricle and through the right side of the heart. The final result would be a great distension of the right side of the heart—first a dilatation of the auricle and then a dilatation and subsequent hypertrophy of the left ventricle. They should bear in mind the exact position of the left auricle in relation to the right lung—that the right auricle rested on the middle lobe of the right lung; and, according to Hilton, they might regard the middle lobe of the right lung as a sort of anatomical wedge, which afforded a very complete support to a portion of the heart which was very distensible—namely, the right auricle. The changes that occurred in aortic patency caused very great distension of the right auricle; and if that right auricle rested against a portion of the lung not likely to expand before it or make way for it, the result was that with the increasing distension of the heart the right side of the heart would generally tend to assume a more horizontal position, and its apex would be displaced to the left side. This, he thought, was a better explanation of what occurred than that given by Sir D. Corrigan. Another important point in connexion with that view was that in those cases in which they had great distension of the right side of the heart they would also have a great amount of turgescence and distension of the liver. The liver would then become like an erectile organ, and its pressure upwards against the diaphragm would more or less impede any downward pressure upon it; so that a lateral movement of the heart towards the left would be favoured.—Dr. FINNY asked how Dr. Nixon explained the very sudden death of the patient where the regurgitation was of such a very slight character, according to his own showing. The valves were evidently of sufficient tone to produce a good second sound. Sudden death in cases of aortic patency was a rare phenomenon. What proof was there in this case that the right side of the heart was at all affected, the mitral valve being competent? He could not see how Dr. Nixon's hypothesis explained the displacement. —The PRESIDENT said he was disposed to think that Dr. Nixon did not give quite its full value to the fixity of the diaphragm in his explanation of the phenomenon of the changing direction of the heart that he sought to illustrate. That change in direction in advanced cases of aortic disease had been long recognised, and he thought that, even on Dr. Nixon's own interpretation of the descent of the right side of the heart, in virtue of the enlargement of the right side—which he could quite understand independently of obstruction of the mitral valve,—it was necessary that the fixity of the diaphragm should be introduced as a factor in explaining that the whole heart did not go down with the right side in these cases, as they knew it did in other cases. Certain points would lead them to believe that Sir Dominic Corrigan was right in attaching a great deal of importance in cases of this kind, as well as of pericardial effusion, to the fixity of the diaphragm. Modern anatomical writers had described certain ligamentous structures as tending to attach the diaphragm upwards towards the upper outlet of the thorax in a much more recognised manner than had been in former times observed; and the observations of Virchow on the fixity of the diaphragm as one of the chief elements regulating the position of the abdominal and other viscera led him (the President) to attach more importance to it than Dr. Nixon seemed to have allowed.—Dr. NIXON, in reply, said the explanation of the patient's sudden death was to be found altogether in the condition of the myocardium, which he had not time to examine, but he took it for granted that it was in a state of fatty change. He found the left ventricle full of currant-jelly matter; and as regarded the sudden death, the case seemed one of paralysis of the heart in diastole. As to the explanation of aortic patency as following changes on the right side, Dr. Finny knew as well as he did that there were cases of aortic patency in which there was not displacement of the apex of the heart upwards to the left side. There were displacements of the apex which were found in dilatation and hypertrophy of the left ventricle, and which were distinctly downwards and to the left side; but when they found that the displacement to the left side was carried upwards and in a horizontal direction, they must admit the existence of another facter in producing that change. The only factor that he knew would be the subsequent changes in the right side of the heart following the changes in the left. It was not necessary, in cases of aortic patency, in explaining a dilated condition of the right side of the heart to assume mitral inadequacy. If, in a case of aortic patency, the left ventricle was filled from two sources in place of one, obviously there was from that circumstance an impediment to the free and thorough emptying of the left auricle, which must subsequently lead to the distension of that chamber and to the subsequent implication of the chambers on the right side of the heart. And they were not, in such a case, to look for any changes in the curtains of the mitral valve to explain mitral regurgitation.

Dr. FINNY exhibited a specimen, two days old, of Acute Pericarditis. It was taken from a man fifty-two years of age, addicted to alcoholism, which had caused him to lose a great many good positions. He came into hospital almost in a state of collapse, and was pulseless, cyanotic without œdema of the legs. Neither of his heart sounds could be felt, and scarcely heard; and it was only with great difficulty, and after free stimulation, that his pulse could be detected at the wrists. In this condition he remained for some days, and then died. The physical signs were dulness over the præcordial region, resembling closely, but not accurately, that in præcordial distension; while the absence of sounds of the heart outside the præcordial region, and absence of any præcordial impulse anywhere, made the case one of no little difficulty to interpret. The specimen was an example of well-marked acute pericarditis, in which adhesions were forming from one surface to the other.

Dr. NIXON exhibited a Kidney from the patient on whose remains he had made the post-mortem in the case of aortic patency. He found great difficulty in removing it, and then discovered it to be a beautiful example of a horseshoe kidney. The lower ends of the two kidneys were connected by a band of renal substance passing between the vertebræ and the abdominal artery, and by means of which the two kidneys were rendered perfectly continuous. The ureters passed down in front of the band, which was exceptional, their usual course, according to Bartels, being behind the transverse band.

SIR GEORGE H. PORTER, surgeon-in-ordinary to the Queen in Ireland, has been appointed a governor of the Richmond District Lunatic Asylum; and Mr. Mapother, surgeon-in-ordinary to his Excellency, a governor of the House of Industry Hospitals, Dublin.

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Reviews and Notices of Books.

The International Encyclopædia of Surgery. A Systematic Treatise on the Theory and Practice of Surgery by Authors of various Nations. Edited by JOHN ASHHURST, jun., M.D., Professor of Clinical Surgery in the University of Pennsylvania. Illustrated with chromo-lithographs and woodcuts. In Six Volumes. Vol. VI. London: Macmillan and Co.

WE are glad to congratulate Dr. John Ashhurst on the completion of the sixth and last volume of the International Encyclopædia of Surgery, a work that represents in a very satisfactory manner the existing condition of that branch of medical science. There are both advantages and disadvantages in the production of a composite work of this kind; in some respects it contrasts unfavourably and in others favourably with a treatise written by a single hand. In the latter case the author, always supposing him to be well fitted for his work, writes with a breadth of view resulting from his wide knowledge, that enables him to seize upon the more salient points and bring them into strong relief; he can preserve the perspective of the subject more perfectly, avoid useless repetitions, and weld all into a harmonious whole. On the other hand, the advance of surgery has been of late years so rapid and great, that it has become almost impossible for any single practitioner to acquire such familiarity in every branch as to constitute him an authority on all, and in many he must necessarily be entirely dependent on the information contained in books, and find it difficult or impossible to distinguish the trustworthy points in the history or treatment of disease or injury from the specious and false. This difficulty is entirely overcome when each affection is placed in the hands of a writer who has given special attention to the subject. We may then expect that each article shall not only supply a thoroughly satisfactory account of the subject with which it deals, but that it shall be enriched with the author's experience, and that it shall contain much of that floating knowledge which has not yet found its way into books, but forms so important a part of the instruction that is given and received by the masters in a craft.

The Encyclopædia before us, the successive instalments of which we have noticed as they appeared, forms six large—perhaps a trifle too large—and heavy volumes, averaging 950 pages each; and Dr. Ashhurst has secured an excellent staff of contributors, seventy-one in number, forty-six of whom are American, thirteen English, and the rest French or German. It is a little more than four years only since the first volume was issued, and the rapidity of publication has therefore been very creditable to Dr. Ashhurst's energy. This period, short as it is, has been sufficient to include the deaths of six American contributors and one English—namely, Professors Gross, Van Buren, Otis, Bell, Lidell, Hodgen, Hodge, Hunter, Post, Sims, and quite recently Royes Bell. The present volume concludes the consideration of the injuries and diseases of the various regions of the body, and supplies certain articles which were necessarily omitted from previous volumes owing to the inability of their authors to complete them in time for insertion in their appropriate places. The chief of these are: Injuries and Diseases of the Œsophagus, by Professor Solis-Cohen of Philadelphia; Intestinal Obstruction, by the Editor; Injuries and Diseases of the Rectum, by Mr. Allingham; Urinary Calculus, by Professor Keyes; Crushing Operation for Stone, by Professor Hingston; Surgery of the Bladder and Prostate, by Mr. Reginald Harrison; Surgery of Male Urethra, by Professor Duplay of Paris; Surgery of Male Generative Organs, by Mr. Royes Bell; Injuries and Diseases of the Female Organs of Generation, by Professor Parvin; Cæsarean Section and Allied Operations, by Dr. R. P. Harris; Ovarian and Uterine Tumours, by Dr. Charles Lee. Ollier, Vincent, and Poucet of Lyons contribute three articles on Diseases of the Bones; and one on the Treatment of Deformities is written by Mr. F. R. Fisher. An excellent memoir is appended by Dr. Cowles on the Construction and Organisation of Hospitals. Clements gives a good account of the preparations to be made by surgeons in time of war in entering upon field duty, with a description of the modern system of ambulance service; and Dr. George Fisher gives a history of surgery. The work closes with a good general index. It is impossible to notice all the articles contained in this volume, especially as many of them are of great length; but we may select one which seems to us exceptionally good—namely, that on Urinary Calculus, by E. L. Keyes, the Professor of Genito-Urinary Surgery in the Bellevue Hospital Medical College of New York.

Dr. Keyes begins with a historical introduction, in which he points out that the first appearance of calculous disease cannot be determined, but an authentic record of stone exists in a medical treatise named "Suçruta," a Hindoo work, believed by some to antedate the Hippocratic collection. In this work, which was published in Sanscrit at Calcutta in 1835, a very fair description of cutting for stone "upon the gripe" is given—the method now commonly known as the method of Celsus. The Chinese are believed to have been acquainted with stone long before the modern era. Dr. Keyes defines a stone to be a body presenting a laminated structure under the microscope, while separate crystals or agglomerations of crystals he terms gravel. In the formation of most calculi he believes inflammation of the mucous membrane of the urinary tract to be an etiological factor. He brings evidence to show that the view of Cadge and Reginald Harrison, that hardness of drinking-water is a cause of calculi, is incorrect. Uric acid calculus is, curiously, uncommon in Finland, the University Hospital case-books showing only one Finlander with uric acid stone during a period of forty-four years. He supplies much interesting information not elsewhere accessible in regard to the occurrence of stone in other nations. The causes of stone formation are then discussed, and much weight is laid upon Dr. Ord's observations on the importance of the colloids. The influence of sex, race, climate, social condition, constitution, and heredity are considered. Dr. Keyes proposes the following classification: (1) Primary stone, the urinary mucous tract being healthy when the stone forms, which includes uric acid and the urates, oxalate of lime, cystine, xanthine, carbonate, and crystalline phosphate of lime and indigo; and (2) secondary or symptomatic stone, the mucous membrane being in a catarrhal state, including urate of ammonia, triple phosphate, amorphous phosphate of lime, fusible calculus, and urostealith. The structure of stones, their rate of growth and general characters, are then described. Several examples of the large number that may occur are recorded, one of the most remarkable being that of Chief Justice Marshall, of the Supreme Court of the United States, from whose bladder Dr. Physic extracted over a thousand stones. The spontaneous fracture of calculi is discussed, and Dr. Ord's conclusions given. A section is devoted to the consideration of the several materials of which calculi are formed, and a short but good section to the chemical analysis of stone. The pathological results of stone in the kidney, bladder, and urethra are next considered; and then follow sections on the symptoms of stone in the bladder, its diagnosis, and the several methods of treatment, including the preventive, the electrolytic, the solvent, the palliative, and finally the radical, which includes lithotomy, lithotrity, and litholapaxy. The statistics of these various operations are extraordinarily well given, and are very suggestive. The author strongly advocates litholapaxy, and also insists

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on the preparation of the patient for the operation. The varied forms of lithotrite instruments are figured, including those of Thompson, Bigelow, Otis, and Guyon. The whole article is written in excellent style, and is very instructive to even the most experienced surgeon. There is a short additional paper by Hingston on Lithotrity.

We must not conclude without again congratulating Dr. Ashhurst on the completion of his Encyclopædia. The editing of such a work is, as we are well aware, a most laborious undertaking, but we think that he has every reason to be satisfied with the manner in which his collaborateurs have done their work. Many of the articles will become standard treatises on the subjects of which they treat, and all show care and judgment in their preparation. The work should be in the hands of every surgeon.

Surgical Operation Chart. By L. HEPENSTAL ORMSBY, M.D., F.R.C.S., Surgeon to the Meath Hospital and County Dublin Infirmary, &c. London: Baillière, Tindall, and Cox. Dublin: Fannin and Co.

THIS chart, which measures about three feet by two, has been arranged and tabulated by the author in six sections. It shows at a glance the instruments, appliances, and dressings required for the performance of all the major and minor operations of surgery. Section I. contains an account of the preliminary arrangements to be made and requisites to be provided in the operating room or theatre. Section II. supplies directions for the sick room or ward after operations. Sections III., IV., and V. comprise lists of instruments and appliances required for operations about the head and neck, the trunk, and the extremities respectively; whilst Section VI. pertains to "varied and special operations." As stated by Dr. Ormsby, the chart is "designed for the use of house-surgeons, junior practitioners, and surgical dressers." It would undoubtedly be an acquisition to the operating theatre of every hospital, as it would serve to prevent those delays which so frequently occur, and which are so annoying to the surgeon during the performance of operations—delays consequent on the oversight of officials whose duty it is "to have everything ready." It is a valuable aid as a reminder to surgeons preparing for operations in private. We unhesitatingly commend it to the profession.

ARMY MEDICAL SCHOOL AT NETLEY.

THE summer session of the Army Medical School was brought to a close at the Royal Victoria Hospital, Netley, on Friday, July 30th. The duty of handing the awards to the successful surgeons on probation had been undertaken by Sir William Mac Cormac, F.R.C.S., chief surgeon of St. Thomas's Hospital, London, who was one of the Royal Commissioners under Lord Morley who inquired into the organisation of the Army Medical Service and the provisions made for the treatment of the sick and wounded during the expedition in Egypt of 1882. Sir William was accompanied on his visit by Sir Thomas Crawford, K.C.B., Director-General of the Army Medical Department; Sir Joseph Fayrer, K.C.S.I., Physician to the Council of India; Surgeon-General W. S. Murray, Principal Medical Officer at Netley; Surgeon-General W. C. Maclean, C.B.; Professors Wm. Aitken, F.R.S., F. de Chaumont, F.R.S., and D. B. Smith, F.R.C.P.; Brigade Surgeons Blatherwick and Mackinnon, Surgeon-Major Welch, and the Medical Staff of the Hospital; Mr. James Cantlie, F.R.C.S., surgeon to Charing-cross Hospital, and a goodly gathering of ladies.

Professor AITKEN said it had been usual for his colleague, Professor Longmore, to discharge the function which now, in his absence, fell to his lot, of announcing the results of the work of the past session of the school and the names of the successful competitors for the prizes, but the Queen had commanded his presence at Osborne to-day in order that she might confer upon him the honour of knighthood (loud applause). While they regretted his absence from this ceremony, at which he had always heretofore been present, he would ask them to join their congratulations with his own and unite in the wish that Sir Thomas Longmore might have health and happiness for many years to come to enjoy with Lady Longmore the well-earned honour Her Majesty had been pleased to bestow (loud applause). Professor Aitken then presented the lists of surgeons on probation who were successful at both the London and Netley examinations, with the combined number of marks gained by each, the fifty-second session of the school being marked by a large number of successes—viz., 16 for the Indian Army Medical Service and 59 for the British Army Medical Service.

Sir WILLIAM MAC CORMAC, having handed the prizes to the recipients, addressed the school, remarking upon the great pleasure it was to come in contact with a number of young men just starting as they were on a career in life, well equipped for the race, and determined, he hoped, to achieve what distinction they could in the profession of their adoption. The list which had been presented showed there were amongst them many earnest workers, and in many instances the prizes had been won in a remarkable manner, the number of marks gained being very large in proportion to the total number obtainable—viz., 7800. Whilst heartily congratulating the winners of the prizes, he reminded them it was the effort they had made—and no doubt it had been a great one—which was the real prize, for that effort would no doubt increase as years went on, and lead to still greater distinction. Every branch of the army now, he conceived, was working harder than it used to do; it was no longer entered as a mere pastime or amusement, and should it be said for a moment that the Medical Department of the army was less seriously at work than other branches? Their position in the army was, he showed, a more responsible one, and vested with greater authority, and they had to proceed in the direction of guiding others; therefore it behoved them to exercise careful judgment, as well as diligence, in their profession. They had the advantage over the civil profession of an infinite number of subjects, and an acquaintance with the life-history of their patients; therefore their opportunities for gaining knowledge with experience were exceptional. He thought he might say, in regard to the army medical officer, that he should be a good all-round man, and try to learn every branch of his profession. He believed, too, he was justified in characterising it as a mistake for a young man to devote himself at an early period of his career to some specialty, for he was apt thereby to neglect the general knowledge he would otherwise attain. Indeed, in his opinion, one could not be a specialist in the true and proper sense of the term without having a thorough good general scientific knowledge of the various branches of their profession. They were a little too much overridden by specialism just now. The human body was divided into so many square inches, and certain gentlemen thought, and tried to make others think, they knew more about certain parts than anyone else. But he advised them, valuable as it was in certain cases for a medical man to devote himself to the special study of certain diseases, not to trouble themselves at first about them exclusively, but as they went on in life they would find themselves naturally taking more interest in some special branch of medicine or surgery, for he maintained that a good all-round man was one of the best of medical men, and that was the main idea they should put before them.

The DIRECTOR-GENERAL proposed an expression of thanks to Sir William Mac Cormac, whom he characterised as a brilliant ornament to the medical profession, and also a distinguished ambulance surgeon (applause). He congratulated the surgeons on probation on having gained their commissions, and said he trusted after rising high in their profession they would be able to go out of the service with those commissions as pure and stainless as they were on the day on which they entered it (applause).

The proceedings then terminated, and a luncheon was afterwards served in the adjacent officers' quarters.

MADAME PATTI has announced her intention of giving another evening concert at the Albert Hall, Swansea, on August 19th, for the joint benefit of the Swansea General Hospital and the poor throughout the neighbourhood of Craig-y-nos Castle, her Welsh seat.

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THE LANCET.

LONDON: SATURDAY, AUGUST 7, 1886.

THE year 1886 marks a new departure in regard to the Hospital Sunday Fund. The prolonged and intense depression of trade has resulted in much embarrassment to most charities, hospitals not excepted; and it does not admit of doubt that, but for special pains and efforts, the Hospital Sunday collection would have been seriously deficient. Happily, it is likely to be in the end five or six thousand pounds over the sum raised in 1885. Last year the total sum available for distribution was £33,444; this year the amount available for distribution is £38,800, and more will yet come in; the whole sum cannot well fall short of £40,000. We are not disposed to utter any undue eulogy over this achievement. Nobody is more alive than we are to its shortcomings. The sum mentioned includes £1000 from one individual. And it is inconceivable that one individual can do the fortieth part of the duty of the churches of all London on this most Christian Sunday of the whole calendar. The fact that not one other individual in five millions was induced by the proposal of Dr. WAKLEY, to give £1000 to support 154 institutions, any one of which would be worth such a subscription, is very curious. There are not a few millionaires in London, men who would not willingly let any Lazarus full of sores lie at their gate untended; but practically this is what it comes to. Sir SYDNEY WATERLOW has demonstrated it. Out of 6412 beds in London hospitals for the reception of Lazaruses, 1559 are unoccupied for want of funds. A third of all the beds in convalescent homes (758) are unoccupied for want of money. It is a proof that money is exceedingly scarce, or that it is difficult to get at, or that we have not yet succeeded in impressing the people who can give with the urgent needs and the great merits of the institutions for which a Sunday in the finest month of the year is well set apart. After making all due allowance for the hardness of the times, for the distraction of men's minds by an unprecedented political crisis, we have to say that the result is inadequate to the case. But let us not be misunderstood. We are getting on, in spite of all the above reflections, which we feel bound to make.

The money raised is thousands over the sum of last year. And the money raised is the least part of the work of the Hospital Sunday year 1886. We have had some noble exhibitions of personal service in the cause of hospitals. The Lord Mayor of the year has been most zealous in the work. His personal trouble has been immense. He has been unwearied in his attention to details, as well as eloquent in his advocacy of the great cause in public. The "Suggestions" which originated a few months ago with Dr. WAKLEY, and which in his absence from illness have been so ably carried out by Mr. BURDETT, involved a great amount of labour. Mr. BURDETT was the medium of communication of these Suggestions to the Council, of which he is a member. He with others, who will be mentioned further on, were appointed by the Council to carry out these suggestions. He assisted materially in the preparation and organisation of the six "hospitals week" meetings in the different districts, attending them all; and finally, as must be known by his name being upon the title-page of our reprints of the three Hospital Sunday Supplements, he materially aided us in their production, and, we may add, thereby largely promoted the success of this year's collection on behalf of the Fund. The series of public meetings were presided over or addressed by the busiest men in the State and in professional and commercial life. Lord SALISBURY and the Duke of CAMBRIDGE found time in the very thick of an election contest to attend one of the best hospital meetings on a Saturday night at the Stratford Town Hall. The ministers of every church and creed in London have exerted themselves to increase their individual collections. The services, too, of the energetic Secretary of the Fund, Mr. CUSTANCE, must not pass unmentioned, nor those of the Special Committee appointed to carry out the arrangements of the "Hospitals Week," which consisted of the following gentlemen:—The Right Hon. JOHN STAPLES, F.S.A., Lord Mayor, President; Sir SYDNEY WATERLOW, Bart.; Sir J. RISDON BENNETT, M.D., F.R.S.; Sir EDMUND HAY CURRIE; HENRY C. BURDETT, Esq.; THOMAS CHRISTIE, Esq., F.L.S.; J. G. GLOVER, Esq., M.D.; J. LAWRENCE HAMILTON, Esq.; the Right Rev. the Bishop of BEDFORD and EAST LONDON; the Rev. Canon FLEMING, B.D.; the Hon. REGINALD CAPEL; the Rev. HENRY ALLON, D.D.; the Rev. JOHN KENNEDY, D.D.; the Rev. WALTER MORISON, D.D.; the Rev. J. H. RIGG, D.D.; the Rev. ANDREW CROMBIE; the Rev. R. J. SIMPSON, M.A.; the Rev. Professor MARKS; and RICHARD. B. MARTIN, Esq. The general result is an increase of thousands in the collection. This is something, but it is far less in value than the information which has been spread and the interest which has been excited in the cause of hospitals. When the public know, as they now do, the want of money and the empty beds, good must inevitably result. When they know that the Council of the Hospital Sunday Fund goes minutely and even critically into the merits and the needs of each hospital and dispensary, and that the result is that only in the case of one institution was an award withheld for mismanagement, and that a dispensary, they will decide, we feel sure, to give more and to leave more to hospitals. One other consideration will confirm this determination—the enormous amount of unpaid and voluntary labour given by busy men to the administration of hospitals. So we leave the best Hospital Sunday year yet realised. All who have laboured in connexion with it will reflect with satisfaction on the money or the time they have given to it. We feel sure they have raised the whole argument for hospital support to a much higher level than before, and that the year 1886 will be remembered in the annals of hospitals.

INTERESTING as is the study of the lesions of the valves of the heart, their importance is as nothing compared with the muscular wall of that organ. Pathological anatomy and clinical medicine present great contrasts in this respect. In the post-mortem room a minute description of the state of the valves is generally forthcoming, whilst the state of the myocardium is usually dismissed in a few words. But

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the matter is altogether different at the bedside. The condition of the heart muscle represents in many respects the state of the patient himself. Hence the extreme importance of the cardiac tonics. The class of cardiac tonics is a very large and heterogeneous one. It includes all the varieties of alcohol, ammonia, and ether. But the chief therapeutical interest centres around digitalis and its congeners. The literature of the specific cardiac tonics alone would fill a small library, and yet there is by no means a general consensus of opinion as to the relative values of the different drugs in the treatment of the various valvular lesions.

Dr. JAMES BARR is performing a great service to the readers of the *Liverpool Medico-Chirurgical Journal* by drawing up a report on the cardiac tonics. Failure of compensation manifests itself in a great variety of ways, but the general meaning of this failure is the same in all cases, and therapeutically calls for certain remedies. There can be no question that the remedy of greatest value is rest in the recumbent posture, and this alone is sufficient to restore, at least for a time, the compensation. It should be tried alone in all cases, if we are to judge accurately of the value of the different cardiac tonics. If it do not succeed alone or in combination with supporting diet and stimulants properly regulated, resort must be had to specific medicines, and the one chosen will vary with the nature of the valvular lesion and with the kind of complication which the failure of compensation has brought about. Take the case of mitral regurgitation. In such a lesion, with failing power of the heart muscle, digitalis will answer best in the vast majority of cases, but not in all. Caffeine, on the other hand, often seems to act with more efficiency when dropsy is the chief sign of failure. And we are of opinion that in dropsical effusions the active principle of coffee would prove the better agent when these are the result of heart debility. Some individuals cannot imbibe digitalis without being injuriously affected, irrespective of its action on the myocardium. Many nervous symptoms appear which were not present before, and which almost certainly are to be ascribed to the deleterious effect of the drug. Further, the drug may depress the activity of the myocardium, or even render the irregularity of its action still more manifest, increasing rather than removing the serious symptoms. It is impossible to predict in which cases these untoward results will occur, and the commencement of the administration of the agent therefore calls for considerable attention on the part of the prescriber. The cases in which convallaria will prove useful when digitalis and caffeine have failed we have found to be few in number. Mitral stenosis pure and simple is a lesion which is peculiarly difficult to be relieved by any of the drugs in present use. Most frequently, in our experience (in uncomplicated cases), the dyspnœa is the severest symptom, and certainly due to the enormous engorgement of the pulmonary vessels. Nature is generally, however, equal to the occasion, and the free hæmoptysis should rather be encouraged, whilst the bed is strictly kept and copious catharsis induced.

Dr. Balfe extols the use of nitro-glycerine in mitral [illegible] on grounds the strict logic of which we do not [illegible] correctly points to the over-distended pulmonary circulation, and then to the tension of the not very full systemic arteries. Nitro-glycerine, which is to be preferred to the sodium nitrite and indefinite sweet spirits of nitre, is to be given because it dilates the arterioles, and thus tends to draw more blood to the arterial system; we are disposed to allow all this, but does the dilatation of the arteries diminish the tension in the pulmonary system of vessels? That nitro-glycerine is of value in mitral stenosis we know from experience.

Although we do not think that digitalis is contra-indicated in aortic regurgitation, there can be no doubt that it is a far less valuable agent in that condition than in mitral affections. A great deal of the uncertainty of the action of digitalis may be explained by reference to the state of the myocardium; when this structure is embarrassed in its functions by fatty degeneration of many of its fibres, or when fibroid degeneration, often spreading in from an adherent pericardium, hinders its action and nutrition, cardiac tonics act at a disadvantage, the real nature of which is only discovered at the necropsy, though during life it was supposed that the case was an illustration of idiosyncrasy. Irregularity of cardiac action, not being always a sign of cardiac failure, is apt to be met with under conditions which, not calling for the tonic effects of digitalis, give the case the aspect of a pure neurosis, and yet the same drug will often regulate the rhythm, or even remove positive intermittency.

THE mountain cure of phthisis has established itself as a genuine therapeutic advance. We are still without definite data regarding the classes of cases to which it is applicable, although a notable advance is being made in th s direction, and we have not yet fully determined the precise measure of its efficacy; but it is no longer doubtful that in a certain number of cases, be they large or small, its value is indisputable. Let us consider for a little on what its efficacy rests, and whether theoretical considerations are in harmony with practical experience.

Phthisis being the respiratory disease *par excellence*, the most fundamental condition of cure is a favourable state of the air which the patient breathes. Good air is not the sum and total of the therapy of phthisis, but without it all other measures are likely to prove ineffectual. The atmosphere at high altitudes possesses three marked characteristics—viz., purity, rarefaction, and cold. All modern observers are agreed that pure air is the most essential requisite in the treatment of the national scourge, and this belief does not depend on, although it is strengthened by, an acceptance of the views of KOCH regarding the important part played by the tubercle bacillus. Whether foul air acts as a nidus for the peculiar virus of the disease, or operates injuriously by promoting the putrefaction of discharges and intensifying the activity of ulcerative processes in the lung, or lastly by merely impairing appetite and hindering nutrition,—in view of any or all of these theories, its unquestionably pernicious influence is readily explicable. Pure air is not to be found near the great centres of human population, nor even in ordinary lowland country. To obtain it in perfection we must look to the ocean, the desert, or to high altitudes. In these three localities we are far removed from the ordinary sources of atmospheric contamination, and it is hardly

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necessary to seek to assign any precedence among them, as in each case the atmospheric purity is practically absolute.

The next and most essential characteristic of the air at high altitudes is its rarefaction, which is of course proportionate to the elevation. Speaking broadly, rarefaction is but slightly appreciable at any elevation under 2000 ft., but becomes marked at every rise of 1000 ft. above this level. The favourite Swiss sanatoria for phthisis, such as Davos, St. Moritz, Samaden, Pontresina, &c., are at elevations of 5000 ft. and upwards. In the Andes the sanatoria are at much higher altitudes, Bogota, Areguipa, &c., being from 9000 ft. to 10,000 ft. above sea-level. The first effect of rarefied air upon the lungs is to provoke deep and full respirations, thus promoting pulmonary expansion and affording a favourable condition for the absorption of morbid deposits. It is evident that such conditions might be expected to exercise a favourable influence upon phthisis. The fact that tubercle has by preference its seat in the apices, the least functionally active part of the lungs, is a hint to us that in the treatment of the disease we should seek to promote activity, and not quiescence, of the pulmonary organs. The great difficulty is, no doubt, with the hæmorrhagic cases. Rest is wisely enjoined where hæmorrhage exists or is threatened, but it seems no less certain that the deposit of tubercle is favoured by an invalid life of sedentary inactivity.

At Davos, phthisical patients who have suffered from hæmoptysis are, after a time, encouraged to engage in skating, tobogganing, and other active out-door amusements, and statistics show that mischief rarely results from so doing. The free circulation of blood throughout the entire system no doubt involves a vigorous flow through the vessels of the lung, but it should not be forgotten that it has the important advantage of preventing pulmonary stasis and congestion. It was long believed that rarefied air tended to promote hæmorrhage, and in confirmation of this view well-authenticated stories were related of the sufferings of mountaineers from epistaxis and melæna. It is not necessary to dispute the accuracy of such facts, but when they are brought forward in support of the view that hæmorrhagic phthisis is likely to be unfavourably influenced by resort to high altitudes, it is forgotten that the conditions of blood-pressure at the various orifices are different from those which prevail in the internal organs. The congestion at the surface of the body must be accompanied by a proportionate anæmia of the deep-seated parts, and among them of the lungs. Hence rarefaction of the air, so far from being injurious in cases of pulmonary hæmorrhage, affords a means for its arrest and relief.

Cold is the third important characteristic of the air at high altitudes. It was long believed that warmth *per se* had a favourable influence upon phthisis, but this theory is now quite abandoned. Tuberculosis is common in tropical regions, whereas it is extremely rare in polar latitudes. Warmth no doubt favourably influences the bronchial catarrh which is so general an accompaniment of phthisis, but it has no beneficial effect upon the tubercular deposit. Fortunately the air at high altitudes is not only very cold but very dry, and this combination of conditions tends to check unhealthy secretions, while at the same time it is promotive of appetite and physical activity. This last point is one of great magnitude. No climate can permanently benefit phthisis unless it tends to improve nutrition, and it is one of the chief claims of the high altitude resorts that most patients, with the exception of those who do not possess sufficient vital energy to react to the stimulus of the cold, acquire during their residence among the mountains a great augmentation of appetite and digestive power.

We content ourselves for the present with merely explaining the *rationale* of the high altitude treatment in favourable cases. That it often fails, and that many cases are unlikely to benefit by it, is undoubted. Further experience is necessary before we can take the full measure of its usefulness, or assign definite limits to its applicability.

THE subject of Public and International Hygiene is likely to occupy an important place in the discussions of the ninth International Medical Congress, or rather of its fourteenth section. We are glad to see that Mr. SIMON is anxious to attend the Congress and take Vice-Presidentship of the Section. Mr. SIMON, indeed, speaks in his letter responding to the invitation with some doubt as to his power to attend, but with a clear intimation of his desire to do so. Dr. B. W. RICHARDSON and Dr. THUDICHUM both reply in most cordial terms to similar invitations, and accept a similar office. To those who know the imperfect health which Mr. SIMON has lately enjoyed, the significance of his conditional acceptance is very great. The promoters of the Congress will take this as a sign of British goodwill towards their great and responsible undertaking. The important subject of International Quarantine is to be raised by the president of the section, JOSEPH JONES, M.D., of New Orleans. We could send to the discussion of such a subject no greater authority than Mr. JOHN SIMON. We are glad to be able to report a very general desire among leaders in London to be present at Washington in 1887. Whatever hesitation they felt some time ago in view of the divided state of feeling in America is now steadily giving place to a desire for the success of the Congress, and a wish to do anything they can to further it. We feel quite justified in saying that our best men in England and Scotland are preparing to go if they get any indication that their presence will be acceptable. Sir JAMES PAGET, Sir ANDREW CLARK, Sir SPENCER WELLS, Professor JOHN CHIENE, Professor FRASER, and we believe Sir WILLIAM TURNER, are all, according to our information likely to go.

It is not America alone that is interested in the success of the meeting at Washington, but the profession throughout the whole world, and we might add the world itself. When our profession meets internationally it is of good omen. We not only stimulate fraternity and scientific rivalry amongst ourselves, but every thought in advance and every medical discovery is a great boon for the human race and for all nations. We urge on members of our profession in the empire to strain a point to be at Washington on or before September, 1887, where, if report is to be trusted, a very hospitable reception awaits them.

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Annotations.

"Ne quid nimis."

CHOLERA IN SOUTHERN EUROPE.

AUTHENTIC news as to cholera from the south of Italy has almost come to an end during the past week, Manduria being the only place from which any definite returns have been received, and even these have been irregular, and they came to a sudden stop on July 31st. Between the 28th and the 31st there had, however, been 83 fresh attacks and 19 deaths there. In Brindisi we also learn that the disease is not yet entirely subjugated, but that the decrease in the epidemic there is so marked that bulletins as to it have been discontinued. Whilst, however, this decrease has been in progress in the south, there has been a further extension of cholera in the north-east of Italy. In the province of Treviso, the capital of the same name and the towns of Castelfranco and Montebelluna have become infected since the beginning of August, and up to the 3rd of the month there had been 4 deaths in Treviso, 7 in Castelfranco, and 13 in Montebelluna. In the adjoining province of Vicenza there have been 8 deaths at Citadella, and there was also a report of 48 cases at Arzignano. In Verona, the city of that name has, during the three days ending August 3rd, had 9 attacks and 1 death; and in Padua 17 cases are stated to have occurred. Immediately to the south in the province of Rovigo, Chioggo, situated on the southern shore of the lagoon of Venice, is reported to have had 22 attacks and 7 deaths, and at Cavazere, to the south of the lagoon, but in the marshy ground which characterises the mouths of the Po, 23 cases and 1 death occurred during the two days August 2nd and 3rd. Coming somewhat further south into the province of Ferrara, cholera still hangs about the southern mouths of the Po, 27 fresh cases and 8 deaths having occurred at Codigoro, and 9 cases and 4 deaths being reported from Lago Santo; whilst in Ferrara itself 4 cases and 3 deaths are stated to have taken place. In Ravenna, 79 cases and 36 deaths have occurred between July 29th and August 3rd, and during the same six days 75 cases and 38 deaths have taken place in Bologna. There are also reported 22 cases and 3 deaths respectively from Cucca and Pescantina. During the last two days of the week under consideration there has also been a resumption of the cholera bulletin from Venice itself, 4 more cases and 1 death having been reported from there. In all, news has been received during the week ending August 3rd of 535 fresh attacks and of 152 deaths from cholera in Italy; and this is admittedly not a complete record of the effects produced by the epidemic. The most striking events of the week are the still further diffusion of the disease in the north-east, where it is most severely felt at Ravenna, Bologna, and Castelfranco, and the sustained severity in Manduria to the extreme south. So far as the Austrian Empire is concerned, the only additional locality where cholera is specifically stated to have occurred is Socesga, in the district of Capo d'Istria, immediately to the south of Trieste; but at the same time the disease is maintained at Trieste, 38 fresh cases and 7 deaths having occurred during the week under consideration. As regards Fiume, where 17 and 6 fresh cases and deaths respectively have taken place, it is said that it has formed a centre whence the disease has spread to several of the neighbouring villages. A sanitary inspection is now required at the Hungarian frontier as regards all goods travelling from Trieste and Istria. Summarising the total effects of cholera in Trieste up to July 28th, a correspondent states that there had been 89 cases and 53 deaths in that city.

DR. GLOVER AND THE MEDICAL COUNCIL.

WE report in another column the proceedings of a meeting of north London practitioners and a few others, which was called to consider the propriety of laying before the profession the claims to a seat on the Medical Council of Dr. J. Grey Glover, of Highbury. It was unanimously decided to ask that gentleman to allow himself to be nominated at the forthcoming election of Direct Representatives, and the meeting of his neighbours and friends pledged themselves to do their utmost in his behalf. Elsewhere will be found Dr. Glover's address, and a preliminary list of his committee of supporters. We are very glad that Sir Andrew Clark, who spoke at this meeting, gave advice which, in our opinion, is most sound. He stated that the great aim of enacting direct representation of the body of the profession on the Medical Council is to enable the general practitioners to express their views and exert their just influence upon medical education and legislation. Already the various teaching and examining bodies, and the consultants, are fully if not over-represented, and the aim of the great mass of electors should be to send men of their own body who by their character, experience, and ability are able really to represent them. We need not conceal the fact that the gift of direct representation has enemies in some influential quarters who will closely watch its earliest results; and for this, among many other reasons, it is all-important that the outcome of the first election should be the return of members to the Council who are able to speak for the great body they will represent with undoubted authority. The election of general practitioners is, however, attended with one great difficulty in that the members of this branch of the profession—the largest and in many respects the most important—have but little opportunity of making themselves known far beyond the district in which they live. This being so, the opinion of a candidate's neighbours must have very great weight. It is eminently satisfactory, therefore to find that the invitation to Dr. Glover emanated from those who are most closely associated with him in the profession, and who have the best opportunities of judging of his ability to serve them on the Council. His neighbours are unanimous in his support; and this fact is one of the strongest possible arguments in his favour. But Dr. Glover has other strong claims upon the suffrages of the profession. He has for years interested himself in a very practical way in the work of the Medical Council; he has been a very frequent visitor at its meetings, and is familiar with its procedure and the duties imposed upon it as defined by Act of Parliament. He would therefore be able to take his seat at the Council fully equipped to enter upon its business, and would not have to undergo any preliminary training. Dr. Glover showed his thorough acquaintance with medical politics in the evidence he gave before the Select Committee and the Royal Commission on Medical Education, and it is clear that his evidence had great weight on both occasions, and its influence was apparent in the reports presented to Parliament. Further than that, Dr. Glover is a man of unimpeachable personal and professional character, who will in himself represent what is truly best in the great body of general practitioners. He is a graduate of the University of Edinburgh, but has been in general practice at Highbury for many years, where he has won the respect of all his neighbours and has attached to himself many friends in all ranks of the profession. In sending Dr. Glover to the Medical Council, the profession will carry out the true intention of the framers of the Act in the best possible way; it will strengthen that body just where it needs strength most, and it will put a high honour upon one worthy to bear it, who has not sought it, who will use it independently, and for no merely personal or sectional ends, but will ever try to advance the wellbeing of the entire profession.

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SIR JOHN LUBBOCK ON THE STUDY OF SCIENCE.

THE address delivered by Sir John Lubbock on the occasion of unveiling the statue of Sir Josiah Mason at Birmingham is reproduced in the current number of the *Contemporary Review*, and will be read with interest by all who are concerned in the promotion of the study of science. It is needless to say that the eloquent address of the member for the University of London was a masterly plea for the pre-eminence of science in the curriculum of a liberal education; and it is equally unnecessary to add that, while bestowing well-deserved praise on the labours and success of his own university, Sir John Lubbock did not allow the opportunity to pass without girding at the universities of Oxford and Cambridge for their alleged neglect of science. Pointing to the facts recently embodied in a return to a motion he made in the House, Sir John stated that, of 240 schools, in 54, or over 20 per cent., no science whatever was taught; in 50 only one hour a week was devoted to science; in 76 two hours, or less than three; while out of the whole 240 schools only 6 devoted to the study of science as much as six hours a week. "In short, it is clear, therefore," contends Sir John Lubbock, "that, in spite of all which has been said, very little progress has been made in this respect. Our schools are generally more industrious; but, remarkable as it may appear, Latin and Greek absorb more time than ever." This is a state of matters which the leading "champion" of science in education, of course, very greatly deplores. There may be differences of opinion on the comparative merits of the study of languages with all this contingently implies, and of the study of science, as agents in mind-culture; but as regards the main issue, there cannot, we venture to think, be any difference. All must feel the need of a better knowledge of scientific subjects, and desire to see the study of science extended. We do not, however, entertain the optimist views of Sir John Lubbock on the subject of science as a regenerator; nor do we share his opinion that "the study of natural history seems destined to replace the loss of what is *par excellence* termed 'sport,' engrained in us, as it is, by the operation of thousands of years during which man lived greatly on the produce of the chase." This is not a disposition of Destiny towards which we can look with yearning or even complacency. The race will never be ennobled, or the glory and independence of the nation increased and consolidated, by the development of a sentimental love of nature or of science. Englishmen must still love the gun and the chase, if they are to be robust as well as "learned." It would be a dark day for the land if the majority of the population should betake itself for pastime to the study of science. It is well that there should be hobbies and hobby-riders, or there would be no struggle for the pre-eminence of the several branches of enterprise, but, in all seriousness, the gentler arts must not be pushed to the neglect of the more *manly*.

PERIPHERAL NEURITIS AND TABES.

THE interesting fact that tabes dorsalis is often associated with, and even preceded by, lesions of a peripheral rather than a central kind has attracted much attention of late. We have before mentioned the contribution made by M. Pierret to the Academy of Medicine, and we may now add the conclusions arrived at by MM. Pitres and Vaillard from a study of many cases (*Rev. de Méd.*, July, 1886). These statements are to the effect that the peripheral nerves of tabetic subjects are often the seat of indubitable inflammatory changes in no way differing from other forms known as non-traumatic neuritis. The changes are very variable in their situation; the sensory, mixed, and visceral nerves may be attacked. In the majority of cases, but not in all, the neuritis begins at the terminal extremities of the nerves. The extent and gravity of the changes bear no constant relation to the age, extent, or depth of the spinal lesions of locomotor ataxy; nor do they apparently take any share in the special symptomatology of tabes, as the lightning pains, motor incoördination, abolition of knee-jerk, and disorder of muscular sense—symptoms which seem to be due to the sclerosis of the posterior columns and the posterior nerve roots. On the other hand, there are certain rarer symptoms which seem to be directly related to peripheral neuritis; such are (*a*) areas of cutaneous anæsthesia or analgesia; (*b*) trophic skin lesions, as perforating ulcer, œdema, eruptions, dystrophy of the nails; (*c*) certain motor paralyses, accompanied or not by muscular atrophy; (*d*) arthropathies and spontaneous fractures; and in some cases the visceral neuralgiæ may be attributed to neuritis of the corresponding nerves.

REPORT OF THE SCOTTISH COMMISSIONERS IN LUNACY.

THE General Board of Lunacy in Scotland has the merit of recognising that there are such persons as "unreported lunatics maintained in private dwellings from private sources," and therefore forbears to claim a thorough knowledge of the whole field of lunacy in Scotland. This recognition is the key to what we conceive to be the better method of statistical work and inference adopted by the Scottish Commissioners when their work is compared with that of the English. Speaking of the alleged "increase of lunacy" so-called, the General Board says, "We have frequently pointed out that the difference in rates of increase does not necessarily indicate an increasing amount of mental disease, and that it is probably due in large measure to what is only an increasing readiness to place persons more or less disordered in mind as lunatics in establishments." On the 1st of January in this year, 1886, the total number of lunatics under official cognizance in Scotland was 11,187, showing an increase of registered lunatics during 1885 of 268. The total increase of pauper patients rose 271, while that of the private patients fell 3. There is nothing specially worthy of notice in the twenty-eighth report of the Scottish Commission, unless it be its very late appearance, the date on the title page being "February 24th."

THE PROPOSED HOSPITAL AT DARENTH.

THE Metropolitan Asylums Board have again had under consideration the desirability of erecting a permanent hospital for small-pox on their land at Gore Farm. The plans for this hospital were prepared a long time since, and these plans were approved by the Local Government Board, but after additional evidence had been placed before the Board of the injury inflicted by small-pox hospitals to their surrounding neighbourhoods, the Local Government Board recommended that only a temporary hospital should be erected, and based this recommendation on the uncertain state of medical knowledge. The Metropolitan Asylums Board, however, at their last meeting, expressed dissatisfaction with this opinion, and determined to request the Local Government Board to at once issue the order promised in their letter of July 12th, 1884, authorising the Managers to expend and raise on loan the sum of £116,000, being the amount which it is estimated will be required for the erection of the proposed hospital for convalescent small-pox patients on the Managers' estate at Darenth. It was urged at the meeting that the difference in cost of the erection of permanent and temporary structures was so slight that the saving was of no practical value compared with the great disadvantage resulting from a temporary building. These proceedings

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are somewhat perplexing. The Local Government Board have in their possession ample evidence that the aggregation of cases of small-pox in the acute stage of the disease gives rise to small-pox in the surrounding neighbourhood. The fact as to the aggregation of convalescents is less obvious, but it may, we imagine, be assumed that some number of persons who cannot be accurately described as convalescents will, as in past times, be received into the hospital. The real question at issue is, therefore, whether hospitals can be so constructed and administered that they shall not be a source of danger to residents in their vicinity; whether they be temporary or permanent does not affect this question. If the Local Government Board are not satisfied with the position of medical knowledge on this subject, they have it within their power to make further investigation; but by the adoption of a policy of procrastination the money of the ratepayers will undoubtedly be sacrificed, and their lives may be imperilled.

LIGATURE OF THE EXTERNAL ILIAC ARTERY.

THE "Observations on Aneurysm and some Diseases of the Arterial System," by Mr. George Freer (Birmingham, 1807), is one of the classical surgical monographs well deserving study. It embodies the results of experimental research, a digest of Guattani's treatment of aneurysm by compression, and a record of the first case in which the external iliac artery was tied successfully. Freer's assistant was no other than Joseph Hodgson, who beautifully illustrated the memoir, and was soon to become famous as the author of the "Treatise on the Diseases of Arteries and Veins" (1815), which was for many years the standard work on the subject. The external iliac was first tied by Abernethy, and he performed the operation four times, but only his last two patients lived; the first of these was rare, as one of the very few cases in which the procedure has been practised on a woman. Astley Cooper had four successes in six, but Mr. Bryant of Guy's has done the operation six times without a death, and, Mr. T. H. Bartleet has successfully tied the external iliac artery three times at the General Hospital, Birmingham. His patients were males, of the respective ages of thirty-one, thirty-three, and thirty-eight years. In his second case Mr. Bartleet tied the iliac for secondary hæmorrhage after ligature of the common femoral. His third case was operated on with stout catgut, cut short, on June 29th ult. The wound healed almost completely by the first intention, and convalescence has been rapid and uneventful.

INSANITARY BURIALS IN ST. MARY WOOLNOTH.

NOTWITHSTANDING that our sanitary arrangements in the present day are sometimes far from perfect, we are fortunately exempt from some of the excesses of mismanagement which prevailed in a former generation. We still bury our illustrious dead in our great churches, but such an occurrence is necessarily rare, and injurious rather as an example than in itself. Vaults and perennial coffins remain among our cherished abuses, but science is dealing heavy blows against their stability. We are learning the laws of funeral hygiene, and are at least endeavouring to apply them. Nor has the change to a rational procedure come a day too soon. We may illustrate these remarks by a reference to the state of the church of St. Mary Woolnoth, now undergoing repairs. Complaints have been made for some time past of the bad smells which prevailed in that building, and were supposed to come from the church vaults. On examination hundreds of bodies undergoing decomposition were found beneath the floor. The last of these was buried, or rather entombed, many years ago; but from the conditions of interment, they with their massive coffins are still decaying, and are thus late yielding to worshipping congregations the gases of putrefaction. No stronger argument could be brought against the still existing custom of burial in churches or vault burial in general—no clearer proof that earth alone must receive our bodies after death. The local vestry will not, we hope, forget the teaching of experience, that thorough disinfection must accompany all the work of repair at St. Mary's if disease is to be surely prevented. The plan of hermetically sealing the whole burial area with concrete, as has been suggested, is an excellent one, which has already stood the test of practice and of time.

LEAD IN TINNED PROVISIONS.

DR. RABCHEVSKI of St. Petersburg has published the results of a series of investigations made on various kinds of tinned provisions, with the view of determining the suitability of food preserved in this way for the purposes of the army commissariat, especially when on active service. He first examined the tinned plates in the preserved provision manufactories, and found them in all cases quite free from lead. The case of the solder was of course different, the amount of lead contained in it varying from 60 to 70 per cent. The chemical examination of the contents of the tins was conducted by Pouchet's method, and showed that while some classes of food, such as roast meat, were quite free from lead, others, such as sour cabbage, which to a Russian is a very important article of diet, contained very appreciable quantities of lead, in one case as much as 0·327 per cent.; so that a man taking 200 grammes, or about a quarter of a pound, of this for his dinner would introduce into his system 0·654 grammes, or about eight grains, of lead—a quantity which, especially if taken frequently, can by no means be considered as harmless. The conclusion arrived at by the author is that these tinned provisions should only be used in the army in case of urgent need, and for a very short time. It would appear, too, that a choice might be made, only such classes of preserved food being accepted by the authorities as were shown to be least likely to become contaminated by the injurious substances contained in the solder.

PHYSICAL TRAINING OF CHILDREN.

LORD BRABAZON, the Chairman of the Metropolitan Public Gardens Association, has, on behalf of this Association, addressed memorials to the Royal Commission on Education and to the London School Board, urging that the code of education should be so altered that physical training shall be included among the obligatory subjects, and in this way necessarily introduced into each department of every elementary school. The proposal has our sincere sympathy. Mental training is now being pushed to an extent that renders it the more necessary that every effort should be made to improve the physical condition of children, who are having a strain put upon their nervous system which is greater than can be easily borne by the ill-developed inhabitants of large towns. The necessity that the English people should not be behind those of other countries in education makes it very desirable that their health should be improved, to fit them to pass through the process without injury, rather than that their teaching should be less thorough; and Lord Brabazon has, we believe, suggested an excellent method by which this can be effectually done. The memorials point out that playgrounds in connexion with the schools under the Board should be kept open for the use of the children and young people of the neighbourhood, under proper supervision, between and after school hours; and that covered gymnasia and an increased supply of gymnastic apparatus in the playgrounds should be provided, with proper instruction in the use of such apparatus. The memorials refer

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to the need of some fund for the maintenance of existing playgrounds and the great difficulty which exists in obtaining in densely populated districts adequate open spaces for public recreation. The ratepayers feel acutely the heavy tax which is put upon them for the education of the poor, and there is probably no way in which the burden of the necessary outlay can be rendered more acceptable than by enabling Board schools to be made more generally useful to a larger number of those who contribute towards their maintenance.

SOFT CHANCRE OF THE MIDDLE EAR.

THE *Gaseta Lekarska*, a Polish medical journal, contains a report by Dr. Guranowski of a case of soft chancre of the middle ear. The patient was a woman with a phagedænic chancre of the genitals, who from snuffing tobacco managed to introduce the virus into the nose, where the septum had become ulcerated, with copious discharge of foul pus. From this the infective material must have passed through the Eustachian tube into the middle ear. Deafness and pain were complained of, and subsequently perforation of the tympanic membrane occurred, a large quantity of purulent matter being discharged through the opening and infecting in its turn the external meatus. The case was treated by the introduction of iodoform into the ear and nose, and by injecting warm water through the ear by means of the Eustachian catheter. In a month's time the patient regained her power of hearing and completely recovered. Dr. Guranowski has a great belief in the efficacy of washing the middle ear with warm water, having seen cases of severe inflammation recover under this treatment where it was feared that the only hope of saving the patient's life lay in trephining the mastoid process.

SUICIDE FROM DYSPEPSIA.

WHY a woman suffering from dyspepsia should elect to drown herself in a water-butt is one of those inscrutable mysteries which it would tax the ingenuity of an astrologer to explain. The intercommunication of mind and body is, however, so close that nothing is really strange in the phenomena of mental symptoms dependent upon visceral irritation. Carlyle's "foul fiend-hag," dyspepsia, is capable of any vicious prank, and the vagaries of the enemy are in no way to be measured by the conventional symptoms of any disease. Hypochondriasis is a good word for popular use in such cases. It means nothing, and yet implies a great deal. But was the woman Elizabeth Rouse, who committed suicide at Paddington last week, under treatment of any kind? A tendency to suicide in cases of this class is not generally of rapid, or at least sudden, growth.

PHOTOGRAPHY IN MEDICINE.

WE are indebted to Dr. J. Ashburton Thompson of Sydney for a copy of a report which, as medical inspector, he made to the Board of Health last year, upon five cases of variola which arose in the Orient Hotel of that city in August, 1884, and were treated in the quarantine hospital ship. At the suggestion of the president of the department, Dr. Thompson took photographs of the cases, in order to convince members of the profession who were sceptical as to the diagnosis. The report is accompanied by a series of eleven photographs of the face and leg of another patient attacked later in the year, taken at various stages of the disease—viz., from the third to the twenty-fifth day. The photographs are excellent specimens of their kind, and convey in a striking manner the changes undergone by the exanthem. The case was one of "variola discreta," so that the eruption became very profuse during its progress. It may be added that the patient, a girl aged eleven years, had been unvaccinated when her mother fell ill of the disease and died. The child was vaccinated, but was attacked with small-pox a week afterwards. We are not aware that photography has ever been employed with such an object before, and Dr. Thompson must be congratulated on the success of his efforts.

ACTION OF VASO-MOTOR NERVES ON LYMPHATICS.

THE circulation of the lymph is usually regarded as dependent on more or less indefinite causes, and probably few have asked themselves the question whether the nerves have any direct influence in the process. M. Lewaschew, whose name will be remembered in connexion with the experiments of chronic nerve-irritation on vessels, has attempted to discover the influence of the vaso-dilator and vaso-constrictor nerves on the circulation of the lymph. He has studied the production of lymph in the posterior limbs of the dog under the action of the different kinds of vaso-motor nerves, and finds generally that it varies directly with the flow of blood through the limbs; so that the greater the rate of the sanguiferous circulation the greater is the production. The method of the experiments is given in the *Union Médicale*, No. 96, in a note communicated to the Académie des Sciences by M. Vulpian. It is not argued that the nerves exercise any direct effect on the lymphatics; but that is a question of hydro-dynamics. Purely physical conditions explain sufficiently accurately the observed facts. The dilation of vessels, with increased contents, is attended with an augmentation of the normal amount of exuded fluid which escapes from the limb through the intermediation of the lymphatics, in which of necessity the stream becomes more rapid, and from which in consequence the quantity of fluid flowing away in a given time is considerably increased.

OPERATION FOR RECTAL CANCER.

DR. ARTURO GUARNERI relates, in the *Gazzetta degli Ospitali* of July 14th, a case from Volkmann's clinique, illustrating very forcibly the modern practice of attacking cancer of the rectum with the knife. The patient, a single woman, aged twenty, had undergone extirpation of the rectum for epithelioma. The disease having returned, some more of the intestine was removed with a large portion of skin, part of the vaginal wall, and a piece of the ischiatic tuberosity. The peritoneum was opened; nevertheless the patient recovered almost perfectly, and a plastic operation was subsequently performed to shut off the vagina and reconstruct the perineum. A detailed history of the procedure and of the final issue could not fail to be instructive.

FREE TRADE IN ADULTERATION.

IF any fresh evidence of the absurd state of the law in regard to adulteration were required, it would be furnished in abundance by the recent Stratford cases reported in, and most fairly denounced by *The Times*. Three tradesmen were proved to have sold adulterated coffee, without notice to the purchaser, at prices which yielded an unreasonable and exorbitant profit. The magistrates, it seems, dismissed the summonses with the pithy remark of the chairman, that "the Court won't give no reasons." These things happen incessantly. Some magistrates strain all points in favour of the dishonest dealer. If they can let him off, legally or illegally, they do so; and if they are forced into a conviction, they impose fines that are purely nominal. Why magistrates should sympathise with traders who prey on the poorer classes, we cannot tell, but it is evident that some of them do. The Food and Drugs Acts have not been dead letters, for things are better now than when we first attacked the evil. Adulterations with poisonous materials have

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become comparatively rare, and even fraudulent adulterations are under some control in a great number of places. But no certain check is imposed. The law is defective, and the administration is equally defective. The definition of adulteration is read very differently by different magistrates, notably in the article of milk, and the penalties attached to the offence differ as much. In some districts the local authorities are active, and having chosen efficient analysts, do their best to support them; but in others nothing whatever is done. Sometimes no analyst is appointed, sometimes he is not efficient, and sometimes he remains for months or years without work. When a prosecution is undertaken every possible difficulty must be surmounted, every legal quibble met, and the result is that even in the clearest cases success is so doubtful that men naturally shrink from the trial. We have no wish to subject honest traders to inconvenience, and we freely admit that it was right in the earlier days of legislation to be careful lest honest trade should be harassed. But much experience has been gained in the last few years, and the time is now ripe for the passing of an Act which, without pressing unfairly upon manufacturers, producers, or dealers, shall afford the public a much greater protection against fraud than they now possess.

PROGRESSIVE FACIAL HEMIATROPHY.

A GIRL of nineteen is mentioned in the reports of the Swedish Medical Society as having suffered from the above-mentioned disease for four years. The first symptom was continuous but not severe headache situated in the right temple, cheek-bone, and crown of the head. After three years she noticed a contortion in her face, with depression of the right temple and cheek-bone. On close examination, Dr. Wärfvinge discovered that the right half of the face from the temporal region to the lower jaw was extremely atrophied, the atrophy affecting the skin, mucous membrane, muscles, fat, and bone. The muscles, however, were not completely atrophied, since they contracted at will or by faradisation. The skin of the atrophied parts could be lifted up in thin folds. The sensibility on the right side of the face was normal, and there was never any sensation of creeping or cold. There was no disturbance in the circulation of the blood; no abnormal dryness or humidity; no spots on the affected side. The colour was the same on both sides; the hair on the right temple a little thinner than on the left. The tongue was found to be thinner on one side than the other, but the taste on both sides was the same. The organs of sight, hearing, and smell presented nothing remarkable.

POISONING BY SAUSAGES.

FAMILIAR as is poisoning by sausages, there yet remains much to be learnt of the manner in which the poison or poisons act. Sometimes an inorganic poison has been suspected, but generally it is supposed that the deleterious agents are in some way related to the occurrence of decomposition in the organic contents of sausages. Nauwerck of Tübingen has investigated a series of cases of poisoning by sausages, and has come to the conclusion that the symptoms were to be largely attributed to the agency of certain complex bodies that are known to be derived from the decomposition of albumen. Some of the symptoms of sausage-poisoning are of considerable interest; such as the paralysis of accommodation for near objects of vision, also the dilatation of the pupil and drooping of the upper eyelid. It does not follow that sausages are harmless because a chemical examination of them has failed to detect poison in sufficient quantity to prove noxious to the organism. The sausages in these cases may simply contain the germs of decomposition and not begin to decompose until they have reached a suitable site in the intestinal canal of their host. If all sausages contained poison ready formed at the time of ingestion, it would be difficult to understand how it happens that a considerable period of time occasionally elapses before the symptoms of poisoning commence. A study of the mode of action of the various poisons that are evolved during the process of decomposition of albumens has proved of great service to the science of pharmacological physiology.

ALLEGED DEATHS FROM VACCINATION.

OUR contemporary to which we referred in last week's issue contains other letters upon this subject. A correspondent in that journal, evidently arguing upon the basis that every death occurring after vaccination may have been due to it, however indirectly, quotes among deaths from other diseases those of infants under one year of age from bronchitis, and states that the increased number of deaths registered under this heading may be due, not to alteration of nomenclature, but to a real increase in mortality from this disease, due to the lowering of the child's tender system by the vaccine disease. If vaccination is to be held responsible for such apparent increase of deaths, it is surely equally right to claim for it responsibility for the diminution in the number of deaths recorded under other headings; but the fact remains that total infantile mortality has decreased and is still decreasing, and even the thoughtful and well informed people who, this correspondent states, look upon vaccination with abhorrence, must be perplexed to find that this diminution is absolutely taking place at the same time as vaccination is supposed by anti-vaccinationists to be increasing the mortality by more than 16,000 deaths to every million births.

GASEOUS MEDICATION PER RECTUM.

THE ingestion of gaseous medicines by the lower bowel was the subject of a recent communication by M. L. Bergeon to the Paris Academy of Sciences (*Comptes Rendus*, July 12th). His research has extended to a variety of diseases, but for the present he only records his experience in the treatment of pulmonary phthisis. After having tried a variety of balsamic substances of parasiticide or antiseptic repute, M. Bergeon gave the preference to sulphurous mineral waters (Eaux Bonnes, Challes, &c.). A current of from four to five litres of carbonic acid gas traversing from 250 to 500 grammes of the sulphurous mineral water was introduced per rectum twice in the twenty-four hours. After a few days' use, cough was notably diminished and almost suppressed, the expectoration greatly modified in quality and quantity, the sweating stopped, and the general state improved; and that not only in incipient, but also in confirmed phthisis. Daily auscultation established the disappearance of moist râles.

DISEASED HORSE-FLESH IN THE MARKET.

STRANGE evidence is given in one of the daily papers to the effect that diseased horse-flesh is not uncommonly sold in London. This rumour acquires additional importance from the statement that such meat imported into the metropolis is despatched from other parts of the country in a raw state, boned, and cut in large pieces, so that it is not easily distinguished from the carcases of cattle. Reflections on such a subject are not reassuring. Not only is there an evident danger that septic disease, if present in meat of this kind, will propagate itself in domestic animals which are fed on it, but the human population are not exempt from risk, particularly since the finer shades of difference in varieties of meat are apt to be obscured by modern methods of preserving it. An inquiry into this matter should not be a tedious one, and it is evidently called for.

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THE DIRECT REPRESENTATION OF THE PROFESSION.

BESIDES the issue of addresses by four candidates for the one seat in the Council for the representation of the practitioners in Ireland, and the steps for promoting Dr. Glover's election in England, no other formal proceedings have been taken. Dr. Edwin Morris, F.R.C.S. Eng., of Spalding, who years ago showed much desire for a larger recognition of the rights of Fellows and Members of his College, has intimated his willingness to stand. Other candidates for England are mentioned, but nothing is as yet certain. It is time now to expect decided steps. In Ireland there will be the embarrassment of deciding between a number of eligible candidates. Dr. Jacob's claims are very strong. His knowledge of the subjects likely to be discussed is very great, and his interest in them keen. There are two weaknesses in his position. He is not in general practice, and he is the Secretary of the Royal College of Surgeons. As regards the first objection, it is somewhat mitigated by his thorough touch of the profession. We gather that he has himself felt the force of the second disqualification, since in the last paragraph of his address he expresses his readiness to abandon the office which he now holds in the College of Surgeons. The other candidates for Ireland are Dr. Kidd, of Dublin, who is a member of the Council of the College of Surgeons of Ireland; Mr. Thomas Laffan, of Cashel, author of one of the Carmichael Prize Essays, and a practitioner of much ability and distinction; and Dr. W. K. McMordie, of Belfast. We hear as yet of no candidate in Scotland.

"SUCKING BREATH."

A SINGULAR tradition bearing on infant mortality was brought out at a recent inquest. A child aged five weeks, was found in bed suffocated beside her mother. She had been alive and awake an hour before. Death was ascribed to the presence of a cat which had got on to the bed. In support of this contention it was alleged that the animal must have lain on the infant and sucked her breath. All have noticed the tendency of cats to nestle about those to whom they are attached, as also their preference for warm corners; and these facts would appear to give colour to the idea that the cat may have lain upon the child's mouth and so smothered her. When, however, we consider that the death occurred in the early morning while the infant was with her mother in bed, that the latter was asleep, that there was a mark possibly due to pressure on the child's right cheek, and no sign that the cat had lain on the bed, it seems at least as probable that she was overlain by her own parent. "Breath-sucking" is probably a myth, or it would ere now have been proved by observation. The jury gave the only verdict possible in the circumstances—that of "Accidental death."

ATTACK ON A SANITARY CAMP.

THE Windsor urban and rural sanitary authorities, being apparently still without any permanent provision for the isolation of infectious diseases, recently erected several marquees and tents upon the Ham, Old Windsor, near the Thames. The spot is stated to be isolated, half a mile from the village, and at a considerable distance from any dwelling-house. Last week, just after a girl had been removed to the female marquee, and when only one other patient was in residence, a crowd of villagers invaded the site, threw three bell-tents into the river, and proceeded to wreck the others, attempting to set them on fire or to cast them into the water. What the exact significance in this story is we do not pretend to explain; but under any circumstances the proceedings are nothing less than barbarous on the part of the people who were engaged in it. The authorities may be to blame for not having, before this, provided a properly enclosed site with permanent buildings for the purposes of an infectious hospital; but nothing can justify the action of the mob who thus dealt with a temporary hospital which was at the time in actual occupation by sick persons. If the people were only anxious to prevent the provision of a hospital at all their ignorance is to be pitied, for it must be obvious to all sensible persons that a number of cases of infectious diseases can hardly do more harm than when they are left scattered about a district, at a number of centres where the infection would be uncontrolled.

SIR WILLIAM STOKES, OF DUBLIN.

OUR Dublin correspondent writes:—"The numerous friends of the President of the Royal College of Surgeons in Ireland will be gratified to learn that he has received the honour of knighthood at the hands of his Excellency the Lord-Lieutenant. Sir William Stokes is an able exponent of Irish surgery, a gentleman of high professional eminence, and possessed of abilities of no mean order. A clever writer, an eloquent speaker, and an honourable gentleman, Sir William holds a foremost place in professional circles in Dublin. The only regret that can be felt is that the higher dignity was not conferred upon a gentleman who holds the highest position the Fellows of the Royal College of Surgeons could bestow upon him. It cannot be denied that successive Governments have dealt very shabbily with the medical profession in Ireland, and it is to be hoped—although from the past little can be expected—that the new Government may see their way to reward the profession in Ireland as in other portions of the United Kingdom."

A FATAL CASE OF PYÆMIA FOLLOWING ALVEOLAR ABSCESS.

M. PONCET, in a communication to the *Société de Chirurgie*, relates one of those rare cases of pyæmia due to alveolar abscess. The patient, who was of intemperate habits, had been ill about ten days before admission to hospital, and showed signs of severe constitutional disturbance. Locally there was a large, non-fluctuating swelling at the angle of the jaw. The following day the outer surface of both forearms became œdematous, and large bullæ formed. Death took place forty-eight hours later. At the necropsy numerous small abscesses were found under the right side of the lower jaw, and along the upper half of the sterno-mastoid of the same side. The cellular tissue of the forearms was infiltrated with purulent matter, the spleen was pulpy, and the liver fatty and cirrhosed.

FOREIGN MEDICAL APPOINTMENTS.

DR. RONA, Assistant to the Professor of Anatomy in Breslau, has been appointed Extraordinary Professor.

Dr. F. R. von Schneider has been appointed President of the Committee of Organisation of the "International Congress for Hygiene and Demography," to be held in Vienna in 1887, and Dr. Th. von Inama Sternegg Vice-President.

Dr. Ludwig Radlkofer, Professor of Botany, has been elected Rector Magnificus of the University of Munich for the next academical year.

The Vienna professorial body having to nominate a Professor of Hygiene, has selected Professor Gruber of Graz, and Dr. Kratschmer of Vienna, each receiving the same number of votes. Some surprise is expressed in German medical circles that Professor Soyka of Prague, who is considered by many to be the greatest authority on hygiene, was not chosen; the reason given was that it was especially desirable that the professor should be a good chemist, and Professor Soyka's numerous and valuable researches on epidemiology &c. have not taken a chemical turn.

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STATISTICS RELATING TO OPERATIONS ON THE KIDNEY.

DR. DAVID NEWMAN, of the Royal Infirmary, Glasgow, having collected, with a view to publication, the statistics relating to operations on the kidney for the relief of disease, is desirous of receiving from surgeons, whose operations of the kind have not been recorded, a statement of such cases. For this purpose a schedule has been prepared, a copy of which, Dr. Newman asks us to state, will be forwarded to any surgeon who may apply to him. The schedule, which contains columns headed "Diseased condition as ultimately determined" and "Results—immediate and ultimate," has already been sent to those operators whose cases have been published, in order that the records of them may be thoroughly authenticated and rendered complete.

HONOURS TO MEDICAL MEN.

ON the 30th ult. Her Majesty conferred the honour of knighthood upon the following gentlemen amongst others: Mr. John Tomes, F.R.C.S.; Mr. Douglas Maclagan, M.D.; Surgeon-General Thomas Longmore, C.B., Professor of Military Surgery at Netley; and Mr. Edward Sieveking, M.D., Physician Extraordinary to the Queen. On the 2nd inst., amongst the distinguished colonial visitors who were invested with various Orders, the following were made Companions of the Order of the Indian Empire: George Watt, M.D., and John W. Tyler, M.D.

DIVISION OF CELLS.

THE modes of multiplication of cellular elements appear to be susceptible of several kinds of classification—simple fission, gemmation, and endogenous formation, and the like; but it is probable that the essence of the process of numerical increase is the same in all the methods. Karyokinesis, the process of division of the nucleus, which usually precedes the division of the cell, generally results in the production of two nuclei and two cells. M. Cornil recently communicated a paper to the Académie des Sciences on the production of three cells by a single act of karyokinesis, in which process the nucleus was seen to become trilobate. This was not thought to be an error of observation; and M. Cornil discussed the possibility of a false interpretation of deceptive appearances.

THE EDINBURGH UNIVERSITY CLUB.

THE capping day of the Edinburgh University is a high festival to Edinburgh graduates. Even in the degenerate South the haggis goes down with an extra zest on that day. Monday last was so observed by the Edinburgh University Club and their friends at the Holborn Restaurant, who were most genially presided over by Dr. T. Graham Balfour, F.R.S. Dr. Balfour is a typical Edinburgh graduate, and the University would scarcely care to be represented by a better specimen of her *alumni*.

A VEXATIOUS ACTION AT LAW.

MEDICAL practitioners are exposed to many annoyances and beset by not a few perils; but it is seldom, happily, that members of the profession are insulted by being brought into a court of justice on pretences so utterly frivolous as that set up by a patient against Mr. S. P. Budd, of Bath, a few days ago. For a relaxed or inflamed throat, with great nervous excitability, Mr. Budd prescribed a mixture containing "bromide of potassium, carbonate of ammonia, and tincture of bark," the bromide being in the moderate quantity of some twenty-two or twenty-three grains per diem. The patient, took it into his head that the medicine did him harm rather than good, and straightway brought an action against Mr. Budd, who was put to the trouble and expense of defending the same, with the result that the jury characterised the proceedings as vexatious, and the plaintiff lost his suit. Something ought to be done to prevent the bringing of such actions as this. Would it not be possible to enact a law by which actions involving any imputation of wrong-doing by medical men—in their professional character—should be subjected to a preliminary scrutiny, such as that to which criminal charges are subjected by grand juries, before being brought into court? The injury inflicted on practitioners by absurd suits at law is not to be measured by the success or failure of the action laid.

PENNY GIFTS TO HOSPITALS AND THE COLONIAL EXHIBITION.

WE heartily remind the public of what Dr. J. A. Aveling said a few days ago in *The Times*, as to the possibility of raising a goodly sum for our needy and worthy hospitals by every visitor giving one penny to the "mechanical beggar." Over £10,000 might thus be given and never missed. Let every visitor impose this easy task on himself. The cost of our hospitals he reckons at £476,000, only £78,000 of which comes from funded property, leaving £398,000 per annum to be made up by voluntary contributions.

CORPORAL PUNISHMENT IN SCHOOLS.

IT is suggested by a correspondent signing himself "M. A. in *The Times* "that it should be a rule of custom that no magistrate should fine a teacher for undue severity, except upon the report of a medical man who has himself been at a public school, and who therefore will be able to give a just opinion upon what is right and wrong in the matter of chastisement—a qualification which many of our medical men no more possess than the parents of the Board school children." We do not know how far it would be right, or necessary, to appeal thus directly to a medical man's *personal* experiences of the birch as a standard of propriety; but we agree that the question of excess, or error, in the administration of corporal punishment in schools might very properly be submitted to medical judgment.

SUICIDES AMONG CHILDREN.

THERE can be no question that there has of late years been an increasing proportion of suicides among children, or very young persons. No psychical reason exists why this should not be so if the brain is very early put to hard labour but it is unfortunate when an organ incompletely developed is thus severely strained. The practical question is whether there may not be something in our mode of training the young which "forces" the brain unduly. Moreover, is there not a tendency to place children too soon in the career of life in a position calculated to strain and worry them?

INSECT-KILLING BOTTLES.

ATTENTION having been called to the danger to the public arising from the indiscriminate sale by naturalists and others of insect-killing bottles containing cyanide of potassium, the Registrar of the Pharmaceutical Society of Great Britain has been instructed to take immediate steps to suppress the practice, which is contrary to the provisions of the Pharmacy Act of 1868. This is a step in the right direction, and we are glad to find that action is being taken in the matter. Poisons of all kinds are sold to the public with so little restriction that anything which tends to check the practice must be regarded as a boon.

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SIR B. W. FOSTER.

WITHOUT expressing any judgment on those parts of Dr. Foster's political opinions and conduct which may be supposed to have led Mr. Gladstone to move Her Majesty to confer on him the honour of knighthood, we may heartily congratulate Dr. Foster on the fact. His professional reputation will well sustain the title, and even do it credit. Dr. B. W. Foster—or, begging his pardon, Sir B. W. Foster—is too good a physician to spend his strength on unpractical politics; and we cannot altogether regret that he has been recalled to pursuits and studies more obviously worthy of his powers.

CHEMICAL HYGROMETER.

HELICES of paper coated with gelatine, and impregnated on opposite sides with substances having very different hygroscopic properties, have been employed by M. Nodon as self-registering hygrometers. It is not difficult to understand how such a coil would undergo changes of shape under the influence of alterations in the state of humidity of the circumambient atmosphere. These movements of the helix could be translated, by means of a pen of capillary tubing, on a chart moving at a definite rate. If the atmospheric humidity remained the same the pen would merely write a straight line, whilst variations in the hygroscopic state would be manifested by varying curves.

REGISTRATION OF PLUMBERS.

WE understand that the subject of brickwork and masonry has been added to the list of subjects in which examinations will be held of those who desire to possess special proof of their fitness to undertake house construction and drainage. This addition is a very proper one. While in no way desirous of detracting from the importance of the latter branch, there is much need for recollecting that it does not embrace all the conditions which are necessary to render a house healthful, and the Institute of Plumbers will be doing a public service if they gradually include in their programme every trade employed in house construction and decoration. We are glad to find that the increased number of candidates for the diploma gives good evidence that the trade is already finding its possession is of value to them.

CIRRHOSIS OF THE LIVER.

IN infants the two chief causes of cirrhosis of the liver commonly recognised are syphilis and alcoholism. It would seem strange if these were the only possible causes. A plausible theory not unsupported by facts has been advanced to the effect that the acute specific fevers may in some cases be operative in the development of hepatic cirrhosis. Interstitial changes, of the usual order, have been detected in the liver of infants who died of various acute disorders. Doubtless, in the majority of cases these interstitial infiltrations undergo resolution as the patient regains health. But there seems good reason to believe that, as M. Lauré has recently advocated, this small-celled infiltration may sometimes form the starting-point of a fibroid degeneration.

MALE NURSES.

THE Hamilton Association for providing trained male nurses is one deserving of support. It is most desirable, we think, that male nurses should be employed for attendance on the sick of their own sex whenever practicable. It is well to know that male nurses can be procured by telegraph to the "Hamilton Association, London," and that the attendants sent out will be carefully selected and well trained.

THE Austrian Minister of Education has, upon the suggestion of the professorial body of the Bohemian University of Prague, decided to establish a new clinic for children's diseases, in which the instruction will be given in Bohemian. The charge of this department will be entrusted to Dr. Neureuter, chief medical officer of the Franz Joseph Children's Hospital. The place of the deceased Professor Kaulich has been conferred on Dr. Andreas v. Hüttenbrenner, chief physician of the Caroline Children's Hospital in Vienna. The Bohemian Medical Faculty has been granted 170,000 florins for the erection of a pathological, physiological, and pharmacological institute. The building is to be commenced early next year.

THE death of Dr. Archibald Gordon, C.B., took place on Tuesday last, at West Hoathley, in the seventy-fifth year of his age. The deceased entered the Army Medical Service in 1836, and became surgeon in 1848. He was present in several actions of the Sutlej campaign in 1846, and served also in the Punjab campaign and in the Crimea. Dr. Gordon was Principal Medical Officer with the expeditionary force to China in 1857, and in the Oudh campaign in the following year. He became Inspector-General in 1867, and was placed on half-pay in 1870.

ON capping day, Principal Geddes, of the Aberdeen University, in the course of an interesting address to the young graduates, mentioned that Mr. Thomson of Pitmedden had recently given the University the sum of £3000 to found a Scholarship or Fellowship of Research in connexion with the Medical Faculty. Two or three years ago Mr. Thomson gave £6000 to found medical bursaries, so that he is indeed a liberal benefactor of the University.

IN the neighbourhood of Greussen, Thuringia, there have recently been more than sixty cases of trichinosis. Those who are most severely infected are said to have eaten pig's-meat in an uncooked state. None of the cases, however, have proved fatal. The diagnosis has been confirmed in some instances by the microscopical examination of a portion excised from the biceps muscle.

FERRYDEN, a fishing village on the Forfarshire coast, has lately been visited with a severe outbreak of typhoid fever, and Her Majesty, in expressing her sympathy with those who have suffered, trusts that an inquiry will be made into the causes of the epidemic.

AN epidemic of typhus fever has broken out on Hare Island, Skibbereen Union, co. Cork, and at the close of last week there were from forty to fifty persons out of a population of some 300 suffering from the disease. The epidemic is attributed to overcrowding.

A BATH establishment is to be added to Dr. Lassar's dermatological clinic in Berlin, where all the necessary appliances will be provided for patients at cost price.

THE death, at the age of forty-four, is announced of Dr. Hermann Maas, Professor of Surgery in Würzburg.

STURGE PRIZE COMPETITION.—Mr. George Sturge has offered to give three prizes of £25, £10, and £5 respectively to the writers of the three best essays on "The Causes of the Financial Depression in the Hospitals of London, with Suggestions for improving their Administration and Finances." The Rev. Canon Erskine Clarke, M.A., the Hon. Conrad Dillon, and Mr. J. S. Wood, will act as judges, and the successful essays will, we understand, appear in the pages of the *Philanthropist*.

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THE HOSPITAL SUNDAY FUND.

ON the 30th ult. a special meeting of the Council of the Hospital Sunday Fund was held at the Mansion House to receive the report of the committee of distribution, and to order payment of the awards to the various hospitals and dispensaries. The Lord Mayor presided, and among those present were Sir Sydney Waterlow, Sir E. H. Currie, Mr. Joseph Fry, Rev. Canon Nisbet, Mr. H. C. Burdett, Dr. Glover, Mr. Pitcairn, &c. Prior to the distribution of the Fund various matters were dealt with. A letter from the Rev. J. W. Bennett suggesting that the third Sunday in June should be fixed permanently for Hospital Sunday was read, and held over for future consideration. A communication was received from the Hospital Saturday Fund, complaining in effect that in making collections at theatres and workshops the Hospital Sunday Fund was overstepping its ordinary limits, and trenching upon the work of the other Fund.

Sir SYDNEY WATERLOW said that such an objection was very foolish, seeing that both Funds were working for the same object, and that the Hospital Sunday Fund was enabled, as it dealt with larger amounts and with necessarily less complicated machinery, to make the collections at a less percentage of expenditure than the Hospital Saturday Fund.

The LORD MAYOR having remarked, in regard to the collection at the theatres, that it was a spontaneous one on the part of Mr. Henry Irving, to whom the thanks of the Council were due for the help he had thus rendered, the discussion dropped.

The following resolution was then proposed and carried unanimously:—"That a special vote of thanks be sent to James Wakley, Esq., M.D., Editor of THE LANCET, and member of this Council, for his second donation of £1000 to be distributed this year, and for the stimulus he has given to the metropolis by his valuable suggestions; and that cordial thanks be also recorded to Dr. Wakley and to Mr. Thomas Wakley, the proprietors of THE LANCET, for the important articles and the three Special Supplements which they have caused to be published and distributed to the clergy and ministers both before and after Hospital Sunday. The Council, in passing this resolution, cannot refrain from an expression of sincere sympathy with Dr. Wakley and his family at a time when he is suffering from the severe affliction of cancer of the tongue which he is now bearing with so much fortitude."

A serious complaint was made that advantage had been taken of Hospital Sunday this year to make out-door collections and hold street processions in the West-end in aid of the Temperance Hospital and King's College Hospital. The Council strongly condemned such a movement, and expressed the hope that it would not be repeated.

The report of the Committee of Distribution stated that they recommended the payment of awards to 154 institutions, being equal in number to those which shared last year's fund, and an increase of forty-nine since the first awards were made in 1873. The following were the principal awards: — Charing-cross Hospital, £833 6*s.* 8*d.*; King's College Hospital, £1302 1*s.* 8*d.*; London Hospital, £3125; St. George's, £1979 3*s.* 4*d.*; St. Mary's, £1666 13*s.* 4*d.*; University College, £1562 10*s.*; and Westminster Hospital, £937 10*s.* The total amount available for distribution after allowing sufficiently for liabilities and the usual current expenses was £38,279, of which £36,679 was recommended for distribution among the various hospitals and dispensaries of London, and £1600—4 per cent. of the total collected—was set apart for the purchase of surgical appliances.

Sir SIDNEY WATERLOW, in proposing "that the report of the Committee of Distribution for 1886 is hereby approved and that the several awards recommended be paid as soon as possible," congratulated the Council on the very largely increased sum placed at their disposal this year for distribution, and which had enabled them materially to augment the grants to the various institutions according to their needs and merits. They had now 50 per cent. more institutions sharing in the Fund than when it was first started in 1873. The necessity for increased help could not be too thoroughly grasped. The number of beds in the hospitals to which grants were made was 6412, but the average number occupied was only 4853. In the convalescent homes there were 2178 beds, but only 1420 were occupied for want of money. If the public could only appreciate what a great benefit their offerings afforded to the sick poor, he was sure that the Fund would be constantly and systematically helped.

Dr. GLOVER seconded and Sir E. HAY CURRIE supported the resolution, both urging that the fact of there being so many vacant beds in existing hospitals and convalescent homes should at least have the effect of preventing the starting of similar institutions until the others were overcrowded. The report was then put and carried. The following resolutions were afterwards carried: "That the cordial thanks of this Council be and are hereby given to the several members of the Committee of Distribution for the time they have so successfully given, as well as for the trouble so well bestowed in presenting the very efficient report of their proceedings"; and "that the thanks of this Council be and are hereby given (*a*) to the Right Hon. John Staples, F.S.A., Lord Mayor, for the special interest he has shown by cheerfully meeting the unusual calls that have been made upon his time and attention in this special year in connexion with the organisation of the 'Hospitals Week'; (*b*) to his Royal Highness the Duke of Cambridge, to the Marquis of Salisbury, to Sir Andrew Clark, Bart., to the Earl of Dartmouth, to the Duke of Norfolk, to the Earl of Northbrook, to the Duke of Westminster, to E. R. Cook, Esq., M.P., and to those noblemen and gentlemen who pleaded the cause of the hospitals on the several district platforms at the meetings held throughout London; (*c*) to the members of the metropolitan press who have ably advocated the cause of the hospitals, and who have fully reported the proceedings day by day through the 'Hospitals Week,' as by these efforts, combined with those of the clergy and ministers of religion, the largest sum yet received in one year has been collected in the churches and chapels of the metropolis on Hospital Sunday of 1886, the total sum received at the Mansion House in the present year to this date being £38,800."

The meeting then separated.

The total amount received up to the 3rd inst. was £38,800.

The following letter has been received by Dr. Wakley from the Lord Mayor in connexion with the first resolution passed at the above meeting:—

"Mansion-house, London, E.C., July 30th, 1886.

"MY DEAR SIR,—I have very great pleasure in handing you the enclosed copy of resolution which has been passed unanimously this day by your colleagues on the Council, and I may add that the sincere expressions of sympathy around the table were general. Let me add my hearty congratulations on the success which has attended the movement which you inaugurated. "Faithfully yours,

"JOHN STAPLES, Lord Mayor, President."

"James Wakley, Esq., M.D., &c., Editor of THE LANCET, Heathlands Park, Longcross, Chertsey."

DIRECT REPRESENTATION OF THE PROFESSION: MEETING AT HIGHBURY.

THE CANDIDATURE OF DR. GLOVER.

A MEETING of practitioners in the north of London and some others was held on Thursday, July 29th, at the house of Mr. Cattlin, 1, Highbury-place, to consider the desirability of selecting a candidate for the forthcoming election of direct representatives on the Medical Council. Among those present were Sir Andrew Clark, Mr. Malcolm Morris, Dr. Anderson, Mr. Nelson Hardy, Mr. Pearce Gould, Mr. Keele, Dr. Potter, Dr. Stokes, Dr. Reed, Mr. Thomas Wakley, Mr. C. H. Wade, Dr. E. H. Cree, B. G. Morison, M.B., Mr. Worley, J. J. Lough, M.B., Mr. H. F. Stokes, Dr. Williamson, Mr. W. H. Kesteven, Mr. A. Skipton, Mr. Jackson, Mr. E. Dukes, Mr. W. Cattlin, and Mr. King.

Dr. STOKES was called to the chair, and, in opening the discussion, referred to the Medical Act, and stated that the obvious intention of Parliament was that the direct representatives should be truly representative of the large body of general practitioners, members of that body themselves, and chosen by it. He thought it was important to take steps at once to recommend a candidate to the general body of the practitioners.

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Mr. KEELE explained the origin of the meeting, and stated that it had been called at the request of several of the local medical men. Letters expressing regret at their unavoidable absence and concurrence in the object of the meeting had been received from Dr. Cribb, Dr. Bateman, Mr. Godfrey, Mr. Tait, Dr. G. J. Stevens, Dr. Hamilton, Mr. James Jackson, and others. Mr. Keele then read the part of the Medical Act referring to the direct representatives.

Sir ANDREW CLARK said that, although he came at the urgent request of a friend, he yet was there with all his heart. The privilege of direct representation had at last been granted. In his opinion it was wise and just, and had become necessary. He thought it morally certain that this boon was intended for those who constitute the great bulk of the profession, who do most work in it, and who are more responsible to the general public than all the consultants put together. The consultants, moreover, are already over-represented on the Council. Therefore, he hoped the general practitioners of the country would elect members of their own body. For the profession to elect consultants would be to stultify itself. He anticipated that this measure would do great good in welding into one body the entire profession, whose duties and aims are really one. But the election by such a constituency was a very difficult matter, and care, he thought, should be taken neither to elect consultants nor *dilettanti*, but only men who were in deed and truth in general practice. Then the candidates ought to be well acquainted with the recent history of the profession and known to the leading men in the profession. Lastly, it was highly important that they should be men of upright and independent character. Such men were not easy to find, but he knew one man who fulfilled all the necessary conditions, and who, if elected, would be one of the best possible members of the Medical Council—this was Dr. Glover. He knew no one more honest, upright, and independent than Dr. Glover, and he earnestly hoped that he would be elected.

Mr. NELSON HARDY fully agreed that Dr. Glover was the right man to represent the general practitioners on the Medical Council. Dr. Glover was particularly well acquainted with the work of the Council, for he had attended all its meetings for some time past, and was thoroughly familiar with the work the Council has to do. He was also sure that he would always truly represent the general body of the practitioners.

Mr. JACKSON proposed that Dr. Glover should be requested to stand.

Dr. REID seconded this resolution, which was carried most heartily. He hoped all present would do their utmost to secure Dr. Glover's election.

Mr. T. WAKLEY thought Dr. Glover was practically the man for the post. For years he had been regular in attendance upon the meetings of the Medical Council, and also at all committees of the Houses of Lords and Commons on medical matters. He was very specially indicated as the right man for the place, and it would be a pleasure to him to do anything in his power to secure Dr. Glover's election.

The resolution was carried unanimously and very heartily.

Dr. GLOVER then shortly addressed the meeting. He deeply thanked the gentlemen present. This was eminently a matter in which a man should be supported by his neighbours in the first instance, and if he could not have their support he had better not come forward. But it was very gratifying to him to see so many friends from a distance at the meeting, and he was specially grateful to Sir Andrew Clark for coming so far after a hard day's work to testify in favour of electing a genuine general practitioner. He said the Act was a very imperfect one, and even in the matter of direct representation it was not satisfactory. It enlarged an already too large Council, and the direct representatives would only be one-sixth of the Council, or five out of thirty. It was the more important, therefore, that those chosen should be chosen from the body of the profession. He would have preferred to take a little more time to think over the matter, but he was in the hands of the meeting and would be entirely guided by his friends. As it seemed the unanimous and hearty wish of the meeting, he agreed to stand.

A discussion then ensued upon the best course to be pursued to promote Dr. Glover's candidature, in which Sir Andrew Clark, Mr. Wakley, Dr. Anderson, Mr. Malcolm Morris, Dr. Stokes, Mr. Keele, Dr. Reid, Dr. Potter, Mr. Morison, and others took part. It was ultimately decided to resolve the meeting into a grand committee, with power to add to their number, and of that number a small executive committee was appointed, with Mr. Keele, Dr. Reid, and Mr. H. F. Stokes hon. secretaries. A cordial vote of thanks to Dr. Stokes was passed and suitably acknowledged, and the meeting soon after broke up.

WILLS OF MEDICAL MEN.

THE Scotch Confirmation, under seal of office of the Clerk of the Court at Aberdeen, of the trust, disposition, and settlement, with two holograph codicils, of James Milne, M.D., of Huntley, Aberdeenshire, who died on April 25th last, granted to James Watt Black, M.D., John Wilson, Robert Milne, and James Black Milne, M.B., the surviving and accepting executors nominate, was resealed in London on the 19th ult., the value of the personal estate in England and Scotland amounting to upwards of £32,000.

The will and codicil of Harvey Kimpton Owen, M.D., F.R.C.S., formerly of 20, Palace-square, and late of 60, Belvedere-road, both at Upper Norwood, who died on May 7th last, were proved on June 16th by Stamford Felce, Francis Shipston Self, and William Horsley, the executors, the value of the personal estate amounting to over £12,000. The testator bequeaths £1800 to the Royal Medical Benevolent College, Epsom, to found a scholarship to be called the "Harvey Owen" Scholarship, the conditions of which are fully set out in his will; £500 to the British Medical Benevolent Fund, of the committee of which he was for many years a member; £300 to the Society for the Widows and Orphans of Medical Men in London, of which he was vice-president; £200 to the widows' fund of the Apothecaries' Company; £100 to the distressed members' fund of the same Company; £50 each to the Lambeth Pension Society, the British Orphan Asylum, Mackenzie-park, the British Bible Society, to the minister of Gipsey-hill Church for the local charities, and to the minister of the Church of St. George-in-the-East, in which parish he was born, also for the local charities; and numerous legacies to his sister and others. The residue of his pure personal estate he leaves upon trust; £10 is to be given annually to the School Recreation Fund of the Royal Medical Benevolent College, and the remainder of the income is to be applied to the purchase of a presentation to St. Ann's or other established institution for a grandchild of one of those on the list of candidates for a pension, providing he is a medical man, or a female child of those seeking a foundation scholarship for their children. The ultimate residue of his property he gives to his sister, Miss Margaret Mary Owen.

The will of Mr. Timothy Richards Lewis, Surgeon-Major H.M. Army, late of Bywood, Woolston, near Southampton, who died on May 7th last, was proved on July 1st by the Rev. James Lewis, Mr. John Lewis, and the Rev. John Morlais Jones, the executors, the value of the personal estate amounting to nearly £4000. The testator appoints the trust funds under his marriage settlement, subject to his wife's interest, to his children equally. He bequeaths his furniture and effects to his wife, Mrs. Emily Frances Lewis; and there are a few other legacies. The residue of his real and personal estate he leaves upon trust for his wife for life, if she remains so long his widow, and then for his children.

The will of John Traill Urquhart Bremner, M.D., Inspector-General R.N., late of 4, Strand-terrace, Walmer, who died on May 8th last, was proved on July 13th by Mrs. Julia Bremner, the widow, the value of the personal estate amounting to over £2000. The testator gives all his estate and effects whatsoever and wheresoever situate to his wife.

The will of Arthur Gardiner, M.D., M.R.C.S., formerly of College-square, Belfast, late of 14, Colville-road, Bayswater, who died on April 21st last, was proved on June 21st by the Rev. John Samuel Gardiner, the son, the sole executor, the value of the personal estate exceeding £2000. The testator leaves his interest in certain house property at Dublin and Merrion upon trust for his two grandsons, Arthur Gardiner and John Stanley Gardiner; the residue of his estate he gives to his said son.

The will and two codicils of William Paton Mackay, M.D., late of the Park, Kingston-upon-Hull, who died on August 28th last, in the Island of Skye, were proved at the York District Registry on June 23rd by Alexander Russell Simpson, M.D., and Robert Russell Simpson, the acting

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executors, the value of the personal estate exceeding £1000. The testator makes a provision for his father and mother, if they survive him; and subject thereto the trusts of the will are for the benefit of his wife and children.

The following legacies have recently been left to hospitals and other medical institutions:—Miss Helen Mary Covey of Castle-hill, Maidenhead, Berks, £50 each to the Brompton Consumption Hospital, the Hospital at Reading, the Bath Hospital, King's College Hospital, the National Hospital for the Paralysed and Epileptic, Queen's-square, the Royal Free Hospital, the Cancer Hospital, Brompton, the Convalescent Home at Uphill, near Weston-super-Mare, and the Maidenhead Cottage Hospital; and £25 each to the British Hospital for Incurables, Clapham-rise, and the Convalescent Home at Eastbourne.—Mr. Calvert Toulmin, of 38, Inverness-terrace, Hyde Park, £100 each to the Hospital for Sick Children, Ormond-street, the Royal Hospital for Incurables, and the British Home for Incurables.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Derby Urban District.—The vital statistics for the borough of Derby during 1885 show a birth-rate of 34·0, and a death-rate of 18 per 1000, the latter being the lowest hitherto recorded. Infant mortality, as measured by the proportion of deaths of children under one year of age to registered births, was 13·8 per cent. Amongst the sanitary work that is in progress the provision of a new infectious hospital in place of the wooden sheds originally erected during a small-pox emergency holds a prominent position. As yet the sum to be devoted to this purpose is only £4000, an amount for which it will obviously be impossible to provide the total number of beds which such a borough as Derby should regard it as necessary to possess permanently. But we hope the earliest instalment of hospital provision will include some isolation rooms for special cases. Only recently a man was removed to the existing hospital because two medical practitioners held that an eruption so far resembled small-pox that it would not be right to leave him where he then was. On the day following his removal to hospital the rash had so far developed as to show that it was not an infectious case, and the man was shortly returned to his home. Such cases must at times arise, and since patients are removed by the sanitary authorities in the interests of the public, the public should see that such accommodation is provided for their reception as will free them from the risk of contracting any other ailment in the hospital. The medical certificates received under the Local Act requiring the notification of infectious diseases were 222 in number, the actual cases thus brought under notice being 292, of which 232 were scarlet fever. Mr. Iliffe says that no difficulty arose in connexion with the Act, which was enforced without any of those drawbacks, infringements of the rights of the public, or even trespassing on the liberty of the subject or the sanctity of the confidence subsisting between medical men and their patients, which were at one time prognosticated by a few persons in the borough.

Gloucestershire Combined Sanitary Districts.—Viewing these five urban and eight rural districts as a whole, Dr. Bond is able to speak favourably of their sanitary history during 1885, the thirteenth year on which he has had to report; and it is especially noteworthy that, compared with the average of preceding years, the death-rate from zymotic diseases is low. The general death-rate from all causes stood at 15·9 per 1000. Grouping scarlatina, diphtheria, and croup together under the heading "scarlatinoid disease," it is pointed out that there is a general subsidence of a great wave of this affection which found its culmination in 1883. During 1885 the mortality had not been high, but the disease being characterised by mildness in type, a low death-rate resulted. Then, again, the bulk of the cases occurred in the early part of the year, since which there has been an abatement. One very satisfactory feature of the report is the remarkably low mortality from the group of continued fevers. In 1884 it was stated that the lowest point within the recent sanitary history of these districts had been reached as regards fever deaths, but 1885 exhibits a still further reduction of over 60 per cent. During the past year two rural districts have found themselves without hospital provision when in the face of small-pox, and as a result a serious expenditure was incurred in providing for the requirements of others than those immediately attacked, a burden which need not have been borne had the districts been provided in advance with some proper means of isolation for those actually sick. Dr. Bond refers to the beneficial result in this matter which has been brought about by pressure from the Local Government Board in securing a combination of riparian authorities on the Sharpness Canal, a place having now been provided by these for the isolation of any cholera cases, and he would wish such pressure extended to inland authorities. As regards such matters as the supervision of new buildings, slaughter-houses, bakehouses, offensive trades, &c., action necessarily varies in the different districts, but on the whole the system of sanitary administration which has been organised works well and with increasing success.

Hendon Urban District.—The death-rate for this district is the lowest Dr. Cameron has ever had to record—namely, 14·0 per 1000. The report enters into details as to the scarlatina outbreak which occurred in connexion with the use of milk from cows having a specific disease. This outbreak has been fully discussed both in connexion with Mr. Power's and Dr. Klein's reports on the whole circumstances, and in connexion with that part of it which Dr. Cameron brought under the notice of the Epidemiological Society. As regards the general sanitary administration of the district, not much that is of importance outside the localities affected is recorded. The work done and the defects remedied are shown in a tabular form; as many as 1491 houses were examined, with the result that defects were remedied when found to exist. The disposal of the sewage of the district still remains to be dealt with, since the negotiations of the authority with the Native Guano Company for the construction of precipitation works at the outfall have fallen through.

Kingston-on-Thames Urban District.—The death-rate for this borough has almost steadily fallen from 18·4 per 1000 in 1879 to 15·7 in 1885. The matter that causes most concern in connexion with the health of the district is the prevalence of diphtheria, which for the past two years had led to a death-rate largely in excess of that for England and Wales as a whole. Some parts of the borough lie on a low site, characterised by humidity of atmosphere, which is regarded by Dr. Shirtliff as tending to the production of superficial forms of ulcerated throat, affections which in turn form a suitable soil for the development of diphtheria under the influence of certain insanitary conditions. Sewer air seems to be the main condition to which diphtheria is attributed, and its influence for mischief is associated with the perversion of rain-pipes into sewer ventilators—an arrangement which is faulty from every point of view, and which more than any other tends to lead to failure at the very times when free ventilation of sewers is most needed. Whatever the cause of diphtheria, it is certain that this disease, when once present, spreads widely by personal intercommunication, and that isolation is one of the remedies which it is imperative to hold in view. The report refers to the absence of the needed infectious hospital, and it is suggested that the hospital which the rural sanitary authority have wisely determined to erect may ultimately be permitted to serve for this urban district also. A public slaughter-house is also named as one of the more prominent wants of the district.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 5951 births and 3593 deaths were registered during the week ending July 31st. The annual death-rate in these towns, which had slowly increased in the preceding six weeks from 16·8 to 20·2, further rose last week to 20·6. During the first four weeks of the current quarter the death-rate in these towns averaged 19·7 per 1000, and was 1·6 below the mean rate in the corresponding periods of the ten years 1876-85. The lowest rates in these towns last week were 11·2 in Hull, 11·7 in Brighton, 14·8 in Derby, and 14·9 in Sheffield. The rates in the other towns ranged upwards to 24·7 in Preston, 25·5 in Norwich, 26·9 in Cardiff, and 31·0

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in Leicester. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had steadily increased in the preceding seven weeks, under the influence of the mortality from infantile summer diarrhœa, from 263 to 754, further rose last week to 872; they included 646 from diarrhœa, 83 from measles, 59 from whooping-cough, 39 from "fever" (principally enteric), 23 from scarlet fever, 22 from diphtheria, and not one from small-pox. The lowest death-rates from these zymotic diseases were recorded last week in Hull, Oldham, and Huddersfield; and the highest in Birkenhead, Norwich, and Leicester. The mortality from diarrhœa showed a further general increase, the largest excess being recorded in Cardiff, London, Birkenhead, Norwich, and Leicester. Measles caused the highest death-rates in Halifax, Birkenhead, and Preston, whooping-cough in Preston, and "fever" in Cardiff and Portsmouth. Small-pox caused no death either in London and its outer ring or in any of the twenty-seven large provincial towns. The number of small-pox patients in the metropolitan hospitals situated in and around London, which had been 13 and 11 on the preceding two Saturdays, had further declined to 10 at the end of last week; 1 case was admitted to these hospitals during the week, against 3 and 2 in the previous two weeks. The deaths referred to diseases of the respiratory organs in London, which had declined in the preceding four weeks from 197 to 162, were last week 172, and 18 below the corrected average. The causes of 71, or 2·0 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Salford, Leicester, Brighton, Bolton, and in six other smaller towns. The largest proportions of uncertified deaths were registered in Sheffield, Oldham, and Bristol.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 19·1, 19·2, and 19·8 per 1000 in the preceding three weeks, declined again to 19·5 in the week ending July 31st; this rate was 1·1 below the mean rate during the same week in the twenty-eight English towns. The rates in the Scotch towns last week ranged from 14·6 in Greenock and 15·6 in Paisley, to 21·2 in Edinburgh and in Aberdeen. The 481 deaths in the eight towns showed a decline of 8 from the number in the previous week, and included 34 which were referred to diarrhœa, 18 to whooping-cough, 8 to measles, 4 to scarlet fever, 2 to diphtheria, 1 to "fever" (typhus, enteric, or simple), and not one to small-pox; in all, 67 deaths resulted from these principal zymotic diseases, against 68 and 65 in the preceding two weeks. These 67 deaths were equal to an annual rate of 2·7 per 1000, which was 2·3 below the mean rate from the same diseases in the twenty-eight English towns. The deaths referred to diarrhœa, which had increased in the preceding six weeks from 8 to 33, further rose last week to 34, of which 15 occurred in Glasgow, 7 in Edinburgh, and 6 in Dundee. The annual death-rate from diarrhœa in these Scotch towns last week did not, however, average more than 1·4 per 1000, whereas the mean rate from the same cause in the twenty-eight English towns was 3·7. The 18 fatal cases of whooping-cough corresponded with the number in each of the previous two weeks, and included 13 in Glasgow and 2 in Perth. The 8 deaths from measles showed an increase of 5 upon the number in the previous week, and included 4 in Edinburgh, 2 in Glasgow, and 2 in Leith. Three of the 4 fatal cases of scarlet fever occurred in Glasgow, and the single death from "fever" in Paisley. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had declined in the preceding six weeks from 93 to 67, further fell last week to 63, but exceeded the low number in the corresponding week of last year by 8. The causes of 67, or nearly 14 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 19·7 and 21·0 per 1000 in the preceding two weeks, declined to 17·3 in the week ending July 31st. During the first four weeks of the current quarter the death-rate in the city averaged 20·3; the mean rate during the same period was 21·0 in London and 19·2 in Edinburgh. The 117 deaths in Dublin last week showed a decline of 25 from the number in the previous week, and included 2 which were referred to scarlet fever, 1 to diphtheria, 1 to "fever," 1 to diarrhœa, and not one to small-pox, measles, or whooping-cough. These 5 deaths from the principal zymotic diseases showed a considerable decline from the numbers in recent weeks, and were equal to an annual rate of 0·7 per 1000, the rates from the same diseases being 6·7 in London and 2·7 in Edinburgh. The 2 deaths from scarlet fever showed a slight increase upon the numbers in the preceding two weeks, whereas the fatal cases of each of the other zymotic diseases (including diarrhœa) had declined. Three inquest cases and 3 deaths from violence were registered; and 32, or nearly one-third of the deaths, were recorded in public institutions. The deaths of infants, as well as those of elderly persons, showed a considerable decline from the numbers returned in the previous week. The causes of 20, or more than 17 per cent., of the deaths registered during the week were not certified.

THE SERVICES.

INDIA OFFICE.—Brigade Surgeon G. Farrel, of the Indian Medical Department, has been appointed Principal Medical Officer to the troops in Upper Burmah.

ADMIRALTY.—The following appointments have been made:—Surgeon Arthur W. May, to the Portsmouth division of Royal Marines; and Surgeon James O. B. Williams, to the *Jackal*, for temporary service.

ENGINEER VOLUNTEERS.—1st Cheshire: Hugh Miller, M.D., to be Surgeon.

RIFLE VOLUNTEERS.—1st Volunteer Battalion, the Buffs (East Kent Regiment): Surgeon and Honorary Surgeon-Major C. Holttum resigns his commission; also is permitted to retain his rank, and to continue to wear the uniform of the battalion on his retirement. Philip Phelps, Gent., to be Acting Surgeon.—2nd Perthshire (the Perthshire Highland): John Allan, Gent., M.B., to be Acting Surgeon.—2nd Volunteer Battalion, the Worcestershire Regiment: Captain Joseph Randle Buck is appointed Surgeon.

Correspondence.

"Audi alteram partem."

CLOSURE OF LOCK HOSPITALS IN INDIA.

To the Editor of THE LANCET.

SIR,—A little over a year ago it was announced that the Government of India had decided to close several lock hospitals as an experimental measure, and in the North-West Provinces four were selected and closed during the year 1885. Immediately after this order appeared I drew attention to it in your columns, and predicted that the inevitable result would be an enormous increase in disease among our European troops. The stations selected were Allahabad, Cawnpore, Meerut, and Chakrata. The result is now before the public in the annual report of the Government of the North-West Provinces to the Government of India, and how true my forebodings were is only too evident.

The following *verbatim* extracts from the report in question will speak for themselves:—Paragraph 3: "In 1885 the lock hospitals at four important military stations were closed; but a careful record of disease was maintained for comparison with stations in which the former system was maintained. The result is undoubtedly to show an enormous increase of disease. The ratio of hospital admissions rose in Allahabad from 260 to 850 per 1000; in Cawnpore from 166 to 309; in Meerut from 328 to 472; and in Chakrata from 123 to 244."

This is bad enough, but it is not the worst part of the tale, as in all the neighbouring stations disease increased in an unprecedented manner—a fact which may fairly be attributed to the migration of diseased women, who infected the men, and through the men the registered women in protected places. "In Agra the rate of admissions per 1000 rose from 223 to 416; in Bareilly, from 228 to 485; in Moradabad, from 424 to 972 (in this station the lock hospital was temporarily closed during the absence

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of troops, so that on their return the registered and unregistered women were much diseased); and in Naini Tal, from 196 to 304. In only three stations, Jhansi, Muttra, and Fatehgarh, were the results better than in the previous year."

The Sanitary Commissioner in his report to the Government of the North-West Provinces characterises the results of the experiment at Allahabad as "lamentable," at Cawnpore as "very unsatisfactory," at Meerut the same remark applies, and at Chakrata as "fairly satisfactory," though the ratio of admissions at this station rose from 123 to 244 per 1000! The Lieutenant-Governor's report concludes by saying: "The results of the year give occasion for considerable concern, and already indicate a doubt (!) whether the system of cantonment lock hospitals can be relaxed or abandoned without a serious increase to service-incapacity in the troops. Further experience, however, is required to warrant the condemnation of the experiment made last year." With reference to these remarks I will again quote the Sanitary Commissioner's report, paragraph 81: "Its figures are such as have never before fallen to my lot to record, in all this series of twelve reports. As regards the garrison generally, they witness to the unprecedented ratio of 346·3 admissions to hospital per 1000 of strength, for comparison with 224·9 in 1884. As regards the garrison of the four stations of abolished management, they witness to a mean admission ratio of 468·4, for comparison with 218·8 in 1884. . . . Viewed in any possible light, the figures present proof of most unsatisfactory result."

Now for a few facts. During the year 1885, no fewer than 1950 diseased women were admitted and treated in the lock hospitals that remained open, at a total cost of 28,833 rupees, or, at the present rate of exchange, considerably less than £2000; out of which sum, however, the Government paid only 2889 rupees, or under £200, the remainder having come from the cantonment funds—the sale of grass, wood, letting of land for grazing, tillage, &c. Out of about 11,000 men 4002 were admitted for venereal disease, and, putting the average of each man at twenty days in hospital, and charging one shilling a day for his maintenance, medical attendance, &c., we have an actual money loss to the State of over £4000, to say nothing of the indirect loss caused by deaths and invaliding, the result of disease. In this garrison we may take it that, on an average, one company of men are constantly off duty, suffering from venereal disease, and when this is multiplied by the remainder of the Indian garrison, the enormous amount of inefficiency from this cause will be apparent. We hold India by the sword, and the health of every unit of the army is a matter of such extreme importance to the State that it appears simply suicidal to attempt to repeal laws that were doing so much good. It is not difficult to foretell the result of any further experiments in the same direction; but it would appear that "Quem Deus vult perdere, prius dementat" is as applicable as ever, and to none more so than the advisers of the Government of India.—I am, Sir, yours obediently,

J. B. HAMILTON, M.D.,
Brigade-Surgeon, Med. Staff.

Station Hospital, Lucknow, July, 1886.

THE PECULIAR PEOPLE.

To the Editor of THE LANCET.

SIR,—In your issue of to-day's date I notice under the above heading a criticism of the evidence given by me at an inquest on the body of a child who had died without medical attendance. At the post-mortem I found a caseous mass in the left lung, with general tuberculosis of lungs, liver, spleen, intestines, &c. There was also tubercular meningitis, which was the immediate cause of death. Under these circumstances I was certainly unable to swear that life would *positively* have been prolonged by medical treatment, and the coroner, in the absence of such evidence, most properly directed the jury not to return a verdict of manslaughter. Whether medical attendance during measles and the subsequent broncho-pneumonia would have prevented the cavitation of the lung is doubtful, and if all parents of the lower orders are to be deemed criminals for [illegible] a doctor in measles our prison accommodation will be insufficient. The law on these cases was laid down in R. *v.* Morbey (8, Q.B.D., 571), as [illegible] neglect on the part of a parent to provide [illegible] child of tender years, in consequence of which his child dies, is not manslaughter, unless it is proved *affirmatively* that the death was caused or accelerated by such neglect; and medical evidence on behalf of the prosecution that the child's life *probably* might have been prolonged or saved by the parent calling in medical aid is not sufficient evidence to support a conviction" (Harris on Crimes). Such, right or wrong, is the law, and I maintain, Sir, that a verdict of manslaughter in this case was not warranted by the facts, and would have been promptly quashed by the judge at the Central Criminal Court. As I think the comment on myself rather unfair, I must ask you to insert this in your next issue.—I am, your obedient servant,

C. LLOYD JONES, M.A., M.D., Barrister-at-Law.

Blackfriars-road, S.E., July 31st, 1886.

ASSOCIATION OF MEMBERS OF THE ROYAL COLLEGE OF SURGEONS.

To the Editor of THE LANCET.

SIR,—Will you allow me, through the medium of THE LANCET, to inform Members of the Royal College of Surgeons of England, that the petition prepared by the Association of Members of the College (and which has been already extensively signed) will lie upon the table of the entrance hall Pavilion, Brighton, during the time of the meeting of the British Medical Association. All Members who have not yet signed are earnestly requested to do so. If possible, a meeting of the Members of the College will be arranged for Wednesday next.—I am, Sir, yours &c.,

JOSEPH SMITH,
A Vice-President of the Association of Members of the Royal College of Surgeons of England.

Thornton-avenue, Streatham-hill, Aug. 5th, 1886.

EDINBURGH.

(*From our own Correspondent.*)

UNIVERSITY GRADUATION CEREMONIAL.

THE Annual Graduation Ceremonial in Medicine, Law, and Divinity took place in the United Presbyterian Synod Hall on Monday, Aug. 2nd. As is usually the case, the graduates in medicine far outnumbered those of other faculties, and reached a number never attained in former years, since 219 gentlemen were promoted to the degrees of M.B. and C.M., and 49 to that of M.D. A number of honorary degrees were at the same time conferred; amongst them that of LL.D. was bestowed upon Professor Tarnier of Paris, who met with a most enthusiastic reception upon his presentation for the degree. Lord Inglis, the Chancellor of the University, presided, and performed the ceremony of "capping" the graduates—a part of the proceedings which was this year unusually protracted. The customary graduation address was delivered by Professor John Chiene, of the chair of Systematic Surgery. His speech dealt chiefly with topics of local interests and contained suggestions of a valuable nature tending to the further development and increased prosperity of the Edinburgh school. More especially he urged the claims of post-graduate instruction and of hospital extension, and in regard to the latter he appealed with telling force to the inhabitants of Edinburgh, showing clearly how much the city owes to the existence of its great medical school, how it could be best maintained in its present prosperous condition, and the opportunity it offered for still further advances in the efficiency of its system of training by the provision of increased facilities for practical instruction. This appeal was accompanied by a short summary of the details of a plan by which the accommodation for hospital patients can be raised to a total strength of 1000 beds. The particulars of the plan do not involve any great alterations, and would seem in many respects to have been allowed for as distant possibilities when the present hospital was designed in 1869. They are rather of the nature of a completion than of a modification of original intentions; and, considering the immense boon which they would prove to patients, to teachers, and to taught, it is to be hoped that the £60,000, which Professor Chiene estimates they will cost, may be soon forthcoming. Professor Chiene reviewed also in his address the present

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arrangements for clinical examinations in Edinburgh, and advocated the formation of joint boards of examiners in clinical medicine and surgery in connexion with the university and corporations' final examinations, so that by this means all the available hospital material might be freely drawn upon for the purposes of each, and a system of cordial reciprocity thus established between the two forces which constitute the Edinburgh school.

Edinburgh, Aug. 3rd.

BELFAST.

(From our own Correspondent.)

THE CHAIR OF SURGERY IN QUEEN'S COLLEGE.

ALTHOUGH there has been no public notification that Dr. Gordon has resigned the Professorship of Surgery in Queen's College, which he has so worthily filled since 1849, it seems to be generally understood that he will not again lecture, and already there is considerable discussion, as well as speculation, in medical circles as to his probable successor. Three canditates are in the field—Dr. J. Walton Browne, Mr. John Fagan, and Dr. Thos. Sinclair. Dr. Browne (son of Dr. Samuel Browne) is senior surgeon to the Royal Hospital, and surgeon to the Belfast Ophthalmic Hospital, and at both of these institutions he has for a long time been a clinical teacher. He is an ex-president of the Ulster Medical Society, and holds the degrees of B.A. and M.D. of the Queen's University; and he is also a member of the Royal College of Surgeons of England. He became qualified in 1867. Mr. John Fagan is a surgeon at the Royal Hospital and surgeon to the Belfast Hospital for Sick Children (an appointment which he has held since the foundation of the hospital in 1873), and at both places he has taught classes of students. He was president of the Ulster Medical Society last year, and is now president of the North of Ireland Branch of the British Medical Association He became qualified in 1866, and is a Fellow of the Royal College of Surgeons of Ireland. Dr. Thos. Sinclair is surgeon to the Ulster Hospital for Children, and assistant-surgeon to the Royal Hospital. When Dr. Anderson was appointed professor of natural history at Galway, Dr. Sinclair succeeded him as demonstrator of anatomy at Queen's College. He is an M.D. and M.Ch. of the Queen's University, and is a Fellow of the Royal College of Surgeons of England. He qualified in 1881. Two documents have already been sent to members of the profession here asking them, in the one case, to sign a testimonial to the President of the College in favour of Dr. Sinclair, and, in the other, to sign a memorial to the Lord-Lieutenant of Ireland on behalf of Dr. Walton Browne. It is said also that a number of the students have framed a petition in favour of Dr. Sinclair's appointment. The duties of the chair consist in giving a systematic course of lectures on the theory and practice of surgery, and in conducting a class of operative surgery. It is a winter lectureship. The appointment rests with the Lord-Lieutenant, who sends the applications and testimonials to the President of the College, asking his opinion, and, as a rule, his nomination is accepted.

Belfast, Aug. 3rd.

PARIS.

(From our own Correspondent.)

TINEA IN FRANCE.

A PROPOSITION has been made at the Paris Municipal Council by Dr. Robinet, one of its members, to the effect that, considering that children affected with tinea in its various forms are treated in the general hospitals, where they are not even separated from the other patients, and where consequently they themselves are liable to contract the contagious maladies prevalent in these hospitals (diphtheria, measles, scarlet fever, variola, whooping-cough, &c.), and considering also that the hospitals for children are overcrowded, it is expedient that a separate hospital should be established for the treatment of the class of skin diseases above named. This arrangement will have the advantage of preventing the spread of the disease in question, and will leave more beds available in the general hospitals for other diseases. To give your readers an idea of the great prevalence of tinea in this country, I may mention that at a recent meeting of the Academy of Medicine, Dr. Feulard furnished the following statistics concerning favus among conscripts. From 1873 to 1885, 3872 men were rejected by the examining board on account of their being affected by that disease. The departments which furnished the most of these cases are Pas-de-Calais, Nord, Aveyron, Tarn, Herault, Landes, Seine-Inférieure, and Côtes-du-Nord. These departments constitute three distinct geographical groups, north, west, and south. These results are the same as those obtained by M. Bergeron, who made similar researches in 1865. From 1841 to 1849 M. Bergeron recorded 730 annual exemptions from favus. At that period a comparatively small number of men were examined. From 1850 to 1860, the yearly average was estimated at 438 men affected with favus out of the total number examined, but the real number would be much higher, being estimated at 800. From 1873 to 1885, the yearly average is stated to have been 300, thereby showing a decrease of more than half in the number of exemptions from this cause. A more regular and exact inspection of schools and the isolation of persons suffering from favus are considered to be the best means of preventing the extension of the disease among the population.

M. CHEVREUL.

In anticipation of the 100th birthday of M. Chevreul, the venerable Academician, which occurs on the 31st of this month, a series of fêtes have already commenced. A banquet was given on Saturday last, in the Latin quarter, by the students of the University, in honour of him whom they styled their "doyen," or the senior student. Great preparations are being made for a grand *fête de nuit* in the garden of the Luxembourg Palace, to which present and former students, with others who have been invited, wil alone be admitted.

ORGANISATION OF HOSPITALS.

M. Paul Aubry, hospital externe, member of the Society of Commercial Geography of Paris, is charged with a mission to Athens, Constantinople, Broussa, Smyrna, Magnesia, Alexandria, and Cairo, to study the organisation of hospitals in these different cities, particularly as regards the treatment of leprosy and mental alienation.

M. PASTEUR.

Rumours have been circulated that M. Pasteur is lying dangerously ill from an attack of general paralysis. On making inquiry at his residence, I learned that the report was false. The eminent biologist is at present at his country villa, where he is enjoying peace and quiet, and is in tolerably good health.

HYDROPHOBIA AMONG CAMELS.

Several cases of hydrophobia are reported to have occurred among camels at Hezeilat (Algiers). It is stated that a few months ago two camels were affected by the disease, and died in thirty-six hours without presenting any trace of a bite. It is supposed that the disease was imported by a rabid horse which had during the night joined the herd. The propagation of the disease is attributed to the saliva which the rabid animals left on the pasturage, which saliva was probably absorbed by the sores in the mouth to which camels are frequently subject. The military authorities have interdicted for three months grazing on the pasturage in which the contaminated herds were enclosed.

DEATH OF DR. ESTOR.

Dr. Estor, Professor of Pathological Anatomy and Histology at the Faculty of Medicine at Montpellier, died suddenly, at the age of fifty-six, of disease of the liver.

Paris, August 3rd.

EGYPT.

(From our own Correspondent.)

FEVER EPIDEMIC AT TOURAH CONVICT PRISON.

REFERENCE has already been made to an epidemic of relapsing and typhus fevers which broke out at this prison last April, and, now that it is all ended it is fair to give a more detailed account of it. The prison cells, which were originally constructed to hold 648 convicts by night have been greatly overcrowded this year, owing to the want of

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sufficient prison accommodation in Egypt. During January and February the inmates averaged 955, and in March this excess rose to 1014. During the first week of April 120 convicts suffering from "fever" were admitted from the prison cells into a temporary hospital in the building, and a second native doctor, a dispenser, and some hospital necessaries were sent from Cairo to assist the overworked prison doctor. The prison is near a station on the Helonan Railway, about eight miles from Cairo, and has the advantage of being a few yards from the Nile and of being surrounded by very pure desert air. Two medical commissions, one entirely composed of natives, visited the epidemic, but, owing partly to the temporary absence of the English heads of the prison and sanitary departments, no satisfactory action was taken until May 14th, when the whole of the sick were officially placed under the charge of Dr. Milton, Director of Egyptian Hospitals, and the prison officials received orders to carry out any instructions given by the Sanitary Department. The state of affairs was then found to be as follows: 214 deaths had occurred during the six weeks ending May 15th, as compared with 34 during the previous six weeks, the total number of convicts thus being reduced to 760, of whom more than 200 were in hospital or sickening of fever. Many of the healthy men, the able-bodied of whom were working in stone quarries for eight hours a day, looked weak, thin, and anæmic, and both healthy and sick were unwashed and covered with lice, while no arrangement for washing existed in the establishment. No necropsies had been made, no notes or temperatures taken, very little medicine or stimulants administered, and neither of the native doctors in charge could throw much light upon the diagnosis of the patients. These were mostly lying on prison mats on the floor, and were fed on coarse native bread, and very little vegetables, with meat broth, and they were unprovided with conservancy arrangements. The work for the first few days consisted in diagnosing, classifying, and treating the sick, establishing a bath and special kitchen, issuing clean clothes, supplying beds, milk, brandy, and nourishing food, performing necropsies, and providing tents for convalescent patients as discharged from hospital. As preventive measures, the healthy were washed in the Nile, extra food, including meat, was served out to them, clean clothing provided, and the period of work reduced to three hours per day. The sanitary authorities also recommended roof ventilation to be immediately provided in the cells, but this was not at once carried out. The cells, originally built for 648 men, for eleven hours per diem, provided cubic space varying from 293 to 311 feet per man, and this was of course further reduced when the number of inmates was increased. The ventilation also was most deficient, and the conservancy arrangements very unsatisfactory. The hospital cases, roughly speaking, were found to be one-half relapsing fever, one-sixth typhus, one-sixth diarrhœa and dysentery, and the remainder lung and other diseases. Volunteers from the healthy were chosen to nurse the sick, and some of them contracted relapsing but not typhus fever. Many of the prison officials, from the governor to the warders, also suffered from relapsing fever. The deaths for the six weeks, commencing May 16th, were only about 77, and at the end of that time the epidemic was practically ended, only a few relapsing, convalescent, and diarrhœa cases remaining. In June, a Committee of Inquiry, consisting of a colonel and two surgeon-majors of the Army of Occupation, was appointed by the Egyptian Government, and their voluminous report has now been forwarded to the English Government. No cases of fever spread from the prison among the neighbouring villagers, and this immunity has been noticed in previous similar epidemics in Egyptian villages.

ENGLISH HOSPITAL AT RAMLEH.

The military hospital for the troops at Alexandria is situated on a cliff of the seashore, and forms part of the Mustapha Pasha Palace. The palace was burnt down in Ismail's reign and rebuilt in 1872, the foundations being partly taken from some well-preserved ruins of a Roman camp in the neighbourhood. In spite of its modern construction, the lath and plaster are everywhere decaying, and occasionally a whole ceiling falls. The maximum number of beds is 415, but this includes at least 100 in badly-ventilated corridors, which are only used when absolute pressure requires. Fifteen hundred cubic feet are allowed for each patient, and 2000 for enteric cases, which are kept in a separate wing of the hospital. The ventilation is perfect in most of the wards, a deliciously cool air blowing straight from the sea. The dry-earth system is of course used throughout the hospital and barracks, the stools, when disinfected, being taken out to sea. The total strength to-day in Alexandria is 2200, of whom 278 are on the sick list, and 56 are suffering from enteric fever. This gives a present sick rate of 12·6 per cent., and an enteric rate of 2·5. In 1883, the Alexandria returns for the year gave 10·9 sick rate, and 4·1 enteric; in 1884, sick rate 9·3, and enteric 5·3; in 1885, sick rate 8·4, and enteric 5·1. It should be mentioned that the four months from April to July are the worst months for enteric fever in Alexandria. An interesting case in the hospital lately will be reported in detail by the medical officers in charge. An English soldier, aged twenty-four, was in hospital for simple continued fever, and was thought to be doing well, when jaundice and other bad symptoms appeared, and he died three days after of acute atrophy of the liver. This disease is as rare in Egypt as in England.

ANNUAL REPORT OF THE GERMAN HOSPITAL.

The Victoria Hospital at Cairo, nursed and managed by the deaconesses of Kaiserswerth, has just issued its first report. The building was constructed at a cost of £5300 on land given by the Egyptian Government, and was opened for the reception of patients in January, 1885. During the year 186 inmates of twenty different nationalities and no less than seven religious beliefs were received. First-class patients pay 10*s.* a day, second-class 6*s.*, and the lowest class 2*s.* 6*d.* 2061 out-patients have also been treated during nine months of the year, but this number is far exceeded by those who now attend at the native hospital.

Cairo, July 24th.

Obituary.

WALTER MOXON, M.D. LOND., F.R.C.P.

THE death of Dr. Moxon leaves a gap in the ranks of the profession which it will be difficult to fill; not that there is any lack of good physicians, but because the physician in him showed only one side of a mind that exerted an extraordinary influence through the variety of its sympathies. That he was a physician of the highest type, well versed in literature, acute in observation, exact in diagnosis, and rational in treatment, all will be ready to admit; but when all the qualities that are essential to a great physician have been enumerated, and it is allowed that he possessed them in the highest degree, the picture fails to show in what his power lay; for Moxon's was a many-sided intellect, and this induced men of every profession to think him best suited for the one to which they themselves belonged. Barristers envied his rapidity of thought, fertility in argument, and fluency of speech; men of science were struck by his perseverance, his industry, and his immense power of grasping details; dignitaries of the church, if sometimes slightly alarmed by the breadth of his views, recognised that his fervour and gift of persuasion might exert influence from the pulpit, and would have had him ordained. Yet no one could say that Moxon was lost in the medical profession; perhaps no other would have allowed such free play for so fresh and vigorous a mind.

One of a large family, each individual of which has shown exceptional talent, Walter Moxon was born on June 27th, 1836, at Midleton, co. Cork, and was just fifty years of age at the time of his death. His father was in the Civil Service, and, migrating to London, became Chief Accountant of Inland Revenue, and one of the original founders of the co-operative system of trading. His mother was a fair maid of Kent, a lady of tender heart, strong faith, and true virtue, who by her gentle teaching and loving nature exerted a powerful and lasting influence over her family. To this son her memory was in itself a religion. He frequently visited her tomb; and at the last, when broken down in health and under strong presentiment of his approaching end, his steps were again directed towards her

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grave. Through his father he was distantly connected with Edward Jenner, the discoverer of vaccination, and one of the family bore his name.

Walter Moxon was educated at a private school, and at an early age was placed in a merchant's office in the city of London. But commercial pursuits proved to be little in accord with his refined tastes and generous nature: an imperious demand on the part of the principal excited a rebellious retort from the apprentice, which quickly terminated the engagement. Having now determined to enter the medical profession, he set himself to pass the difficult matriculation examination of the University of London, and this he accomplished without the assistance of a tutor. He entered as a student at Guy's Hospital in 1854, and soon attracted the attention of his teachers by the accuracy of his work and his exactness in points of detail. Among his fellow-students was Mr. Arthur Durham, with whom there existed a friendly rivalry for a position on the staff, to which each eventually attained. At the first M.B. examination of the University of London, which he passed in 1857, he was placed first in honours with an exhibition and a gold medal in materia medica, and second in honours with a gold medal in chemistry. In the following year, before graduation, he was appointed Demonstrator of Anatomy in the Medical School. This appointment, he always maintained, lowered his position at the second M.B., which he passed in 1859. Although he gained no exhibition at this examination, he took honours in every subject. He graduated M.D. in 1864, and was elected a Fellow of the Royal College of Physicians in 1868.

Moxon's faculty for teaching became at once apparent when he was appointed Demonstrator of Anatomy. The students crowded round him the moment he entered the dissecting-room, to be amused and instructed at the same time. His knowledge of the human frame was exact and complete; but it was not his habit to teach mere book anatomy, for he used to say, "The books have better memories than you have, and will beat you." His plan was rather so to interest his pupils as to make them search for themselves. An excellent draughtsman and a neat dissector, he possessed every qualification for the post, which he held for a period of five years. At this time the exigencies of examinations had not levelled the junior teachers to the grade of crammers, but left them plenty of time for original scientific investigation. Of this spare time Moxon made good use. He became a Fellow of the Linnæan Society, and devoted himself to microscopic research. In 1864 he read before this Society a paper on "New Points in the Anatomy of the Rotatoria," in which he described some heretofore unnoticed "cilium funnels" in the water vascular system. Leaving the dissecting-room in 1864, on being appointed assistant-physician, he became Lecturer on Zoology and Comparative Anatomy, and continued to work assiduously at the microscope. In 1866, in the *Journal of Microscopic Science*, he published a paper on the "Peripheral Termination of Motor Nerve, showing the direct ending of Nerve on Muscle," wherein for the first time in this country was described the disc-like termination of the axis cylinder within the sarcolemma. A paper on the "Anatomy and Mode of Division of the Stentor and other Infusoria" appeared in the *Journal of Anatomy and Physiology* in 1869. Following Dr. Wilks as Lecturer and Demonstrator of Pathology, with charge of the museum, he threw himself with zeal into this new department; and the Pathological Society's Transactions show what labour and care he bestowed on his post-mortem examinations. He designed a book in which is kept an accurate record of every examination made by him—a marvellous piece of work, in which the kind of disease in each organ is indicated by a dash of colour that at once strikes the eye. About this time, on account of the health of his wife, he took a house at Hornsey, and he used to go home laden with pathological specimens for microscopic examination, at which he would work late at night and in early morning. Some of his best work was done at this time, notably a magnificent and unique series of pathological drawings, which are preserved in the post-mortem theatre at Guy's Hospital, and are well worth inspection. Whilst holding the chair of Pathology he undertook to re-edit Dr. Wilks' "Lectures on Pathological Anatomy." For the editing of an original work it is well to choose a man with no originality; then a book may pass through many editions unchanged. Moxon could not re-edit—he completely transformed the work; but the volume published under the joint names of Wilks and Moxon remains the representative English work on Pathology. He also published a series of "Lectures on Analytical Pathology," which served to increase his reputation as an original thinker and exact pathologist. On leaving the pathological department, he was appointed Lecturer on Materia Medica and Therapeutics. This course of lectures, which is generally looked upon with dread by the student, in his hands became the most popular in the hospital. No subject could more severely test a lecturer's power. Entering the theatre without a note, he kept his class amused and instructed from the beginning to the end of the lecture. He held his audience absolutely and imperiously under his control, never allowing so much as a whisper until he had finished speaking. Men of all years flocked to these lectures, not merely for instruction in the subject of his discourse, but to secure for themselves an intellectual treat; in this they were never disappointed. But not as a lecturer only did Moxon lay claim to be considered an exceptional teacher. His clinical instruction was equally fascinating: whilst leaving no sign unnoticed, no symptom uninterpreted or undiscussed, he kept up a flow of sparkling dialogue full of suggestions for after-reflection. In this way the germs he distributed often grew and bore fruit in the minds of his pupils, and many scientific papers may be traced to his initiative. His ideas on the importance of clinical observation may be gained from the following extract: "Knowledge of facts got by reading is practically worth nothing. The only use of books is to instruct you in the meaning of a name, your own eyes and ears and touch must teach you the nature of the thing." On the retirement of Dr. Owen Rees, Moxon succeeded as physician to Guy's Hospital; he then began to devote himself still more to clinical instruction. About five years ago he became Lecturer on Medicine, and this chair he continued to hold until the time of his death. On the preparation of these lectures he bestowed much labour, but he never hampered himself with a note, so that the delivery always appeared to be spontaneous. Given entirely without theatrical effect, they compelled attention and charmed at the same time by the brilliancy of thought, the epigrammatic sayings, and the pointed illustrations distributed through them. Never dull, and acutely sensitive to the impression conveyed to his hearers, he never lost touch of his audience, but drew them insensibly after him. His oratory was of a persuasive, argumentative kind, tending towards metaphysical thought, abruptly broken by some sudden surprise or unexpected witticism to carry his audience back to the major premiss, or to assist them in anticipating his conclusion. His hearers quickened their ears and hung upon his lips—

> "When some chromatic sequence of fine thought
> In learned modulation phrased itself
> To an unconjectured harmony of truth."

All were interested and amused, even if they left by their own fault uninstructed or unconvinced.

Dr. Moxon's contributions to the literature of his profession were numerous and valuable. Whatever he touched he cast a glow of original light upon, and, as a colleague remarked, "he never fell to the level of anything commonplace." To scientific minds those papers will present the greatest interest wherein he was fettered by rigid facts, so that his mental activity found exercise only in elaborating details. But where there was left room for speculative thought, his fertile imagination winged itself from point to point with a touch as light as that which in gathering sweetness scatters wide the anther-dust. It was then that he raised men's thoughts to an ethereal height and strained their eyes towards the vanishing point. He carried you without effort through the deepest labyrinths of metaphysical thought to an inquiry into the origin of things, subtilely following his silken thread till he landed you at the inconceivable, and then, with a remarkable dexterity, he would bring you back as from a dream to awaken into ordinary daylight. When unconstrained by subjection to every-day facts, as in giving addresses or introductory lectures, he simply revelled in illustration and anecdote, sometimes to such an extent as to obscure his main argument; but those who listened never wore a look of weariness, and went away refreshed and enlightened. His sketch of the life and professional career of his colleague, Dr. Hilton Fagge, was a remarkable production. It appeared in THE LANCET, Aug. 30th, 1884. In this article Fagge became the text of a Moxonian homily. The picture was scarcely that of Fagge as we remem-

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bered him, but Fagge refracted through Moxon's intellectual prism. Moxon's unpublished "Philosophia Medici"—*Notes and Reflections*—grew to a prodigious size, and some of them at one time used to find their way into the *Guy's Hospital Gazette*, under the signature of "Pilocereus Senilis." It may be interesting to those old Guy's men who have retained copies of that students' journal to know from whose pen these remarkable essays proceeded. One of Moxon's most important papers was "The Explanation of the Association of Aphasia with Right Hemiplegia," published in the *Medico-Chirurgical Review*, wherein he put forward the view now generally adopted, that the left hemisphere takes the initiative in right-handed persons, whilst the right acts in unison with it, and so under ordinary conditions the left hemisphere controls the organ of speech. This theory has since been proved by the observation of aphasia in association with left hemiplegia in left-handed persons. Many of his papers are published in Guy's Hospital Reports, among which will be found "A Contribution to the History of Visceral Syphilis," "Syphilitic Disease of the Spinal Cord," "Atheroma of Arteries," "The Pathological Nature of Tumours," "Insular Sclerosis of the Brain and Spinal Cord," "The Albuminuria of Adolescents," &c. In 1881 he delivered the Croonian Lectures at the Royal College of Physicians on the "Anatominal Conditions of Cerebral and Spinal Circulation," wherein are described some original observations on the fourth ventricle, upon which, after laying in the dust the previously accepted views, he proceeded to construct some interesting theories of his own.

In 1878, Dr. Moxon, finding himself hemmed in by new buildings at Hornsey, purchased a house at Highgate, and, securing a large piece of ground in its vicinity, laid it out as a beautiful garden. In this he took the greatest interest, and amused himself in making frequent alterations and improvements. At one time he added a mountain-top covered with every Alpine plant; at another his fancy led him in the direction of little lakes and pools for the accommodation of aquatic plants and ferns. Every flower, wild or cultivated, found a home in his garden; and many had histories that brought back the thoughts of friends. Here, too, the wild birds from the Highgate woods flocked for food and certain protection. In the winter, lumps of suet and cocoa-nut sawn in rings were hung on the arches and boughs for the benefit of the tits, and loaves of bread were broken up for the blackbirds and thrushes, finches and sparrows. Always, before taking his own breakfast on a winter's morning, Moxon first saw to the feeding of his feathered friends. He was, indeed, an ardent lover of nature, to whom every flower in the hedgerows was familiar, and who in his studies had not even neglected to distinguish the various English grasses. Slight in figure and of a very delicate constitution, which showed signs of breaking even when he was a student, Moxon always worked to the extreme edge of his strength, but was buoyed up by a natural vivacity and an indomitable will. For years, when overworked, he was liable to attacks of hæmaturia, apparently dependent upon an excess of oxalates, and of late albumen had been noticed in the intervals of the attacks. Six years ago he on two occasions suffered from hæmoptysis, and was compelled to go abroad and rest for a term of three months. His delicacy of fibre also showed itself in attacks of ulceration of the cornea, whereby one eye became permanently defective in refraction. Of late he began to suffer, too, from periodic attacks of vomiting, occurring suddenly, for which he used to take hydrocyanic acid. Chloral also became frequently necessary to obtain sleep. But before the outside world he worked on as cheerfully as before, under an ever-increasing weight of practice. Still more recently another symptom appeared in the form of giddiness, with a feeling of numbness and weakness on the left side. He was suffering from one of these attacks in March last, but it passed off after a rest by the sea. To him they meant thickened arteries and impending paralysis or apoplexy. On the morning of July 21st he telegraphed to a friend to relieve him of his life-office work, but he nevertheless came to town in a state of suffering. At 1 o'clock he asked to be relieved of another appointment, and his friend, calling a little later, found him suffering from the symptoms before detailed. Afterwards he drove out to his mother's grave at Finchley, and, returning to finish his correspondence, appears, whilst suffering in the manner described, to have injudiciously taken a carelessly large dose of hydrocyanic acid, which in his low state of health doubtlessly precipitated the end.

Dr. Moxon was a devoted and loving husband, a kind and affectionate father, and a true friend. Generous, warm-hearted and benevolent, he was ever ready to lend a helping hand to those in distress. Many a poor student has been assisted through his difficulties, and many an orphan has been temporarily supported, by his open purse. The amount he thus gave away in private charity would be scarcely credited. Hospitable, and fond of entertaining, it was his delight to collect around his table men of thought and wisdom, and to introduce some abstruse problem for their discussion. Often, for the sake of argument, taking the weaker side, he would silence all speakers, and then, suddenly changing round, would show in what the fallacy of his former argument lay. Sensitive and tender-hearted, he was deeply affected by the sight of pain, and he rebelled against anything akin to oppression. How he stirred the College of Physicians and moved the whole profession in the Bower and Keates case is still fresh in the memories of all, and the triumphant result obtained was due mainly to his able advocacy. Of late, under the pressure of friends and editors, he had, at intervals, contributed to the *Contemporary Review*, and perhaps we cannot end this sketch of his life better than by quoting the final words of his last published essay: "True, the vital spark of heavenly flame does somehow hold one together. Yet faith is not for the body, nor is hope mere earthly expectation, nor is life all centripetal, nor is the future merely a coming present; and those who vulgarise our holy things do harm to all that is noble in humanity, whose faith must endure all things, with 'nevertheless not my will, but Thine,' trusting ever in One whose ways are not our ways, who sees good in everything we call evil, so as to permit it, and evil in everything we call good, so as to send it quietly away, and believing that the good God is always good to all, and strives to be good through all to all, and never fails, but only seems to men to fail."

We have been favoured by an esteemed correspondent with the following appreciative sketch of

WALTER MOXON AS A TEACHER.

Dead, did you say? Yes, dead! Dead?—that slim figure, that grey, searching, friendly-victimising eye, that low earnest voice that carried the beginner straight out of his depth, thinking only of the pleasure of the bath and nought of the risk of drowning? Dead?—that man of work-by-banter, of sparkling humour, writ, even to a stranger, by his slight oddities of manner and of gesture, brimfull of individualised nervous energy? Yes, dead! The sad surprise refuses to take root; it is impossible to believe it of Walter Moxon, whose natural talent these short long years has been at once our pleasure and our pride.

Short indeed seems the time since my first remembrance of him. Yet it carries one back nearly a quarter of a century, and over all those twenty years and more his intellectual gifts have freely sprayed their pleasurable refreshment. At first in the dissecting-room, when with his hat on and beflannelled, he was a somewhat weird-looking figure, that first-year's men fought shy of. Second-year's men had learnt to appreciate him and were fond of him. But to the very juniors in my day he was more identified with the Pupils' Physical Society, of which he was one of the honorary secretaries. Many of us, then spratlings, must remember him in various parts of the hospital making up to the fresh faces of the newly-opened session; and how, having fixed a man down, so to speak, with his eye, he would say, in somewhat measured, backward speech, "You come to the Physical Society of course, Mr. W——. All Guy's men come to the Physical." And then with a few words, putting one quite at ease with oneself and him, and with an irresistible "You will come to-night, won't you?" he had gone, having implanted a shaft, in the sensation of an indefinable charm, the force of which is best measured by what is most certainly the fact, that most of those he accosted went to the meetings in question, were cordially impelled towards a better knowledge of him, and that many of them subsequently often contributed to the discussions at the Society in obedience to the suasion of his look or his pen. We passed on together—he in his promotion to the offices of assistant-physician and Demonstrator of Morbid Anatomy, we in our pupilage. He used to do such ward work as attached to the former in the

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mornings; and even in those days I well remember how his particular and original acuteness showed itself, for he never seemed to exhaust a case or to have said his last word about it. Were it some chronic case that had been in the wards for months, he had something new to say about it; some airy vision would be embodied for his clerks, to rehabilitate their jaded ardour and stir their interests in what, except under the illumination of his profundity of insight, imagination, and humour, would have remained but a dry bone indeed. I am afraid in those days, both in the out-patient room and in the wards, we sometimes thought him over-critical—"too clever by half," as we might have said,—and wanting in power to knuckle down to the pressing necessities of the student; but if so, it was due to a juvenile want of that depth in which he excelled and revelled. Moreover, after all, he was learning the rudiments himself; and in the wards and the out-patient room he studied harder than the best of us. But his special talent was at that time most displayed in the post-mortem room. The fringe of the class would still go in and out of the theatre (the audience in the dead-house is, I suppose, always a shifting one) and be little the wiser for the attendance. "What is the case?" "Goodness knows! There is Moxon talking away," are the question and answer I have often heard, and who of Guy's men of 1864 to 1874 does not remember him in very deed "talking away" with his fingers as much as by word of mouth. But there was always an inner ring of a goodly number of students who listened to him, talked with him, followed his play of thought and fancy as best they could, and who remember those demonstrations, so imbued were they with exhilarating and unwonted enjoyment, so original, so quick, so instinct with new light, with old light played in strange and varied combinations, as times which shaped their future study, and to which, whether as regards the matter or the manner in which the instruction was conveyed, they look back with the profoundest gratitude.

As a lecturer on Pathology and on Clinical Medicine I do not think he at first made much mark. Lectures on pathology were ill-attended in those days; attendance was not then compulsory; and in his lectures on Analytical Pathology he probably fired mostly over the heads of the few that came. And as regards his earlier clinical lectures, young students found difficulty in recognising the main road, he so often wandered in his journey down the shaded lanes, which even to the last seemed still to possess too much attraction to allow of lucidity, and which for those who were not familiar with his manner of thought made him difficult of comprehension. More experience made him less subtle; and, as showing how rapidly he gained a hold as a teacher, it may be said that on the occasion of his delivering the introductory lecture, not many years after his appointment on the hospital staff—an occasion, it need hardly be said, which has usually been considered by the audience as a fit opportunity for the indulgence of playful and irresponsible criticism of a somewhat harassing nature,—the crowded theatre from the commencement to its close was wrapped in absorbed attention. Moxon left the post-mortem room when he became full physician, and he next lectured on Materia Medica. Of these lectures it must suffice to say that they were of a piece with all his other work; they exhibited a most retentive memory, they were quite original, always amusing, and—a thing so difficult in this subject—the interest of his hearers was maintained to the last. In his ward work he had continued to increase in power and popularity as a teacher. While his vivacity of thought had remained irrepressible, his power of unravelling the problems of disease had become more conspicuous, and the two phases of his ability made an hour or two in the wards with him a time of which it would be difficult to say whether the pleasure or the profit were the greater. It is not my purpose to speak of his more public life. I shall only say that as he was in the wards of his hospital, and amongst us his pupils, so he was when speaking to his fellows at any of the Medical Societies. He was sure to draw. Whether in the ingenuity of his suggestion, the adroitness of his argument, the humour of his simile, the crispness of his epigram, or the general piquancy of his style, he was always clever, never commonplace.

Just the same, too, was he at his home. It is said that his colleague, Hilton Fagge, speaking of Moxon's tact and knowledge as displayed in his attendance upon him in his [illegible] last [illegible] him as a perfect physician. I [illegible] that he made a perfect host. He collected round him men of all ages and of all intellectual grades; and whether it was his youngest clinical clerk, or a first or second year's man, he drew him out and made him at home just as easily as he entered the lists with those of graver years, maturer knowledge, and more subtle reasoning powers.

There must be many who are now recalling the enjoyable quiet of a Saturday to Monday with Dr. and Mrs. Moxon at Hornsey or Highgate. Fond of his garden, he was ready for a stroll and a chat about roses or the plants in his greenhouse. If his guests were particularly energetic, he would walk with the lustiest of them and examine those who would submit in grasses or wild flowers. Back again at home, he would start upon Darwin, politics, metaphysics—anything, it mattered not to him. Nothing found him uninterested, for if he had little precise knowledge of the immediate subject, he was always well at home as a sort of intellectual *picador*—in and out amongst the disputants, now here now there, to keep up the vigour of the fight. He generally succeeded in the end in arraying everyone against himself, and then would come the fun—both his and ours—three or four at him, and he, by no means infrequently, with no case, as the barristers say. But such was his skill in dialectics, he was pretty sure to wriggle out of his difficulties and to score, at any rate, a seeming success. In this passion for disputation lay the secret of much of his success. He was always a kind man and ready to interest himself in the welfare of his clinical clerks or any of the students of the hospital with whom he came into more immediate contact; but it may be doubted whether he laid himself out with set purpose for their good, as that he delighted in the friction of men's minds—he revelled in it; and nothing, I think, gave him more real pleasure than to gather some friends round his table, or in his drawing-room with his wife, and to have a talk. On one such afternoon within memory someone proposed that Ruskin should be read; a volume of "Stones of Venice" was accordingly produced, and the reading commenced. The third line started Moxon, and we were off; and even the fascinations of that great and strange writer, with whose angularities of thought and eccentricities of expression I should suppose him to have had much responsive sympathy, were dead to us for that day. Moxon was, even at home, a master teacher, and if in a peculiar and inimitable way, none the less I think in the best sense. Teaching is direct or indirect: there is that which satiates, there is that which creates, appetite. Moxon's was essentially of the latter kind. He himself described it, not as food, but as mustard. It was highly seasoned, no doubt, and often, in consequence, produced indigestion, but always of that form which is attended by voracity. I think I may safely say there has been no man of my time at Guy's who has possessed so really marvellous a power of making men work. Gallingly caustic to the lazy, kind and painstaking with the slow, skilled in putting the diffident on better terms with themselves and their powers, quick for the clear-headed and acute, only unsympathetic—sometimes scornful—to the stupid and perverse, he seemed to sum up character with much keenness of insight, and to lead by a charm which was essentially his own.

His method occasionally did harm to the overweening or precocious, since it fostered and forced a self-respect which, in such, was already in too great abundance; and I believe it to be true, as I have heard said, that there were particular instances of deterioration under his training. This was, however, but seldom; probably in no case was the declension abiding, while an enthusiasm for observation and research was generated in overwhelming proportion. In this also was another element of his strength: he taught men to teach themselves, and by the attractiveness of the material he put before them he suggested how his hearers could make work attractive to themselves. No doubt, too, he repelled some. To such he was whimsical or unintelligible, but they had never got at him or taken the pains to understand him, and it was necessary for a student to be almost a disciple to fully enjoy him.

Dear Moxon—dear indeed to those who knew you intimately—there is a peculiarly fresh and springtime memory of those happy days now gone for ever. As I dwell on them, it is impossible to forget that the last time many of us heard you speak was when you proposed "The Past and Present Students of Guy's" at the recent biennial festival. You did not like that word *past*. For it you would substitute *perpetual*. Oh, tell us, had you a prevision that ere a month had gone you would belong to the one Perpetual, and that to our Past would be added such a poignant regret?

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THOMAS WARD JESTON.

MR. THOMAS WARD JESTON, whose death, within a few days after entering upon his ninety-seventh year, occurred on the 18th inst. at his residence at Henley-on-Thames, was one of the few survivors of the Peninsular war. Born at Henley in 1790, he served his apprenticeship to the medical profession at Wallingford, and subsequently attended the Northampton, Guy's, and St. Thomas's Hospitals. In 1812 he was gazetted to the 36th Foot, and joined the British Army under Lord Wellington just after the battle of Salamanca. After sharing in the retreat from Burgos, he was sent to Vittoria, a day or two after the great battle, and was present at the battles of the Pyrenees, Nivelee, Nive, Orthes, and Toulouse, for the first four of which he received medals. At Toulouse, being struck down by dysentery and fever, he was invalided home, and being put on half pay at the end of the war, he established himself as a medical practitioner in his native town. In 1834 he was put on the Commission of the Peace, and was elected mayor, an honour four times afterwards bestowed upon him, the last occasion being so recent as 1881. Mr. Jeston was also the recipient of a medal awarded by the Society of Arts for improvements in the mode of obtaining opium from the poppy, and it was not till 1883 that he retired from active work. As a link with a great and glorious past, an interest attaches to him extending beyond the circle of his personal friends and his immediate neighbours, by whom his decease is sincerely regretted.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

AT an ordinary meeting of the Council of the above College held on Thursday last (Aug. 5th) the minutes of the previous meeting were read and confirmed. Mr. Berkeley Hill was elected a member of the Council of Examiners in the place of Mr. John Croft, resigned.

The annual meeting of Fellows and Members is to be held on Thursday, November 4th, at 3 P.M.

A letter was read from the Master of the Society of Apothecaries inviting the College to admit the Society as a party to the Combined Examination instituted by the two Colleges. The letter was referred to the President, who was empowered to appoint delegates to confer with delegates from the Royal College of Physicians on the question.

The vacancy in the Examinership in Medicine created by the death of the late Dr. Moxon, and that in Midwifery by the retirement of Dr. Champneys, will be filled up in October. The next quarterly meeting of the Council of the College will also be held in October.

Medical News.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—The following gentlemen were admitted Members of the College on the 29th ult.:—

Collier, William, M.D. Camb., Oxford.
Gay, William, M.B. Edin., Disraeli-road.
Miner, Francis Leslie, M.D. McGill, Wimpole-street.
Pidcock, George Douglas, M.B. Camb., Downshire-hill.

The following gentlemen were admitted Licentiates of the College on the 29th ult.:—

Aikin, William Arthur, Clifton-place, Sussex-square.
Arnold, Ernest Charles, Argyle-street, Tynemouth.
Barber, Percival Ellison, Brookhill, Sheffield.
Barclay, Wilfred Martin, Canynge-square, Clifton, Bristol.
Barnard, Walter Burrows, Upper Richmond-road, Putney.
Barrett, William Amherst Henry, Angell-road, Brixton.
Barsham, William Orridge, Lymington.
Bett, William Trinity-square.
Bhedwar, Pallonji Pestonji, Union-street, Burton-on-Trent.
Blacker, A. Barry, St. George's-road, Pimlico.
Blancard, Joinville Toby, Myddleton-square.
Blaxland, Ernest Gregory, Sydney, New South Wales.
Blatt, George Mallack, Regent's-park-terrace.
Bonsor, Herbert William, Tavistock-road, Westbourne-park.
Burtce, Leonard Wm., Terrace, Knatchbull-road, Camberwell.
Cave, Frank Evans, Glantivy, Dorville-road, Lee.
Charlesworth, Charles Dunn, Weltje-road, Hammersmith.
Clarke, Samuel Arathoon, Bolingbroke-road.
Collingwood, George Trevor, Manor-road, Brockley.
Comber, C. T. Thornton, Clarence-terrace, Priory-park, Kew.
Cox, James Herbert, Malmesbury-road, Bow.
Crocket, Wm. Caldwell, M.D. McGill, Tollit-street, Mile-end.
Crossley, Ely Wilkinson, Weymouth-street.
Damian, Francis George Claxton, Lupus-street.
Deane, Edward, Guy's Hospital.
Dickinson, William Lee, Chesterfield-street.
Du Boulay, Hubert Houssemayne, Lancaster-gate, Hyde-park.
Dunn, Philip Henry, St. Bartholomew's Hospital.
Dutch, Henry Asher, Sinclair-gardens, Uxbridge-road.
Engelbach, Frederick George, Fernleigh, Richmond, Surrey.
Fenton, Charles Francis, Western-road, Romford.
Forbes, Norman Hay, Bedford-park, Chiswick.
France, James Mead, Guildford-road, South Lambeth.
French, George Brooke, Royal Medical Society, Edinburgh.
Gault, Arthur Henry, Bramhall, Stoakport.
Girvin, John, Perry-hill.
Glasson, Charles James, Miles-road, Clifton, Bristol.
Glinn, Cornelius Frederick, Oxford-terrace, Edgware-road.
Goullett, Charles Arthur, Finchley-road, St. John's-wood.
Hackett, Harry Eugene, Lever-street, Manchester.
Harding, Charles O'Brien, Compton-terrace, Islington.
Harger, Frank Arnold, Castlenau, Barnes.
Harries, John Frail, King's College Hospital.
Hassard, Edward Moresby, Hoddesden.
Haynes, Edward J. Ambrose, Ashburnham-road, Greenwich.
Hentsch, George Frederick, Hoxton House Asylum.
Hill, Walter James, Royal Hotel, Bath.
Hinde, Alfred Buckley, Middlesex Hospital.
Hutcheson, James, Nelson-street, Edinburgh.
Kapadia, Fardunji Sorabji, Camden-road, Holloway.
Labey, Julius, Harleyford-road, Vauxhall.
Lyle, Charles Conway Vacey, Maryland's-road, Paddington.
Montague, Arthur John Helm, St. Ann's Villas, Notting-hill.
Mudge, Zachary Belling, Claremont-square.
Nairn, Robert, Lambeth-palace-road.
Norman, Frederick Choumert-road, Peckham.
Pearse, Arthur William, Botesdale, Diss.
Penton, Richard Hugh, Sewardstone-road, Victoria-park.
Pocock, Herbert Innes, Worcester-terrace, Clifton, Bristol.
Rickards, Henry William, Russell-square.
Robinson, Bernard, Edith-road, West Kensington.
Roper, Harold Kennaway, St. Olave, Waldengrave-road, Upper Norwood.
Roughton, John Paul, St. Julian's-road, Streatham.
Rowell, George, Guy's Hospital.
Scatliff, Philip Melancthon, Macaulay-road, Clapham-common
Smallpeice, William Donald, Queen Anne's-gate.
Snow, Lionel Mason, King Henry's-road, Primrose-hill.
Stabb, Ewen Carthew, Ilfracombe.
Tonking, John Herbert, Carn Brae.
Tredinnick, Albert Stephen, Claremont-square.
Tubby, Alfred Herbert, Kennington-park-road.
Wakeham, Charles Henry, Amhurst-road, Hackney.
Ward, Stanley Edward, Haverhill.
Webb, William Henry, Brook House, Upper Clapton.
Wilson, Arthur Edward, Wickham-road, Brockley.
Woakes, Arnold Beaumont, Harley-street.
Wright, George Cornelius William, Rawcliffe, Selby.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted Members of the College at a meeting of the Court of Examiners on July 28th:

Barsham, W. Orridge, L.R.C.P. Lond., Fincham, Norfolk.
Bradbury, John Augustus, L.S.A., Denmark-hill.
Brushfield, Thomas, Burleigh.
Collins, Frank, Adelaide-road.
Cook, Robert James, East Dulwich.
Denman, Robert, L.S.A., Sydenham.
Engelbach, Frederick George, L.S.A., Richmond.
Forbes, Norman Hay, L.R.C.P. Lond., Chiswick.
Griffin, John Hubert, L.S.A., Hammersmith.
Manby, Edward Petronell, Trinity-square.
Nason, Edward Noel, Nuneaton.
Pockett, Lewis Walter, L.S.A., Gool.
Rains, Robert Harding, Levenshulme.
Stabb, Ewen Carthew, L.S.A., Ilfracombe.
Stevens, William Henry, Bristol.
Tonking, John Herbert, L.R.C.P.Lond., Pool, Cornwall.
Wheaton, Samuel Walton, L.R.C.P. Lond., Battersea-park.

Admitted on the 29th ult.:—

Briant, Arthur John, L.S.A., Liverpool.
Brown, William Henry, L.S.A., Oxburgh.
Clarke, Samuel Arathoon, L.R.C.P. Lond., West Kensington.
Dickinson, William Lee, L.R.C.P. Lond., Chesterfield-street.
Fowler, John Bucknell, L.S.A., Harrington-street.
Furnivall, Bryan, L.R.C.P. Lond., Bishopsgate-street Without.
Holland, Edmund Burke, Titchfield-terrace.
Jones, Sydney Harold, L.S.A., George-street, Hanover-square.
Malden, Walter, M.B. Cantab., Ventnor.
Mugford, Sidney Arthur, Dean-street.
Shelswell, William Arthur, Banbury.
Shopoff, Pano Ivan, L.R.C.P. Lond., Upper Brook-street.
Wilson, Arthur Edward, L.R.C.P. Lond., Brockley.
Woodhouse, Francis Decimus, Dorchester.

Admitted on the 30th ult.:—

Burton, Charles Frederick, L.S.A., Harrogate.
Charlesworth, George Henry, L.S.A., Wandsworth.
Cunliffe, William Shrubsole, L.S.A., Stoneleigh.
Goodman, Thomas Herbert, L.S.A., Strand.
Luff, Arthur Pearson, L.S.A., Ealing.
Rowell, George, L.R.C.P. Lond., Trinity-square.
Skelding, Henry, Euston-square.
Stockton, Hubert Samuel, L.S.A., Wray-crescent.

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Admitted on the 2nd inst.:—

Biddlecombe, Edward Henry, L.R.C.P. Lond., North Allington.
Evans, John Morgan, L.R.C.P. Lond., Penyboat, Badnor.
Sankey, Julius Ivor, Notting-hill.
Thompson, Ernest Atherden, Wandsworth-common.

Admitted on the 3rd inst.:—

Fenoulhet, James Peter, Lee, Kent.
Phillips, William Edward Picton, L.S.A., Haverfordwest.
Wright, G. Cornelius Wm., L.R.C.P. Lond., Rawcliffe, Selby.

UNIVERSITY OF ABERDEEN.—The lectures at Marischal College closed on July 16th, and the Professional Examinations began the day following. A large number of candidates appeared for examination, and, as usual, about 50 per cent. were rejected. The closing ceremony, the "capping," took place on Saturday, the 31st ult., when 17 were promoted to the degree of M.D. and 62 received the degrees of M.B. and C.M. The following is the list of successful candidates:—

DEGREE OF M.D.

Anderson, John Hector.
Argo, George Collie.
Booth, James Mackenzie.
Ferguson, William Balfour.
Geddie, William.
Holmes, William Reid.
Inglis, John.
Macdonald, Peter William.
Matheson, John.
Morrison, Arthur Andrew.
Mutch, Forbes Robertson.
Reid, John.
Robb, James Taylor.
Smith, Alexander Gillespie.
Stericker, William.
Sullivan, Peter Alfred.
Taylor, John.

DEGREES OF M.B. AND C.M.

Aird, Charles Mitchell.
Angus, Henry.
Arnold, Charles Arthur.
Barnes, Joseph Marshall.
Barrett, Charles Wm. Sessions.
Bennett, Thomas Charles.
Binnie, John Fairbairn.
Brown, Henry Havelock.
Burgess, Gregor.
Chapman, Arthur Wilson.
Clark, Alex. Forbes Chisholm.
Collie, Frank Lang.
Coward, Ernest George.
Dalgarno, Alexander William.
Davidson, William.
Dickie, James Steel.
*Duffus, John Charles Grant.
†Findlay, George.
Forbes, Charles Frederick.
Forbes, George.
Forbes, Henry Farquharson.
†Galloway, James.
Geddie, William Stewart.
Gray, William Henry.
Greig, William.
Grieve, Alexander Nathanael.
Hewlett, William Henry.
Hutchinson, Arthur Cayley.
Ingram, Alexander Gordon R.
Jameson, Alexander Seymour.
Lewis, James Thomson.
Lumsden, Philip James.
Macdonald, Donald G. Gordon.
Mackay, Alfred.
Macrae, Farquhar.
Malcolm, John.
Martin, Edmund Thomas.
†Milligan, William.
Milne, Alexander.
Milne, G. Leslie Hodgson.
†Murray, James.
Nicol, James.
Orchard, Edward Russell.
Reid, Charles.
Reid, George Marr.
Reynolds, Graham Hay.
Robertson, Cecil.
Ross, Hugh.
Russell, John.
Scatterty, William.
Shirres, David Alexander.
Simpson, Alexander.
Smith, John Wesley.
Stenhouse, John Hutton.
Souza, Edwardo Marciel de.
Stephenson, Robert Ben Tydd.
Taylor, John.
Thomson, James.
*Thomson, John Duncan.
Twining, Vincent Wing.
Urquhart, William Donald.
Williamson, George.
Wills, Reginald Graham.

* Highest Academical Honours. † Honourable Distinction.

UNIVERSITY OF GLASGOW.—The following degrees were conferred in the Faculty of Medicine on July 29th:—

DEGREE OF M.D.

Aitken, John, M.B., C.M.
Alexander, Samuel, M.B., C.M.
Auld, Alex. Gunn, M.B., C.M.
Buchanan, John, M.B., C.M.
Carruthers, John, M.B., C.M.
Duff, John, M.B., C.M.
Dunlop, T. Cameron, M.B., C.M.
Lawson, J. Burnett, M.B., C.M.
†Rankin, Alexander, M.B., C.M.
Sinclair, Eric, M.B., C.M.
Skottowe, Alex. J. F., M.B., C.M.
*Somerville, William Francis, M.A., B.Sc., M.B., C.M.
*Stewart, Robert Sloss, M.B., C.M.
Waddell, William, M.B., C.M.

DEGREES OF M.B. AND C.M.

Aird, Alexander Wallace.
Adam, Basil John.
Banks, Charles.
Baxter, Colin.
Beattie, Robert M'Ghie.
Broom, John.
Brown, James Andrew.
Brown, Robert, M.A.
Brown, Walter Falconer.
Bruce, James.
‡Bryce, Alexander.¶
Campbell, Archibald, M.A.
Campbell, Archibald Thomson.
Carmichael, Alexander.
‡Carslaw, John Howie, M.A.
‡Connal, James Galbraith.
Corbett, Robert.
Craik, Robert.
Crawford, Alexander David.
Cullen, John Robert Fleming.
Currie, John.
§Dewar, Daniel M'Kellar.
Dodd, John.
Downes, Joseph Lockhart.
§Dunlop, James.
‡Fergus, William Henry.
Ferguson, George Gunnis.
Ferguson, Robert Thomson.
Gardner, Robert Irvine.
Goff, Bruce Edward.
Gray, Andrew.
Gray, Charles.
Haddow, Robert Wilson Taylor.
Hamilton, Robert.
Hannah, William Tweed.
Hay, Walter.
Henry, Robert.
Highet, Robert Campbell.
Hill, James Wright.
Hughes, Arthur Davies.
Jago, Josias.
Keddie, John.
Kennedy, John Alexander, M.A.
Laurie, James.
§Macphail, John.
MacColl, Donald Stewart.
Macdonald, David.
Macdonald, Thomas Ross.
Maclachlan, Archibald.
Maclachlan, James.
MacLean, Alexander Henderson.
MacLeod, David Thomas.
M'Conechy, James.
M'Donald, James.
M'Houl, Hugh Miller.
M'Intyre, George.
M'Kinlay, William.
Mair, Robert.
§Manners, William Henry.
Miller, Robert Craig.
Monteagle, Henry Ward Beecher.
Muirhead, James.
Nicholson, William Thomas.
Nicoll, James Henderson.
§Nisbet, Adam T.
Penman, Robert Steven.
Phillips, William Fleming.
Pyle, William.
Rae, James.
Robertson, Robert.
Robertson, William.
Robinson, Harry Watt.
Routledge, Robert.
Roxburgh, Alexander.
Roxburgh, Archibald.
Scanlan, Charles Edward.
Shand, William.
Sinclair, Henry Williamson.
‡Snodgrass, William, M.A.
Steil, Jas. William Handcock.
Stewart, John.
Stewart, John Barclay, M.A.
‡Stewart, John.
Thorburn, John.
Watt, Thomas, M.A.
Whitelaw, Robert.
Wingate, Donald.
Wylie, Alexander.
Wylie, James.
Young, John.

DEGREE OF C.M.

Chalmers, John, M.D.

Received the degrees of M.B. and C.M. on July 26th:—

Fox, Walter.

* Highly commended for Thesis. † Commended for Thesis.
‡ Honours. § High commendation. ‖ Commendation.
¶ Mr. Bryce gains the Brunton Memorial Prize of £10, awarded to the most distinguished Medical Graduate of the year.

BRITISH MEDICAL SERVICE.—The following Surgeons on probation in the Medical Department of the British Army were successful at both the London and Netley examinations held on July 30th. The prizes are awarded for marks gained in the special subjects taught at the Army Medical School. The final positions of these gentlemen are determined by the marks gained in London added to those gained at Netley, and the combined numbers are accordingly shown in the list which follows:—

	Combined Marks.		Combined Marks.
*Davidson, J. S.	5575	Donegan, J. F.	4200
†Will, J.	5565	Donaldson, J.	4195
Moir, J.	5383	Mathias, H. B.	4175
Fallon, J.	5375	Bent, G.	4168
Salvage, J. V.	5308	Barefoot, G. H.	4166
Fowler, J. F. S.	5210	Newland, F. R.	4160
Aldridge, A. R.	5190	Windle, R. J.	4143
Bostock, R. A.	5008	Hall, R. J. D.	4130
Fayrer, J.	4992	Marder, E. S.	4115
Walker, C. P.	4950	Allport, C. W.	4042
Macdonald, C. J.	4930	Russell, J. J.	4030
Tatham, C. J. W.	4907	Edye, J. S.	4013
Clarkson, T. H. F.	4828	Scott, G.	4005
Austin, H. W.	4715	Browning, T.	3989
Garner, C.	4689	Bate, L. A. F.	3960
Wright, R. W.	4685	Trotter, W. J.	3910
Bailey, W. F.	4665	Hosie, A.	3906
Eckersley, E.	4655	Marks, G. F. H.	3896
Cottell, H. J. C.	4635	Holyoake, R.	3890
Deacon, J. G.	4585	Buist, R. N.	3878
Greig, D. M.	4577	Watson, J. J. C.	3785
Burrows, J. R.	4531	Whaite, T. D.	3741
Keatley, J.	4445	Knaggs, H. T.	3710
Hennessy, D.	4436	Le Quesne, F. S.	3670
Saunders, D. M.	4410	Travers-Smith, V. E.	3626
‡Kiddle, W.	4337	Smyth, N.	3613
O'Callaghan, D. M.	4313	Cronin, C. S.	3595
Whitty, M. J.	4294	Dowman, W.	3560
Cummins, H. A.	4285	Foott, R. E.	3510
Kelly, R. E.	4235		

* Gained the Prize in Pathology, presented by Sir Thomas Crawford, K.C.B.
† Gained a Prize in Pathology.
‡ Gained the Parkes Memorial Bronze Medal.

INDIAN MEDICAL SERVICE.—The following Surgeons on probation in this Service were successful at both the London and Netley examinations held on July 30th. The prizes are awarded for marks gained in the special subjects taught at the Army Medical School. The final positions are determined by the marks gained in London added to those gained at Netley. The combined numbers are as follows:—

	Combined Marks.		Combined Marks.
*Thorold, W. G.	6215	Bell, G. J. H.	5288
†Hehir, P.	5940	Daly, J. T.	5279
Pisani, L. J.	5875	Pooks, R.	5242
Basu, B. K.	5672	§Hudson, E.	5190
Sinha, N. P.	5545	Deane, A. C.	5175
Edwards, W. R.	5518	Dawson, A. W.	5107
Mactaggart, C.	5352	Robinson, W. H. B.	5048
‡Evans, J. P.	5317	Sheppard, H. A.	4783

* Gained the Herbert Prize of £30, with the Montefiore Medal and Prize of 20 guineas.
† Gained the Martin Memorial Gold Medal.
‡ Gained the Montefiore Second Prize and also the Prize presented by Surgeon-General W. C. Maclean, C.B.
§ Gained a Prize in Pathology, presented by Sir Joseph Fayrer.

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ROYAL COLLEGE OF SURGEONS IN IRELAND.—At a meeting of the Court of Examiners, held on July 19th and following days, the undermentioned were admitted Licentiates of the College:—

Thos. G. Barton, Louis Buggy, Edward Corcoran, Thos. A. Connellan, Robert H. Cox, William B. Dick, St. Leger John Edmundson, Victor Fenton, William Greene, Richard M'Hugo, Edmund J. Jacob, John F. Kennedy, John Langan, Sinclair A. Long, Victor E. Ludlow, Philip McDermott, Henry J. Mathews, Jeremiah Nally, John W. O'Brien, Joseph O'Meara, Francis G. O'Donohoe, Joseph O'Connor, Denis Joseph O'Loughlin, Francis J. Reid, Thos. J. Rossiter, William L. Ross, Thomas Williams, Thos. H. Wilson, Charles S. Woodwright, William H. Woodwright, Edward Yates.

SOCIETY OF APOTHECARIES.—The following gentlemen have been appointed a Court of Examiners of this Society for the ensuing year:—Henry Bullock, L.S.A., F.R.C.S.E.; Andrew Clark, L.S.A., F.R.C.S.E.; William A. Duncan, L.S.A., M.R.C.P. Lond., F.R.C.S. Eng., M.D. Brussels; Robert Fowler, L.S.A., M.D. Univ. Edin., M.R.C.P. Edin., M.R.C.S.; F. de Havilland Hall, L.S.A., M.D. Univ. Lond., F.R.C.P.L., M.R.C.S.; Frederick J. Hensley, L.S.A., M.D. Lond., M.R.C.S.; Robert J. Lee, M.D. Univ. Camb., F.R.C.P.L.; G. H. Makins, L.S.A., F.R.C.S.; John Sherwood Stocker, L.S.A., M.R.C.S., M.D. Univ. Lond., M.R.C.P.L.; John Charles Thorowgood, L.S.A., M.R.C.S., M.D. Univ. Lond., F.R.C.P.L.; W. J. Walsham, L.S.A., F.R.C.S. Eng., M.B., M.S. Aberd.; Francis Warner, L.S.A., F.R.C.S.E., M.D. Univ. Lond., F.R.C.P.L.

The following gentlemen passed their examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received certificates to practise, on the 29th ult.:—

Bower, William George, The Vineries, Southport.
Briant, Arthur John, Bootle Borough Hospital, Liverpool.
Barton, Chas. Fredk., M.R.C.S., South Park Villas, Harrogate.
Cunliffe, Wm. Shrubsole, M.R.C.S., Torrington-square.
Goodman, Thomas Hubert, Strand.
Henderson, George Christopher, M.R.C.S., Natal, S. Africa.
Hunt, Howard Wraughan, M.R.C.S., Holford-square.
Paige, Horace Bennett Wood, Whitley, Newcastle-on-Tyne.
Plant, Alex. Whitmore, Wordesby, Stourbridge.
Popham, R. Brooks, L.R.C.P., L.R.C.S., L.F.P.S.G., Bartholomew-road, Camden-road.
South, Fredk. William Berry, San Nicolas, St. Leonards-on-Sea.
Stockton, Hubert Samuel, Wray-crescent, Tollington-park.
Watson, Henry Gervase, Moorfields, Sheffield.

OBSTETRICAL SOCIETY OF LONDON.—The Library of the Society will be closed from Aug. 16th to Sept. 16th.

GUY'S HOSPITAL.—The Library of this hospital will be closed to-day (Saturday) at 3 P.M., and reopened on Monday, Aug. 30th, at 9.30 A.M.

A DEMONSTRATION of the friendly and trade societies of Darlington in aid of the funds of the local hospital took place on the 1st inst.

ROYAL UNIVERSITY OF IRELAND.—By the sudden death of Mr. Curtis who was elected a senator of this university last week, a vacancy has taken place for a member of the Senate.

VICTORIA UNIVERSITY.—At the recent examinations at this University six candidates (two in the first division) passed Part 1 of the Final Examination for the degree of M.B.; five passed Part 2 of the same examination; seven the Intermediate Examination; and twenty-two the Preliminary Examination in Science.

HOSPITAL FOR THE ISLE OF MAN.—On July 26th, the foundation stone of a new hospital and dispensary was laid in Douglas by Mrs. H. B. Noble, who with Mr. Noble has given the site and £5000 for the erection of the building. Accommodation will be provided for 14 male and 14 female patients in the general wards, and there will be beds also for 10 patients in smaller wards. Several private wards will likewise be provided.

SANITARY CONDITION OF DUNGARVAN.—Dr. O'Farrell, Inspector of the Local Government Board for Ireland, reports in the following terms as to the sanitary condition of this place:—"The town is not well kept. Animals are domiciled in some of the cottages. The scavenging is inefficiently performed, the pavement and water-tables of the lanes being disgustingly dirty. There is no supply of potable water. It is sold through the streets, as in Spanish towns, at a half-penny the four gallons. The sewers have but a slight gradient, and there is no means of flushing them." The Town Commissioners, to whom this report was referred, have [illegible]

BRITISH DENTAL ASSOCIATION.—The annual general meeting of the members of this Association will be held in the theatre of the Royal School of Mines, Jermyn-street, and in the Dental Hospital of London, Leicester-square, on the 19th, 20th, and 21st of the present month. An address will be delivered by Sir Edwin Saunders, F.R.C.S., the President elect, and papers on various subjects have been promised by Mr. Morton Smale, Mr. T. Charters White, Mr. S. J. Hutchinson, and others. The annual dinner of the Association will be held on the 20th inst.

MEDICAL STUDENTS AND COMPULSORY MILITARY SERVICE IN AUSTRIA.—Austrian medical students who, like other university men, are only obliged to serve in the army for one year, during which period they are miscalled "volunteers," have hitherto been allowed to serve their time while pursuing their medical studies. A new arrangement has, however, just been made by which six months only of the "volunteering" may be served during the period of medical study, the remaining half-year being deferred until after the M.D. degree has been obtained, and being occupied in medical and sanitary duties. These regulations will not come into force until after the completion of the next academical year.

PRESENTATION TO DR. FERGUS.—On the 24th ult. the old students at, and friends of, Marlborough College made a presentation to Dr. Walter Fergus, who, it will be remembered, recently relinquished his appointment as medical officer of the College after thirty-seven years of assiduous and highly successful work. The testimonial consisted of a portrait of the recipient, which it has been decided shall occupy a space in the large hall of the institution, a purse containing 400 guineas, and an illuminated address, recording the gift and signed by the long list of subscribers—579 in number. The presentation was made by the master, the Rev. G. C. Bell, who described the origin of the fund, and feelingly alluded to Dr. Fergus's long connexion with, and many services to, the College. The Bursar, the Rev. J. S. Thomas, and Mr. H. Richardson having spoken in similar strains, Dr. Fergus responded in suitable terms, and the proceedings terminated.

ST. ANDREWS GRADUATES' ASSOCIATION.—At a special meeting of the Council of the Association held at 11 Chandos-street, London, on Thursday July 29th, the following resolutions were proposed and carried:—1. "That this Council, at a special meeting to consider the question of direct medical representation in the Council of Medical Education, decides to support the candidature of Dr. B. W. Richardson, F.R.S., and to ask and invite the members of our Association and all St. Andrews graduates, the graduates of other Universities, and the profession generally, to support its candidate, believing Dr. Richardson to have identified himself with the interests of the general practitioners, and that he will fully support their interests and the interests of the profession." 2. "That a committee be formed to secure the election of Dr. Richardson as direct medical representative in the General Medical Council." 3. "That the following gentlemen form the committee, with power to add to their number—viz.: Sir J. Crichton Browne, M.D. (Chairman); Surgeon-General Gordon, C.B., M.D. (Vice-Chairman); F. H. Alderson, M.D. (Hon. Treasurer); R. J. Banning, M.D. (Hon. Secretary); Surgeon-Major Duka; Drs. Bright, Maurice Davis, Henty, Longhurst, Pickett, Royston, Savory, and Wyman.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

BARRITT, GILBERT LACY, L.R.C.P.Lond., M.R.C.S., has been appointed Medical Officer of Health for the Spalding Urban Sanitary District, vice Morris, resigned.

BOWKETT, THOMAS E., M.R.C.S., L.S.A., has been appointed Medical Officer to the Workhouse of the Poplar Union.

DAVIES, T. L. KENRICK, M.B.Edin., has been appointed Medical Officer for No. 2 District of the Conway Union.

DRUMMOND, ALEXANDER P., M.B., C.M.Ed., has been appointed Medical Officer for the First Dolton and Second Dolton Districts of the Torrington Union.

FOWKE, F. W., M.R.C.P.Ed., M.R.C.S., has been appointed Medical Officer for the Priors Marston District of the Southam Union.

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GARMAN, J. CORNELIUS, L.R.C.S., L.R.C.P.Ed., has been appointed Medical Officer for the Brewood District of the Cannock Union.

GRANT, J. DUNDAS, M.A., M.D., F.R.C.S.Ed., late Assistant-Surgeon to the Central London Throat and Ear Hospital, has been appointed Full Surgeon to that Institution.

HALL, EDWARD, M.R.C.S., L.S.A., has been appointed Medical Officer for the Llanllwchaiarn District of the Newtown and Llanidloes Union.

HIND, ALBERT, L.R.C.S.Ed., L.S.A., has been reappointed Medical Officer of Health for the South Molton Urban Sanitary District.

HODGSON, MICHAEL, B.A.Dur., M.B., C.M.Ed., has been appointed Medical Officer for the Chipping Warden District of the Banbury Union.

JACKSON, MARK, M.D., M.R.C.S., has been appointed Medical Officer for the Second District of the Barnstaple Union.

LARKING, ARTHUR ERNEST, M.B.Dur., M.R.C.S., L.S.A., has been appointed House-Surgeon to the Parent Institution of the Brighton, Hove, and Preston Dispensary, vice Gerald Hodgson, M.R.C.S., L.S.A., resigned.

LIPSCOMB, E. R. S., L.R.C.P.Lond., M.R.C.S., has been appointed Medical Officer for the Kenton District of the St. Thomas Union.

NEVINS, ARTHUR E., M.R.C.S., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed House-Surgeon to the Middlesex Hospital, vice Clement Pound, L.S.A., whose term of office has expired.

PRAGER, ALFRED, L.D.S., has been appointed Honorary Consulting-Dentist to the Pimlico-road Free Dispensary, vice Lovejoy, deceased.

SULLIVAN, E. J. H., M.D., M.Ch., Q.U.I., has been appointed Medical Officer for the Fourth District of the Hemsworth Union.

Births, Marriages, and Deaths.

BIRTHS.

BOSWELL.—On the 27th ult., at Ashburne, Derbyshire, the wife of Alexander Boswell, M.D., of a son.

DEAN.—On the 1st inst., at Northleach, Gloucestershire, the wife of Francis Dean, M.R.C.S., of a daughter.

GREENWOOD.—On the 29th ult., at 3, Crouch-end-crescent, Hornsey-rise, N., the wife of A. Greenwood, L.R.C.P.Lond., of a son.

HUNTER.—On the 3rd inst., at Norfolk-crescent, Hyde-park, the wife of Sir W. Guyer Hunter, K.C.M.G., M.P., of a daughter.

KING.—On the 3rd inst., at Sutton Court-road, Chiswick, the wife of Wm. Moore King, M.R.C.S., of a daughter.

MARRIAGES.

ALFORD—KING.—On the 31st ult., at St. James's Church, Spanish-place, Henry J. Alford, M.D., of Taunton, to Marian, daughter of the late John King, of St. John's-wood.

BARLOW—SMITH.—On the 29th ult., at the Baptist Church, Astwood-bank, Robert Barlow, M.R.C.S., to Mary Ann, youngest daughter of James Smith, J.P., of Doe-bank House, Astwood-bank, Worcestershire.

CREASY—MARKBY.—On the 28th ult., at Holy Trinity Church, Paddington, Rolf Creasy, M.R.C.S., L.R.C.P., of Winslow, Bucks, to Mary, second daughter of Henry Markby, of Westbourne-terrace, Hyde-park.

HINE—BROWN.—On the 1st inst., at St. Andrew's Church, Bristol, Samuel D. Hine, M.R.C.S., L.S.A., of Ilminster, to Emily, daughter of Capt. George Brown, of Montpelier, Bristol.

ROBINSON—WILSON.—On the 29th ult., at Trinity Church, Claughton, Cheshire, Frederick William Robinson, M.B., C.M., of Huddersfield, to Janet Brocket Ritchie, daughter of J. Moncrieff Wilson, of Devonshire-place, Claughton.

RUSHBROOKE—PENHALL.—On the 31st ult., at City-road Wesleyan Chapel, Thomas Rushbrooke, M.A., M.R.C.S., L.R.C.P., to Louisa, daughter of Mr. George Penhall.

DEATHS.

BUSBY.—On the 27th ult., at the Paragon, Bath (after a long and painful illness), Alexander Ralph Busby, M.R.C.S., in his 44th year.

GITTINS.—On the 23rd ult. (after a short and painful illness), John Gittins, M.R.C.S., L.R.C.P., L.S.A., of St. John's, Horselydown, S.E., in his 45th year.

GORDON.—On the 3rd inst., at Woodlands, West Hoathly, Archibald Gordon, M.D., C.B., L.H., Inspector-General of Hospitals, and Hon. Surgeon to H.M., of Cornwall-gardens, Queen's-gate, in the 75th year of his age.

GRANT.—On the 23rd ult., at Cairo, Egypt, Ada Torrey, wife of Dr. Grant, Bey, M.D.

HOYLE.—On the 28th ult., at the Square, Tyldesley, Manchester, William Hoyle, M.R.C.S., L.S.A., aged 49.

KITCHING.—On the 1st inst., at Heworth, York, Walter Kitching, M.R.C.S., L.R.C.P., late of Clapham, Surrey.

LEIGH.—On the 26th ult., at The Grove, Arnold, Notts, George William Leigh, M.R.C.S., aged 75.

N.B.—*A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.*

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, August 5th, 1886.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
July 30	29·79	W.	66	62	109	74	60	...	Overcast
,, 31	29·68	N.W.	60	58	103	72	58	·04	Overcast
Aug. 1	29·93	S.W.	64	57	111	71	53	...	Cloudy
,, 2	29·66	N.	60	58	95	65	58	·12	Overcast
,, 3	30·08	N.	57	51	108	68	49	·03	Fine
,, 4	30·14	N.E.	59	55	87	67	55	...	Overcast
,, 5	30·12	W.	61	57	108	71	53	...	Hazy

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

We cannot undertake to return MSS. not used.

LIQUOR STATISTICS.

LAST year the British spirits retained for home consumption amounted to 26,609,488 gallons, 0·733 of a gallon per head of a population estimated at 36,325,115. The foreign and colonial spirits consumed represented 0·221 of a gallon per head, the quantity being 8,012,655 gallons. The amount of foreign wines consumed was 13,767,928 gallons, 0·379 of a gallon per head; of beer, 27,101,238, or 0·746 of a barrel per head; of tea, 182,408,830 lb., equivalent to 5·022 lb. per head; of coffee, 32,660,320 lb., 0·898 of a pound per head. These figures show a large falling off in the consumption of British spirits, nearly 2,000,000 gallons; a falling off of some 300,000 gallons of foreign spirits; and a slight decline in the consumption of foreign wines. Beer showed a slight increase in the total consumed, but not on the amount per head of the population. Nearly 20,000,000 lb. more of tea were consumed, and coffee also showed a slight improvement. These statistics must be highly encouraging to advocates of temperance, being an undoubted proof that their labours in the past have not been without effect.

A. L.—The institution named has not been subjected to inspection by our commissioners.

Dr. F. W. Kirkham.—The right to do so is indisputable.

LUNATIC ASYLUMS IN SWITZERLAND.

To the Editor of THE LANCET.

SIR,—I beg leave to state, for the information of your correspondent, "F. F. G.," in reply to his communication in your issue of this day regarding the localities of asylums for the insane in Switzerland, that twelve Swiss cantons possess public asylums, and seven private asylums. Of the public asylums the cantons of Zurich and Thurgovie have two each, whilst Berne, Lucerne, Fribourg, Soleure, Bâle-Ville, St. Gall, Argovie, Vaud, Neufchâtel, and Geneva each have one only. The largest of these public institutions are the two in Zurich; they are together capable of containing 820 patients. The ten cantons which possess no lunatic asylums arrange to send patients to asylums in the cantons already named as possessing them. The oldest asylum in Switzerland is that at Geneva; it was founded in 1833. The most recent is that at Marseus in Fribourg, established in 1875. Besides these public asylums, there are also private asylums (some of them on a large scale, such as those at Stammheim and Männedorf in Zurich) situated in Geneva, Berne, St. Gall, Argovie, Thurgovie, and Vaud.

I am, Sir, your obedient servant,

West Malling Asylum, Kent, July 31st, 1886. JAMES ADAM, M.D.

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A VACCINATION CENSUS.

MR. WILLIAM TEBB, who seems to devote his life to the disparagement of the most life-saving discovery of medical science—viz., vaccination, has given in *The Times* the results of a census meant to test popular opinion on the question. We have little respect for such statistics, which can be collected by any dissatisfied person. Everything untoward that happens about the post-vaccination age is readily attributed to vaccination, without respect to accuracy, and in entire ignorance of the frightful sequelæ of small-pox, which are the alternative to the slight inconvenience which sometimes follows vaccination.

THE ire of *One of the Public* is surely a little misplaced. The sentence quoted by our correspondent appears to be quite in the direction of his own sentiments.

A. S. might consult the Charities Register, published by Longmans.

DRAINAGE AND DISPOSAL OF SEWAGE.

To the Editor of THE LANCET.

SIR,—If the contributor of the annotation in your last issue (p. 217) on the disposal of sewage at Yarmouth had studied and experimented on the subject as he ought before unconditionally approving the abominable habit of corporations and engineers of discharging sewage into the sea, he would have known it is not a matter of the slightest importance, when a right system of drainage is adopted, whether what is called the outfall is under or above low-water mark. I say it is outside the question, because no engineer who knows his work, and has any inventive faculty about him, would ever resort to the disgraceful and ignorant expedient of making God's beautiful sea a national cesspool. Yet the doing it seems to be the acme of wisdom that an engineer can obtain. Not only is the folly of polluting the sea being perpetrated at Yarmouth, but at the neighbouring town of Lowestoft and other towns as well. The engineers and authorities of these and other towns will, perhaps, endeavour to excuse themselves by saying: "We are surely not responsible, for we only copy the blunders of other men, and follow the example of now notorious London." To some extent, perhaps, the sarcasm is rightly applied, because, as London appears to be the guide in matters of social good, she ought to be ashamed of having the imputation so justly hurled at her of being the worst and most pestilential river poisoner in the world.

What are the facts? The Metropolitan Board of Works have courteously sent me the report of their committee, who are at their wits' end on the subject of London sewage. No wonder, for the condemnatory fact stares them in the face that they are daily discharging 150,000,000 gallons of sewage into the Thames at the two outfalls of Barking and Crossness, and how to diminish or extinguish the quantity they have not even the semblance of a good idea. Worse still, they do not seem willing to learn. The solid, fæcal and otherwise, to be obtained from 150,000,000 gallons of sewage represents, by the accepted rule, 1434 tons, 18 cwt. a day. To tell those who have practically experimented with the article that it does not represent an adequate manurial money value, if unspoiled by chemical reagents to decompose and unfit it for use, is simply a denial of visible facts to the contrary. Properly manipulated it would be eagerly bought for agriculture and gardening at £2 a ton, guano being £12. Yet the Metropolitan Board of Works ignorantly throw away such a source of wealth to themselves and the ratepayers, despite the suggestion of value given them by Colonel Jones and Mr. Bayley Denton. These gentlemen, the Board of Works state in their report, applied to the Home Secretary for all the sewage of London, and asked that the Board of Works should pay them in addition the modest sum of £110,000 a year! The Metropolitan Board, of course, were unable to comply. They will therefore continue to pollute the sea. In time, no doubt, some financial philanthropist will arise to seize this source of wasted wealth for his own and the public good.

I am, Sir, your obedient servant,

Batoum Gardens, W., Aug. 1st, 1886. W. HEMPSON DENHAM.

Progress.—Some of the wants indicated in our correspondent's letter are already met; others, for the most part, must be left to be supplied by the good sense and consideration of the public. We do not see that any useful purpose would be served by inserting the communication.

Mr. Robson (Leeds).—In an early number.

LONDON CONVALESCENT HOME.

To the Editor of THE LANCET.

SIR,—With regard to the scheme for a London Convalescent Home, can you inform me if it is in contemplation to erect such a home in or near town; and if so, is it likely that a seaside branch will be associated with it? I ask this because, as medical men, we all know the marvellous effect of change, combined with pure sea breezes, and how magically they act in perfecting cures. There is a building now vacant at Walton-on-the-Naze, of considerable capacity, facing a wide expanse of the German Ocean, which was formerly a large marine hotel. It contains numerous rooms, is in many ways suitable for a convalescent hospital, and may be had cheap. The death-rate at Walton is marvellously low, the distance from London inconsiderable, and the place is a very paradise of health for young children; so that I hope its advantages may not be lost sight of.—I am, Sir, yours faithfully,

HENRY GRAMSHAW, L.R.C.P., &c.

Walton-on-the-Naze, July 31st, 1886.

THE HYGIENE OF THEATRES.

DR. P. RENK, Professor of Hygiene at Munich, has recently endeavoured to solve the following problem:—Given a spacious theatre crowded during an evening performance for a certain number of hours, what is the difference of the effects on its atmosphere produced by the electric light or by gas, particularly as to the temperature and the generation of carbonic acid? Taking the Theatre Royal of Munich, which is lighted by 1400 lamps on the Edison system, he tested the two kinds of illuminants, with the following results:—During a representation which lasted from 5.30 to 10.15 P.M., and was witnessed by 1790 people, he found that while the rise in temperature in the pit was 11·1° C. with gas, it was only 7·7° C. with the electric light, and that in the upper gallery it was 10·7° with the former, and not more than 7·4° with the latter. As to the increase in the production of carbonic acid the results were equally important. In the pit it was as 2176 with gas to 1221 with the electric light, and in the upper gallery as 2855 with the first to 1430 only with the second.

Dr. Harries.—We cannot afford space for the continuation of the controversy.

Deutschland.—We see no reason why our correspondent should not do so.

HOSPITAL SUNDAY FUND AND THE WORKING CLASSES.

To the Editor of THE LANCET.

SIR,—At a workmen's delegate meeting, representing the various trades and associations of the metropolis, held at 109, Dennett's-road, Queen's-road, Peckham, S.E., on Saturday evening, July 31st, it was proposed by Mr. Kempley, seconded by Mr. Hart (engineers), and carried unanimously, that a hearty vote of thanks be accorded to Dr. Wakley, Editor of THE LANCET, for his generous gift of £1000 towards the Hospital Sunday Fund, and that the secretary be requested to forward the same, and to ask Dr. Wakley if we might reckon upon his sympathy with an organisation now being formed, having for its object the exemption of hospitals from local taxation.

I am, Sir, your very obedient servant,

Dennett's-road, S.E., Aug. 2nd, 1886. C. AMMON.

"THE INSUFFLATION OF IODOFORM INTO THE TRACHEA AFTER TRACHEOTOMY FOR DIPHTHERIA."

To the Editor of THE LANCET.

SIR,—In reply to Dr. Marshall, I beg to say that in both cases there was slight transient albuminuria. In neither was there paralysis. At the time my first patient was under treatment two children in the immediate neighbourhood were taken to hospital suffering from diphtheria. Both were operated on; one died, and the other made a protracted recovery. All three children attended the same school. At the time my second patient was under treatment I was attending two cases of diphtheria within a stone's-throw of the house; both these cases were fatal. The shortness of time during which it was necessary to keep a tube in was, I believe, in great part due to the action of the iodoform.

I am, Sir, your obedient servant,

Walterton-road, W., Aug. 2nd, 1886. GEORGE SHIRRES, M.B.

Dr. W. H. Lambart's communication should have been addressed to the editor of the journal in which the "note" referred to appeared.

Dr. Martin's communication arrived too late to be dealt with this week.

CIRCULAR CLINICAL THERMOMETERS.

To the Editor of THE LANCET.

SIR,—Having had some experience with the metallic thermometers, possibly you will not object to me stating my opinion. They would appear to me to be suitable for taking the temperature of the body when it is normal or thereabouts; but when it ranges from 102° to 105°, and that on a very cold day, they run down so rapidly that it is impossible to obtain a correct reading. What is wanted is some sort of self-registering arrangement. Above all things, I would advise purchasers to have the Kew certificate; otherwise they may occasionally find a variation of from one to two degrees.—I am, Sir, your obedient servant,

Surbiton, July, 1886. F. P. ATKINSON.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Mr. Lawson Tait, Birmingham; Prof. Hannover, Copenhagen; Mr. Jos. Smith, London; Dr. Ward Cousins, Southsea; Dr. Thurstan, Southborough; Dr. C. Ll. Jones, London; Prof. Hay, Aberdeen; Mr. W. H. Denham, Southsea; Prof. Longmore; Dr. Adam, London; Mr. A. Haviland, London; Mr. Bremridge, London; Dr. Aveling, London; Mr. N. B. Davies, Sherborne; Mr. E. Owen, London; Mr. Gramshaw, Walton-on-the-Naze; Dr. E. B. Truman, Nottingham; Messrs. Arnold and Son; Dr. Elder, Nottingham; Dr. Goodhart, London; Dr. Imlach, Liverpool; Mr. A. Thomas, London; Dr. Kirkham; Mr. G. Shirres, London; Mr. B. Bryan, London; Mr. Venman, London; Dr. Harries, London; Dr. Bell Taylor, Nottingham; Dr. Lambart; Mr. W. Fraser, Ashburton; Dr. Newman, Glasgow; Mr. Berthier, Paris; Mr. Boys, Somerset; Mr. Horsfall, Leeds; Mr. Hall, Clarens; Mr. Field, Bradford; Dr. Smith, London; Mr. Atkins, Somerset; Messrs. Dawson

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Beds., Montreal; Mr. Blake, Dublin; Messrs. Ledger, Smith, and Co., London; Dr. Struthers, Aberdeen; Mr. Logan, Newcastle-on-Tyne; Miss Hitchcock, Braintree; Mr. Daniel, London; Dr. Neile, Edinburgh; Dr. Richardson, London; Mr. Hickey; Mr. Stephen Paget, London; Mr. Newsholme, Sheffield; Mr. Plowright, King's Lynn; Mr. Parrish, Horncastle; Dr. Hime, Bradford; Dr. Banning, Bushey; Dr. Thompson, Beds; Mr. Moffat, Glasgow; Mr. Atkinson, Burmantofts; Dr. A. M. Buchanan, Glasgow; Messrs. Wright and Co., Birmingham; Mr. H. B. Melville, Edinburgh; Prof. H. Smith, London; Mr. F. P. Atkinson, Surbiton; Mr. Wijeyesakere, Port de Galle; Mr. Preston, Liskeard; Dr. Gairdner, Crieff; Mr. Southeron, York; Mr. Craig, Llandudno; Mr. Blore, Leeds; Messrs. Haller and Co., London; Mr. Ellis, Westminster; Messrs. Livingstone, Edinburgh; Mr. Hoar, Maidstone; Mr. Horsley, London; Messrs. Thomas and Co., London; Mr. Laffan, Cashel; Mr. Keely, Notts; Messrs. Lee and Martin, Birmingham; Mr. Blair, Leeds; Messrs. Richards and Co., Leicester; Mr. Beswick, London; Messrs. Gilson and Co., Herne Hill; Mr. Hedley, Rotherham; Mr. Godfrey, Scarboro'; Mr. Rigden, Shrewsbury; Mrs. Hitch, St. Leonards-on-Sea; Messrs. Burgeyne and Co., London; Mr. Saunder, Manchester; Messrs. Robertson and Scott, Edinburgh; Dr. Thomas, Glasgow; Messrs. Forrest and Co., London; Mr. Maw, Bradford; Mr. Reid, Thornton Heath; Messrs. Hall and Co., Birmingham; Mr. H. E. Armstrong, Newcastle-on-Tyne; Mr. V. Jackson, Wolverhampton; Messrs. Beal and Son, Brighton; Mr. W. P. Fox, London; Mr. A. W. M. Robson, Leeds; Messrs. Sampson Low and Co., London; M.B., Notting Hill; Medicina; H. G. S.; A Grieved One; Deutschland; A. L.; Progress; L.C.P.S. Que.; An Enquirer; Non-Doctor; A. B.; Beta; Tunbridguse.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Hope, London; Mr. Faulkner, London; Mr. Taylor, London; Mr. Burcombe, Lincoln; Mr. Sharp, Walsall; Mr. Mackenzie; Messrs. Macniven and Wallace, Edinburgh; Miss Turner, Southampton; Messrs. Iliffe and Dawson, Coventry; Mr. Heywood, Corby; Mr. Torrance; Mr. Birch, Manchester; Mr. Forbes, Stonehaven; Dr. Green; Dr. Vernon, Yeovil; Dr. Royle, Jersey; Mr. Godfrey, Northampton; Mr. Macauley, Leicester; Mr. Griffith; Dr. Seaton, Sunbury; Miss Pudney, Earl's Colne; Mr. Sparke, Dover; Mr. Grant, Kirkmichael; Messrs. Black and Co., Elgin; Mr. McDonald, Manchester; Mr. Richards, Eglwyswrw; Dr. Allan, Bonnybridge; Capt. Blount, Chelsea; Mr. Cockell, West Hartlepool; Mr. Davenport, London; Miss Smith; Messrs. Read and Co., Bristol; Dr. Brecknell, Bucks; Mr. Blandford; Mr. Van Praagh, London; Mr. Gray, Burnley; Mr. Cairns; Messrs. Slinger and Son, York; Mr. Masson, Paris; Mr. Curme; Messrs. Mottershead and Co., Manchester; Mr. St. Dalmas, Leicester; Messrs. Bullock and Co., London; Dr. Drysdale, London; Dr. Eberle, Thirsk; Miss De Lattichau, London; Miss Carson, Burton-on-Trent; Messrs. Kilner Bros., London; Mr. Rideal London; Mrs. Fryer, London; Mr. Thin, Edinburgh; Mr. Blatchley, London; Mr. Ostell, Carlisle; Mr. Price, Glamorgan; Mr. Eminson, Haxey; Mr. Tunstall, Manchester; Dr. Needham, Gloucester; Mr. Jennings, Newbery; Mr. Greenwood, London; Mr. Phillips, London; Mr. Atkins, Taunton; Secretary, Eastbourne; Cerebellum; J. G.; D., Eastbourne; North Staffs Infirmary; R. B.; M.B., Hawkhurst; L. S. D.; T. T., Stoke Newington; Vigilance, Exeter; Doctor, Rimswell; Doctor, Stoke Newington; M.R.C.S., Grantham; Reverend, Loughton; Queen's Coll., Birmingham; Medicus, Folkestone; Spes; Cantab., Burton-on-Trent; Dr., London; S. B.; Assistant, London; G., Aberdeen; K., London; G. Y. X.; M. X., Hanley; Healtherice; E. R., Notting Hill; L. L.; Medicus, Birmingham; Medicus, London; M. B.

Aberdeen Journal, Buxton Advertiser, Imperial Federation, Marlborough Times, Doncaster Chronicle, &c., have been received.

Medical Diary for the ensuing Week.

Monday, August 9.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.

ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesdays, same hour.

CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2 P.M.

HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.

Tuesday, August 10.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.

CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

Wednesday, August 11.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesdays and Thursdays, 1.30 P.M.

ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department, Tuesdays and Fridays, 9.30 A.M.

ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.

LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.

GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.

KING'S COLLEGE HOSPITAL.—Operations, 2 to 4 P.M.; and on Friday, 2 P.M.; and Saturday, 1 P.M.

Thursday, August 12.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

Friday, August 13.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Saturday, August 14.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.

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The Annual Address
IN
MEDICINE IN THE UNITED STATES, AND ITS RELATIONS TO CO-OPERATIVE INVESTIGATION.

Delivered before the British Medical Association, Wednesday, August 11th, 1886,

BY JOHN S. BILLINGS, M.D., LL.D. EDIN.,
SURGEON, U.S.A.

MR. PRESIDENT AND GENTLEMEN,—You all know that the representative of the American medical profession first selected by your executive committee to deliver the address in medicine to-day was the late Dr. Austin Flint, sen., of New York, whose death last March is therefore a great and direct loss to you as well as to America. Every English physician knows Dr. Flint by reputation and through his writings, but only those few of you who were so fortunate as to know him personally can fully appreciate the magnitude of the loss which the medical profession has sustained in his death. This is not the time and place to attempt to pronounce a fitting eulogium upon him and his work, and I shall therefore only say that my deep personal sorrow for his removal is mingled with sympathy for the members of this Association, who have been thus deprived of the pleasure of hearing him state in person some of the results of his long and wide experience. The loss is not a total one, it is true, since he had fortunately completed his address on "The Medicine of the Future," which has been published, and has no doubt been read by all of you; but in this case the printed page is by no means a satisfactory substitute for the spoken word.

In accepting the request with which I have been honoured by your Council, that I should attempt to take his vacant place on this occasion, it is with a full understanding of my inability to fill it that I stand before you. The request came at a time when I was hard pressed by official duties, and had neither leisure nor opportunity to undertake any special research; hence, to avoid violating one of my favourite Scotch maxims—viz., "That which you do not know, tell not to anyone," it was necessary to select some subject to which I had already given consideration, and which at the same time would probably be of interest to English physicians. Reflection on these restrictions soon brought the field of selection into narrow limits, almost into "a small intercept of space of one dimension," as a mathematician would say. What is the significance of this invitation extended for the first time to a physician of another country, and that country the United States, to come to this annual gathering of the medical men of Great Britain and give the address in medicine? Does it not mean recognition of the unity of medicine, of the utility of co-operation, of the fact that we have common interests, and that the time has come when it is desirable to hear from the outlying younger branch of the family with a view to mutual pleasure and profit in the future? So it seems to me; and I propose, therefore, to call your attention briefly to some points relating to the present condition and future prospects of medicine in the United States, and to the direction in which you may reasonably hope and expect from that country in the future the most useful co-operation in the improvement of medical science and art. I believe that these must be matters of interest to you, and that I can perhaps make clear certain peculiarities which do not seem to be as generally understood on this side of the Atlantic as it is desirable that they should be to ensure sound judgment upon some of the results observed.

In the first place, permit me to call your attention to the fact that it is hardly possible to make any statements with regard to medicine in, or the medical profession of, the United States as a whole which shall be definite and at the same time distinctive—that is, which will not apply almost equally well to medicine and the medical profession in other countries. This is due to the fact that there are great differences in the organisation of the profession in different parts of America, so that what is true of one State would not be true of another; what is required as to fitness or qualification to practise in one place is not required in another; and the country covers so many parallels of latitude and meridians of longitude, making the conditions of life so diverse, and producing such differences in the prevailing diseases, that a man who is fairly qualified to practise in one section may be poorly fitted to treat the endemic diseases of another. As in painting a picture, it is best to locate and define the shadows first, and deal with the lights afterwards, let us begin by considering some of the things that American physicians complain about in other words, some of their supposed grievances. One of these is that the profession is overcrowded; that there are too many doctors, both *in esse* and *in posse*, and that this is due to too low a standard of education, and to the want of legal restrictions as to the qualifications which shall give a man the right to practise. The feelings of some of our physicians on this subject are in full accord with those of the good old New England deacon who told the village scapegrace seeking admission, that "he thought the church was about full."

Now, what are the number and distribution of medical men in America? Statistics gathered in 1883[1] showed that in the United States and Canada there were 90,410 persons calling themselves physicians, being in the proportion of 1 to every 600 of population. In Canada alone there were 3487 physicians, or 1 to 1112 of population. If we take the figures of our last census, 1880, the proportion of physicians reported is 1 to 589 of population, or 17 per 10,000. In England and Wales, by the census of 1881, the proportion of physicians is only 5·8 per 10,000, but these figures are not properly comparable with those of the United States, because they do not include unregistered persons. If the same classes were included that are counted in the United States report, I presume that the proportion would be about 9 per 10,000, or a little more than half that in the United States. The proportion to the population of those who call themselves physicians varies greatly in different localities; thus, in Colorado there are 29·3, in Indiana 25·2, in Oregon 24·3, and in Arkansas 23·5 per 10,000; while in New Mexico there are only 6·6, in South Carolina 9·2, and in North Carolina 9·7 per 10,000. [A map of the United States was here shown, on which the proportion of persons calling themselves physicians to the population in the several States was indicated by different shades of colour.]

It is not easy to give satisfactory reasons for these differences; we can only say that they do not depend to any great extent upon local legislation. The proportion of physicians is generally lowest in the southern States lying east of the Mississippi, and highest in those regions where immigration has recently been active. If we compare, by localities, the proportion of physicians to the population with that of clergymen and lawyers, we find some curious differences. It seems that the lawyers in the United States number 12·7, while in England and Wales they are 6·6 per 10,000; but that, on the other hand, the clergymen are 14·6 in England and 12·8 in the United States per 10,000 of population. In many instances it seems that where the lawyers are most numerous the supply of clergymen is smallest. I believe that a fair proportion of physicians to population is about 1 per 1000, which is not far from the actual proportion in England; while the true proportion of practising physicians in the United States is about 1 in 750. We must admit, then, that there is, at all events, no scarcity of physicians in the United States; and, as we have over eighty medical schools at work, besides a fair proportion of medical immigrants, there is no immediate danger of any interruption to the supply.

Let us now consider the second head of the complaint—viz., that the standard of education is too low. There is ground for this, considered with reference to some localities, but not for others. I said a moment ago that a man might be fairly qualified for practice in one part of the country, and yet find himself at a loss in another. This needs a little explanation, which I can, perhaps, give most easily in connexion with a map of the United States [the lecturer here exhibited a chart]. This map, which was prepared for a

[1] Illinois State Board of Health Report, 1883.

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very different purpose, indicates by different shades of colour the relative proportion of deaths reported as due to malarial disease to the total number of deaths in different parts of the country for the census-year 1879-80. You will note how comparatively light the tint is in the north and north-east, and how dark the shades become in the south and in the valley of the Mississippi, thus indicating the great differences which exist as to the prevalence and deadly effects of the malarial poison in different sections of the country. It is in some of these low bottom lands and swampy districts that we meet with cases of congestive chills and of malarial hæmaturia—cases in which the patient has been described as being "a mere appendage to a huge malarial entity, an incident of a miasmatic cataclysm." Furthermore, this strip of land bordering on the Gulf Coast is in the yellow fever zone, and has heretofore been repeatedly desolated by this pestilence.

As compared with the north and east, much of this malarious region is a thinly settled country, an almost purely agricultural country, and not a rich one. I need hardly tell you that the physician who has received his chief clinical instruction in the office of his preceptor in Vermont or New Hampshire, supplemented by distant glimpses of a few cases in hospital in Boston or New York, will find himself at a loss at first in dealing with the emergencies of daily practice in Arkansas and Mississippi. He will be subjected to influences which at times are dangerous to one who is not acclimated, and which tend to produce depression of spirits, want of energy, and bad health. He will not have free and constant access to scientific companionship, nor be stimulated by the influence of learned societies, and he cannot avail himself of the ordinary sources of amusement, education, and rest, such as art galleries, the drama, libraries, and museums, &c., which are found in the large cities. Moreover, the pecuniary reward the practitioner in many of these places can reasonably hope for is comparatively small.

Taking all these things into consideration, it is clear that if a man, after spending from six to eight years, and from £1000 to £2000 in acquiring such a general and professional education as it is now considered that a skilled physician should possess, then settles in such a region with the prospect of an average income of from £150 to £200 per year, it is not from pecuniary motives alone. There are such men in such places, men who are not only highly educated and skilled practitioners, but who are also original investigators and thinkers. It was within the limits of this malarial shadow that the foundation of modern gynæcology was laid by Marion Sims, of abdominal surgery by McDowell, Battey, and Gross, of an important part of the physiology of the nervous system by Campbell. Nevertheless, the rule holds good that malaria and science are antagonistic; the exceptions prove the rule. Nor can the inducements for highly educated physicians to settle in thinly settled localities be made stronger by any form of penal or restrictive legislation. Any attempt to fix a standard of requirements or qualifications for practice which shall be the same for such rural districts and for the large cities and manufacturing towns, must result in the adoption of what competent judges would consider so low a standard as to be ridiculous and useless. The demands are widely different, and corresponding differences exist in the sources of supply—that is, in the medical schools.

There is a class of medical schools in the United States whose object is to give the minimum amount of instruction which will enable a man to commence the practice of medicine without much danger of making such serious and glaring blunders as will be readily detected by the public. There are others schools whose aim and object are to make fairly well trained practitioners; the general character of the instruction given in these being substantially the same as that given in your English hospital medical schools. The results of such a three-years' graded course of instruction in medicine as these schools furnish depend upon the character of the material upon which they work—that is to say, upon the general preliminary education possessed by the student at the time of his matriculation. This is evidently too often defective, and only a few schools have thus far ventured to establish any standard of preliminary examination which at all approaches in its demands that which is required in England. The proverb that it does not pay to give a $5000 education to a $5 boy is clearly of American origin, and sums up a great deal of experience. You have nineteen portals of entrance to the profession, and have not found it easy to keep them all up to the standard. In America we have over eighty gates, a number of turnstiles, and a good deal of the ground is unenclosed common. Many of our physicians are more or less dissatisfied with this state of things and with the results thereof, and every year in some States efforts are made to secure legislation which it is supposed will protect the interests of the profession, though those who advocate such legislation are usually prudent enough to claim as their only motive a desire for the protection of the public.

Now, how does this free trade in medicine and the low standard of qualification or no standard at all required by law affect practitioners as individuals? To answer this we must divide the profession into several classes. In the first place, in all our cities, great and small, there is a large class of physicians who are as well educated and as thoroughly competent to practise their art as can be found in the world. They have studied both at home and abroad, have had extensive clinical training, are always supplied with the latest and best medical literature and the most improved instruments, and many of them are connected with hospitals and medical schools. Among them are found the majority of our writers and teachers, and the successful men are the survivors of a struggle in which there has been keen and incessant competition. These physicians, whose positions are fairly assured, and who, as a rule, have all the practice they desire, are not usually active leaders in movements to secure medical legislation, although they passively assent to such efforts, or at least do not oppose them; and their names may sometimes be found appended to memorials urging such legislation. They are clear-headed, shrewd, "practical" men, who know that their business interests are not specially injured by quacks and ignoramuses, rather the contrary in fact, for they are called on to repair the damage done by the quack to people who have more money than brains; and they are not inclined to risk the fate of the Mexican donkey who died of *congojas agenas*, that is, "of other people's troubles."

Then there is another large class of honest, hard-working practitioners, who rely more on what they call experience and common sense than on book learning. Many of these have obtained assured positions of respectability and usefulness, and are comparatively indifferent to medical legislation so far as their own interests are concerned. Others, however, who are not so successful, feel the competition of the local herb doctor or of the travelling quack more keenly, and have more decided views about the importance of diplomas. Among these are the young men who have not yet acquired local fame, and who are apt to become very indignant over the doings of some charlatan in the neighbourhood, or of some druggist who prescribes over his counter. These last are usually quite clear in their minds that the State ought to interfere and prevent injury to the health of the people. I have known two unsuccessful physicians who finally abandoned practice and who gave as a reason for their failure—one that "he did not know enough," and the other that "he had not the manners and tact which would inspire confidence in his patients," but such frank-speaking men are rare.

Thus far, as a rule, the efforts which have been made to secure legislation upon medical matters in America have come from the profession itself, and have been chiefly urged and recommended by physicians. The general public, and even the educated public, has shown very little interest in the matter. It does not demand protection against ignorance, but entrusts the care of its health and the lives of those who are nearest and dearest to it to almost anyone who announces himself as prepared to take charge of them. The number of those who profess to practise medicine in the United States and are not qualified to do so is undoubtedly large, though by no means so large as one might suppose after listening to the impassioned eloquence which is duly aired every year upon the subject. There are some advertising charlatans, and travelling quacks are occasionally to be met with, but they are rare. The most rigid tests of qualification in our profession in the United States are those required of candidates for admission into the medical departments of the army and navy. The standard established for these is about the same as that for the corresponding corps of the English army and navy; and of the candidates who apply, from 70 to 80 per cent. are rejected. Certainly we must admit that this percentage indicates an unsatisfactory state of things. But what evidence have we as to its results upon the health and life of the people? What shall we take as the measure of the difference of skill in physicians? The death-rate? If we compare the death-rate of the United

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States with those of other civilised countries, we find that it is as low as any, with the exception of Sweden. Does a low death-rate mean better sanitary condition or more skill amongst the doctors? For the last twenty years the death-rate has been diminishing in England; the average amount of life for each person here has been increased, but I observe that the sanitarians claim this as proof of the value and importance of their efforts, and that nothing is said about its being in any way due to increase in medical skill or to improvements in medical science. Evidently this test is not a convincing one. Almost the only matter in which figures seem to demonstrate the importance of superior medical education and skill is in the statistics of deaths due to childbirth and of the results of surgical operations.

The proportion of deaths from childbirth to the number of births is decidedly greater in the rural districts than in large cities, and among the coloured than among the white population. If this difference were found only in the United States statistics, it might be accounted for by the differences in the trustworthiness of the sources from which the data are derived; but we find similar differences in England, and we must admit that these are probably largely due to the fact that in cities labour cases receive more prompt and efficient professional care than they do in the country. I need hardly call your attention to the results of antiseptic surgery, or of modern abdominal surgery, as compared with those of twenty-five years ago. Here there can be no question as to the improvement. It is well to remember in this connexion that whatever undue prolongation of disease or unnecessary mortality is due to want of skilled medical treatment, occurs mainly among the wage earners—the farmers, mechanics, salesmen, needlewomen, &c.,—and not among the rich, nor yet among the very poor.

Now, seeing that really efficacious legislation with regard to medical education or to the practice of medicine must, like all efficacious legislation, be substantially in accord with public opinion, since it is impossible to continue to punish for any length of time that which public opinion does not condemn; and as the great mass of the people of the United States have not as yet had such evidence as they can understand, and which would thoroughly convince them that it is to their interest to suppress quackery,—it follows that it is necessary to go slowly and to allow such evidence to accumulate.

To me it seems that the most important of the first steps to be taken in this direction is one which has already been taken in Great Britain—namely, the requirement that every death in the community shall be registered, and that in such registration satisfactory evidence shall be given as to the cause of death, sufficient at least to prove that such cause is what is known as a natural cause—that is, that it is not due to crime. When it is admitted that one of the duties of government is to provide for such registration, both in the interests of life and to secure the rights of property, it follows, necessarily, that those persons whose certificates as to the cause of death are to be accepted as satisfactory evidence that there has been no foul play must present evidence that they are properly qualified to make such certificates. The principle is precisely the same as that which induces a government to provide for the examination of the medical men whom it employs in its army and navy. So far as the art of medicine is concerned, the demand has much, though by no means all, to do with regulating the quantity and quality of the supply; and there are few localities in the United States where the qualifications of the medical man are not fully up to the standard which the community is able to appreciate and is willing to pay for. In the natural order of things suffering and death are the remedies for ignorance, weakness, and vice, and the means of preventing the transmission of these characteristics to offspring. These remedies, though effectual, are drastic, and we do our best to avoid them; but perhaps it is well that the penalties cannot be done away with altogether. The laws regulating the practice of medicine in the United States are all State laws. If we were to judge only from what may be found in the statute books, assuming that all the laws contained therein are duly enforced, we should find that nearly two-thirds of the States have laws ostensibly regulating the practice of medicine within their borders. As a matter of fact, however, in over half the States which have laws on this subject no attempt is made to enforce them, and in almost all of them the possession of a diploma, no matter from what source derived, is all that is required. Of the various methods which have been tried in different States to ensure by law that physicians shall be properly qualified I will call your attention to two which are of special interest.

The first is that of Alabama, the principle of which is to organise the whole medical profession of the State, and use it as the means of regulating the qualifications of practitioners and of caring for the public health. The Medical Society of the State of Alabama with its branches, the county medical societies, thus forms a part of the machinery of the Government; it appoints boards of medical examiners, selects State and county sanitary officials, supervises the registration of vital statistics, the administration of quarantine, &c.—in short, it is the State Board of Health, and the county branches are the county boards of health. In that State the possession of a diploma does not give the right to practise, it simply enables the owner to go before the examining board. The examinations before the County Board are partly in writing, and are subject to review by the State Board, which has in some instances publicly condemned the local examinations as not sufficient. This system has now been in operation nine years, and has gradually been consolidated and improved by educating the local boards, and getting all physicians interested in it, until it is now working fairly well. Much remains to be done, and it is too soon to predict results; at present, the success of the system is largely due to the wisdom and energy of one man, who has given his whole time and labour to the work, and it remains to be seen whether the machine which he has built will work well without him.

The second system to which I will call your attention is that of the State of Illinois, which was commenced in 1877, or about the same time as that of Alabama. In Illinois anyone who presents a diploma, or licence to practise, from a legally chartered medical institution in good standing, is entitled to practise, and the State Board of Health is to decide as to what shall constitute "good standing." The Board of Health also examines all persons who do not possess satisfactory diplomas, and who nevertheless wish to practise in this State.

One of the greatest practical difficulties in the way of providing any system of State examinations in medicine in the United States is that public opinion will not support any law which can be supposed to condemn or in any way to injure homœopathic and eclectic practitioners or their schools, and hence any proposed law relating to medicine, or to the organisation of State boards of health, which does not recognise the existence of these sects will, in many States, at all events, meet with enough opposition to defeat it. In Illinois this difficulty was surmounted by the arrangement, that of the five physicians on the board one should be homœopathic and one eclectic. The Kansas law, passed last year, goes further in this direction, and provides that appointments must be so made that no school of medicine shall ever furnish a majority of the members of the board. Much to the surprise of many, the Illinois plan has worked very well,—there has been no quarrelling in the board—and the homœopathic and eclectic members seem to have upheld quite as high a standard of qualification as their fellow members. The results of the work in Illinois have been very good. A large number of ignorant charlatans have been forced to leave the State. The requirements of the board as to what shall constitute a medical college in good standing have been raised, and it has thus caused improvement in the medical schools, not only of Illinois, but of other States. Moreover, the neighbouring States have been stimulated to action, not only by the force of example, but because they received the men who had been driven out of Illinois, and found the accession an unpleasant one.

As in the case of Alabama, it is too soon to judge definitely of the results; and in Illinois, also, the satisfactory working of the system is largely due to one man—the secretary and executive officer of the board, who has given his entire time to the work. I do not by any means wish you to suppose, however, that I consider this as being a serious objection to this or any other plan, for in the building up of any organisation, or the carrying out of any system, much must always depend upon some one man.

The relations of the United States Government to medical education and to the practice of medicine are indirect only, the regulation of these matters by law being part of the police power which, under the constitution, is reserved exclusively to the individual States. The United States employs physicians in its Indian Department, in the Pension Department, in the Marine Hospital Service, and in the

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medical departments of the army and navy; and it has power to regulate the practice of medicine in those territories which are not yet organised into States, and also in the district of Columbia, but thus far it has made no use of such power. The qualifications of physicians employed in the army and navy, and in the Marine Hospital Service, are determined by examinations made by boards of medical officers belonging to those services. The possession of a diploma from a respectable medical college is a prerequisite for such examination, but beyond this it does not count—that is to say, the examination is the same for the holders of all diplomas, and covers all branches of medicine. But while the relations of the general government to medical education are thus indirect, they have of late years become of very considerable practical importance, and are now exerting much influence upon medical investigations and literature. This is being effected by the museums and libraries which are now being formed under the auspices of the Government at Washington, and also to some extent by certain special investigations undertaken by the Government in the interests of preventive medicine. Of these various agencies one of the most important is the library which has been formed at Washington, under the auspices of the medical department of the army in connexion with the Army Medical Museum; both of these institutions being a part of the results of the late civil war. The museum was at first formed to illustrate military medicine and surgery, giving the results, primary and secondary, of injuries inflicted by modern weapons of warfare and of the diseases of armies in the field; in which direction the collection is unrivalled in extent and completeness. Gradually its scope has been enlarged to include illustrations of anatomy, development, and all branches of pathology and therapeutics, so that it is fast covering the whole field of medical science. In like manner, the library, which commenced in a collection of those books relating solely or especially to military medicine and surgery, which were required in the compilation of the "Medical and Surgical History of the War," has expanded into a great medical library, which is now one of the best practical working collections of the kind in the world. These collections, then, no longer appertain exclusively, or chiefly, to the business of one department, but belong to the whole profession of the United States as a body; and the department which has charge of them is managing them from this point of view. The influence of the library in stimulating research, and upon the quality of medical literature, is already very perceptible, and is destined to increase with advancing years. I think I may also venture to claim that the utility of these collections, and especially of the library, is by no means confined to the medical profession of the United States, for the catalogues and indexes which are being issued in connexion with them are of service to medical writers and teachers all over the world.

As regards investigations into the causes of disease undertaken at the expense of the general government, only a beginning has as yet been made; but it is sufficient to indicate future possibilities and probabilities. The main importance of the work of the National Board of Health, which was organised in 1879 under the stimulus of the great yellow fever epidemic of the previous year, was due to investigations upon the causes of yellow fever and diphtheria, upon the relations of soils and of water-supply to certain diseases, &c.—investigations of the same general character as those which are being prosecuted under the auspices of the Local Government Board in this country, and of the Imperial Board of Health of Germany. It is true that, owing to circumstances which I cannot here explain, the work of the National Board of Health has been stopped; but there is every probability that it will be resumed, with perhaps some change of organisation, at no distant day, and I need not dwell upon the vast importance to medical science of organised and systematic work in this direction. Similar investigations have been undertaken by State boards of health, and especially by the State Board of Health of Massachusetts; and the fact that Governmental health departments are tending to work in this direction is significant as to future co-operation from such sources. In this connexion should be mentioned the National Museum of Hygiene, which has been formed under the direction of the Medical Department of the United States Navy, which is now one of the most instructive collections of the kind in the world, and has also connected with it an excellent library and a well-equipped laboratory.

Comparative and experimental pathology is also receiving attention from the Government under the direction of the Department of Agriculture, which is doing some good work in the investigation of the diseases of our domestic animals. Our investigators are fortunately not hampered by anti-vivisection laws, and there is little danger that they ever will be, for though we have our due proportion of fanatics and seekers of notoriety who wish to emulate the British Antis-, their true motives are so well understood that they have little power to do mischief.

Of medical associations in the United States there are several classes. We have a few local societies analogous to clubs in their organisation, which own property in the form of buildings, libraries, &c., are somewhat conservative in their selection of members, and are only to be found in large cities. Of these the College of Physicians of Philadelphia is the oldest and has the largest and best library and museum; it will celebrate the hundredth anniversary of its existence next year. In New York the Academy of Medicine, and in Boston the Medical Library Association, are of the same character, and in general each large city has a similar society, although as yet they have not become fully anchored and established by the acquisition of property. The second class includes local societies devoted to specialties, such as pathology, obstetrics, &c. These also are found only in large cities, and as yet are few in number. Four of them only have published transactions. Corresponding with these are national societies devoted to specialties such as gynæcology, ophthalmology, surgery, pathology, and clinical medicine, &c. These societies meet annually, elect their own members, exercising care in the selection, and publish valuable transactions.

Another class is composed of the county medical societies, which strive to include all regular practitioners residing in their precincts. From these are sent delegates who form the State medical societies and the American Medical Association. The mode of organisation varies somewhat in the different States, but the representative principle prevails in all. Most of these societies publish transactions, and the American Medical Association now has its journal.

As to the condition of medical science and art in America, it partakes of the general progress, for the press now makes all discoveries the common property of the civilised world. The marked feature of the present epoch is the recent advance in knowledge as to the relations between micro-organisms and certain diseases, and the strong stimulus which this has given to preventive medicine. Sanitation is becoming fashionable, and if we may believe some of its votaries, it is a very simple matter to prolong the average lifetime to the scriptural, "threescore years and ten." All that is necessary is that everything shall be clean, and every person virtuous. Having learned to distinguish those diseases which can be prevented much more easily and certainly than they can be cured, we may turn them over to the sanitarian, who has his own battles to fight with ignorance and prejudice. If he succeeds, and so far as he succeeds, he will change in certain respects the work of the practitioner. The lives which are saved from cholera and typhoid, from consumption and diphtheria, and from the acute specific diseases, will, at last, be weakened and destroyed in other ways. The work of the physician will not be lessened by preventive medicine, it will simply be required more for older persons, and for another class of diseases. As sanitarians must depend upon practitioners for much of the information which is essential for their work, it follows that if preventive medicine is to become a working power, it will bring the mass of the profession into closer relations with the State than its members have held heretofore. What these relations shall be is one of the most interesting, and, at the same time, one of the most difficult, of the many problems with which we, or our successors, must deal. I have referred to some experiments on this subject which are now being tried in America, where it is much easier to make such trials than it is in an older country hampered with vested interests. Just at present, in this, as in a number of other things, our tendency is towards centralisation, both in the several States and for the whole country, and it is not improbable that we may go far on this road in the future.

I come now to the consideration of the second part of my subject—namely, the direction or manner in which we have reason to hope that medicine will be developed in the United States, and the kind of co-operation which you may reasonably expect to receive from the medical profession of that country. A marked feature of the present day, in medicine as in other things, is the tendency to

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specialisation in study and in practice. But this very development of specialties, of increasing minuteness in the division of labour, increases the necessity for co-operation and in fact tends to create what we may call the specialty of co-operation. Formerly a rifle, or a watch, was made by a single workman. No two instruments were exactly alike, each piece had its own individuality and was not interchangeable, and the cost of the whole was such as to put it beyond the reach of the multitude. Now, the work on these things is greatly subdivided; one man makes only one small wheel, or spring, or pinion, and another another, each doing his work according to a uniform pattern, rapidly, perfectly, and at comparatively small cost. But, in addition to the workmen who make the individual parts, it is now necessary to have one person specially skilled in making drawings and preparing patterns, another to assemble the completed parts, and a third to test the whole after it has been put together. As the centrifugal force increases, the centripetal power must also increase. In one sense medicine, as we have it to-day, is the result of co-operation, not of deliberate, centrally planned and direct co-operation, but of natural selection from results produced by many men, often working at cross purposes and, therefore, wasting much energy, but nevertheless working, though blindly, to a common end. And it is safe to predict that in the future much of the best work will be done in the same way, by individual effort inspired by the love of science, by personal ambition, &c. But the results obtained in this way come slowly, and some things that we want can hardly be obtained by individual effort, even if we were willing to wait, hence we must look to organisation for help.

This is an age of machinery, of exchanges, of corporations—for all these correspond to one and the same fundamental idea. Men make machines to do what the individual cannot do; and they make them not only of brass and iron, but of men; for such an obvious source of power to the man or men who can master the combination is not likely to be overlooked. One result of such organisation is seen in our encyclopædic works on medicine, whether these be called dictionaries or handbooks; another in the great medical journals; another in associations which seek to wield political influence; another in the comparatively recent attempt at collective investigation of disease. With these may be classed also the attempts of Government departments to make scientific investigations, to form libraries and museums, to do things which require long continuity of effort on a definite plan in order to produce the best results. And it is by the combination of all these, with the efforts of individual workers, that substantial advance and improvement are to be effected. In this broader view of co-operation it is interesting to consider those fields of labour to which comparatively few physicians can devote themselves, because of want of time and opportunity, but whose proper working is, nevertheless, of the greatest importance to the practitioner. One of these is experimental laboratory work, and in this direction the prospect of valuable contributions from America is now exceedingly good. Some of the wisest of our most wealthy men have shown their appreciation of the responsibilities which riches entail on their possessors by seeking new channels through which to benefit their fellow-men. While the old and well-known methods of endowing hospitals and charitable institutions are not neglected, there is apparent an increasing tendency to endeavour to promote the advancement of knowledge, and especially of such knowledge as tends to the mitigation of suffering and the improvement of the race, to furnish means for the investigation of disease, to provide laboratories, and to endow medical schools, and thus place them beyond the reach of the temptations and difficulties which must always exist when such schools are dependent upon the fees of students, and are, therefore, practically commercial manufacturing establishments.

As illustrations of this tendency, I may mention the bequest of £1,400,000 by Johns Hopkins to endow, in the city of Baltimore, a university and a hospital of which the medical department is to be a special feature, to be provided with the best laboratory and other facilities for original investigation as well as for teaching; the gift of Mr. Carnegie to the Bellevue Hospital Medical School of New York in the shape of a well-equipped pathological laboratory; the presentation by Mr. Vanderbilt, and members of his family, to the College of Physicians of New York, of [illegible], to provide for that school new buildings [illegible] having the best means of teaching and research, and the endowment by an unknown donor of a laboratory for the University Medical College of New York, with the sum of £20,000. Last year, in his retiring address as President of the New York Academy of Medicine, Dr. Fordyce Barker referred to this tendency to regard wealth as a trust to be used for the benefit of humanity, and after sketching the requirements of the Academy on a scale which would require an endowment of at least a million of dollars, predicted that such an endowment would be furnished by wealthy citizens of the city. I believe that he was right, and that his prediction will become history.

As the class of men who have wealth, leisure, and knowledge becomes greater, there comes an ever-increasing demand, not only for the best medical skill, for the most expert practitioner, but also for exhaustive research in every direction which promises to furnish new means for the prevention or relief of suffering, and for warding off as long as possible the inevitable end, and hence there is little reason to doubt that the examples I have named will be followed by others in the near future. With such opportunities, and under such conditions and influences, the stimulus to the young and ambitious worker is strong; we have abundance of material of this kind upon which the process of natural selection can operate, and there is little reason to doubt that the result will be substantial and valuable contributions to physiology, pathology, and therapeutics.

I have already referred to some of the work which has been undertaken by the United States Government for the benefit of medicine and of the medical profession in the formation of a library and the providing of means of assistance in bibliographical research. There is another most important means of advancing medical and sanitary science which only a government can furnish, and in which field of work England now stands pre-eminent—I refer to vital statistics. In this field the United States Government has thus far done but little, yet enough to show the great interest and value of what we have a right to hope will be done in the future by combining the work of the several States. This is one of the fields in which international co-operation is most desirable; it alone can furnish data sufficiently complete and reliable for a scientific consideration of the relations of disease to geographical and race distinctions. Geographical pathology is a very old branch of medicine, as old at least as Hippocrates, whose treatise on airs, waters, and places is justly famous. Permit me to remind you of its opening clauses. "Whoever wishes to investigate medicine properly should proceed to consider the seasons of the year, and what effects each of them produces—the winds, the qualities of the waters, the situation and exposure of the city, the character of the ground, and the mode of life of the inhabitants." Then, says the wise old Greek, "from these things he must proceed to investigate everything else." There is a breadth of view in that last sentence which is particularly satisfactory. Since the days of Hippocrates there has accumulated a vast amount of literature relating to the supposed connexion between the topographical peculiarities of different cities and countries and the diseases that prevail in them; but when the books and essays which come under the heading of "Medical Topography" are examined, it will be found that the topographical part is much more complete than the medical, which latter is mainly confined to the consideration of malarial diseases, and is vague and indefinite with regard to their relative prevalence.

Much the larger part of our really valuable information on this subject has been obtained within the last twenty-five years, as Professor Hirsch points out in the preface to the recent edition of his very valuable Handbook of Geographical and Historical Pathology, and while the contributions of the United States to this branch of medical science have been already important, I hope to be able to show you that they are probably destined to be of steadily increasing importance in the future. Considered as a body, the opportunities of the medical profession of the United States for the study of the manifold influences which can cause, modify, or prevent disease, are in some respects unequalled. As regards peculiarities of climate, soil, altitude, &c., the country is so large as to afford almost every variety of combination, so that nature may be said to be making a series of experiments on a grand scale upon the mass of humanity which is so rapidly increasing in the New World. Especially is this the case with regard to the problems of heredity as connected with the mysterious relations of

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certain forms of disease to race. America is at present the great mixing bowl into which are pouring streams of human life from origins the most diverse, from regions the most remote. Black and white, red and yellow, long skulls and short skulls, Celt, Teuton, and Slav, are being brought together under similar conditions of climate, food, and occupation, thus permitting of the comparison and study of the different effects, if such exist, which result from variations in parentage under conditions of exposure to the same causes of disease. For a little time, a generation or two at least, the different streams remain pure, then there is more or less mingling, in some cases very little, in others very intimate, but always there is an opportunity of studying the races separately, as well as of investigating the results of their various mixtures.

To illustrate the possibilities in this direction, I will call your attention to some peculiarities in the distribution of deaths from certain causes in different parts of the United States, and for this purpose I shall make use of the data from our last census, taken in 1880. We have no general and uniform system of registration of births and deaths. The larger cities, and about half a dozen States, have such a system, but for much the larger portion of the country the only means which we have for determining differences in amount or causes of mortality in different localities is through the census, which is taken once in ten years. The data thus obtained with regard to deaths are imperfect, because when these are collected, only at the end of the year, about 30 per cent. of the deaths are unrecorded; and they are inaccurate, because the reports of the causes of death are not furnished by persons competent to give reliable information with regard to them. Nevertheless, these data are the best that we have, and although for a large part of the country they do not give us the actual number of deaths from any cause or set of causes, they do furnish some interesting information with regard to the relative prevalence and importance of certain causes, and suggest questions and lines for future investigation, although they do not furnish definite and scientific answers.

Take, for instance, this map of the United States, upon which, by varying shades of colour, is shown the proportion of deaths reported as due to cancer, as compared with the reported deaths from all causes. Cancer, using the term in its broadest sense, is a disease which seems to be gradually increasing in frequency among civilised nations, and, possibly, to have a tendency to increase with the advance of civilisation. In England and Wales the proportion of deaths from this cause seems to have nearly doubled within the last twenty-six years, and a similar rate of increase can be made out in certain parts of America. How far this increase is a real one, and how far it is due simply to improvement in diagnosis, is a question yet unanswered.

The mortality from cancer in the United States is proportionately greatest in the New England States, somewhat less so in New York and Pennsylvania, and it causes the least proportion of deaths in the Mississippi Valley and the South generally. The proportion of deaths from cancer in the United States is somewhat greater than it is in England; but it is not possible to make any accurate comparisons in this respect. Now, why are the shades on this map so dark in the North-east and so light in the South? In the first place, cancer is a disease the mortality from which steadily increases with advanced age, as you may see from this diagram. Hence, cancer causes a higher proportion of mortality in those localities which have the greatest proportion of population living at advanced ages, and in the United States these localities are the New England States, as you will see by this map. One deduction from this, which may perhaps not have occurred to all of you, is that a large proportion of deaths from cancer indicates, to a certain extent, that the locality in which it occurs is a healthy and long-settled one, since it has probably a relatively large proportion of inhabitants, and especially females, of an advanced age. But another explanation of the peculiar shading of the cancer map is found in the relations of race to the tendency to death from this disease. The proportion of annual deaths from cancer per 100,000 living population was, in round numbers, 23 for the whites and 13 for the coloured. That is to say, cancer is more than twice as prevalent among the whites as it is among the coloured in the same localities, for these figures apply only to the South. On the other hand, cancer appears to cause a greater proportion of deaths in persons of Irish and German parentage than it does among the rest of the white population, the indications being that between the ages of fifteen and sixty-five the Germans are especially liable to cancer, more so than the Irish, and decidedly more so than the average white population. Now, when we remember that the greater part of the coloured population is in the South, and the greater part of the Irish and German population is in the North, we have another reason for the differences in mortality caused by this disease in the two sections.

Again, take this map, showing the distribution of the deaths from scarlet fever during the census year. You see that this also was most fatal in the North, and, here again, the influence of race comes in, because in the negro race the mortality from this disease appears to be very low. This disease has always been much rarer in the South than in the North, and the contrast was much stronger in former years than it is at present; but this cannot be explained solely, or even to any great extent, by difference of temperature, because scarlet fever has often been epidemic in the tropics, and, on the other hand, in many localities in temperate climates it is among the rarest of diseases.

Here is another map showing the distribution of deaths reported as due to diphtheria during the year. Diphtheria is a disease which has been unusually prevalent in the northern portion of the United States for several years. During the census year it caused 2374 deaths out of every 100,000 deaths from all causes, while in England, for the year 1880, the deaths from diphtheria were 532 per 100,000 deaths from all causes—that is to say, the comparative mortality from this disease in England was less than one-fourth that of the United States for the same period. Diphtheria, again, is essentially a disease of the North, but especially of the North-west. It causes an excessive mortality in children of German parentage, sufficiently so to show that here again the influence of race comes into the problem, although probably only indirectly—that is to say, it is probably the habits of a peculiar class of people which favour the propagation of the disease rather than any physical peculiarities in the structure of their bodies. Two more illustrations of the geographical distribution of disease in the United States may be of interest in this connexion. The first is that of consumption, the second of pneumonia.

Consumption is a vague term, and, as used in the census, no doubt includes many cases which were not true tubercular phthisis. It is reported as causing 12 per cent. of all the deaths, or more than any other single cause. In England and Wales, in 1880, it caused a little over 9 per cent. of all the deaths. Such wholesale ratios are, however, of little interest or value. There are very great differences in the liability to this disease in different parts of the United States, as the map makes sufficiently evident; and it is from a study of the causes of these differences in the data derived from large masses of people, combined with clinical histories and experimental laboratory work, that we have good reason to hope to obtain knowledge, not only of the causes of this disease, but of better methods of prevention and treatment than are now at our command. It causes a greater mortality among the Irish than in other white races, and perhaps a greater mortality among the coloured than among the white.

Next to consumption, pneumonia is reported as causing the greatest number of deaths in the United States during the census year, giving a ratio of 8·3 per cent. of all deaths, as against 4·8 per cent. in England and Wales in 1880. Here, again, the local distribution of deaths is interesting, and the contrast between the map of consumption and that of pneumonia is very striking. Here, again, we find that race peculiarity is an important factor in the problem, the proportion of deaths from pneumonia among the coloured being much greater than it is among the white.

I have elsewhere commented more fully than it is possible to do here upon these peculiarities of the distribution of certain causes of deaths in the United States.[2] In fact, my only object in calling your attention to the subject is to indicate the direction in which we may hope for good work hereafter, which indication is the chief, if not the only, valuable result of the work already done. In the brief comments which I have made upon these maps you will have noticed the stress which I have laid upon race peculiarities. These race problems are simply problems of

[2] See report on Mortality and Vital Statistics of the United States as returned at the tenth census, 2 vols. 4to, Washington, 1885-1886.

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heredity taken in mass, and there is no need to urge upon an assemblage of medical practitioners the importance of considering family peculiarities in diagnosis, prognosis, and therapeutics. That the questions involved are difficult and complicated is true, but we are already possessed of more knowledge with regard to them than is commonly supposed.

In a lecture on "Life," delivered a few months ago, Professor Brookes, of the Johns Hopkins University, illustrated this as follows: "If I am placed, with my eyes bandaged, before a stone lying free on the surface and am told to kick it, and if I know at the same time the size, shape, and weight of the stone and the character of the surface, I can form a pretty accurate idea as to what the result upon the stone will be. While if the object to be kicked is a dog, and I am given precisely the same data, I cannot tell what will be the effect. But if I can see the dog, I can in many cases predict pretty accurately. If he is a bulldog he will do one thing; if he is a Gordon setter he will do another." And, in like manner, the old family doctor knows that when a particular disease appears in his neighbourhood he may expect to see it produce in one family convulsions, in another collapse, and in a third little or no danger or inconvenience. This kind of knowledge is, however, at present mainly confined to individuals, it has not become a part of the world's knowledge; it is not defined—in other words, it is not scientific. To make it so is the work of the future, and in this work I hope that we shall be able to help you.

I have spoken to little purpose if I have failed to show you that there is a great deal of human nature in American physicians, and that it is a kind of human nature with which you are tolerably familiar. It should be so, for we are of the same race, a race which, perhaps, as Emerson says, "sets a higher value on wealth, victory, and material superiority than other men, has less tranquillity, is less easily contented." Our ancestors were restless, fighters, freebooters, and from these ancestors we have the common inheritance of energy; of what *we* call "firmness," and our opponents unreasonable, pigheaded stubbornness; of liking to manage our own affairs, and, at the same time, to exercise a little judicious supervision over those of our neighbours; of hatred of humbug and lying; and, in spite of our discontent, of a firm belief that our wives and children, habits, houses, modes of business, and of treating disease are, on the whole, better than those of any other people under the sun. Privately, and between ourselves, we grumble and declare that the country and profession are going to the dogs—nay, we must do so, or we should not be of true English blood; but there is no need for me to tell you that these are only "growing pains," and not symptoms of progressive ataxy. While we must consider the difficulties in the way of the improvement of the science and art of medicine, difficulties due to ignorance, to indolence, to conflict of interests, and to the eternal fitness of things, the existence of such difficulties is not a matter to be bemoaned and lamented over. These obstacles are the spice of life, the incentives to action, the source of some of the greatest pleasures which it is given to man to experience. The child, spending a happy hour with its new puzzle is a type of the scientific investigator. The naturalist who objected to the statement that this is a miserable world which it is well to be soon done with, on the ground that there are still many species of rhizopods which he had not examined and classified, is another type. On the ethical and sociological side, the matter is summed up in Ruskin's aphorism, that "Fools were made that wise men may take care of them." It is surely not without cause that there has been given to us this restless spirit of inquisitiveness, this desire to compass the heavens and the earth, this raging, infinite thirst for knowledge; it is the outcome of brain training and natural selection for thousands and tens of thousands of years. We are in a period of the world's history characterised by material prosperity, by increase of populations, by tendencies to uniformity, to the making of individuals of small account. According to the Swiss philosopher, Alphonse de Candolle, this is to last a thousand years or so, after which the pendulum will swing the other way, and there will follow a long period of diminution and separation of peoples, and of decadence. Against that decay of nations we know of but one remedy, and that is increase of knowledge and of wisdom. And this increase must be in *our* knowledge, in the world's wisdom, and not merely in that of John, or Fritz, or Claude. As each man has special opportunities and duties, if he can only recognise them, so it is with guilds, with professions, and with nations.

I have tried to indicate to you some of these opportunities which are presenting themselves to my colleagues, your brothers, in the lands beyond the sea, and I hope that I shall not be considered rash or vainglorious in saying that I believe they will so use those opportunities as to return compound interest for what they have received from the storehouse of our common inheritance. Force changes form and place, the stored energy of the soil of our plains and valleys has been coming here in the form of meat and grain, has appeared in muscle and brain, and in a hundred other shapes, but none has been destroyed; our loss has been your gain, and in our turn we have received full and fair exchange.

It is our part now to remember that there are not two springs in the year, there are not two periods of youth abounding in energy and desire, or of manhood's strength and self-poise, in the life of any man or of any nation, and for us, as for those who have been before us, the Kanuri proverb holds true, "*Kabu datsia, kargum bago*"—The days being finished, there is no more medicine.

ABSTRACT OF

The Address in Surgery,

Delivered before the British Medical Association, Wednesday, August 11th, 1886,

By FREDERICK ABELL HUMPHRY, F.R.C.S.,

SURGEON TO THE SUSSEX COUNTY HOSPITAL.

THE MEDICAL ASPECT OF SURGERY.

AFTER a few introductory remarks Mr. Humphry said: "In former years your visits have been made to great centres of industry and great centres of intellectual and professional activity and vigour. Your visit this year is to a town probably quite as large as many at which you have held your meetings, but it is a town of a peculiar character, having no special manufacture, no definite industry of its own; it is wanting in many causes of those great surgical injuries and surgical diseases that form the fruitful subject of such a paper as this. In fact, it is a town where not disease, but recovery from disease, is, medically speaking, the chief characteristic. And so, in the wards of our hospital, the numbers of serious and acute diseases do not hold the ordinary proportion to the chronic and strumous cases; hip-joint disease, necrosis, and similar affections that abound in the surrounding country districts.

"In casting about, then, for a fit subject for these remarks, I have not chosen to bring before you any group of cases from my own experience, or any special form of treatment for any special disease, but rather to take a wider and, I trust, as interesting subject for consideration. Looking back over the last half century, I suppose the greatest change that has occurred in the practice of surgery has been the development of the so-called specialties. This development is cause and consequence, too, of the enormous increase in the knowledge of the art and science of surgery that has occurred during that period.....But, while fully recognising and valuing these great and rapid advances in different directions, it may be worth while to pause—as it were to take breath—and even look back on the ground already covered. Are we going too fast? Old theories, old opinions, old treatment, old books, are they sufficiently studied and considered? Are the old relations between medicine and surgery still maintained? Is the medical side of surgery (if I may so speak) holding its ground, and making the same advances as the more strictly called surgery?

"Of late years, how much has surgery done for medicine? Has medicine done as much for surgery, and has the medical treatment of surgical disease received the same consideration, or made the same rapid strides as the study and development of operative procedure? It is now more than fifty years ago that Sir William Lawrence, in an introductory lecture at St. Bartholomew's Hospital, said: 'It is the boast of modern surgery to have greatly diminished the number of operations.'.....That improved knowledge of which Lawrence boasted, and to which he referred as the cause of lessened operations, has in itself, by the medical aids to surgery it has introduced, been the main cause of their greater frequency and of their increased success. But,

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after all, the fact that, in any case, recourse is had to an operation is an admission that medical treatment has failed in curing the disease. We can hardly open an abscess without acknowledging that, by simpler means, we have been powerless to combat the inflammation that preceded it. In what state, then, is our knowledge as respects surgical medicine?

"And, first, of inflammation—that subject which occupies rightly so much space at the commencement of all surgical works, and is the enemy we have to meet at all corners in the treatment of surgical disease. It would occupy too much time here to compare the present state of our knowledge of those pathological changes comprised under the head of inflammation with what it was, say, in John Hunter's time; for, in spite of our general advancement, and with the additions of chemistry and the microscope, our views, for all essential purposes of treatment, have not been materially altered in principle. And yet the treatment of inflammatory affections has undergone considerable modification, due, no doubt, to the altered conditions of life. In bygone days a man really lived by the sweat of his brow, his occupation was a more active one, and, with fewer holidays and fewer aspirations to be rich, he spent the even tenour of his days in greater health and more comfort. But now life is a struggle; competition and the anxiety to be rich give a man anxious days and sleepless nights. His brain is used to the neglect of his body, and, when his holiday comes, he shrinks from the fatigue of its enjoyment. Illness then finds these two men in very different conditions. Instead of a man who, as formerly, would bear bleeding and active treatment, we now get a man in whom the nervous system predominates, whose digestion is out of order, and to whom sedatives and stimulants are necessary. This change has become so marked, almost so universal, that we are in considerable danger of forgetting the principles of the antiphlogistic treatment, or perhaps we are timid in putting them into practice in those cases really requiring it. We are inclined to smile at the way in which our forefathers were bled and purged because they had received some slight injury, the result of accident; and many were perhaps bled and purged too freely; but no one who has seen, not only the relief from pain, but also the relief from impending suffocation following a prompt bleeding, in the case of a man suffering severely from fractured ribs, can doubt that the principle, when properly applied, still holds good. ..... In inflammatory affections of other organs, also, we are probably becoming too timid in the use of depletion. The onset of many local inflammations may be cut short by a free and timely local bleeding. Even a strumous affection of the hip-joint will often have an inflammatory commencement, perhaps following some slight injury; if this condition be recognised sufficiently early, and be treated by the application of a few leeches in addition to the ordinary long splint, the inflammatory part of the illness may be controlled, and opportunity be given for the constitutional part of the malady to be arrested by other means. ..... In medical surgery, syphilis is one of the subjects that has necessarily received much attention. Compared with, almost classed among, the exanthemata, with its period of incubation, its local manifestations, and its subsequent constitutional symptoms, its pathology seems to have been put on a surer foundation, and the principles of treatment are consequently of a more definite character. Still, all this further experience and investigation does not invalidate in the main either the views of pathology or of treatment as laid down by John Hunter. Its further history has, however, been much extended, and a whole train of symptoms not mentioned by the older writers on syphilis have been explained as due to specific deposits; and the term 'visceral syphilis' now includes many pathological conditions that were certainly not recognised as due to this disease. In treatment, now as formerly, mercury is the one remedy—at all events, in the early stages; but salivation, formerly looked on as the necessary evidence of mercury having affected the system, and with it the constitutional disorder, is not considered necessary—indeed, is now supposed not to have so good an effect as the slower result obtained by the long-continued use of small doses. In this way the patient does not suffer from the treatment as well as from the complaint, and is able to continue any active occupation he usually follows. On the other hand, in the use of iodide of potassium for the gummata and other tertiary deposits, it would seem that the further they are removed in point of time from the primary affection, the greater the necessity for its free administration. Symptoms yielding slowly, or not at all, to small doses will, if these be quickly and largely increased, soon show signs of decided improvement..... Cancer still remains of all diseases, though unfortunately one of the most common, one of the most obscure and the most intractable. It still defies all our attempts at cure. ..... Beyond the relief from pain, medicine has, at present, proved useless. From time to time remedies have been tried, and some have held their ground for a season; but after a long experience have proved of no avail. But we should not be deterred by this failure; those who are specially working at this subject, and who are connected with hospitals for its treatment, are always open to try fairly any remedy which can show any reasonable prospect of success; and surely we may yet hope the time will come when some relief, perhaps some cure, may be found for this dire disease. M. Pasteur has recently opened a wide field for investigation of this kind; may we possibly look for any help from following the lines he has laid down in the treatment he has adopted for hydrophobia and some other diseases of the brute creation? ..... Very early removal is at present our only remedy; but surely the efforts of surgical medicine should be directed more than they have been to the medical treatment of cancer. Surgery has done much of late for its removal from regions hitherto looked on as inaccessible; how far greater the triumph, if, by remedies prophylactic or otherwise, some method of treatment could be discovered that would obviate the constant recourse to the knife, with even then a strong probability of a return of the disease. Till lately, the physician has laid claim to the three great cavities of the body as his peculiar province, but this is so no longer. The surgeon is now called on to assist in their treatment when, from the occurrence of inflammatory effusions or morbid growths, medicine is manifestly powerless; and there is now scarcely an organ that has not been attacked by the operating surgeon with a view of relieving some pathological condition. But, while the surgeon is thus intruding on the physician's province, it behoves him also to participate in the physician's knowledge; while surgery is steadily advancing by introducing new operations and perfecting old ones, is surgical medicine equally advancing by improvements in diagnosis, in its power specially of laying down definitely those indications that make such operations advisable? Surgery of this kind is of a comparatively recent date; but, to the credit of modern surgeons, it may be said that with their increased skill in operating has also increased their skill in diagnosis..... Diagnosis has, however, arrived at a very high development in determining the presence and locality of tumours in the brain, and that with sufficient accuracy to warrant the surgeon's attempt at their removal. The cases, of course, at present have been few, but sufficiently numerous and sufficiently successful to justify further trial; but with our present knowledge there are, I think, few of us who could depend on their powers of diagnosis enough to encourage them in undertaking so serious an operation..... Still, in spite of early and accurate diagnosis, in spite of advancing medical knowledge, operations are still increasing.

"Anæsthetics, and now antiseptics, have been the chief medical helps to the operating surgeon. The administration of chloroform (as a type of the anæsthetics) is now, from the natural requirements of the patient, so necessary a part of the operation, that it becomes more a matter for theoretical than practical consideration as to whether its use is attended or not by any disadvantage in the further progress of the case. The immediate gain to the patient, excluding the very few sad exceptions, is of course enormous. There can be no doubt that the introduction of antiseptics has both increased the number as well as the success of operations. Certainly, many of the large abdominal operations would not have been undertaken unless the surgeon believed that, by their use, the patient was freed from most of the casualties that follow such proceedings. Records of cases treated antiseptically show marvellous results; but of late as marvellous results are occurring in the hands of those who have relinquished that treatment. By antiseptics, I would at once say that I include those means by which septic matter is prevented from being absorbed into a wound; but while fully recognising the importance of Sir Joseph Lister's experiments with regard to the fermentative process and the resulting germs, I cannot believe that on their presence or absence depends the health or otherwise of a wound..... I must also mention here the very great advantage to hospital

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surgery from the recent very laudable antiseptic *furore* among the nurses. We must all, I am sure, attach the greatest consequence to the improvement, not only in the education and the social status of our present race of nurses, but also in their great attention to the cleanliness of the patients, as well as their wounds. I would admit, then, the great gain to surgery from the use of antiseptics; but I would limit this admission to the gain from the absence of the putrefactive change, not to the absence of germs and the fermentative processes therein implied.

"Among the recent aids to surgery must be mentioned electricity. From its stimulating effects on the nervous system, it has long been used to give tone to limbs and muscles weakened by disease or injury; but of late advantage has been taken of the chemical effect produced during its passage through the tissues, and of the decomposition that ensues, to cause resolution of tumours or coagulation of blood. In this way it has proved chiefly useful in the treatment of those large thoracic aneurysms that are not amenable to other surgical relief. The clotting that takes place between the needles introduced well into the cavity of the sac becomes the focus for still further coagulation; and in this way, perhaps after repeated applications, the increase of the aneurysm has, in some few cases, been arrested, and, in several, amelioration of symptoms or delay of fatal ones has been accomplished. In nævi and small blood-tumours, electrolysis has the advantage of curing the disease with certainty, and with but little scar. Probably in medical, as in social, life, electricity has not yet fulfilled all the requirements we may expect of it. Some further development of the telephone and the electric light, in its application to medical purposes, will almost certainly take place, and large additions will, we may fairly hope, by their help, be made to our present means of surgical diagnosis.....

"Among the medical aids to the treatment of surgical disease, it would be disloyal of me, speaking in this place, and after a long residence in this town, not only to mention but to enforce the great advantage to be gained by sea air. Besides the bracing effect, as it is popularly called, of sea air, there is no doubt that many surgical diseases distinctly benefit by a sojourn here. Roughly speaking, the effect on people in health on coming to Brighton is somewhat to check the natural secretions; and, in like manner, probably, patients suffering from exhausting illnesses or discharging abscesses are certainly benefited. They not only improve in general health, bnt the discharge lessens, a sinus takes on a more vigorous action, and night-perspirations are much diminished.....

"But you will say, What is the object of these remarks—to what do they tend? Surely to this, that while great, almost marvellous, results have followed the late advances and improvements in operative surgery, and which have been so carefully and so scientifically matured by many distinguished surgeons, there is still a wide field open for the investigation and improvement in the medical treatment of surgical disease; and that, on the whole, the strictly surgical and operative treatment has received more than its share of the attention due to disease, looking at it simply from a remedial point of view. I fear we must admit that the tendency of the present day is to eradicate disease rather than to cure it. In his lectures delivered at the Royal College of Surgeons, now many years ago, Mr. Hilton almost apologised for introducing the subject of physiological and mechanical rest as a branch of what he called natural therapeutics; and yet how much has surgery benefited by the principles he enunciated? He brought great anatomical knowledge and wide surgical experience to bear on this subject of rest, and seemed really to show that there were few surgical affections that were not capable of some relief, and many of cure, if the directions he gave were scientifically carried out.

"I mention this as an example of the direction in which scientific surgery may be advanced, and to suggest that if by therapeutics the pain of a cancer can be relieved, or a hip-joint saved, other means than the purely operative demand greater attention, and acquire greater importance than has been hitherto awarded them. Another bright example may be derived from the experiments lately carried on by M. Pasteur. It may, perhaps, be thought premature to accept his discovery with regard to the treatment of hydrophobia as a scientific fact, but even now the evidence in favour of the correctness of his views is very strong, and is not in opposition to doctrines already acknowledged. He deserves all praise for the patience, assiduity, and care with which he has laboured on this subject, and endeavoured to cure one of the most painful and fatal illnesses that come under the surgeon's care. Surely these examples may encourage us to attempt more in the medical treatment of surgical disease; to endeavour to discover the first deviation from the healthy condition; and to endeavour to find for such deviation some remedy that may arrest its further progress, and obviate the necessity for those operations that have justly helped to raise British surgery to its present high position.

"In making these remarks to this Association, I cannot but remember that I am addressing a body of gentlemen who are, like myself, largely engaged in general practice, and who have opportunities of watching disease from its onset to its close, in a way impossible for the pure surgeon or the specialist. Family peculiarities, family histories, family medical secrets are known to us, and in this way we have advantages for investigating, tracing, and treating disease, that we cannot be too eager to avail ourselves of. In fact, the general practititioner is the living embodiment of that principle I wish so strongly to establish—the necessary and close connexion between medicine and surgery, a principle nobly illustrated by many of our great provincial surgeons. Our practice comprises both medicine and surgery; our medical experience out of doors is brought to bear upon our patients in the surgical wards of our hospital. Chloroform has taken away from the value of the rapid and brilliant operation. He is the most successful surgeon who is also the best physician. Surgery should get more dependent on medicine for its help. Operative surgery, from the nature of things must have a limit, and surely that limit must be nearly reached. Let the medical aspect of surgery, then, command more of your interest and attention."

ABSTRACT OF

Address in Public Medicine,

Delivered before the British Medical Association, Wednesday, August 11th, 1886,

BY E. D. MAPOTHER, M.D.,

CONSULTING MEDICAL OFFICER TO THE CITY OF DUBLIN.

DR. MAPOTHER chose as his subject "The Medical Profession in Ireland and its Work." Referring to the Brehon code of laws, he stated that the most important of them, Senchus Mor, originated with St. Patrick; the provision in them most worthy of imitation at present was that the physicians sat in the Council of the State. They provided for distress—that is, for the support of a son taken from his mother's dead breast, and for the care of the sick and incurable. The unqualified physician was fined unless he gave notice that he was not qualified. In the sixteenth century it does not appear that the Irish were largely addicted to the use of intoxicating drinks, but in 1749, according to Dr. Rutty, there were in Dublin 3500 drink-shops in a population of about 150,000; at present among the humbler rural population alcoholic diseases are not frequent, but they are amongst the middle classes. A brief account was given of epidemic diseases which visited Ireland in past times. Ireland was spared from many mediæval plagues, on account of its insulated position, but typhus had its home in the country, and its ravages were such that during the year 1818 a million cases were recorded. During this year, Dr. Cheyne, Professor of Medicine in the School of the College of Surgeons, recorded the axilla and mouth temperature of 250 cases. At this time the profession held a high position owing to the distinguished men who practised in Dublin. It suffered heavily from typhus from 1818 to 1839, during which period 560 physicians had fever, and in 1847, 123 died from the disease. Cholera in 1866 did much mischief in Dublin, killing 923 persons; in 1867 there was a brief but fierce epidemic of cerebro-spinal meningitis. During the last six years the profession has suffered heavily in other respects; the landlords, who were formerly generous patients, have left Ireland, and the farmers and shopkeepers are becoming less able to pay fees; nevertheless, the number

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of members of the profession is steadily increasing. An interesting *résumé* was then given of a paper read last year in the Academy of Medicine by Dr. Grimshaw, showing the condition of health of the Irish people. In rural districts, the average death-rate was 16·6, in urban districts 22·5 per 1000 living. The deaths from phthisis were 2·8 per 1000 among the civic and 1·6 amongst the rural population. Preventable ills in Dublin promote phthisis, but its low level and climate must also be blamed. The sick poor are better cared for in Ireland than in any other country, and this is due to the Medical Charities Act of 1851. The speaker entered in some detail into the Poor-law administration of the country, speaking of it in complimentary terms, and stating that provident dispensaries are unknown in Ireland, except in a few towns. The county hospitals were formerly a great disgrace to the country, but are now efficiently and economically managed. The clinical hospitals of Dublin are now the subject of investigation by a Government Commission. Ireland has only had a system of registration of deaths since 1864, although this system existed in England twenty years previously. Reference was made to the public medical services, and those of the army and navy were discussed at some length, and it was noted that the work of many Dublin chemists was inexact and untrustworthy. Veterinary surgery is not even taught in Ireland, and Dr. Mapother commented upon this in view of the interest of the Irish population in the production of horses and cattle. In conclusion, an account was given of the system of medical education in Dublin, and of the various licensing bodies.

ON A SPONGY FORMATION BETWEEN THE SCLEROTIC AND CHOROID COAT IN NEW-BORN CHILDREN.

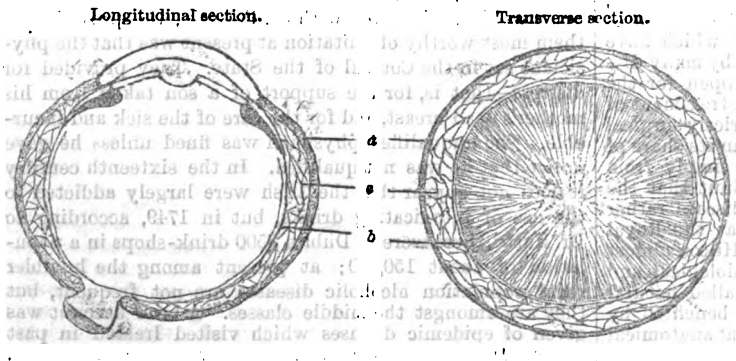
BY PROFESSOR ADOLPH HANNOVER, M.D.

AMONGST the great number of eyes of new-born children which I have examined, I have four times found a formation between the sclerotic and choroid, which, as far as I know, has not been noticed hitherto. I consider this formation to be spongy, on account of the structure it presented to view when the eyes were hardened in dilute chromic acid.

Eye of a child between one and two years of age, hardened in dilute chromic acid.

FIG. 1. Longitudinal section.

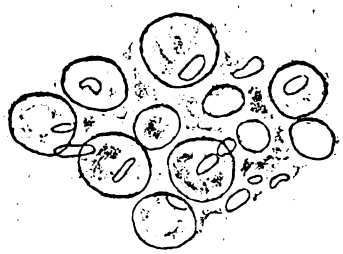
FIG. 2. Transverse section.



a, Sclerotic. *b*, Choroid. *c*, Spongy substance between these two coats. Double size.

(See Figs. 1 and 2.) It consisted then of small areolæ, which were elongated, flat, generally parallel to the concavity of the eye, or irregular and angular like those of the spongy substance of the penis. In different subjects this layer between the sclerotic and choroid varied from 0·5 mm. to 1·5 mm.; it was thickest at the equator of the eye, and became thinner at the back part of the eye near the entrance of the optic nerve, and likewise at the fore part outside the corpus ciliare. The membranes which formed the framework were semi-transparent and firmly adherent to the sclerotic and choroid, so that they could not be removed without injury. Under the microscope they appeared as membranes of uniform transparent structure or covered with molecules; the lines on them were caused by folds. There was, besides, a great number of round or oval clear cells, with sharp linear contours, but without any contents (see Fig. 3); even the presence of a nucleus was doubtful, although there were many bodies of their appearance on the membranes, and some of them may have had

FIG. 3.



their place in the interior of the cells. There was no connective tissue; the cells may possibly have belonged to the lamina supra-choroidea. The circumstance that the formation was always found to have the same shape and extension in both the eyes of the child made it very probable that one and the same cause had prevailed in producing it. As such a one we may most likely presume an increased secretion of the serous or rather half-gelatinous substance, which under ordinary circumstances always exists between the sclerotic and the choroid of the new-born child. The adhesion of this half-gelatinous substance, wherein the ciliary nerves and vessels rest, is stronger with the sclerotic than with the choroid; it is stronger in the posterior part than in the anterior, and stronger in the inner than on the outer half of the eye.[1] When examined with the microscope, this substance is seen to be composed of a uniform basis without any structure, intermixed with a great number of oval, angular, or pointed nuclei of different size, from which also fibres may proceed. There seems, besides, to be a faint indication of connective tissue in bundles which cross each other, and of some elastic fibres, but these may belong to the lamina supra-choroidea. (See Fig. 4.) When an eye of a new-born child is kept in dilute chromic acid for some days, the half-gelatinous substance becomes more like a fine membrane, but the microscopical relations remain the same as in the fresh state of the eyes. This spongy substance which I have mentioned has nothing to do with the lamina fusca on the inside of the sclerotica. The lamina fusca does not form a complete membrane, but consists only of bundles of connective tissue interwoven with irregular pigmentary cells, and connected with the lamina supra-choroidea by strings.

FIG. 4.



It is most convenient for the examination of the relations between the sclerotic and the choroid to wash off all the pigment from the inside of the latter, so that this coat appears almost white and without colour, except in the neighbourhood of the entrance of the optic nerve, where a light red-brown colour remains, especially extending outwards (tapetum?), caused by a brown sprinkling, but not by regular pigmentary cells. The posterior part of the choroid is not yet provided with pigment, but has only a light-brown colour—hence the reddish colour of the pupil in the new-born child. A transverse oval is formed with an excentric white spot for the entrance of the optic nerve. On the contrary, the place of the foramen cæcum is black,

[1] I have found exactly the same relation in the connective tissue between the sclerotic and choroid in the ox.

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but not so dark as the rest of the choroid. The pigmentation proceeds both from the foramen cæcum and from the periphery of the oval, beginning in the foremost part of the eye and extending backwards.

The first eyes in which I discovered this formation were those of a child of between one and two years of age. The dimensions of each eye were as follows:—Vertical diameter 19 mm., transverse diameter 20 mm., antero-posterior diameter 18·5 mm. (the eyes were compressed from before backwards), diameter of the base of the cornea 10 mm. and 11·5 mm. All other parts of the eyes were perfectly normal, the radial structure of the vitreous body, like the structure of an orange, being very distinct. Nothing is known about the power of sight of the eyes.

When I had communicated the results of my observations, Dr. Paul Haensell of Paris suggested the opinion that the spongy layer between the sclerotic and the choroid might be due to an arrest of development. This hint may lead to further investigations of the eyes of the human fœtus at different ages before birth, kept for some time in dilute chromic acid in order to preserve the shape of the eyes and the possibly existing space between the sclerotic and the choroid.

Copenhagen.

ON A CASE OF CARDIAC DILATATION.

By GRAHAM STEELL, M.D.,
ASSISTANT-PHYSICIAN TO THE MANCHESTER ROYAL INFIRMARY.

THE following case seems to me of sufficient interest to be recorded as furnishing a good example of a form of heart disease which, though comparatively rare, is important from the readiness with which, while yet in an early stage, it yields to treatment. It would seem to depend on failure of the muscle of the heart, whereby dilatation and mitral incompetence are induced. I have met with it most commonly in vigorous, muscular men below forty years of age. Most of its subjects have been exposed to the bad effects of alcoholic excess and undue strain thrown upon their heart by one cause or another; probably there is some congenital or acquired predisposition to the disease. In a fatal case lately under my care, in which the diagnosis was verified by post-mortem examination, the valves being quite normal in structure, no cause could be ascertained either during life or after death.

The diagnostic points of this form of cardiac dilatation are briefly as follows:—

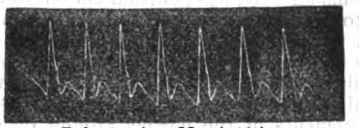
1. The absence of a history of rheumatism.
2. Evidence of enlargement of the heart, affecting both sides, but especially the left ventricle, accompanied by extremely feeble cardiac impulse, the apex-beat (the impulse of the left ventricle) being especially weak and diffused.
3. An apex systolic murmur not carried backwards behind the mid-axillary line, accompanied usually by a first sound, which sound may be heard alone at the back and behind the line named.
4. The ordinary circulatory phenomena of mitral disease of the heart, such as pulmonary congestion, enlarged liver, and anasarca spreading from below upwards, along with their respective symptoms, dyspnœa, &c.

The valvular lesion with which this variety of cardiac dilatation is most likely to be confused is mitral stenosis. Certain cases of mitral stenosis have no history of rheumatism, and present a systolic apex murmur having the attributes of the murmur described above, while there is no presystolic or diastolic murmur. Even in such cases, however, there are peculiarities which will prevent confusion with the cases of which the present is an example.

The restoration of the circulation on the recovery of the heart is strikingly illustrated by the accompanying sphygmograms, taken before and after treatment. As further evidence of the recovery of the heart in the same case may be mentioned the diuresis and the disappearance of the murmur, dyspnœa, and practically all symptoms. For the notes of the case and the sphygmograms I am indebted to Mr. Mumford, house-physician, Royal Infirmary.

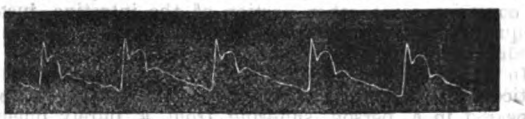
H. S——, a baker, aged thirty-five, has been much exposed to changes in temperature, but has not suffered from rheumatic fever, rheumatism, or colds: he has never before had a day's illness that he can remember. He has indulged in beer, occasionally taking three or four pints a day, but generally not more than two; never takes spirits; no history of syphilis. His work necessitates carrying heavy sacks of flour up to 280 lb. in weight. Father very healthy, aged sixty; mother died of dropsy, apparently cardiac, as she suffered for six months from great dyspnœa, and had to be propped up in bed; she appears not to have suffered from rheumatism; brothers and sister healthy; the patient has a family of nine children, all living and well. On March 2nd, 1886, the patient went to his work as usual, but was unable to continue at it, on account of breathlessness and severe generalised pain all over the front of the chest on both sides, which prevented him from stooping. He endeavoured to continue his work on this and on the following day, but was obliged to go home and rest. The dyspnœa came on if he only walked slowly for twenty yards. He had severe cough and swelling of the legs and face. He remained at home, sitting up in the daytime, till March 15th, when he was admitted to the Manchester Royal Infirmary.

The patient's condition on admission may be briefly described as follows: He is a large, powerfully built man of pale complexion. He complains of pain in his chest and swelling of his feet. The ordinary signs of bronchitis distributed generally over the lungs are audible on examination of the chest. The cardiac dulness is increased and extends to the left of the nipple over an inch, while the apex-beat, although in its normal intercostal space, is displaced to the left of the mammary line and is very weak and ill-defined. A systolic murmur is heard at the apex and for some distance above the apex, being especially loud at a point midway between the nipple and left border of the sternum. The murmur is accompanied by a first sound possessing a peculiar clang. A pronounced difference between the pulmonary and aortic second sounds cannot be ascertained. There is no albumen in the urine. He was ordered the following mixture: Tincture of squill, one drachm; aromatic spirit of ammonia, one ounce; infusion of digitalis, six ounces; infusion of senega, to twelve ounces; one ounce to be taken three times a day.



Pulse tracing, March 16th.

March 24th.—Digitalis mixture stopped yesterday, and a mixture containing aromatic spirit of ammonia and infusion of senega substituted. Pulse 60. "The patient is a great deal



Pulse tracing, March 24th.

better, and the cough has almost entirely gone; the dropsy has almost disappeared, and there is no pain in the chest. The murmur has greatly diminished in intensity, and is only occasionally heard.

30th.—"The patient is much better, and gets up during a great part of the day. There is no dropsy, pain, or cough." A slight diminution of cardiac dulness seems perceptible. A tracing taken to-day presents similar characters to the last one, but the tidal wave is less pronounced.

April 6th.—No murmur is audible to-day, and the first sound has entirely lost its abnormal clang. The apex-beat is now well defined and of good strength. It is situated to the left of the mammary line in the fifth space. The patient has entirely lost his dyspnœa, pain, and dropsy.

The following quantities of urine were passed:—

		oz.			oz.
March	15th	10	March	25th	80
,,	16th	10 (?)	,,	26th	90
,,	17th	40	,,	27th	100
,,	18th	26	,,	28th	104
,,	19th	30	,,	29th	110
,,	20th	40	,,	30th	94
,,	21st	40	,,	31st	70
,,	22nd	80	April	1st...	80
,,	23rd	30*	,,	2nd	88
,,	24th	80	,,	3rd	64

* Digitalis stopped.

The patient on leaving the infirmary went to the Convalescent Hospital, and after a sojourn of a few weeks there,

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again attended the infirmary as an out-patient for a considerable time. While under observation he remained well, although he did not resume the hard labour to which he had formerly been exposed.

A CASE OF

INTESTINAL OBSTRUCTION RELIEVED BY LIBERATING THE OMENTUM FROM AN OMENTAL HERNIA.

BY F. A. SOUTHAM, M.B. OXON., F.R.C.S.,
ASSISTANT-SURGEON TO THE MANCHESTER ROYAL INFIRMARY AND SURGEON TO THE CLINICAL HOSPITAL FOR WOMEN AND CHILDREN.

A FEW years ago the question was discussed in the columns of THE LANCET by Mr. Holmes[1] and Mr. Rushton Parker[2] as to the reality of the occurrence of symptoms of strangulation in herniæ containing omentum only, and the cause of such symptoms when present.

Mr. Holmes is of opinion that strangulation of the omentum only may produce symptoms identical in kind with those of strangulated bowel, though probably not so severe, and suggests that the function of the intestine is suspended by some reflex action originating in the nerves of the strangulated omentum. Mr. Parker, on the other hand, believes that there can be no such thing as symptoms of intestinal obstruction brought about solely by constriction of omentum, and that when present they are due either to dragging of the omentum on the colon ("strangulation by kinking") or to peritonitis, whether resulting from inflamed omentum or otherwise. In other cases he suggests that possibly a small knuckle of strangulated bowel was reduced previous to operation, and the relief to the symptoms afforded by operation is therefore erroneously assigned to the reduction of the omentum alone. Mr. Treves, in his valuable work on Intestinal Obstruction (p. 29) has shown that when a portion of omentum has become adherent (as so often happens when it is involved in a hernial sac), it tends to become elongated, while the rolling movements of the bowels around it help to mould it into a rounded cord-like ligament. It seems not unlikely that an omental band of this kind may in some instances drag upon and produce kinking of the colon in the way Mr. Parker suggests, while in others it may strangulate or constrict some other portion of the intestine, just as frequently happens with other bands, and in this manner produce all the symptoms of complete obstruction.

In the following case, which recently came under my notice, well-marked symptoms of acute obstruction suddenly appeared in a person suffering from a purely omental hernia of long standing, without any evidences of congestion or inflammation being found in the hernia itself to account for them, and the symptoms were at once relieved on liberating the omentum from the hernial sac.

The patient was a female, fifty-two years of age, who for some time had suffered from a small irreducible femoral hernia, and had occasionally been under treatment for dyspepsia, colic, &c. About 3 A.M. on May 3rd, having gone to bed quite well, with the exception that for a few days the bowels had been somewhat constipated, she awoke with severe colicky pains in the abdomen, which were not relieved by an emetic administered by the patient herself, as had happened on several previous attacks of a similar nature. The same evening Mr. Gowland of Hulme saw her for the first time, and found her suffering from severe paroxysms of pain in the abdomen, which was distended, tympanitic, and somewhat tender. She was put on milk diet, morphia was administered every four hours, and turpentine stupes applied to the abdomen. The following evening severe sickness set in, and continued during the night. The next morning the vomiting was becoming stercoraceous. As there had been no action of the bowels for three days, a soap-and-water enema was administered; this was followed by the passage of some flatus and a few small particles of fæcal matter. As the symptoms continued unrelieved, Mr. Gowland suggested operative interference, and I saw the patient in consultation with him the same afternoon. She was then extremely collapsed; the pulse (130) was so weak and fluttering as to be almost imperceptible; the vomiting was distinctly fæcal; there was no marked distension of the abdomen, but severe pain was complained of in the umbilical region, with tenderness on pressure; beyond an indefinite fulness just above Poupart's ligament on the right, nothing abnormal could be detected in the abdomen. On the same side there was a femoral hernia the size of a walnut; it was not tender on pressure, but felt soft and irregular, evidently consisting of omentum, and being quite irreducible. Under the circumstances, as the symptoms of obstruction were so well marked, it was thought advisable to explore the hernia, for though it was clear that it was mainly omental, it appeared very probable that a small knuckle of bowel would be found tightly nipped at the neck of the sac. Herniotomy was accordingly performed. On opening the sac, a few drops of clear fluid escaped, and a small piece of indurated omentum, quite healthy and free from any signs of congestion or inflammation, was found in its interior. Its pedicle, which was about the size of a lead-pencil, completely filled the neck of the sac, to which it was fixed all round by old adhesions, there being no room left for any bowel to have made its way by the side of it. The adhesions having been broken down with the finger and a director, the pedicle was drawn down and surrounded high up with a catgut ligature, and, after the omentum had been removed on the distal side of the ligature, allowed to slip back into the abdominal cavity. The sac itself was then removed, its neck having been secured by another ligature. On recovering from the anæsthesia the patient at once expressed great relief from the operation, the abdominal pain having quite disappeared. There was no recurrence of the sickness, and henceforth all went well with the exception of a troublesome diarrhœa, which set in the following evening and continued for some days.

The sudden onset with the acute nature of the symptoms in this case, and their complete disappearance immediately the omentum was set free, point either to strangulation by kinking of the colon, or to constriction of some other portion of the bowel, probably of the small intestine, by an omental band, continuous with the pedicle of the portion of omentum present in the hernial sac.

Manchester.

[1] THE LANCET, vol. ii., 1883, p. 21. [2] Ibid., vol. ii., 1884, p. 211.

CASE OF CÆSAREAN SECTION IN COUNTRY PRACTICE; RECOVERY.

BY THOMPSON FORSTER, M.R.C.S., L.S.A.

ON May 16th, 1886, a man came to me at 10.30 P.M., stating that his wife was in labour and the midwife said there was something wrong, "the child was crossed." He was in great distress.

The patient, aged twenty-three, married, primipara, had been very delicate all her life, and subject to fits and very frequent sickness; she had been in labour during the whole of the 15th, and suffered severe pains on the 16th. The membranes ruptured at midday. She was in the following condition: Head presenting; os fully dilated, but the head had not in any way entered the pelvis; pelvis contracted; upper part of sacrum projecting. I considered it impossible to deliver the child entire. The cottage was so small, so badly ventilated, and the surroundings so unsatisfactory, that I decided to open the head, and endeavour to remove the child. I called in my friend, Mr. Johnson, who entirely agreed with me, and undertook to administer chloroform. Having opened the head, from which no blood flowed, I concluded the child was dead before commencing. Every effort was used to bring down the child's head, but without success. I could not introduce my hand. We agreed that delivery per vaginam was quite impossible. We then decided upon the Cæsarean section. I made the following arrangements: placed the woman across the bed, the nurse to take charge of the patient's hands, Mr. Johnson to see to the chloroform, one farthing candle on the bed and one on a chair with a basin of water and sponges, and one small petroleum lamp on a box with the instruments. I could not get further assistance, as the friends would not come into the room; if they had, they could not have moved. As soon as she was ready and well under the influence of chloroform, which she took freely, I made an incision through the skin and the peritoneum at the upper part, and passed two fingers

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into the cavity as a guide, and extended the incision down to the pubis, about five inches. There was no more room. The uterus presented. I opened it freely, and the back of the child presented. With some difficulty I drew out the empty head, which I found the easiest, and removed the child, which weighed 9½ lb., and divided the cord. Then the placenta presented; this was removed easily, being free, and apparently floating in blood. As soon as it was removed blood poured out over everything. I then took hold of the fundus of the uterus with my left hand, and compressed the neck with my right. I then left the neck, as it was flabby and long, and the os very flabby, though the fundus was getting firmer, and began to sponge freely, still holding the fundus very firmly in the left hand. The bleeding slackened, but on removing my hand the blood flowed out as fast as ever. I applied the sponge freely, and then squeezed it out in cold water and pushed it into the uterus, holding the uterus with both hands. The bleeding then ceased. During the whole of this time the woman was vomiting violently, and forced down a large piece of omentum and some of the small intestines, which were violently projected through the wound. These were passed back steadily but very firmly, and held for a short time until the vomiting had slackened. I then carefully sponged out all the blood until the whole was quite dry and free from blood and water. The edges of the uterine wound were everted. I then perceived a faint odour of urine, so I examined the bladder, which was sound and almost empty. The vomiting began again a little, so I had to hold the intestines in with the back of my left hand whilst I passed in three deep sutures through the peritoneum of strong silver wire and twisted each one as I passed it, also twisting three small vessels. This was necessary because of some restlessness of the legs, which made it a little difficult. I then passed two shallow sutures of the same wire, and placed a piece of dry lint on the wound, and a thick pad of Strutt's absorbent cotton put on firmly, and a flannel bandage.[1] I found the bed so saturated with blood that I had to get a bag of straw that some children were sleeping upon in the room above, and removed the wet one and put the patient on this. I then put her on a man's old shirt, and covered her with two blankets; there were no sheets or other blankets at hand. I gave her a one-grain pill of capsicum and camphor, to be repeated every four hours, and left her in the care of her mother, the midwife going home. The difficulties having been all overcome by time and patience, I left the woman at about 4.30 A.M., comfortable as far as possible.

May 17th: Some pain. Passed urine freely; some bloody discharge with it. Pulse 120.—18th: Pulse 120; temperature 102·5°. Sweating very freely; to continue opium, and give beef-tea, milk-and-water, and barley-water as required. Dressings dry, excepting from the sweat, which saturated them; passed urine freely.—19th, 10 A.M.: Temperature 101·2°; fresh flannel bandage over the old one to tighten it; some flatulency; passed urine freely; back tender from the rough ticking and hard bed; abdomen tender; put a bag of powdered sulphur over the abdomen, and some over the bed and patient; to continue support; omit opium; some bloody discharge per vaginam.—20th, 10 A.M.: Pulse 120; temperature 102°; patient comfortable and very thirsty.—21st, 10 A.M.: Pulse 120; temperature 101°; patient comfortable.—23rd, 10 A.M.: Pulse 100; temperature 100°. Mother obliged to go for the day; bowels acted slightly.—25th, 10 A.M.: Pulse 110; temperature 102°; bowels irritable. Nurse removed some hard masses of fæcal matter, and then the bowels acted very freely.—7 P.M.: Very comfortable. Removed dressings and sutures; wound quite dry, and not even a pink blush, but apparently healed by first intention. Dressed with adhesive plaster and flannel bandage.—26th, 10 A.M.: Very comfortable. 7 P.M.: The nurse had gone home, as the mother came to say she could not stop, and must go home. There was some difficulty in getting a nurse. The patient cried all the afternoon. She had a fit of vomiting. Ordered brandy and one grain of opium every four hours. A drop of pus came from the suture hole.—27th: Temperature 104°. I dressed the wound, which had opened, I suppose, from the retching, and breathing quick and irritable. 7 P.M.: Delirious. Pulse 140; temperature 105°. Dressed the wound with sulphurous acid, 9 per cent., one part to four of water.—28th: Delirious all night. Sulphurous acid, twenty minims, 9 per cent., water one ounce, every three hours. Teeth dry; tongue dry; temperature 104°; frequent cough and expectoration.—29th: Temperature 102°. Bedsore on back. Cough and some diarrhœa.—31st: Temperature 105°. Diarrhœa severe. Lead and opium pill (five grains) every four hours. Some discharge per vaginam.

June 1st: Temperature 100°. Diarrhœa stopped. No medicine.—2nd: Removed to airy, comfortable lodgings. Since May 27th I have dressed the wound with sulphurous acid, 9 per cent., one part acid to four of water. Discharge very free, as of an ordinary period.—6th: Temperature 98·5°. Discharge very free. Ordered mutton chops and porter. There has been only four drops of pus during the whole time.—7th: Discharge ceased almost entirely. Wound healed. Gets up to night-stool, as the bedsore is so painful and large that she cannot use the bedpan. No ill effects.—18th: Walked home. Bedsore still large.—20th: Met the woman walking in the streets on her husband's arm, having returned to household duties.

Daventry.

[1] Sir Spencer Wells advised some years ago the necessity of dry sponging.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Procemium.

CHARING-CROSS HOSPITAL.

STRICTURE OF THE ŒSOPHAGUS; GASTROSTOMY; RECOVERY.

(Under the care of Mr. RICHARD BARWELL.)

THE following case of gastrostomy, which was performed in the manner which now finds most general acceptance, at two operations, as recommended by Mr. Howse, will be read with interest. In it the stomach was not opened and food introduced until five days after it had been secured to the abdominal wall, when adhesion was firm. In cases of cancerous stricture of the œsophagus it is always a serious question as to whether gastrostomy should be performed or not, and if the operation be decided upon, as to the time for its performance. In a paper published not long ago by Dr. Hacher it is stated that Professor Billroth is of opinion that the operation should not be undertaken until the swallowing of fluids is quite impossible. This view would hardly meet with acceptance with British surgeons, most of whom are in favour of doing it at an earlier date, before the patient is so much reduced in strength by starvation as to make any operation of importance and risk to life, *a fortiori*, one in which the peritoneum is exposed and manipulated. The case which is appended, in which the operation was performed before complete obstruction had taken place, not only gave the patient great relief, but enabled her to return to her ordinary occupation, and has undoubtedly considerably prolonged life.

Eliza C——, aged forty-six, was admitted into the Golding ward on Feb. 3rd, 1886, on account of difficulty in swallowing, which necessitated many efforts, but still did not absolutely preclude deglutition. After thorough exploration of the chest, a bougie three-eighths of an inch in diameter was passed without difficulty for ten inches from the upper dental arch, but here decided resistance was encountered. Smaller and smaller instruments were gently used, and it was found that a No. 12 catheter could be got through the stricture without force. As there was no history of traumatism, it was evident that the stricture must be either syphilitic or malignant. No sign or history of the former could be found, nevertheless iodide of potassium was given, and its effects carefully watched. No instrumental treatment was deemed advisable, and the patient desired to be treated outside. She did not improve under the iodide, and in a fortnight it was discontinued. After another fortnight the difficulty of swallowing became greater, the efforts more painful, and she also began to lose flesh. Again, in another

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fortnight she was evidently worse, had lost 14 lb. in weight during the past month. Her condition and the effect of gastrostomy were explained to her, and she urgently desired that the operation might be performed, in order to obviate the pain and trouble of attempting to swallow. She re-entered the hospital early in April, and on the 13th Mr. Barwell performed the first stage of gastrostomy, making an incision, three and a half inches long, three-quarters of an inch below the margin of the costal cartilages, commencing about the same distance from the middle line. The abdominal wall was opened through the fibres of the rectus, because it seemed desirable (the stricture being so low) to avoid going very near the cardiac end of the stomach. The viscus was found narrow and contracted, but it was easily drawn down with the fingers from behind the liver, and was sewn in two circles to the abdominal wall, the wound through which was then stitched. She was ordered to be fed per rectum.

April 18th.—No pyrexia of any kind or discomfort followed the operation; and at this date Mr. Barwell punctured the stomach at the opening with a tenotome and introduced slowly, so as to stretch the puncture, a glass tube with a conical end. An indiarubber tube was attached to this, and she was ordered to have two ounces of liquid food every three hours. Feeding per rectum to be continued.

24th.—The amount of food taken by the stomach has been gradually increased, the feeding per rectum diminished *pari passu;* it was at this date discontinued.

May 1st.—Patient takes food into the mouth and ejects it thence, after mastication, into the funnel connected with the indiarubber tube. Four days ago she was allowed to get up, was very comfortable save that some irritation around the wound resulted from a slight overflow of gastric juice.

12th.—Patient went out at her own request, being very comfortable.

July 24th.—During this month she has returned twice to report herself. She is well and gaining in flesh.

PRESBYTERIAN EYE AND EAR CHARITY HOSPITAL, BALTIMORE, U.S.A.

A CASE OF CATARACT.

(Under the care of Dr. JULIAN J. CHISOLM.)

D. S——, aged fifty-two, a finely developed man, in apparently perfect health, has a cataract fully formed in the left eye, and one also forming in the right. The left eye has been blind for two years. Light perception is good in this eye. He can get about readily by means of the right eye. The left lens was removed under the local action of a 4 per cent. solution of the muriate of cocaine. It was a mixed lens, with small nucleus and much cortical matter. When the pupil was cleared of lens detritus he counted fingers with this eye. The surface of the eye was carefully sponged with a solution of the biniodide of mercury, 1 part in 20,000. A few drops of a 1 per cent. solution of the sulphate of atropia was instilled into the eye and the lids then gently closed. A piece of isinglass plaster, that which is spread on silk, light in colour and therefore diaphanous, 2¼ in. long and 1¼ in. wide, was dipped in water, and as soon as it became thoroughly pliant it was laid upon the closed lids, extending from the brow to the cheek. By the use of a rubber spoon this softened strap was thoroughly adjusted to all the irregularities of the lid surface, until it became an additional skin extending smoothly from canthus to canthus over the whole lid and contiguous surfaces. In a very few minutes evaporation dried it. It then stuck so firmly that there was no fear of displacement. The patient, with both eyes closed in this manner, went from the operating table and walked to his room, ascending often two flights of steps before reaching his bed. All the rooms of the hospital have blue shades covering the large windows, so that the light of the room is subdued; it is not so dark as to prevent reading. The hour for operating is from 2 to 4 P.M. The patient is put to bed, and allowed supper if he wishes it. No restrictions are placed upon diet; whatever he knows does not disagree is allowed to be eaten. No instructions are given as to movements. If the patient be restless at bedtime, a mixture of chloral and bromides is administered.

Second day.—The patient had some discomfort in the eye during the night, but not enough to prevent sleep. He had not taken the sleeping mixture, not needing it. The light of the room does not annoy him. It enables one to see that the plasters have not been disturbed. If there had been any watering it has evaporated, for the adhesive strips are dry. The eyes are perfectly comfortable. The patient had been up to stool, and suffered no inconvenience from it in the eye. As he seemed in every way well, no treatment was needed.

Third day.—He has had no trouble whatever. Has had a good night, and no pain at any time. One eye feels as comfortable as the other. No treatment necessary.

Fourth day.—The patient has had no discomfort during the last twenty-four hours. The adhesive straps are a little wrinkled at the lash border, apparently from some eye secretion. As there are no complaints, and as the straps on each eye are in a similar condition with no detachment of the straps, they are not disturbed. No treatment is ordered. A few drops of a 1 per cent. atropia solution are put at the inner canthus. It is seen to be drawn in under the adhesive strap in the line of the lashes, and is felt in the eye. Only a few drops of the atropia solution were used, not enough to wet the bandage, excepting the line indicated, and therefore not enough to disturb the adhesion of the plaster to the surface of the eyelids.

Fifth day.—He feels perfectly well in every way. Slept well, and has had no eye uneasiness. The adhesive plasters look moist at the palpebral split on each eye. There is every reason to believe that the corneal wound has perfectly healed, and that the plasters are no longer required. When removed the eyelashes were found a little gummy, and were cleansed with warm water. When both eyes are fully opened, they stand the light of the room equally well. There is no watering of either eye. Light does not seem in any way disagreeable. There is very little hyperæmia of the eye operated upon. A few drops of a 1 per cent. atropia solution are put in the eyes, and they are left in the moderate light of the room without protection.

Sixth day.—He has suffered no inconvenience from the removal of the adhesive straps. He is dressed, and is walking about his room with the hall-door opened. He feels well; says that his sight has grown stronger since yesterday. The eyes seem strong and show no photophobia or lacrymation. No treatment.

Seventh day.—The patient is doing well. A more thorough examination of the eye is to be made to-day. The shade was rolled up, allowing strong light to enter the room. The eye shows no discomfort from the exposure. The hyperæmia of the conjunctiva is very trivial. The pupil is large and clear, an evidence of no trouble whatever. After the examination the shade is drawn down again. A drop of atropia solution is instilled into the eye; the only treatment needed.

Eighth day.—Patient strolling about the halls, feeling no inconvenience from the light.

Ninth day.—The patient was found writing in a contiguous room. He faces the open window and looks out into the sunny street without discomfort, and feels quite ready to take care of himself.

Tenth day.—He sees well, and feels that he no longer needs the protection of hospital treatment. He is advised on going out to wear smoked glasses when out of doors, but not to wear them in the house; also not to expose himself needlessly to strong light.

Remarks by Dr. CHISOLM.—An item of much interest is found in the new method of dressing eyes after cataract extraction, and the manner of treating such cases in the Presbyterian Eye and Ear Hospital. It is directly at variance with the generally established and at present universally adopted method of using compressors, retentive bandages, cold water applications, dark rooms, and smoked shade glasses. The foundation for this new treatment is based upon the belief that as the cataractous eye is not annoyed by moderate light, the closed lids are a sufficient protective substitute when the lens is removed; and that when cataract extractions are treated with closed lids in light rooms neither lacrymation nor photophobia is produced, even when strong light is finally admitted. As to the retaining of the lips of the corneal wound in apposition, the best splint which can be found is the one which nature supplies, the stiff cartilage of the upper lid. The most equable support for this natural splint, and one which never becomes irregular, regardless of the movements of the patient, is the tonic action of the orbicular palpebral muscle. When the lids are kept closed by a piece of adhesive plaster, this muscle affords a constant and uniform support to the incised eyeball. The

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results of this new departure, in the treatment of cataract extractions, are very striking. The comfort to both patients and attendants is readily recognised. Patients can be dismissed from professional care in about half the time that any other mode of treatment will admit; and the percentage of successes will be fully up to that now secured by the most cautious ophthalmic surgeons with the old methods in use. This method of dressing eyes follows naturally upon the use of cocaine or the local anæsthetic. The vomiting, so common after the administration of chloroform or ether, would render such a dressing inadmissible. After a cataract extraction both eyes are closed by adhesive strips. In iridectomies only the eye operated upon is dressed, in this manner the other remaining uncovered and unprotected. These cases need no longer to be considered bad cases, but are truly peripatetics.

When the cataract patient is put to bed, no restrictions are put upon his movements. He may roll about at his pleasure, as there is no head band to draw irregularly on the wounded eye. He sits up to his meals, and gets out of bed for calls of nature. After the second day he may leave the bed if he prefers to do so. The moderate light in the room permits friends to read to and amuse the patient during the week's confinement. Usually the first dressing, applied immediately after the operation, is removed on the fifth day. The eyes can be examined then, when very little injection will be seen. The eye operated upon stands this moderate light without any exhibition of lacrymation or photophobia. Two or three days afterwards even sunlight can be admitted into the room for examination purposes without annoyance and without smoked glasses.

Notices of Books.

Micro-organisms and Diseases: an Introduction to the Study of Specific Micro-organisms. By E. KLEIN, M.D., F.R.S. Third Edition. London: Macmillan and Co. 1886.—No better example of the interest taken in the prevailing pathological pursuit of the present day—the search after specific micro-organisms—could be cited than the rapidity with which Dr. Klein's admirable little work has reached its third edition. As a compendium of knowledge upon the subject, and for the most part a faithful guide in the researches requisite to establish the presence and characters of bacteria, it holds an established position. Opening with chapters upon the methods of examination and cultivation, the bulk of the volume is occupied with concise but clear and sufficiently detailed descriptions of the various forms, aided by a plenitude of engravings, which are nearly all from original drawings. The discussion of the relation of septic to pathogenic organisms, including a confutation of Buchner's views, and such subjects as vaccination and antiseptics, are reserved for the closing chapters, so that the author has succeeded within comparatively small compass in giving as full a survey of the subject as could be desired. Invaluable to the student, it is a book which deserves to be read by all who follow with interest the directions in which modern research is leading in the attempt to solve the great problems of etiology.

A Manual of Microscopical Technology. By Dr. CARL FRIEDLANDER. Translated from the Second Edition by STEPHEN YATES HOWELL, M.A., M.D. New York and London: G. P. Putnam's Sons. 1885.—This little work has met with so much approval at the hands of its author's compatriots that we are not surprised at an appearance of an English translation, which will, we imagine, be equally acceptable to histologists in this country and America. It is a thoroughly practical and reliable book, not by any means overburdened with detail, but conveying sufficiently precise instructions upon all the "modern methods" of staining and preparation which may be required in histological and pathological investigation. Although we cannot altogether congratulate the translator upon his share of the work, yet he has erred on the right side, and succeeded in presenting a very literal translation of the original. As to the subject matter of the book, the directions given for bacterial investigation are especially worthy of note, and we may commend to all would-be discoverers the wise remarks upon the necessity of comparing normal with morbid tissues before declaring their opinion as to the nature or extent of the latter, for there is no department more open to erroneous interpretation or responsible for more hasty and ill-considered speculation than that of microscopical research.

Sore-throat; its Nature, Varieties, and Treatment. By PROSSER JAMES, M.D. Fifth Edition. London: J. & A. Churchill. 1886.—The scope of this book is not sufficiently indicated in its title, for it embraces not only the inflammatory lesions of the pharynx and larynx, but other affections as well, including those of the trachea and bronchi, the thyroid and thymus, although it must be allowed that these last-named subjects receive but a minimum of description. The book, which has reached the dignity of a fifth edition, is written in plain language, and is thoroughly practical. It is therefore very suitable for the practitioner, who would hardly be able to devote the time requisite for the study of a more profound or elaborate treatise.

Traité Elémentaire d'Anatomie Médicale du Système Nerveux. Par CH. FÉRÉ. Paris: A. Delahaye et Lecrosnier. 1886.—No French neurologist is more fitted to write a medical anatomy of the nervous system than the author of this volume. The first section of the work is concerned with the central nervous system. The text does not merely describe the parts, but shows how they are altered by disease, and gives a general account of the pathology of the affections of the structure under discussion. This method relieves the usual monotony of mere descriptive anatomy, and effectually interests the reader. There are many illustrations of abnormal as well as normal structures.

The Asclepiad, No. 11, Vol. III.—The article on Alcoholic Asthenia is a very readable one, in the author's best vein, and showing strongly his excellent prejudices. The Skeleton in the National Cupboard is one more of those earnest appeals not to forget the foundations on which national existence and prosperity depend. Richard Wiseman and the Surgery of the Commonwealth (with portrait) is a most instructive biography. A very suggestive article is that entitled "Vis Medicatrix Naturæ," in which strong arguments are advanced against the favourite notion of the beneficence of Nature in restoring to health and harmonious working parts or organs in the physical economy which have become deranged by injury or disease. The section of Contemporary Practice and Literature shows a keen eye for the best. The popularity of Dr. Richardson's quarterly is now established beyond dispute.

Hospital Reports.

The Surgical Registrar of *University College Hospital* is again to be congratulated on the early appearance of his annual report of the surgical cases that have been under treatment during the year 1885. The completeness of these reports must be a source of gratification and of considerable utility to the members of the staff. The preface that Mr. Bilton Pollard writes to his report is remarkable, among other things, for its modesty. The labour to which the registrar has been put to produce such a report might well have found some mention in the preface, which is the customary repository of regrets at imperfections in the body of the work. All that Mr. Pollard says is: "The report for 1885 is similar in its general arrangement to that of 1884."

The fourteenth volume of the *St. Thomas's Hospital Reports* contains a large number of original articles by

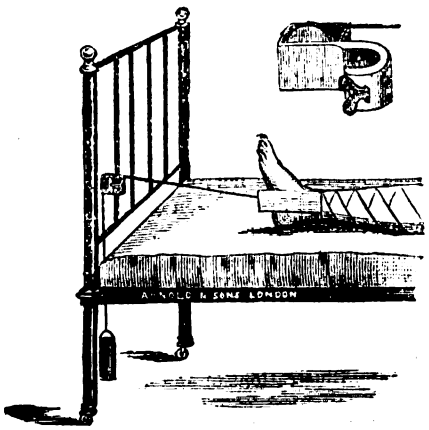
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members of the staff. Dr. Bristowe relates some interesting cases of Tubercle of the Cerebellum; Mr. Ballance, a case of Spasmodic Wry-neck treated by excision of a portion of the spinal accessory nerve; Mr. Clutton has an interesting paper on late Rickets; Dr. Hadden calls attention to some of the usually less conspicuous features of Chorea; Dr. Gulliver describes a case of Gangrene of the Lung consecutive to acute pneumonia; Mr. Shattock gives a notice of the more interesting additions made to the museum during the year. The medical report is signed by Dr. Hadden and the surgical by Mr. Battle.

New Inventions.

EXTENSION PULLEY.

THE accompanying illustration depicts an extension pulley which I have had made, and which is used at the Cork Children's Hospital, to the exclusion of nearly all the old extension arrangements. By means of the side screw



it is easily attachable to any ordinary bedstead, and can be raised or lowered at pleasure, so that a pull can be had from any direction. Messrs. Arnold and Sons, West Smithfield, have arranged to manufacture these pulleys.

NICHOLAS GRATTAN, F.R.C.S.E.,
Senior Surgeon, Cork Hospital for Women and Children.

THE TRAVELLING AND NURSERY CONVENIENCE.

THIS is undoubtedly a very useful contrivance, and will be welcomed by mothers and nurses when travelling with young children. Its chief recommendations appear to be—its great portability; the neatness of the case, effectually disguising the purpose for which it is intended; and the security with which the contents of the pan may be enclosed, being hermetically sealed by closure of the lid, which is provided with an elastic waterproof pad. The apparatus may be readily taken to pieces, to facilitate cleansing, and its cost is very moderate. The patentees are James Allen and Sons, 21 Marylebone-lane, W.

GUY'S HOSPITAL.—An excellent portrait of the late Dr. Alfred Swaine Taylor, F.R.S., the distinguished medical jurist, toxicologist and chemist, has been presented to Guy's Hospital by his son-in-law, Mr. F. Methold, with a request that it may be hung in the theatre in which the professor lectured for so many years.

UNIVERSITY COLLEGE, LONDON. — Sir William Roberts, M.D., F.R.S., Professor of Clinical Medicine in the Victoria University, Fellow of University College, has consented to preside at the annual dinner of the Faculty of Medicine, which will take place at the Freemasons' Tavern on Monday, October 4th. Tickets may be had of the Honorary Secretaries, Dr. Poore (30, Wimpole-street) and Mr. Stonham, F.R.C.S. (109, Gower-street).

ACTION AGAINST A LIVERPOOL DOCTOR.

CASEY *v.* IMLACH.

AT the Liverpool Assizes on the 6th inst., before Mr. Justice Cave and a special jury, an action was heard in which John Casey, a labourer, and his wife Mary were the plaintiffs, and Francis Imlach, M.D., one of the senior surgeons of the Hospital for Women, Shaw-street, Liverpool, was the defendant. The action was brought to recover damages from the defendant for performing improperly an operation upon the female plaintiff without her consent. The defendant in his pleadings denied the allegations made against him. Mr. French, Q.C., with him Mr. Walton, appeared for the plaintiffs, the defendant being represented by Mr. Bigham, Q.C., and Mr. W. H. Butler.

Mr. FRENCH, in opening the case, explained that the male plaintiff was formerly a sailor, but that he now worked on shore for Messrs. Singlehurst and Co., the owners of the Redcross line of steamers. The female plaintiff was married to him in 1874, and her complaint against the defendant was that he removed both her ovaries without her consent, without informing her what the result upon her after-life would be, and without there being any necessity for such an operation. By this operation he took away from her, at the age of thirty-nine years, a material portion of her genital organs, and left her incapable of conceiving. The operation was one not long known in surgery, and one which so seriously affected a woman that it was not had recourse to by surgeons except under circumstances of the gravest necessity in certain classes of disease for the purpose of saving human life. In the case of Mrs. Casey it was not an operation which any surgeon should have had recourse to, and if it had been, the fullest information should have been given to her of what her future life would be, so that herself, her husband, and her friends might form their own judgment as to whether the operation should be submitted to, or whether the woman would be prepared to run any risk there might be in continuing under medical treatment, and trust to that alone for restoration to health. Not one word was said to her as to the nature of the operation—that she was to be unsexed—no suggestion to her that the operation was so serious that her friends should be consulted, no intimation that the disease was one which, under medical treatment, with care, rest, and constant attention, could be dealt with, but an intimation that, under the penalty of being a dead woman within six months, the operation should be at once performed. As a result of the operation her bodily system was entirely altered, but the pains from which she had previously suffered disappeared. Her health and her bodily comfort were, however, in no degree improved; other pains of an equally serious character came on, and her health became worse than ever it was before. One painful circumstance in connexion with the case was that, according to his instructions, what medical men would expect to follow from an operation of this kind had actually occurred, and the result had been a change not only in her own life, but in the life of her husband. Under these circumstances the plaintiff claimed that she was entitled to be informed by the defendant not alone of the danger of the operation he was about to perform, but above all in her case, as a married woman, she was entitled to know what the after-effects would be upon her own life and the life of her husband. Dr. Imlach, a surgeon not of very long standing, had become very skilful in his profession. He had had great experience in surgical cases, and had performed this novel operation very frequently. The operation was one which had had not more than from twelve to fifteen years' existence in this country, and among the body of surgeons there was not any large number who practised it; but among those who did practise it there was, as he understood, a well-recognised rule that, looking to the gravity of the results as well as to the danger itself, it should not be had recourse to except in very grave cases. The complaint from which Mrs. Casey was suffering at the time, according even to the views of surgeons who strongly supported this novel invention in surgery, was not one in which the operation should be had recourse to. The defendant, as surgeon, made the usual entry in his note-book at the time of the operation, and described it as being for hæmatocele and hæmatosalpinx.

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Mrs. CASEY, the plaintiff, was then called. She stated that in March, 1881, she first experienced some illness, from which she suffered afterwards, and she attended the dispensary of the Ladies' Charity and Lying-in Hospital in Myrtle-street, Liverpool, as an out-door patient. From April, 1881, to March, 1883, she was quite free from these pains. In April, 1883, she had another attack of the same pains, and she saw Dr. Utting, who told her she was suffering from inflammation of the bowels. He prescribed for her, and she became much better. She, in June, 1883, went to the Women's Hospital in Shaw-street and saw the defendant, who gave her medicine, which she took until August; and then she was well until the beginning of December, 1884, when she felt a similar pain in her abdomen, which continued for about half an hour. She went to the defendant on Dec. 8th and told him about this, and he then examined her. He told her she would have to undergo an operation, as she was suffering from inflammation outside the womb. On Dec. 15th she entered the hospital, and was operated upon on the 18th. She was never examined or seen by any other doctor, and was not told by him or anyone in the hospital what the result of the operation would be. On Dec. 31st she was taken home in a cab, and ten weeks afterwards she went to the defendant and complained of weakness. She also told him she had not been "unwell" (meaning that there had been no menstrual discharges), and the defendant replied, "No, you never will be; you have been 'unwell' too much;" and explained that the diseased parts he had removed were the cause of this. On Jan. 29th last she went to him to complain about the operation, having found out that he had removed her ovaries. She considered her health to have been worse since the operation than it was before, and between herself and her husband it had made a wonderful change. She had since been under Dr. Wallace of the Royal Infirmary.

Cross-examined by Mr. BIGHAM: She had been a hard-working woman until attacked by pains in the lower part of the abdomen, and had had five children—four of whom had died in childbirth and the other, born on Oct. 7th, 1878, was now alive. In 1879 she suffered from pains which she thought were not connected with her womb, but with her stomach, and she consulted Dr. Wilson at the Myrtle-street Hospital, who gave her some medicine which removed the pains. About March, 1881, she had a recurrence of pains in the lower portion of the abdomen when four months in pregnancy. She remained in good health until April, 1883, when she was treated by Dr. Utting's assistant for inflammation of the bowels. In May she began to become "unwell" too often. The menstrual discharge was about the usual quantity, and was accompanied by pain. In consequence of this she, in June, went to the hospital again, and was prescribed for by some medical man whom she believed was Dr. Davis. She then saw Dr. Imlach and remained under him from June to August, when the pain from which she occasionally suffered ceased. On Dec. 7th, 1884, the pains returned, though they were not so bad as previously. She went to Dr. Imlach at the hospital, which by this time had been removed to Shaw-street, who examined her on December 8th. She did not tell Dr. Imlach in 1883 that she was suffering from constant pain, or from frequent and unusual bleeding. She never told him she had had a flooding of three weeks, or that she had been to many doctors to get cured. He did not tell her on December 8th, when he examined her about the private parts, that she was suffering from some disease in that region. She understood him that she was suffering from internal inflammation. Dr. Imlach never mentioned the word ovaries, and she did not at that time know what they were. He did not tell her that the inflamed parts were connected with childbearing. She did not hear that her womb was displaced, but she understood that by the operation Dr. Imlach would bring down the womb and destroy the cause of inflammation.

Mr. BIGHAM: Did you form that opinion from anything he said, or was it your own opinion?—It was my own opinion.

Was Dr. Imlach kind to you before the operation?—Yes.

Kind and considerate?—I don't know; he was not very considerate when he took my ovaries away. (Laughter.) The nature of the operation was never discussed between me and the lady superintendent of the hospital or the nurses.

Did you, a married woman, know at that time what it meant if you were never to be "unwell" again?—I only knew that I could never have any more children.

Were you not told, amongst other things, that you never would be unwell again?—Never.

But if you had been told that, you would have known it meant never to have any more children?—If I had been told that, I should never have submitted to the operation.

Witness, continuing, said that when she was told by Dr. Imlach in March that with the operation she would never be "unwell" again, that was the first time she ever heard of such a thing. She first became acquainted with the fact that her ovaries had been removed in December last. She had told Dr. Imlach that she would have the law of him, but she did not tell him that she knew an attorney, and an individual would pay the expense. She had heard that Dr. Wallace was very eminent, and that was the reason she went to see him; but she did not hear that Dr. Wallace was taking a considerable part in the medical discussion regarding Dr. Imlach's operations.

JOHN CASEY, the husband of the previous witness, was called to state that he never heard of the serious operation to be performed on his wife, or he would never have consented to it.

The examination of JOHN WALLACE, M.D. Edin. and Professor of Midwifery at the Liverpool University College, was then read, he being too ill to attend. He stated that he had examined the plaintiff and read the note-books of Dr. Imlach, and she had explained her symptoms before operation to him. From what he knew of the case, such an operation as the removal of the ovaries ought not to be performed. He would not perform excision of the ovaries except in very extreme cases, and after very long observation. Assuming that the plaintiff saw the defendant from time to time, from May to August, 1883, and then not until Dec. 8th, 1884, and was only in hospital from Dec. 15th to the 18th, that was not, in his judgment, sufficient opportunity for observation to justify the operation. He should consider that the disease would be amenable to rest and medical treatment. Sterility followed the excision of the ovaries, and loss of sexual feeling, which might be kept up for a year, but after that declined. Hæmatocele and hæmatosalpinx did not produce sterility. The patient might be temporarily sterile while it lasted. In any such an operation as the removal of the ovaries the operation ought not to have been performed without explaining to the patient its nature. It was a well-known fact that it produced a masculine appearance; in an older woman the appearance was not so marked, but it made a young woman old before her time.

In cross-examination Dr. Wallace had stated that he should perform the operation of abdominal section only when continual hæmorrhage threatened life, with the object of tying the bleeding parts. He would perform excision of the ovaries when they were enlarged from cystic disease, for fibroid tumours of the ovary, or early cancer. Different men had different views as to when the operation was necessary. If there were salpingitis adhesions to the Fallopian tubes and ovaries, that would not justify the operation. If the patient had any pain or inconvenience that would make a difference, and it would then depend upon the time of life.

CHARLES STEEL, surgeon at the Women's Hospital in Shaw-street, was then called, and before he was sworn stated that he knew nothing of this particular case.

His LORDSHIP: That is not very material; we have a number of witnesses of that sort.

Mr. FRENCH: You mean you attend here on subpœna?—Yes.

Mr. STEEL was then sworn, and he stated that from Dr. Imlach's entry in his note-book that Mrs. Casey was suffering from hæmatocele and hæmatosalpinx, he did not think there would be sufficient disease to justify the excision of the ovaries. As to sexual desire, he could only speak within twelve months, as he had not made any other inquiry. Of the patients who have been operated upon in about twelve months, some say the feeling has not gone, others that it has.

In your acquaintance with hospital management, can you tell me whether in operations of this gravity there is not a custom as to the attendance of the senior medical officers—is it usual for the operating surgeon to have the benefit of the advice of the senior medical officers?—That is usually done.

Can you tell us in this case of Mrs. Casey whether there was any consultation between Dr. Imlach and any of the senior medical officers?—I did not receive notice; so that to my knowledge there was not.

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In the case of hæmatocele, what would be the proper course of treatment in order to extract the blood?—As far as length of time is concerned, I should have the patient under my care some time before I operated, in order to try rest and medical attendance.

Had Dr. Imlach, in your judgment, sufficient time to watch the case, to try medical treatment, and to justify the operation?—I should take rather a longer time myself, but I cannot say as to this case.

Do you consider in this case there were sufficient grounds to justify the operation?—Not having seen the patient, I really cannot answer.

With the information now before you, and Dr. Imlach's note-book, what do you say?—Well, if I am to judge merely by that, I should not operate myself in such a case.

Before operating in a case of this kind what information, in your judgment, ought to be given to the patient as to the nature of the operation, and the subsequent effects of the operation upon herself?

Mr. BIGHAM: I submit that is a question for the jury.

Mr. FRENCH: I am quite content it should be so.

Cross-examined by Mr. BIGHAM: Whether you would perform an operation or not would depend upon an examination of the patient?—Yes. I have five times performed this operation of excision of the ovaries, and once made an exploratory operation, in which I performed the abdominal section, and did not remove the ovaries.

If you ascertained that the ovaries were sclerotic, and that the patient was suffering from salpingitis and intense pain, would you then think it was a proper case for operation?—I should not operate then under the circumstances.

But if the ovaries are sclerotic the woman, I suppose, is past childbearing?—Not exactly. It is very difficult to say. Very little is known about sclerotic ovaries.

If it had been ascertained that the ovaries had fallen down into Douglas's pouch, and that the uterus was displaced, would these two facts dispose you, in addition to the others, to think that the operation was a needful one?—That is the condition I found them in when I replaced them.

Do you think that it would be a proper thing, in a case of definite evidence of all these symptoms which had resisted known methods of treatment, to remove the ovaries?—I should be guided very much by the position of the case.

Re-examined by Mr. FRENCH: Is it not a matter of very great difficulty to diagnose whether the ovaries are sclerotic?—I should say very difficult.

The Court then adjourned until Saturday.

On Saturday morning, JAMES MOORE BENNETT, M.D. and surgeon, said he had been twenty-five years practising in Liverpool, to a considerable extent in connexion with diseases of women. He had had his attention called to the operation performed by Dr. Imlach, and he did not see anything that would render it necessary, without first using other means of treatment. In his opinion the defendant had not given sufficient time for medical treatment before having recourse to such an operation.

Mr. FRENCH: Are you able to say from your own experience in the profession whether diseases of this character are amenable to medical treatment?—They have been. I have treated a large number myself without having recourse to surgery.

How is the female affected by this operation?—It destroys the power of procreation, stops the menstrual discharge, and it is believed by a large number to leave the female unsexed.

Then I may take it, shortly, the effect is the same as the castration of a man?—Yes.

Is that answer based partly upon your scientific knowledge of the human body and partly upon inquiries and information you have had in the course of your practice from women themselves?—It is.

In your judgment, would the giving of information by an operator of the nature and consequence of an operation of this kind be likely to be injurious to the patient, or to render the operation more dangerous or difficult to the patient?—It would make her nervous.

His LORDSHIP: People have a right to know the nature of an operation, no matter what the immediate consequence may be.

Mr FRENCH: You have heard that in Dr. Imlach's answers to interrogatories he says that in 1883 she complained of severe pelvic pain, irregular flooding, and so on. Does that change the judgment you have expressed in reference to this operation?—Somewhat.

In what does it show that the case was more difficult from his answer to his description in the note-book?—It shows the frequent pain and the continued hæmorrhage.

But even assuming this, what do you say as the time necessary for observation before operation?—I think the patient ought to have been longer under observation.

Cross-examined by Mr. BIGHAM: Assuming the symptoms to be such as my friend has just read to you, and they had been under observation for a considerable time, you don't think the operation would have been an unwise one?—Not for a considerable time.

What time do you consider sufficient?—I have seen some of these cases under observation for years. I should think Dr. Imlach had not sufficient time for observation, but a great deal would depend upon the result of a personal examination of the patient and upon the opinion a medical man would form after it. This operation is seldom necessary except in cases of tumour.

Do you think there are ever cases of sclerotic ovaries and salpingitis where this operation is necessary?—It is quite possible.

Would any information convey to another man the knowledge the doctor gets from an examination?—None.

Is it true that cases of sclerotic ovaries are peculiarly resistant to palliative remedies?—It has so been said.

And that is the opinion of many medical men?—Yes.

In a case of persistent salpingitis, is it true that with rest a patient may get well?—Yes.

Is it true that when the ends of the tubes are blocked removal is the only form of giving relief?—Not always; the blood may be absorbed. I have seen in the answers that a clot of blood was discovered in this case.

Is it a moot question amongst doctors as to whether this operation destroys sexual desire or not?—Yes.

Re-examined by Mr. FRENCH: Rule 39 of the hospital regulations provides that "No operation of a dangerous character shall be performed in the hospital without consultation between one of the medical officers for in-patients and one of the consulting medical officers and the operators." Is that in your judgment a prudent rule for a surgeon to follow?—Certainly.

Have you in your experience had cases with symptoms even more serious than this, upon Dr. Imlach's statement, which have yielded to medical treatment?—I have.

His LORDSHIP: Have you read anything in the note-books, in the answers to interrogatories, to make you think this operation on this woman was a proper one?—Nothing that would cause me to operate in a similar case.

In your judgment would delaying the operation have been injurious to the patient?—I should think not.

THOMAS FREDERICK GRIMSDALE, physician and surgeon, practising in Liverpool for the past thirty-nine years, said he attended upon his subpœna, and had not given proofs to either side. For many years his practice had been in connexion with female patients, and he was senior physician to the Women's Hospital in Shaw-street. During last year there were 111 operations of the kind in question performed, and in the previous year forty-four. Whilst he had the strongest possible objection to giving evidence on an abstract or suppositious case, he could say that the excision of both ovaries from a patient when, according to the defendant's note-book, she was suffering from hæmatocele and hæmatosalpinx, and her highest temperature was 100° and her lowest 97°, did not commend itself to his judgment.

Mr. FRENCH: Assuming treatment in 1881, recovery, good health until 1883, treatment in June and July, then health until December, 1884, one attendance on Dec. 8th, hospital on the 15th, operation on the 18th: in your judgment, was there a sufficient medical treatment or duration of time before having recourse to surgery?—If it was a case of hæmatocele, I should say it could not have been the same attack. They must have been distinct attacks.

Therefore, I may ask you, in December, 1884, ought there to have been a further considerable period of waiting and medical watching before having recourse to surgery?—Well, I draw the line at hæmatocele entirely.

You would not have it all?—Certainly not, from my experience. Hæmatocele and hæmatosalpinx combined would require a long medical watching before having recourse to surgery, and I should not have had recourse to surgery unless there was extra-uterine fœtus.

Assuming hæmatocele and hæmatosalpinx to exist, would you rely upon medical treatment, or have recourse to the knife?—I have had a great many cases in my life, and never had an idea of resorting to the knife. Of course, the

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great majority were before this treatment was known, and a very great majority have got well under medical treatment alone. The operation does not commend itself to me at all. From the very great success that I have experienced, together with other medical men, the patient will recover from simple treatment, especially from prolonged rest. As far as I know, the operation has been less successful than the milder treatment of medical attention and rest. According to the last annual report the mortality in this hospital was about 33 per cent.

What judgment have you formed as to how women are affected by this operation as to sexual desire?—I have made some inquiries, and the result is that it varies very considerably. Probably in about half the cases there is no change whatever. In some the desire is impaired slightly; in others it is taken away altogether.

In your own practice, have you ever found it necessary to have recourse to this operation?—I have suggested it, but not in many cases.

Cross-examined by Dr. BIGHAM: Have you been present at any operations performed by Dr. Imlach?—A few.

You have heard the cross-examination of Dr. Bennett?—Yes.

Do you agree with him that in forming an opinion the most important thing is a personal examination of the patient?—Certainly. I think that a man gets a personal idea of the case by examination which he cannot communicate to another, and that is the reason why I object to give these *ex parte* statements without seeing the patient. I should doubt it to be possible that an experienced man could detect sclerotic ovaries by examination. I am now invited to these operations, but for about eighteen months I was not invited at all. I have been medical officer of the institution since it was opened two and a half or three years ago. There has been a good deal of discussion and difference of opinion about the necessity of these operations throughout the whole profession.

His LORDSHIP: We cannot have that opinion produced here. We must go by evidence.

Witness (continuing): I do not recognise the present operation at all. I was not invited until the beginning of this year.

Mr. BIGHAM: Do I understand you would recognise this operation of abdominal section and removal of the uterine appendages in any case?—Yes, in myoma, and if there be symptoms of pus in the tubes.

Dr. Imlach, in his answers to interrogatories, says that when the plaintiff first consulted him in 1883 she complained of severe and constant pelvic pain from which she had suffered for about five years, also frequent, prolonged, and exhausting hæmorrhage from the womb. When she was examined per vaginam, the womb was found to be retroverted, fixed to the sacrum, and very painful to the touch. The ovaries and Fallopian tubes were pressed down into Douglas's pouch; the ovaries seemed atrophied, and the Fallopian tubes could be felt to be thickened. Can you say whether the conditions there described are sufficient to justify the operation?—If they were just as there described, the operation would not have occurred to me.

Mr. ALEXANDER, late surgeon to the Brownlow-hill Workhouse Hospital, Liverpool, was called, to say that he had made over 3000 post-mortem examinations, and in only one female had he found hæmatocele.

Dr. BURTON, one of the medical men at the Women's Hospital, was called, but did not appear.

This closed the plaintiff's case.

Mr. BIGHAM, having briefly opened the case for the defence, called

FRANCIS IMLACH, the defendant, who said he was M.D. Edin., M.R.C.S., and one of the honorary acting medical officers for the Women's Hospital in Shaw-street, Liverpool. He graduated in February, 1872, and had both before that time and since devoted particular attention to diseases of women. He did not remember seeing Mary Casey before May, 1883, when the hospital was in Myrtle-street, and his note of that visit was "menorrhagia—three weeks." His impression was possibly there was a miscarriage; but this she denied, and he never found out anything to suppose that it was a miscarriage. Her complaint was as to this frequent hæmorrhage, which would come on almost at any time. She complained of a pain in the left side of the stomach low down, and he recommended her rest and good food. On Dec. 8th, 1884, she called at the institution in Shaw-street, and he examined her abdomen. There was some indefinite dulness where there should have been resonance; but it was not distinctly felt. It had no definite limitations in the pelvis. He examined her per vaginam, and the first thing he found was that the uterus was dragged out of place, down to the left, and was immovable. His fingers could feel the posterior portion of the uterus and the vaginal viscera. The plaintiff was a spare woman and a very good subject for examination. At that time he formed an opinion that the position of the uterus was due to contraction from previous inflammation of the left broad ligament, and partly due to adhesions of the uterus to the pelvic walls. When he operated he found this opinion wrong, for he found that adhesions of the tubes were the cause, and not contraction of the broad ligament. At this examination of Dec. 8th he could feel with his fingers into the space behind the uterus—Douglas's space. He could feel the Fallopian tubes behind and below the uterus, as if they were two solid limbs like two little fingers. There was a membrane between them and his fingers, but he could feel that they were thick. They were certainly not in a healthy state, from the fact that he could feel them in that place and in that condition. It was quite a difficult matter to diagnose sclerotic ovaries before operation. He could feel two little substances which from their relation to the tubes he was convinced were the ovaries. By pressing down the abdomen with one hand and working the fingers of the other, he could get to them, and he found they were hard and small. He wrote down at the subsequent examination that they were atrophied ovaries, but at this examination he wrote salpingitis, because he was surer of that than the sclerotic ovaries. There was no doubt about that. The womb was painful to the touch, and there was great tenderness. She told him she had been to any number of doctors since 1879. What impressed him very much was that she had told him she had been treated by a general practitioner for inflammation of the bowels, which made him rather suppose it might turn out to be, on examination, inflammation of the tubes and ovaries, which gave symptoms much like those arising from inflammation of the bowels. His examination indicated a serious state of the woman's health. It seemed to him there was great danger of her losing her life through the irregular loss of blood, and that nothing short of an operation was required. He told her the nature of the operation, that she would never have any more children after it, and that he was fully convinced she was then sterile. On Dec. 15th she entered the hospital, and on the 17th he again examined her, when the appearances were similar to those of ten days previously. In his abdominal note-book he made the entry: "Irregular menstruation for last five years; pain in the left hypogastrium, worse just after cessation of menstruation; habits doubtful, probably irregular; weak and miserable from constant pelvic pain and hæmorrhage. Condition of the uterus—dragged to the left by contraction of the broad ligament, also retroverted slightly; mobility restricted; length of cavity normal; ovaries atrophied." Before performing the operation, he had a consultation about her case with Dr. Lupton, one of the acting medical officers, who was suffering from spinal paralysis, and too ill to give an account of the matter. Present at the operation were the lady superintendent of the hospital, at least one nurse, and Dr. Davies, one of the acting medical officers. When he made an incision of the peritoneal cavity it was purple, showing that there was blood inside, and that he was right when he judged there was peritoneal hæmatocele. He opened up the peritoneum, put his fingers in, and drew out a blood clot that was free in the pelvic cavity. It was not one clot, but was composed of two or three, and was about the size of a small orange. He felt the uterus drawn down on the left side, and therefore turned up on the right. The ovaries were low down in Douglas's space, but he easily drew them up separately, and when he drew them out of the incision with his finger he found that he had also brought up the appendix vermiformis. It was not usual to find this appendix adhering to the fimbriated extremity of the right tube. The outer half of the right tube contained an old blood clot which, according to his recollection, was about the size of a cork, and was sticking out of the fimbriated extremity. At first he thought this clot was fæcal matter from the intestine; but, looking at it more carefully, it seemed to him to be a blood-clot ulcerating into the appendix vermiformis. He separated the right tube from the appendix, and care-

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fully looked to see whether there was any perforation, and satisfied himself that there was. The right tube was thickened from chronic salpingitis, and there was also a dense blood-clot. The inflammation was so severe that it bled. Then he removed the ovary on that side. It was low down, very small, contracted, and hard, and he removed it, along with the tube that was thickened and inflamed. He felt for the left tube, and found that it was pulling the uterus down. It was thickened and dense and adhering to the pelvic walls. After separating the adhesions he drew it up to the surface outside the incision and found it a source of great danger to the woman. He removed it with the ovary. From what he saw of the ovaries he became certain they were sclerosed throughout. They were contracted like the hard kernel of a hazel nut. He was certain it was a case of hopeless sterility; it was the last stage of inflammation. The presence of the tubes was dangerous to the woman's life if left as they were. He had no reason to suppose that sclerotic ovaries were dangerous to life, but if they had been healthy and the tubes as he had described, there would have been no advantage in leaving the ovaries. Before he removed the ovaries he had formed an opinion that the operation was a proper one. In March following the plaintiff came to him, and he found menstruation had ceased and there was nothing abnormal.

Cross-examined by Mr. FRENCH: Did you consult anyone beside Dr. Lupton about this case?—No.

Did Dr. Lupton see the patient?—I cannot recollect, but my distinct impression is that he did not.

Don't you know that by a large body of practitioners this operation is looked upon with great disfavour, and don't you think it would have been better to get the advice of another doctor before operating?—Dr. Lupton had seen several cases like this before, and he agreed with me. He is perfectly familiar with my methods and with my accounts of the cases. My recollection is that he was to see the patient, but we had had a very heavy operation, and I was so exhausted, as the operator that we simply talked this case over.

Was this case so serious that it could not stand over for a few days to allow you to recover and consult with another medical officer?—I think the question of hæmorrhage made the matter an urgent one.

Urgent to one or two days?—No; I don't suggest that.

During the year 1885, how many castrating operations were performed in this Women's Hospital?—I don't think the term castrating is proper.

Then in how many cases were the uterine appendages removed?—I should say that a hundred was near the mark.

And in 1884, how many cases?—I think thirty or forty.

In how many cases during the last two years have you yourself operated for the removal of uterine appendages?—In many I removed both, but if I include where there was only one, nearly 135 cases. This includes my private as well as hospital practice.

In your practice at this hospital have you habitually had recourse to this operation for hæmatocele?—I have always operated in cases of intra-peritoneal hæmatocele where the symptoms have convinced me it was dangerous to life.

Did you tell Mrs. Casey to tell her husband of the nature and results of this operation?—I can't swear to any distinct conversation in which I should tell her to go home and acquaint her husband, but I have no doubt I should do. I can't remember on Dec. 15th, when she came back, inquiring whether she had consulted her husband or any of her friends, but should assume consent because she had been at home for a week.

Can you remember anything said by you to indicate that there was a risk of her losing the capacity for sexual desire by this operation?—I would not say that because it is contrary to my experience. I never met a case in which there was loss of desire. There is no relation between the sexual feeling and the ovaries that I have been able to discover. I advised the operation, and told her it was a removal of the parts that were diseased, which parts they were, and the consequences that would follow.

Have you made any attempt to have Dr. Lupton examined in this case with regard to your speaking to him about this examination?—No, I have not.

Did you know what Dr. Grimsdale's views with regard to the unwisdom of performing this operation were?—I don't think his views were definitely formed at that date.

Did you abstain from calling in Dr. Burton as a consultant because he was against performing the operation?—He is performing the same operation himself.

Cross-examined by Mr. BIGHAM: You have been told that the medical profession complained because you did not call in any other doctors in consultation. Did that relate to your practice at the hospital, or generally?—My practice at the hospital.

Have you been to see Dr. Lupton?—I have seen him often.

Have you tried to have a conversation with him on this subject?—No; but I have had conversations frequently with him to get him to recollect cases of consultation he had with him in 1885, and he has always shown he could not recollect, and he could not speak of medical matters.

Are there two kinds of hæmatocele—intra-peritoneal and extra-peritoneal?—Yes.

And this was intra-peritoneal—the most dangerous form of hæmatocele?—Yes.

LAWSON TAIT, F.R.C.S., and surgeon to the Birmingham Hospital for Women, said he performed the first operation for the removal of uterine appendages on Feb. 11th, 1872, and, including abdominal sections, he had operated about 1600 times. Intra-peritoneal hæmatocele was very distinct from extra-peritoneal and was fatal in 96 per cent. of the cases if left long. In the great majority of cases it was fatal in three hours, and the longest time he had known before it was fatal in one attack was forty-eight hours. He had heard the evidence of Dr. Imlach, and from his description of the case he could say that the operation was a most proper one.

Mr. BIGHAM.—You have heard his diagnosis before the operation, what does that indicate as to the sterility of the patient?—There can be no doubt that the woman was completely sterile before the operation. His account of the operation itself confirms the diagnosis.

From your experience what effect has this operation upon the sexual desire?—In no case that I have ever asked the question have I found it destroy the sexual appetite at all, and in very many cases where the disease destroyed it the operation has restored it. Chronic salpingitis with adhesions apart from or connected with hæmatocele would be a proper case for operation if the symptoms were severe enough. From the plaintiff's own description of the symptoms, I should say that is a case of recurring intra-peritoneal hæmatocele. She described the case exactly.

His LORDSHIP: You say the longest period before death you have known has been forty-eight hours; but here you have a woman who has three previous attacks, none of them fatal?—I know of no case like this; it is unique.

Mr. BIGHAM.—From the diagnosis you have heard of Dec. 8th and 17th, would there have been any danger in leaving the case longer?—I say Yes; because the amount of blood found at the time of the operation was very considerable, and if the bleeding had been going on the patient would certainly have died. It most certainly was an urgent case according to the amount of blood.

His LORDSHIP: In the case of intra-peritoneal effusion how is the blood got rid of?—A great majority die of the hæmorrhage.

Cross-examined by Mr. FRENCH.—Before this action was brought was there a discussion amongst medical men on this question in which you took part? Was there a printed discussion between you and Liverpool doctors with regard to Dr. Imlach and his system of treatment at this hospital in Shaw-street?—There were several letters published in medical journals.

There is a letter of yours in the *Medical Press* of March 3rd, and I will read to you a passage: "I assumed, of course, in my previous discussion of this matter in your columns that Dr. Imlach was actuated by principles similar to those which I myself had adopted. I am not yet prepared to say he is actuated by others, but I am bound to say that after reading the discussion in your columns to-day, and still more after reading the paper by Dr. Imlach himself in the *British Medical Journal* of last Saturday, I think he has departed from those principles. He certainly has gone a great deal further than I think can be justified in the removal of appendages for hæmatocele; but I want to guard against condemning Dr. Imlach, because, after all, it may be proved that he is on the right side of the question. At present I do not think so." Can you now point out anything in the course of this case to make you change the opinion you expressed in this letter?—The opinion expressed there is very simply explained. It arose from a want of precision in Dr. Imlach's description of the two kinds of hæmatocele, and I assumed,

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perhaps too hastily, that he removed the appendages for extra-peritoneal hæmatocele. I afterwards found that this assumption was not correct. In intra-peritoneal hæmatocele surgical operation is absolutely demanded, and immediately.

Can you explain why Dr. Grimsdale has not had occasion to remove the ovaries?—I can point to a large number of cases which have passed through Dr. Grimsdale's hands, which have come to me for operation, and the explanation is that he has not followed the advances made so as to recognise the value of the operation.

On December 8th, if there had been a diagnosis of intra-peritoneal hæmatocele, what decision would you have come to?—I should have operated upon the 8th or 9th.

Then that would have been really a case of urgency?—I should have regarded it as such.

Did you hear Dr. Imlach this morning say that even on the 18th there was no such urgency, but that he could wait a day, or even two or three?—That would depend upon the condition of the plaintiff, about which I can form no opinion.

Have you known medical treatment tried to save a patient's life for intra-peritoneal hæmatocele?—I have, and known it always to fail.

Do you assume, then, that in cases of hæmatocele successfully treated there was no intra-peritoneal hæmatocele?—I can make no such assumption; I can only speak of my own practice.

Mr. BIGHAM: Quite irrespective of hæmatocele, do you think from the description of the salpingitis and pain there was quite sufficient to justify the operation that was performed?—Yes.

JAMES AVELING, M.D., senior physician of the Chelsea Hospital for Women, gave evidence that from the descriptions given the operation was a proper one. The exploratory incision was warranted by the symptoms, and then, having regard to the discovery made afterwards, the removal of the uterine appendages was proper. There were two things which he thought justified the operation: one was the inflamed condition of the tubes, and the other the small and hardened ovaries. He believed the removal of the ovaries had no detrimental effects as regarded sexual desire. In the case of eunuchs the sexual desire was not removed.

Cross-examined by Mr. FRENCH: He did not attach much importance to what was called intra-peritoneal hæmatocele. He believed it existed in this case, but did not think it of so much importance as the other things he mentioned.

His LORDSHIP: Would you perform this operation where there was nothing more than a sclerotic condition of the ovaries?—I have done so; it makes life miserable.

If there is pain after an absence of eighteen months, is it necessary to cut out the ovaries?—Certainly not.

THOMAS SAVAGE, F.R.C.S., surgeon to the Birmingham Hospital for Women, deposed that the operation was a proper one under the circumstances, and that Dr. Imlach had plenty of opportunity of ascertaining the condition of the patient. In a large number of cases the operation did not interfere with sexual desire, and in others it increased it.

By His LORDSHIP: He was quite prepared to say that in this case recovery by medical treatment was impossible. Temporary recovery was not probable. Although nature had succeeded three times in effecting a recovery, he did not think it would have been the slightest use giving nature a chance again, as every time the pain occurred the woman was on the brink of a precipice.

JAMES GREIG SMITH, surgeon at the Bristol Royal Infirmary; Mr. Sinclair, physician for the diseases of women at the Southern Hospital, Manchester; Nicholas Kendrick Marsh, surgeon, Liverpool; James Muir Howie, M.B., Liverpool; Andrew Stewart, L.R.C.P. and L.R.C.S. Edin., Birkenhead, also stated that the operation was a proper and necessary one.

Dr. DAVIES, one of the honorary assistant medical officers at the hospital in Shaw-street, Liverpool, said he attended nearly all the operations at the hospital, and he gave ether to the patient in this case. He had no distinct recollection of the operation. He had not known a single case of the removal of uterine appendages which he disapproved of, and had never known of the removal of healthy ovaries except in the case of fibroid and solid tumours. From Dr. Imlach's description this was a case for surgical treatment; medicine would have been no use at all. It was a case for prompt operation, as she was liable to recurring attacks of hæmatocele, which was a danger to life.

Cross-examined by Mr. FRENCH: Do you at this hospital [illegible] a distinction between intra- and extra-peritoneal hæmatocele?—I have not yet seen a case of extra-peritoneal hæmatocele.

Miss Carless, lady superintendent of the hospital, and Miss White, formerly nurse, deposed to telling the plaintiff what the result of the operation would be. Miss White stated that she told Mrs. Casey that she would never be "unwell" again, and the reply was "a good thing too," or words to that effect.

This closed the evidence for the defence, and his Lordship was about to adjourn until Monday, when the jury intimated that they had made up their minds about the case, and were ready with a verdict.

Counsel in the case agreed to accept the decision of the jury, who then returned a verdict for the defendant.

On the application of Mr. Bigham, his Lordship certified for a special jury.

SURGICAL CASES.

To the Editor of THE LANCET.

SIR,—Permit me to offer a few observations on some surgical cases published in your journal.

1. *Delayed union of lower jaw after division in Sédillot's operation.*—The writer of the editorial preface to my two cases of Sédillot's operation for the removal of the entire tongue and floor of the mouth missed a fact recorded in the first case, which would have substantiated his surmise that bony union of the jaw was only delayed in these cases. It was mentioned at the end of the account of Case 1. That when the patient was seen, six months after the operation and three months after leaving the hospital with a movable symphysis, the jaw was quite firm; in other words, bony union had then occurred, as a result of greatly improved general health and condition from residence in the country. This result renders it probable that bony union will be found to have taken place when the second case comes under observation, after a corresponding interval of time. The possibility of the halves of the divided jaw not uniting by bone is not touched upon in surgical works of established authority, nor is anything said about delayed union in cases published in medical journals. The point, however, is evidently important, for Sédillot's operation affords by far the freest access to the tongue and the adjacent structures of any of the ordinary operations on the tongue, and I do not think that it is a whit more dangerous than clipping out the tongue with scissors. Your comment may serve to direct attention to a neglected detail.

2. *Mr. Thomas Smith's successful case of supra-pubic lithotomy for a stone weighing 24¼ oz.*—Whilst cordially congratulating Mr. Smith on the successful issue of this interesting case, I may be allowed to point out that it is doubtful whether the stone is the *largest* that has been extracted during life, nor is it even the *heaviest*. If Mr. Smith will refer to THE LANCET of Jan. 16th last he will find that Dr. W. B. Hunter of Londonderry reports a case of calculus weighing 25 oz. removed by Joseph Hunter, L.M.S., from a native in the Madras Presidency. The patient lived three days. Then there is Uytterhoeven's calculus measuring 16½ in. by 12½ in. in circumference. Moreover, the calculus which I was obliged to remove piecemeal from a pouch was *larger* but not so heavy, for it measured 13 in. by 10 in. in circumference. The extra *weight* of Mr. Smith's calculus appears to have been due to its centre of oxalates. He had the advantage of a patient only forty-three years of age, and of a calculus free in the cavity of the bladder; and I feel convinced that, if the latter had been the condition in my own case, a permanent recovery would have ensued. It is not my wish to detract one iota from the merit of Mr. Thomas Smith's operation, but merely to temper his not quite accurate superlatives.

3. *Strangulated umbilical hernia.*—In THE LANCET of Oct. 24th, 1885, I reported some cases of strangulated hernia treated by removal of the sac and omentum, and amongst them a case of strangulated umbilical hernia in a patient aged seventy. The account broke off on the fourth day after operation. The patient went on as well as possible, the wound healed, and she recovered completely. Further experience of this method of dealing with the sac and omentum has strengthened my opinion of its superiority over the mere relief of the stricture, which was all that was aimed at in the old operation.—Yours faithfully,

August, 1886. WALTER RIVINGTON.

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THE LANCET.

LONDON: SATURDAY, AUGUST 14, 1886.

A CASE of considerable importance was tried last week at Liverpool before Mr. Justice CAVE and a special jury. It was a case in which an action was brought against Dr. IMLACH to recover damages for improperly performing an operation known as ovariotomy without giving the patient any intimation of the nature or result of such operation. Mrs. CASEY, the person operated upon, was forty years of age, had borne five children, and had enjoyed fair health up to the time of the operation in December, 1884. In March, 1881, she began to suffer some pain in the lower part of the abdomen, for which she was treated and cured. She suffered no pain thereafter until April, 1883. She then had another attack, and was again cured. In December, 1884, the pain returned, she became an in-patient at the Hospital for Women, Liverpool, and Dr. IMLACH performed "ovariotomy" upon her. Although the operation is described as ovariotomy, yet it is clear from the context that the operation was not what is usually termed ovariotomy, but oöphorectomy, BATTEY'S operation, or spaying. It is said to have been done for hæmatocele and hæmatosalpinx. At the end of the evidence for the defendant, the jury returned a verdict for the defendant without hearing counsel or judge. Dr. IMLACH is thus to be congratulated on the result of the case.

A court of law is not the place to elucidate scientific questions. Its methods are not adapted for such a purpose, but for the trial of narrow issues. Scientific evidence when given in court is cramped, one-sided, and often misleading, and necessarily so from the methods employed to obtain it. The gentlemen learned in the law, as well as the scientific witnesses, are not free to obtain or to give evidence, except on the narrow issue under consideration. Evidence which is regarded as unsuitable by either one side or by both sides may be omitted. The interest of this trial lies, however, far less in the narrow issue which the jury had to deal with than in the broad question whether the frequent and almost indiscriminate spaying of women suffering from diseases which are not fatal, and which are often only trivial, is justifiable. This great question was not touched upon, and indeed it is one not suited to be placed before a jury so long as the methods of the courts are such as they are at present.

Some astonishing statements were made in the witness-box—statements which are utterly at variance with the present state of knowledge of the subject. Mr. LAWSON TAIT stated that intra-peritoneal hæmatocele was fatal in 95 per cent. of cases, if left long enough, and in the majority of cases it was fatal in three hours if not operated upon. The judge interposed here, and said, "This woman had three previous attacks, and none of them were fatal, although treated medicinally and not surgically." Mr. TAIT, however, replied, "This is a case that is unique, and I have seen none like it." We can hardly understand his statement that 95 per cent. of cases of intra-peritoneal hæmatocele prove fatal, and that Mrs. CASEY'S case is unique. It is true that when the rupture of the sac of an extra-uterine pregnancy gives rise to hæmatocele, the condition is dangerous and fatal, but such rupture is not among the common causes of hæmatocele. Intra-peritoneal hæmatocele is a condition frequently met with; extra-uterine pregnancy is comparatively rare. Recurring intra-uterine hæmatocele, like the case of Mrs. CASEY, is not very rare, and it very rarely proves fatal; its tendency is to recovery. The danger accompanying it, however great it may be in theory, can be truly measured only by the results obtained by medicinal treatment. Measured in this way the danger is extremely small. There are not more than two or three institutions in the kingdom, and not one general hospital, in which it is the rule to treat intra-peritoneal hæmatocele by abdominal section.

In the evidence of Dr. GRIMSDALE, which was of a highly scientific character, one fact very important was stated—namely, that in the Liverpool Hospital for Women, 111 women were spayed during the past year, and 44 during the previous year.

The highest authorities in this country have justly condemned the frequent performance of spaying, and it is well known that such practice is limited to one or two towns in the kingdom. In America the operation has been performed with great frequency, but there pathologists and physicians have begun to question the frequency of disease of the uterine appendages calling for their removal; and they assert that ovaries are removed and called cystic, which are in reality typically healthy organs. That there are certain cases in which the operation is justifiable and called for cannot be denied; but the idea that such cases are common is entirely erroneous.

THE State of Medicine in the United States and of State Law as it affects Medicine, as a science and as a profession, are subjects of immense interest. Dr. BILLINGS' remarks on them, constituting the Address in Medicine of the British Medical Association, in lieu of that which was to have been delivered by the lamented Dr. FLINT, may be too long to be overtaken in a day by every reader of it. But it will well repay study. The subjects are of interest to us in more ways than one. The Americans are not the men to stand still in medicine, any more than in any other practical art. Already they have given us fair notice of sharp competition. In medicine proper, in surgery, in gynæcology, in midwifery, they more than hold their own. They come to Europe and are thankful and respectful learners in London, Paris, Berlin, and Vienna. But there is nothing in their respect which forbids them going beyond their teachers, or becoming teachers of us in their turn. In anæsthetics, in abdominal surgery, in lithotrity, in therapeutics they have had men of "light and leading," and fortunately have them still. This is one reason why Dr. BILLINGS' Address should be carefully considered, in spite of its somewhat undue length. Another reason is that under the new Medical Act we shall have to come to some very definite understanding with our brethren as to the value of their diplomas. We shall soon be asked to recognise some of them. Which? That is the question. It is therefore kind as well as opportune for Dr. BILLINGS to come amongst us and lay before us

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frankly the state of the law, or the lawlessness of the States, in the matter of medical education and of medical diplomas.

Dr. BILLINGS is very candid. He tells us frankly that in his country there is great popular tolerance of, if not sympathy with, irregular and heterodox forms of medicine, and that the Medical Schools are so numerous and the examinations so defective, that when real sound tests are applied 70 or 80 per cent. of those tested are found wanting. It is not a little curious that the deficiencies of medical schools and medical Bodies in the United States have been made manifest exactly in the same way as they were brought to light here. The first effective demonstration of the imperfections of our examining system and of the education which preceded it was given by Dr. PARKES, who based his criticism on the experience of the special examinations for candidates for medical service in the Army and Navy. But for these we should never have obtained the great improvements already achieved, or the public inquiry leading to recent legislation. The Army and Navy Medical Boards in the United States have done an exactly similar service. They examine those already in possession of diplomas; their examinations are the most rigid tests of qualification in the States. And what is the result? Of the candidates who apply from 70 to 80 per cent. are rejected. Our own Army and Navy Boards now reject a very small proportion. This may partly be due to the fact that only the better class of students now venture to apply for these appointments. But it is largely because our Examining Boards, under the pressure of outside criticism, are really much more careful in their work and in the curriculum which they require to be observed by students. In this country the examining boards are by law made absolute judges of competency. Public opinion will back them in any reasonable and fair severity in the work of examination. In the States it is not so. Public opinion does not demand very strict or scientific tests of medical knowledge. In many States the law requires that on the examining boards there shall be a certain proportion of homœopathic and eclectic practitioners, and in the States generally there is little complaint—except from medical men—of that loose state of the law which allows charlatans and herbalists to vaunt their remedies, and the school examinations to be so loose that from 70 to 80 per cent. have to be rejected by the Army and Navy Medical Department. There is one other huge evil in the United States—the large number of schools, amounting to over eighty. These compete keenly with each other for students. They are not exacting in regard to preliminary education; their curriculum is short; their examinations are easy. Hence it happens that the profession is overcrowded and, consequently, less highly esteemed. There is a medical man to every 589 of the population, or about twice as many as in England. It is a serious thing when eighty bodies have an interest in drawing students and supplying them with diplomas. The very bodies that should protect the public are tempted to betray it and to flood the country with men whose incompetence may not appear in statistics, but must have terrible consequences in individual cases. We probably misapprehend Dr. BILLINGS, but if not, we must venture to differ from him in thinking that a practitioner may be good enough for one part of the country and not for another: good enough for a rural or malarious district, but not for an urban or a wealthy one. Quackery has at least one use—that of a foil to set off true and wise practice; but examining authorities should be strict. There will be quackery and incompetence enough, without any laxness on their part. It is not their function to ask how a sufficiently educated man is to be maintained; that is his look out. Their duty is to see that none but such men acquire diplomas. We must hope for another opportunity to notice other subjects of great interest in Dr. BILLINGS' Address.

IT is not a politic proceeding to visit a health-resort without previously ascertaining that it is really healthy. A moment's reflection must convince anyone that the fact of any particular place having a high reputation for its hygienic qualities is certain to expose its inhabitants and those who visit the locality to special risks. The convalescent from maladies of all classes, and more especially the "catching" diseases, always seek "change of air," and they are pretty sure to go, or be taken, to places, probably by the seaside, which are renowned for their restorative properties. Practically, therefore, just as a district naturally free from phthisical affections is sure to be crowded with the victims of lung disease, so a healthful locality is likely to be frequented by the unhealthy. There is no help for this, and the fact must be faced; but in so far as infectious or contagious diseases are concerned, there ought to be special measures taken to protect visitors to places of general resort for health purposes from the needless peril of unsuspected morbid poisons.

It is idle to rail against the lodging-house keepers as though they were greater offenders than others. As a matter of fact, it is the visitors who are most to blame. Does good and careful Paterfamilias, or the fond mother of the child, go frankly to the keeper of a lodging-house and say, "My little boy has just had an infectious disease, and I am bringing him to your house to get rid of the infection?" Certainly not. The parents are particularly careful not to mention the fact that the illness has been infectious or contagious. The servants are cautioned not to divulge the truth; and because human nature is selfish for its own interests and those of its immediate belongings, the health of subsequent visitors to the lodging-house in which the sick boy is located is disregarded. This is what happens frequently; and in the face of such occurrences it is unjust, we say, to blame the lodging-house keepers. They are only responsible for not divulging a fact which has been carefully kept from them, or which, if they know it, has been discovered accidentally. When a subsequent case occurs in the house, of course the lodging-house keeper *ought* to set aside personal interest, and starve rather than take in new lodgers, or at least disinfect his house; at the risk of his rival neighbours ascertaining the facts and publishing them to his disadvantage. All this he ought most certainly to do; but with the bad example set for him by his first lodger, it is not unlikely that he may leave the right and proper thing undone. Someone has said that sanitation is an affair of the individual; and it is simply true that if any serviceable reform is to be carried out, it must be accomplished by personal effort rather than by law-making, which generally means law-breaking, or, at best, law-evading.

There can be no question as to the expediency of making

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it obligatory, in a legal sense, to notify the existence of *any* infectious or contagious disease to the local medical officer or to the sanitary authority of the district. This ought to be done without delay everywhere; but when so much has been accomplished, there will remain the real *crux* of the difficulty untouched. When a case of infectious disease is developed, the mischief of propagation has generally been some time in operation. To grapple with the evil at close quarters we need to give the lodging-house keeper a remedy against the person who brought disease into his house. When a case of infectious disease occurs, it should not be simply a question of reporting the existence of the disease, but of determining whence it came and who was the introducer. If it were made the duty of the medical officer of health to investigate the manner in which the disease had been contracted, and if the conclusions at which that official arrived were available as evidence in support of a claim to damages on the part of the lodging-house keeper, there would soon be an end of the cowardly practice of sending the infected, or probably infected, members of a family to a health-resort without the smallest care or precaution; and lodging-house keepers, having a prospect of compensation, would not hesitate to report the existence of infectious disease in their houses unless they were really themselves at fault, in which case the visitor who contracted disease should have his remedy against the peccant housekeeper. It is imperative that something should be done in this matter; and we venture to think that, to be effectual, equitable compensation to the party who has been exposed to risk through the carelessness of another should form part of the arrangement.

We do not desire to overstate the perils which beset those who go from home to seek health, but it cannot be disguised that the danger indicated is a very considerable one. It is not enough to consult the death-rate of a locality, and to assume the sanitary perfection of a district which does not happen to have had many deaths from zymotic disease. There are many maladies which do not directly kill. It would be interesting, though painfully so, to be able to tabulate the cases of disastrous illness distinctly traceable to the contraction of diseases at health-resorts which, having only an insignificant proportion of deaths from infectious disease recorded against them, contrive to keep up their character. In short, we should deal with disease rather than death, and to do this there must sooner or later be a complete and well-adjusted system for the registration of disease, applicable to all cases and in force throughout the country.

A LONG telegram was despatched to this country on August 6th by the correspondent to *The Times* at Venice as to cholera in North-Eastern Italy which it is by no means easy to understand. As is now well known, cholera, after prevailing for two years in various parts of Italy, reappeared in Southern Italy, where it has been and still is most fatal, and cases were reported about the same time as occurring in the town and province of Venice. Thence there has been a wide diffusion of the disease. To the east the extension is recorded as affecting certain port towns on the Austrian and Hungarian coast and the villages lying near them, but to the west and south it has been on a wide scale, making its way into a number of provinces as far west as Verona and as far south as Bologna and Ravenna. This disease in the north-east of Italy has already caused over 1800 deaths this summer, and in many places, as, for example, in Bologna and Ravenna, the fatality is at the rate of about 50 per cent. of the attacks.

But the correspondent in question, referring to the "commotion in the eastern provinces of Italy," finds as the results of his inquiries "confirmation of the doubts" he has felt, since he first entered the infected district, "whether there is any Asiatic cholera" there. We are at the onset bound to say that we can hardly conceive that any other malady could, under the circumstances afforded by the recent history of Italy, be mistaken for that disease, and this especially in view of the heavy mortality which is occasioned by it. But it is when the correspondent in question comes to explain what the disease may be apart from cholera that our greatest difficulty occurs. Speaking of what he regards as the reprehensible precipitation of the local authorities in regarding all sudden attacks of diarrhœa as cholera, and of the injury done by the consequent isolation practised, he instances what we assume to be a typical case. The case was one which, he alleges, was not Asiatic cholera, but one "rather of typhoid fever," and it is stated that in spite of the protestations of the physician who was called in, the patient was treated for cholera, and he had so far recovered within "two days" as to be released "as the physician predicted." Any more conclusive evidence than that contained in the last few words quoted from the telegram that the disease in question was not typhoid fever, as we understand that term, can hardly be imagined. Typhoid fever certainly is not a disease of which anyone having the most rudimentary knowledge of medicine would predict recovery in two days; but, on the other hand, a number of cases are met with during cholera epidemics as to which careful treatment for that disease does result in comparative recovery within a few days. In Venice, we admit the fatality is not now so great as it is in some other of the towns in the north-eastern provinces, but the disease, which has caused over 900 deaths in the province of Venice, must be regarded as a whole; and looking at it from that point of view, we fail to see that it is an "endemic rather than an epidemic," unless, indeed, the third year's course of cholera in the same country can be held to justify its being regarded as having become endemic. One explanation as to the readiness with which the disease is called cholera by the local medical men is stated to be that the Italian authorities allow a fee of 25 francs for a case of cholera, this sum being greatly in excess of the usual fee for ordinary medical attendance. But this explanation is obviously insufficient in the face of the fact that the disease which prevails at Trieste and Fiume and in the neighbouring villages is styled by the same name; neither does it account for the statement which is afforded by another correspondent of the same paper, to the effect that "cholera" is on the increase on the Dalmatian border and in Croatia. There have, however, been several suggestions that many of the symptoms usually associated with cholera have not been apparent in some of the towns affected, and it has elsewhere been remarked that the disease which exists has in many places been less fatal, and that it has been much more limited in its severity than epidemic cholera usually is; but, on the other hand, it is well known that cholera is a

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disease which is more or less marked in its symptoms according to the circumstances in which it occurs, and according to the stage of the epidemic of which it forms a part; and although the disease, as it is prevailing in some of the towns in Italy, tends in some respects to resemble outbreaks of epidemic diarrhœa amongst adults, such as we have had recent knowledge of in this country, yet with the information as yet before us, we are unable to distinguish between the fatal disease which has prevailed in the south at Bari, Latiano, Francavilla, and now at Barletta, and that which is equally fatal in such towns as Bologna and Ravenna in the north-east. On the other hand, diarrhœal epidemics are not nearly so fatal as the least fatal of the outbreaks in the several towns of Italy, and where the signs of cholera are ill-marked it is far more likely that we may be witnessing a last stage of the epidemic of 1884–86 than that the epidemic is due to some other disease than cholera.

Annotations.

"Ne quid nimis."

THE REGISTRAR-GENERAL'S QUARTERLY RETURN.

IT is pointed out in the Registrar-General's Quarterly Return just issued, that the English death-rate during the three months ending June last was the lowest recorded in the second quarter of any year since the commencement of civil registration in 1837. The period prior to 1837 may, as regards trustworthy mortality statistics, be correctly described as prehistoric. The death-rate in England and Wales in the second quarter of the year fell below 20 per 1000 for the first time in 1880, and it is noteworthy that since that date the rate has only once (in 1883) reached that figure, while it has three times been below 19, the lowest rate being 18·0 in the quarter now under notice. The mortality last quarter in the chief town population, estimated at nearly 17,000,000, did not exceed 18·3, while in the remaining, and mainly rural, population of nearly 11,000,000 the rate was 17·5. Urban mortality was therefore as 104·6 to 100 taken to represent the rural mortality. The mean proportion of urban to rural mortality in the second quarters of the ten years 1876-85 was 113 to 100. This decline in the excess of urban mortality, especially in the largest towns, is one of the most marked, and at the same time one of the most satisfactory, features of the recent decline in the English death-rate. In the twenty-eight largest English towns, including London, with an estimated population of rather more than 9,000,000, the death-rate last quarter averaged 18·6, and was nearly 14 per cent. below the mean rate in those large towns in the ten preceding corresponding quarters; the decline in the general English death-rate did not exceed 10 per cent. The death-rates last quarter in these large towns ranged from 15·3 in Brighton, 16·6 in Birkenhead, 16·7 in Hull, and 16·8 in Bristol, to 23·9 in Portsmouth, 25·1 in Blackburn, 25·2 in Manchester, and 30·3 in Preston. Thus the Lancashire towns maintain their unenviable notoriety of excessive mortality, even in the present day of generally declining death-rates. Among the most noteworthy features of the Registrar-General's most recent mortality statistics is the remarkable decrease of zymotic mortality and the steady decline of infant mortality. As regards the former of these features, it should be specially noticed that those diseases no longer show the [illegible] of mortality in the largest towns compared with that recorded in the remaining and mostly [illegible] of England and Wales. The death-rate from the principal zymotic diseases last quarter was 1·55 in the whole of England and Wales; it was 1·81 in the seventy-eight largest towns, and 1·36 in the rest of England and Wales. This excess in the largest towns was almost solely confined to measles and whooping-cough, which diseases urban sanitation has not yet attempted to deal with by isolation. Small-pox was more fatal in rural districts and small towns, and the death-rates from diphtheria and "fever" were fully as high in the mainly rural districts as in the largest towns. This seems to point to the fact that sanitation is not yet in the rural districts and small towns what it has now become in most of the largest towns.

MEDICAL STUDENT LIFE IN LONDON.

THE ever-recurring question of supervision of the medical student in his work and at his play has again been revived by a letter from Dr. Evatt in *The Times*, who makes it an opportunity for unduly praising the care taken at the medical school at Cambridge as compared with the London schools. Dr. Evatt quite ignores the differences in the previous education and training of the average London student and the Cambridge undergraduate, and, forgetting the man, attributes all good or evil to the system. The tone running through Dr. Evatt's letter shows that he is not familiar with the vast changes in supervision and discipline in the London schools during the past twenty or thirty years, and he is apparently under the belief that idleness and riot are still allowed to go unchecked as in the days of his own pupilage. Bob Sawyers and Benjamin Allens are really nearly as extinct as the dodo, and medical students, socially and professionally, at work and at play, do not differ very much from other species of the genus student. By some authorities, not unconversant with their manners and customs, they are considered to be as gentlemanly in their behaviour and as earnest in their studies as even the theological, legal, or military student. A lad passing straight to a medical school from his ordinary school life merely passes from one stage of discipline to another. "Walking the hospital" is anything but standing at the front door in idleness, and for the first two years really means incessant work from nine till four or five in the dissecting-room, laboratory, or class-room, and Dr. Evatt is evidently quite mistaken as to the amount of discipline exercised therein. Attendance at some set lectures may be a little lax, but this is only because the student's work has become more and more practical every year, and because the increasing tendency is to lessen their number instead of insisting on a perfunctory attendance as in days gone by. Formal reports may not be sent home periodically by more schools than two, but school committees exist, we believe, in every London school, and they are not slow to enforce discipline or to warn the idler that he must work or else his parents will be asked to remove him from the school. Dr. Evatt seems really to believe that perpetual pupilship is a fact, and not a mere verbal phrase, but we should have thought that everyone who had given the subject some *study* was aware that this was always, as Mr. Bruce Clarke puts it, conditional on "the student's work and conduct being satisfactory to the hospital authorities and to the medical officers." There may be many reasons why the fees of the student should be paid for each class separately when he attends it, instead of in a lump sum, as is the present custom in London, but any supposed impossibility of getting rid of an idle student has never struck us as being concerned in the question. The difficulty of finding residences for medical students is sufficiently well known, and the eager desire of everyone connected with medical education to foster residential halls is shown practically by those who have built such rooms, and by other authorities who are trying to build them; but Dr. Evatt must surely be aware

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that on such points as these London can hardly be fairly compared with Oxford and Cambridge. Does he know anything of student life elsewhere—say in Edinburgh, Glasgow, Aberdeen, or Dublin, or even in Germany? Do not the authorities of the London schools exercise as much social supervision over students as is done at other great centres of medical education?

THE CHOLERA EPIDEMIC IN SOUTHERN EUROPE.

THERE has been a severe recrudescence of cholera in Southern Italy during the week ending August 10th. Almost all news had ceased from the south, when on the 7th of the month information came to the effect that at Barletta, a port town to the north of Bari, there had been 132 attacks and 45 deaths during the previous twenty-four hours. At Barletta the disease has since that date been maintained with great severity, and in the four days ending the 10th, the total number of attacks and deaths there have been 536 and 217 respectively. At the same time, news has been received of an outbreak at Palo, and the bulletins as to cholera in Brindisi have been resumed. In the north-east of Italy there has been no extension of the disease further westward, but nearly all the towns and villages hitherto affected continue to record fresh attacks and deaths either daily or at intervals of a few days only, and in some towns the mortality is at a rate which is rarely exceeded during the worst periods of epidemic cholera in Europe. Thus, during the week we are dealing with, there have been 84 fresh attacks and 52 deaths in Bologna, 138 attacks and 62 deaths at Ravenna, 53 attacks and 22 deaths at Verona. The disease has also been steadily maintained at Chioggia, Castelfranco, Verona, Padua, and other places. In Venice the mortality is comparatively small. The daily record of attacks in that city have varied from 4 to 11, and the deaths have only exceeded 1 on the 7th, when 5 fatal attacks occurred, the total weekly record being 46 attacks and 10 deaths. In all, there have been recorded from Italy during the week ending Aug. 10th 1320 attacks and 484 deaths. In Austria the definite news as to cases of cholera is still limited to Trieste and Fiume. At Trieste there have been 26 cases and 16 deaths, and at Fiume 4 cases and 2 deaths. This, however, takes no cognisance of the surrounding villages which have previously been announced to be infected. This local prevalence of cholera has led to the departure from Trieste of no less than 15,000 persons. Four casee are also reported at Naples, the persons attacked having come from infected districts. The disease, again, is stated to be increasing in the direction of the Dalmatian border and in Croatia.

CACHEXIA STRUMIPRIVA.

THE records of cases in which a condition resembling that of myxœdema has developed after extirpation of the thyroid gland are increasing. The latest is an account furnished by Dr. Hans Schmidt of the Augusta Hospital, Berlin (*Berl. Klin. Wochensch.*, 1886, No. 31). It appears that during the five years 1880-86, twenty-five cases of thyroidectomy have occurred at this hospital, mostly under Professor Küster's care. Of these, six were cases of total extirpation, seventeen of unilateral, and two of malignant growths. All the unilateral cases survive, and not one of them has developed any ulterior symptoms, the interval since operation varying from six months to four years. Of the cases of total extirpation, two died of hæmorrhage following operation, another died about a year later from phthisis, another patient, a young girl, was perfectly healthy several years afterwards, and a fifth required tracheotomy six months after the thyroidectomy on account of paralysis of the abductors. In only one case had the manifestations of cachexia strumipriva arisen. This was a lad who, at the age of fourteen years, was admitted in July, 1883, suffering from an enormous goitre, which caused considerable dyspnœa. The operation had to be done in two sittings, and on each occasion tracheotomy was necessary, the cannula being removed the day after. After the lapse of two years and three-quarters he was brought to the hospital by his father, with the statement that ever since the operation he had gradually deteriorated both mentally and physically, leading a listless, indolent life, taking no interest in anything. The change in the lad's physique was most striking, and thoroughly accorded with Kocher's description. The body was undeveloped, the muscles were lax, the skin flabby and of a yellowish colour; there was slight œdema of the cheeks and back of the hand; the mucous membranes were pale the testes very small; no splenic enlargement existed. The trachea appeared to be very thin, and there was no trace of a thyroid gland. The head was relatively large, and hair scanty; speech slow and drawling; aspect stupid and dull. He walked slowly, and was easily tired. The larynx and urine were normal. His memory had become defective.

SCHOOL BOARD CONUNDRUMS.

SURELY Mr. Endean could not have been serious when, at the last weekly meeting of the School Board for London, he cited as questions put to pupils in Board schools the following conundrums:—"1. What would be now thought of crusades, trial by ordeal, and Smithfield fires? 2. How may a current of electricity be produced, and what magnetic, chemical, and mechanical effects may be brought about by means of such a current? 3. A sphere weighing 10 lb., and having a radius of 7 in., hangs by a cord from a point in the wall, and leans against the wall. The point of contact of the sphere and wall is 2 ft. below the point of suspension. Find the length and the tension of the cord. 4. State all the conditions you know of which affect the climate of any place. 5. Why are the following pairs of words called 'doublets': example and sample, faction and fashion, diamond and adamant? 6. State precisely how you would proceed if you were required to prepare a sample of pure hydrogen. 7. Write out examples of a definition, an axiom, a problem, and a theorem. 8. Describe the grievances which led to the Americans asserting their independence. 9. It is said that 'the sun never sets on the Queen's dominion.' Taking a line from London eastwards, denote the points which would make this statement fairly correct. 10. Explain the terms—motion, velocity, acceleration, momentum, and energy." If such questions were really put, we venture to think the lowest abyss of dementia must have been reached by those who preside over the vagaries of our educators. No wonder Sir James Crichton Browne found the children had headaches.

EASILY SATISFIED.

ON the 4th inst. an inquest was held by Mr. William Carter on the body of a girl, a shirt-maker, aged sixteen years, who up to the time of her death had resided with her parents. The deceased had enjoyed good health till the 29th ult., when she was attacked with sickness and pains in the abdomen, and had to return home from her place of employment. On the following day she kept her bed and the sickness continued, and at midnight the pains increased to such an extent that it was thought prudent to send for medical assistance. No doctor, however, could be obtained until six o'clock on the 31st ult., when Dr. Farr, through the agency of the police, attended and pronounced life extinct. At the inquest Dr. Farr deposed that the cause of death was very obscure, and he could not express any opinion without a post-mortem examination. The deceased was a fine and fully-developed young woman, who had enjoyed good

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health, and the body was well nourished. There was nothing to indicate disease of the heart, brain, or any other organ, and he was of opinion that death was due to some irritant in the stomach. A sister of the deceased was recalled, and stated that the unfortunate girl had always suffered from constipation. In spite of the mystery attaching to the death, and the opinion of Dr. Farr as to the presence of an irritant, the jury after a short deliberation returned a verdict of "Death from natural causes, arising on inflammation of the bowels." We have no hesitation in expressing the opinion that the verdict was unsupported by medical evidence, and that in the interests of the public Mr. Carter should have ordered a post-mortem examination to be made.

THE INFLUENCE OF SANITARY WORKS AT MERTHYR-TYDFIL.

MR. DYKE, the well-known health officer to the town of Merthyr-Tydfil, has now completed a series of twenty annual reports; and in so doing he makes a summary showing the proportion of deaths per 10,000 persons living during a series of groups of years. The first period is that from 1845 to 1855, before any sanitary works were commenced; the second includes the six years 1856-61, during which paving works and removal of nuisances were attended to; the third relates to the four years 1862-65, whilst the works specified were still being carried out, and whilst water was also being laid on to the houses; the fourth includes the ten years 1866-75, when the water-supply was perfected, whilst the sewers and drains were being laid and whilst the sewage disposal was being completed; and a fifth deals with the ten years 1876-85, when the whole of these completed works were in operation. The table shows a gradual and continuous reduction of the death-rate from all causes from an average of 332 per 10,000 in 1845-55 to one of 231 in 1876-85, the proportionate mortality of infants under one year of age being reduced from 80 to 45 per 10,000. The rates from the contagious fevers—measles, scarlet fever, and whooping-cough—do not seem to have been in any way affected by sanitary improvement. This we were prepared for; but it is curious that the same applies to diphtheria. Probably this is due, not so much to the fact that this latter disease is independent of sanitary conditions, as to the circumstance that diphtheria has of recent years been much more widely diffused in this country than it was during the earlier periods referred to in the table. On the other hand, there has been a marked diminution in the other forms of "fever." "Continued fever" has practically ceased to exist as a separate disease—a circumstance doubtless due to improved nomenclature; and the mortality from typhoid or enteric fever has fallen from 21 to 3 per 10,000. The death-rate from infantile diarrhœa has also fallen from 11¼ to 4 per 10,000; and the average age at death has increased from seventeen years and a half to twenty-seven years and a half, a clear gain of ten years of life. It will be observed that in making these comparisons Mr. Dyke is following out the plan adopted by Dr. Buchanan in 1866, when he reported on the results of the adoption of sanitary works in many of our large towns, including Merthyr-Tydfil, and hence it is appropriate that the information as to the results of the drying of the subsoil by the construction of sewers should be specially dealt with and brought up to current date. The influence of such drying has brought about a reduction in the phthisis death-rate from 38 to 22 per 10,000; but acute and chronic bronchitis and pneumonia have during the same period become more fatal, the corresponding rate for this group of affections having risen from 33 to 45—a result due, in the opinion of Mr. Dyke, to the continued occupancy of damp and unventilated dwellings. On the whole, this summary affords the most convincing proof that properly planned and well executed sanitary works result in a vast decrease in sickness and death, and by producing healthiness and increased duration of life they become a source of profitable income to the communities affected by them.

CRUSHING THE GRANULATIONS IN TRACHOMA.

DR. KRAMSZTYK, writing in the *Gazeta Lekarski*, advises a method of treating granular lids or trachoma which was proposed by Dr. Wicherkiewicz, and which consists of a forcible crushing of the granulations. The eyelid is everted and held by an assistant, and is then subjected to pressure between the two thumb-nails, the operator moving his thumbs to and fro so as to act on as much of the eyelid as possible. Where the granulations cannot be reached in this way, such as those situated at the canthi and on the plica semilunaris, they are pricked with a needle, and then crushed by means of a pair of forceps or some other suitable instrument. The operation is very painful, and cocaine seems to be of little use. Under chloroform, the whole of the granulations can be crushed at a single sitting. Otherwise the length of time and the number of sittings required to effect a cure depend on the abundance of the granulations and the patient's power of endurance. Where other disease of the conjunctiva exists, it must of course be attended to, and different measures adopted. The after-treatment consists in the prolonged application of cold water dressings to the eye.

THE MEDICO-PSYCHOLOGICAL ASSOCIATION.

THE annual general meeting of this Association was held in the rooms of the Medical Society, 11, Chandos-street, on August 9th, under the presidency of Dr. G. H. Savage. At the opening of the proceedings there were many expressions of deep regret at the recent and somewhat sudden death of Dr. Eames, the president for the past year, under whose auspices the previous annual meeting had taken place at Cork, and a resolution of sympathy with his family was unanimously adopted. Dr. F. Needham was elected to be president for the year 1886-87. Some discussion arose in reference to the examinations for the certificate now granted by the Association of competency in psychological medicine. Among other modifications, the fee was lowered to three guineas, and it was decided that the examination should be open to anyone who was a student in medicine and of age; that there should be no restriction as to his being qualified before applying for the certificate, but that, if successful, he should not receive it until he was registered. It was decided that the next annual meeting should be held in London. At the afternoon meeting the President read an address on the subject of the pathology of insanity, which was followed by a discussion in which Drs. Clouston, Conolly, Norman, Hack Tuke, and Rayner took part. The members afterwards dined together at the "Ship" at Greenwich.

HOUSE-BOATS AND THE THAMES CONSERVANCY.

OUR report on the pollution of the Thames at the Henley Regatta has been greeted with marks of approval from all quarters. We have received innumerable letters confirming all the evils our Commissioner denounced, and, finally, we are pleased to note that the Thames conservators are seeking to deal with the question. Their efforts, unfortunately, do not as yet promise a very brilliant result. We are told that in regard to house-boats and launches the conservators appear to rely on the requirements of registration to prevent the pollution of the river. Certainly, as the *Law Journal* points out, the conservators could not be compelled to register a boat which obviously, from its construction,

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broke the sanitary law established by statute for the Thames. For our part, we fear that it will complicate the issue if the vexed question of numbering and registering boats be mixed up with the imperative necessity of enforcing the sanitary law. If a pickpocket plied his industry on board a house-boat, or if a quarrel led to a case of homicide, the police would not wait till the boat was numbered and marked, according to some new regulations, before proceeding against the culprit. Then why should the inhabitant of London wait till house-boats have "painted upon each bow, and upon each quarter, either the register number or the name" of the boat before the water he is compelled to drink is protected from a frequent and dangerous contamination? Further, supposing that in the course of time the registering is effective in abolishing the closets on board these boats, this will not prevent the throwing overboard of all manner of refuse and, perhaps, of soil. Where a great number of floating dwellings collect together, as in the event of a regatta, a scavenger-boat still remains a necessity. When, on the contrary, the house-boats are scattered in all directions, then watch should be kept and prosecutions instituted against those who are detected and can be proved to have contaminated the river. The law in such cases inflicts very severe penalties. There is not so much need of new regulations as of an organised service for carrying out the existing law.

NEW MEDICAL GRADUATES FROM HEIDELBERG.

SOME of our correspondents are being alarmed at the prospect of an immigration of foreign graduates under the new Medical Act. It will be interesting to see the answer that will be given by the Council to the application of Sir Henry Roscoe, of Manchester, and Professor William Thomson, of Glasgow, when they apply to have the degree of Doctor of Medicine, which they have just received at Heidelberg, registered. It does not do to be too critical about honours distributed on such a rare occasion as the 500th anniversary of a university, and it is perhaps as easy to acquiesce in Sir Henry Roscoe and Professor Thomson receiving medical degrees as in the Grand Duke receiving the degree of Doctor of Theology. These somewhat fantastic actions notwithstanding, the jubilee seems to have been a great event, upon which Germany generally, and Heidelberg especially, may be heartily congratulated.

PRESERVATION OF FRESH FISH.

OF late years we have been accustomed to associate economy in the preservation of food with colonial or transatlantic enterprise. It is therefore the more encouraging to learn that Europe is equal to inventive progress in the same direction, and of this we have apparently a genuine proof in the method of preserving fresh fish introduced by Mr. August R. Roosen of Hamburg. By his process, which is a simple one, the fish when caught are enclosed in steel barrels each capable of accommodating 300 lb. weight, immersed in a 3 per cent. antiseptic solution of boracic acid, tartaric acid, and salt in water, which is forced in by means of a hydraulic hand-pump, while air is simultaneously expelled. An air-tight lid closes the cask, and the bung-hole is a valve to which the pump is attached when in action, and which at a certain stage is closed by internal pressure. It is also satisfactory to find that a year's experience has proved its practical efficiency, at all events in the hands of the introducers. Meat is stated to have been preserved by the same process. On board of the larger fishing craft the plan appears likely to answer well. One or two points in connexion with its working will require careful regulation. With regard to the water to which the antiseptics are added, if this is to consist of sea-water as might naturally be expected, it will still be necessary for coast fishers to be careful as to its purity from river or port refuse. It will also be necessary to guard against the overcrowding of fish. If this should happen, even powerful antiseptics will be of little avail, since perfect exclusion of air is hardly possible. We hope that future use will justify the promise of this novel and ingenious experiment.

PLUGGING THE TRACHEA IN LESIONS OF THE PNEUMOGASTRIC.

IN an article in the *Norliskt Medicinskt Archiv*, Dr. Jens Schou of Copenhagen discusses at some length the treatment of traumatic lesions of the pneumogastric nerve by means of permanently plugging or tamponing the trachea. Dr. Schou gives a succinct description of the doctrine propounded by Traube, that the pulmonary affection caused by section of the pneumogastric nerve is a pneumonia by aspiration—a theory which has lately been supported by other observers, more especially Gärtner. It appears that with animals the unilateral section of the pneumogastric or of the recurrent nerve is generally harmless; but in the human subject it causes pneumonia by aspiration. The reason seems to be that in animals the sections are effected without complications, whilst in men they are as a rule the result of some serious operation capable alone of causing a state of collapse from which pneumonia by aspiration might result. Here, one of the vocal cords is paralysed, which serves to increase the effect of the lesion. The treatment indicated is, then, permanent tamponing of the trachea till the end of collapse, by which time the healthy cord will be accustomed to replace the diseased one. Below's method—namely, tamponing above the cannula—is recommended, an india-rubber ball above. Dr. Schou, however, prefers to introduce a tampon of some antiseptic material such as iodoform gauze. A tampon of this kind is easily applied by means of a cannula open above. If it be necessary to cut the pneumogastric or recurrent nerve, tracheotomy and tamponing should be immediately resorted to, in order to prevent the development of pneumonia by aspiration. Should some time have elapsed before pneumonia by aspiration fully developed has been discovered, it is still necessary as quickly as possible to do the tamponing in hopes of arresting the progress, for in these cases the nerve may be paralysed for some time.

OPIUM POISONING.

AN inquest was held a few days ago on the body of a woman, the wife of a labourer, who committed suicide by taking an overdose of laudanum. The husband stated that about six weeks ago she nearly died from taking the same medicine. On the day of her death, quite early in the morning, he was awakened by his wife, who told him she had swallowed "some more of that stuff again." She was removed to the infirmary, where a few hours later she died. The coroner strongly condemned the system by which laudanum and other deadly poisons could be obtained without question, and the jury after some deliberation returned a verdict that the deceased committed suicide whilst in an unsound state of mind. It was mentioned in the course of the inquiry that the deceased had taken one ounce of laudanum. With regard to this, it is well known many people have recovered after taking very much larger doses of laudanum. We would also point out, in the absence of the old-fashioned stomach-pump, a piece of common indiarubber gas-tubing, fitted with a glass funnel by which it could be filled with water, would suffice not only to empty the stomach of its contents, but to wash it out thoroughly. The use of apomorphine as an emetic is now generally recognised, and it is to be regretted that in this case it was not resorted to for the evacuation of the poison. Coffee in the form of an

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enema, with hypodermic injections of atropine repeated from time to time, are the true physiological antidotes; whilst the cold douche, and electricity or massage to the extremities, would act as valuable accessories.

OFFICIAL CHOLERA MEMORANDUM.

IN view of the recent serious extension of cholera in Italy and the appearance of the disease in certain Austrian ports of the Adriatic, the Local Government Board have drawn the attention of sanitary authorities in this country to the memorandum which was issued in July, 1885, on Precautions against the Infection of Cholera, by Dr. Buchanan, their medical officer, and they again urge upon authorities the importance of continuing, without intermission, to take all measures within their power for maintaining their districts in a state of security against the infection of that disease. The memorandum in question, after explaining the circumstances under which cholera habitually spreads in this country, draws especial attention to the need for maintaining all water-supplies free from the risk of pollution, for securing the systematic and frequent removal of all filth and refuse from the vicinity of dwellings, and for maintaining a state of cleanliness everywhere and under all circumstances; and, lastly, it draws attention to the importance of remembering that any pains taken and costs incurred for the purposes referred to cannot, in any event, be regarded as wasted. Indeed, the sanitary improvements which would justify a sense of security against any apprehended importation of cholera would, to their extent, give amply remunerative results in the prevention of those other diseases. This is eminently true, and some of the most permanent works which have conduced to the saving of human life in this country have resulted from efforts to cope with anticipated advents of cholera.

DEATH OF DR. ROBERT FOWLER.

WE regret to have to announce that Dr. Robert Fowler, of Bishopsgate-street Without, and Old Burlington-street, died at Hampstead on the 7th inst. from pyæmia at the age of fifty-eight. He was M.D., and M.R.C.P. Edin., M.R.C.S., Associate of King's College, London. He was one of the Examiners to the Society of Apothecaries, late Manager to the Metropolitan Asylums Board, late President, Librarian, and Orator to the Hunterian Society, and author of a "Medical Vocabulary." He exposed the celebrated case of the Welsh Fasting Girl, on which he published a book, entitled "Observations on Death from Starvation." Dr. Fowler was a frequent contributor to the medical journals, and was much esteemed by a wide circle of professional friends, as well as by a large *clientèle*.

MATRON v. MEDICAL STAFF.

SINCE alluding in a recent issue to the unfortunate state of affairs at the Blackburn and East Lancashire Infirmary, which has led to the resignation of the entire medical staff, we have learnt further particulars, which only serve to confirm our view of the arbitrary interference of the majority of the Board of Management with a question which belongs solely to the medical authorities. For some time past the medical staff have felt the need of having a second qualified resident at the infirmary, but the board have hitherto declined to entertain the proposal on the score of expense. The creation of a vacancy in the office of dispenser led the staff to suggest the appointment of a junior house-surgeon and dispenser; but since the use of the former title would involve a change of bye-laws, it was recommended that the dispenser should be medically qualified. In desiring to have a second qualified resident the staff acted, it seems to us, with regard to the comfort and welfare of the patients and the proper working of such an institution. They, and they only, could possibly be judges of what was needed in this direction; but a majority of the board (twelve to ten) rejected the proposal, one argument which appeared to have most weight being that the matron had objected to such an appointment, and had threatened to resign if it was made. We are seriously assured that the fear of losing the services of the matron was the principal reason assigned by the majority. If that be so, we can only express surprise at the manner in which a recommendation of the medical staff has been set aside, and trust that the Board of Management will take speedy steps to reverse a decision which is calculated to be disastrous to the welfare of the institution.

SPURIOUS CHARGES AGAINST MEDICAL MEN.

MR. JUSTICE FIELD has done loyal service to the cause of justice, and incidentally he has done good service to the medical profession, by sentencing a man who, to extort money, threatened a medical man with a ruinous charge. It is intolerable that a class of the Queen's subjects who live by their honour in an especial sense, and to whom any imputation on their morality is an irreparable injury, should be exposed to charges and threats of charges which are incited by dishonest greed or malice. Women and men are unscrupulous in what they say or do against medical practitioners, and the more kindly and generously they are treated the greater is the peril from their black ingratitude. The medical practitioner threatened in this case acted with courage and sagacity. He placed the matter at once in the hands of the police. It would be well if every medical man resolved to pursue the same wise course. The moment a charge is made, however vague it may be, let criminal proceedings be instituted. It is useless bringing actions at law. Treat the offence as a crime.

LIGATURE OF THE SUBCLAVIAN ARTERY.

AT the third meeting of the Italian Surgical Society Dr. Lampiasi reported two cases in which he had successfully tied the subclavian artery, after failure of ligature of the axillary under the clavicle. In the discussion which followed a case was referred to in which, two years ago, Dr. Piccinini, at the Ospedale della Consolazione in Rome, tied the subclavian just outside the scaleni for wound in the highest part of the axillary artery. The result was most satisfactory. (*Gazzetta degli Ospitali*, August 4th.)

TOWN REFUSE.

MR. JOHN BRAYE, a member of the Kensington Vestry, has moved for a select committee to report on the practicability of taking road-sweepings and dustbin refuse thirty miles into the country and giving it to the farmers free of cost; and he has requested, through the public press, information from farmers, surveyors, and others. Mr. Braye is evidently a gentleman who is not disposed to trust to contractors for the performance of the important duty of scavenging, and we shall await with interest the publication of the report of his committee, for the reason that the disposal and utilisation of refuse are evidently not to be allowed to depend upon questions of profit. If Kensington, like some other parishes, possessed a water-way, the cost of removal would not be so great as where dependence must be placed upon roads alone. Farmers will gladly utilise road sweepings at certain periods of the year, but for the rest it is necessary to find some place of deposit; and with regard to this, it is essential that it shall be far removed from all dwelling-houses. The subject could be dealt with much

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more economically by an authority acting for the whole metropolis; and it is possible that this conclusion may be the outcome of the report of the Kensington Vestry.

MEDICAL REGISTRATION.

ONE good, if incidental, effect of the new Medical Act may be anticipated. As medical men, under it, are to have the power of voting for a representative in the Council, they may be expected to be more anxious about their own registration, and more careful in forwarding to the Registrar any change of their address. It is important, before the time of the election in November, that all errors of the Register be corrected and all registrations be complete. The Registrars of the several Branch Councils are doing their part in this matter. They are sending to each registered practitioner, by post, a printed statement on the importance of registration, with a copy of his own particular registration, for any correction which may be needed. Every practitioner should give this matter his immediate attention, and return the slip, with his affirmation of its correctness, as required by the form. Those who have been erased from the Register under Section 14—generally persons who have changed their address without informing the Registrar — should immediately send the necessary information, with a request to be restored to the Register.

REVOLVER BULLET LODGED IN THE BRAIN; RECOVERY.

AT the Society of Surgery of Paris, on May 26th, M. Prengrueber presented a man who had fired a revolver at the middle of his temporal fossa. The ball, seven millimetres in diameter, lodged in the brain. The three days following the accident the surgeon abstained from interference, as the only symptoms were general prostration, with lowering of the temperature. Epileptiform attacks having occurred on the fourth and fifth day, M. Prengrueber exposed the cranial wound and removed several bony spicules, which had penetrated the brain. A stilet having failed to detect the bullet, though passed along its course to a depth of five centimetres, nothing else was done. The epileptiform seizures did not recur, and the patient left the hospital at the expiration of a month without any cerebral complication.

THE EPIDEMIC OF ENTERIC FEVER AT SHOREHAM.

THE epidemic which was announced at Shoreham and at Lancing College is now stated to have been due to the consumption of milk from a dairy in Shoreham, where a well liable to pollution was allowed to be used as the water-supply. Shoreham has before this been liable to the same disease. The extension to Lancing College was due to the occasional use, during some cricket matches, of cream which was brought from the Shoreham dairy to Lancing to be served up with strawberries. At Lancing College the outbreak is over.

THE HOURS OF TRAMWAY MEN.

THE directors of the North Metropolitan Tramways Company have little or no sympathy with the talk about "'slavery" and overwork among their *employés* to which many of the London public are addicted. Thirteen and a half hours per day of continuous work, during a week of ten days, with meals taken on the car, they seem to regard as matters of no great moment. We do not agree with them. Statistics may not perhaps be sufficiently exact to show how much health per annum is lost under these arrangements. That the loss is considerable we do not doubt. The system is one of unthinking and unwholesome hurry, and cannot fail to balance its money profit by a culpable and extravagant waste of human working power. Snatched meals are condemned by an all but universal trade custom, while the ten-day labour period has been tried before and has failed, even under the daily working conditions of the last century, which were probably far easier than our own.

THE ODESSA MEDICAL SCHOOL.

DIFFICULTIES of a pecuniary kind are at the very outset interfering with the commencement of the proposed medical school in Odessa. The rector of the university having applied to the Finance Ministry for £1000 for the purpose of enabling the architect to visit various foreign universities, and so to perfect his designs for the clinic and the scientific institutes, laboratories, &c., has been met with a *non possumus*. The municipal authorities, too, do not seem to be as complacent as was expected regarding the site, for they have refused the piece of ground upon which the university professors had set their hearts for the Anatomical Institute. It is to be hoped, however, that in course of time all these difficulties will have been arranged, and that Odessa will have the complete medical school which is so much required in South Russia, and for which so large a city is eminently adapted.

DIRECT REPRESENTATIVES.

DR. B. W. RICHARDSON has issued an address, presenting himself as a candidate for the office of direct representative of the registered practitioners of England and Wales. We understand that he has come forward on the invitation of a large general committee. Dr. Dolan, of Horton House, Halifax, has also issued an address. Dr. Dolan bases his claims on the facts that for seventeen years he has been a Poor-law medical officer, and for twenty-one years a general practitioner. It will be seen that the British Medical Association decline to act as a body in the way of nomination. We think this both wise and in good taste on the part of the Association. We are informed that, in addition to the list published last week, numbers of representative men in every district have signified their intention to support Dr. Glover's candidature.

THE SANITARY CONGRESS AT YORK.

IN connexion with the meeting of the Sanitary Institute in York next month (from the 21st to the 25th), under the presidency of Sir Spencer Wells, it is proposed to hold a conference of medical officers of health on the 22nd, in which, among others, members of the Yorkshire Association of Health Officers will take part. The subjects already decided upon are: the Appointment and Tenure of Office of Medical Officers of Health; Free Hospitals for the Treatment of Infectious Cases; and Local Government for Counties in relation to Sanitary Questions. It is anticipated that the conference will be well attended. The Health Exhibition, including sanitary apparatus and appliances in connexion with the Congress, will be held in the Yorkshire Fine Art and Industrial Institution Buildings, St. Leonard's-place, from Sept. 21st to Oct. 16th.

THE VOLTA PRIZE.

Le Progrès Médical (Aug. 7th) reports that the French Minister of Education has just fixed the date of competition for the Volta Prize. It is of the value of £2000, and was instituted by a decree dated June 11th, 1882, in favour of the author of a discovery which shall render electricity economically useful in one of the following applications:—As a source of heat, of light, of chemical action, of mechani-

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cal power, as a means of transmission of despatches, or in the treatment of disease. The competition will remain open to June 30th, 1887, and the prize will be awarded the following December. Scientists of all nations may compete. A commission, nominated by the Minister of Education, will be charged with the examination of the discovery specified by each competitor, with a view to determine if it fulfil the required conditions.

FOREIGN UNIVERSITY INTELLIGENCE.

THE following vacancies in Spanish university professorships are officially announced:—Santiago: the chair of surgical anatomy, operations and bandaging. Seville: Cadiz Faculty of Medicine, the chairs of medical pathology and therapeutics. Saragossa: the chair of anatomy. The salary attached to each of the above chairs is about £140 annually.

There are three candidates for the vacant surgical professorships in Graz—viz., Professor von Winiwarter of Liège, Professor Wölfler of Vienna, and Professor Nicoladoni of Innsbruck. In Munich Dr. Posselt has been nominated Extraordinary Professor of Dermatology, and Dr. Bezoldt Extraordinary Professor of Otology.

The long-expected opening of the Siberian University at Omsk will have to be still further delayed owing to the impossibility of obtaining professors in the legal and medical faculties.

THE INTERNATIONAL MEDICAL CONGRESS.

WE were in error in stating that Sir James Paget is likely to attend the International Medical Congress. We may, however, still hope that one who would be so much missed will find his way to Washington.

ON the 10th inst. the death occurred of Mr. George Busk, in the seventy-eighth year of his age, after a lingering illness. The deceased became a member of the Royal College of Surgeons in 1830, and in 1843 was selected to receive the Fellowship of that institution. He was elected a member of the Council in 1863, and in 1871 was chosen president of the College. He was a Fellow, and had twice been vice-president of the Royal Society, and also a Fellow of the Linnæan, Geological, and Zoological Societies. Mr. Busk was a trustee of the Hunterian Museum, a member of the Senate of the University of London, and for some years acted as examiner in comparative anatomy and zoology to that university. At the time of his decease Mr. Busk had just completed an elaborate report on the zoophytes found during the expedition of the *Challenger*.

DR. R. J. MANN, whose death at the age of sixty-five has recently been announced, was well known in scientific circles in London. He was a member of the Council of the Society of Arts, for three years President of the Meteorological Society, and was a member of the Astronomical, Geographical, Photographic and other societies. In early life he held a Government appointment in Natal, where he served as head of the Education Department and medical officer for many years. Dr. Mann was a popular and prolific writer. Many of the recent scientific articles in the *Edinburgh Review* were from his pen, and he was a frequent contributor to several magazines and reviews.

PROFESSOR WEICHSELBAUM has been given space in the Vienna Anatomical Museum for the accommodation of his class in pathological histology.

THE death is announced of Dr. Frank Hamilton, the eminent surgeon of New York.

THE lectures on Darwinism, which Professor Mathias Duval delivered at the Paris School of Anthropology, have just been published by Delahaye and Lecrosnier.

ON Monday next, M. Chevreul, the famous French chemist, will complete his hundredth year, and the Parisians will celebrate the event by a grand fête.

BRITISH MEDICAL ASSOCIATION.

FIFTY-FOURTH ANNUAL MEETING,

HELD AT BRIGHTON, 1886.

ALTHOUGH the weather on the opening day of the meeting—Tuesday, August 10th—was not at first very propitious, the number of members who thus early appeared on the scene augured well for the probable success of the meeting. An unusual number of eminent foreigners were among those early arrivals, including Professor Charcot, of Paris, and Dr. Nathan Davis, the President-elect of the International Medical Congress to be held in Washington in September, 1887. Certainly no pains had been spared by the Municipality and medical profession of Brighton to welcome their visitors. The Royal Pavilion was placed at the disposal of the Association, so that the large general meetings could be held in the dome and the sectional meetings in the various apartments of this curious but interesting building. A museum of pathological specimens, pharmaceutical preparations, surgical and scientific instruments, &c., was opened in the Corn Exchange, which abuts on to the dome; whilst in the Museum of Science and Art adjoining the Pavilion there was a most admirable collection of bacteriological apparatus, cultivations of micro-organisms, microscopical preparations, and photo-micrographs exhibited by Mr. Edgar Crookshank in connexion with the Section of Public Medicine. Few places could be better adapted for such a purpose, whilst the proximity to London has done much to bring many to spend the week on the coast. An admirable guide-book, compiled by Mr. Friend, was presented to every member of the Association.

The Council were entertained by the Mayor at a banquet on Tuesday evening.

The First General Meeting was held on Tuesday afternoon in the Dome. The chair was taken by the retiring President, Dr. W. T. Edwards (Cardiff), who, after a few words expressing his hearty thanks for his election last year, and his hope to continue an active member of Council, said that he had great pleasure in handing his office over to Dr. Withers Moore, who would certainly well discharge its duties.

The PRESIDENT, in taking the chair, offered a hearty welcome to the Association in the name of the municipal authorities and the medical profession of Brighton. He mentioned that there were a very large number of distinguished visitors present, especially from America, including Dr. N. S. Davis, the President of the forthcoming International Medical Congress. He trusted that the meeting would be a pleasant and prosperous one, and he felt sure that socially and scientifically it would take a high rank.

A vote of thanks to the retiring President and a motion that he be elected a Vice-President for life was moved by Dr. Waters, seconded by Dr. Chadwick, and carried by acclamation.

The Report of the Council was then presented by the President of the Council, Sir B. Walter Foster, M.D. It began by alluding to the fact that since the Association last met in Brighton, in 1851, the population of the town had increased from 65,000 to 107,000; whilst the Association, which numbered 1200 members then, has at present nearly 12,000 members, and an invested capital of upwards of £22,000. New branches of the Association are to be formed at Limerick, Bermuda, Ceylon, Calcutta, and at Oxford. The labours of the various committees

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were reviewed. The Medical Reform Committee, presided over by Dr. E. Waters for eighteen years, had accomplished its work by the passage of the new Medical Act, and a tribute of praise was accorded to Dr. Waters and to Sir B. W. Foster for the share taken by them in this work, especially in respect to the number of direct representatives allotted to England. The Parliamentary Bills Committee had rendered assistance in amending the Lunacy Acts Amendment Bill, which passed the House of Lords; in considering the health clauses of Local Corporation Bills, with reference to compulsory registration of infectious diseases, and in other subjects. The Scientific Grants Committee had not exceeded the grant of £300; but regret was expressed that no satisfactory report had been received from the recipient of a special grant of £100 for research upon methods of conferring immunity in septic diseases. The Scientific Scholarships, held for three years by Mr. Watson Cheyne and Dr. Augustus Waller, would expire in October. Elaborate reports had been received from Mr. Cheyne upon the Relation of Micro-organisms to Disease, and from Dr. Waller upon the Fatigue and Recovery of Muscle and Nerve. The Collective Investigation Committee apply for a renewal of the annual grant of £600; and the Council being aware that many members of the Association feel disappointed with the inadequate results of this movement, have appointed a subcommittee to inquire into it from a financial point of view. The Middleman prize for the best essay on Discoveries in Ophthalmic Science and the Stewart prize for the best work on Contagious Diseases would again be awarded. The question of more commodious premises had been considered by a Committee of Council, but no definite result yet arrived at. A series of rules and regulations regarding the appointment of committees had been adopted by the Council, and were embodied in the report, which concluded with an enumeration of some of the losses sustained by death during the past year.

Sir B. W. FOSTER, in moving the adoption of the report, briefly commented upon the paragraphs of the report. As regards direct representation, he said that this was due to the untiring assiduity of Dr. Waters. The whole status of the profession would depend on those who might be elected. With respect to improved premises for the Association, he contended that it would be unwise to spend all the capital of the Association in securing them; for, as a representative body of the profession, they might some day require funds if they were engaged in contending with great corporations. The future of the medical profession depended on the way in which they developed their resources.

Dr. CARTER (Liverpool) seconded the motion. He referred to Medical Reform and the great assistance given by Sir B. W. Foster in Parliament in securing three representatives for England. He pointed out that the British Medical Association, having been mainly instrumental in securing this favour of Direct Representation, should take steps through its Medical Reform Committee to select three gentlemen who might be supported by the Association and profession at large.

Dr. MORRIS (Spalding) thought the allusion to representation in the Council report was insufficient, seeing the important position taken by the Association amongst general practitioners. The representatives must be general practitioners themselves, for this branch of the profession had been too long ignored. He himself was at the service of the Association. He suggested that lists should be issued by the Council, and members should indicate those whom they preferred, the three names approved by the majority being selected. Unless some such steps were taken the election would be influenced by those already in power.

Mr. NICHOLSON (Hull) suggested that the Council should make the selection, and that the names selected should be suggested by the whole profession.

Mr. HUGH KER (Halesowen) said it was of the greatest importance to have a proper selection of candidates, and he suggested an alternative plan might be a ballot by the members present at the Brighton meeting.

Dr. DEAS (Exeter) questioned the desirability of this subject being introduced in a discussion on the Report of the Council; and Mr. V. JACKSON (Sheffield) thought the subject might be left to the Presidents of the Branches.

Mr. MARSHALL (Dover) asked about the expenditure for contributions to the journal, and suggested that the Association might take up the subject of medical protection, and the prosecution of unqualified practitioners as of greater practical utility than collective investigation.

The Report was then adopted, and Dr. CARTER gave notice of a resolution about the selection of candidates for the Medical Council.

Dr. WARD COUSINS moved an alteration of the bye-laws, so as to admit of the Colonial and Indian Branches being properly represented upon the Council. The matter was referred to the Council.

Mr. JOHN DIX (Hull), after failing to secure the postponement of the subject to the coming meeting, then moved a resolution referring to the Council the subject of the payment of the travelling expenses of the representatives of the branches to the meetings of the Council. The greatest possible sum thus required would not exceed £500, and he thought it was a mere act of justice.

Dr. DEAS seconded the motion, which was opposed by Dr. BRIDGWATER and Dr. EYTON JONES, and lost; but some confusion prevailed owing to the prolongation of the meeting beyond the hour fixed for adjournment.

The adjourned meeting took place in the evening. There was a large attendance. The proceedings commenced by Sir B. W. Foster introducing Dr. Nathan S. Davis, of Chicago, President-elect of the International Medical Congress.

The President (Dr. WITHERS MOORE) then delivered his address. After a few introductory remarks, in the course of which he referred to the meeting of the Association at Brighton thirty-five years ago, and the changes that had taken place, not only in the locality and in the Association since that time, but also in the science of medicine, he alluded to the great prevalence of indiscriminate gratuitous medical relief, and the question of medical fees. He then proceeded to the main topic of his address, which dealt with the higher education of women, meaning by the phrase an education "which aims at raising women (as it imagines) to the masculine level, by fitting them for the exercise of brain-power in competition with man." Is it good, he asked, for the human race that women should be trained and admitted to compete with men in departments from which they have hitherto been excluded by feeling and usage, and by legislation? Is such a competition demanded by the "rights of women," or by "justice to women"; do their duties admit of it? The old chivalrous ideal was different; it held that woman should be protected from the rude battle of life by the work and labour of man, but if this ideal is to be changed, then the age of chivalry and courtesy will pass away. Apart from this sentimental aspect of the question, he held that "it is *not* for the good of the human race, considered as progressive, that women should be freed from the restraints which law and custom have imposed upon them, and should receive an education intended to prepare them for the exercise of brain-power in competition with men;" for such a cause could only incapacitate them for their own proper function which nature has assigned them in the maintenance and progressive development of the human race. It will hinder those who would have been the best mothers from being mothers at all, or, if it does not hinder them, more or less it will spoil them, and no training will enable themselves to do what their sons might have done. He disclaimed any covert intention of proving that women are unfitted for the practice of medicine, for in many walks open to women—as music, literature, and the fine arts—none had been so distinguished as men, and the day is far distant when a Hippocrates, a Harvey, a Haller, or a Hunter will adorn the ranks of the lady doctors. As Herbert Spencer says, "The first requisite to success in life is to be a good animal; and to be a nation of good animals is the first condition to national prosperity;" and Dr. Moore contrasted the haphazard way in which in the case of the human animal conjugal union was arrived at, as contrasted with the care bestowed on such unions by the breeders of the inferior animals. Since, however, there can be no interference with individuals, there should be no attempts made whereby the fittest mothers should be shut out from motherhood. To encourage competition with man in the intellectual pursuits was to make vast demands on the vital powers, and *pro tanto* interfere with maternity and its duties. Education is very expensive, physiologically as well as pecuniarily, and growing girls are not physiologically rich enough to bear the expense of being trained for motherhood, and also that of being trained for competition with men in the severer exercises of the intellect. Again, the first ten years of life was the most important period of a man's existence, and how important it was that the mother should be fitted for the charge and training of her offspring at this period. Still

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more wonderful than the change undergone by the new-born infant and the child of ten years were the changes that go to build up the organism in the period of gestation. All the tissues and organs are developed from the maternal substance. "Manifestly it is before his birth, mainly, that the man is made. From and after his birth he has mostly not to be made, but to grow; the making of him has been begun and carried on, and well-nigh completed in his mother's womb." How important then that she should be in such a vital state as to fit her for discharging duly the arduous functions of maternity. The detrimental influence of mental labour, in producing infertility and in damaging the physique of women, was illustrated by a statement of Herbert Spencer, and Dr. Matthews Duncan's opinion was cited that "amenorrhœa and chlorosis, and development of great nervousness, are frequent results of over-pressure in education at or near the important epoch—fifteen to twenty years of age. To the same cause I have often attributed destruction of sensuality of a proper commendable kind, and its consequent personal and social evils." The opinions of Sir B. Brodie, of Dr. E. H. Clarke, of Boston, of Drs. Emmett, Goodall and Lownes; and Mr. Lawson Tait, all express the same view. Dr. Moore, after alluding to other arguments in support of his contention, concluded as follows:—"But time admonishes me to make an end. My argument may be summed up very simply. Excessive work, especially in youth, is ruinous to health, both of mind and body; excessive brain-work more surely so than any other. From the eagerness of woman's nature competitive brain-work among gifted girls can hardly but be excessive, especially if the competition be against the superior brain-weight and brain-strength of man. The resulting ruin can be averted—if it be averted at all—only by drawing so largely upon the woman's whole capital stock of vital force and energy as to leave a remainder quite inadequate for maternity. The Laureate's 'sweet girl-graduate in her golden hair' will not have in her the fulfilment of his later aspiration—viz.,

> 'May we see, as ages run,
> The mother featured in the son.'

In the prophet's words, 'She will not have strength to bring forth'; her reproductive system will more or less have been atrophied; she will have lost her womanhood's proper power. With the power, she will have largely lost also the inclination; of 'Love's sweet want,' as Shelley calls it, she will know little, for, in Dr. Duncan's more matter-of-fact language, she will have lost 'sensuality of a proper commendable kind.' Unsexed it might be wrong to call her, but she will be more or less sexless. And the human race will have lost those who should have been her sons. Bacon, for want of a mother, will not be born. She who should have been his mother will perhaps be a very distinguished collegian. That one truism says it all—women are made and meant to be, not men, but mothers of men. A noble mother, a noble wife—are not these the designations in which we find the highest ideal of noble womanhood? Woman was formed to be man's helpmeet, not his rival; heart, not head; sustainer, not leader. Many times, indeed, woman's fate has set her in the foremost place; in some of those times, no doubt, such place has been well and grandly filled by her. Yet even then our admiration is not untinged with compassion. Even in this year of approaching or commencing jubilee, it is not so with us when we think of that Crown, Royal and Imperial, which, splendid as it is, has so long been left 'a lonely splendour'? 'Victoria Regina et Imperatrix'—bravely, proudly, gloriously is the burden borne; but would she, who knows its weight, wish a like weight to be laid upon any daughter? Let this address come back to the humbler life which more belongs to it. 'I am king of the household, and thou art its queen,' says the happy husband in Longfellow. Permit me to conclude to-day with King Solomon's eulogy for the happy home-queen, the happy wife. 'Who can find a virtuous woman? for her price is far above rubies. The heart of her husband doth safely trust in her; she will do him good and not evil all the days of her life. She rises while it is yet night, and giveth meat to her household, and a portion to her maidens. She girdeth her loins with strength, and strengtheneth her arms. She perceiveth that her merchandise is good, her candle goeth not out by night. She layeth her hand to the spindle, and her hands hold the distaff. She stretcheth forth her hands to the poor, yea, she reacheth forth her hands to the needy. Her husband is known in the gates, when he sitteth among the elders of the land. Strength and honour are her clothing, and she shall rejoice in time to come. She openeth her mouth with wisdom, and in her tongue is the law of kindness. She looketh well to the ways of her household, and eateth not the bread of idleness. Her children arise and call her blessed; her husband also, and he praiseth her. Favour is deceitful, and beauty is vain; but a woman that feareth the Lord, she shall be praised.'"

Dr. N. G. DAVIS (Chicago), in proposing a vote of thanks to the President for his able and interesting address, said that he cordially sympathised with its sentiments. There could be no room for doubt as to the truth of the statement it contained, and in America they had abundant evidence of it; when the laws of nature are set at defiance a fatal blow is struck against the welfare of the race.

The vote was carried by acclamation and acknowledged by Dr. Moore.

A motion by Mr. J. Marshall (Dover) respecting the publication of notices of births, marriages, and deaths in the journal—free of charge to members—was after a brief discussion referred, on the motion of Mr. Wheelhouse, to the Council.

The Second General Meeting was held on Wednesday morning, August 10th, Dr. Withers Moore, President, in the chair. The large hall was very nearly filled by the audience.

Sir B. WALTER FOSTER, President of Council, announced that although invitations had been received from Glasgow and Leeds for the meetings of the association in 1888 and 1889, yet no invitation had been received for next year. He therefore moved that the Council be requested to make arrangements for the annual meeting in 1887, and empowered to nominate a President-elect.

A number of foreign delegates were then introduced to the President, and received with applause.

The PRESIDENT alluded in suitable terms to the death of Dr. Austin Flint, who had cordially accepted the invitation to deliver the address in medicine at this meeting, and had prepared that address, which had since been published. The Council of the Association had invited Dr. Billings to take the place thus vacated.

Dr. Billings then delivered the address on medicine. (See p. 283.)

A vote of thanks to Dr. Billings for his address was proposed by Sir J. Crawford, Director General, seconded by Dr. Ord, and carried with great enthusiasm.

The list of Members of Council was read by the Secretary.

Sir B. W. FOSTER then announced that a prize of £20 had been awarded to Dr. Ward Cousins for the invention of a sound-deadener, and related the circumstances attending that award.

Dr. WARD COUSINS, in gratefully accepting the honour, announced that he would offer a prize of £20 for a subject which would be duly announced.

DIRECT REPRESENTATION OF THE PROFESSION.

Dr. CARTER (Liverpool) moved: "That it be an instruction from this meeting to the Council of the British Medical Association to select three names of gentlemen suitable for election to the General Medical Council by the medical practitioners of England, and to submit them to a future general meeting during the session of the Association in Brighton." He justified this course on the grounds that the time for selection was short; that to procure capable representatives it is necessary to have some organisation; and they could have no fear of leaving the selection to so representative a body as the Council of the Association.

Dr. EYTON JONES seconded the motion, the object being that general practitioners should be represented; and he suggested as one of the representatives the name of Dr. Waters.

Dr. HUGH KER supported the motion, but suggested that more names be proposed than required, and that the Irish and Scotch branches should take the matter up themselves.

Dr. DOLAN (Halifax) proposed as an amendment that it was inexpedient that the Association should interfere with the election, and that its action should be limited to affording facilities for the circulation of the names of candidates, with a view to get the opinion of members of the Association upon them. Dr. Carter's motion would, he said, place in the hands of a caucus the franchise for which they had so long struggled. He reminded them that the Association was not the only power that had moved to secure them

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this right. THE LANCET had been working for years. Were they going to hand this selection to a body which might lead to the exclusion of so good a candidate as Dr. Glover? The question had been sprung upon the meeting. They must have general practitioners for their representatives, and not consultants, who are already amply represented.

Dr. MORRIS (Spalding) suggested that the selection could be made through the medium of the journal.

Dr. DUNCAN (Glasgow) objected to the Scotch and Irish representatives being disregarded.

Mr. G. BROWN (London) said the Association did not represent the profession, and insisted that candidates should come forward on their own merits, and not as nominees of any body.

Dr. ALDERSON thought that the machinery of the Association might be used for the election, but objected to placing the selection in the hands of the Council. He did not think a candidate should be excluded just because he was not a general practitioner.

Dr. CARTER explained that he had proposed to place the matter in the hands of the Council, because he felt it could be thoroughly trusted. But in obedience to the evident sense of the meeting, he withdrew his motion.

Dr. DOLAN'S amendment now being a substantive motion, was put to the meeting.

Dr. BERNARD O'CONNOR was engaged in speaking against the motion, when it was withdrawn by Dr. Dolan, and the meeting concluded with the result that no action will be taken at all in the matter.

In the afternoon a garden party was given by Sir Julian Goldsmid at St. Ann's Wells; and in the evening a brilliant conversazione was given at the Royal Pavilion by the President of the Association and the members of the South-Eastern Branch.

At the third general meeting on Thursday morning thanks to Mr. Humphry for his address in surgery were moved by Sir W. Mac Cormac, and seconded by Mr. Wheelhouse, and carried *nem. con.* Sir B. W. Foster then addressed the meeting in declaring the award of the Association Gold Medal to Dr. E. Waters for his long-continued and devoted labours in the cause of Medical Reform. The medal was founded in 1870, and has been awarded three times before, to Dr. Davies of Swansea, to Surgeon-Major Reynolds, and to the late Dr. Farr respectively. The President then presented the medal, and Dr. Waters acknowledged the award, which he said was a distinction which, of all others, he could most have desired. The Stewart prize was awarded to Dr. Robert Cory, for his self-denying research in vaccination, and the Middlemere prize was divided between Mr. G. Berry and Mr. Adams Frost. A delegation from the American Medical Association, including Drs. N. Davis, Brodie, Pancoast, Sinclair, and others, attended, and Dr. Davis, President-elect of the International Congress, gave a warm invitation to the profession of this country to attend the meeting at Washington in September, 1887. The delegates were most heartily received.

THE SECTIONS.

MEDICINE.

The first meeting of this Section was held in the Music-room of the Royal Pavilion on Wednesday afternoon. Dr. Broadbent, President of the Section, occupied the chair. The following subject had been selected for special discussion:—"Cases in which disease of the valves of the heart has been known to exist for upwards of five years without causing serious symptoms." Introduced by Sir ANDREW CLARK. From notes of cases coming under observation during the last fifteen years he brought forward certain points for discussion. He excluded from his tables all murmurs heard in the pulmonary area, all murmurs which were presumably variable, and what he called murmurishness. The cases had thus been repeatedly sifted. He noted 684 cases of valvular disease without symptoms showing how many persons must be going about with heart disease, and yet not suffering from it. There were also a large number of patients who suffer so slightly that they never consult a doctor, and thus the murmurs are perhaps never detected. Of the 684 cases the great proportion of 272 consulted him for indigestion, 57 on account of some rheumatic condition, 22 for gout, 44 for nervous ailments, 17 for eczema, and only 4 for phthisis. Lesions of the heart produced in youth were noticed to be greatly recovered from if development were not complete. He considered the Collective Investigation Committee were quite justified in taking up this subject, because town physicians do not know sufficient of the family and personal histories of these patients. It was the general practitioners who could supply the necessary information. He thought the Committee might take up those cases in which, though symptoms are experienced, the patient continues even to advanced life in a comfortable way. He described cases in which the valvular lesion was known to have disappeared. He drew impressions from these cases with reference to what favoured and what impaired recovery. He considered that impressions grew up with all of us into a clinical instinct, which, for the most part, served us well. Those who were exempted from the secondary effects of heart disease were those who placed themselves in favourable physiological conditions, especially with regard to the health of the mind, an absence of worry and disquiet. As disfavouring recovery, all disobedience to physiological laws, irregularities of living, especially eating and drinking. Many patients are over-fed by their anxious friends, and he considered that the abuse of tea, and especially of tobacco, weakened the ventricle. The failing strength of the ventricle was to be feared more than anything else. He concluded by referring to many cases which were proved to exist with valve lesions, and yet without symptoms, even to the extreme of life; others who have symptoms and yet live to advanced age; others, again, whose heart murmurs disappear. He considered that if this investigation were pursued carefully, it will do more than any other for the completion of the natural history of these diseases, and will render most important services to mankind.

Dr. GAIRDNER continued the discussion, and observed that his own impressions agreed very much with those Sir A. Clark had expressed. He referred to this subject in print twenty-five years ago, and said then, that there was a tendency to overrate the importance of murmurs, to pay too much attention to sound rather than the circumstances, and to take too serious a view of cardiac murmurs and disease generally. He recorded nine cases illustrating the more favourable prospects than usually admitted in this class of cases.

Dr. CLIFFORD ALLBUTT laid stress upon whether the cause of the valve disease was intrinsic or extrinsic. He considered dietetic considerations very important, and alluded to the great weakening effect of alcohol upon the muscle of the heart. He thought that with alcohol the mischief was essential; with tea and coffee, the effect, being produced through the nervous system, was readily recovered from. He believed that a noisy murmur was not often a serious one, and that the important point was whether any alteration occurred in the current of blood. He drew attention to the danger of sudden death always existing with aortic regurgitation, whereas the occurrence of acute dilatation with mitral disease was recovered from. He concluded by observing that this discussion ought to comfort physicians who were outliving the pathological era in which they were first trained, and which placed too much importance upon organic changes.

Dr. BRISTOWE did not doubt that occasionally organic murmurs do disappear. He recorded a case in which heart disease existed for forty-five years, and others of aortic obstruction which had existed a long time in fair health. The loudness of a murmur was not a criterion of its seriousness. He thought doctors often discovered heart disease when the patient knew nothing previously about it, and made them miserable. He referred to Murchison having died in harness, and said he would often recommend others to run the risk also.

Dr. LEACH, in referring to the treatment in these cases, asked whether we should advise patients to do nothing and keep quiet, because they have no murmur; or go to the other extreme, with some German authors, and advise mountain climbing and severe exercise. He thought it was not wise to consider a man with heart disease as equally favourable for insurance as one without.

Dr. BOWLES considered that for collective investigation purposes we must not disregard temporary murmurs. They have had an important meaning. We were, perhaps, apt to attach too much importance to them in our prognosis.

In summing up, Sir ANDREW CLARK said, that in considering a case for life assurance he weighed these facts—the time the mitral disease must have existed; whether independently of disease of the heart-walls; whether in

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existence for over two years; whether associated with attacks of negative congestion; whether the general health was good, and whether there was a fair radial pulse. Murmurs must be considered in their relation to the general health, and the condition of the heart-wall.

A vote of thanks was passed to Sir A. Clark for opening this discussion.

SURGERY.

Mr. ERICHSEN, President, in opening the section, spoke on the tendency of modern surgery—i.e., the lines that it will be most profitable to follow in the immediate future by those who seek to advance surgery beyond its present limits of undoubted excellence. Will, he asked, these lines be the same as those along which the present generation of surgeons has successfully carried it to so high a pitch of excellence, or will the very success that has attended their efforts in these directions compel a new departure? Have we, in fact, reached the final terminations of the old routes, and must we follow, if not new, at least less well-explored tracks if we wish to reach a uniformly higher level? "Before answering these questions, let us consider the direction in which surgery has advanced since the introduction of anæsthetics, from which epoch I would roughly date the development of what is now known as 'modern surgery.' And here I speak only of surgery proper, not of those questions in diagnosis and pathology which are common to it with the other departments of medicine. This advance has been in three distinct lines. First, and mainly, in the extension of the scope, and in the improvement of the methods of operative surgery. Secondly, in the precision both as to exactitude of performance and certainty in the result of operations. Thirdly, in the application of those methods of scientific research by which those sciences are advanced on which practical surgery is based. The extension of operative surgery since the introduction of anæsthetics is certainly one of the most remarkable phenomena even of this mechanical age. It cannot have fallen to the lot of many of you to have been personally engaged in surgical operations in the pre-anæsthetic period, but to those who, like myself, were then well acquainted with the operating theatres and the wards of the London and of some of the Continental hospitals, and who can carry our minds back to what we should now call the horrors, both as regards physical suffering and total absence of hygienic precautions, of those days, the change that has come over the whole field of operative surgery is more than startling. That the final limits of surgery have been reached in the direction of all that is manipulative and mechanical there can, I venture to think, be little doubt. Within these limits there may be much of movement, of change, of modification in the 'technique,' if I may borrow that word from art; but movement is not necessarily advance, it is often the mere restlessness engendered by dissatisfaction with established methods; change may be the outcome of mere personal vanity, or of more unworthy motives..... But another great advance that has been made in modern surgery is in its precision. Now, there are two kinds of precision, there is the precision which consists in exactitude of performance and the precision which consists in certainty of result. So far as exactitude of performance is concerned, there is little left to be desired in modern surgery. The rules laid down for most operations are so precise that the surgeon can hardly err, the more so as the use of anæsthetics by rendering the patient insensible to all suffering makes it unnecessary to operate against time, a cause of much fatality in former days, and the use of Esmarch's bandage renders the limb as bloodless as if it were in the dissecting room. Almost absolute precision of result has also been obtained, so far at least as the wound is concerned by the employment of strict hygienic precautions and the adoption of the antiseptic method in one or other of its various modifications. Precision of result, so far as recovery is concerned, is less certain; but here also the gain has been immense, and so great has the advance been, that instead of looking upon any given operator as having a definite rate of mortality, often high, we now look upon death after operation, and as the direct result of the operation, as a rare contingency, and one to be carefully inquired into..... The development of those methods of scientific research by which those sciences are advanced on which the practice of surgery is based is the next point to be considered, and here we come to ground that has been less assiduously cultivated than other fields of surgery, but which certainly may be expected to yield a fruitful and abundant harvest in the future. It may, in truth, be doubted whether there is really a 'science of surgery' in the sense that we attach to the word 'science' when applied to other departments of human knowledge, the observation of natural phenomena, collections of facts governed by and subordinated to certain fixed laws. We should be more correct in saying that surgery is based on certain of the natural sciences, such as those of biology, anatomy, physics, and chemistry, and on pathology. The art of surgery has been in no way dependent for its advance in the past on the cultivation or the progress of science. There was a highly advanced empirical art of surgery long before the natural sciences existed as such. The art has ever been in advance of the science, and the science has too often had to content itself with giving a rational explanation of the phenomena already determined by the art of surgery..... Art is final, but science is illimitable. We have reached finality in the mere mechanical art of surgery, both as to expansion of its limits and the precision of its practice. But we are yet on the very threshold of the science of surgery. We have yet to learn much from that compound science biology, in its application to the elucidation of surgical problems, that compound science of modern creation into which physiology and histology, pathology, chemistry and physics, enter in equal proportions, which works by means of experimental research, and I venture to think that this is the line of investigation which promises the greatest and most useful results in the cultivator of surgery in the immediate future. The old lines also of ordinary clinical observation and of dead-house pathology have long since been followed to their final termination; we can but multiply the facts already so carefully observed, and so admirably recorded by countless observers in every civilised country. It is not by following these old lines that modern surgery will owe its advance, but it is in the application to it of those means of experimental research which are now being worked out in the biological and pathological laboratory that we may hope to find the solution of many of those problems that have hitherto baffled the surgeon."

Sir HENRY THOMPSON then opened the discussion on Supra-pubic Lithotomy. Being strictly limited, he said, he would condense his remarks as much as possible, and limit himself to the discussion of the best manner of removing large stones in adults. Formerly it was a choice between lateral or median lithotomy, with a few cases for lithotrity. Now, the latter operation was universally selected for nine out of every ten cases, and it was a question how the remaining case should be dealt with. Lateral lithotomy seemed a simple and an expeditious operation for a looker-on, but for those who had access to the wards it was a fatal operation as formerly practised. In the earlier part of his career he had tested the several methods, and the contrast between any method of lithotomy and of lithotrity was very striking. In removing a large mulberry calculus through the perineum more severe must be the injury to the neck of the bladder and to the prostate. Cheselden had had remarkable success for small and medium-sized stones in children, and this was probably the best operation he could have done, seeing that crushing had not then been invented. But to-day the situation was completely changed. The supra-pubic operation was well adapted for medium-sized and for large stones, because the space is practically unlimited; because there was no danger of hæmorrhage, or, if it occurred, it was easily dealt with; because the incision was easy to make and quite safe; because the after-treatment was easy, and the use of antiseptics possible; and finally, because neither rectum nor sexual organs were in any way interfered with. It had, however, been argued that there were some dangers, notably two—the peritoneal cavity might be opened, or there might be extravasation of urine into the surrounding cellular tissue. Dealing first with the latter, Sir Henry pointed out that this could hardly occur if the rules of procedure were at all carefully carried out. It was conceivable that extravasation might occur if the tissues were much disturbed. This would be likely to follow if the bladder, not being properly supported, should tend to recede back into the pelvis as its contents flowed out after it had been incised; hence the importance of carefully fixing it before the incisions were made into it. Then, as regarded the peritoneum, this danger need not occur. Garson's experiments, amply confirmed by Petersen and others, showed the value of rectal distension; and, besides, the floor of the bladder could be seen when it was

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well raised out of the pelvis by a distended rectum, and this was a great advantage, especially when operating for tumour of the bladder. Sir Henry next described the details of the operation (now very generally known through his *brochure* on this subject). He thought there was no advantage in suturing the bladder; it was better to leave it open in order to effect drainage, which a catheter in the urethra failed to accomplish.

Mr. REGINALD HARRISON (Liverpool), for Dr. Morrison, showed a large uric acid calculus (the largest on record) which had been removed by this method: a pair of midwifery forceps had been used for its extraction. For himself, he spoke with reserve on this supra-pubic operation; he had operated on about fifty children by the left lateral method without losing a single one, and he should hesitate about changing his practice until circumstances convinced him that he could improve on his present results. To judge from the recorded experience of others, lateral lithotomy had proved a difficult operation, and for such men the easier one would doubtless be welcomed. For stone cases, however, attended with complications, such as sacculation or cystitis, he felt sure that the perineal method would prove the better and the more satisfactory.

Mr. CADGE (Norwich) would prefer to take a midway course between Sir Henry Thompson, who went for the operation, and Mr. Harrison, who condemned it. Perhaps on account of his old associations and prejudices, he (Mr. Cadge) was apt to see difficulties where others saw none; perhaps, too, he was reluctant to let the older operation lose the place of honour it had so long occupied. Nor could he forget that Cheselden had abandoned it, and never returned to it. But at present it was impossible to lay down any principles on which it could rest; the aggregate experience of all surgeons hardly amounted to 100 or 150 cases. As regarded the wound, he was rather in favour of leaving it open; at most, perhaps, one or two stitches, for the sake of securing coaptation, might be desirable. He then referred to cases quite unsuited for the supra-pubic operation—cases of contracted bladder. He would advise that surgeons keep their minds open, carefully experimenting on the dead, and cautiously practising the operation in suitable cases on the living.

Mr. JESSOP (Leeds) related an interesting case, in which he had quite failed to grasp the stone with the lithotrite, but quickly extracted it by the supra-pubic method. He was much disappointed with Sir Henry Thompson's opening paper. It contained nothing new, nothing that had not already been published at least twice before. He had been hoping to learn the cases in which Sir Henry would advise this operation before any others. How would he or Mr. Cadge deal with a moderate-sized stone in persons with enlarged prostate? Then, as regards children: he confessed that in a small child lateral lithotomy was a difficult operation; on the other hand, the bladder in children lent itself readily to the supra-pubic method.

Mr. BARWELL spoke in favour of the operation, both for boys and girls.

Dr. WARD COUSINS (Plymouth) seemed perfectly satisfied with the old-fashioned lateral lithotomy for small and median stones. With improved tools, lithotrity bade fair to take its place. Nevertheless, supra-pubic lithotomy was a very easy operation.

Surgeon-Major KEEGAN (India) showed a remarkable series of stones removed from children by crushing and rapid evacuation. There were 58 consecutive cases, with only one unsuccessful result. Some of the stones were very large indeed. The average stay in hospital amounted to 77 days. He therefore advocated this operation in preference to any other, unless specially contraindicated for stones of a certain size. The question was, where should the supra-pubic method come in? He thought for all stones weighing about 4 oz. and upwards. As a proof of the success of lateral lithotomy, he referred to the published results—143 consecutive cases—of his friend Dr. Freer, without a single death.

Sir WM. MAC CORMAC related a case in point, with primary union of the incisions.

Mr. JACOBSON related three recently operated cases, and advocated the operation for its own sake. He referred to the frequency of relapse after lithotrity; once in seven or eight cases (Cadge), as compared with one in fifty cases after lithotomy. There were the relapses of the leading operators; in less skilled hands they would probably be more numerous. Hence this was a strong argument in favour of the easier method. This, the supra-pubic operation, was evidently the operation for country surgeons, where want of opportunity lost them something of the facility which more experienced surgeons were constantly acquiring. He had not used sutures, and rather inclined not to do so. He should very much like to know something of the personal after-history of those who had been cut for stone while young. What were the real facts as regards the emasculation which was asserted to follow in a proportion of the cases?

Mr. BRUCE CLARKE made some observations on the use of the rectal bag. In a case at which he had assisted no inflation was necessary; the size of the stone sufficiently raised and distended the bladder.

Dr. HINGSTON (Montreal), as a pupil of Civiale, felt that lithotrity ought in adults always to take the place of lithotomy when practicable. In children lateral lithotomy is so simple, so easy, that he failed to see why anyone should desire to adopt new procedures. He recommended that the size of a stone should be indicated rather than its weight, as the latter could only be ascertained after its removal. For stones three ounces and over he would be inclined to try the supra-pubic method.

OBSTETRIC MEDICINE.

The President, Dr. ALFRED MEADOWS, F.R.C.P., on taking the chair delivered an address. In his opening remarks he offered, in the name of the Association, a welcome to all, and referred especially to those whom, though foreigners in a national sense, we are proud to regard as brothers, whose lives are spent in and whose hearts are devoted to the study of obstetrics and gynæcology. Reference was next made to the growing differentiation on the subjects of which this Section has cognisance. More and more evident each year is the divergence which is springing up between obstetrics and gynæcology, and the opinion was strongly advanced that in future there should be two sections for their consideration, and if that were so it would be to the advantage of both; certainly to gynæcology. Many gynæcologists are not obstetricians. Neither are many practitioners of the obstetric art gynæcologists. The advances which have been made and the brilliant achievements which have been wrought in the practice of gynæcology during recent years have placed this department in the foremost rank of surgical art, and if we look up and down the history of surgery during the last quarter of a century it would puzzle anyone to find a parallel to the chapter which may have been written of the abdominal surgery introduced by the gynæcologist. "Nowhere is there such a record of life saved, of suffering averted, of health restored, of happiness secured, as is inscribed on that tablet of time which the knife of the gynæcologist has carved in letters of indelible characters." Allusion was made to the subject to be introduced by Dr. Barnes, "The Alternatives to Craniotomy," as likely to mark an epoch in this country, and will lead to a new departure by which many lives will be spared, and the conscience of the obstetrician will in the future be made happy by the promulgation of a new law which will save his hand from becoming an instrument of slaughter; for the resources of civilisation cannot be exhausted until some means are found out by which in every case of labour we may with reasonable chances of maternal safety extract a living and viable child from the mother. Porro's operation has undoubtedly advanced abdominal surgery, and is a great improvement upon Cæsarean section, and it has this merit, that it insures the mother against a repetition of the peril in which pregnancy places her. A subject not less inferior is the one frequently spoken of as "The Removal of the Uterine Appendages," but if this term is the best that can be selected it expresses a physiological error, for the ovaries and the Fallopian tubes ought not certainly to be regarded merely as appendages to the uterus, but rather that the uterus is an appendage to the other organs, which are undoubtedly its superior in physiological work. One point, however, is clear, that their removal is becoming—if it has not already become—one of the most startling innovations in modern surgery, and it is likely to occupy professional attention for many years. Dr. Meadows thoroughly believes in the sound and scientific basis upon which the operation is founded, and that it is a valuable addition to our methods of curing certain cases of ovarian and tubal disease which are beyond the reach of therapeutic remedies. And he en-

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dorses the view of its applicability to certain forms of nervous diseases which have hereto resisted all attempts of cure by means of drugs, even when these so-called appendages are the seat of any cognisable disease, and lastly, by this operation, the sufferings caused by the presence of certain forms of uterine fibromata may be entirely removed, the growth of the tumour be thereby arrested, and its disappearance in some cases effected. Again, in women who are the subjects of such pelvic distortion that the birth of a living child *per vias naturales* is an impossibility, it may be a question whether the removal of the ovaries and Fallopian tubes ought not to be undertaken. In a final allusion to this operation a word of caution was uttered lest the facility with which it can be performed should tempt practitioners to be too lavish in the selection of the cases alleged to be fitting; greater perfection in diagnosis was also required, and it was possible to lose sight of the fact that there is such a thing as medical treatment, both topical and general, and that *not* every case of disease of this appendage must necessarily come under the radical treatment of the knife.

Dr. BARNES read a paper on the Alternatives of Craniotomy. He said: "I will submit the following summary of the arguments set forth:—1. The legitimate aspiration and the tendency of science is to eliminate craniotomy on the living and viable child from obstetric practice. 2. The advance of hygienic rule, the improvements, the forceps, in turning, in the induction of labour, and in obstetrics generally, have materially curtailed the field within which craniotomy can be justifiably applied. The extension of the axis-traction curve to the forceps will, I believe, still further curtail the resort to craniotomy. 3. In the most extreme degrees of pelvic distortion, where delivery *per vias naturales* can only be effected by the best appliances and the highest skill, and with appreciable risk to the mother, Porro's operation is the legitimate alternative for craniotomy, if the opportunity of inducing abortion be gone by. 4. In less advanced degrees of pelvic contraction, but still incomparable with the delivery of a living child *per vias naturales*, the opportunity of inducing abortion having gone by, the Cæsarean section may be a legitimate alternative of craniotomy. This is the most debateable point. 5. In the minor degrees of contraction, say from 3 in. to 3½ in., the opportunity for inducing premature labour having gone by, the far greater safety to the mother obtained by craniotomy makes this the proper course to adopt—at least, until it can be shown that the Cæsarean section is so improved as to be equally safe to the mother. The mother's right to be rescued stands before that of the child. 6. In other emergencies than deformity, as in obstructed labour from ovarian tumours, the alternative to craniotomy, if possible, is to remove the tumour. 7. In cases of immovable tumours, Porro's operation is the proper alternative. 8. In ruptures of the uterus, the child being delivered or not, Porro's operation is the proper alternative. The interests of mother and child coincide. 9. In cases of disease or tumours of the uterus, Porro's operation will generally be the proper alternative. 10. In atresia of the cervix or vagina craniotomy or Cæsarean section may be necessary, but incisions and dilatation may more frequently be the proper alternative. 11. When obstruction is due to hydrocephalus, or dropsy in the child embryotomy or tapping is indicated. 12. When the child is dead embryotomy is indicated, and decollation when turning is hazardous from impactions of the child. 13. In convulsions and hæmorrhages the proper alternatives for craniotomy are found in the more scientific methods of concluding labours under these complications. Lastly. But the dream of Tyler Smith, the abolition of craniotomy, will be fully realised only when hygiene shall have triumphed over disease and deformity.

PUBLIC MEDICINE.

At the opening of this Section Dr. R. P. B. TAAFFE, President, selected two or three points for discussion, the first being Smoke Abatement and Purification of Gas. He urged the necessity for a strong effort being made to reduce the amount of smoke which was daily given off in every town, and he suggested that every occupier of a house should be required to exchange at least one old-fashioned stove for a smoke-consuming stove in every year. He next described Mr. W. J. Cooper's method for purifying gas, and he expressed the hope that this process, which is being successfully employed at Tunbridge Wells, will be made compulsory in all gas-works by the Legislature. The decrease in the death-rate during the decade 1871-80 was next touched upon, and it was pointed out that this rate, amounting to 21·7, was lower than in any preceding decennium since civil registration began. During the current decade the average death-rate is still lower, being only 19·3, a result which, as Dr. Ogle says, is due to the effects of the ever-increasing efforts to improve the sanitary condition of the country. The results of this decrease, as affecting prolongation of life, was then discussed, and it was shown that this amounted for every male to an increase of more than two years. The death-rates of the borough of Brighton have declined 2·7 per 1000 since 1851-60, and those of Kemp Town, Preston, and Hove were during 1885 as low as 14·1, 12·9, and 12·5 per 1000. The lecturer then proceeded to show the extent to which the public misunderstood the death-rates in the weekly returns of the Registrar-General—mistakes which were shared in by Doctors of Divinity and a Fellow of the Royal Society; and he pointed out with much exactness the meaning of the Registrar-General. Infantile diarrhœa, which was next commented upon, was attributed mainly to improper feeding and improper nursing, and he expressed the opinion that even infants at the breast may be improperly fed by a too frequent supply. Diarrhœa amongst the children of the poor is much more common and fatal than among the children of the rich, and this is due to the larger number of poor children who are brought up by hand, the uncleanly condition of feeding-bottles, and the difficulty of obtaining medical advice. Dr. Taaffe considered the mortality from autumnal diarrhœa occurred as the result of the stomach and bowels being in a state of subacute congestion for months previously, that the climatic and other epidemic influences at this period act secondarily in determining the disease. After a brief reference to Mr. Power's investigations into the outbreak of scarlet fever in connexion with milk from Hendon, Dr. Taaffe gave some account of recent legislation, and spoke of the rapid growth with which the education of the public on sanitary matters had progressed, indicating the directions in which the law should be amended, and finally urged the improvement of London government on such a basis that example might be set to the rest of the kingdom.

PATHOLOGY.

The PRESIDENT (Julius Dreschfeld, M.D.) delivered an opening address on the Relations of Pathology to the other branches of Medical Science, and on the Study of Pathology in England compared with other countries. Of the subdivisions of the subject, the anatomical, physiological, and etiological, the first named and oldest has received the largest share of attention. It may be said to have been founded by John Hunter, who bequeathed to England a museum superior to any in Europe, and which, thanks to the labours of Sir James Paget and his able fellow-workers, has been richly supplemented and kept pace with the advancement of pathological science. The advances in histology had their application in pathology—e.g., the discovery of karykinesis and the reaction of cells and tissues to special colouring agents, as developed by Ehrlich. Pathological anatomy also enables us to trace the steps of diseased processes, and how to arrive at their cause; and the history of tuberculosis shows how this may anticipate the discoveries of experimental science. This latter line of research—pathological physiology, the importance of which was recognised by Hunter,—is hampered in this country. It receives much support from experimental physiology, and in pathology experiment is even more needed than in physiology—as in the study of inflammation, thrombosis, and fever,—and the whole field of bacterial pathology. Dr. Dreschfeld showed how the legislative restrictions in this country placed experiment on the action of poisons under great difficulties, and he illustrated this by the loss of an opportunity to verify Pasteur's assertions on hydrophobia in a case recently in the Manchester Infirmary. The patient died two days after admission, and there was consequently no time to apply for the necessary licence to perform the inoculation experiment with the fresh medulla. He urged that in the interests of humanity, as well as of medical science, these anti-vivisection restrictions should be relaxed, and thought a fresh appeal might not be altogether fruitless. But pathology also gains much support from clinical medicine—witness the pathology of nervous diseases, which has made such enormous progress

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in the last ten or fifteen years, owing largely to M. Charcot. And not only pathology, but physiology, has gained by these observations. The pathology of Bright's disease can only be elucidated by continued clinical and anatomical investigation; and there are many affections—notably increased arterial tension, digestive disorders, hysteria, &c.—where clinical observation is the chief means of research. Pathology thus covers a large field, too large for one man to devote himself to all parts of it, although much of our pathological knowledge has been due to clinicians; and, conversely, most of the excellent clinicians of England have spent their earlier years in pathological work and pathological research. We require well-endowed chairs of pathology in all teaching centres, and a separate recognition of the subject by examining bodies. It would better prepare the student for his clinical work, and be of the greatest advantage to him afterwards in the exercise of his practice.

A discussion upon Peripheral Neuritis was opened by Dr. ROSS (Manchester), who restricted the subject to that of progressive multiple neuritis, the chararteristic of which is its resemblance to diseases produced by poisons circulating in the blood. These toxic causes he summarised in the following groups:—1. Lead, arsenic, copper, &c. 2. Alcohol, bisulphide and oxide of carbon, and perhaps the pains due to prolonged excess of chloroform and chloral, and advanced diabetes. 3. Animal poison, diphtheritic paralysis, syphilis (Buzzard), and many specific fevers; leprosy, and perhaps pemphigus and herpes; very probably also rheumatism and rheumatoid arthritis. 4. A certain number of cases appear to be idiopathic. He described the various symptoms—motor, sensory, trophic. The motor paralysis is of the ordinary atrophic variety; reflexes variable. The extensors chiefly affected—e.g., lead palsy. In alcoholic paralysis there is first double ankle-drop, then double wrist-drop, &c. Ocular paralyses occur in diphtheria and in alcoholism. The diagnosis had to be made from cerebral disease. No doubt several cases of so-called acute ascending paralysis were really of this class; and the distinction can be made by noting that when the hands are involved the muscles supplied by the first dorsal nerve will (unlike spinal paralysis) be attacked after those of the cervical nerves. Death takes place by respiratory paralysis. The gait is quite characteristic, with pointed depressed toe and semiflexed knee.

Dr. BUZZARD followed. He described the histological changes of the neuritis, changes which embraced degenerative as well as inflammatory processes, and exhibited specimens. The limitation to periphery of so many nerves is startling, and suggests some unrecognised lesions in the centre. Duchenne suggested functional disorder of the cord, and the same idea has been further advanced by De Watteville and Erb—that the nerve cells are deranged. But if functional activity of the cord were long suspended the paralysis should be more widespread. Dr. Buzzard suggested that the nerves may be affected through bloodvessels supplying them through irritation of vaso-motor centres. The phenomena of Reynaud's disease are attributed by Peters and Vaillard to peripheral neuritis, but Dr. Buzzard regarded the neuritis as secondary to the altered state of the bloodvessels due to poison acting on the vaso-motor centre. The explanation should be wide enough to embrace the peripheral lesions which arise in chronic diseases of the spinal cord—e.g., tabes. Dr. Buzzard related some cases, and referred to diphtheria, beri-beri, and other diseases, due apparently to specific poisons, which are more or less strongly marked by the symptoms of peripheral neuritis.

Professor CHARCOT said the clinical aspect of the subject mainly interested him. In lead paralysis we have wrist-drop; in alcoholic paralysis, foot-drop. In alcoholic paralysis, sensibility was affected in high degree and flying pains, not in lead paralysis. We are far from understanding the true pathology of this state, which we connect under the term peripheral neuritis. Diphtheritic paralysis, kakke, &c., are different from the other forms. In locomotor ataxy there is very often a peripheral neuritis, and it is not possible to confound this with alcoholic paralysis. There is no real difference between tabetic gait and that of alcoholic paralysis, and it is certain that what has been called peripheral tabes is alcoholic paralysis and nothing else.

Professor BROWN-SÉQUARD said that the vaso-motor nervous system has not so much power as we have for long imagined. We know now that the nervous system can influence nutrition by producing a direct chemical change. We knew gangrene was due to nervous changes, joint disease, &c., which we cannot attribute to the vaso-motor system. In an apoplectic patient we may find arteries beating with undue violence—a power of attraction; in collapse the cessation of interchange between blood and tissue, the venous blood assuming the colour of arterial. By certain substances the colour of blood may be changed in one half of the body, evidently through action of the nervous system on tissue. Inhibition can produce a cessation of activity in a vaso-motor nerve, or in a sensory or motor nerve; and outside the nervous system—e.g., a secretion—its power is much more various than we suppose. Under the term "dynamogeny" Professor Brown-Séquard has studied an increase of power by changes in the nervous system. All these things should be taken into account in studying neuritis.

Dr. GREVES (Liverpool) mentioned on behalf of Dr. Glynn two cases lately under the care of that gentleman, in both of which there was distinct evidence of neuritis, particularly affecting the cutaneous nerves of the lower extremities; and in one case there were granular kidney and cirrhosis of liver.

Dr. WHITTLE spoke of the clinical features of some traumatic cases—one in which a neuritis followed subcoracoid dislocation of the humerus. It followed the course of the musculo-spiral nerve, and produced rapid atrophy of the muscles. Another was a case of severe pain in the foot and leg, in a case of ingrowing toenail; the pain was intensified by the operation, and followed by muscular atrophy.

Dr. B. N. RAKE (Trinidad) read a paper upon the Distribution of the Leprosy Bacillus, the blood and tissues being widely examined. In no case were they found in the blood. He also described some experiments on the communicability of leprosy to animals by inoculation and feeding. The subcutaneous method was the best. The cutaneous tubercle is used, and introduced beneath the animal's skin, bacilli having been found in the tubercles employed. All the experiments yielded negative results, but differences were noticed between the results in mammals and birds, no absorption of the tubercles taking place in the latter. Dr. Rake exhibited specimens illustrating the neuritis of leprosy.

Dr. CROCKER said that Unna had observed the presence of bacilli in the cells, which had been quite disproved by Hansen, Neisner, and Toulon; but it was still an open question whether the bacilli find their way into epithelial cells. Dr. Rake's observation of paucity of bacilli in anæsthetic leprosy accords with the view of its non-contagious character. Dr. Crocker showed drawings illustrative of the anæsthetic, tubercular, and mixed form of leprosy.

Dr. CROCKER read a paper on the Anatomy of Keloid in an Early Stage. The tumour was from a man aged thirty-three, who had also multiple fibromata. The duration of the keloid did not exceed three weeks; it lay close to the site, and consisted of two unequal lobes. The tumour was surrounded by a fibrous capsule, and was divided up into lobules by bloodvessels which permeated it; the interval between the vessels being filled by a network of fibrous tissue. Laterally and below the rete the vessels were surrounded by leucocytal infiltration. The vessels became atrophied and converted into bundles of fibrous tissue. Anatomically the two kinds of keloid—true and false—are identical. The frequency of so-called "spontaneous" keloid over the sternum is attributable to liability of this region to injury. One point is the distance to which the bloodvessels are surrounded by tissue cells; thus explaining liability to recurrence, and need for wide excision.

THERAPEUTICS AND PHARMACOLOGY.

THE Address in the Section of Pharmacology and Therapeutics at the meeting of the British Medical Association at Brighton was delivered by Dr. LAUDER BRUNTON, F.R.S., who selected as his subject the "Connexion between Chemical Constitution and Physiological Action." He compared the advances which had been made in the art of treatment to the progress of civilisation as indicated by the nature of the tools or weapons employed in different ages. In the first, or Paleolithic age, man employed weapons or tools of flint, roughly chipped into shape and unpolished. In the next, or Neolithic age the implements consisted of stone, but they were polished. The next age is characterised by the employment of bronze as a material, and the fourth and highest stage by the use of iron. In a similar manner four stages were recognisable in the development of the instruments used in the treatment of

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disease. In the first stage crude drugs were employed prepared in the roughest way—such, for example, as powdered bark or metallic antimony. In the next stage these were converted into more active and manageable forms, such as extracts or solutions. In the third stage the pure active principles, separated from the crude drugs, were employed, such, for example, as morphine or quinine. In the fourth stage an attempt was made to manufacture artificially substances possessing the exact physiological action and uses required. This last stage, the iron age of pharmacology, may be said to have opened some twenty years ago, when Professor Fraser and Professor Crum-Brown of Edinburgh demonstrated the connexion between physiological action and chemical constitution, and inaugurated a new era in pharmacology. They found that by modifying the chemical constitution of strychnine they could alter its physiological action and convert it from a poison which would tetanise the spinal cord into one which would paralyse the motor nerves. At the same time that Crum-Brown and Fraser were making these experiments, Schroff in Vienna and Jolyet and Cahours in France independently arrived at somewhat similar conclusions. It would be impossible to enter fully into all the recent developments of this branch of research, but it would be of interest to review briefly what might be said to be the present position of the question. Nitrogen is a substance peculiar in this respect, that it possesses sometimes three and sometimes five "affinities," using the term in the sense in which it was employed by the scientific chemist. When combined with hydrogen in the form of ammonia or of ammoniacal salts, it affects nerve centres, motor nerves, and muscles, tending first to stimulate and then to paralyse them. But, as might be expected, the effect of the ammonia is modified by its combination with iodine, chlorine, and bromine; and it is found that while the ammonium-chloride generally attacks the spinal cord and causes irritation, ammonium-iodide paralyses the motor nerves and muscles. When nitrogen has oxygen combined with it in place of hydrogen, so as to form nitrous acid, its action is exerted more especially upon the blood and bloodvessels, so that it causes the blood to become chocolate-coloured and the bloodvessels to dilate. This power of dilating the vessels is sometimes exceedingly useful in the treatment of disease; and we are enabled to vary the action of our drugs so as to attain, to a great extent, the end desired, by our knowledge that the action depends upon the nitrous acid, and not on the substance to which the acid may be attached. Thus, where rapid dilatation is desired, nitrite of amyl is used; but where a slower and more prolonged action is desirable, nitrite of soda or nitroglycerine is employed. Carbon, again, is a substance with four affinities, while nitrogen appears sometimes to have three and sometimes five. When the nitrogen and the carbon are united in such a way that four affinities and each are connected together, leaving one free affinity belonging to penferd nitrogen, the compound is exceedingly poisonous; whereas when the free affinity belongs to the carbon and the other three affinities are joined to triad nitrogen, the compound is comparatively innocuous. This illustrates strikingly how very important the nature of the free affinity in the compound is in relation to physiological action. In the series of chemical substances to which alcohol belongs an illustration of a very striking kind is afforded. Here the carbon atoms are attached to each other by one affinity, so that each terminal atom has three affinities and the intermediate atoms two affinities unattached. All the alcohols attack the nerve centres and paralyse the brain—the spinal cord and the centres of organic life in the medulla oblongata. Primary propylalcohol, where the hydroxyl is attached to the terminal link, so to speak, appears to produce steadily increasing paralysation of the nerve centres; but secondary propylalcohol, where the hydroxyl is attached to an intermediate link, stimulates the nerve centres before it paralyses them. The whole of the carbon compounds, formed on the principle of an open chain, appear to have an action more or less like that of alcohol, though these are modified by the nature of the substances which "tip," as it were, the free affinities of the carbon links. Thus, marsh-gas, alcohol, ether, chloroform, bromoform, and iodoform, all tend to paralyse nerve centres, and to exert an anæsthetic action; but the chloral in the chloroform tends to make the substance paralyse the heart more quickly than marsh-gas, alcohol, or ether, which contain hydrogen alone or hydrogen and oxygen; and in iodoform the effect of the carbon is to a great extent swamped by the iodine. It is to Liebreich's recognition of the fact that similar carbon compounds possess a similar anæsthetic action that we owe the discovery of chloral. The knowledge of the depressing action of chlorine in such compounds upon the heart led Schmiedeberg and Cervello to search for a hypnotic substance which should not contain chlorine, with the result that paraldehyde has been added to our therapeutic *armamentarium;* and the stimulant action of ammonia led Schmiedeberg to introduce a new hypnotic, urethan, which, like chloral, will produce sleep, but, instead of weakening, will stimulate the heart, and is thus admissible in cases where chloral might be dangerous. Another good illustration is afforded by the other group of carbon compounds which is termed the aromatic series. It differs from those of the fatty groups, inasmuch as they tend to stimulate the nerve centres and produce spasms or convulsions before stimulating them. The most marked property which they possess is the power of reducing temperature, and of destroying low forms of animal life, so that they act not only as antipyretics, but as antiseptics. In the open chains of the fatty series of carbon compounds the increased number of links appears to increase the activity of the compound, and a condition which is similar in some respects is to be found in the aromatic series. For example, in phenol or carbolic acid, as it is commonly called, there is one hydroxyl terminal, just as in ordinary alcohol, the other carbon affinities being saturated with hydrogen. When these hydrogen atoms are replaced by methyl the antiseptic power of the phenol is increased, and the increase appears to be in proportion to the number of methyl groups which are introduced into the compound. In the case of antiseptics, all that is required is to ensure a thorough destruction of the microbes, which give rise to putrefaction or disease; but when we come to deal with antipyretics, we have a more complicated problem, for we wish to reduce the temperature in man or the higher animals, while, at the same time, we have to avoid producing any marked action on the nervous system in the way either of spasms or paralysis, and to avoid also depressing the circulation and causing collapse. Several bodies nearly allied to carbolic acid, and differing from it only in the fact that the benzine nucleus in them has two hydroxyl groups attached to it instead of one, as in carbolic acid, have a strong antiseptic power. These bodies are hydroquinone, resorcin, and pyrocatechin. They all have an antiseptic action, but the strength of their action is very different; resorcin being only one-third of the strength, and pyrocatechin only one-fourth of that of hydroquinone. This difference in strength shows here, also, how important the position of the hydroxyl groups is; because in pyrocatechin they are close together, in hydroquinone they are as far apart as they can be, and in resorcin they keep an intermediate position. These bodies with their simple structure appear to be too well adapted to attack all parts of the animal organisation, and they are apt to affect the nervous system and circulation. In order to avoid these disadvantages, various attempts have been made to obtain bodies of a similar but more complicated structure, which should have a more specialised action, and would lower the temperature and leave the nervous system and circulation unaffected. These attempts have been more or less successful, and we owe to them the introduction of three new remedies—kairin, thallin, and antipyrin. The former two, after a brief period of trial, have been found more or less unsatisfactory, but the latter is perhaps, upon the whole, the best antipyretic that we possess, reducing the temperature, and, at the same time, having few disadvantages. Salicylate of soda is nearly allied in chemical constitution to resorcin, and as a general antipyretic it is almost equal to antipyrin, and superior to it in cases of rheumatic fever. It is possible that we may still obtain antipyretics more powerful than any we yet possess, and specially adapted to the febrile conditions arising from different causes, for these antipyretics do not appear to be equally successful in different kinds of fever. Antipyrin is best in hectic fever, salicylate of soda in rheumatic fever, but an antipyretic which will be thoroughly satisfactory in typhoid fever is still a desideratum. Antipyrin is generally free from any disagreeable action, but this is not always the case, for it sometimes produces collapse. This shows that in the action of all drugs there are two factors to be considered: the drug itself and the body into which it is introduced. The failure of our drugs to produce the effects we desire is one of the most trying occurrences in medical practice. Thus, in fever we some-

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times find that drugs will not reduce the pulse as they do in non-febrile conditions, and digitalis in pneumonia sometimes appears to have lost its sedative action on the heart altogether. This failure of digitalis to slow the pulse in febrile conditions is due to paralysis of the regulating nerves of the heart, the part affected by the heat being that connected with the medulla. It was found that the muscle of a frog poisoned by barium could be restored to its normal condition by a high temperature, and also by the application of salts of potassium. If the body of an animal be saturated with potassium, it is rendered proof against the poisonous action of barium. Dr. Cash, following up this line of research, has recently demonstrated that an animal inoculated with the powerful antiseptic, corrosive sublimate, is capable of resisting the power of anthrax. These experiments derive additional interest from the fact that Pasteur is now inclined to think that his process of inoculation, which has produced such wonderful results in hydrophobia, is effected by means of an agent which is in reality a chemical substance, and not a microbe. The lecturer concluded with these words:—"When we look back for twenty years and see how far pharmacology has advanced since Crum-Brown and Fraser's experiments directed it into a new path, we may hope that twenty years more may not only have greatly added to our stock of new remedies, but will have enabled us so to ascertain the condition of our patients that we may ensure the action we desire either by the proper modification of a single remedy, by the proper admixture of remedies, or by proper changes in food or surroundings of each patient; that we shall not have to feel, as we painfully do at the present, that our patients often die for lack of knowledge, not on our part, but on that of our art. Nothing is more painful to a medical man than having to answer in the negative to an agonised appeal 'Oh, doctor, can you do nothing?' of those who see passing away those who are dearer to them than their own life. It is because we know the value of human life and the extent of human suffering, because we are called upon to prolong the lives of those not only their friends but their country and the world at large can ill spare, and to relieve pain sometimes amounting to extreme torture in the sufferers themselves, and felt hardly less keenly by their friends, that we consider it is not only permissible, but it is our imperative duty, to gain the knowledge we require to attain our object, even though we sacrifice the lives of animals, and inflict upon them small pain, never wantonly, never carelessly, and almost always slight in comparison with that we often see our patients feel. Moreover, the lower animals suffer from disease as well as men, and we may hope that the advance of pharmacology will give us the means of relieving pain and prolonging life in them as well as in man."

At the conclusion of Dr. Lauder Brunton's address, Professor LIEBREICH of Berlin read a paper on "Lanoline, a new Fatty Substance; its Physical Properties and Therapeutical Uses." After referring to the enormous progress which had been made in the study of pharmacology and therapeutics during the last few years, he pointed out that the importance of local treatment in many diseases had received little attention. Ordinary inunctions were of comparatively little value, but lanoline differed from common fat in that it contained cholesterine and not glycerine, and consequently assimilated more closely to the natural composition of the body. It was a very stable chemical compound, and was not decomposed by boiling with alkaline solutions. It was extracted from the fat contained in wool, and in a crude and imperfect form had long been employed in veterinary practice under the name of "wool oil." It absorbed water very readily, and could be rubbed into the skin without difficulty. It was very valuable indeed as an adjuvant in massage, and had this great advantage, that there was no necessity for washing the skin afterwards as when fatty substances were used. It was useful in all forms of skin diseases, whether local or constitutional. The great difficulty was to get it pure; chemists often supplied the wrong article or inferior kinds which gave rise to much irritation. He had frequently seen this, and in one case which had come under his notice in consultation a crop of acne spots had resulted from the use of an adulterated form. The pure lanoline had great powers of penetration, and might be used as a vehicle for the introduction of mercury and other drugs into the system. The great point to remember was that it was a neutral body freely miscible with water. Professor Liebreich concluded his paper, which was listened to with marked attention, by demonstrating the points of difference between good and bad lanoline.

Dr. JOHN V. SHOEMAKER (Philadelphia) said that his attention had been first directed to the subject in 1879, and had occupied him considerably since then. He had referred to it in the paper which he read before the British Medical Association at its meeting in Belfast in 1884. He had no doubt that animal fats were the best adapted for deep penetration. Lanoline was mild and soothing in action, and was reliable in a great number of obstinate skin diseases. He had used it personally with great success in alopecia, chronic eczema, boils, and carbuncles.

Dr. MACKEY (Brighton) said that lanoline in his hands had given the most marvellous results in the treatment of chronic joint affections, especially those of rheumatic origin. An ointment of iodide of potassium made with lanoline reduced swelling of the joints and gave prompt relief to pain. In psoriasis it was well-nigh a specific, whilst in chronic enlargement of the glands of the neck nothing could be better.

Dr. JOHN V. SHOEMAKER (Philadelphia) contributed an able paper on the Witch Hazel (*Hamamelis Virginica*) and its therapeutic uses. It had long been used, he said, as a domestic remedy, but was in reality a powerful therapeutic agent worthy of the attention both of physicians and surgeons. It was not only anodyne, but hæmostatic. It was employed in America in many forms—not only in the forms which were officinal, such as the liquid extract, but also as hazeline, which was an aqueous distillate. If it failed it was from being used in inappropriate cases. It was said by some that the good effects were due to the spirit contained in the preparations, but such was not the case, for he had tried weak alcoholic solutions against the hamamelis, and had no hesitation in saying that the latter was incomparably superior. The solutions of hamamelis contained a volatile oil, on the presence of which much of the activity depended. Perhaps some of the failures were attributable to the fact that insufficient quantities were given. It was not only an astringent, but an astringent tonic. It was not generally known that it was a cardiac sedative. He had found it act like magic in hæmorrhage after the failure of quinine, ergot, and a number of other drugs. It would check bleeding after parturition, especially when it assumed a chronic form. In chronic epistaxis it would often save life when other remedies were hopeless. He had used it in two cases of hæmophilia with absolute success. In hæmorrhage from the bowels, purpura, and many similar conditions it might be relied on absolutely. He had seen good results from its use in varicose veins, and had cured eleven out of seventeen cases of varicose ulcer by it alone. It was useful in chronic diarrhœa, leucorrhœa, and gonorrhœa; nothing was better in some forms of acne. In America it was largely used in the treatment of chronic naso-pharyngeal catarrh, and also as a mouth-wash.

Dr. POLLOK (Glasgow) fully corroborated Dr. Shoemaker's statements, and said that he had found hazeline useful in a great number of cases. Its good effects might to some extent be due to the terebene it contained.

OPHTHALMOLOGY.

Mr. CHARLES OLDHAM, President, after welcoming the Association to Brighton, and briefly reviewing the ophthalmological work of the past year, spoke as follows:—"The last time the Association met in Brighton was in the year 1851. There was then no Ophthalmic Section. Nearly thirty years were to elapse before the Association, which at that date numbered only about 1700 or 1800 members in all, could boast of a body of its associates who devoted their time and abilities to the sole study and practice of the surgery of the eye. But that year was destined to be a memorable one in ophthalmic annals; for it was in 1851 that the great Helmholtz brought out the instrument of which it may be said (and it is an excellent illustration of Schopenhauer's just remark, that all great thinkings are apparently obvious in proportion to their greatness) that its principle was apparently so obvious that we marvel it had never been thought of before. I need not point out to you the entire change that has been wrought in our art by this discovery. It will suffice to say that diseases which, before its advent, were so many additions to nomenclature, and to nomenclature only, have now become objective entities to the surgeon as well as to the patient.

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It is as alien to what I conceive to be my province to make you any learned address on the more recondite and controversial points of our art—for we have before us for our consideration a series of papers and discussions which promise much in that direction—as to anticipate in any way the matter contained in these contributions. We shall undoubtedly listen to them with great interest, as they will give us the experience of others on questions which each one of us has frequently attempted to solve, and has also lamentably failed more than once at least in the enterprise. I note with some regret the absence in our list of any paper on the best mode of treatment of simple chronic glaucoma. Now that we have been enlightened by the labours of Priestly-Smith, Brailey, Landolt, and others, as to the etiology of this formidable affection, the advancement of our knowledge should bear fruit in the direction of some mode of dealing with the problem set before us, other than by iridectomy pure and simple, the results of which are very far indeed from satisfactory. Is there any hope that some other method of counterbalancing drainage, at once unirritating and effective, may be devised? At present, eyes so affected would seem to be best left alone. Have we learnt anything in the past year with regard to suppuration after operation? Would he not render a great service to mankind who should give us, by some process of generalisation, amongst other precepts, rules for the kind of incision to be made in various operations, but principally, of course, in that for cataract in different individuals—whether such incisions should be severely corneal, or in the sclero-corneal junction,—to give us, in short, some indications which should guide us as to the likelihood of consequent suppuration? It is certainly given to individuals, now and again, to possess what, for want of a better name, may be called an instinct in such matters. As a pointed example of this power of selection by instinct, I may cite the case of Antonius Stradivarius of Cremona. This great master, by the sense of touch alone, was able to divine the relative acoustic merits of the wood from which he made his hitherto unrivalled violins. The late Mr. Critchett possessed a rare instinct for the selection, not only of cases which were suitable for operation, but also of the particular mode of operating which should best favour success; but, like Antonius Stradivarius, he was apparently unable to convey the method of his secret to others. I cannot but think that this selective instinct, which has been given to few, may in course of time be formulated for general use. In this connexion it is pertinent to ask how far we are agreed upon the value of antiseptic measures in operations on the eye; and whether, conceding the value of these measures, out of many agents we possess for the purpose, there are any solutions of greater antiseptic virtues, and with fewer drawbacks, than those of the perchloride of mercury and boracic acid? One of the main objects of every Society of Oculists is the propagation of such knowledge of ophthalmic surgery, amongst those who do not enjoy their special advantages as will enable them to avoid being pointed at as the authors of cases of preventable blindness; and also by a routine acquaintance with the ophthalmoscope, to add a factor, or factors, to the items of evidence which they already possess towards forming a just estimate of many cases which must necessarily pass through their hands in the course of the working year. I venture to think that this has lately been, and is now being, very effectually done. Such cases as those I have referred to are becoming rarer every day, and I am frequently surprised at the amount and accuracy of ophthalmological knowledge to be met with at the present time amongst those who are not specialists, as compared with the acquirements in this direction of a very few years back. Ours is, indeed, one of the noblest of sciences. The blind have ever been considered amongst all nations and in all ages to be the class that most appeals to the commiseration and sympathy of mankind. It is, with us, not only a plain-sailing duty in the legitimate exercise of our profession, but also a pleasure of the acutest kind to relieve the necessities of those who call upon us in this respect for aid. The trustful confidence with which blind humanity invariably relies upon the everyday assistance of its brother man, even in the guise of a stranger, is a very marked feature of this particular affliction.

It was resolved at a special meeting of subscribers, held on the 6th inst., to enlarge the premises at present occupied by the Bristol Eye Hospital.

Pharmacology and Therapeutics.

ANHYDROUS HYDROCHLORATE OF COCAINE.

WE have examined and used the sample of anhydrous crystals of hydrochlorate of cocaine which Messrs. M'Kesson and Robins, of 38, Mark-lane, have forwarded to us. The crystals were well formed, dissolved readily in distilled water, and proved to be free from impurity. The 20 per cent. solution which we prepared from it answered its purposes admirably. The crystals are sold in small phials containing one gramme each, and the cost of twelve grammes is one guinea.

COCAINE PELLETS.

Mr. W. E. Sacker, of Fenchurch-street, E.C., calls our attention to his compressed cocaine pellets for the treatment of bronchitis and laryngeal complaints. They contain in each four grains of chlorate of potassium, one grain of extract of liquorice, and one-sixtieth of a grain of cocaine. The compound cocaine pellets contain borax, chloride of ammonium, bicarbonate of sodium, and one-twentieth of a grain of cocaine. They are both somewhat roughly made, but the formulæ are good, and would undoubtedly prove applicable to many cases.

PURE TEREBENE.

We have received from Messrs. C. J. Hewlett and Son a specimen of their pure terebene. On examination it is found to be colourless, to have an agreeable odour, pleasant taste, and to be entirely volatile. It is well adapted for internal administration, and is an improvement on most of the so-called terebenes which were at first manufactured.

BUSH AND CO.'S SANDAL-WOOD OIL.

We have received from Messrs. W. J. Bush and Co. a sample of their pure drawn English oil of sandal-wood. It is undoubtedly a very pure specimen, and is admirably adapted for use as a medicinal agent.

ANTIPYRINE IN PEDIATRICS.

In the policlinique of Rio Janeiro, Professor Moncorvo has tested the value of antipyrine in infantile therapeutics by administering it to more than one hundred children of various ages, the youngest being only thirteen days old. The principal diseases treated were bronchitis, bronchopneumonia, tuberculosis, acute rheumatism, and some surgical affections associated with suppurative fever. As much as from two to three grammes of the agent were given every hour or two, and repetition regulated by half-hour thermometric observation. No toxic effect was observed, and defervescence was rapid and regular. Antipyrine may be employed hypodermically, and when administered by the mouth may be combined with quinine, the absorption of which it appears to facilitate.

BROMINE IN DIPHTHERIA.

Señor Lovat A. Mulcachy of Buenos Ayres finds great advantage in cases of diphtheria in giving a solution of bromine. The bromine is simply dissolved in water in the proportion of 1 to 2500. A teaspoonful of this is given every ten minutes. He says that children will swallow it automatically even when asleep. For infants under three years of age the strength may be diminished to half that mentioned above. He cites several cases showing the successful results obtained by this method, but he points out the importance of the administration being continued for some days, and of the medicine being given exactly every ten minutes. As to local caustic applications, he considers that they serve no purpose whatever, but only irritate and distress the patient.

TAR BANDAGES.

Dr. Prokhoroff, writing in the *Vrach*, speaks very highly of the advantages of tar bandages in compound fractures and suppurating wounds. The material used for the bandage is gauze, and, after this has been applied, it is well smeared over with the tar brush. The dressing is not changed but fresh tar is applied daily. The cases in which this method

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has been employed are not as yet very numerous, but Dr. Prokhoroff hopes that other surgeons will give the plan a trial.

ACTIVE PRINCIPLE OF BONDUC SEEDS.

A bitter principle has been extracted from the bonduc seeds of the Indian Pharmacopœia in the form of a white bitter powder, soluble in alcohol and chloroform, and nearly soluble in water. It dissolves in fixed and volatile oils. In doses of from ten to twenty centigrammes it has proved of value equal to quinine in the treatment of intermittent fever.

CAMPHOR, CHLORAL, AND COCAINE IN TOOTHACHE.

Dr. K. Gsellfels recommends in toothache with hollow teeth a plug of cotton-wool saturated with a mixture made by heating five parts of camphor, five parts of chloral hydrate, and one part of hydrochlorate of cocaine to boiling for some minutes. An oily liquid is obtained.

REPORT
OF
The Lancet Sanitary Commission
ON
SMALL-POX AT WINDSOR.

THE Special Commission Report on the Housing of the Windsor Poor which we published on Aug. 15th, 1885, has, within less than a year, received disastrous confirmation. Some slight improvements have taken place in the interval. Prospect-place is condemned, a few new closets have been built, and there is a little more activity in respect to cleaning and whitewashing. Nevertheless the scandal of the exposure has not done much good. In the main, matters remain in the same state as at the time when we first described and denounced the insanitary condition of various slums, but especially South-place and its surroundings. Here, and in Bier-lane, small-pox and cholera had each in its turn wrought havoc; but it was stated, in reply, that during the last five years there had been no death from zymotic disease in the incriminated districts. These statistics related, however, to an average population of only 170 persons, and did not therefore include all the districts we condemned. Nevertheless, and whatever may have been the value of such an argument, it is now no longer available. During the last two or three months small-pox has prevailed in the very parts of Windsor to which we pointed as constituting a permanent public danger. At 4, Charles-place, which is but the continuation of South-place, described in our special report, a man died of small-pox during the hot weather of last July. The clergyman who visited this unfortunate man informed us that he found him lying on some wood shavings in a back room, where no ventilation existed. Instead of an immediate burial and a plentiful supply of disinfectants, the body was allowed to remain for some days in this awful rookery, so that the surrounding atmosphere was still further poisoned. When, at last, the body, without disinfectants, was brought for burial, even the undertaker refused to put a pall over so foul a coffin. Without this last sign of respect the poor man was buried, and the clergyman who performed the ceremony has suffered from sore-throat since. Charles-place consists of five houses, facing Charles-street. There is a small yard behind and three more houses. These eight houses have for the use of their occupants but three closets and no dustbin. The dust and refuse are thrown recklessly about. A mound, apparently of refuse well-trodden down, rises above the level of a little hutch used as a barber's shop. The rain must drain from this mound of dirt into the basement of the hairdresser's establishment. The barber pays £16 a year for this miserable shanty, and a so-called four-roomed house. But the ceilings of the rooms are so low that a tall man cannot stand up in them, and two of the four rooms measure about 9 ft. by 7 ft. Here people came to be shaved during the dog days, and enjoyed the refreshing operation within a few yards of the decaying corpse of a small-pox patient.

On visiting this mournful locality last week, we found that the house No. 4, Charles-place, was undergoing the process of fumigation. No. 17, Charles-street, almost opposite, was also abandoned, the people who had suffered from small-pox having left. No. 23, where there had been cases of small-pox, was also evacuated; but altogether, in this small clump of houses and within a radius of fifty yards, we found the record of eleven cases of small-pox. A few steps further, in Oxford-road on one side and in South-place on the other side, there were also cases, and we noted that a small shop in Oxford-road was shut up in consequence. We were further informed that there had been cases of small-pox in Victoria Cottages, in Bridgewater-terrace, in Arthur-road, in Church-street (close under the Castle walls), and in Love-lane (close to the barracks), but the Windsor authorities have, however, taken extraordinary measures to stamp the disease out, and it was resolved to isolate the cases in spite of all obstacles. Orders were given that not only should the sick remain in their miserable hovels, but that all the other tenants should be kept there close to the source of infection. Watchmen were posted outside the houses, and the inhabitants made prisoners, so that they should not carry the disease elsewhere, though such a measure rendered it likely that they would themselves contract the disorder. The value of this precaution, from a sanitary point of view, we do not at present propose to discuss. At No. 31, South-place, where seven persons lived in a very small house, we were informed that all the inmates, with the exception of a man who worked in the open fields, were confined on the premises. This caused a youth who had been employed as an errand boy in a shop for four years and a half to lose his place, and a young woman who had just secured an engagement as domestic servant had to give up her situation. We maintain that all those who have suffered through the epidemic, who have been confined to their houses so that the disease should not spread, have a right to compensation. But for the long delay in compelling the owners of property to do their duty towards their tenants, this epidemic would probably not have gained ground. It is stated that the first cases were imported by tramps; doubtless. We are not aware that small-pox is of spontaneous growth. But why was there no means of isolating these tramps—no fever hospital; and why are rookeries so long allowed to exist where zymotic germs find a fertile soil for their development?

In the month of March last a grand meeting was held. It was announced that a company would be formed under Royal patronage, and that the Bier-lane district would be pulled down and rebuilt. In a month's time another meeting would be convened and progress reported. Four months have now elapsed; there has been no other meeting, and no progress whatsoever is reported. We protest against this Bier-lane scheme as utterly inadequate to meet the exigencies of the situation. Bier-lane is certainly not the worst part of Windsor, and South-place should be first attacked. It is said that land owners and house owners claim too heavy compensation. Let the Sanitary Act be applied with the utmost and with constant rigour, the owners of this foul property will then be glad enough to get rid of it at any price. In one way or the other these Royal rookeries must be done away with, both those that are within fifty yards and those that are within five hundred yards of the castle. The danger of infection is almost equal in either case. During the last few weeks the small-pox has travelled from these slums to within a few yards of the castle walls, and close to the barrack gates. We have to consider the health not only of the Royal family, but of the *élite* of our troops quartered all the year round at Windsor. Reform in Bier-lane will not suffice to remove the dangers with which they and the ordinary inhabitants of the town, the innumerable visitors and tourists, are menaced; and, as the authorities at Windsor are so slow to move, we trust pressure, official pressure, will be brought to bear from without.

BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.—The fifty-sixth annual meeting of the members of this Association is to be held at Birmingham, from the 1st to the 8th prox. On the 2nd and 3rd ult., the Ingleby Lectures on "Recent Advances in Abdominal Surgery" will be delivered by Mr. Lawson Tait, admission to which may be obtained by medical members and associates of the Association. A lecture by Professor W. Rutherford, M.D., on "The Sense of Hearing" is also announced for the 3rd prox.

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VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns 5397 births and 3472 deaths were registered during the week ending August 7th. The annual death-rate in these towns, which had slowly increased in the preceding seven weeks from 15·8 to 20·6, declined again last week to 19·9. During the first five weeks of the current quarter the death-rate in these towns averaged 19·8 per 1000, and was 1·7 below the mean rate in the corresponding periods of the ten years 1876-85. The lowest rates in these towns last week were 10·0 in Halifax, 10·4 in Hull, 10·8 in Derby, and 15·0 in Plymouth. The rates in the other towns ranged upwards to 24·1 in Blackburn, 24·4 in Manchester, 28·9 in Norwich, and 31·4 in Leicester. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had steadily increased in the preceding eight weeks (owing to the rising mortality from infantile summer diarrhœa) from 263 to 872, was last week 869; they included 657 from diarrhœa, 62 from measles, 55 from whooping-cough, 43 from scarlet fever, 38 from "fever" (principally enteric), 13 from diphtheria, and one from small-pox. The lowest death-rates from these zymotic diseases were recorded last week in Hull and Derby, and the highest in Leeds, Norwich, and Leicester. The mortality from diarrhœa in the aggregate of the twenty-eight towns differed but slightly from that recorded in the previous week; the largest excess occurred in Birkenhead, Leeds, Norwich, and Leicester. Measles caused the highest death-rate in Preston, scarlet fever in Salford, whooping-cough in Manchester and Norwich, and "fever" in Cardiff and Portsmouth. Small-pox caused one death in Liverpool, but none in London and its outer ring or in any of the twenty-six other large provincial towns. The number of small-pox patients in the metropolitan hospitals situated in and around London, which had been 13, 11, and 10 on the preceding three Saturdays, had further declined to 8 at the end of last week; 2 cases were admitted to these hospitals during the week, against 2 and 1 in the previous two weeks. The deaths referred to diseases of the respiratory organs in London, which had been 163 and 172 in the preceding two weeks, declined last week to 148, and were 44 below the corrected average; this was a lower number of deaths from these diseases than have been returned in any week since the beginning of this year. The causes of 73, or 2·2 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Birmingham, Newcastle-on-Tyne, Sunderland, and in five other smaller towns. The largest proportions of uncertified deaths were registered in Halifax, Oldham, Salford, and Sheffield.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 19·8 and 19·5 per 1000 in the preceding two weeks, declined to 18·8 in the week ending August 7th; this rate was 1·1 below the mean rate during the same week in the twenty-eight English towns. The rates in the Scotch towns last week ranged from 11·5 in Perth and 14·4 in Dundee, to 20·5 in Glasgow and 25·2 in Paisley. The 464 deaths in the eight towns showed a decline of 17 from the number in the previous week, and included 28 which were referred to diarrhœa, 23 to whooping-cough, 15 to scarlet fever, 8 to "fever" (typhus, enteric, or simple), 2 to diphtheria, 1 to measles, and not one to small-pox; in all, 77 deaths resulted from these principal zymotic diseases, against 65 and 67 in the preceding two weeks. These 77 deaths were equal to an annual rate of 2·1 per 1000, which was 1·9 below the mean rate from the same diseases in the twenty-eight English towns. The deaths attributed to diarrhœa, which had increased in the preceding seven weeks from 8 to 34, declined again last week to 28, of which 19 occurred in Glasgow, 7 in Edinburgh, 5 in Dundee, and 3 in Paisley. The annual death-rate from diarrhœa in these eight Scotch towns last week did not average more than 1·1 per 1000, whereas the mean rate from the same cause in the twenty-eight English towns was 3·7. The 23 fatal cases of whooping-cough showed an increase of 5 upon the number returned in each of the three preceding weeks, and included 18 in Glasgow and 2 in Aberdeen. The 15 deaths from scarlet fever showed a considerable increase upon the recent weekly numbers; 13 were returned in Glasgow, against but 5 and 3 in the previous two weeks. The deaths referred to "fever," which had been 4 and 1 in the previous two weeks also rose last week to 8, of which 4 occurred in Glasgow. The fatal cases of measles and diphtheria were below the average. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had declined in the preceding seven weeks from 93 to 63, further fell last week to 58, and were 4 below the number returned in the corresponding week of last year. The causes of 58, or nearly 13 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 21·0 and 17·3 per 1000 in the preceding two weeks, was 17·6 in the week ending Aug. 7th. During the first five weeks of the current quarter the death-rate in the city averaged 19·7; the mean rate during the same period was 20·9 in London and 19·2 in Edinburgh. The 119 deaths in Dublin last week showed an increase of but 2 upon the low number in the previous week, and included 7 which were referred to scarlet fever, 3 to diphtheria, 2 to "fever," 2 to diarrhœa, 1 to whooping-cough, and not one either to small-pox or measles. Thus, the deaths from these principal zymotic diseases, which had been 12 and 5 in the preceding two weeks, rose last week to 15, and were equal to an annual rate of 2·2 per 1000, the rates from the same diseases being 5·9 in London and 2·0 in Edinburgh. The 7 deaths from scarlet fever showed a considerable increase upon recent weekly numbers, and exceeded the number in any previous week of this year. The fatal cases of diphtheria also showed an increase. The deaths attributed to diarrhœa were considerably below the average for the season. Two inquest cases and 2 deaths from violence were registered; and 41, or more than a third of the deaths, were recorded in public institutions. The deaths of infants and of elderly persons showed a considerable decline from recent weekly numbers. The causes of 10, or more than 8 per cent., of the deaths registered during the week were not certified.

Correspondence.

"Audi alteram partem."

NERVE-STRETCHING FOR LEPROSY.

To the Editor of THE LANCET.

SIR,—In your issue of June 5th is a brief report of a paper read before the Harveian Society by Dr. Downes. The question was asked how long the improvement continued after nerve-stretching. I still occasionally meet with cases operated on by Dr. Downes six or seven years ago. Many of these continue to have good sensation, others of them return for the purpose of having the operation repeated. Certainly in a large proportion of cases the benefit is permanent, and in very few indeed is the recurrence rapid or complete. In the *Edinburgh Medical Journal*, two years ago, I published an account of 170 nerve-stretchings which included Dr. Downes' cases. Any who are interested in the practice can refer to that paper; the theory has yet to be elucidated.

I am, Sir, yours truly,

Kashmir Mission Hospital. A. NEVE, F.R.C.S. Ed., &c.

THE BEAUFORT LEG.

To the Editor of THE LANCET.

SIR,—Your issue of the 17th ult. contains a paragraph headed "A Modified Beaufort Leg," which ends by stating that Mr. Schramm sells the modified limbs at considerably less price than the original. Now, as one who has had above six years and a half practical and intimate experience of the "original" Beaufort leg, having ordered and paid for upwards of eighty specimens, perhaps you will do me the favour to allow me an equally prominent position with the original statement in your journal to deny the assertion so confidently made. The original leg, which has stood the test of some twenty years' experience, costs, when made by

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Mr. E. Werber of Paris, the sole French manufacturer, from 32*s.* to 36*s.* Mr. Schramm's charges are 70*s.* to 90*s.*! One of the great merits of the Beaufort leg, indeed, *the* object of the invention, was cheapness, so that it might be given by the charitable to poor cripples. The modification of the Beaufort leg, however advantageous in use, is certainly not so in cheapness.—Yours faithfully,

HENRY H. MAXWELL,
London, Aug. 5th, 1886. General, Royal Artillery.

THE MEDICAL ACT OF 1886.

To the Editor of THE LANCET.

SIR,—Since a copy of this Act appeared in your issue of 3rd July I have anxiously looked for an expression of opinion from some member of the profession, but so far as I am aware *no one has as yet written either favourably or otherwise of this piece of legislation.* If I interpret the Act correctly, it signifies that we may at any time expect men who possess an M.D. from some *American degree-granting University* to settle in our midst. As these *gentlemen* have neither expended the time nor money necessary to acquire any medical qualification obtainable in Britain, they will be able and willing to give their services at a low rate; they will, moreover, have the advantage of being thought by people generally to be better qualified to treat sickness than, for example, an M.B. or an M.R.C.S., owing to their being "Doctors of Medicine." It surely cannot be too late to prevent such an injustice being thrust upon us. If some eminent member of the profession will raise his voice against this iniquitous Act, he will, I feel certain, be supported by every legally-qualified practitioner in Britain, and will, moreover, earn our lasting gratitude and, I hope, something more substantial.

I am, Sir, yours faithfully,
Aug. 4, 1886. NEMO.

*** The recognition of foreign degrees will be one of the most serious duties of the Council under the new Act.—ED. L.

NORTHERN COUNTIES NOTES.

(*From our own Correspondent.*)

NOTIFICATION OF INFECTIOUS DISEASES.

MR. A. E. HARRIS, the medical officer of health for Sunderland, said in a paper read last week at Gilsland that "he considered it strange the people of this country had not yet generally adopted laws for their protection from diseases which were spread by infection. He knew well that Parliament was very jealous of enacting laws which interfered in any way with the liberty of the subject; but he was also aware that when persons suffering from infectious diseases unnecessarily exposed themselves, they were degenerating their liberty into licence, and he thought it strange that while a paternal Government insisted that if an unfortunate pig should unhappily contract swine fever the animal was fenced round with all kinds of restrictions to prevent the disease spreading to any of its kind, yet that it did nothing, and had done nothing, to insist on the greatest care being taken that infectious diseases should be carefully separated from the public." Mr. Harris, in the course of his paper, went on to show that the Medical Department of the Local Government Board was entirely in favour of the principle of notification. He stated that the compulsory notification took effect on the 1st of September last, and mentioned sixty-two cases which had come under his notice where disease occurred in places of business at Sunderland, which might very easily consequently have become centres for the spread of disease. Mr. Harris further said that since the notification of infectious diseases had been introduced in Sunderland infectious diseases had been less than at any period during the last twenty years.

MEASLES AND GOSSIPING.

At the late meeting of the Hebburn Local Board the subject of the present epidemic of measles came under consideration. The medical officer stated that the outbreak of measles at the Hebburn Colliery was very serious. Nine deaths had taken place, but the disease gave signs of abatement. At the same time, it was very difficult to prevent the spread of the disease, owing to the gossiping nature of the inhabitants. The houses were invariably to be found with open doors, and the neighbours entered the first one they came to, and sat down.

THE FLEMING MEMORIAL HOSPITAL.

A further step in progress has been made towards the erection of the hospital proposed to be built in Newcastle by Mr. Fleming, a munificent citizen, for sick children. Mr. Currey, architect of St. Thomas's Hospital, London, having been appointed to advise Mr. Fleming in the matter of the competition of designs for the hospital, the former gentleman has given the first place to the design of Messrs. Quilter and Wheelhouse of London, so that we hope very soon to see the foundation-stone laid.

At a meeting of the Jarrow Town Council last week it was finally decided to accept tenders for the erection of a hospital for infectious diseases in the borough. The question, it was stated, had been under discussion for nearly twenty years.

Newcastle-on-Tyne, Aug. 2nd.

EDINBURGH.

(*From our own Correspondent.*)

POST-GRADUATE COURSE IN EDINBURGH.

THE programme for this course of Clinical Instruction, which is arranged to extend from September 27th to October 16th, is now completed. Thirteen separate subjects are to be taken up and illustrated clinically or experimentally; in some of them there will be the option of attending one or other of a series of cliniques in different departments—this, however, only where the amount of material at command is so great that subdivision of labour will be advantageous, as in general medical and surgical diseases; in other subjects, where this is not the case, arrangements for amalgamation and concentration of material have been made. Special courses will be given on dental diseases, the diseases of children, gynæcology, diseases of the ear and throat, of the eye, and of the skin, syphilis, mental diseases, general medical and surgical diseases, and upon pathology. Six demonstrations on the regional anatomy of the viscera and organs are also arranged for. The hours for the various demonstrations have been arranged, so far as may be so as not to clash with one another; and a chart has been prepared giving ready information as to the time, day, and place of meeting of each of the classes in the course. The charts and further particulars are obtainable upon application to either of the secretaries, Prof. Chiene and Dr. Claud Muirhead, of Charlotte-square, Edinburgh. A large number of old Edinburgh students have already announced their intention of attending the course, and there is every prospect of its being in all respects a great success.

GRADUATION THESES.

At the annual Graduation in Medicine which took place last week, forty-nine Bachelors of Medicine of the University of Edinburgh were promoted to the degree of M.D., upon their presentation of theses dealing with medical or scientific subjects. Five of these dissertations were of such merit as to earn for their authors University Gold Medals, the highest distinction in medicine conferred by the University upon its alumni. Two of these theses, those of Dr. William Hunter and Dr. Edward Carmichael, were upon the subject of the transfusion of blood, both containing original and valuable results derived from experimental research. Dr. MacFadyean presented a thesis upon the behaviour of bacteria in the digestive tract, the outcome of investigations carried on in the laboratory of Professor Fluegge, and of special interest at present from the relation it bears to the discussions which are now taking place upon the etiology of cholera. Dr. A. M. Paterson's thesis is upon the spinal nervous system of the mammalia, and is a contribution to anatomical science from the Manchester Medical School, in which he is senior demonstrator of anatomy. Dr. Stockman in his thesis considers the action and therapeutic value of vegetable astringents, giving the results of investigations carried on in the Materia Medica laboratories in the University of

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Edinburgh. In addition to these five thesis, which were deemed worthy of gold medals, were a number specially commended for the excellence of the work contained in them, amongst which are Dr. Lang's upon the knee-joint, and Dr. Clemow's upon the infective granulomata. The whole of these theses find their way into the University archives, where in general they pass through an undisturbed existence, for as theses they are never published. Fortunately, however, they are not altogether committed to oblivion, for in the form of summaries, extracts, or at times in lengthy papers, the pith of their contents finds its way into current numbers of one or other, occasionally even several, of the leading medical journals, and data often of considerable importance are thus added to various branches of medical science.

Edinburgh, August 10th.

IRELAND.

(From our own Correspondent.)

VICEREGAL APPOINTMENTS.

THE following appointments have been made by his Excellency the Marquis of Londonderry:—Physician in Ordinary: Dr. Hatchell. Surgeons in Ordinary: Philip Crampton Smyly and Edward Hamilton. Surgeon to the Household: Thomas Nedley. Surgeon Dentist in Ordinary: Robert H. Moore. Surgeon Dentist: A. H. Jacob.

ROYAL UNIVERSITY OF IRELAND.

At a meeting of the Senate last week the death of Dr. Curtis, who had been re-elected as senator as late as July 27th, having been reported, a resolution was unanimously adopted, expressing the regret of the Senate for the loss of so valuable a member, and their sympathy with his family in their bereavement. The Senate have appointed October 27th next for the annual meeting of Convocation, when the vacancy in the Senate will be filled up. Dr. William Thomson has been elected a member of the Standing Committee.

SOUTH DUBLIN UNION.

At a meeting of the guardians last week a communication was received from Dr. H. Stevens, Inspector to the Local Government Board, England, to the effect that he had been instructed to visit Dublin, in order to inquire into the arrangements for public vaccination, and to report to his board with the view to the recognition by the board of the certificates of proficiency in vaccination that may be given by a public vaccinator to be selected by the board. Dr. Stevens will be in Dublin on an early day, and the clerk of the union has, at his request, furnished him with particulars of the vaccination arrangements in the union.

THE BELFAST RIOTS.

There were, on Monday last, thirty-seven persons injured by gunshot wounds remaining under treatment in the Belfast Royal Hospital. About twenty-seven of these cases were admitted on Saturday, and ten on Sunday. In addition, fifty persons were treated for gunshot wounds in the extern department of the hospital.

SEVERE BULLET WOUND; RECOVERY.

The case of Head Constable M'Coldrick, of Dundrum, county Tipperary, is worth noting. On July 12th the constable shot himself with a revolver; the bullet entering half an inch under the heart, passed entirely through the body, and emerged at the back, close to the spinal column, being found immediately after the occurrence in the man's clothes. The patient has now quite recovered, and has resumed duty.

RATHDOWN UNION.

Mr. Robinson, Local Government Board Inspector, in his recent report on the condition of this workhouse, states that with regard to the lunatics located in the institution he has carefully considered the recommendations of the committee of the guardians dealing with this matter. He is convinced that unless a paid attendant is appointed and placed in charge of this department, there is no security that the directions of the committee will be properly and stringently carried out. Our readers will bear in mind the recent case of manslaughter by a lunatic inmate of the workhouse, which in the opinion of the coroner's jury was attributable to the want of efficient supervision in this department. The Local Government Board have written to the guardians suggesting that the recommendation of their inspector should be carried out, but the guardians appear to consider that their present arrangements are ample to meet all necessary requirements.

THE HARE ISLAND EPIDEMIC.

The epidemic of typhus fever which was reported to prevail to an alarming extent has, on investigation, proved to be less extensive than was at first supposed. There are twenty-four cases of typhus fever and one doubtful case on the island, which lies about half a mile off the mainland, and is of small size. Only one death has occurred since the outbreak of fever, or a mortality of about 4 per cent., showing that the disease must be of a mild character. The habitations of the islanders are in a most insanitary condition, and of the forty-one houses all are unfit for human habitation. There is also a considerable amount of overcrowding. The water is obtained from wells, to the majority of which the cattle have access. A guardian of the Skibbereen Union has given notice that a medical officer should be required to reside in the district; the difficulty, however, will be to find any medical practitioner who will consent to accept the appointment.

At the recent examinations for the First Professional of the Royal College of Surgeons, exactly 50 per cent. of the candidates who entered were rejected

A sum of nearly £300 has already been subscribed for the testimonial in memory of the late Dr. Eames of Cork.

Dublin, August 10th.

Obituary.

THOMAS H. PURDON, M.B. DUB., F.R.C.S.I.

IT is with sincere regret that we have to announce the death of another of the older medical practitioners of Belfast, Mr. Thomas H. Purdon, which took place at his residence in Wellington-place on Friday, the 6th instant, at the advanced age of eighty-one. The deceased gentleman, who was the principal representative of an old Huguenot family which settled in Ireland in the reign of Queen Elizabeth, was born in Belfast in 1805, his father being a medical man, Dr. Henry Purdon, Staff Surgeon. After spending some time at the Armagh Royal School, Mr. Purdon entered Trinity College at the early age of thirteen, a sufficient evidence of his precocity, and after a distinguished College course he took the degrees of M.B. and M.A. in 1828; but previous to this, in 1821, he was elected a Fellow of the Irish College of Surgeons. He also studied for a time at Edinburgh. While he was attending in Dublin at the University he was prosector and demonstrator for a well-known man, Dr. Harrison.

Mr. Purdon commenced practice in Belfast in 1828, although from the age of sixteen he had been engaged as assistant in some of the local dispensaries. He soon obtained a large and high-class practice, and enjoyed the complete confidence of the aristocracy of the neighbourhood — a confidence which he retained for upwards of half a century. During the long period in which he was engaged in active practice (sixty years) Mr. Purdon held numerous medical appointments. He was formerly senior surgeon to the Royal Hospital, and latterly consulting surgeon. He was consulting physician to the Belfast Hospital for Consumption, and consulting surgeon to the Ophthalmic Hospital. He was for a time medical officer to the County Antrim Prison, to the Deaf and Dumb Institution, and to the Infirmary and Poorhouse. He was permanent President of the Belfast Branch of the Royal Medical Benevolent Fund Society of Ireland. He was a prominent and highly respected member of the Church of Ireland, and, in recognition of his eminence as a Churchman, and his spotless life, he was ordained as a lay reader by the present Lord Primate of Ireland. Mr. Purdon took great interest in everything pertaining to his native town, and about twenty-six years ago he was a member of the Town Council. He belonged to a medical family *par excellence*.

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His grandfather, father, and two brothers were doctors, he had one son in the profession, and at present three of his nephews are in practice. The deceased was an able surgeon, and a skilful and much-trusted physician. It is said he performed the first case of tracheotomy in Ireland, the subject of which lived for thirty-six years afterwards. He was a great reader, and amassed a fine collection of medical books. He was also at times a contributor to the *Dublin Medical Journal* and to the *Medical Press*, but it is probable that had his practice not been so large he would have written more. Few medical men have occupied a more respected and honourable position than the late Thomas Henry Purdon. By his numerous patients he was beloved as much for his extreme kindness as for his skilful treatment of their maladies, while by his professional brethren he was respected on account of his abilities, his ripe experience, and especially on account of his thoroughly honourable and upright professional conduct. He was by birth, education, ability, and high personal character an honour to the medical profession.

THE SERVICES.

SURGEON H. S. PARKER, Medical Staff, having rejoined from the three months' privilege leave of absence granted to him to visit Rachenir, has returned to the duties of Staff Surgeon, Medical charge of the Ordnance Department, and of the Lock Hospital at Ferozepore.

WAR OFFICE.—Army Medical Staff: Brigade Surgeon Alexander Frederick Bradshaw to be Deputy Surgeon-General, vice J. J. Thompson, retired.

ADMIRALTY.—The following appointments have been made:—Fleet Surgeon Godfrey, to the *Rupert;* Fleet Surgeon W. B. Fletcher, to Sheerness Yard; Fleet Surgeon J. S. Dolby, to the *Crocodile;* Surgeon J. Porter, to the Bermuda Hospital; Surgeon W. R. Young to the *Impregnable;* and Staff Surgeon W. E. Bennett, to the *Pylades.*

YEOMANRY CAVALRY.—Westmoreland and Cumberland: Surgeon and Honorary Surgeon-Major Joseph Wickham, M.D., resigns his commission.

ARTILLERY VOLUNTEERS.—1st Orkney: Acting Surgeon John Gibson resigns his appointment.

RIFLE VOLUNTEERS.—6th Lancashire (1st Manchester): Leslie Hudson Jones, Gent., M.D., to be Surgeon.

Medical News.

ROYAL COLLEGES OF PHYSICIANS AND SURGEONS OF EDINBURGH AND FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW.—The following candidates at the July sittings of the Examiners, held in Glasgow, passed the examinations for the triple qualification conferred by the three Scottish medical corporations, and were admitted Licentiates:—

J. M'Clymont, Edward Ball, Ewen Whitwell, Henry Johnson, Archibald M'Arthur, John C. Davidson, John K. Jones, Alfred J. Harwood, and A. C. Milne, of the Glasgow Medical School; Alice Jane S. Ker, of the Edinburgh School and the London Medical College for Women; H. W. Cross, of the Newcastle-on-Tyne School; A. H. Hoffman, of the Birmingham School; F. H. Gaunson, of Melbourne University and the Edinburgh School; J. F. Chapman and Alfred W. Rinder, of Melbourne University; W. C. Halpin, of the Dublin School; Joseph de Souza and F. V. A. de Souza, of the Grant Medical College, Bombay; Francis D. Robertson, M.D., M'Gill College, Montreal.

SOCIETY OF APOTHECARIES.—The following gentlemen passed their examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received certificates to practise, on Thursday, the 5th inst.:—

Dutt, Aaron Chaunder, 200, St. Paul's-road, Highbury, N.
Tomlinson, William Henry, 13, Craig-street, Devonshire-street, Manchester.

At the recent examination for the Prizes in Botany given annually by the Society of Apothecaries, the successful candidates were:—

Boyce, Robert W., of University College, the Gold Medal.
Hall, Frederick William, of Guy's Hospital, the Silver Medal and Books.

VACCINATION GRANT.—Dr. Dearden, Church, has received the grant for efficient vaccination in his district (sixth time).

ON the 4th inst. a bazaar in aid of the funds of the Royal Surrey County Hospital was opened at Guildford by Prince Albert Victor.

AN open-air concert of sacred music was given at Rochdale on the 8th inst., in aid of the funds of the local infirmary, the proceeds amounting to £124.

PRESENTATION.—On the fifth inst. the members of the Redcliffe and Totterdown Dispensary presented Mr. H. Mc Quade, B.A., M.B., B. Ch. Dub., with a dining-room clock as a token of their esteem and as a recognition of his recent marriage.

THE VATICAN AND CREMATION.—The Roman Holy Office has issued a decree forbidding Roman Catholics to belong to cremation societies, and the practice of cremation is stigmatised as *detestobilem abusum corpora humana cremandi.*

WATFORD DISTRICT COTTAGE HOSPITAL. — The ceremony of opening this hospital, recently erected in the Vicarage-road, was performed on the fifth inst. by the Countess of Clarendon. It affords accommodation for nine patients. The cost of the building and site is about £2200.

INTERNATIONAL ASSOCIATION OF SURGICAL AND ORTHOPÆDIC INSTRUMENT MAKERS.—The fourth meeting of this association will be held at 12, Dorotheenstrasse, Berlin, on Tuesday, September 14th, at 6 P.M. Intending members of any nationality are invited to attend. Mr. Krohne, of 8, Duke-street, Manchester-square, London, W., isthe secretary.

ROYAL UNIVERSITY OF IRELAND.—The following exhibitions and honours have been awarded:—First Examination in Medicine:—Exhibitions: First Class (£30), John McNamara; Second Class (£15), Jeremiah Ambrose. Honours: First Class, John McNamara; Second Class, Jeremiah Ambrose, John E. W. Cruise James R. Steen, Walter V. A. Raleigh.

MUNICIPAL LIBERALITY.—At its sitting of July 31st, the Municipal Council of Paris voted a credit of 289,765 francs (£11,590) for the construction of a new surgical department at the Hôpital Cochin, to replace the wooden huts erected during the siege. It is intended to provide for all the requirements of modern surgery, with laboratory, means of isolation, &c.

THE Council of the Medical Defence Union has determined to memorialise the Local Government Board on behalf of Mr. Simpson, who it will be remembered was requested by the Local Government Board to resign his post as medical officer to the Birmingham Workhouse on account of an outbreak of puerperal fever in that institution, which it was alleged that Mr. Simpson by his recklessness had caused.

HOSPITAL SATURDAY FUND.—At a meeting of the board of delegates of this fund held on the 7th inst., it was reported that, notwithstanding the very inclement weather on the occasion of last Hospital Saturday, the 17th ult., the falling-off in the collection had not proved as large as had been anticipated. The diminution amounted to nearly £500. The total of the collection, so far as it was yet ascertainable, was £4039.

APOTHECARIES' HALL OF IRELAND.—The following have been elected office-bearers for the ensuing year:—Governor: Edward J. O'Neill. Deputy-Governor: George Wyse. Court of Directors and Examiners: Edward H. Bolland, Thomas Collins, John Evans, Arthur Harvey, Charles Holmes, Charles H. Leet, Robert Montgomery, Charles F. Moore, Henry P. Nolan, Richard O'Flaherty, Sir George B. Owens, J.P., John Ryan, and James Shaw. Representative on the General Medical Council: Thomas Collins. Secretary: Robert Montgomery.

THE UNIVERSITY OF LONDON.—At the recent preliminary Scientific (M.B.) Examination, 58 candidates passed the entire examination—viz., 25 in the first division and 33 in the second. Thirty-four candidates satisfied the examiners in two subjects of the examination, and 31 in one subject. At the Intermediate Examination in Medicine, 82 passed the entire examination—52 in the first and 30 in the second division. In all subjects, excluding Physiology, 12 passed—10 in the first and 2 in the second division. In Physiology only, 15 passed, the names of 8 appearing in the first division. In the Examination for

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Honours at the Intermediate Science and Preliminary Scientific (M.B.) conjointly, the following are the numbers of successful candidates:—Inorganic Chemistry, first class 5, second class 5, and third class 6; Experimental Physics, 2, 3, 3, respectively. In Botany, one candidate obtained a first and 2 candidates a third class. In Zoology, the names of three candidates appear in the first class, 4 in the second, and 3 in the third.

AN epidemic of measles amongst the children in the Driffield Workhouse was reported to the Local Board of Guardians on the 5th inst. The disease is also prevalent in the town.

AT a recent meeting of the Paris Municipal Council the concession of land for the erection of a Pasteur Institute was extended from thirty to ninety-nine years. A vote, expressing unqualified admiration of M. Pasteur, was also carried.

MEDICO-LEGAL LABORATORIES IN SPAIN. — The Spanish Ministry of Justice has arranged for the establishment in Madrid, Barcelona, and Seville, of laboratories of forensic medicine. After the middle of September, analyses which may be ordered by magistrates will be conducted in the new institutions—a provision enabling experts nominated in the interests of accused persons to be present during the performance of such analyses.

DEATH FROM ETHER.—An inquest was held on the 6th inst., by Dr. Diplock, on the body of Mrs. Wesselhoeft, the wife of an American physician. From the evidence it appeared that the deceased had suffered from asthma, for the relief of which she was supplied with ether. A pint bottle two-thirds full of the drug was found by the bedside, and the atmosphere of the room was charged with the vapour of ether. The jury returned a verdict in accordance with the medical evidence, and expressed the opinion that it was unwise to have allowed the deceased to have so much ether at her command.

PARKES' MEMORIAL PRIZE ESSAY.—Six essays were sent in on Dec. 31st, 1885, on the following subject:—"The Prevention of Disease among Troops during Military Operations in Tropical and Subtropical Climates." The following gentlemen consented to act as Assessors at the request of the Committee:—Surgeon-General W. C. Maclean, C.B.; Deputy Surgeon-General J. A. Marston, M.D.; Hon. Deputy Surgeon-General H. L. Veale, M.D. After careful consideration of the essays, the Assessors unanimously adjudged the prize to Dr. Andrew Duncan, F.R.C.S., Indian Medical Service, who entered the Medical Service on Sept. 30th, 1878. The prize consists of a gold medal of the value of 15 guineas, and £100 in money—it is awarded triennially; the subject for the next essay being "The Etiology and Prevention of Yellow Fever, to be illustrated so far as possible from the personal experience of the author." Essays to be sent in to the Director-General, Medical Staff, War Office, London, S.W., on or before the 31st Dec., 1888. The competition is open to all executive medical officers on full pay of the Royal Navy, Army, and Indian Medical Departments.

ARSON BY MEANS OF PHOSPHORUS.—At the last Manchester Assizes in July, a solicitor and a builder were sentenced, the former to ten and the latter to seven years' imprisonment, for arson. In December last, they took a shop in Hulme, fitting it up as a cigar shop, but not living upon the premises. The stock was valued at about £2 10s. and the fixtures were of the thinnest wood, and under the counters were large quantities of shavings. They ensured the stock and fixtures for £950 in April last, and in the night of the 19th of June a fire broke out, and on the arrival of the fire-brigade there were found to be three distinct fires in different parts of the shop and house. The two firemen who first entered were nearly suffocated by a dense white smoke, and applied to Mr. Heslop, Divisional Surgeon, Manchester police force, a day or two after, complaining of a rawness of the throat and chest, very different from anything they had experienced before. On account of what they told, Mr. Heslop burned some phosphorus in their presence, and they at once recognised the smell. Some phosphorus was then placed in some shavings, and it ignited spontaneously in about eight or ten minutes, and in sawdust in about twenty minutes. The gas-pipes had been cut, and the ends joined with indiarubber tubing. The defence was that there was no evidence that the prisoners were the men who set fire to the place.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

JACK, JOHN S., M.B., C.M.Glas., has been appointed Medical Officer for the Rothbury East District of the Rothbury Union.

OLDMAN, CHARLES B., M.D.Cantab., M.R.C.S., has been appointed Medical Officer for the Workhouse and the Western District of the Godstone Union.

PEARCE, FRANCIS D., M.R.C.S., L.S.A., has been appointed Medical Officer for the South District of the Kingsbridge Union.

PROWSE, W., M.R.C.S., L.S.A., has been appointed Medical Officer for the Hutton District of the Axbridge Union.

WHITTINGTON, T., L.F.P.S.Glas., L.R.C.P.Ed., has been appointed Medical Officer for the Prestwich District of the Prestwich Union.

Births, Marriages, and Deaths.

BIRTHS.

DRURY.—On the 6th inst., at Lingmoor, Dean-park, Bournemouth, the wife of W. V. Drury, M.D., of a daughter.

GRAMSHAW.—On the 3rd inst., at Walton-on-Naze, the wife of Henry Gramshaw, M.D., of a daughter.

LLOYD.—On the 6th inst., at Ty'nycoed, Barmouth, the wife of H. J. Lloyd, L.R.C.P., &c., of a son.

WILLIAMS.—On the 6th inst., at The Grange, Grinshill, near Shrewsbury, the wife of Clarence Williams, M.R.C.P., of a daughter.

MARRIAGES.

DAVIS—MALTBY.—On the 4th inst., at Old Basford Parish Church, Frederick Howard Davis, L.F.P.S., L.S.A., of The Grove, Dawley, Salop, to Maud Mary Maltby, daughter of Dr. Maltby, of Old Basford, Notts.

DE'ATH—ZIMMERMANN.—On the 5th inst., at St. Stephen's Church, Castle-hill, Ealing, by the Rev. B. Seymour Tupholme, Vicar, assisted by the Rev. John Chubb Ford, George Hanby De'Ath, L.R.C.P. Lond., M.R.C.S.Eng., youngest son of the late Robert De'Ath, of Buckingham, to Margaret Fair, youngest daughter of Edward Zimmermann, of 5, Cleveland-gardens, Castle-hill, Ealing, formerly of Buenos Ayres,

GORDON—GARLAND.—On the 4th inst., at St. Michael's, Croydon, George A. S. Gordon, M.A., L.R.C.P.Ed., L.R.C.S.Ed., to Emily, third daughter of Captain Augustus Henry Garland, of Sydney Lodge, Croydon.

GREENWOOD—JENKINSON.—On the 5th inst., at St. Paul's, Clapham, Cecil Danforth Greenwood, M.R.C.S., to Annie Beatrice, daughter of Alfred Jenkinson, of Clapham.

HALL—MORGAN.—On the 4th inst., at St. Mary's Church, Dilwyn, T. Lambert Hall, M.R.C.S., of Great House, Dilwyn, to Edith Mabel, third daughter of the Rev. T. Morgan, M.A., Vicar of Dilwyn, Herefordshire.

HANLY—MATTS.—On the 5th inst., at the Church of the Holy Cross, Leicester, by the Rev. F. Procter Prior, assisted by the Rev. F. Gabriel Whitacre, Dr. T. F. Hanly, of Newtown Desford, second son of E. Hanly, Esq., of Brighton, to Hannah Elizabeth Hooley, only daughter of the late Joseph Healey Matts, Esq., of Cropstone, Leicestershire.

KEETLEY—LONG.—On the 5th inst., at St. Mary's, Clapham-park-road, by the Rev. Richards Crofts, Charles B. Keetley, F.R.C.S., of 10, George-street, Hanover-square, W., to Anna M., daughter of the late Henry Holmes Long, Esq., H.E.I.C.S.

MACDONOGH—HANCOCK.—On the 10th inst., at All Saints', Isleworth, William Frederic MacDonogh, L.R.C.P., M.R.C.S., to Thérèse Uzielli, eldest daughter of Thomas Webster Hancock, Esq., of Treskelly, St. Margaret's, S.W.

MACKINNON—MACPHAIL.—On the 5th inst., at the Free Church, Manse Kilmuir, Isle of Skye, by the Rev. J. Calder Macphail, uncle of the bride, Francis Irvine MacKinnon, M.B.Edin., M.R.C.S., Medical Missionary, Damascus, to Lydia Jessie, second daughter of the Rev. John S. Macphail.

PENNY—PINDER.—On the 5th inst., at St. Matthew's, Denmark-hill, by the Rev. Stephen Penny, M.A., brother of the bridegroom, assisted by the Rev. H. Weston Wright, Edmund J. Penny, Esq., M.R.C.S., of Berkhampsted, Herts, to Annie Sophia Devall, daughter of Dr. and Mrs. Pinder, of Camberwell-green.

ROBSON—BALLARD.—On the 4th inst., at the Parish Church of Preston, Sussex, W. W. Constable Robson, M.R.C.S., of Walkeringham, Notts, to Rebecca, third daughter of Richard Ballard, of Patcham, Sussex.

DEATHS.

ARMSTRONG.—On the 5th inst., at Brampton (suddenly), William Armstrong, Surgeon, J.P. for the County of Cumberland, aged 74.

COVENEY.—On June 25th, John Coveney, M.R.C.S. (of phthisis), aged 25.

FOWLER.—On the 7th inst., at Hampstead, Robert Fowler, M.D., of Old Burlington-street, and Bishopsgate-street Without, aged 58.

MADDEN.—On the 8th inst., at Northwich-terrace, Maida-hill, Christopher J. Madden, M.D., aged 81.

MANN.—On the 4th inst., at Kingsdown Villas, Wandsworth-common, Robert James Mann, M.D., F.R.C.S., aged 69.

PLAYFAIR.—On the 6th inst., at Fishery House, Boxmoor (suddenly), Charles Edward Playfair, Staff-Surgeon, R.N., retired.

N.B.—*A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.*

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METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, August 12th, 1886.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Aug. 6	29·94	W.	66	62	107	80	60	...	Cloudy
,, 7	29·97	W.	66	64	115	78	62	...	Overcast
,, 8	30·03	W.	72	68	119	76	64	·02	Cloudy
,, 9	30·08	W.	65	62	107	72	62	·06	Overcast
,, 10	29·71	W.	62	62	82	65	61	·15	Raining
,, 11	29·91	N.W.	59	54	106	71	53	·02	Fine
,, 12	30·01	W.	60	55	110	70	50	...	Cloudy

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

We cannot undertake to return MSS. not used.

"A HOSPITAL ROMANCE."

THE *Leisure Hour* for the present month contains an affecting account of an incident in London hospital life, which, while evidently not overdrawn, is strikingly descriptive of the interest taken by the officials of medical charities in the well-being of patients placed under their charge. The "romance" should serve to enhance the interest of the public, which will bear a little quickening, in the beneficent institutions whose "praise" recently was "in all the churches."

Thirty.—The question is a legal one, the answer to which depends on the agreement as to costs beforehand.

Dr. Julius Rüdinger.—We will consider the suggestion.

THE "PENDJEH SORE."

To the Editor of THE LANCET.

SIR,—In your issue of April 10th, p. 703, an account of the "Pendjeh Sore" is given, from the *Vrach*, by Dr. Suski, and in your issue of June 12th, p. 1148, Surgeon Pierson points out the identity of this disease with Oriental sore known under many names, as "Delhi boil," "Scinde boil," "frontier sore," &c. A full account of the distribution will be found in Hirsch's Geographical Pathology, vol. ii. (New Sydenham Society). I pointed out this identity in an Indian journal early in May, where I also added that the account of the bacillus and *every* statement given in your abstract, and supposed to be original, will be found in my article on this subject in the *Practitioner* of last January.

I am, Sir, yours obediently,

Burmah Field Force, July 11th, 1886. J. HICKMAN, Med. Staff.

B.—The Royal Benevolent College answers to our correspondent's first question. There is a Branch Medical Council for Scotland; address—4, Lindsay-place, George IV. Bridge, Edinburgh.

A MONSTER CHILD.

To the Editor of THE LANCET.

SIR,—Here is a nut for physiologists to crack. A thin little woman gave birth to a male child sixteen months ago, at the village of West Camel, Somerset. When born the infant was of ordinary size in every way; it now weighs and measures as follows: Length, 36 in.; circumference round abdomen 33 in., chest 30 in., thigh 17 in., calf 11½ in., neck 15½ in., arm 10 in., and face 17 in. It is perfectly impossible for anyone to conceive its extraordinary appearance without seeing it. Its weight is 4 st. 8 lb. I may further add that the father is a man of ordinary size. The infant seems very intelligent and happy, but on account of its enormous weight it cannot be lifted without expressing pain.

I am, Sir, yours faithfully,

Sherborne, July, 1886. NATHL. EDWARD DAVIES.

THE NEW SOLICITOR-GENERAL ON THE BARTLETT CASE.

MR. EDWARD CLARKE, Q.C., contributes the following preface to a complete and revised report of the Bartlett poisoning case which has lately been issued by Messrs. Stevens and Haynes. The preface is dated, "5, Essex-court, Temple, July, 1886":—

"The case of which a complete and corrected report will be found in this volume attracted so much public attention, and had in it so many elements of enduring interest, that I think it desirable that it should be recorded in a permanent and convenient form. The very large correspondence which came to me during the progress of the case from members of the medical profession showed that the questions which had to be discussed were felt to be of great importance in the study of medical jurisprudence; and I have never known a case, or at all events not more than one, which had in itself so strong a dramatic interest. The strange relations between the prisoner and the husband, with whose murder she was charged, the yet more strange relations between her and the man who in the first instance was included in the accusation, together with the exceptional circumstances of his acquittal and his immediate appearance in the witness-box, fully explain the great public interest which existed during the trial, and which culminated in the very remarkable scene which followed its conclusion. It was at my request that my friend, Mr. Edward Beal—from whom, as well as from Mr. Mead, I received during the case the most diligent and admirable assistance—has undertaken the duty, which he was specially qualified to perform, of preparing the volume for the press, and I am greatly obliged to him for the care which he has given to his task. Mr. Justice Wills has been good enough to revise the report of his summing-up, and Sir Charles Russell has kindly performed the same service in respect of his opening speech and reply. Mr. Sidney Plowman, of St. Thomas's Hospital, has supervised the medical references in the report, and thereby added to the obligation under which all concerned in the defence already stood for his assistance during the case. I trust that the volume may be found useful to all students of the administration of the law."

A. B. C.—Illustrated Lectures on Ambulance Work, by R. Lawton Roberts, M.D., published by Lewis, Gower-street, 1885.

THE "EXCELSIOR" PATENT COMBINATION GIG-PHAETON.

To the Editor of THE LANCET.

SIR,—Messrs. Clift and Sons, of Wellington, Salop, exhibited at the "Inventories" last year a pony carriage which could be converted at wish from a four-wheeler to a two-wheeler. The gold medal of the exhibition was awarded to them for this carriage as the most ingenious improvement in carriage-building that was exhibited. At my request they have adapted their invention to another class of vehicle—one which may be described as a gig-phaeton. The idea in my mind was to provide a carriage which should serve several different purposes needed especially by country doctors. In the winter, when roads are heavy, the prime requisite of an effective carriage for a country practitioner is easy draught. A two-wheeler, as compared with a four-wheeler, must always have the advantage in this respect, particularly in hilly districts. The great drawback of two-wheelers is the want of accommodation. This patent combination carriage makes a nice-looking, easily-worked gig for winter work, and an equally good-looking phaeton for summer weather, capable of bringing a friend and luggage from the railway station, or of accommodating four or five passengers in case of need for a picnic or dinner party. With hood and apron there is effective shelter in rainy weather. The four-wheeler has a full lock in turning, and the two-wheeler is balanced by means of a screw slide, and has therefore an easy motion. The distinctive advantages of the combination are (1) that the purchaser gets two carriages for the price of one—viz., from £52 without hood; (2) that one tax is paid for the two carriages; and (3) that only one coachhouse is needed for the two carriages. I do not know of any other carriage combining in one all these advantages.

I am, Sir, yours faithfully,

Southborough, Aug. 10th, 1886. E. PAGET THURSTAN, M.D.

A USEFUL PLANT.

DR. BRANDES, a Hanoverian physician, has recently demonstrated in a German contemporary the valuable properties of the anacharis alsinastrum, a water-plant which has hitherto been considered as an unmitigated nuisance, choking up rivers, and altogether useless. Dr. Brandes has remarked that in the district where he lives, and where malaria and diarrhœa yearly appeared in a sporadic or epidemic form, those diseases have gradually decreased since the anacharis alsinastrum began to infest the neighbouring rivers and marshes, and for four years have totally disappeared. He therefore proposes that the plant, which came originally from Canada, should be planted in marshy districts, with the view of checking malaria; and the experiment, in view of the evidence adduced in the article under notice, is certainly deserving of consideration.

Mr. Wm. Hedley had better study medicine at home first. The *Journal of the American Medical Association* is published in Chicago; the *Medical Record* in New York. Either of these journals might serve our correspondent's purpose.

Mr. Hawkins-Ambler.—Yes, in an early number.

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THE MISSION TO DEEP SEA FISHERMEN.

THE useful work of the Mission to Deep Sea Fishermen is, we are glad to notice, receiving further recognition and support. An anonymous donor has recently contributed £2300 to cover the entire cost of building and equipping a seventh medical mission vessel to cruise with the North Sea trawling fleet. The medical and surgical work done on board these vessels is most important. The log of the vessel just arrived at Great Yarmouth after a two months' cruise with the Columbia fleet shows that no fewer than 200 cases have been treated in the dispensary during the voyage. One naturally asks what would these patients have done had there been no mission ship in the fleet. The more trivial cases would have had to endure until the return to port, whilst the serious ones would have been shipped off to London by the steam trawlers, which means being transferred in a small open boat from smack to steamer, and two days of suffering before the hospital can be reached. It is to be hoped that funds may be speedily forthcoming to enable the Mission to place a vessel with every fleet in the North Sea.

B. ought to make a claim if the executors show no sign of carrying out the wishes of A.

"THE OVERCROWDING OF THE PROFESSION."

To the Editor of THE LANCET.

SIR,—Your correspondent, "Felix Holt," very pertinently inquires in your issue of July 3rd, p. 43, "What may we expect the condition of the profession to be in half a century if some steps are not taken to prevent overcrowding?" I think I may say that this state of affairs is now under consideration in Canada—in the older province, at any rate—and those in authority are endeavouring to find a remedy for it. The principal steps to this end have been, so far, the raising of the standard of both matriculation and primary and final examinations, increasing the fees, and in the case of one university the term of study has been lengthened. The fact remains, nevertheless, that some schools in Canada, and many in the United States, are far too lenient as regards both the course of study and examinations. In this country there are but solitary cases of medical partnerships, and the assistant-system is unknown. Consequently, every practitioner has to make a practice for himself. In reply to the concluding inquiry in your correspondent's letter, I may state that a degree from a British university gives the same privilege as the licence of the Royal Colleges. A person not holding some such qualification would have to pass an examination in Ontario or Quebec only if he intends to practise in those provinces.

I am, Sir, yours faithfully,

Montreal, July 16th, 1886. L.C.P.S. QUE.

"THE METROPOLITAN DISPENSARY," COMMERCIAL-ROAD.

A CORRESPONDENT sends us one of the cards of this dispensary, distributed promiscuously among the patients of other practitioners and dispensaries, with the signature of the resident physician. Our correspondent expresses his strong disapproval of such a system as an advertising one; and we agree with him.

G. L.—No vaccination certificates from Ireland are accepted in England in place of English certificates. The only places outside England where certificates can be obtained are Edinburgh and Glasgow, and there the vaccination stations are under special inspection.

"THE USE OF COCAINE IN CIRCUMCISION."

To the Editor of THE LANCET.

SIR,—As a commentary upon the cases lately reported under this heading, will you permit me to ask the question, Is circumcision (for congenital phimosis) a justifiable operation? We know that fatal results have followed this procedure; and besides the risk, however small that may be, the parents, when not of the Hebrew persuasion, usually dislike the idea of their child "being made into a little Jew."

In the case of my own little boy and of several others, I have, under ether, introduced under the prepuce the closed blades of a pair of dressing forceps, and have then widely separated these. It is surprising how easily the prepuce can then be retracted behind the glans, which must be thoroughly exposed and cleaned. For a few days the foreskin must be drawn back. If thoroughly loosened on the first occasion there will be no difficulty whatever. Probably all this could be efficiently done under cocaine. At any rate, the success of the little manœuvre makes me urge its substitution for the cutting operation.

I am, Sir, yours faithfully,

Norfolk-terrace, W., Aug. 3rd, 1886. HERBERT SNOW.

COLOUR-BLINDNESS.

DR. WORMS, having examined 11,175 persons in respect of colour-blindness, has communicated his results to the French Academy of Medicine. Of the above number he found two only incapable of distinguishing one colour from another, three were blind for red and six for green, eighteen could not distinguish green from red, fifteen saw no difference between green and blue or grey, and fifty-two had a peculiar weakness in colour vision in general.

Mr. William Habgood.—Only graduates of universities are entitled to the prefix.

HEIGHT AND WEIGHT.

DR. BROCA, the eminent French anthropologist, is the author of a formula relative to the height and weight of the human body. It is that the body should weigh as many kilogrammes as it measures in centimetres, after deduction of the first metre. Thus a man measuring one metre eighty centimetres should weigh eighty kilos. Should his weight be more or less, he is too stout or too thin. As men grow older they lose their weight, but as a compensation they diminish in height also.

Justitia.—The insertion of the letter would probably lead to a discussion of a painful nature without corresponding benefit. Moreover, the matter is scarcely within our province.

"LEAD IN TINNED PROVISIONS."

To the Editor of THE LANCET.

SIR,—I notice in your valued journal the remarks of Dr. Rabcherski of St. Petersburg as to lead poisoning in connexion with preserved provisions. I am taking the liberty of sending you a tin invented by me during the last two years for the purpose of overcoming the difficulties spoken of by your correspondent. It is struck out of solid tin plate, and reduces to a minimum the danger of lead and other poisoning. In the first place, only tin plates of the very best quality can be used—that is, plates coated with pure block tin. The use of inferior plates coated with lead would result in too large a percentage of burst tins in the process of manufacture, as the strain is very great; therefore firms who prepare cheap goods cannot avail themselves of this method. To such perfection has this machine been brought that it strikes out 10,000 tins per day, with an average of not more than three damaged ones. The meat (or other contents) rests on the part of the tin struck out, and the top is soldered externally with solder composed of seventy parts of pure block tin and thirty parts of lead. This mixture is used for the sake of purity, also because it accelerates the work, which is of importance, as the quicker the preserving process is accomplished the better the results.

Trusting you will give place for these remarks in your columns,

I am, Sir, your obedient servant,

Leadenhall-street, E.C., Aug. 7th, 1886. J. MOIR CLARK.

"SUICIDE FROM DYSPEPSIA."

IN an annotation last week headed as above, we asked if the sufferer from dyspepsia in the case referred to had been under treatment of any kind. Mr. Rouse, the husband of the deceased, in a letter to us, replies that "she was, and had been for years, and was visited only the morning before the sad event by her medical attendant."

An Enquirer (Cleckheaton).—The suggestion is not new. The connexion between cause and effect, supposing such to exist in the matter referred to, is not very clear.

A CENTENARIAN.

To the Editor of THE LANCET.

SIR,—The following case of longevity may interest some of your readers.

Joseph Gathercole died at the Thingoe Union last week at the advanced age of 104 years and eight months. The accuracy of this age may be ascertained from the fact that he has been, on and off, an inmate of the union since it was built in 1836, and that at the time of his admission he was supposed to be about fifty-five years of age. Up to a few months of his death he was hale and hearty, and able to get downstairs and walk about.—I am, Sir, yours truly,

CHARLES SCOTT KILNER, M.B.,
Medical Officer of the Thingoe Union Workhouse.

Bury St. Edmunds.

DEAF-MUTISM IN SPAIN.

ACCORDING to Señor Don J. Lopez Navalon, principal of the National College for Deaf-mutes in Madrid, the number of persons afflicted with deaf-mutism in Spain is more than 10,000. For these there are, besides the Madrid College, which is supported by the State, only four other institutions in the provinces, and these are all supported and managed by private enterprise.

William Penn.—The question is entirely subject to the action of the General Medical Council in the matter of the recognition of forei degrees.

CANCER OF RECTUM; COLOTOMY.

To the Editor of THE LANCET.

SIR,—I have a patient upon whom I performed colotomy a fortnight ago whose case is interesting from two points. In the first place, she is only twenty-three years of age, and has such extensive cancer of the rectum as to have suffered complete obstruction of the bowels for three weeks. Secondly, the mode of death promises to be unusual. She was progressing rapidly towards recovery when, on the twelfth day after the operation, violent hæmorrhage came on, and has recurred to an alarming extent from time to time since. This bleeding evidently comes from the lower part of the bowel and from the cancerous mass itself, and will probably be the immediate cause of death.

I am, Sir, yours faithfully,

JOHN ALCOCK,
Surgeon, North Staffs. Infirmary.

Burslem, Aug. 9th, 1886.

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COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Sir Andrew Clark, London; Dr. Unna, Hamburg; Dr. Jose P. Rego Filho, Buenos Ayres; Dr. Herbert Snow, London; Dr. Rüdinger, Vienna; Dr. F. Kammerer, Berlin; Mr. V. Horsley, London; Mr. Reginald Harrison, Liverpool; Dr. R. D'O. Stephenson, London; Mr. Bruce Douglas, Lucerne; Mr. G. Padley, Swansea; Mr. G. H. Browne, Brynmawr; Mr. J. M. Clark, London; Messrs. Duncan, Flockhart, and Co., Edinburgh; Mr. W. Young, London; Mr. Grattan, Cork; Mr. J. Alcock, Burslem; Mr. J. W. Wood, Liverpool; Messrs. Merritt and Hatcher, London; Mr. Nicholson, Hull; Mr. Kay, Pitworth; Mr. J. Hickman, Burmah; Mr. Rivington, London; General Maxwell, London; Mr. A. Neve, Kashmir; Mr. Hareton, Shirley; Dr. Chetti, London; Mr. W. McLaurin, London; Mr. Gurner, London; Mr. Hoar, Maidstone; Mr. St. Dalmas, Leicester; Messrs. Legos, Smith, and Co., London; Mr. Blake, Dublin; Dr. Ulian, Lima; Dr. Michell, New York; Dr. Redwood, Queensland; Dr. Wise, Maloja; Messrs. Hook and Co., Snodland; Miss Saunders, Tunbridge; Messrs. Hopkinson and Co., Nottingham; Dr. Hoysted, Gibraltar; Dr. Duggan, Castle Eden; Mr. Leeson, Brighton; Mr. Delaney, Shenley; Messrs. Lee and Martin, Birmingham; Miss Sergeant, Dudley; Mr. Keeley, Nottingham; Dr. Burgess, Manchester; Messrs. Mottershead and Co., Manchester; Mr. Mitchell, Transvaal; Dr. Cameron, Aberdeen; Mr. Gibson, Bromley; Mr. Cooke, Liskeard; Mr. C. S. Kilner, Bury St. Edmunds; Mr. Clark, Edinburgh; Mr. Roland, Richmond; Dr. J. Gairdner, Crieff; Mr. Vincent Jackson, Wolverhampton; Mr. Eales, Torquay; Mr. W. Fowler, London; Mr. Askey; Mr. H. G. Brooke, Manchester; Dr. J. F. Allen, Pietermaritzburg; Mr. R. Jones, Liverpool; Mr. M. D. Walker, Dundee; Mr. Morrison, Luton; Mr. W. Hatgood, London; Mr. W. Lees, Chester; Mr. C. J. Smith; Mrs. J. Taylor; Mr. Crowdy, Chertsey; Mr. Huxley, London; Mr. Birchall, Liverpool; Mr. Brown, Houghton-le-Spring; Messrs. Robertson and Scott, Edinburgh; Mr. Hughes, Birmingham; Dr. Clapham, Rotherham; Mr. Shearman, Pendleton; Mr. Paterson, Leeds; Mr. Scott, Manchester; Mr. Fowler, Hereford; Dr. Symons, Oxford; Dr. Richardson, London; Thirty; J. H. O.; Justitia; Matron, Moorfields; R. S. B., Upton; Dr. E. F.; Guardian; Alpha, Wandsworth; Doctor; Student, Glasgow; W. C. S., Worthing; A. B., London; Sanitas; South Africa.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Nairn, Ferrybridge; Mr. Horsfall, Leeds; Mr. Anderson; Mr. Crookshank, Brighton; Mr. Newcomb, Ancoats; Mr. Boys, Pill; Mr. Robertson, Mexborough; Mr. Bridger, Hampstead; Mr. Bennington, Stockton-on-Tees; Dr. Jones, Treherbert; Mr. Creasy, Winslow; Mr. Aveling, Paddington; Mr. Hughes, Hansworth; Dr. McIntre; Dr. Williams, Shrewsbury; Dr. Harley, London; Mrs. Ernst, London; Mr. Jones, Llandovery; Mr. Horsley, Crail; Mr. Grace, Bristol; Messrs. Lee and Nightingale, London; Dr. Duckworth, London; Messrs. Oliver and Boyd, Edinburgh; Mr. Banks, Cheltenham; Messrs. Roberts and Co., London; Dr. Brecknell, Beaconsfield; Messrs. Abershon and Sons, St. Leonards; Mr. Partington, Tunstall; Messrs. Giles and Co., Bristol; Dr. Hanly, Leicester; Mr. Roberts, Kilmuir; Mr. Fry, Swindon; Mr. Birley, Manchester; Mr. Brown, Barlow; Dr. Pinder, Camberwell; Dr. Buchan, Plymouth; Mr. Dawe, Taunton; Mr. Dale, Harrow; Mr. Pentland, Edinburgh; Dr. Whiteside, Shap; Mr. Brown, Westgate-on-Sea; Mr. Cheesebrough, Bainton; Messrs. Robbins and Co., London; Mr. Marquis, Dundee; Mr. Arthur, Walsall; Mr. Lewis, Wingham; Mr. Malins, Dublin; Mr. Lloyd, Barmouth; Mr. Harris, Birmingham; Dr. Eberle, Thirsk; Mr. East, London; Mr. Blair, Upton Park; Mr. Richardson, Leicester; Mr. Kitchen, Ipswich; Mr. Cooke, Washington; Dr. Ems, Eastbourne; Mr. Rideal, London; Mr. Hall, Beverley; Mr. Phillips, Wandsworth; Messrs. Oppenheimer, London; Dr. Hughes, Nottingham; Mr. Cocoran, Loughboro'; Dr. Morgan, Treherbert; Secretary, Manchester; M. L.; M.R.C.S., Grantham; L. M. N.; Surrey, Birmingham; Substitute; General Apothecaries' Co., London; Medicus, Runcorn; P. D. P.; H.; Norman; C. B., Whitechapel; B. C.; A. B. C.; Reliable; R., Cheltenham; M.R.C.S., Barrow-in-Furness; M.R.C.S., Hastings; Medico-Chirurgius; Lady Superintendent, Cannock; M.D., Swanage; A. B., Barnley; Alpha, Hinckley; Y. S.; N. B., Leicester.

Liverpool Courier, Advocate of India, Liverpool Echo, Charity Record, Sussex Express, Leeds Evening Express, &c., have been received.

Medical Diary for the ensuing Week.

Monday, August 16.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesdays, same hour.
CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2 P.M.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.

Tuesday, August 17.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.
CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

Wednesday, August 18.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesdays and Thursdays, 1.30 P.M.
ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department, Tuesdays and Fridays, 9.30 A.M.
ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.
LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.
GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.
KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; and on Friday, 2 P.M.; and Saturday, 1 P.M.
ROYAL COLLEGE OF PHYSICIANS OF LONDON.—4 P.M. Prof. Dreschfeld: Diabetic Coma (Bradshawe Lecture).

Thursday, August 19.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M

Friday, August 20.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Saturday, August 21.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.

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An original and novel feature of "THE LANCET General Advertiser" is a special Index to Advertisements on page 2, which not only affords a ready means of finding any notice, but is in itself an *additional* advertisement.

Advertisements (to ensure insertion the same week) should be delivered at the Office not later than Wednesday, accompanied by a remittance.

Answers are now received at this Office, by special arrangement, to Advertisements appearing in THE LANCET.

Terms for Serial Insertions may be obtained of the Publisher, to whom all letters relating to Advertisements or Subscriptions should be addressed.

Advertisements are now received at all Messrs. W. H. Smith and Son's Railway Bookstalls throughout the United Kingdom and all other Advertising Agents.

Agent for the Advertising Department in France—J. ASTIER, 68, Rue Caumartin, Paris.

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Clinical Lecture
ON A
CASE OF HAMMERMAN'S CRAMP.

By G. V. POORE, M.D., F.R.C.P.,
PHYSICIAN TO UNIVERSITY COLLEGE HOSPITAL.

GENTLEMEN,—The case which I wish to bring to your notice to-day is one belonging to the class of "professional ailments" in which the constant repetition of the same movement begets an inability to perform that movement—a movement which often constitutes the profession of the sufferer, and is his sole source of income. These troubles are very serious for the patient, and, once established, they prove a source of mental anxiety and worry which can hardly be exceeded. On this account they are deserving of a very careful study, albeit that we know nothing for certain of their pathology, because these troubles are never fatal. The commonest of this class of diseases is "writer's cramp," of which I have seen about two hundred cases. Failure of professional movements other than writing is infinitely rare, but I have had occasion to see pianists who cannot play the piano; violinists who have lost the power to manipulate the strings with the left hand, or hold the bow in the right hand; a violoncello player who had lost the power to "make the nut" with the phalangeal joint of the left thumb; a compositor who could no longer hold the "stick" in his left hand; a tailor who could not sew; a pickle-jar-tyer who had lost the power of grasping the top of the jar with his left hand; a watchmaker who could not hold his watchmaker's lens in his eye; a packing-case-maker who could not use his saw; a bricklayer who could not use the trowel; and lastly a nailmaker (our patient of to-day) who cannot wield his hammer.

Other observers have described similar affections in telegraphists (I have never seen a case of telegraphist's cramp), ballet dancers who perform the "pas des pointes" on the tips of their toes, milkers, and fencing masters; and Professor Dieulafoy once told me that he had seen a cellarman from Rheims who had lost the power of giving a slight rotary movement to a champagne bottle, a movement which he was called upon to exercise all day and every day.

The investigation of these cases requires great care. Search must be made methodically and diligently for peripheral evidence of mischief, and we must bear in mind that no two cases are alike in all respects, and that since no two persons probably perform the same professional act in precisely the same way, so the mode of break-down will be found to differ immensely.

Careful examination of these cases has shown me that the break-down is generally most evident in those muscles which are subjected to prolonged strain rather than in those in which the periods of contraction and relaxation are more equally divided. Thus in writer's cramp it is the muscles of pen-prehension rather than those of pen-movement which are liable to fail. In the comparatively few cases of pianist's cramp which I have seen the extensors of the wrist and the near phalanges have been at fault. In the packing-case maker who could not wield his saw the chief trouble seemed to be in the supra-spinatus muscle, which during the act of sawing is subjected to prolonged strain. "Dancer's cramps" would probably be unknown if rhythmical movements, such as constitute dancing proper, alone were executed. It occurs only in those who abandon the rhythm which is the very essence of dancing for the performance of an acrobatic "tour de force."

The following history of our patient is summarised from that very excellent record which has been made by Mr. L. Barnett, house-physician.

J. M——, aged twenty-five, nailmaker, admitted Feb. 2nd, 1886. He is a piece worker—i.e., the more nails he can make the more money he will earn. He has worked from 7 A.M. to 7 P.M., with about forty minutes interval for meals. He has worked in a hot place in-doors, and has been in the habit of taking three or four pints of beer per diem with occasional spirits. There is nothing in the family history of definite import; but the death of his parents at fifty-four and fifty, and the loss of eleven brothers and sisters (out of thirteen) in infancy, make it probable that our patient's "constitution" is not very robust. His work consists in forging nails with a moderately light hammer. The iron is seized with pincers in the left hand, placed in position, and then forged into shape by a rapid succession of blows dealt by the hammer in the right hand. The onset of his trouble was almost sudden. He states that on Monday, June 8th, 1885, after he had been at work for about two hours, he was seized with an inability to direct the blows with his right hand. The trouble increased during the ensuing three hours, when, in consequence of the intense feeling of fatigue, he was obliged to "knock off work" for the day. On June 9th he managed by dint of holding the elbow close to the side to get through his day's work. On June 10th, 11th, 12th, and 13th he worked as well as ever. On the following Monday (June 15th) his trouble returned, but not to the same extent, and he got through his week's work fairly well by holding his elbow close to the side. After this the feeling of loss of aim in the arm recurred every Monday, and gradually wore off during the week, but the period it took to wear off got greater each time. By September the constant pressure of the elbow against the side produced soreness, and when attempts were made to keep the arm against the side the limb jerked, so that further work became impossible, and on Sept. 4th he had to leave it off. The patient states that after this everything he did with his right arm was done clumsily. He was then admitted into the Royal Free Hospital under Dr. Harrington Sainsbury, by whose kindness I first was enabled to see him.

Leaving the Royal Free Hospital, he next went to St. Bartholomew's, and from the latter institution he came here. On admission the "present state" was taken with great care and minuteness by Mr. Barnett. On the chest are a few small scars, the result of burns from sparks; otherwise the skin is normal. The circulatory, respiratory, digestive, and genito-urinary systems present no abnormalities of any kind. The temperature during his stay in hospital was always normal, but the pulse, when recorded, was found to be rather infrequent, being 62 on one occasion and 56 on another.

As regards the nervous system, it is noted that the intelligence was good, that there was no headache, and that the special senses were normal. The third, fourth, fifth, and sixth cranial nerves were apparently normal. The right naso-labial fold was rather less marked than the left; the mouth dropped a little on the right side when at rest and moved a little less vigorously than the left side. The tongue is slightly tremulous when protruded, and the median furrow deviates very slightly to the right side. The right upper limb, if carefully observed, will be noted to be seldom or never quite still. When sitting up with the arms hanging by the side the right arm is the seat of constant slight movements,—elevation, and adduction of the humerus, and flexion of the elbow. When an attempt is made at voluntary movement, the spasmodic action of the muscles of the upper limb is increased. The arm is held fixed to the side, the wrist is extended, the hand supinated and closed. The spasmodic action is seen to extend to the deltoid, trapezius, and pectoral muscles. The right sterno-mastoid is also slightly affected. When an attempt is made to use the hammer, the spasm reaches its maximum, and affects the right arm and shoulder to an extent which makes analysis impossible. It is evident that some of the muscles attached to the scapula are in an abnormal condition. I have followed my invariable plan and have carefully outlined both scapulæ with a blue pencil. By this means we see that the inferior angle of the right scapula is at a higher level than the left, that the distance between the mid-vertebral line and the base of the scapula is 5 in. on the right side and 4¾ in. on the left. The spinal border of the right scapula is somewhat tilted, and stands away from the surface of the back. The mass of the rhomboid muscles is very distinctly larger on the right side than the left. Looking to the lower axillary region, it is evident that the mass of the serratus magnus muscle is distinctly less evident on the right side than on the left. There is nothing wrong with the lower limbs, except that the plantar reflex is more marked on the right side than the left. Sensation is everywhere normal. The muscles were tested electrically. When I first saw this patient at the Royal Free Hospital, with Dr. Sainsbury, the irritability of the right serratus magnus to both forms of

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current was distinctly diminished. Now, however, the difference in irritability of the two serrati is scarcely noticeable. The patient is free from pain. After attempts at voluntary use of the arm there is a sense of fatigue and some aching, especially beneath the prominent rhomboid muscles on the right side, but beyond this his condition causes no suffering. *None of the nerve-trunks are in the least tender.* It is very evident that the spasm is not now special to the performance of his professional act of hammering. When he is asked to write he picks up the pen with his left hand and then transfers it to the right, and his attempt to sign his name is interrupted by repeated slight shocks of spasm, and the resulting signature bears evidence of the jerking of the hand. No treatment has been of any service to him. He has previously been in two hospitals without benefit. In this hospital he has had electrical treatment, and in addition he took one-sixteenth of a grain of extract of physostigma from Feb. 6th to the 15th, and twenty minims of paraldehyde three times daily from Feb. 15th to the 21st. He is no better.

There are some points about this patient to which I desire to direct your attention, because they seem to me to place his case in a category different from some of the other professional ailments to which I have alluded. First, as to the mode of onset; it is to be noticed that it was comparatively sudden, and the patient fixes the date absolutely, and he states that before June 8th, 1885, he had no trouble at all, but since then he has never worked satisfactorily. In most other "professional ailments" the onset is gradual, the loss of function increases by scarcely perceptible degrees, and for a patient to be able to fix the exact day of onset is infinitely rare. I took occasion to tell you in my preliminary remarks that these professional ailments most commonly affect movements which necessitate, as in writing, a prolonged contraction of muscles. Now, in hammering it is difficult to say where (if anywhere) this prolonged contraction occurs. It would be most likely to occur in some of the muscles which steady the shoulder, and the permanent slight displacement of the right scapula in the case we are considering rather favours such an idea, but I am unable to say anything more definite.

The act of hammering is probably less automatic than many other acts of a similar kind. The action of the right hand depends to a certain extent upon that of the left, which places the metal in position for being struck. The action of the left hand in selecting and placing in position the nails to be forged is far from being a mere monotonous repetition of the same act, and hence the position of the nail when receiving the blows from the hammer must be to some extent uncertain. Hence it follows that each blow with the hammer involves the taking aim and the exercise of no inconsiderable amount of judgment. The act is as much mental as it is automatic, and both arms and the eyes have to act in harmony for its accomplishment. It seems to me such an act as would be likely to produce a considerable amount of mental worry, which would be redoubled on the first appearance of any failure of accuracy. The repetitions of the act were very numerous, and during the eleven hours of work very many thousand blows with the hammer must have been delivered. Dr. Frank Smith of Sheffield, who published a very able paper on this subject in the *British Medical Journal* of October 31st, 1874, estimated that a penblade forger who suffered similarly to our patient delivered about 28,000 blows per diem, and if we assume that the hammer weighs 3 lb. and is lifted 1 foot for the delivery of each blow, this amounts to 35 foot tons per diem. If we assume that the work of delivering the blow is equal to that of raising the hammer, and if we add to the weight of the hammer the weight of the arm, we must allow that the work done is about 150 foot tons per diem. This is by no means a very excessive day's work.

You will observe that, as I have previously said, the trouble is by no means limited to the act of hammering. It very obviously interferes with the accuracy of all voluntary efforts of the right hand, and, indeed, the spasm is noticeable to some extent when the patient is making no voluntary effort with it. It is, or used to be, stated in text books that in these cases, beyond the professional trouble, there is nothing detectably wrong, and that all movements excepting the professional movement are perfect. I dissent from both these statements; but, nevertheless, the present case differs from the great majority of professional troubles in the very large amount of peripheral evidence of mischief which is present and the rapidity with which the motor trouble has spread, as it were, from the professional act to the involvement of other acts. Indeed, one cannot escape from the belief that the motor trouble is part of a hemiplegia, for added to the disorderly movements of the upper limb, we have evidence of slight failure of the right side of the face and the right half of the tongue, and probably the exaggerated plantar reflex on the right side tells of diminished cerebral control over the right leg. These trifling signs of hemiplegia, added to the fact of comparatively sudden onset, make it highly probable that the lesion, whatever it may be, would be found in the motor area of the cerebral cortex on the left side. In addition, notwithstanding that I can find no defect of intelligence of any definite kind, I confess that there is something vacuous in the expression of his face, which, added to a certain listlessness of manner and utterance, leaves upon me the impression that mentally he is below the average. He further admits that since his trouble he is more easily moved to anger than formerly was the case.

There is now loss of control over a large group of muscles, and the history of the case makes it probable that at the beginning of his trouble the area of diminished control was smaller than at present, and possibly was limited to one or two muscles, or perhaps a single muscle. That the serratus magnus was the first, or one of the first, muscles to be affected seems to me very likely. It certainly is smaller than its fellow; it certainly was at first less irritable to both forms of the electric current than its fellow; it was the only muscle that I could definitely say was not in a healthy condition; it certainly is brought into play whenever the arm is raised in the act of hammering, and most certainly the plan adopted by the patient of holding the elbow close to his side in the act of hammering would enable him to do so without scapular movement, and thus save the muscle over which control had been lost. Again, the slightly faulty position of the right scapula points to some weakness of the serratus magnus. The slight tilting backwards of the vertebral border and the slight elevations of the lower angle are both indications that the serratus is weak, and the large size of the rhomboid muscles on the right side looks as if they had been employed to compensate for the weakness of the serratus and had been used for steadying the scapula. The prominence of the rhomboid muscles, even when the scapula is at rest, coupled with the fact that the vertebral border of the right scapula is ½ in. further from the middle line than its fellow, led me to think that possibly a bursa or abscess had formed beneath the muscles, and at my request Mr. Godlee very kindly inserted an aspirator at the spot where the prominence is most marked, but with no result.

This case is of interest because of its rarity. It is the first of its kind that I have seen, and for me its chief interest lies in the fact that in many points it offers a striking contrast to all the other cases of professional ailments (and they are not few) which I have seen. In every case of professional trouble that I have seen I have been able, as in this one, to detect peripheral evidence of mischief, but this one is exceptional in the fact that the *peripheral* evidence is evidence of *cerebral* mischief, and enables us to conclude that the lesion is in the brain. This is the only case of hammerman's cramp that has come under my notice, and the only record of similar cases which I can find is in the short paper by Dr. Frank Smith previously alluded to. He was physician to the Sheffield Infirmary, and had seen, naturally, a very large number of hammermen among the patients of the infirmary, and he has placed upon record eight cases analogous to the one we are discussing, and which he called cases of "hephestic hemiplegia or hammer palsy," the word "hephestic," it is perhaps necessary to state, being derived from the Greek word Ηφαιστος, Vulcan. Of these eight cases six were distinctly hemiplegic in character, while two were cases of brachial monoplegia. In one there was spasm with wasting of the forearm. In one other case there was spasm. In the other cases the symptoms were paralytic, and in four of the cases there was derangement of tactile sense. The ages of Dr. Frank Smith's patients were thirty-one, forty, thirty-two, eighteen, twenty-four, thirty-five, twenty-nine, and fifty-five. He alludes to the points of similarity between these cases and those of writer's cramp, but says that the disease positively differs from writer's cramp in the fact that the cerebral centres are implicated.

It is the difference from rather than the similarity to cases of writer's cramp which constitutes the interest of the case. Cerebral symptoms in writer's cramp and allied professional ailments are infinitely rare, and when present are

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very vague and consist at most of some slight dizziness during attempts to exercise the deranged function. In the case we are considering and in Dr. Frank Smith's case cerebral symptoms have been prominent, and, once established, persistent, and in no sense intermittent. Why should this be?

I would offer the following explanation:—Muscular acts differ enormously in the amount of cerebral effort they demand. In some muscular acts we are unconscious of any cerebral effort. This is notably the case in walking, which appears to be almost a purely reflex act, and is often accomplished unconsciously. The woman who walks about gossiping and knitting will do an extraordinary amount of work without apparently giving a thought to her knitting-needles. Even writing—i.e., quill-driving and copying—may be done almost automatically, and so, indeed, may any act in which the tactile sense is largely employed to guide the limb in its movement. An incident which once occurred to myself will serve to show how very automatic a delicate act may become. Some years ago I got a small flake of iron rust into my eye while railway travelling. This caused slight annoyance at the time, but in a day or so I began to suffer from catarrh of the eye, which was excessively painful at times, causing a spasmodic flood of tears and the forcible closing of both eyes. It was in the days when I used a razor, and one morning I was shaving my chin before a looking-glass when suddenly the eyes filled with tears and I closed them; but, nevertheless, I unconsciously finished my shaving, and shaved my chin quite smooth with my eyes shut. There must have been very little cerebration in this act; in fact, had I appreciated what I was doing, I should inevitably have cut myself. My shaving on this morning must have been almost a pure reflex, brought about by constant daily repetition of the same act.

Other acts, again, can never become automatic, and this is notably the case when the movement of the limb is not guided by tactile sense in the performance of the special act. When, for example, did anyone ever thread a needle automatically or unconsciously? During such an act as this there is evidence of strong cerebral effort, as is shown in the face of the sempstress. The taking aim—whether it be at a needle's eye, a bull's eye, or the bit of iron to be forged into a nail—involves the bending of the mind towards the object aimed at; and the aiming at an object against time, as occurs to the pieceworker forging nails, is an act, one would think, which is calculated to cause brain-fag rather than muscle-fag. And the limited number of clinical facts at our disposal seem to point to the correctness of this assumption. When the work done by the muscle is great, and the cerebral effort involved is small, we may well expect the muscle, rather than the brain, to show signs of failure. When, however, the cerebral effort is out of proportion to the mechanical work, as in the repeated act of aiming with a hammer, it is not surprising that, if breakdown occurs, it should occur in the brain. It might be urged that this is not a "professional" trouble—that it is merely a hemiplegic attack followed by post-hemiplegic spasm occurring accidentally in a nail forger. Against this supposition we have to put the fact that his first sign of trouble was in connexion with the professional act; that the spasm of the arm is only seen at its maximum when he attempts to perform the professional act; and that the case does not stand alone, two of Dr. Frank Smith's cases having been very similar in character.

In the average case of writer's cramp I have always contended that, although peripheral evidence of mischief is always present, the evidence does not enable us to say that the lesion is central, although, of course, I very well know that brain cell, nerve fibre, and muscle are practically one. Ordinarily professional ailments never spread to other functions, and certainly the man with writer's cramp is not more likely to become hemiplegic than anyone else. In the case we are considering the trouble, from being merely professional to begin with, quickly spread. This in itself is evidence that in one case the lesion is peripheral and in the other case central, for at the centre where the nerve fibres converge almost to a point any *sudden* lesion is not likely to be limited to the cells connected with one small function only. The nervous system may be compared to a railway with branch lines and a "central" terminus. Now, a fire at Holyhead would not cause any disturbance at Carlisle, notwithstanding that they are both stations on one system of railway, but a fire at Euston would certainly derange the functions of both these outlying stations, and of many others.

The lesion in our case probably began in the part of the centre corresponding to the serratus magnus muscle (for as each limb has its controlling "centre" in the train, so, we must assume, has each muscle of each limb), and thence quickly spread until the right upper limb, the right side of the face, the right half of the tongue and the right leg (?) became involved.

Seeing that the leg is very slightly and doubtfully involved, the lesion, whatever it may be, is apparently almost limited to the left ascending frontal convolution, to an area to which the blood is brought by the ascending frontal branch of the Sylvian artery. Seeing that the onset of the trouble was comparatively sudden, it is not probable that the change which has taken place in the brain is of the nature of a slow degeneration or sclerosis. It is to the vessels of the part to which we must look for an explanation, to hæmorrhage in the area of the ascending frontal artery or embolism or thrombosis of it. There are manifest difficulties in accepting the theory of hæmorrhage or embolism, and against the latter supposition is the absence of any source of emboli. On the whole, I adhere to the belief that the physical basis of our patient's trouble will be found in thrombosis of the ascending frontal branch of the Sylvian artery. In favour of this theory is the fact that his trouble at its commencement was always worse on Monday morning, when the overworked area of his brain had had a period of rest, and when the circulation through it had been, presumably, slow. If we imagine a clot forming in one of the smallest branches and gradually spreading backwards, so as to involve the larger branches of the ascending frontal branch of the Sylvian branch of the middle cerebral artery, we have conditions which, automatically and pathologically, would account for the clinical facts. Thrombosis on the side of the veins leading from this area might conceivably lead to a similar condition, and cause such derangement of nutrition as to prevent the proper control of movement and lead to such a state of things as we are confronted with.

The prognosis in this case is, I fear, not good. Between September, 1885, and February, 1886, his progress has been *nil*, in spite of complete rest, good nourishment, and the therapeutic skill in at least three of our metropolitan hospitals. The deficient irritability of the serratus magnus has disappeared, but even this has not caused more benefit than a similar recovery of normal irritability causes in ordinary hemiplegia. With the exception of this diminished irritability, there have been no indications for treatment in the affected limb. No tender nerves have seemed to demand a blister (which is often of very great use in cases of professional trouble), and no massage or shampooing of the limb would be likely to influence the brain. Rest, if anything, should lead to recovery or improvement; but six months' rest has done nothing, and I very much fear that his trouble is likely to be permanent, and that his loss of control over the affected group of muscles will continue.

Address
ON
MICROBES AND DISEASE,
INTRODUCTORY TO THE DEMONSTRATIONS IN BACTERIOLOGY,

Delivered before the British Medical Association at Brighton, August, 1886,

BY EDGAR M. CROOKSHANK, M.B.

GENTLEMEN,—Many, perhaps, may have expected that the formation of this bacteriological laboratory would be made the occasion for reading papers or holding discussions in connexion with bacterial pathology; it might have been regarded as an opportunity for publishing the discovery of some interesting micro-organism, or for giving an account of recent researches in connexion with the etiology of some morbid process which has been hitherto veiled in obscurity. This, however, is not the case, and for this reason. As is only too well known, we have in England no laboratory devoted to this particular line of research; we have, so far

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as I am aware, in London, no institution to which a medical man can be directed where he would obtain a course of instruction or a series of systematic demonstrations. With perhaps one exception, there is no hospital or medical school in London that can be said to give substantial encouragement to this branch of study. Obviously, then, an occasion like the present affords an opportunity of forming a temporary laboratory which may in some measure supply this want, by enabling the busy practitioner, and many others who have not time to visit the laboratories abroad, some opportunity of gaining a practical acquaintance with the subject. Instead of papers and discussions on points of doubt in the past or of hopes of what may be done in the future, we are met to have demonstrations of what has already been done, and more particularly illustrations of those points which, being based upon absolute proof, will undoubtedly bear the test of time and experience. To afford an opportunity of explaining the methods employed in bacteriology, of showing cultivations of micro-organisms, and of demonstrating the microscopical appearances of the pathogenic species, is the purpose for which this laboratory has been arranged. That you should be able to understand the meaning of these mysterious tubes and to appreciate the value of the preparations under the microscope, I will endeavour to briefly describe a few points which indicate the lines of research.

It must be remembered that we have to deal with organisms wonderfully minute, and that we have to study the life-history of each individual species. When we realise the ubiquitous character of microbes, their presence in the air we breathe, the water we drink, and in the earth on which we move and have our being, the difficulties of isolating one particular form from another would seem to be insuperable; nevertheless, with delicate methods and with minute precautions we are able to effect this. The medical man being interested more especially in those micro-organisms which are related to disease, it will be sufficient to give illustrations of the methods which are employed in investigating the life-history of the pathogenic microbes. It must not be supposed that it can be, or ever is, considered sufficient simply to discover by the aid of the microscope a micro-organism connected with a disease in order to proclaim it as the actual cause of the disease. Even if we can, in addition, cultivate it apart from the diseased body, the mere fact of its being able to increase and multiply, and to exhibit peculiar macroscopical characteristics, affords us no evidence whatever of its being pathogenic. From such evidence as this conclusions would be only conjectural, instead of being based upon absolute proof. One cannot, therefore, too often repeat the necessary requirements for accepting the belief in a micro-organism as the *causa causans* of a disease. To Koch we are indebted for laying down concisely what the requirements are. In the first place, the micro-organisms must be constantly found in the blood, lymph, or tissues of the diseased man or animal. To ascertain their presence we must apply our knowledge of practical histology, augmented by many special staining reactions, and in some cases microchemical tests. In the second place, we must isolate the micro-organisms from the blood, lymph, or tissues, and cultivate them apart from the diseased body in suitable media, and we must carry on these pure cultivations through successive generations. To isolate and cultivate microbes requires special apparatus—in some cases simple, in others complicated and expensive. It is at this stage of the inquiry that the investigator requires aid from his medical school or from the pathological department of his hospital, otherwise the expense of the apparatus will probably be such a burden to his finances as to prohibit his prosecuting his researches. The suitable medium must be a pabulum which has been rendered free from all pre-existing micro-organisms. This is effected by sterilisation by means of hot air or steam in such apparatus as you have exhibited before you.

We will suppose that we are anxious to investigate some material, such as blood or pus, in which we suspect the presence of a micro-organism. We take a glass rod furnished at one extremity with a platinum wire; we deprive it of any micro-organisms which may have alighted upon it by heating it in the Bunsen burner, and then, as platinum rapidly cools again, we can almost immediately dip the point of the wire into the material to be examined. This test-tube, which is, as you see, plugged with cotton-wool, is filled about one-third with a nutrient jelly. Holding the tube mouth downwards, and twisting out the plug, the inoculating needle is steadily thrust into the jelly and withdrawn, and the plug replaced. These tubes with their contained medium—nutrient gelatine, nutrient agar-agar, blood-serum, hydrocele fluid, as the case may be—are also perfectly germ free; the tubes themselves have been cleansed and sterilised by a temperature of 150° C. for an hour or longer, the cotton-wool sterilised by similar means, and the nutrient medium itself sterilised by exposure to prolonged heat or by boiling on several successive days. If it were not so, the nutrient jellies would in a very short time fall a prey to bacteria of putrefaction, or, in simple language, "go bad." It is sufficient to introduce an invisible quantity of micro-organisms. Nothing will be observable immediately after the inoculation, but in the course of a day or two according to the rapidity of the growth of the particular micro-organism, the temperature of the room, and the nature of the nutrient medium, the germs will increase and multiply in the needle track, and produce some visible change. The resulting appearances are very varied. You have many examples before you: in some there is the appearance of a white thread or a delicate cloud; or the medium has liquefied or become milky, or tinged a pea-green or smoky brown; or a growth or deposit has resulted, of a blood-red, vermilion, purple, or yellow colour.

The method just described is simple and effectual when we have to deal with the presence of one micro-organism, but it may be well asked, What is the course of procedure if there are different species of micro-organisms present together? How can a mixture of micro-organisms be treated so as to isolate them one from another and to test the properties of each? How can they be separated so as to ascertain which are pathogenic and which are harmless? In such a case there is a method which is as simple as it is beautiful. Instead of inoculating our medium in the solid state, it must be first liquefied, and when the mixture of microbes has been introduced the inoculating needle is stirred round and round, and the test-tube tipped and rolled between the fingers. The microbes introduced become disseminated throughout the liquid medium, and if the gelatine is poured out upon a small pane of glass the individual microbes are fixed by the setting of the gelatine, each in a particular spot. In order to effectually separate the different species of micrococci, bacteria, or bacilli, which may be present, from each other, we must employ a method of dilution. A fresh tube of liquefied jelly is inoculated with a droplet from the first tube, and a third tube from the second, and a fourth from the third. Then in the "plate cultivations" which we prepare with these diluted inoculations we shall find that the micro-organisms have been completely separated from each other; the colonies resulting from each microbe giving rise to its own species will be so completely isolated as to leave no chance of their commingling. From these colonies we inoculate fresh tubes of nutrient media, so that at last we have growing in separate tubes all or nearly all the microbes present in the original mixture. The appearance of these colonies before inoculation should be carefully studied, for in some cases they are absolutely characteristic, and in others help to distinguish micro-organisms which resemble each other in form. As an example of a very beautiful and characteristic colony growth, I would draw your attention to the impression-preparations of colonies of anthrax, and several other micro-organisms exhibited under the microscopes. The same method has been also extensively used for studying the various microbes in water; but we must remember that nutrient gelatine is not a suitable pabulum for each and every microbe, and we must therefore supplement our test by means of cultivations in other media. As an example of another medium I would point to the growths on sterilised potato. The outside of the potato is covered with microbes found in the earth, and these must be removed by thoroughly cleansing them and soaking them in a solution of corrosive sublimate. When cut in half with a sterilised knife, the cut surfaces present a germ-free soil, which is particularly suitable for the rapid growth of many, particularly the chromogenic species. The inoculations traced over the potato with no immediate visible effect, will in the course of a day or two develop such a growth—for example, of the *bacillus violaceus* or *micrococcus prodigiosus*—that one might imagine that some violet or red ink had been spilt over the surface of the potato. These pigment-producing microbes are of the greatest interest, for not only is there a wide field for research in the investigation of the chemistry of these pigments, but the very fact that these simple organisms

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are endowed with the power of producing such striking colours—are, indeed, miniature laboratories of these beautiful pigments—helps us to understand that other species are equally capable of manufacturing the most virulent poison or of inducing some chemical change, some fermentation, in the blood or tissues which produces a fatal result.

By such means having obtained a pure cultivation, we must carry it on through successive generations. The importance of the successive cultivation cannot be overestimated, for the process does away with the possibility of the fatal result being due to some chemical poison transferred from the material examined to the nutrient jelly. If after carrying on a cultivation through a hundred or a thousand tubes the growth is as virulent as in the first tube, it surely cannot be held that the result is still due to any chemical poison mechanically carried over in the first inoculation, for the original fraction of a drop must have become diluted to such an extent as to be absolutely inert. We must be able with a pure cultivation to produce the disease in question; and, lastly, we must be able to find the micro-organism again in the blood, lymph, or tissues of the inoculated animal. It may be asked, Are there any micro-organisms which undoubtedly comply with all these requirements? The answer is, Most assuredly there are. We may, indeed, very roughly divide the so-called pathogenic microbes into three great classes: first, those which absolutely answer these tests in every particular, and which are therefore undoubtedly the cause of disease; secondly, those in which the chain of evidence is not absolutely complete, but which we nevertheless believe to be the cause of the disease; and, lastly, those which are very probably only accidentally associated with disease. Of the first class, the bacillus of anthrax, the bacillus of mouse septicæmia, or the micrococcus tetragonus may be given as examples. In all these cases we can easily isolate the microbe, we can carry on any number of successive pure cultivations, and we can always reproduce the disease and find the same micro-organism again. Of the second class, we may give as examples the bacillus of tubercle and of leprosy. In the case of the first named the evidence is very strong; but the chain is not absolutely complete, in that, in some cases of tuberculosis, in tissue sections it is very difficult to demonstrate the existence of the bacillus at all, and therefore, until such cases are explained, or until it is more generally accepted that there are forms of tuberculosis etiologically different, of which bacillary tuberculosis is one, there may continue to be doubt in the minds of many as to whether the discovery of this bacillus is of any importance at all. So, too, with the bacillus of leprosy the chain is incomplete, for the bacillus has not been cultivated apart and the disease reproduced by inoculation, and yet, from the veritable invasion of the affected tissues by the bacilli, there can be but little doubt that the bacilli are the active agents in producing the disease. Lastly, we have the class which includes many micrococci, bacteria, and bacilli, present, for example, in the mucous membranes of the respiratory and alimentary tracts, or in the skin, which have been described as characteristic of certain diseases, but about which we must have far more certain evidence before we can maintain that they are more than accidental associates.

DROGHEDA UNION: THE LABOURERS ACT.—Drs. Delahoyde, Callan, and O'Keeffe, medical officers of this Union, having been refused a fair remuneration for inspecting labourers' cottages, &c., under the Act, have served writs on the guardians. The medical officers asked the moderate sum of 5*s.* for each inspection, and they were offered 2*s.* 6*d.* The guardians will defend the action, but there is little doubt that they will be defeated with heavy costs.

SALFORD ROYAL HOSPITAL.—A new wing has just been added to this institution, at a cost of £20,000, which has been paid out of a bequest under the will of the late Mr. John Pendlebury, no appeal having so far been made to the public. Amongst other features, the new wing has three wards, totally isolated from the remainder of the building, for the reception of any cases of infectious disease which may be developed in the hospital, and an operating theatre. The out-patients' department, with the accident ward, is placed at the rear of the building. The hospital, which hitherto has only contained sixty beds, will now be provided with 150. It is expected that the wing will be completed for the reception of patients during the course of next month.

CLINICAL REMARKS
ON
THE TREATMENT OF SYPHILIS BY SUBCUTANEOUS INJECTIONS OF MERCURY.

BY J. ASTLEY BLOXAM, F.R.C.S. ENG.,
SURGEON AND LECTURER ON OPERATIVE SURGERY, CHARING-CROSS HOSPITAL.

THE lecturer mentioned the excellent results which he had obtained at the Lock Hospital and elsewhere in the treatment of syphilis by intra-muscular injections of a solution of the perchloride of mercury. The solution for injection contains six grains of the perchloride to the ounce of distilled water, and should be made fresh for each *séance*. Since he had adopted this method, now a period of some eighteen months, upwards of 1500 cases had been treated with the best results. The sore generally begins to heal very promptly after one or two injections, the secondary symptoms are markedly modified, and after a course of treatment extending over a year, more or less, the patient is enabled to discontinue his attendance. Towards the latter end of the course of treatment the injections may be given less frequently, and as a general rule not more than from eight to twelve grains of the perchloride are injected in all. It is undesirable to repeat the injections oftener than once a week, as otherwise salivation might be induced, and the quantity injected each time (one-third of a grain) is found to be quite sufficient until the next time. There are several advantages attending this method of exhibiting mercury. In the first instance it is only necessary to see the patient once a week, when sufficient mercury is injected to last until the following week; secondly, salivation is not produced, as when the patient continued to take mercury for a whole week away from the supervision of his medical attendant; thirdly, the gastric derangements which are so apt to follow the administration of mercury by the mouth are by this means avoided; lastly, the ease and certainty of the administration, which enable the surgeon to do his own dispensing with a minimum of trouble. A little quinine is generally given during the course as a tonic, but no other form of mercury is administered.

The injection itself is a very simple operation, but certain rules have nevertheless to be observed in order to obviate any inconveniences which might otherwise result. An ordinary glass hypodermic syringe is used with a fine needle (the needle is apt to become very brittle from the action of the mercury on the steel and requires to be replaced from time to time), containing twenty drops of the solution, equivalent to one-third of a grain of the perchloride. After filling the syringe the needle is freed from adhering solutions by washing in order to avoid irritation in its track, and is then plunged deliberately into the muscular tissue of the buttock, selecting for this purpose the spot corresponding to the muscular mass of the glutei into the substance of which the injection is made. If this precaution be observed, no discomfort or abscess formation follows, the only solitary case in which this has occurred being attributable to the injection having been made into the areolar tissue over the trochanter. The pain of the injection is but slight, and soon passes off. It is desirable that the patient should not take active exercise immediately after the injection, as it has been noticed that blood may be effused at the point of injection, giving rise to the sensation of a severe bruise of the part, which lasts for several days. The same effect has followed the puncture of a large vessel, but in any case the result is only transient, and disappears after the lapse of a few days. If for any reason the buttock be objected to as the site of the operation, the injection may be made into the trapezius muscle at a point two inches above the superior angle of the scapula, but the injection into the buttock is attended with less inconvenience.

Mr. Bloxam mentioned that his own opinions were strongly in favour of syphilis being bacillar in origin, thus accounting for the specific action of mercury in the treatment of the disease. In support of this view he alluded to the remarkable researches of Messrs. Eve and Lingard, whom he had furnished with blood and chancrous tissue from patients at the Lock Hospital, the subjects of syphilis.

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They have succeeded in detecting and cultivating a bacillus which could generally be found in the blood and tissues of syphilitic patients who had not been subjected to the influence of mercury, or who at any rate had not taken it long. In a contribution to THE LANCET of April 10th, 1886, they say: "In none of the cases from which cultivations were obtained had mercury been administered for any length of time, and a long series of failures have led us to reject entirely cases which have been long under mercurial treatment." With this fact in view, the importance of obtaining a thorough and certain permeation of mercury in the system is apparent, and without claiming any originality in this method of treatment, the lecturer wished to bring before them the extremely favourable results he had obtained from it.

BILOCULAR EMPYEMA; THORACENTESIS; DIVISION OF SEPTUM; COMPLETE RECOVERY.

BY GEORGE PADLEY, L.R.C.P.LOND, &c.,
CONSULTING PHYSICIAN TO THE SWANSEA HOSPITAL.

ON the morning of December 18th last I was sent for to see a young lady, aged between seventeen and eighteen, who had been seized somewhat suddenly soon after midnight with a very severe pain in the right side, preceded by a sharp rigor. She had gone to bed feeling quite well, and awoke at the time named with the above symptoms, accompanied by intense headache and thirst. The only cause to which they could be traced was exposure the previous day to an open window in a covered waggonette. When I saw her she was in a state of high fever, side acutely painful, temperature 104·8° F., pungent heat of skin, pulse 120, respiration 38, subsequently reaching as high as 45; short cough and dyspnœa. These symptoms were soon followed by fine crepitation at the base of the right lung—rusty expectoration, and some friction sound,—in fact, the ordinary symptoms of an attack of acute pleuro-pneumonia. She passed through the earlier stages of the malady favourably, the more urgent symptoms having gradually subsided until the morning of the sixteenth day (Jan. 3rd), when the temperature had fallen to 99·8°. It is needless therefore to give further details of the case, which pursued the ordinary course of this disease, or of its treatment, up to this time. In the evening of Jan. 3rd there occurred a fresh accession of acute symptoms, without any apparent cause beyond some stomachic disturbance, and the temperature rose to 103° and continued averaging from about 101° morning to 103° (on two occasions 104°) evening, until the 24th, when the morning temperature fell to 100·2°. As time advanced the percussion dulness had become more dead, the breath sounds, clear and even exaggerated immediately beneath the clavicle, were inaudible elsewhere, excepting in a space beneath the angle of the scapula; vocal fremitus absent, respiratory movements almost *nil*, voice bronchophonic and distant. Such symptoms, together with the history of the case, plainly indicated effusion within the right chest. The dictum of Dr. Wilks—that "if the case be one of pleuro-pneumonia, and there result, after the acute attack, the same local physical signs (localised dulness with absence of breath-sound, and perhaps distant tubular breathing), then also an empyema is present,"[1] a most valuable inference derived from his large experience—also pointed to the same conclusion. On the other hand, not only was there an absence of any enlargement of the right side, or bulging of the intercostal spaces, but the reverse, the right side appearing rather smaller than the left, and even somewhat contracted. In addition to which there was the localised respiratory murmur near the angle of the scapula, at which spot the air appeared to enter more freely than before. These conditions, though subsequently explained, inculcated caution at this time with regard to operative interference. I could not help also feeling some anxiety as to the state of the lung. The evidences of effusion, however, became more pronounced as the case progressed, and these were corroborated by some displacement of the heart towards the left side, and slight bulging of the right. The general condition had, notwithstanding, somewhat improved, and the average of temperature had fallen about a degree. Before proceeding further, it was thought advisable to have a consultation, and on Jan. 18th Sir Andrew Clark was written to, and kindly came down the following day. He confirmed my diagnosis as to the effusion, but advised postponement of paracentesis for a time, unless rise of temperature, growing embarrassment of the breathing and heart's action, failing general condition, or indications of hectic, should render it necessary at an earlier period.

On the morning of the 24th the patient continued in much the same condition; in the evening, however, there was a marked change for the worse. She had had a restless, feverish day; and when I visited her at about 9 P.M. I found her symptoms had assumed a serious aspect. The axillary temperature was 103°; pulse small, about 135 (partly no doubt accelerated by emotion); breathing distressed; respiration above 40. I therefore determined to postpone the operation no longer, and that night, with the assistance of Mr. Farrant Fry, tapped the chest, under ether spray, with the aspirator in the seventh intercostal space, below where the breath-sounds were heard, and in the posterior axillary line, and withdrew rather more than half a pint of purulent fluid. After this quantity had been taken the aspirator, although the cannula was cleared, ceased to act. As we found the tube of the instrument blocked by fibrinous coagula, we assumed, incorrectly as the sequel showed, these to be the cause of the stoppage. Very material relief, however, especially to the breathing, was afforded by the operation. After the subsidence of some coughing the patient had a good night, having slept calmly for more than four hours continuously. At 11 A.M. (25th) the temperature was 99°, at 9.30 P.M. 100·5°, the pulse and breathing quieter, and the general condition much improved. As, however, the nature and the quantity of the fluid withdrawn, together with some remaining symptoms, indicated the necessity for further relief, a free incision into the pleural cavity was determined on, which was accordingly made the next morning at the site of the previous aspiration, but without the slightest appearance of pus or any other fluid. I had cut into an empty sac. It was evident, however, that there was more fluid pent up somewhere. I passed my finger freely into the cavity, and found the sac from which the pus had been withdrawn surrounded, especially above, by firm adhesions. I then passed a silver catheter through the wound, and made its point project into the ninth interspace, and (as I originally purposed for more efficient drainage) cut down upon it, but with no result whatever in the way of discharge. The remaining pus was clearly encysted above, the dense adhesions felt in that direction probably forming the floor of the cavity. I asked Mr. Fry (who most efficiently administered the anæsthetic, and whose kind co-operation I have to acknowledge) to pass his finger in, and he thought he felt slight fluctuation. I then passed a small long cannula (belonging to the aspirator case) up to this septum—a distance, as near as I could guess, of between two and three inches,—keeping it as near as I could to the parietes of the chest, to avoid the chance of wounding the lung, and through this thrust a trocar, and pushed both onwards. On withdrawing the latter, to our infinite relief, a drop of pus made its appearance at the mouth of the cannula. I at once enlarged the opening thus made with a bistoury, and a gush of pus took place and flowed freely through both external wounds. A full pint was measured, and at least half a pint or more in addition must have escaped. The patient was greatly relieved. A large-sized drainage-tube was inserted through the upper wound into the upper cavity, the lower wound being also kept open to allow of the escape of any pus that might find its way to the lower part of the pleural cavity from the upper cyst. The wounds and drainage tube were then completely covered over with a thick layer of carbolised tow, and this again by some layers of carbolised gauze. A hypodermic injection of morphia was then given, and the patient left to rest.

The morning and evening temperature on the 27th was 99°, and varied but little from this for about a week, when the average was somewhat higher. The drainage appeared perfect, some fibrinous shreds being discharged with the pus, which was not in the least offensive. The secreting action of the cavity first opened appeared also to have ceased. During the subsequent dressings night and morning the atmosphere surrounding the patient was impregnated by the vapour of pine wood oil diffused by

[1] Brit. Med. Journal, vol. i., 1879.

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means of a steam kettle, into the water of which three teaspoonfuls of the oil were poured. This, acting as an antiseptic, together with the carbolised dressings, &c., though not perhaps strictly Listerian, contributed, I believe, to preserve the purulent discharge in the pure and inoffensive condition which was maintained during the whole period of the treatment. It is, perhaps, unnecessary to say that all the drainage-tubes and other instruments were immersed in a carbolic lotion before being used.

As the case progressed there were occasional periods of febrile disturbance which had to be met, but as the interest of the case centres in what I have above described, I will not prolong this paper by any detail concerning these, nor occupy space and time by a record of the general treatment, medicinal, dietetic, &c., which was adopted. One thing, however, I may note as having had a favourable influence in hastening the satisfactory result. The pyogenetic cavity being situated at a high level—i.e., opposite the submammary region—I adopted the plan of raising the patient to an upright sitting position during the dressings, and afterwards for half an hour out of bed before them, when she was also desired to walk about the room. The consequence was a freer discharge and more complete emptying of the cavity. This appeared to have a decided effect upon the temperature (which had varied from 99° to 100° or 101°) and upon the subsequent progress of the case. I gradually reduced the length and calibre of the drainage-tubes, until the last used, and finally withdrawn about March 18th, was a portion of a No. 4 catheter à boulé, a little fibro-serous discharge being all that remained at that time. The temperature was normal on March 15th and continued so. The upper wound healed satisfactorily soon after the withdrawal of the catheter, the lower one having been allowed to close some time before. The general health rapidly improved, the breath-sounds became more distinct and extended, the percussion note clearer, the heart also returning to its normal position. At one time there was some contraction of the right side, with slight curvature of the spine, but these gradually diminished, and her strength, breathing power, and capacity for exertion steadily increased. I examined her carefully twice in April and again about a week ago. The spine is straight and almost perfect symmetry has been regained. The percussion note and respiratory murmur are normal in front, or very nearly so—not quite so clear or distinct behind, although fairly restored, excepting at the lowest part of the base of the lung. She is able to take active exercise, rides on horseback, mounts stairs or a hill without embarrassment, and nearly as well as before the attack, from which, indeed, she may now be said to have completely recovered.

The case was of course one of great and continued anxiety. In 1879, Dr. Wilks thus writes: "Amongst the numberless affections of the lungs and their appendages which, during the last two or three years, have presented the most difficult problems of treatment, have been localised pleuritic effusions or empyemata." The views upon this question of treatment, especially in regard to operative measures and subsequent management, have undergone a marked change during the last few years. It was stated by an eminent authority, M. Jaccoud, in 1879,[2] that he "had acquired proof that multilocular pleurisies do not bear thoracentesis satisfactorily;" and that "multilocular acute pleurisy ought not to be treated by thoracentesis; puncture is only authorised in order to relieve in emergency the vital indication resulting from really imminent suffocation,"—a doctrine entirely opposed to the lesson derived from the case I have described, as well as probably from some others, more or less similar in character, of which two have been recorded by Professor Morgan of Manchester,[3] and one by Dr. Darwin,[4] though in the latter the empyema pointed in the thoracic wall, and was there opened. There are few also who would now, I think, be disposed to adopt, "even if the case should run altogether a normal course," the heroic measures recommended in an exhaustive article on this subject, largely read and quoted, in Ziemssen's Cyclopædia, involving the frequent cleansings of the pleural sac with water, followed for several days with a solution of common salt; then, after a few days, replacing this with compound tincture of iodine, in 20 to 50 times its bulk of water, or solutions of permanganate of potash or of carbolic acid, "even if there is no fever and the contents of the pleural sac are not fetid."

[2] British Medical Journal.
[3] THE LANCET, vol. i., 1881. [4] Ibid., vol. ii., 1882.

With regard to the localisation of the purulent cavity, the only instance I have met with, partially corresponding to the one I have given, is recorded by the late Dr. Fagge, in which fluid was found, post mortem, filling the upper part of the pleural cavity, while crepitant lung tissue still existed in the lower part. He states, also, that the limitation of such effusion by adhesion is seldom so complete as to lead to the formation of two or more collections of fluid entirely cut off from one another. Here the limitation was complete.

I have recently (July 27th) examined the patient, and find the right lung fully expanded and the respiratory and percussion-sounds normal.

Swansea.

CASES OF

URINARY DIFFICULTIES OCCURRING IN BOYS.[1]

BY WILLIAM THOMAS, F.R.C.S.,
HON. SURGEON TO THE BIRMINGHAM AND MIDLAND FREE HOSPITAL FOR SICK CHILDREN.

URINARY troubles in children present many points of interest, though they may not perhaps be of so serious a nature as similar conditions in adults. The following cases appear worthy of record, partly from their comparative rarity, and partly from the treatment adopted. All of them occurred at the Birmingham Children's Hospital, and I am indebted to the various resident officers for most of the notes appended.

Extravasation of Urine.

CASE 1.—George R——, aged four, was brought to the Birmingham Children's Hospital on Oct. 2nd, 1880. His mother gave the following history. The child had always complained of pain in his abdomen. When he was three years old his mother was in the workhouse infirmary, and the boy in the children's ward of the same institution. The nurse told his mother that he could not hold his urine, which was constantly dribbling. Medicine was prescribed, and on leaving the infirmary his mother noticed nothing wrong with him, nor was any peculiarity observed about the penis. He was quite well for some time until Sept. 20th, 1880, when he complained of being unable to micturate. During the whole day he strained very hard, holding on by the bedpost like a woman in labour. He was seen by a doctor in the evening, who ordered medicines and fomentations. On the morning of Oct. 1st the penis began to swell, and the doctor recommended him to be brought to the Children's Hospital. I saw him first on Oct. 2nd. The bladder was distended to the umbilicus; there was much elastic swelling of the penis; the scrotum was large and œdematous; and general œdema extended along both inguinal regions, across the pubes, and backwards in the perineum to the base of the triangular ligament. Free incisions were made into the swollen parts, from which clear but slightly blood-stained fluid escaped. The patient was placed in bed and the parts irrigated with weak carbolic lotion (1 in 100). At first a catheter was placed in the bladder, but as it appeared uncomfortable it was withdrawn after three hours.—Oct. 3rd: Urine drawn off at 7.30. Circumcision performed at 10, relieving the glans from the pressure of the still œdematous prepuce. The bleeding was arrested by forci-pressure. Child much more comfortable; only complains of thirst. Some tenderness over the lower part of the abdomen, none elsewhere.

The notes of this case, which were taken daily, show that catheterism was required to empty the bladder for about seven days, after which the urine was voided spontaneously; that it spurted through one of the incisions near the root of the penis on the right side; that an abscess formed in this situation, and a considerable time was required before urine and pus ceased to be discharged from it; that the boy recovered without any permanent injury to the urethra or penis, and that no stone was found. What was the cause of retention and the seat of obstruction to the flow of urine in this case? As a catheter could readily be passed into the bladder, it seems hardly likely that a calculus in the urethra produced the stoppage. The history suggests that a calculus

[1] The substance of this paper was read at a meeting of the Midland Medical Society last session.

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blocked the urethra, caused ulceration, and escaped: and the fact that an abscess and a sinus formed near the root of the penis, through which urine passed readily, points to the position of the ulceration. But as no calculus was discovered, the evidence is not complete. The boy had also a tight phimosis, enough of itself to cause obstruction. The extravasation, as in all the cases I have seen among boys, first distended the penis, then passed to the scrotum and along the inguinal regions; so that the phimosis might have had more to do with it than seemed at first apparent.

CASE 2.—That a phimosis may lead to extravasation is clear to me from a case which came under my care some four or five years ago. The patient was a little boy about three years old. The penis was enormously swollen and translucent. Circumcision was at once performed, and on examination of the removed foreskin an opening was discovered on the inner surface, through which the urine had passed. No incisions were made in the skin of the penis in this case, although the swelling was great, and on removal of the prepuce urine gushed out; but the free exit afforded by circumcision quickly reduced the enlargement, and although the penis for some days was of a dusky red, no sloughing or even suppuration occurred.

CASE 3.—Albert H—— was brought to the Children's Hospital in November, 1877, with enormous swelling of the penis and areolar tissue about the pubes. The house-surgeon requested one of my colleagues, who happened to be in the hospital at the time, to see him. Several free incisions were made into the swelling, from which urinous fluid escaped. I saw him shortly afterwards, and ordered irrigation. The case did well in every respect but one. One of the incisions had been so free that the urethra was opened for about an inch, and a penile fistula resulted which afterwards gave me much trouble. In this case, as in the majority of such cases in children, there was no necessity for deep incisions. Circumcision seems to relieve the swelling and drain off the effused urine much more effectually than incisions into the skin, and the urine is not very irritating to the tissues. The severe cases which occasionally occur, such as are reported by Mr. Cooper Forster in his work on the Surgical Diseases of Children, are exceptional. I believe that irrigation is an important aid to treatment, and exercises a considerable effect in the prevention of inflammation and sloughing, which the old treatment by poulticing seemed rather to encourage.

CASE 4.—*Congenital Malformation of Urethra, causing difficulty in micturition; treated successfully by Suprapubic Cystotomy.*—Edward J. H——, aged four, was admitted into the Children's Hospital on July 3rd, 1885, under the care of my colleague, Mr. G. Elkington. His mother stated that he had never been a healthy child, and always seemed low and pining. He never from his birth micturated properly, the urine either passing in drops or in a stream not larger than a fine needle; micturition was also very painful, the child screaming and seizing hold of the penis, so that he always dreaded it. His bowels were irregular, and the motions were sometimes white and firm, but often like matter mixed with blood. He had once or twice passed a drop of blood at the end of micturition, but never any gravel. He had not suffered from any zymotic disease. He was seized with two convulsive fits last December, and the doctor thought they were due to the urinary irritation. On examination after admission the above account of his symptoms was fully confirmed. The urine could only be passed in drops or in a very fine stream, and sometimes dribbled away; frequently the boy was unable to pass it until he had been placed in a warm bath. His bladder was considerably distended. The urine was alkaline, and contained about a fifth of a column of pus, but no casts could be found. His prepuce had somewhat the hooded appearance seen in hypospadias; the meatus was in its usual position, and a No. 6 catheter could easily be passed for about an inch down the urethra. Several attempts were made, but no instrument or fine probe could be inserted further; the urethra beyond seemed to communicate with the bladder by some fine channel, but the extent and position of this could not be made out. There was no apparent swelling or enlargement of the urethra beyond the constricted part, when straining during micturition.

Mr. Elkington going abroad, he kindly transferred this patient to me. I at once determined to open his bladder above the pubes and explore the urethra from its commencement. My reasons for adopting this course were founded chiefly on the uncertainty as to the situation and extent of the obstruction to the flow of urine. It was easy after the event to see that a different course might have been adopted, possibly with success; but at the time, we had to deal with a contraction of the urethra—how produced, and its extent and nature, whether congenital, mechanical, or inflammatory, were not apparent. The operation was performed on Aug. 4th. An incision about two inches long was made in the median line above the pubes, the recti tendons divided, and the bladder exposed; this was freely opened by a transverse incision. The bladder wall, although distended, was much thickened, and its mucous membrane in a state of chronic catarrh. It contained some four or five ounces of thick, stinking, purulent urine. Passing my finger into the bladder, I found the urethra, and easily directed into it a No. 7 gum-elastic bougie; it passed readily to the obstruction, and on examination its point could be felt at the end of the *glans* penis and on the right of the meatus. The thin stratum of skin covering it was divided and the bougie passed through, withdrawn, and afterwards repassed into the bladder from the meatus. The complete patency of the urethra was thus established. There was some hæmorrhage from the distended veins covering the bladder, which soon ceased. The upper part of the skin wound above the pubes was brought together by two silver wire sutures, the rest being left open for the free escape of the contents of the bladder. Perhaps it would have been an advantage to have washed out the bladder thoroughly, but this was not done, and probably the escape of fetid matter into the areolar tissue gave rise to the subsequent slow progress of the case.

At first the child progressed favourably; at the end of a week there had been no rise of temperature; and ten days after the operation he began to pass all the urine by the urethra; but when the urine ceased to pass over the pubes, inflammatory action took place about the wound, abscesses formed in the areolar tissue above the pubes and delayed healing, besides reopening the communication with the bladder. The quantity of urine passed by the urethra and by the wound varied much, sometimes scarcely any passing by the fistula, at others a considerable proportion, perhaps one-fourth. The urine became clear, and the power of retention, which did not at first exist, was gradually acquired. Four months after the operation a fistula still remained, and on exploring this a buried suture was removed, after which the fistula gradually closed, and the patient was discharged cured. Careful examination still shows that a kind of septum was present near the termination of the urethra, dividing it into two tubes, and acting as a valve to prevent the discharge of the urine. The case, so far as I am aware, is unique.

CASE 5. *Complete Rupture of the Urethra from a fall on the Perineum, with extensive separation of the divided extremities; treated by suture, without catheterism; perfect and rapid recovery.*—Harry J——, aged eleven, was admitted on Oct. 10th, 1885. The day before he had fallen with his perineum across a rail. The fall caused much pain and inability to micturate. The surgeon who was called in attempted to pass a catheter, but without success, and the boy was sent to the Children's Hospital. The resident officer also tried catheterism, but was unable to reach the bladder. I saw him for the first time in the evening of the day of admission. He was then in great pain from distension of the bladder, which reached to the umbilicus. The scrotum was much swollen and dark-coloured, the perineum black from ecchymosis, and there was also some ecchymosis along the right groin. Chloroform was given and the scrotum freely incised on each side; this did not free much fluid; the tissues were gelatinous-looking, and the slight serous discharge from the cut surfaces had no urinous odour. A catheter was introduced into the urethra, but after passing easily for about three inches it seemed to enter a cavity which was evidently not the bladder, although about a tablespoonful of bloody urinous fluid was withdrawn at each attempt. The perineum was incised, and on passing the finger into the wound the point of the catheter was felt in a large cavity, which was filled by coagulated blood and some urine. It was determined to wait until morning before any further operative proceedings were undertaken. In the meantime the cavity was ordered to be freely syringed out with weak carbolic lotion and the surface of the scrotum and incisions irrigated. The bladder was aspirated above the pubes and 23 oz. of slightly turbid urine withdrawn. Five minims of tincture of opium to be taken every four hours.

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Oct. 11th: Has passed a fairly good night. Swelling of scrotum much diminished; no urine passing by incisions. Chloroform administered, the boy placed in the lithotomy position, and the perineum incised in the median line until the bulb of the urethra was exposed and the cavity of the perineum fully opened. The urethra was then seen to be completely torn across just behind the bulb; the posterior part was retracted and separated for about two inches, lying deeply in the perineal cavity. A catheter was easily passed through this into the bladder, and some urine withdrawn. A lithotomy staff was next passed along the whole extent of the urethra into the bladder, and the separated parts brought together and stitched with three silver wire sutures. The sutures were passed completely through the wall of the urethra and each tied outside in a reef knot, the ends being cut short. With the staff still in the bladder, the membranous part of the urethra was opened by an incision such as is made in lithotomy to allow of the escape of the urine by the perineum, and, by keeping the stitched urethra free from contact with that fluid, to give a better chance of union. A tube was passed through the incision into the bladder, the boy placed in bed, and irrigation continued.—12th: Patient looks comfortable; has passed a good night; temperature normal. A black clot fills each incision in the scrotum; urine passes freely by the tube. A warm water enema was administered, by which the bowels were freely moved.—13th: Continues improving; tube had partly slipped out and was completely withdrawn, as the urine escapes freely without it.—16th: As there appeared to be rather an ammoniacal odour about the wound, a flexible indiarubber catheter was passed into the bladder from the perineum. The urine withdrawn was clear, pale straw colour, and free from any ammoniacal odour. The same catheter, a No. 7, was passed down the urethra into the bladder quite easily. This was the only time an instrument was passed along the urethra from the time of the operation. For the next few days the boy steadily improved, and on the 26th it was noted that all the urine passed by the urethra, and that the perineal wound was rapidly closing.—Nov. 13th: A careful observation was made of the size of the stream passed during micturition; it was estimated to be as large as a No. 8 catheter, and was attended by no straining or pain.—23rd: Perineal wound quite healed; boy to get up.

I have seen this patient about every month since, and he continues in every respect well. The size of the stream of urine during micturition is larger than when he left the hospital; no induration or pain is experienced at the site of the sutures. It will be observed that these were not removed; they became so quickly buried in the wound, and excited so little irritation, that it was unnecessary to disturb them. Hitherto they have given no trouble, and the boy would not be conscious of their presence if he had not been told.

I believe there are several cases on record in which suture of a ruptured urethra has been practised; but as yet it scarcely seems to be a recognised proceeding, as our surgical text-books say so little about it. My friend, Mr. Hawkins, had a somewhat similar case to the above, with an excellent result; and Mr. Mayo Robson has, I believe, excised a stricture and successfully united the two parts of the urethra. Mr. Birkett's case is also well known. But every additional case is worth recording, as showing that in such injuries to the perineum from falls or sudden impact, attended with retention of urine, we ought at once to dissect down to the urethra, ascertain the amount of damage, and endeavour to repair it. Such a course of proceeding, more frequently followed, would do away with the surgical difficulties in the relief of the miseries of traumatic stricture by preventing its occurrence.

PRESENTATION TO SIR DYCE DUCKWORTH.—On Saturday last the matron, many of the sisters, and nurses of St. Bartholomew's Hospital assembled in John ward to present a testimonial to Sir Dyce Duckworth on the occasion of his resigning the medical lectureship in the nursing school of the hospital. The testimonial consisted of a Doulton ware salad-bowl, mounted in silver, and suitably inscribed, together with a large photographic album and an address. Sir Dyce Duckworth expressed his thanks for the very handsome gift, and regretted that he was compelled to give up teaching in the nursery school, which he had always been much interested in since he began the lectures nine years ago.

NOTES OF A CASE OF GASTROSTOMY.

By GEORGE A. HAWKINS-AMBLER, L.R.C.P.I., &c.

D. L——, master dyer, aged sixty-one years, came under my observation on November 14th, 1885, when I was called to him in consequence of a severe attack of hæmorrhage, which came on suddenly whilst he was standing at his office desk early in the morning. He "felt something cut or break" in the throat, and blood came up in mouthfuls to the extent of about two pints. Complete rest in bed, the hypodermic injection of three grains of ergotin, and the exhibition of half-drachm doses of oil of turpentine in egg albumen every three hours was followed by entire stoppage of the bleeding. These circumstances—the patient's age, hæmorrhage easily controlled, with the following symptoms—led me to diagnose cancer of the gullet. Family history good; no history of syphilis. With the exception of repeated attacks of quinsy he has always enjoyed good health. For two years past he has felt a slowly increasing difficulty in swallowing, and in July last consulted a surgeon who, by dilating the œsophagus with bougies, enabled him to swallow with more ease for some months. The last time the bougie was passed the instrument was stained with blood, and he grew alarmed and never went again. From July to November he underwent no further treatment, but lived on thick soups with such solids as Yorkshire pudding, which he could swallow with difficulty, and milk foods. A loss of some two stones in weight, however, indicated the progress of the disease and insufficiency of food; but he carried on his business regularly up to Nov. 14th. The recent hæmorrhage precluded the passing of a bougie; but I learnt from his former attendant that the constriction was opposite the manubrium sterni. The hæmorrhage relieved the constriction somewhat, so that for a fortnight later he could swallow dry oatmeal porridge. I asked for the opinion of Dr. T. Kilner Clarke of Huddersfield, which confirmed my diagnosis of cancer, and suggested a gastrostomy as the only thing to be done. I may add there were no physical signs whatever to help the diagnosis. As the patient could not be adequately fed, and the weakness increased rapidly, especially after a second attack of hæmorrhage, the operation was done, as soon as patient gave his consent, Dec. 17th, by Dr. Clarke.

Half a pint of Benger's food was given by the mouth at 6.30 A.M. and a Slinger's nutrient suppository at 7.30. The operation commenced at 9 o'clock A.M. Ether was administered, but was soon changed for chloroform, as the action of the abdominal muscles was tumultuous. The margins of the stomach being ascertained by percussion, an incision four inches long, commencing three-quarters of an inch above the edge of the ribs, was made in the line of the fibres of the rectus abdominis, an inch and a half internal to the left nipple-line—viz., half an inch to the inner side of the linea alba. After the integument and fascia had been divided, the fibres of the rectus came into view, and were separated by the handle of the scalpel, and held apart by retractors till the peritoneum was reached. This was divided on a director, and the stomach readily found and recognised by its thick substantial coats and arrangement of vessels, and drawn well forwards. Two silk loops were inserted into the stomach at an interval of one-third of an inch apart at its most presenting part, and four silk sutures on either side, each traversing half an inch of the serous and muscular coats of the stomach, brought its wall into close contact with the margins of the wound, leaving exposed at the bottom of the wound a piece of stomach the size of a sixpence. The peritoneum was united with carbolised catgut sutures, and the margins of the wound carefully approximated above and below the loops in the stomach. A small piece of drainage tubing was placed on the lower part of the would, and the whole covered in with salicylic silk and bandages. Antiseptic precautions were used throughout. The patient was fed every two hours with Slinger's suppositories, which proved of great value, and injections of peptonised milk and other foods alternately, all of which were retained. The rectum was washed out with warm water prior to each nutrient injection, which gave the patient great ease and comfort, and the bowels were relieved daily. The temperature kept at and below normal for a week after the operation, and there was no bad symptom throughout. The wound was dressed under the spray every second day; the drainage-tube was removed at

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the second dressing. On the fifth day the operation was completed by an incision in the stomach wall between the loops, which were then removed. Previous to this the patient was given separately the two parts of the effervescing draught, the effervescence of which in the stomach assisted the operation by dilating that organ and bulging it forwards. A piece of gum elastic catheter (No. 9) was now inserted, some Benger's food syringed through, and the opening kept patent by the insertion of a piece of tent, which was removed in twenty-four hours. At first there was great leakage, the dressings—tenax, tissue, and flannel binders—being saturated at each feeding. But this slowly lessened, and the skin, which was extremely irritated and inflamed by contact with partly-digested foods, healed under the application of vaseline and zinc ointment. The wound filled up, until on Jan. 25th there was merely a round aperture for the insertion of Krohne's apparatus (Bryant). A tent has since been inserted for a few hours to dilate the aperture, which has a tendency to close. Digested foods, soup, beef-tea, eggs, wine, and whisky are administered every three or four hours to the extent of a pint each time, and there is no gastric discomfort. The bowels act daily with the warm water enema. The patient gains strength, sits up twice a day, and is only inconvenienced by the constant expectoration of saliva, mucus, &c. The gain in strength and comfort resulting from the operation is most marked and gratifying, and there can be no question that life has been considerably prolonged by it.

I have ventured to describe the case at this length because (1) the operation has been considered to be on its trial; (2) the books do not describe it as fully as the student and young practitioner desire; (3) because of one or two points in the operation now described which seem worthy of notice—viz., (*a*) mapping out the margins of the stomach before making the primary incision; (*b*) the advantages derived from making the incision parallel to the fibres of the rectus, lessening hæmorrhage, and providing, as has been pointed out, a sphincter for the opening subsequently; (*c*) and finally, in performing the second part of the operation—viz., the opening into the stomach cavity—it is, unless the stomach be distended, extremely easy to fail, from the mucous coat being so easily separable from the serous and muscular coats; this is obviated by the exhibition of the effervescing draught separately as described before proceeding to the completion of the operation.

Kirkburton.

A CASE OF ACTINOMYCOSIS.

BY WILLIAM O'NEILL, M.D., M.R.C.P.,
HONORARY PHYSICIAN TO THE LINCOLN LUNATIC HOSPITAL, ETC.

IN November of last year Mr. S——, a farmer, fifty years of age, consulted me about a pustular eruption on the left wrist and forearm and a slight apparently glandular swelling under the right ear, both affections he had noticed in the early part of the preceding month. There were also four or five smaller swellings in the neighbourhood of the clavicles and one in the left axilla. As the patient was somewhat out of health, I thought the tumours might either be of a strumous character or might be owing to a cachectic state of the system from defective sanitation. The patient thought he was suffering from blood-poisoning, and suspected the water he had been drinking, but on investigation the water and drainage were found to be good. He was ordered a mixture containing iodine and arsenic, and as a local application for the eruption citrine ointment. In a few weeks the skin eruption had almost disappeared and the tumours were slowly diminishing in size, when in January of this year he was attacked with inflammation of the tonsils and an aphthous-looking state of the mouth. In February under suitable treatment the mouth was better, but two or three new enlargements had appeared, and some of the old ones had increased in size. The one below the ear was as large as a small hen's egg. It was smooth, nearly painless, elastic to the touch, and slightly movable. Under the chin there was a globular enlargement as big as a filbert, and another of about the same size on the back of the head. The patient was now ordered a mixture containing solution of perchloride of mercury and iodide of potassium, and an ointment of iodide of ammonium. In March the state of things was looking more favourable, when unfortunately severe bronchitis set in, which on its subsidence left matters much worse than before. The tumour in the angle of the neck had extended in all directions, more especially downwards. It had also suppurated, and two or three sinuses gave exit to a whitish purulent fluid, which frequently contained small yellowish particles. The sore generally presented a reddish granulating surface, but occasionally dark-coloured scabs would form on it. Several of the smaller tumours on the lower part of the neck had nearly disappeared, but the one under the chin was still large enough to be uncomfortable, and the tumour on the back of the head had become as big as a walnut, and although unulcerated, was so painful that he could hardly sleep on his back. A small swelling had also formed under the left ear. The irritation of the system produced by so many tumours caused an increase of temperature and a hastening of the pulse—however, not so much increase of temperature and frequency of pulse as might have been expected. At this stage of the disease the patient began to take a combination of iodide and bromide of ammonium, but a few weeks ago, seeing that most of the tumours, especially the one in the angle of the neck, continued to enlarge, and being in some doubt as to their exact nature, I advised him to go up to University College Hospital, with the object of having them removed either then or on some future day. Consequently, on June 4th Mr. Redman, a student friend of mine, showed the patient to Mr. A. E. Barker, who kindly examined him, and came almost to the conclusion that he was suffering from actinomycosis. Since the patient returned from London I have been able to find some of the micro-organisms which are supposed to be peculiar to the disease.

I believe it is the opinion of those who have studied the subject of actinomycosis that the malady is communicated from animals to man. There is a probability that the disease may have been thus conveyed in this instance, for a few weeks before the affection made its appearance in Mr. S—— he had been "dressing" calves affected with a disease which he called "ringworm." I have had a photograph taken of two young animals in which so-called "ringworm" is well marked. In these animals there are no lumps at present under the jaws, or in or about their mouths. Ringworm began in them, as well as in several others, by the hair falling off, a reddening or inflammation of the skin, and the formation of ash-coloured scabs, more or less thick, according to the severity of the disease in the part affected. The disease is caused by a fungus which can be destroyed by sulphur or by a mercurial preparation, notably by corrosive sublimate. Whether the fungus of the ringworm in these animals is the same as the parasite of actinomycosis, I am unable at present to say; but, if not identical, I am inclined to think that both parasites are closely allied.

Taking into consideration the source whence the infection of antinomycosis is derived, it will be seen that the disease must have presented itself from time immemorial, and the reason why it has been unrecognised and overlooked and has not been described as a substantive disease until the last few years, is most probably owing to its being confounded in certain of its stages with scrofulous and cancerous affections—with scrofula in its early stages, and with cancer in its ulcerated stages. That it is a serious complaint there cannot be much doubt, for it appears that one-half of the cases which have been published have died, and this serious result is not to be wondered at when authorities on the affection tell us that the disease may attack almost any organ in the body. The fungoid disease may have contaminated Mr. S—— first in the wrist, from the wrist it may have extended to the axilla, thence to the neck, and even the parasite may have had something to do with the causation of the bronchitis.

As to treatment, iodine, arsenic, and mercury have, I think, some power over the disease in its early stages, for the tumours, late in making their appearance, dispersed whilst the patient was taking these medicines, and even the large lumps, on account of their becoming smaller and more movable on one or two occasions, gave hope of their disappearing. After all, in a case of this kind, where actinomycosis appears in the shape of external tumours, the most expeditious and the best treatment would, I believe, be removal by surgical operation.

Lastly, I would remark that the history of the discovery of actinomycosis is very interesting. According to M. Bricon the parasite was first discovered by Italian veterinary

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surgeons, one of whom, Rivolta, wrote about the disease in 1868. In Germany Bollinger rediscovered it in 1877, and gave it the name by which it is at present known. Israel was the first to describe a case of it in a man in 1878, but since then several cases of the disease have been published on the Continent and two or three in this country.

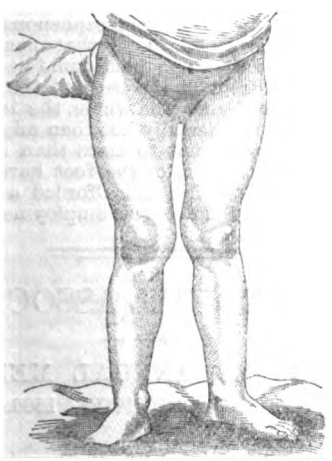
Lincoln.

A CASE OF
SEPARATION OF THE UPPER EPIPHYSIS OF THE LEFT FEMUR.

By A. W. MAYO ROBSON, F.R.C.S.,
SURGEON TO THE LEEDS GENERAL INFIRMARY, LECTURER ON OPERATIVE SURGERY AT THE YORKSHIRE COLLEGE.

In the article by Mr. H. Morris in Holmes' System of Surgery occurs the following passage:—"Several supposed examples of this accident have been recorded, but I agree with Mr. Holmes in thinking that they are not conclusive as to the real existence of this lesion," and again in the same page, "fractures of the neck of the femur are hardly known in childhood, and the upper epiphysis is so small and lies so completely within the hip-joint, that its disjunction is unknown, except perhaps in the fœtus." The case related below is certainly either a fracture through the neck of the femur or a separation of the upper epiphysis; I believe it to be the latter, and in this opinion I am supported by my colleagues at the Leeds Infirmary, to whom I showed the patient. The notes have been furnished by my dresser, Mr. Roper.

W. C——, aged five, was admitted in March, 1886, into the Leeds General Infirmary on account of lameness due to



shortening of the left lower extremity, with the history of having been thrown up four years previously by her uncle, who failed to catch her, letting her fall heavily on the left side. Beyond rest no treatment had been followed out, and the mother was unaware of any other accident having happened to the child, but she had noticed the limp to become more marked during the last few months.

The accompanying photograph, kindly taken for me by Mr. Barling, clearly shows the position of the deformed left limb as the patient stood. The signs on admission were as follows:—Marked limp on walking, the patient leaning to the left; well-marked eversion of the foot, which could, however, be brought parallel with the right without giving pain; ability to completely flex and extend the thigh. Measurement from the anterior superior spine of the ilium to the malleolus showed three-quarters of an inch of shortening on the left side, and from the same point to the lower border of the patella gave a like result, but the distance from the top of the great trochanter to the malleolus was the same on both sides. Nélaton's line showed the left great trochanter to be raised three-quarters of an inch, and Bryant's line was three-quarters of an inch shorter on the injured side. The folds of the buttocks were well marked. On flexing and rotating inwards the left femur the fingers could clearly feel the neck of the femur as far as the head, but the prominent part of the caput femoris was apparently in the acetabulum, and was not attached to the cervix. The muscles of the limb were well developed, and a thickened sole on the left boot almost abolished the limp.

Leeds.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum allorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

UNIVERSITY COLLEGE HOSPITAL.

IMPACTION OF A FOREIGN BODY IN THE ŒSOPHAGUS; LARYNGOTOMY; TRACHEOTOMY; RECOVERY; REMARKS.

(Under the care of Mr. CHRISTOPHER HEATH.)

THE following is one of a class of cases which not unfrequently present themselves in the casualty department of large hospitals, and in which the necessity for immediate interference is imperative. With a history such as that given, after exploration of the pharynx without the discovery of any foreign body, the indication is clearly the line of treatment adopted in this case, the completion of the diagnosis being left until the subsidence of the urgent symptoms. There are few conditions in which a more prompt action or greater self-reliance is required. For the following notes we are indebted to Mr. Hugh Armstrong, house-surgeon.

On May 22nd, W. S——, a boy aged twelve, was brought to University College Hospital casualty room by the father, with the history that while at dinner the boy had fallen back choking. When seen by the house-surgeon the patient was insensible, motionless, much cyanosed, and making strong inspiratory efforts that appeared to draw a small quantity of air into the lungs. Nothing could be felt at the back of the mouth; and, as the case was extremely urgent, laryngotomy was performed with a penknife, and the opening in the crico-thyroid membrane kept patent with a pair of sinus forceps. There was a little bleeding, chiefly venous, which subsided as soon as the asphyxial condition was relieved. The opening, however, did not seem sufficient, so tracheotomy was done, and a tube tied in, the cricoid cartilage not being divided. The boy quickly recovered consciousness, and in about a quarter of an hour was taken into a private ward, put under chloroform, and examined. Nothing could be felt in the fauces or pharynx with the finger. A No. 6 English catheter was then passed along the forefinger down the pharynx, and, when about two-thirds had disappeared, an obstruction was felt, beyond which the instrument would not pass; for it doubled up when moderate pressure was made. A full-sized instrument with a stylet in it was next tried. The obstruction was again felt, and, after somewhat firmer pressure, the catheter slipped on into the stomach. There was no blood on the end of the instrument when withdrawn. A feather was afterwards passed up the larynx through the tracheotomy opening, but no obstruction felt. The tube was replaced, a canopy arranged over the bed, and steam allowed to play under it. While recovering from chloroform the boy vomited a large piece of meat an inch and a half long, three-fourths of an inch broad, and about half an inch thick; and when quite conscious gave the house-surgeon to understand that the obstruction had disappeared. Milk and beef-tea were ordered. The temperature rose to 102° on the following evening, but never went higher. A piece of wet boracic lint was laid over the mouth of the tube, which was kept in for forty-eight hours. When this was withdrawn the wound was covered with wet lint, and by June 8th had completely closed. The boy's voice had regained its strength within a week later.

The after-treatment consisted in keeping the air of the room warm and moist, but the steam kettle was removed on the second day, when the temperature was 102°. No crepitation could be heard over any part of the chest, and the pulse-respiration ratio was unaltered.

Remarks.—The exact cause of the asphyxia in this case is

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doubtful. From the distance which the catheter was passed it may be assumed that the meat lay at the upper part of the œsophagus. But whether this was the position when the boy was brought to the hospital is questionable. Two views suggest themselves to explain the dyspnœa. Either that the fragment lay partly over the orifice of the larynx partly within the œsophagus, or that all lay behind the larynx and reflexly led to spasm of the glottis. The character of the dyspnœa accords better with the latter view, as it was distinctly stridulous. The boy's symptoms, however, were too urgent to allow time for fetching instruments, or an œsophageal bougie would have at once relieved his condition. Laryngotomy was selected on account of the rapidity with which it could be done, and the laryngeal character of the dyspnœa. But the opening was insufficient, so it was decided to perform tracheotomy. The question arose as to whether the tube should be removed after the meat had been vomited. But, considering the somewhat rough handling with the feather that the larynx had been subjected to, it was thought safer to leave it in. This course was justified next morning, for the boy was unable to breathe when the tube was plugged.

NEWCASTLE-ON-TYNE INFIRMARY.

A CASE OF SARCOMA OF THE INTERNAL POPLITEAL NERVE.

(Under the care of Dr. G. H. HUME.)

FOR the following notes we are indebted to Mr. H. Bramwell.

Joseph J--, aged forty, a miner, was admitted on Jan. 28th, 1886, complaining of a swelling behind the right knee and of shooting pains down the leg. He had noticed, four months since, that while at work he occasionally had shooting pains down the outer side of the leg; these pains had become more frequent, and could always be produced by forcibly bending or fully stretching the leg. There has also been sharp pain across the sole of the foot at the base of the toes. A few weeks ago he noticed a lump behind the knee. His health generally has not been so good as usual during the past year, and he has lost in that time a stone and a half in weight. He is a tall, well-developed, but lean man, with pale face and anxious expression. Towards the lower part of the right popliteal space in the median line is a tumour which extends downwards to the arch of the gastrocnemius. The swelling is under the deep fascia, being freely movable when the leg is flexed; fixed, or at most slightly movable laterally, when the leg is extended. Pressure on the tumour causes the shooting pains. The diagnosis arrived at was that the tumour was probably a sarcoma, and from the direction of the shooting pains it was believed to implicate the short saphenous, or possibly the internal popliteal nerve.

On Feb. 4th the tumour was cut down upon, and found to be a soft oval-shaped growth, extremely vascular, intimately connected with the fibres of the internal popliteal nerve, and having the short saphenous nerve stretched over it, the latter fact being that which had mainly given rise to the symptoms. As the growth had not acquired adhesions to adjacent structures, it was separated from the sheath of the vessels, and the internal popliteal nerve with which it was incorporated was cleared for a distance above and below. The nerve trunk was then divided, so as to remove with the growth a portion of healthy nerve at either end. The length of nerve removed, including the tumour, was three inches and a half. The wound healed slowly but without complication, and the man returned to his work as a miner.

Description of tumour.—The growth was encapsuled in the sheath of the nerve, and appeared defined even at the two ends; but there it could not be separated from the substance of the nerve on account of a portion of the nerve fibres passing through it. The bulk of the substance of the nerve lay behind. A longitudinal section of the growth had a coarsely fibrillated appearance; to the naked eye it consisted of strands of fibres pushed apart by soft, easily broken-down material. It was exceedingly vascular, large veins being visible underneath the capsule, and in the interior were one or two blood cavities filled with clot. The minute examination corresponded with this appearance. Masses of small round-celled growth lay between the implicated nerve fibres, and into this new growth numerous hæmorrhages had taken place. In the centre of the tumour a blood cavity three-eighteenths of an inch in length had thus been formed.

Remarks by Dr. HUME.—The interest of this case is twofold. It is clear that with the further growth of the tumour, and the consequent expansion of the supporting nerve fibres, the tendency of the new cell material to break down under the pressure of the blood would be increased. Probably in no long time the tumour would have been thus converted mainly into a blood-containing cavity. Such hæmorrhages are, of course, produced by the rupture of bloodvessels, and if it chanced that a vessel of some size were opened into, the tumour would have at once become pulsatile and have closely simulated an aneurysm. In its position with reference to the popliteal artery the resemblance to aneurysm would have been very close, and correct diagnosis correspondingly difficult. The case therefore illustrates the manner in which sarcomatous tumours so frequently come to simulate aneurysm. It also illustrates one mode of production by that vague class of pathological formations referred to and described in surgical works under the name of blood cysts. Perhaps the best known of such cases is that related by Mr. Moore in the Medico-Chirurgical Transactions for 1886. In that case the cyst originated in the popliteal nerve, became adherent to surrounding parts, and in some portions was composed of "old tough lymph," which contained "small oval cells having indistinct nuclei." Anyone now reading Mr. Moore's narrative will be struck with the probability that the tumour was in reality a sarcoma. The case is further of interest as regards the degree of usefulness of the limb after division of its chief nerve trunk. The leg and foot, so far as cutaneous sensibility and muscular power are supplied by the posterior tibial nerve, were of necessity paralysed. Happily the muscular branches of the internal popliteal to the two heads of the gastrocnemius, being given off, as frequently happens, at quite the upper part of the ham, escaped division, so that some power of extending the foot at the ankle remained. Cutaneous sensibility of the outer aspect of the leg above the ankle and of the foot, which depends on the external saphenous nerve (tibial communicating), also remained, as that nerve had been merely stretched over the tumour and could be pushed aside. The muscles on the front of the leg and the peronei were not, of course, affected. On the whole, the impairment of walking power was wonderfully less than might have been expected, and did not amount to more than a slight limp. The insensibility of the sole of the foot hardly seemed to cause inconvenience; the leg still afforded a firm support, and the patient is now following his employment as a miner.

BRITISH MEDICAL ASSOCIATION.

FIFTY-FOURTH ANNUAL MEETING, HELD AT BRIGHTON, 1886.

THE third general meeting, held on Thursday, Aug. 12th, of which a brief account was given in our last issue, was marked by some interesting proceedings—namely, the presentation of awards, and the invitation by delegates from the United States to members of the Association to attend the forthcoming International Congress.

Sir B. W. FOSTER, as President of the Council, related the circumstances under which the Council had this year decided to award the special Order of Merit instituted by the Association in 1877. The badge of that Order was a medal in gold, silver, or bronze, and it had only previously been thrice awarded. The first recipient was Dr. Davies of Swansea, who had heroically distinguished himself in saving several lives at a colliery disaster in South Wales. On the second occasion it was given to Surgeon-Major Reynolds, for his conduct at the terrible conflict at Rorke's Drift. The third award was made to Dr. W. Farr, whose life had been spent in the study of vital statistics, and in establishing a system of registration which had been adopted by all civilised communities. They now proposed to reward another kind of merit, which had never been recognised by the Association, and too little recognised by the world at large. There were services rendered to every body of men in their corporate capacity—services which developed

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their power, and raised their social and professional status—services too often forgotten, but which left a lasting mark. The Medical Reform Committee was presided over by a gentleman who never lost heart or courage, or failed in industry. In the last Parliament a Bill was introduced which, though imperfect in many of its details, not rising to the level which they wished, yet contained two of the principles for which he had fought so earnestly and well. One of these principles was that every medical man should be thoroughly qualified before he was placed on the Register, and the other was the recognition of their right to be represented on the General Medical Council. For years they had been fighting this battle, and had at last in this Bill got the principle recognised, although not to the full extent which the medical profession had a right to claim.

The PRESIDENT (Dr. Withers Moore) then invested Dr. Waters with the gold medal for distinguished merit of the British Medical Association, and said that he felt very proud to be the instrument of conferring upon him this great honour, which he hoped he would many years enjoy.

Dr. E. WATERS, who was loudly applauded, said he need not say with what feelings he appeared before them. He appreciated the high distinction conferred upon him—a distinction which, of all others, he could have desired to crown his life, and which he trusted he should always prove himself not unworthy of. He had always been, and would always be, a devoted, loyal member of the British Medical Association, from the time when, as a stranger, he had settled in Chester, and had found in the Lancashire and Cheshire Branch life-long friends. He said when, in 1859, he was chosen President of that Branch, he desired and cared comparatively little for the opinion of the general public provided he could only win the esteem and regard of his professional brethren. Subsequently he was elected to the high post of President of the Association, and thenceforth determined to discharge zealously any duty that the Association might impose upon him. He briefly referred to the action of the Medical Reform Committee, and said, in conclusion, that the reward which he had earned at the hands of a body representing 12,000 medical men exceeded his wildest imaginings. He regarded it as one of the greatest treasures that he could have obtained, and he disregarded all else in comparison with what had been conferred upon him.

Sir B. W. FOSTER then announced that the prize founded by the late Dr. A. P. Stewart for the best work done in contagious diseases, had been awarded to Dr. Robert Cory, whose self-sacrificing inquiry into the subject was well known. He also announced that the Middlemore Prize in Ophthalmology had been awarded to Mr. George Berry and Mr. Adams Frost.

The American delegates were then introduced—viz., Drs. Davis (Chicago), Pancoast (Philadelphia), Shoemaker (Philadelphia), Brodie (Detroit), Gordon (Portland), Wylie (New York), Earle (Chicago), Romsey (Michigan), Hitchcock (Kalamagoo), and Peck (Devonport, Iowa).

Dr. N. S. DAVIS commenced by returning thanks for the opportunity afforded them to address the meeting, and for all the courtesies they had received. He related the steps that had been taken to promote the meeting of the ninth International Congress in Washington next year, from Sept. 5th to the 13th, and said that the idea of inviting the Congress to the United States had originated with the late Samuel D. Gross and Austin Flint, sen.—those Nestors in surgery and medicine, who had both gone to their rest. Dr. Flint, at the meeting of the American Medical Association in 1884, had reminded them that theirs was the only organisation representing the whole profession in America, and that steps should be taken to invite the Congress. The invitation was sent, and, after inevitable differences, an organisation had been formed representative of all the profession in every State, as well as the army and navy departments. English, French, and German would be the official languages, and four secretaries had been appointed to each of the seventeen sections. He asked the members of the English profession to come in force, and promised them a welcome as cordial as Americans know how to give. An influential local reception committee had been appointed; and with respect to transit, he begged the members of the British Medical Association to join in exerting their influence to induce the steamship companies to carry members across the Atlantic at reduced rates.

Drs. BRODIE and PANCOAST also briefly addressed the meeting, and repeated the assurances of a hearty and cordial welcome to all who attended the Congress.

A hearty vote of thanks to the delegates was then passed.

Mr. J. R. HUMPHREYS (Shrewsbury) then brought forward a memorial to the Government, proposed by the Shropshire Branch, with reference to the conferment of peerages upon medical men; but the motion, on being put to a division, in a greatly attenuated meeting, was negatived.

The fourth general meeting was held on Friday morning, Aug. 13th, when an address on Public Medicine was delivered by Dr. Mapother of Belfast.

On the conclusion of the address, a vote of thanks to Dr. Mapother was moved by Dr. Taaffe, seconded by Surgeon-General Cornish, and unanimously carried.

Dr. GRANT (Ottawa) expressed the pleasure with which he had listened to the address, and took occasion to return thanks for the hospitality awarded to the American, colonial, and foreign visitors. He trusted that at the International Congress they would see a large number of the members of the British Medical Association. As representative of Canada, he warmly thanked Sir B. W. Foster and those associated with him in the House of Commons for the efforts successfully made in the cause of medical reform.

The concluding general meeting was held in the afternoon of Friday, the 13th inst.

Dr. WATERS moved the adoption of the report of the Medical Reform Committee. He said that in the Medical Act of 1858 the chief points gained were the foundation of a Medical Council, the establishment of reciprocity, and the formation of a Medical Register. In a few years imperfections in the Act became manifest, and the Association took steps to secure its amendment in the way of direct representation of the profession on the Medical Council. The struggle had lasted twenty-five years, and they had now gained large concessions. Dr. Waters said that he did not intend to become a candidate for a seat on the Council, but it would be for the Association to select men who would do them credit and who would be recognised by the Council as able men.

Dr. GRIMSHAW, Registrar-General of Ireland, seconded the motion. He had been a member of the committee until his official duties necessitated his retirement.

The report was then unanimously adopted, as was also the report of the Parliamentary Bills Committee.

Mr. SIBLEY moved the adoption of the report of the Scientific Grants Committee. Grants had been made during the past year to Drs. V. D. Harris, Noel Paton, W. D. Halliburton, Professor V. Horsley, Drs. A. Money, D. Williams, S. H. Martin, and T. Cash, Messrs. R. Stockman, G. A. Atkinson, Drs. Brown, W. Hunter, and P. M. Chapman. The Research Scholarships had been held by Mr. Watson Cheyne and Dr. A. Waller. Mr. Sibley said that the Association voted each year the sum of £600 for scientific research; of this sum £300 was given in divided grants to aid investigators, and the selection was made with great care. The other moiety was divided into two Research Scholarships—each tenable for two years.—Dr. CHADWICK seconded the motion, which was adopted.

Dr. NORMAN KERR moved the adoption of the report of the Habitual Drunkards Committee, and pointed out that the need for further legislation was imperative.—Dr. JACOB (Dublin) seconded the motion, which was carried.

Dr. BRIDGWATER moved the adoption of the report of the Collective Investigation Committee.—Mr. JONES MORRIS seconded the motion, which was carried.

On the motion of Sir B. W. FOSTER, seconded by Dr. B. O'CONNOR, an alteration in the bye-laws, proposed by Dr. Ward Cousins, and referred to the Council, relating to the representation of distinct branches, was put to the meeting and declared carried.

Sir W. FOSTER then moved the election as honorary members of Dr. N. S. Davis (Chicago), Dr. J. S. Billings (Washington), Dr. J. A. Grant (Ottawa), and Dr. W. H. Hingston (Montreal).—The motion was seconded by the PRESIDENT, and carried with applause.

Drs. DAVIS and HINGSTON briefly returned thanks.

The rest of the proceedings consisted in votes of thanks to the Mayor of Brighton for his hospitality and grand reception, moved by the PRESIDENT, seconded by Mr. WHEELHOUSE; to the Mayor and Corporation for the free use of the Royal Pavilion, Dome, and Corn Exchange, moved by Prof. GRIKIE (Toronto), seconded by D. W. STRANGE; to the President of the Association and members of the South-eastern Branch for their splendid reception on the 11th, moved by

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Sir T. CRAWFORD, seconded by Dr. CUMING; to Sir Julian Goldsmid for his invitation to a garden party at St. Ann's-hills; to the managers of the New Club and the committee of the Sailing Club; to the directors of the Aquarium and West Pier; to Mr. E. T. Booth for permission to visit the Bird Museum; to Mr. Halliwell Phillips for his invitation to inspect his Shakesperian relics; to the Executive Committee; to the Duke of Norfolk and Lord and Lady Brassey for invitations to Arundel and Normanhurst.

Dr. CHADWICK proposed a vote of thanks to the President, which was seconded by Sir B. W. Foster and acknowledged by Dr. Withers Moore, who took occasion to correct the misapprehension of his address by his critics. His opinion was that woman had her special vocation, in which she was far superior to man. She was secure in her present position; she would not be secure if she tried to change it. He desired to express his deep sense of the kindness of the members of the Association.

THE SECTIONS.

MEDICINE.

The second meeting of this Section was held in the Music Room of the Royal Pavilion on Thursday, Aug. 12th. Dr. BROADBENT, President of the Section, delivered his address. The subject selected was the Remote Effects of Remedies. After referring to the well-known after-effects of alcohol, he alluded to the mental and bodily derangement induced by eating opium, the miserable irresolution and wretchedness of the man who habitually resorts to chloral, and the childish dementia brought on by the prolonged use of the bromides. He thought that coca is already beginning to claim its victims, who gradually develop an excitement which becomes maniacal or an exaltation like that of general paralysis. The subject of gout was given as illustrating the remote effect of remedies. The effect produced by continued and excessive use of colchicum and other drugs having a similar action, and the consequences following the neglect of such treatment which will clear the system of the gout poison, were especially drawn attention to. With reference to the latter he urged: "It can scarcely be too often repeated that all the effects upon the arteries on the one hand and the heart on the other associated with contracted granular kidney—viz, arterial degeneration, cerebral hæmorrhage, aneurysm and dilatation of the left ventricle, and valvular disease—are just as commonly produced independently of kidney disease by high pressure in the arterial system due to other causes; and such pressure in an extreme degree may be induced prematurely by the means taken to keep down gout." Another cause of injuriously high arterial tension was the "Banting" treatment of obesity as understood by the public. In this the non-nitrogenous sugars and starches were taken very sparingly—the amount of fluid taken into the system was reduced as much as possible, and the subject lived on a highly nitrogenous diet. The imperfectly oxidised nitrogenised waste present in the blood provoked resistance in the capillaries, and generated tension in the arteries. Exercise and an adequate supply of water, which were generally omitted, were essential to active metabolism and the working off of impurities. Another example of injury given was that furnished in asthma. Certain drugs afford alleviation of symptoms, but many popular powders contain powerful alkaloids, which produce after-effects on the nervous and vascular systems. "When we see the stupefied mental condition and the congested face and eyes, and note the large, weak, sluggish pulse, showing paralysis of the arterial walls, it is clear that such effects cannot be indefinitely repeated with impunity." "The right ventricle loses its tone like the muscular coats of the arteries, and, instead of becoming hypertrophied, yields to the resistance in the pulmonary circulation, and is dilated, finally giving rise to systemic venous stasis and dropsy." A striking illustration of his subject was given by the too careful and restricted diet of certain forms of so-called indigestion. One kind of food after another was left off, but still with the same discomfort and a sense of repletion after food. The appetite being wanting, a starvation point becomes almost reached. Instances of severe neuralgia, spurious attacks of angina pectoris, and serious debility, were related as having followed this line of treatment. Again, in the winter indigestion of women and weakly men, the functional energy of the stomach required stimulating by extra food, such as beef-tea, egg-flip, stimulants at meals, and tonics. What was wanted in winter indigestion was protection from the depressing influence of cold or the means of neutralising it.

A vote of thanks was accorded to the President for his address.

Dr. ORD followed with a paper on the Remote Effects of Gall-stones. In the discussion succeeding, Sir Peter Ede, Dr. Clifford Allbutt, and Professor Charcot took part. Papers on Mental Symptoms with Locomotor Ataxy, by Dr. SAVAGE; on Functional Albuminuria, by Dr. RALFE; and on the Relationship of Urea to certain Diseased Processes, by Dr. OLIVER, subsequently followed.

The third meeting of this Section was held on Friday, Aug. 13th. Dr. R. CROCKER demonstrated the Removal of Hair by Electrolysis. A paper was next contributed by Dr. MANTLE on the Etiology of Rheumatism, considered from a Bacterial point of view. Numerous specimens of micro-organisms found in acute and chronic rheumatism were shown. Inoculations had been made from the serum of joints and also from the blood taken under the usual antiseptic precautions. Cultivation shows bacilli having a peculiar mode of growth, preferring the surface and presenting a brown reticulated scum. The organism was said to grow best in an acid medium, and to stain well with Gram's method. These organisms had been found in over forty cases.—Dr. HAYCRAFT followed with two papers, the first with a demonstration on a New Method of Estimating Uric Acid, and the second on Some Points in the Coagulation of the Blood. Secretion from the leech was found to prevent coagulation, and when injected into animals produced temporary hæmophilia, for this bleeding continued from the smallest capillaries, but could be stopped by styptics such as perchloride of iron. There were also found extravasations within the body. This and other diseased conditions were thought to indicate that the coagulation of the blood was a necessary and temporary preventive of bleeding, so as to give time for the formation of new tissue. In hæmophilia, although time may be given for formation of healing tissue, bleeding may still continue, indicating probably diseased conditions of the connective tissue elements of the body. The author much desired specimens of hæmophilia blood, and the tissues of a wound preserved in alcohol. Other papers followed.

SURGERY.

On Thursday, Aug. 12th (Mr. Erichsen, F.R.S., President of the Section, in the chair), a series of papers on the Surgical Treatment of Hepatic Disease was read. The papers dealt less with general principles than with individual cases, and hence no adequate or satisfactory discussion took place. Dr. George Harley discussed and advocated hepatic phlebotomy and puncture in hypertrophic congestion. Mr. J. K. Thornton related some cases. Mr. Lawson Tait's contribution was by far the most important; this included seven cases of exploratory incision for a variety of conditions, including abscess, tumours of the liver and gall-bladder, and of cancer, with one death; thirteen cases of hepatotomy, chiefly for hydatids, without a death; and thirty cases of cholecystotomy, with three deaths. Mr. Willett related a case of cholecystotomy, and Mr. Howard Marsh a case of abscess of the liver opened by free incision. Mr. Adams read a paper on the Treatment of Congenital Displacement, so-called Congenital Dislocation, of the Hip-joint by long-continued recumbency and extension. The recumbency should not be less than one year, and might be continued under favourable circumstances for two years, or even longer. It was necessary to sustain the general health by horizontal gymnastics, &c. Mr. Ernst demonstrated a new and very ingenious extension couch, which he had constructed, at Mr. Adams's suggestion, for the effectual carrying out of this plan of treatment. Mr. Edmund Owen read a paper on Psoas Abscess, when and how to open it.

On Friday (13th inst.) what may truly be called *the* surgical paper of the meeting was read by Mr. VICTOR HORSLEY, entitled "Advances in the Surgery of the Central Nervous System." In introducing the subject, the author laid special weight on the fact that all the advantages, both scientific and operative, claimed in his paper were the results of lessons learned from experiments on monkeys. It had been said that monkeys were not quite like human beings, but this was not correct from a surgical standpoint. Time did not allow of any elaborate details, so the author contented

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himself with a brief recapitulation of the chief facts of the case. He referred to (1) the preparation of the patient for the operation, which consisted in shaving the scalp, and then *thoroughly* cleansing the head; (2) anæsthesia—for this he preferred chloroform, previously giving subcutaneously a quarter of a grain of morphia; the morphia produced contraction of the arterioles of the brain, and there was consequently less oozing, and a less amount of chloroform sufficed; (3) strict Listerism, pure and simple—the spray was used, and the usual gauze dressings; (4) the line of incision—instead of the old-fashioned crucial flaps, a semilunar was advocated, as being easily displaced out of the way of the later steps in the operation, as less likely to suffer from interference with the blood circulation, and therefore with the vitality of the flap; (5) the use of large trephines—it was so difficult to hit the exact spot, and yet so necessary to have ample room, that the old small trephines were comparatively useless; (6) Macewen's plan of replacing the bone—the bone after removal was preserved in hot carbolised sponges, cut up into small pieces and placed in the opening between the dura mater and the scalp. The brain being exposed, the first question to decide was whether it bulged into the opening or not—normal brain, Mr. Horsley said, never bulges at first; if an operation lasted an hour or more some bulging became evident. If the brain bulged at first, it was presumptive evidence of the presence of a tumour; a yellowish colour and venous congestion were likewise suggestive points. The lesion being found, how was it to be treated? The use of the actual cautery led to secondary troubles, so he used a knife and excised what had to be removed, which must be all that was necessary, but not one bit more. There would doubtless be some considerable oozing at first; if so, a sponge should be pressed into the incision. The tumour or diseased part having been removed, it was desirable to close the wound as quickly and as accurately as possible; primary union of the skin flap was almost essential to success. Drainage was required for twenty-four hours only; if more serum collected, a small probe should be passed in to let it out, but a little tension did no harm, as it kept the brain matter in its place until cicatrisation was complete. Hernia cerebri only occurred as the result of decomposition. Mr. Horsley then demonstrated his three patients: they had quite recovered from the operation, and were well enough to travel to Brighton and be exhibited to the meeting. The main clinical symptoms were epileptiform fits, two of the cases following injury with subsequent scarring of the convolutions; the third case was one of tumour, which was accurately localised by the manner in which the fits (to which it gave rise) invariably commenced.

Professor CHARCOT (Paris) congratulated Mr. Horsley on his brilliant success. The patients, he said, might be taken (1) as new proofs of the value and legitimate use of animals for purposes of experimentation, and (2) as confirmation of the doctrines of localisation of the functions of the brain.

Dr. HUGHLINGS-JACKSON also congratulated the author on his admirable success. He thought that every person with epileptiform seizures was the subject of a very localised lesion of some kind, either a tumour or otherwise. If the aura were very localised and constant, it was in favour of tumour. He would, however, recommend an operation even if a tumour were not present. He had changed his views with regard to double optic neuritis, for tumours might exist without it. Mr. Horsley had produced artificially in monkeys fits similar to those from which these patients had been suffering, showing thus the accuracy of the present views on the function of the convolutions. He thought in removing the tumour that the adjoining portions of the brain ought to be removed, for the tumour produced fits by altering that portion of the brain on which it was seated. He would cut out too much rather than too little. Unfortunately there would occur cases with more than one tumour in the brain, or with more than one tumour on the same side of the brain.

Mr. HORSLEY then exhibited photographs, illuminated by limelight, of the parts of the brain injured and removed. A vote of thanks was carried by acclamation on its termination.

Dr. STEAVENSON and Mr. BRUCE CLARKE read papers on the employment of Electricity in the Treatment of Diseases of the Urinary Organs. Dr. Steavenson dealt chiefly with the scientific aspect of electrolysis, while Mr. Clarke referred to the practical side of the question.

The PRESIDENT remarked on the variety of the diseases referred to, and expressed himself unable to understand how one and the same remedy could favourably affect such diverse conditions.

Mr. VINCENT JACKSON also took part in the discussion, after which the authors suitably replied.

Mr. REGINALD HARRISON read a paper on the Treatment of Urethral Stricture by Internal and External Urethrotomy combined. He first entered into a consideration of the causes of relapse, the formation of cicatricial tissue, explaining his own views that this was largely increased by the passage of urine over the cut surface before it had had time to heal. Hence his argument was that after the stricture had been cut, an opening into the bladder through the perineum should be made simultaneously, by means of which the bladder could be efficiently drained; further, another tube should be passed from the perineum through the penis, in order to keep open the strictured part while cicatrisation was taking place.

Dr. PANCOAST (New York) advocated multiple incisions through the mucous membrane and submucous tissue, as giving better results than a single one.

Dr. WARD COUSINS and Mr. WHITEHEAD also took part in the discussion. Several ingenious urethrotomes were exhibited.

Papers were also read by Mr. F. CHURCHILL, on the Multiple Causation and the Immediate Treatment of Congenital Club-foot; by Sir WM. STOKES, on Acute Myxœdema following Thyroidectomy; by Mr. E. SMITH, on Obscure Disease of the Spine; by Mr. WHITEHEAD, on the Treatment of Hæmorrhoids by Excision, &c.

PATHOLOGY.

At the meeting of this Section on Thursday, Aug. 12th,

Mr. T. HOLMES opened a discussion upon Aneurysm. The cause of aneurysm was defined as weakening of the vessel wall so that it yields to the blood-pressure. The change in the wall may be due to degeneration of coats, to laceration of the intima, to ulceration from without (of which an instance was mentioned). The degenerative changes include the atheromatous and syphilitic. There is no question that the subjects of aneurysm often have syphilis. Syphilitic subjects are generally persons broken down in health and liable to arterial disease. Syphilis affects arteries in two ways: either by thickening of the intima or by gummata in the external coats, thus rendering the vessel prone to aneurysm; but, practically, this seldom occurs. Heubner, in fifty cases of syphilitic arteritis, only found aneurysm in one. Again, the syphilitic process generally attacks the smaller arteries, atheroma the larger; the former leads to obliteration of the vessel, the latter to weakening and dilatation. Many cases of arterial disease in syphilitic subjects are alleged to be of a syphilitic nature, but there is often no direct proof of this. The true syphilitic degeneration of arteries rarely leads to aneurysm. The statistical argument is unreliable. Iodide of potassium, in Mr. Holmes's experience, is of little use in aneurysm, and certainly cannot owe its effect to its antisyphilitic action. Complete rest and careful diet are always beneficial, and in exceptional cases may effect a cure. The typical form of aneurysms produced by the giving way of one side of the vessel has been described by Syme as common to all aneurysms; but there are other forms—as fusiform &c.—where there is more than one opening. The relations between the vessel and aneurysm were illustrated by drawings—(1) single opening; (2) two openings at some distance from each other; and (3) where artery opens into and out of the aneurysm. The aneurysmal sac is a living tissue; the rapidity with which the sac sometimes shrinks must be due to vital changes, to which also are owing the alterations in shape. The treatment by introduction of foreign bodies or electrolysis is only applicable when nothing else can be applied, because of the risk of setting up inflammatory changes in the sac. Professor Loreta's case was mentioned, where the sac had contracted and consolidated after introduction of wire; death was due to rupture at the junction of the sac and vessel. Dr. Cayley and Mr. Hulke's case and Mr. Bryant's case were also mentioned. This form of cure (by impaction of clot) is also produced by Esmarch's bandage, the sac rapidly contracting. In manipulation the cure is sought almost wholly by impaction of clot; and the same thing occurs in rapid flexion. These methods have dangers of their own in injury to the walls of the sac. The absence of aneurysmal bruit is of evil augury, as showing there is no

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proper mouth to the sac. The nature and direction of the growth of an aneurysm are of importance as indicating the line of treatment; this is especially seen in thoracic or innominate aneurysm pressing on the trachea or œsophagus. Cases were described where the detachment and impaction of clot at the mouth of the sac had given rise to coagulation within the sac, and these were contrasted with a case of distal ligature, when the same result ensued. There are cases, especially of aortic aneurysm, where danger may be due to growth of aneurysm in one or other direction, and where consolidation in these parts may be effected, and thus a partial cure with relief to symptoms obtained.

Mr. BARWELL agreed as to the non-syphilitic character of aneurysm, especially of the thoracic and abdominal varieties. He showed a specimen of aortic aneurysm, diagnosed as on the second part of the aorta, which projected on the left side of the sternum, having previously presented on the right. The patient was treated by rest, belladonna, &c.; but iodide of potassium increased his symptoms. Pressure on the root of the left lung was causing serious symptoms, and the patient begged that something might be done. An ivory cannula was introduced into the sac, and about 12 ft. of fine steel wire passed in, and an electric current was sent through the wire for seventy minutes. About four hours later the tumour began to consolidate. On the fourth day the saccule on the right side increased. Death took place partly from rupture of this sac and partly from the pressure by the main tumour on the root of the left lung. The wire was found to be completely covered with fibrine. In electrolysis, as a rule, the influence is not sufficiently diffused; and in introduction of wire the coagulum is too soft; a combination of the methods seemed to remedy these objections.

Mr. J. C. SYMONDS alluded to aneurysm due to external inflammation, mentioning a case which occurred in an amputated stump, which had become inflamed, and had led to softening of the vessel wall. He also mentioned a case where multiple aneurysm followed upon contusion of an artery, and the limb had to be amputated. In phthisis, pulmonary aneurysm owns a like cause. Probably secondary hæmorrhage from stumps is due to the same condition.

Dr. GOODRIDGE (Bath) read a paper on a case of large Abdominal Aneurysm in a man aged thirty-eight, who was attacked with severe pain in the left knee and swelling of the leg, extending afterwards to the thigh. A tense tumour occupied the left half of the abdomen; no bruit was audible. Six months previously he had been knocked down by a truck. After death, which occurred one month from the onset of symptoms, the tumour was found to be an aneurysm springing from the left side of the aorta, just above the bifurcation; it contained much clot and had eroded some of the lumbar vertebræ, and extended below Poupart's ligament, comprising the iliac vessels. It had ruptured into the peritoneal cavity, but by a very small opening; the fatal issue was also attended by pleural effusion.

Mr. HOLMES mentioned two cases of abdominal aneurysm which were unattended by the usual symptoms. One was a case under Sir P. Hewett, the tumour being diagnosed as a psoas abscess. The other was a case where there was fixed pain in the back; but after a time a tumour began to form; there was no bruit or pulsation. Death occurred suddenly, and a ruptured abdominal aneurysm was found.

The PRESIDENT (Dr. Dreschfeld) said the etiology of aneurysm is still very obscure; an atheromatous artery will withstand considerable strain. Again, aneurysm is very rare in Germany as compared with this country. As to treatment, one must not draw conclusions from a few successful cases. A case under Dr. Simpson was treated by electrolysis; after death it was found there were two aneurysms, one of which had been untreated and had undergone spontaneous cure; the other, which had been treated, still contained fluid blood. The introduction of wire was more likely to lead to consolidation. Fibrine ferment had been injected in one case at Manchester, but the clot formed was very firm and portions of it were wasted away and caused death by embolism.

Mr. BARWELL related a case of Upward Dislocation of the Sternal End of the Clavicle—a very rare form of injury. There was but little pain, and the movements of the arm were very slightly affected.

Dr. CHAFFEY read a paper upon Fibrinous Deposits within the Heart in Diphtheria and in some other diseases of children. The results of about 200 post-mortems on children dying from diseases of all kinds proved that out of fourteen cases of phthisis, four showed considerable fibrinous deposits, of which two were cystiform, whilst in the remaining ten cases fibrine was either absent or present in small amount. In tuberculosis (including tubercular meningitis, but excluding phthisis) three only, out of a total of thirty-three, presented fibrinous deposits of any size; very marked fatty changes in the muscular walls were present in two of these three cases. Of twenty-three post-mortems on diphtheria cases more than one-half showed marked fibrinous deposits. They were situated chiefly in the right cavities, though to some extent the left cavities suffered also in most cases. In seven of the twenty-three, the right cavities were nearly filled with firm decolorised fibrine. A few other cases presented well-marked fibrinous deposits—viz., two of morbus coxæ, where death resulted a few days after amputation at the hip-joint; one case of osteotomy of the femora; one of tracheotomy for papilloma of the larynx; one case of acute and two of chronic tubular nephritis; two out of seven cases of diphtheritic paralysis; and one case each of simple purulent meningitis, otitis with pneumonia, pyelo-nephritis, and diabetes mellitus. There were also two cases of morbus cordis with old fibrinous deposit, and one of adherent pericardium with softening fibrinous deposit in the right auricular appendix giving rise to pneumonia. (Mounted specimens were shown illustrating deposits of fibrine, some of which almost filled the right cavities of the heart.)

Dr. COUPLAND confirmed, from his experience, the comparative frequency of cardiac thrombosis in diphtheria, to which cause was often owing the sudden death, frequently attributed to cardiac paralysis, which occurred in diphtheria. It mostly happened after the local diphtheritic symptoms had passed away, and was due, as Dr. Chaffey said, to weakening of the heart walls by fatty degeneration, and sometimes to interstitial myocarditis, as in a case under Dr. Coupland's care. Leyden had described diphtheritic myocarditis, and detected micrococci in the inflammatory exudation.

Dr. WOODHEAD (Edinburgh) said that these coagula occur in very many conditions in children, especially on the right side of the heart. They are not uncommon in specific inflammatory conditions, as in scarlet fever, tubercle, and in catarrhal pneumonia. There is almost invariably cloudy swelling, or interstitial inflammation, or fatty degeneration. This coagulation commences on the right side and afterwards occurs in the left cavities.

The PRESIDENT confirmed what had been said, remarking that acute dilatation of the heart, due to inflammatory or degenerative changes, was a frequent result of specific poisons. Venesection should be tried in these cases of acute thrombosis, especially in adults.

At the meeting of this Section on Friday, August 13th, Dr. STURGES opened a discussion upon the Etiology of Pneumonia. He said that in the course of an inquiry into the subject by the Collective Investigation Committee, the opinion of a large body of the profession was obtained. The pneumonia in question was that form of acute lobar pneumonia occurring suddenly, running a short definite course, and with recovery in the large majority of cases, which is a disease *within* the lung rather than *of* the lung. Therefore the idea gained from post-mortem inspection is incomplete. The causes of pneumonia are now admitted to be more numerous than supposed by former authorites. There is nothing more instructive or striking than an attack of the malady to which there is no parallel in other forms of disease. There has been a prevalence of pneumonia during the past spring, which has been characterised by exceptional weather—prolonged cold and easterly winds; when the milder weather came then pneumonia became less frequent, so that pneumonia was "caught" and prevailed like ordinary catarrh. This is the most frequent form of acute lobar pneumonia due to chill, a form which by adopting modern theories we are apt to forget. There is the pneumonia of alcholic excess, which post mortem is the same as that due to chill. Does chill play any part at all in such a case? The patient may not be exposed to chill, and the conclusion is that alcohol is as much a cause of pneumonia as chill. Again, there is sufficient evidence that "sewer-gas poisoning" causes pneumonia, and in many cases totally apart from the prevalence of cold weather. Besides the alcoholic and pythogenic form, there is another, which is preceded for some time by ill-defined symptoms of gastro-intestinal disorder, especially in children, the acute

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pneumonia being, as it were, the final effect of the poison, much as in gout a period of deranged health will culminate in an attack of acute gout. There is a near connexion between privation and pneumonia, and that apart from exposure and alcohol—e.g., in the Madras famine one in five died from pneumonia. Over-work, fatigue, and mental depression favour the advent of pneumonia, and such cases have a gravity special to themselves. So that pneumonia as a local disease must be replaced by the notion that it is only part of a wider disorder. It may be that in rare instances pneumonia, like diphtheria, takes on contagious characters—a recent paper by Dr. Bruce confirms this strongly—by the occurrence in families and the presence of micro-organisms. Dr. Bruce admits that this infection is rare, and epidemic prevalence is not proof of infection. If pneumonia be conveyable from person to person, it ought to show itself in hospital wards; but Dr. Sturges cannot find a single instance of this. There is less positive evidence of contagion as a cause than of the others enumerated; and is it necessary ever to involve contagion to explain the disease? In a family there is not only a general tendency, but there are added fatigue, mental depression, and often exposure by the graveside—all causes which may explain multiple pneumonia in families, apart from any epidemic influence. The points he raised for discussion were—What are the exciting causes of simple pneumonia? Is there any evidence of the conveyance of the disease from one to another? How are predisposing distinguished from exciting causes? and what is the proper place of this idiopathic pneumonia in nosology.

Dr. DOUGLAS POWELL in most points agreed with Dr. Sturges. Some would say that the causes of pneumonia, instead of being more numerous, are now reduced to one—viz., the introduction of the pneumococcus—no matter whether the individual be subjected to chill, alcoholism, &c. No one familiar with Friedländer's researches can doubt for a moment the existence of an organism in all cases of pneumonia, which can be cultivated and reintroduced into certain animals, which thereby become attacked with pneumonia. In a series of eighteen consecutive cases of pneumonia recently observed, Mr. Leopold Hudson had examined the sputa, and in every instance had found this micro-organism. [Photographs by Mr. Crookshank and specimens of cultures were shown.] Most of these cases were typical ones, but not all. One was an apex case in a drunkard; in another the pneumonia supervened in chronic lung-disease. In another patient, after an obscure illness of twenty-one days before admission, the signs of pneumonia developed; and, lastly, there was a case of a girl who was attacked after exposure to cold, the course of the disease being marked by hectic, and now passing into phthisis, although the bacillus tuberculosis had not yet been detected. In all these varieties the coccus was present, so that in what clinically are regarded as different forms the characteristic micro-organism is to be found. Any hope that one might have of distinguishing septic cases by this test is therefore disappointed. Is it possible that these organisms are of different kinds? The researches into micro-organisms of pneumonia have been too uniformly successful for them to be the cause of the disease. Evidence is accumulating which tends to show that we are teeming with organisms, and that when certain diseases arise a kind of culture goes on of what are as yet indifferent organisms which converts them into specific forms, which may propagate the disease. He would therefore regard these organisms as rather epiphytic than as truly pathogenic or causative.

Dr. CHURTON (Leeds) had in post-mortem examination found pulmonary œdema very common, but had only twice met with distinct evidence of pneumonic exudation in such cases, where, as a rule, the alveolar walls look perfectly healthy. Whatever be the cause of pneumonia, the products are the same, and it would be inconceivable that only one cause should produce this result. The damaged lung may be the soil in which the pneumococci thrive, and they in their turn irritate the tissue, giving rise to inflammatory exudation. Pulmonary œdema is always most marked in the upper lobe. He would admit as exciting causes of pneumonia not only the pneumococcus but many other causes; and it is difficult to explain the selection of one part of the lung rather than another. As to contagion, Dr. Churton had never seen pneumonia spread in a hospital ward, or even in the most ill-ventilated apartments. The prognosis depends on the condition of the patient before he is attacked.

Dr. HOLLIS (Brighton) said that if the pneumococcus is invariably present, it more or less decides the matter as regards the exciting cause. If it be hereafter shown that in the pneumonia of typhoid fever, or in that which occurs by extension from other parts, the pneumococcus occurs, he would suppose it to be the active cause. As to the clinical conditions, we have to treat different forms of the disease.

Surgeon-Major BLACK gave his experience in the army. Sometimes the pneumonia would run through a regiment after fatigue, chill, and exposure; and yet such cases were quite unconnected with infection. He also cited cases of pneumonia due to insufficient clothing and chilling, with inactive circulation, as in people who sit in public gardens listening to music on chilly evenings, and too lightly clad. He therefore thought it indisputable that pneumonia could be directly produced by chilling of the surface of the body.

Dr. COUPLAND remarked that since the pneumococcus had answered to the tests required to establish its pathogenic character, the whole question of the precise relations of bacteria to specific diseases must depend on the solution of the problem as regards pneumonia. Moreover, the clinical course of acute lobar pneumonia was very much allied to that exhibited by other specific diseases which are now equally claimed to be bacterial: e.g., facial erysipelas—a disease, too, which prevails under meteorological conditions similar to those under which pneumonia prevails. It may well be that the true solution is that in all bacterial diseases the microbes are, as Dr. Powell suggested, epiphytic, but yet specific and characteristic of the disease.

Dr. MAGUIRE had exhibited at Belfast the pneumococcus not only in the lung but in other organs—as spleen, kidney, &c. In the case of all germs one must consider the concomitant conditions. Undoubtedly cold has some influence in producing pneumonia. When he was pathologist at the Manchester Infirmary there were epidemics of pneumonia and fatal cases, especially in certain months of the year. At the same time, it is absolutely certain that there is a microbe in the pneumonic lung which differs from others, and it is probable that we might trace its life-history a little further. The mere morphological characters of a germ are of no use in determining specific differences; the physiological properties must also be considered.

The PRESIDENT (Dr. Dreschfeld) said that there does exist an organism in some forms of pneumonia, one which can reproduce the disease after culture and inoculation, there is very little doubt, although it may not be present in all forms. It is impossible to recognise as a pathological entity the pneumococcus found in sputum. If the same pneumococcus be found in the lung and cultivated, &c., it must have something to do with the disease. That a contagious pneumonia exists is proved beyond doubt; and there is the type known clinically as "creeping pneumonia," where the inflammation spreads gradually from one part of the lung to another. In Manchester, lately, this form of contagious pneumonia prevailed with well-marked characteristics. In these cases the pneumococcus was found and cultivated, and inoculations made by Friedländer from these cultures produced pneumonia in guinea-pigs, but not in rabbits. One is compelled to admit modified forms of pneumococcus to explain these different forms of disease. Indeed more than one kind of pneumococcus has been found. Besides Friedländer's, there is that described by Fraenkel, which can infect rabbits but not guinea-pigs; and a third variety has also been met with. If there be such differences in the microbes, it is easy to explain clinical differences. Recently a pneumococcus has been found in catarrhal pneumonia. Again, the same anatomical lesion may be produced by different causes, and no doubt there are many predisposing causes.

Drs. STURGES and POWELL replied briefly.

Dr. W. A. HOLLIS read a paper on Pulmonary Tuberculosis associated with Heart Disease. The author gave brief notes of three cases of heart disease associated with tubercle of the lungs. In every instance the heart disease preceded the phthisical symptoms. The cardiac complications, which were various, resembled each other, inasmuch as they were invariably accompanied with dilatation, of the right chambers especially. Dr. Hollis conjectures that, as the cubic expansion is three times the linear, the contractile energy of a dilated ventricle will speedily prove inadequate to propel its liquid contents through the vessels, even when its strength is supplemented by considerable compensatory hypertrophy of the walls. In such cases the heart at each contraction only forwards a portion of the contained blood

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at each systole, and it therefore necessarily acts as a reservoir for the residuum. This condition of the circulation leads to anæmia and consequent malnutrition of the body generally—a state which was observable in all the cases narrated. The lungs will especially suffer under these circumstances, and will possibly offer a favourable nidus for the growth and development of tubercle bacilli, which were discovered in the sputum of one of the narrated cases.

PUBLIC MEDICINE.

On Wednesday, August 11th, after the introductory address by the President, Dr. Taaffe, Deputy-Surgeon JOSEPH EWART opened a discussion on Scarlet Fever, its causation, and the best sanitary measures for dealing with the disease as it exists among urban populations. He said that scarlet fever accounts for a twentieth or twenty-fifth of the general death-rate; it occurs among all classes, but is mainly a disease of early life. Its infectious character is based on the clearest evidence; it is often difficult to trace the origin of the first case, but there is no doubt as to the manner of its spread afterwards. The prompt removal of a case of scarlet fever prior to the development of its infecting property is sure to prevent its communication to others; immunity is also obtained by the thorough disinfection of tainted articles. The speaker then proceeded to show that the *materies morbi* appears in the juices of the skin, in the exfoliated cuticle, nasal and pharyngeal exudation, the breath, probably at certain stages in the renal secretion, and possibly in the alvine excreta. After describing the means by which the disease is disseminated, Dr. Ewart discussed the incubation period, which he stated to be usually from two to five days, occasionally not more than twenty-four hours or even twelve or fourteen days. He considered it rarely communicable during incubation, but infectiousness lasted from the commencement of the eruption up to the completion of the peeling process. Imperfect ventilation and overcrowding increase the liability to this disease. To prevent its spread the first essential condition of prophylaxis is segregation of the affected from the unaffected and continued isolation of the sick; the detailed arrangements were indicated as well as those of disinfection, and the speaker urged the need for all hospitals being provided with isolation wards and of special hospitals for the reception of those who could not be properly isolated in their own homes. But their use is not to be regarded as sufficient substitution for sanitation and hygiene. Notification was pleaded for, and this subject was briefly discussed as well as that of compulsory removal. Dr. Ewart, while expressing his sense of the value of these methods of prevention, doubted whether the compulsory removal of cases would receive the cordial assent of the public at the present time.

Dr. WILLIAM SQUIRE expressed the opinion that the improved sanitary condition of a town had never led to any difference between the incidence of scarlet fever upon the rich and the poor, those surrounded by the best circumstances and the most healthy suffering as severely as others. With reference to the subject of notification of infectious disease, he thought medical men would raise no objection. Hospitals for the isolation of persons suffering from this class of malady should be situated near to where the patients lived; he had never known scarlet fever spread from an invaded house to another on the opposite side of the street.

Dr. GRIMSHAW considered that the most important means of preventing the spread of scarlet fever was, in the first place, notification of the disease, and the isolation of the patient must follow.

Mr. BUTTERFIELD observed that his experience was that the worst cases of scarlet fever did not occur amongst poor persons. Notification was of no use until the means for isolation had been provided. In Bradford he had met with no difficulties in the enforcement of the provisions of the local Notification Act.

Mr. VACHER held that powers of compulsory removal of infectious cases were urgently needed. At Warrington, where this power existed, 90 per cent. were removed to hospital. Still, much could be done without such power, as at Salford, where 50 per cent. of the cases were removed.

Dr. TAAFFE, after speaking in favour of the Nottingham system, where the medical man notifies to the householder and the householder to the sanitary authority, urged the need of provision for isolation of persons in all classes of life.

The discussion was continued by Drs. Groves, Norman Kerr, Sykes, Duncan, Bird, and Surgeon-Major Evatt and Mr. Brown.

Mr. BOOBBYER read an interesting paper on two outbreaks of scarlet fever which occurred concurrently with the disturbance of impure subsoil, to which we hope to refer later.

The proceedings terminated with a paper by Surgeon-Major PRINGLE, on the Advantages and Disadvantages of Human and Animal Lymph. He pointed out that his object in making this comparison was that, judging from the report of the German Vaccination Commission, published in 1885, and very carefully condensed by Dr. E. J. Edwardes, the preference, as given by this very important commission was undoubtedly in favour of animal lymph. The necessity advanced by the opponents of human lymph for the substitution of animal for human lymph was based on the following four objections:—1. The supposed deficiency in the protective power of human lymph, owing to some unaccountable deterioration in this principle, caused by the passage of the virus through the systems of so many individuals. 2. The danger to health and life, owing to the possible introduction into the system of syphilis or the infection of erysipelas. 3. The difficulty of obtaining sufficient human lymph for any sudden emergency or great demand. 4. The general objection raised to the withdrawal of lymph for other operations. Animal lymph, the speaker said, was supposed to overcome these four objections, as follows:—1. Animal lymph could never become deficient in protective power, owing to its constant reinvigoration from the calf. 2. The dangers to health and life, owing to the possible introduction into the system with human lymph of syphilis and the infection of erysipelas, could not occur where animal lymph was employed. 3. As long as suitable calves were obtainable, it was maintained that the supply of animal lymph, to meet any emergency or great demand, was inexhaustible. 4. For the same reason, no possible objection could be raised under this point. Dr. Pringle then met the four objections brought forward against human lymph. 1. The objection under the head of deficiency of protective power. In Dr. Pringle's extensive and prolonged vaccine practice in India, details of which he gave, he maintained that, where carefully and systematically practised by arm-to-arm vaccination, this deterioration was unknown, and this was certainly not due to the absence of small-pox contagion or infection. 2. There was a complete absence in the above practice of any risk as regards syphilitic transference, and the infection of erysipelas was unknown. 3. With a properly instructed vaccine staff this limited supply of human lymph was unknown, and where the number of children was small the knowledge of storing lymph prevented any difficulties under this head. 4. Mutual confidence between the vaccinator and the parents of the children would satisfactorily overcome any difficulty regarding the withdrawal of lymph for future operations. Dr. Pringle argued against the view that animal lymph was more protective than humanised, and quoted an official report in support of the view that a spurious vaccination could exist for years. Further, that blood poisoning, although not of a syphilitic character, might follow the use of animal as well as humanised lymph, that animal lymph was incapable of storage or despatch with any certainty, and that unless squeezed out with clamps and forceps the contents of six vesicles would only supply sufficient material for the inoculation of one person.

On Thursday, Aug. 12th, Dr. GAMGEE, F.R.S., on behalf of Dr. Ransome of Manchester, who was unavoidably absent, read a paper on the Duration of Infectiousness of Scarlet Fever, Small-pox, Measles, Mumps, and Diphtheria, and pointed out the need for more precise information on this subject. He suggested that the Association should appoint registrars throughout the country who should investigate every case which came to their knowledge, and obtain, when necessary, detailed information from medical men and even the patients themselves, so as to avoid all source of error.

The discussion was continued by Drs. PRINGLE and HOPE, the latter defining the infectious period of measles to extend from the second day of the symptoms and to last for three weeks; of small-pox, from the first day of the symptoms to from three to four weeks; scarlet fever, from the fourth day, and to last seven weeks; mumps to be under three weeks; and diphtheria to be the same.

Dr. C. KELLY read a paper on the Relation of Soil to Diphtheria. It was shown that in England the death-rate from this disease was the lowest of the four common diseases of childhood, while in some parts of Sussex the mortality from

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diphtheria was higher than from measles, scarlet fever, and whooping-cough added together. This prevalence was coincident with wet, retentive soils. On the dry and pervious formations, the death-rate over a period of ten years was only 127 per million persons living, while on the cold, wet soils the mortality was 454 per million. This great increase was not met with in large towns or in populous places, where inter-communication among children is very frequent; but it was most marked in lonely, isolated places, where the children had to go a long way to school and were exposed to conditions of cold and wet. In urban districts no similar outbreaks were met with, and in such cases the disease seldom spread, and it was apparently due to sanitary defects. The disease constantly appeared in rural districts in the autumn of the year, causing primary outbreaks.

Dr. PARSONS agreed generally with Dr. Kelly's conclusions except as to the relation of diphtheria to damp soils; he himself had noticed endemic prevalence of this disease on high and dry soils, and indeed on all kinds of soils. He dwelt upon the special prevalence of diphtheria in rural as compared with urban districts, and quoted statistics in proof of this fact. Diphtheria, he thought, was spread by personal communication, but in towns usually some sanitary defect was found in the houses where it occurred, but this was not so in the country. He suggested that the freedom of towns might be explained if the disease were due to some fungoid growth which could not thrive in an atmosphere of coal-smoke; on the Continent, where coal is not largely consumed, towns are not more exempt than country districts.

Dr. WILSON, of Doncaster, observed that while the deaths from zymotic diseases generally were decreasing, those from diphtheria were increasing.

Dr. SQUIRE called attention to the fact that clay soil occupied a much larger extent than other soils, and this, he thought, might account for the greater prevalence of diphtheria thereon.

Dr. GROVES thought there was a relation between the prevalence of diphtheria in a district and antecedent scarlet fever; he noted the tendency of these diseases to appear in wooded districts.

Dr. KELLY, in conclusion, raised the question whether the diphtheria of the towns was absolutely identical with that of the country districts.

Surgeon-Major EVATT gave an address on the Medical Department of an Army Corps in War. He said an army corps in war time consists of 36,000 men; this is divided into three parts of 10,000 men each, with a cavalry brigade and artillery. To each regiment is attached one medical officer, and he has given him two to four men per company. Their duties are to give first aid to the wounded, who then pass into the hands of the divisional bearer companies of the medical staff corps, with all necessary appliances, waggons, &c. The wounded may be operated on at this stage and subsequently transferred to the field hospitals, of which there are in each army corps fourteen for one army corps. Thence the wounded pass to the base hospital, the organisation of which was described, and thence in the ship hospitals to England. Dr. Evatt pointed out that what is now needed is a Volunteer medical staff corps sufficient to supply divisional bearer companies and field hospitals in the same way for the Volunteer forces, which are now 250,000 strong.

Dr. BILLING gave an account of the difficulties with which the army surgeon had to contend during the American war, and Mr. WALTER PEARSE stated that steps were now being taken to improve the medical service in connexion with the Volunteers.

Dr. TATHAM (Salford) read a paper on the best means of dealing prophylactically with Scarlet Fever in urban populations. It appears that in past years Salford has occupied a prominent position amongst the scarlet fever fields of England, the average annual rate of mortality from this disease in the twenty years ending in 1875 being equal to 135 per 100,000 of the population; but that under the combined systems of compulsory notification and hospital isolation obtaining in the borough during the last few years scarlatina mortality has been reduced to an average rate of 50 per 100,000. Dr. Tatham gave interesting particulars of the steps taken in Salford for the stamping-out of scarlet fever, vigorously insisting that in order to exercise reasonably sufficient control over its spread, it was essential that sanitary authorities should possess powers for securing immediate notification as to all scarlatinal attacks.

At the conclusion of a discussion which followed the reading of the paper, the subjoined resolution, proposed by Dr. TATHAM and seconded by Dr. GRIMSHAW, the Irish Registrar-General, was carried:—"That the Public Health Section of the British Medical Association, having considered the papers read and the remarks made upon them, are of opinion that the time has arrived when the protection afforded under the Act for the compulsory notification of infectious diseases should be extended to the population generally, and they recommend the Council to consider at an early date the advisability of endeavouring to promote general legislation with this object in view."

Preliminary to the adoption of this resolution, Dr. WHITELEGGE showed a marked reduction in deaths from scarlet fever in Nottingham subsequent to the passing of a Notification Act. Diphtheria, which had only recently been added to the list of diseases to be notified, had only declined since that time.

Dr. H. ASHBY read a paper on the Duration of Infectiousness in Scarlet Fever, and urged the necessity for seaside towns who wished to preserve their reputation as health-resorts to take special precautions.

Dr. NORMAN KERR read a paper on Hydrophobia, in which he gave the history of the disease, and stated that it was known to Aristotle. Referring to Pasteur's work, he considered that he had been more successful than any other person; Dr. Kerr expressed the opinion that all dogs should be muzzled and stray dogs destroyed.

Mr. C. E. PAGET followed with a paper on the Influence of Acute, supposed Simple, Sore-throat in the spread of Diphtheria. This paper contained descriptions of two epidemics of diphtheria which occurred in and around two villages widely separated from each other during the months of September, October, and November, 1885. Both of the outbreaks were characterised by the mildness of the large majority of the cases that occurred, and in one this feature was so masked that the nature of the prevalent throat illness had never been suspected until the close of the outbreak, when a severe case of true diphtheria came to light. That the doubtful cases of past and present throat illness in the two epidemics, which the writer at the time of investigation was able to collect together, were cases of "mild" or "benign" diphtheria, though they were not followed by paralytic sequelæ, was rendered probable, (1) because one of the results of investigation was the disclosure of the fact that these cases had occurred in close precedence of true cases of diphtheria; (2) because other cases of throat illness as mild, which followed them in both epidemics, were found to have been cases of diphtheria; and (3) because there is at present not evidence enough to support a theory that a single simple case of sore-throat can give rise to a case of diphtheria. The paper concluded with an explanation that such epidemics can occur so easily and so extensively in rural districts, chiefly because medical men are necessarily few in number, and the labouring classes are not in the habit of seeking medical aid in mild cases of illness.

The meeting concluded with a paper by Surgeon-General CORNISH on an Outbreak of Cholera among British Emigrants on board a vessel proceeding from London to Queensland in the latter part of last year.

On Friday, August 13th, Dr. MICHAEL W. TAYLOR (late of Penrith) read a paper on Diphtheria in connexion with Mould Fungi. The purpose was to work out a certain hypothesis, which, stated in its simplest form, was this: that the spores of some common moulds under certain conditions are capable of originating diphtheria. He now brought forward the whole evidence from his personal clinical experience in support of these views. The cases disclosed some curious, exceptional, and unique features in their history, comprising observations in seven different outbreaks of diphtheria, amounting to sixteen attacks and two deaths. In one series of cases the growth of aspergillus associated with a pileate fungus a coprinus, on the walls of a bedroom, was given as determining the incidence of the disease. In another case the development of common moulds in a damp house, within which a large quantity of recent cat-skins were stored, seemed the most probable source of a fatal case of diphtheria. In another instance a young man took diphtheria severely four days after working all day in a pigeon garret which was full of mould from the débris and rotten woodwork. Three outbreaks of diphtheria were traced to the sufferers having occupied rooms in which a large quantity of sheep's wool had been stored. Dr. Taylor regarded the incidence and sequence of events as affording strong evidence in these cases that circumstances

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arising from this wool storage were primary causes of these outbreaks. He continued the argument that diphtheria is due to the action of micro-organisms; that analogous parasitic diseases are produced by organisms morphologically identical with common moulds; that there may be alternations of development and transformations of innocuous organisms into pathogenic forms; that this may be the result of growth in noxious media; that the infective element may be a virus elaborated in the protoplasm of the organism derived from the media or a living host, and, along with the germ, capable of being multiplied in living structures.

Dr. CHARLES DRYSDALE read a paper on Animal Vaccination. He had, in a paper read before the Medical Society of London, strongly recommended the substitution of the process of calf-lymph vaccination to replace vaccination with long-humanised lymph now in use in this country. Many countries, such as Holland, the United States, &c., had at this moment practically abandoned humanised lymph, using calf lymph alone. Dr. Drysdale said he had always held that vaccination was merely mitigated small-pox, and that the reason why it protected against an attack of small-pox was that it was merely a slighter form of the same disease. If, then, vaccinia were mitigated small-pox, it was not probable that when transplanted to man it would remain long unchanged, and statistics seemed to show that long-humanised lymph had lost much of its power in preventing variola. Dr. Charles Cameron (*Fortnightly Review*, 1881) mentioned that the number of small-pox cases in 1000 vaccinated was very much greater of late years than formerly, and that the death-rate had increased from 1·75 per cent. between 1819 and 1835 to over 10 per cent. in 1870-79. On the other hand, the late Dr. Henry Martin, of Boston, U.S.A., had alleged most distinctly that up to the date when he attended the Ryde Congress of the British Medical Association, the calf-lymph vesicle had not in any way deteriorated or lost its preservative powers. According, too, to that most energetic of all modern vaccinators, who succeeded in banishing the use of humanised lymph from his adopted country, the United States, the case of animal vaccination was a complete preventive against small-pox, and also quite free from the reproach of causing erysipelas. Dr. Warlomont, of Brussels, also mentioned that, in the epidemic of 1870-71 in Brussels, those patients who had been vaccinated with calf lymph entirely escaped small-pox; and Dr. Martin gave instances where in one epidemic of small-pox in San Francisco humanised lymph had proved of little efficacy, whilst animal vaccine in a subsequent epidemic had entirely prevented the occurrence of small-pox. Dr. Drysdale thought the only conclusion must be that vaccine should always be drawn from the calf, and moved the following resolution:—"That this meeting, after taking into consideration the superior advantages of animal vaccination over long-humanised lymph as acknowledged in the United States and other countries, such as Holland and Prussia, recommends the substitution of vaccination by calf lymph for the present system of arm-to-arm vaccination, and the discontinuance of the practice of arm-to-arm vaccination in this country."

Mr. J. BRINDLEY JAMES seconded Dr. Drysdale's motion.

Mr. SHIRLEY MURPHY and Dr. WILLIAM SQUIRE urged the advantage of arm-to-arm vaccination over any system that would necessitate the use of stored lymph, and opposed the motion.

After further discussion an amendment was adopted in favour of arm-to-arm vaccination, but expressing the opinion that greater opportunities should be given for direct vaccination from the calf.

Dr. J. GROVES read a paper on the Sanitary Acts as applied to Rural Sanitary Districts. He said the rural sanitary district is not what its name would imply, a purely agricultural area, but one containing old and new towns and parts of large towns and cities which possess urban government and which have overflowed the civic boundaries. The suburbs of towns will increasingly extend into the rural districts about them. The powers and obligations of rural authorities should therefore be commensurate with their responsibilities. The Rivers Pollution Act, 1876, applies fully to rural sanitary districts, and the rural authorities can by it prevent even the pollution of the sea under certain circumstances. The Public Health Act, 1875, contains enactments which are common to both urban and rural districts, or which apply to one or other exclusively. Section 91, which applies to both, is the only weapon possessed by rural sanitary authorities for abatement of the most dangerous nuisances. The test of the value of a sanitary law is the celerity with which it can be used. It takes about six weeks to bring into and enforce in a court of law Section 91. A similar nuisance in the next street under urban rule can, and in many cases must, be abated by the authority, under Section 47, which belongs to urban authorities exclusively. Offensive trades can only be dealt with as nuisances under Section 91 by rural authorities, and it is most difficult to obtain a conviction; while urban authorities can deal with them successfully under Sections 112 and 114. Dangerous and dilapidated buildings, dealt with by urban authorities under Section 160, cannot be dealt with at all by rural authorities. Although nearly all the new houses are being built in the rural districts, in many parts rural authorities have not the least control over their construction or over the construction of wells or cesspits. Section 276 enables rural authorities to apply to the Local Government Board for urban powers, but as the section is permissive it is comparatively valueless. Many rural authorities will not accept urban powers or make bye-laws. The Public Health (Water) Act, 1878, would have more value if it contained a definition of what constitutes wholesome water. The continued wholesomeness of water depends upon the surroundings of the supply rather than upon the existence of a small amount of organic matter in it at a given moment. The Sanitary Acts enable rural sanitary authorities to deal only with what is at the time present. They cannot require precautions to be taken for security of the public health. The time has come for revising the Public Health Act, 1875, as it applies both to urban and to rural authorities, but in rural districts it is imperative that action should be taken forthwith. Certain sections of the Act of 1875—as Secs. 47, 49, 112, 114, and 160—should be at once made universally applicable, and rural authorities should be required to frame bye-laws, and especially such building bye-laws as would give fair security against disease. To this end it is desirable that the Local Government Board should frame a second set of simple model bye-laws especially applicable to rural districts.

OTOLOGY.

MR. HODGSON, the President of the Section, selected as the subject of his address the Progress of Aural Surgery during the Present Century, and, after offering a welcome to the visitors, remarked that the period of eighty years includes the history of about all that can be recorded on the subject to any purpose; as although the anatomy of the organ of hearing had been fairly well made out for a century or more previously, a knowledge of its diseases and their suitable treatment could not be said to exist: what was thought and done was not only devoid of common sense, but for the most part empirical, not to say absurd, and sometimes even disgusting. In 1806 a Mr. John Cunningham Saunders (demonstrator of practical anatomy at St. Thomas's Hospital) brought out the first book of English origin that put aural surgery on a clear and sound footing. He classified the diseases as they respectively affect the outer, middle, and internal portions of the organ; and although his means of diagnosis were very defective, yet by making numerous careful dissections of the ears of deceased persons who had been deaf, he obtained valuable information wherewith to guide his notions of pathology and treatment. He pretty successfully treated otorrhœa and polypus, practised paracentesis of the membrane for tympanal suppuration, and showed that neglected suppuration of the ear might lead to brain disease. Some six years previously Mr. Cooper (afterwards Sir Astley) had, at the suggestion of Sir Everard Home, punctured the membrane in a few cases in which the Eustachian tube was supposed to be impervious, with the object of letting air into the drum cavity. Some thirty years afterwards, Kramer of Berlin, and two years later Pilcher of London, each brought out a book on diseases of the ear. Both these authors dwelt much on the importance of Eustachian treatment; Kramer by means of the catheter and a metallic air-pump for forcing in air and vapours to the tympanum, and Pilcher by using bougies and stilettes and sending in fluid injections by the catheter and a syringe. Kramer's treatise held sway for many years; although his air-pump soon fell into disuse in England, especially after the occurrence in London of two sudden deaths during its employment by a practitioner in Gower-street. Emphysema of the throat, implicating the glottis, was supposed to be

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the effect, the mucous membrane having been torn first by the point of the catheter. A case of emphysema of the neck, whilst using the catheter and air-pump occurred to Pilcher, but it did not prove fatal. In 1848, in THE LANCET for July 1st, Mr. Yearsley made public his fortunate discovery of the so-called "cotton-wool drum," the value of which is still considered as great as then. If Saunders had lived longer one can imagine that he might have hit upon something of the sort, as he seems to have been much struck with the fact that one or two of his patients heard considerably better whilst a drop or two of fluid (even if it were pus) was in contact with the maimed membrane. During the decade 1850 to 1860, Wilde of Dublin and Toynbee of London came to the front, the former advancing aural surgery in a thoroughly practical and common-sense manner. The polypus snare, a free incision down to the mastoid process, and the tubular speculum are identified with his name—the speculum, however, being modified from Gruber's, and perhaps not thereby improved. Toynbee, by his painstaking and indefatigable dissections, put the pathological anatomy of the ear on a footing never previously approached, and which has largely helped forward a more correct understanding on the subject. In consequence of Toynbee having drawn attention to the normal condition of the Eustachian tube being *closure* (except under the influence of some muscular action, such as swallowing), Politzer was led to work out his simple and now well-known method of inflating the drum cavity. The name of Politzer, Mr. Hodgson observed, brings us to within a quarter of a century of the present day. During this period increased activity has sprung up, most civilised countries having furnished men who have made advances in otological knowledge. Thus, Lucæ and Politzer have taught us the use of the tuning-fork; trephining the mastoid (which Petit originated in 1774) has been revived by Troltsch, James Hinton, and some Americans, and been fully established as an orthodox proceeding. Troltsch again has given us a simple, but effectual, mode of illuminating the meatus and the drum membrane; and the laryngoscope, reversed, serves us well for examining the pharynx and posterior nares; whilst, during the same space of time, numerous books and monographs have appeared, wherein not only the minuter anatomy (healthy and morbid) and physiology of the ear, but also the general principles and various details of aural surgery, have been described with as much accuracy as characterises other branches of surgery. In conclusion, Mr. Hodgson remarked that, although he had practised at Brighton for forty years, he had met nothing to support the theory advanced by some aural surgeons that exostoses of the meatus owe their origin to sea-bathing, although he had known prolonged "side-stroke" swimming in the sea cause severe ordinary otitis on the submerged side.

ANNUAL MUSEUM.

The exhibition of foods, drugs, and peptonised compound nutrients in the Museum of the British Medical Association at Brighton this year was of quite an exceptional character, and attracted a great deal of attention both from the members and the public generally. Most of the leading houses were represented, and an effort had evidently been made to ensure a display of new remedial agents.

Messrs. Allen and Hanbury showed not only drugs, but apparatus and accessories adapted for medical and surgical purposes. Their douches and sprays for the throat, nose, and ear were of especial interest, and were carefully examined by many of the visitors. Their cresolene has now been for some time in the hands of the profession, and the general opinion seemed to be in every way favourable to its employment. Their perfected cod-liver oil and tasteless castor oil are already established favourites, and call for no detailed criticism.

Messrs. Savory and Moore exhibited pancreatic emulsion, datura tatula specimens, and a fine collection of lamels and discs of all kinds. Their "fruit confection" and taurocholate of sodium pills coated with keratin are especially deserving of mention. The solid liniments of belladonna, aconite, camphor, and croton oil are a decided advance in pharmacy, and deserve to be better known.

Messrs. T. and H. Smith exhibited morphine, codeine, cryptopia, meconisine, gallic acid, tannic acid, jalap resin, scammony resin, and many alkaloids and active principles, for the careful preparation of which they have been so long renowned.

Messrs. Corbyn, Stacey, and Co. were represented by various drugs, chemicals, and pharmaceutical products of recent introduction. Their "Notes on Drugs and Chemicals" served admirably to explain and elucidate the various points of interest in connexion with their exhibit. Their new soluble cerium salts are a decided novelty, and will probably in time supersede the old-fashioned oxalate. Their liquor tolutanus is very valuable as a flavouring agent, and has many advantages over the syrup of the Pharmacopœia. Their apiol perles are useful, and will be found of service in the treatment of amenorrhœa and other allied conditions. In connexion with Messrs. Corbyn, Stacey, and Co.'s exhibition we may call attention once more to Valentine's meat juice, for which they are the agents. In this admirable preparation not only is the flavour of the meat preserved, but the albumen of the juice is retained in perfect solution.

Mr. Martindale exhibited his well-known Antidote Bag furnished with a complete supply of physiological and chemical antidotes, hypodermic syringes, and case of solutions. His capsules of glass encased in silk and cotton-wool, and containing bromide of ethyl, chloroform, iodide of ethyl, and nitrite of amyl, are admirable contrivances; whilst his granular effervescent preparations of caffeine hydrobromate, sulphate of sodium, and sodio-magnesian aperient are beyond praise. The various odourless substitutes for iodoform—iodol, iodosalicylic acid, and diiodosalicylic acid—attracted much attention. We noticed a very fine specimen of mercurous tannate, the new remedy for syphilis, introduced by Lustgarten of Vienna. It is best given in the form of pills, each containing one and a half grains.

Messrs. Burroughs, Wellcome, and Co. showed some excellent specimens of Strophanthus hispidus, the new heart remedy and substitute for digitalis, introduced by Professor T. R. Fraser of Edinburgh. Their tincture of strophanthus is a reliable preparation, and is now largely employed. The Burroughs pure terebene, for the treatment of chronic bronchitis, winter cough, flatulence, acidity, and allied conditions, is free from all objectionable odour and taste, and may be prescribed with confidence. The new tabloids of antipyrin and trinitrin—the latter for the treatment of angina pectoris and asthma—are decided novelties, and deserve a trial. Their medical pocket cases, hypodermic cases, and medicine chests are excellent, and will be found most useful in country practice. This firm, we notice, makes a special feature of Dr. Liebreich's lanoline in all its various forms for external application.

Messrs. Thos. Christy and Co. showed an admirable collection of new and rare drugs, including acalypha indica, alveolos milk, kola nut, papaw juice, viburnin, and aletrin. The Siegesbeckia orientalis is said to be a valuable depurative, and to possess great healing properties when employed in the treatment of gangrenous ulcers and sores. The sentellarin prepared by the well-known firm of Lloyd Bros. of Cincinnati, for which Messrs. Christy and Co. are the agents, is a tonic stimulant to the nervous system, and is useful in low fevers and when the system is suffering from exhaustion due to over-excitement. Many of these remedies are as yet but little known, at all events in this country, but they have undoubtedly a great future before them. In connexion with Mr. Thos. Christy's admirable exhibit it is only fair to award a passing word of praise to the periodical entitled "New Commercial Plants and Drugs," so admirably edited by that gentleman.

Messrs. John Bell and Co.'s exhibit consisted chiefly of a collection of specimens of absorbent wool, with boric, carbolic, and salicylic acids, iodine, iodoform, perchloride of iron, and matico, all of which are of much value.

Messrs. Burgoyne, Burbidges, and Co. exhibited for Messrs. Parke, Davis, and Co. specimens of the well-known fluid extract of cascara sagrada and cascara sagrada, both of which are now so largely used in the treatment of obstinate constipation. The Semple's atomising inhaler shown by the same firm is an admirable contrivance, and commends itself to our notice in the treatment of hay fever and coryza. It may be employed for atomising almost any medicated fluid, but compound tincture of benzoin and a mixture of pure terebene and oil of cubebs are most commonly employed. We have no doubt that the employment of atomised fluids for bronchial affections will soon become more generally known.

Messrs. Fairchild Brothers and Foster, of New York, exhibited some very fine tripsin, the most potent form of the fibrin-digesting principle of the pancreas. It is said to be

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a powerful solvent of diphtheritic membrane, and to be capable of effecting a cure in well-nigh hopeless cases. The pepsine in scales prepared by this firm is a good digestive agent; whilst their zymine (extractum pancreatis) and zymine tabloids will always take a high place as therapeutic agents.

The Maltine Manufacturing Company showed, in addition to their maltine, specimens of Carnrick's beef peptonoids, Carnrick's peptonised cod-liver oil and milk, and Carnrick's soluble food for infants, invalids, and the aged—the last-named being described as a substitute for mother's milk. Peptonised foods of all kinds are now largely employed in the treatment of many diseases, and are of much value.

The Kepler Malt Extract Company have three new preparations—(1) malt and cream, consisting of two parts of the former and one of the latter evaporated *in vacuo* to dryness; (2) malt and milk food for infants and invalids, designed to correspond when diluted to human milk, the milk being peptonised; and (3) a malt, milk, and chocolate combination, made in the same way as the preceding preparation with the addition of a small proportion of pure coca. These new preparations are all of much value. The Kepler Extract of Malt Company also demonstrate by a series of microscopical specimens that their extract of malt and cod-liver oil is a true solution and not merely an emulsion—a point which may now be said to be fairly established.

In connexion with therapeutical appliances we must award a word of praise to Mr. Coxeter's batteries. His constant currents are remarkable alike for their cheapness and excellence. Some of the small batteries are admirably adapted for use by patients themselves, whilst others are most elaborately fitted, and will be found useful in the consulting-room.

In Section B, which included new books, surgical instruments and appliances, there were numerous interesting exhibits.

Messrs. Down Brothers showed many instruments which have been invented by Guy's Hospital surgeons, such as Golding Bird's trachea dilator, Lucas's forceps for removal of foreign bodies from the air-passages, Symond's œsophageal tube, nephrectomy instruments, lithotomy and lithotrity instruments, and midwifery instruments.

Messrs. Mayer and Meltzer exhibited a new spirometer by Dr. Mackenzie; a new intraocular syringe by Dr. M'Keown; and their patent self-adjusting piston.

Messrs. Weiss and Son had a collection of modern surgical instruments.

Mr. Hawksley showed a large series, including a very interesting set of appliances or aids for the improvement of hearing, as well as instruments employed in aural surgery.

Messrs. Coxeter and Son exhibited their new student's ophthalmoscope and a number of electric batteries and appliances.

Messrs. Evans and Wormull showed improved instruments for registering temperature, for aspiration and exploration, and improved appliances for dressing wounds. Exhibits were also shown by *Messrs. Krohne and Sesemann* and *Messrs. Arnold and Sons.*

Electric apparatus was exhibited by the *Electric Apparatus Company;* optical instruments by *Messrs. Pickard and Curry, T. Rowley and Son,* and *W. S. Stanley.*

Mr. H. K. Lewis and *Messrs. Cassell* showed a large collection of their respective publications; whilst charts, diagrams, &c., were exhibited by *Messrs. Danielssen and Co.* and *H. Silverlock.* Haviland's health guide map for Brighton was also appropriately exhibited.

In Section C, devoted to anatomical and pathological specimens, the most striking exhibits were the photomicrographs and microscopical preparations of Dr. Heneage Gibbes. *Messrs. R.* and *J. Beck, Medland,* and *E. Hinton* showed microscopes and microscopical appliances. Pathological specimens from the museum of the Sussex County Hospital were exhibited by Mr. L. P. Blaker; and specimens of cardiac thrombosis and others from the Great Ormond-street Hospital for Sick Children were exhibited by Dr. Chaffey. There was also a collection of specimens from the Alexandra Hospital for Children, Brighton. Dr. Tyson and Dr. Bowles of Folkestone showed several specimens; and Dr. Goodhart had sent some from Guy's Hospital museum. Dr. Beaven Rake exhibited some specimens of leprosy; and models and drawings of cutaneous disease were shown by Dr. Brooke, Dr. H. Radcliffe Crocker, and Mr. J. Startin.

Besides drugs, Sections A and B included also hygienic and sanitary appliances—such as specimens of Dr. Jaeger's woollen clothing and bedding; *W. Barlow's* "hygienic boots"; invalid couches, &c., by *J. Carter, Hamilton and Co., W. Watson, Leveson and Son.* Earth-closets were shown by the *Moule Sanitary Company,* and other improved closets and lavatory arrangements by the *Hygienic and Sanitary Engineering Company.* In the Pavilion Grounds *Messrs. Pugaard and Galschiot* showed a portable hospital on Tokeer's system.

BACTERIOLOGICAL MUSEUM.

This was perhaps the most unique of the week's exhibits, and too much praise cannot be awarded to Mr. E. Crookshank, who supervised and arranged it, and who attended during the whole of each day of the meeting to explain and demonstrate the apparatus and preparations. Three large rooms in the School of Science and Art were devoted to this purpose. In one there was a complete collection of bacteriological apparatus exhibited by F. E. Becker and Co., J. J. Griffin and Son, and R. and J. Beck, and by Mr. Crookshank. In another room there were to be seen all the processes which go on in the bacteriologist's laboratory—viz., cultivation of micro-organisms, of various kinds, in different media. These were exhibited by Mr. Crookshank and Dr. Penrose. The third room was devoted to an equally extensive display of microscopical preparations of bacteria and other pathogenic organisms, and also of photomicrographs and apparatus connected with photomicrography, all these exhibits being by Mr. Crookshank. On no occasion has there ever been collected so large a number of specimens and *matériel,* and to the great majority of those who visited the collection it must have been the means of opening up a new world. They were enabled to realise the remarkable extent to which the study of bacteriology has been carried, as well as to admire the industry and painstaking which had enabled so striking a demonstration to be made.

In closing this brief notice of the annual meeting of the Association, it is right to add that everything appears to have passed off with success, both the social and scientific elements being carried out with a spirit which could hardly be surpassed. Something, no doubt, must be put down to the fortunate circumstance of the place of meeting. Brighton looked at its best, and the extensive and admirable accommodation afforded by its excellent hotels was much appreciated by the members of the medical profession who came from all parts of the kingdom to take a part in this annual gathering.

The social entertainments of the week were brilliantly closed by the reception given by the Mayor and Mayoress at the Royal Pavilion on Friday evening.

Saturday was devoted to excursions, of which five had been planned—viz., one to the Isle of Wight by special steamer, the passengers landing at Ryde, where they were entertained at luncheon before returning to Brighton by the route they came; another to Arundel and Chichester, visiting the castle and cathedral at Arundel and being entertained at luncheon by the Duke of Norfolk, thence to Chichester, where a visit was paid to the cathedral and the party were entertained at tea by Dr. Tyacke and the medical men of Chichester in the old Council Chamber. A third party proceeded to Eastbourne, where they were entertained at luncheon, followed by visits to Romsey and Beachy Head; a fourth excursion was to Tunbridge Wells, with drives to Penshurst, Eridge, and Bayham; and a fifth to Hastings, when the new hospital with circular wards was inspected, thence to Battle and Normanhurst, the seat of Lord and Lady Brassey.

Amongst the special visits of interest made during the week there were two of notable prominence as indicative of the measures taken by the Brighton authorities to ensure a good water-supply to the town and an efficient system of drainage. On Wednesday a large party inspected the Goldstone Waterworks, and on Friday there was a similar inspection of the intercepting sewer about four miles to the east of Brighton.

DARENTH CAMP.—On Monday last the Right Hon. C. T. Ritchie, President of the Local Government Board, visited the camp of Darenth and inspected the site for the proposed permanent small-pox hospital. He also made a careful inspection of the temporary buildings now standing, which were in use during the last small-pox epidemic.

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THE LANCET.

LONDON: SATURDAY, AUGUST 21, 1886.

THE annual meetings of the British Medical Association become year by year more interesting, and, we are glad to observe, more practically useful and scientifically important. Time was when these gatherings were less popular, for the affairs of the Association were in the hands of the few; but with the growth of the body itself there has been infused into its management a more enlightened spirit, and the work the Association performs is proportionately extended. With the striking success of the Brighton meeting—one of the most successful that the Association has known—and the harmony that marked its proceedings, still fresh in the mind, it may seem ungracious to hint at certain improvements which are yet needed at these gatherings if they are to fulfil their whole purpose. At the same time, the Council may not take it amiss if we present to their notice some matters which require attention and reform. The Association is now so large a body that its interests and affairs have increased enormously, and although it confides all its important functions to a representative Council and to numerous committees, the conduct of its business requires more organisation than at present obtains. It must have struck many that the time allowed for such business is lamentably insufficient. The practice of having addresses in medicine, surgery, and cognate sciences in addition to a presidential address is not one which we should care to see abandoned; but it must be confessed that the transaction of business after a lengthy address is unsatisfactory. Those who are attracted to the general meetings to hear the addresses are not disposed to linger whilst the real affairs of the Association are being discussed and arranged. The general meetings therefore are attended by a small number only, and no topics are adequately debated. The remedy will lie in an extension of the time allotted to the whole meeting, and the setting apart of at least one day for the sole purpose of such debate. It may be said that it is impossible to afford sufficient time to ensure anything like an adequate discussion of such topics; that the general body of members would take no share in such debates, which could end in no practical result. This may be so; but in an Association that undertakes many and varied duties the opportunity at least should be afforded for free discussion upon certain questions of interest; especially should such provision be made in the case of the reports of committees. The merely formal adoption of these reports, although doubtless showing the confidence the members generally have in the committees, is, after all, but a poor compliment to their labours Take, for instance, the subject of Collective Investigation, a work upon which the Association has expended much funds, with, as many think, but inadequate return. The Committee itself would have liked to hear openly any objections to its line of action that might be entertained, and any suggestions for the better conduct of an undertaking that, *per se*, is desirable and valuable. It appears that the Council have undertaken to inquire into the work of this Committee, which we should regret to see abandoned, but which ought, if possible, to be made to excite greater interest among the profession Nor can we leave this subject without alluding to the labours of the Medical Reform Committee, and the well-merited recognition accorded to its indefatigable chairman by the Association. It was a graceful as well as a just act to bestow on Dr. WATERS the highest honour it was in the power of the Association to confer. Turning now from the general business of the Association to the actual scientific work of the annual meetings, it is plain that there is room for improvement here also. Of late years the practice has grown up of having set debates in most of the sections. The practice was never more fully developed than at this Brighton meeting. Some of these debates were of considerable interest and importance, and were shared in by many well entitled to speak on the topics raised. Others, equally interesting and important, languished from lack of debaters, and took place before a scanty assemblage of members. It is worth considering whether it is advisable to encourage the reading of papers on subjects other than those set down for special debate, and also whether the number of sections should not be restricted, or some arrangement made whereby the sittings may be held at different hours.

In passing in review the proceedings of the week, the President's address naturally claims the first consideration. Although dealing with a somewhat trite topic, it was yet one which we do not think has ever yet been attempted in these presidential orations. As medical men and physiologists, it is not possible to gainsay the truth of Dr. WITHERS MOORE'S statements upon the physical injury induced by a too keen and undiscriminating course of intellectual training. The mind can only be forced at the expense of the body, and this is true of both sexes. Dr. WITHERS MOORE, however, intended his strictures to apply to the female sex, and prophesied dark things of the deterioration of the race if the present striving for equality in the higher pursuits continues to be carried on by those upon whom devolves, or should devolve, the cares of maternity and the training of the young. Brighton is an intellectual centre, and has long enjoyed celebrity as a training-ground for young women; but even there it is surprising what differences have shown themselves in the methods of training within a generation. What we must all declaim against is intemperance in study, without due regard to the maintenance of physical health. Only those who are really the "fittest," in body as in mind, should be permitted to enter for those competitions—which are, we fear, doing as much harm as good—that now universally prevail. The examination system needs to be far more jealously guarded than at present; and those who have the charge of the young should aim less at heading the list with their scholars, and more after the individual capacities and the physical well-being of those committed to their care. It is too late in the day—nay, it would be unjust and wrong—to exclude women from such avenues of employment that many of them are driven by necessity to seek; but we can exercise more supervision over their training, and do much to render their path easier and the race healthier by so doing. We must face the fact that there is a "redundancy" of women, as the late Mr. W. R. GREG phrased it; and

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surely if there be any manhood or chivalry left (and we cannot share Dr. MOORE'S fears that women themselves will be responsible for the loss of this attribute), we ought to take care that the weaker sex have a fair field for the exercise of their faculties, not so much in the way of competition with men as in co-operation for the general good. This, however, is a large question, and one which has received a great deal of attention. Dr. WITHERS MOORE'S address has given rise to criticism of all kinds and from all quarters. He spoke with authority, and he kept within the limits of physiological knowledge; but we take it that he would be the last to advocate a return to the primitive conditions of life or to close the door of knowledge upon one-half of humanity. The other addresses at Brighton were of a high stamp. No better substitute for the lamented AUSTIN FLINT could have been found than Dr. BILLINGS, whose quiet humour, indicated by tone and gesture as much as by language, made the task of listening to a somewhat dry topic a rare intellectual treat. Mr. HUMPHRY and Dr. MAPOTHER placed clearly before their respective audiences the position of surgery and public health at the present day.

On certain features of the Medicine and Surgery Sections we have commented elsewhere. In the Pathology Section three interesting debates, unfortunately very thinly attended, were opened by Dr. Ross on peripheral neuritis, by Mr. HOLMES on aneurysm, and by Drs. STURGES and DOUGLAS POWELL upon pneumonia. The Public Medicine Section was amongst the most active, and here also an important practical subject—viz., the duration of infectiveness—was discussed preliminary to a collective inquiry. But we cannot undertake to enumerate even a small portion of the work done in the nine hours or so during which the several sections sat. Not the least valuable contributions made therein were the addresses of the sectional presidents, as might be expected when these include such well-known names as those of ERICHSEN, BROADBENT, CLOUSTON, DRESCHFELD, and LAUDER BRUNTON. Nor should mention be omitted of what was perhaps the most notable feature of the scientific side of this meeting—we mean the bacteriological demonstrations and museum, which were under the direction of Mr. CROOKSHANK. Some of those present may have recalled the fact that only five years ago, at the Worcester meeting, a very limited bacteriological demonstration took place in the Pathology Section. The newly-discovered tubercle bacillus and the mode of its demonstration then formed the staple topic. The contrast between that occasion and the present was striking, and spoke eloquently in evidence of the remarkable advance made in bacteriology, which may now well claim to be a special department of science by itself. Whether the next five years will show as great advances who can say? Perhaps with increased knowledge we may learn to modify our views as to the relation of bacteria to mankind, but it is hardly likely that we shall ever cease to recognise their importance.

The Brighton meeting was further notable for the visit of the delegates from the American Medical Association, headed by Dr. DAVIS, of Chicago, who had come to offer a cordial invitation to the Washington International Congress, over which Dr. DAVIS will preside. The reception accorded to these gentlemen is, we may trust, of good augury for the success of the Congress, which at one time seemed likely to be in jeopardy. Again, this meeting was important in being the first since the passing of the Medical Act, and the decision of the Association not to interfere in the election of direct representatives to the Medical Council is a wise and salutary one. Lastly, from a social point of view, there seems to be no two opinions as to the character of the receptions and entertainments with which Brighton honoured her guests, whilst the suitability of this favourite health-resort for such a gathering was warmly acknowledged by all.

THE members of the British Medical Association assembled at Brighton have been favoured this year with two very interesting but very different addresses in Surgery. Both were retrospective, both dealt with the great advances which have been made in recent years in scientific as well as operative surgery, and the authors are both men of mark and long and varied experience. Mr. F. A. HUMPHRY reviewed the past, not so much with a view to point out rapid strides that have been made, though fully recognising and valuing them, but for the purpose of inquiring whether old theories, old opinions, old treatment, old books, are sufficiently studied and considered—in fact, to inquire whether we are not possibly going ahead a little too fast. Is the "medical side of surgery" sufficiently considered, and making equally rapid advances with the more purely surgical aspect of the science?

"Of late years," asked Mr. HUMPHRY, "how much has surgery done for medicine? Has medicine done as much for surgery, and has the medical treatment of surgical disease received the same consideration or made the same rapid strides as the study and development of operative procedure?" LAWRENCE, in an Introductory Lecture fifty years ago, boasted that modern surgery had greatly diminished the number of surgical operations, but both Mr. HUMPHRY and Mr. ERICHSEN now point out that the modern surgery of to-day has vastly increased not the number only, but the scope and magnitude of operations. Mr. HUMPHRY, however, reminds us that "an operation is an admission that medical treatment has failed in curing the disease." Up to a certain point Mr. HUMPHRY is quite right, and we heartily concur in this view; but we would ask whether it is absolutely true that there are more operations than formerly—that is to say, are there now performed more or fewer of the operations to which LAWRENCE referred: more amputations, for instance, *pro ratâ* than formerly? Of the new operations it is not fair to speak. Ovariotomy was unknown, and, with many other new operations, must be left out of count, though no one will argue that a successful ovariotomy is not an unmixed triumph, notwithstanding that medical treatment has failed. And herein lies, as it appears to us, the characteristic of modern surgery as understood to-day: an increase in scope rather than in number or method of operations. Amputations remain much as they were, and the removal of tumours also has undergone little or no change. It is rather in the after-treatment that modern surgery comes in with its beneficent discoveries, and prevents patients from poisoning themselves and their neighbours with the foul discharges that were once con-

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sidered part and parcel of the operation. It is this same knowledge of septic inflammation, its causes, its consequences, and the means of preventing them, that has enabled surgeons so largely to widen the range and scope of surgical proceedings. Amputations after compound fracture are fewer in proportion to the total cases than at any previous time, and this is entirely because the sources of danger are better understood than formerly. In such cases as these surely there can be no question of medical treatment, nor can there be any reproach in adopting surgical remedies in preference to therapeutic ones. Would it not be equally just to say that the fact of therapeutic measures being necessary is an admission that common sense has failed to arrest the disease, or has failed to keep clear of an accident? It thus appears to us that whether we adopt medicine or surgery depends on the nature of the case. It would seem that "medical surgery" is chiefly indicated in disordered function, and that surgery proper is the remedy for diseased or injured tissue. The one has to be set right, the other has to be removed: precious time is only too often wasted in trying therapeutic measures, when radical surgery can alone be of any avail.

Mr. ERICHSEN arrives at the conclusion that we have reached finality in the mechanical art of surgery both as to the expansion of its limits and the precision of its practice, and points out that further advances are to be sought not on the old lines, but rather in applying to it lessons which can only be learnt in the pathological laboratory. With the last of these conclusions we fully agree, but we doubt very much whether the mechanical side has been as fully developed as it is capable of. Indeed if it were so, would not surgery have obtained finality? The lessons of the laboratory are not surgery—they are science, and can only be applied usefully to the cure of disease by the mechanical arts which really constitute surgery. When we look back even on the past year only, we must recognise that science is ahead of surgery in many respects, and that she has already pointed out directions in which surgeons may successfully labour, provided only they can bring the necessary mechanical skill to bear. It would indeed be discouraging if practical surgery were already approaching finality. We venture to hope the contrary, and even to think that there is room for a vast amount of improvement. It will indeed be strange if, with the increased number of hospitals all over the country, the improved education of students, the great mechanical skill which is now available for the manufacture of surgical appliances, we do not continue to see fresh mechanical developments in the manipulative part of surgery. We can hardly think that surgical instruments or surgical dressings have reached their highest development. In ovariotomy, for instance, it was believed for a time that the use of LISTER'S antiseptic method had reduced the mortality of the operation to the lowest possible point, until it was shown that greater experience and skill in mechanical details could achieve, even without Listerism, ever improving results.

We make these observations less because we differ from Mr. ERICHSEN than because we hold that it will never do to minimise the great importance of mechanical skill and mechanical detail in surgery. Surgery is essentially an art; modern investigations are beginnin to ntroduce a strong element of science. But, notwithstanding, surgery proper is only the mechanical application of science to the cure and prevention of disease; and the mechanical art must always be largely fostered and developed by anyone who would desire to become a truly great surgeon. Nor can we quite bring ourselves to think that surgery has reached finality as regards its limits. There are still several regions of the body for which surgical help is often wanted, and which, we believe, will sooner or later come within the limits of legitimate surgery. Thus, the lungs have only recently come to be regarded as susceptible of benefit from surgical treatment, and very much yet remains to be done before surgeons will be able to boast of their results. It is known that animals have survived the removal of an entire lung, and it may one day come to be equally well known that the human subject is able to bear such an operation as well as the lower animals. The spleen too has been removed successfully, but splenic surgery is still in its infancy; so also is liver surgery, a subject touched upon, but not greatly elucidated, at Brighton last week. Thus, it cannot be denied that very much remains to be done, of work which is largely mechanical, before these organs can be placed on the same footing, when diseased, as the ovaries, or even the brain.

AMONGST the many features at the recent meeting of the British Medical Association, none were more interesting or commendable than the discussion on cases in which disease of the valves of the heart has been known to exist for upwards of five years without causing serious symptoms. The discussion was opened by Sir ANDREW CLARK, who never spoke to greater advantage. The difficulty of compactness, where the number of cases and the number of ideas to be dealt with were so great, will appear the more clearly the more it is considered, and when we remember the little leisure that Sir ANDREW can have for either making notes or summarising conclusions or impressions, we are disposed to highly commend his discourse at Brighton. The notes of cases of valvular disease on which the discourse was based extended over a period of fifteen years. The number of cases was no less than 684. These were without serious cardiac symptoms. It is interesting to notice for what purpose these patients found their way to Sir ANDREW CLARK. He gave the following particulars: 272 complained of indigestion, 57 of rheumatism, 22 of gout, 44 of nervous ailments, 17 of eczema, and 4 of phthisis. Other persons with cardiac murmurs suffer even more slightly than these, and so pass through years of life without having their heart murmurs detected; for which, as Dr. BRISTOWE seemed to think, there is something to be said. He said that many people were made miserable through the discovery by doctors of cardiac murmurs, of which they had no previous knowledge or symptoms, and he very shrewdly said that though he was disposed to think himself quite sound in a cardiac sense, he would be very sorry to invite the criticism of Sir ANDREW CLARK or Dr. GAIRDNER. Medical men have themselves to blame very largely for the exaggerated fears of heart disease entertained by many, and for an exaggerated objection to have their hearts examined. The stethoscope is a handy thing, and the detection of a murmur not a very difficult operation. Some physicians, more intent on making a show of their own art than a study of

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the patient's welfare, have been ready to magnify their little and cheap discoveries. The late Dr. STOKES used to tell, with strong disapproval, of a physician who, on detecting a murmur in the heart of a distinguished and useful public man, said, "Sir, I hear your death knell." Such a prognosis fulfils itself—as it did quickly in this case, though previously the patient was apparently in good health,—and the man dies, not of the cardiac disease, but of the nervous shock, literally of his physician. The great value of the discussion raised by Sir ANDREW CLARK, and most ably sustained by Dr. GAIRDNER, Dr. CLIFFORD ALLBUTT, Dr. BRISTOWE, and others, was not so much in any novelty of discovery announced, as in the evidence afforded by it of the wider and wiser view of disease taken by physicians and by all good practitioners, and of their perception of the fact that the run of people with heart disease do not fare very much worse than other people, if they only have the sense to consult sensible medical men and follow their advice. We heartily endorse Sir ANDREW CLARK'S teaching and that of the other distinguished authorities whom we have mentioned, and we bespeak for patients with heart disease, but with common sense and with due respect for medical teaching, more comfort from the profession than they have sometimes received. Let their common ailments be cured, let their diathesis be considered, let their intelligence be appealed to as to the best way of preserving their health and improving the muscular tissue of their heart as of their limbs, let Dr. ALLBUTT'S shrewd remarks as to the specially injurious effects of alcohol on the heart tissue, and Sir ANDREW'S exposure of the folly of over-eating and drinking, be duly pondered, and valvular disease will lose half its terrors. It is half—it is two-thirds—of the duty of a physician to find out the favourable facts about disease. He is not a mere pathologist, a mere hearer of murmurs. We cannot have absolutely healthy bodies; few of us have. Nearly all great works are done by those in whose health there is a flaw, to be detected, perhaps, but not to be magnified, "rather to be healed." As physicians cultivate this view of their calling men will flock to them for comfort and for guidance. Faulty men will not evade them, even if they happen to be physicians to life insurance offices, who have lessons to learn from the recent discussion at Brighton.

SOME two years ago Dr. VICTOR C. VAUGHAN, Professor of Physiological Chemistry to the University of Michigan, succeeded in isolating from some samples of cheese which had produced alarming symptoms in several persons a highly poisonous ptomaine, to which the name of tyrotoxicon was given. The effects of the poison were demonstrated on the investigator and several students, amongst whom dryness and constriction of the fauces, nausea, retching, vomiting, and purging were produced. Last November Dr. VAUGHAN succeeded in isolating the same poison from a sample of milk which had been tightly closed up for about six months, the appearance and effects of the poison being the same as in the previous experiments. Dr. VAUGHAN then placed samples of normal milk in his workroom, testing them from time to time. After about three months the poison was obtained from one of the bottles after certain processes, such as filtration, the rendering of the filtrate alkaline, and agitation with ether, the final outcome being that on evaporation the crystalline substance in question was left. A solution being made of the substance, ten drops were placed in the mouth of a dog three weeks old, and within a few minutes frothing at the mouth, retching, vomiting, muscular spasm of the abdominal walls, and subsequently watery stools were the result.

Following on this experience, Dr. VAUGHAN received a sample of melted ice-cream which had seriously affected eighteen persons who had partaken of it. The ice-cream had been flavoured with vanilla, and since those who had preferred lemon ice-cream had escaped any untoward results, it was at first assumed that the mischief was due to the vanilla. But experiments on individuals and otherwise showed that this was not the case. The cream substance itself being then tested in the same way as had formerly been done in the case of the tyrotoxicon, the aqueous solution, after spontaneous evaporation of the ether, was given to a cat two months old, with the result that in ten minutes retching, vomiting, and nearly all the symptoms already described supervened. The cat being subsequently killed, the stomach and small intestines were found to be full of a frothy serous fluid, but there was no local redness, and the organs examined appeared normal. A description of the symptoms which those who had consumed the ice-cream had suffered was later on received, and it is evident that they agreed closely with those observed in the cat, and that, in addition, occipital pain, excruciating back-ache, and in some cases stupefaction, dizziness, and numbness, were experienced. The throats of all were also œdematous, and the pulse varied from 90 to 120.

Dr. VAUGHAN holds that he had already shown that tyrotoxicon can be developed in normal milk in a period of three months, but that it now appears the development may take place much earlier; the production of the ptomaine being in all probability due, either directly or indirectly, to the growth of some micro-organism. As yet the poison has not been obtained in sufficient quantity to enable an ultimate analysis to be made of it; but it is asserted that it is, without doubt, a chemical body produced by fermentation. Further experiments, including the administration of the materials resulting from them to animals, go, however, to show that the production of the poison is in no way related to the ordinary decomposition of milk.

As regards the ice-cream in question, details are supplied as to its manufacture, and it appears that there was no difference in the preparation of the vanilla and the lemon ices except in the flavouring, both being made from a sample of milk obtained from the same cows, the milk from all the cows being mixed before the custard for both ices was made. But the lemon cream was frozen some time before the vanilla cream. A further experiment was next made with a small hardened lump of the substance sent for analysis. It had been left on the filter paper, and it was mixed with cream and eggs and made up into a custard in the same way as had been carried out with the original custard, and it was then placed in a refrigerator. A filtrate was subsequently prepared of a portion of it in a similar manner to that adopted in the original analysis, and the residue on the evaporation of the ether was dissolved in water and given to a kitten about two

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months old, the result being the immediate production of symptoms resembling poisoning by tyrotoxicon. The experimenter himself partook of some, and was seized with nausea, vomiting, griping, &c. Reviewing his several experiments, Dr. VAUGHAN is of opinion that the fermentation going on in the custard, and probably begun in the milk, was arrested in that part flavoured with lemon by the freezing, which was begun immediately. But while the lemon cream was being frozen, that part of the custard which was to be made into vanilla cream continued to ferment, and before the freezing process was begun enough of the poison was generated to seriously affect those partaking of it.

This series of experiments is of importance in more than one sense, and one of these is referred to in some detail by Dr. VAUGHAN. He finds a great similarity between the symptoms of poisoning by tyrotoxicon and the symptoms produced in the human subject during certain diarrhœal epidemics. He especially refers to cholera infantum, and notes that this latter disease has a tendency to occur mainly at a time when decomposition of milk takes place most readily, and amongst persons whose surroundings are most favourable to fermentative changes, and he seems inclined to connect the infantile complaint with the production of tyrotoxicon generated from dried milk along the seam of a tin pail, or in a rubber nipple or tube, or in a nursing bottle. One thing is certain, that in this country cholera infantum, or fatal infantile diarrhœa, is due in many places to conditions quite apart from those of feeding; and whilst we would by no means exclude such a cause as Dr. VAUGHAN indicates from being at times one of those tending to the production of the disease he refers to, yet we should rather have looked for some such explanation as he offers in those groups of cases in which poisoning by articles of diet has occurred independently of infantile diarrhœa. The production of poisonous alkaloids, and their effects in causing sudden and serious symptoms in the human subject, is a matter calling for further study on both sides of the Atlantic.

THERE is no more interesting subject of study than that of the modes of causation of movements. Experimental investigation has given, and bids fair yet to give, results of no mean value. We have before us a paper entitled "Experiments on the Character of the Muscular Contractions which are evoked by Excitation of the various parts of the Motor Tract." It gives a succinct account of the researches carried out by Messrs. VICTOR HORSLEY and E. A. SCHAFER at the Physiological Laboratory, University College, London.

The motor tract may be divided into four parts: (1) The cortical centres in the grey matter, the well-known motor region; (2) the fibres proceeding thence along the corona radiata; (3) the same paths in the spinal cord, together with the spinal motor centres in the anterior horns; and (4) the peripheral continuation in the anterior roots and efferent fibres to the muscles. The experimenters have found that all these portions are excitable by electricity; electrical excitation always evoking contractions of the skeletal muscles, provided only that the degree of anæsthesia be not too deep, or the nervous matter exhausted by repeated stimulation or other extraneous circumstances. In all the experiments the observers named have commenced by recording the contractions which result from excitation of the cerebral cortex, and the epileptoid contractions by which, in many cases, they are succeeded. The excitations were made at the rate of fifty, decreasing to forty, per second, and consisted of induction shocks obtained by varying the current of one or two Daniell elements sent through the primary coil of a Du Bois sliding inductorium; the variations were effected by the short-circuiting of the current by means of a vibrating metallic reed, which is kept in motion by an electro-magnet and the point of which dips in and out of a cup of mercury. After the tracings have been obtained from the cortex, this has been removed, and stimulation of the corona radiata practised. Then the spinal cord has been exposed and cut in the dorsal region, the excitations being repeated at the same rate upon the distal cut end. Finally, in a few instances the observations were completed by cutting and stimulating the peripheral end of the motor nerve.

FRANCK and PITRES and others have asserted that each excitation of the motor tract is translated by a single muscular contraction; so that twenty excitations per second would be recorded on the moving paper as twenty waves of muscular contraction. With above forty strokes per second a tetanic condition is produced in which it is impossible or very difficult to recognise the influence of the individual excitations. Messrs. HORSLEY and SCHAFER have discovered that this rule does not hold good, at least as far as the first three divisions of the motor tract are concerned. The rhythm of muscular response to electrical excitation of the nerve centres is the same whether the electricity be applied to the grey matter of the cerebral cortex, or to the fibres thence proceeding, or to the spinal cord. The rate of the muscular rhythm is not the same as that of the excitation, except when the number of electrical excitations is less than eleven per second. It seems that some number of excitations above ten per second is required to make the rate of discharge from nerve centres as frequent as possible, and that, increase the rate of excitation as much as we may, we cannot get, so far as is known, by legitimate means, the motor centres to discharge their energy at any other rate than that of their own. This is indeed a most instructive law, and one which must open new ground, whilst enlarging our conceptions of the mode of action of the nervous system. It is further stated that the rhythm of muscular response in the case of voluntary contractions, and also of reflex ones, is essentially the same as that which results from the electrical excitation of the nerve centres. Again, it is asserted that the rate of muscular response in all cases of after-excitation (whether distinctly epileptoid in their nature or not) is fundamentally the same as that of voluntary and reflex contractions and of contractions immediately produced by a rapidly recurring electrical excitation, but the response in the case of epilepsy may present an apparent difference.

The principal conclusion to be drawn from these results, which have been supplemented by numerous observations on the voluntary and epileptoid contractions of man, seems to be best formulated thus: That every prolonged contraction of the skeletal muscles which is provoked by no matter what kind of excitation of any part of the nerve centres is a tetanic contraction which has been produced by

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a series of impulses generated in the nerve centres, and passing along the motor nerves at an average rate of about ten per second.

If these observations be true—and there is every reason to be satisfied that they are,—we find ourselves in possession of information which is of the highest scientific importance. Certain questions remain to be answered. It is said that forty electrical excitations of the fibres of the corona radiata generally give only ten muscular twitches, fused into a tetanus, or we may safely say only ten motor nerve impulses. Whereabouts does this transformation of forty into ten take place? Obviously in the spinal motor centres. There must be in them a mechanism for the summation of nerve impulses, or else for the regulation in some other method of the numerous afferent impulses. The question whether the cortical motor centres have a rhythmical rate of discharge is not yet settled, though the fact that in some individuals the automatic action of the cortical centres (as the authors physiologically describe a voluntary contraction) may occasionally produce a muscular response of twelve or thirteen, or even more per second, whereas the automatic action of the nerve cells of the spinal cord appears to be never capable of originating a rhythm of greater frequency than ten per second, lends a probability to this hypothesis.

If the motor centres have a normal rate of discharge, is it too much to suppose that a similar law prevails for the sensory centres? Is not the sensation of tingling composed of vibrations having a regular rhythm?

THE summer is advancing, and as yet we are unvisited by the dreadful guest which threatened us. The cholera has been for some time unpleasantly near us—now in Spain, now in France, and now in Italy. No one can tell that even now it may not swoop upon us, as it has so often done before, without warning and without pre-recognised cause. With all our modern science the disease still remains mysterious, baffling dogmatic teaching and throwing us back incessantly upon the few certain facts we have gained. The hypothesis of zymotic origin and propagation has certainly been strengthened by scientific study, but it cannot even now be said to have arrived at the position of a theory, and its admission leaves much still to be accounted for. What we do know for certain is, that some kind of seed or virus is invariably, or, at any rate, commonly, present, and that this seed, or whatever we may please to call it, develops under certain conditions as yet imperfectly known, and does not develop under others. There seems no doubt that the disease may be spread by what looks like contagion, as in certain hospitals and ships, by the air, as in the memorable case of Southampton, reported on by the late Professor PARKES, and above all by water, in regard to which there are endless examples, beginning with the celebrated Golden-square case, and extending to the terrible epidemic in Spain last year. It is generally admitted that water is the most potent and perhaps the most frequent agent for the propagation of the disease, but it is certainly not the only one, for cholera spread through Southampton in spite of an excellent water-supply, and it has been known to commit havoc on board a ship supplied only with distilled water.

For the present public fear is at rest. We are well into August, and the cholera has not come. Every week brings us nearer to safety, and we, like the rest of the world, trust not a little to the chapter of accidents. Only one thing could rouse us, and that is a single case of undoubted cholera. Such an event, which might happen any day would at once cause a panic. It would then be discovered that all kinds of sanitary evils existed in our midst, that our river was a cesspool, our water-supply imperfect and most imperfectly guarded, and that our guardians were ignorant and inert, and deserved impeachment. A torrent of gross exaggeration would set in, and probably a measure of more or less frantic zeal would be passed in a hurry. All this has happened so often before, that its repetition in the next panic may be counted upon as a certainty. We always forget easily the lessons taught by calamities that have passed.

In contrast with this *laissez-faire* system, this contented waiting for the sharp lesson of experience so often taught before, it is our duty once more to urge the necessity of doing something before the danger arises. It is, we presume, useless to call attention again to the condition of the Thames and its tributaries, for each of them is undergoing a process of tinkering which will certainly be accepted as reformation unless some really great voice makes itself heard in Parliament and by the country. But it does not seem equally hopeless to beg that one simple matter may be attended to at once during the remaining short period of the year in which the danger is urgent. The intakes of our great Water Companies in London and many other towns ought to be guarded with the utmost vigilance. We will not at present discuss again the question whether these intakes are in themselves satisfactory. Let us assume that they are, that the Thames and Lea in London and the queer gathering grounds of Hastings are in ordinary times all that could be wished. The question still remains whether they are not liable through mere carelessness to a sudden pollution, compared with which the introduction of arsenic into a house-well would be a mere bagatelle. A few illustrations will serve to show the danger. The water of the Thames above Hampton is, let us say, perfect, but the river is a highway for trade and pleasure; many house-boats are moored nightly in it during the summer months, and a great number of barges—which are to all intents and purposes house-boats—pass up and down every day. We have no wish to figure as alarmists, but is it not obvious that any simple case of cholera—or even of choleraic diarrhœa, which seems to be sometimes almost as venomous as cholera—occurring on any one of these boats in the neighbourhood of the intakes may infect with a horrible poison a large portion of the water-supply of the metropolis? It is certain that no filtration after so recent an infection could render the water safe.

Those who wish for further information in regard to the spread of cholera by drinking-water should read the admirable article contributed to *Nature* on June 17th, 1886, by Mr. GEORGE HIGGIN. In that article the whole history of the cholera epidemic in Spain in 1884 and 1885 is given with remarkable lucidity, and its close connexion with water-supply is fully proved. The evidence is over-

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whelming. Cities of bad sanitary repute but with good water-supplies escaped or were lightly touched, while others, such as Valencia, which were cleaner and better drained, but supplied with polluted water, suffered frightfully. So evident, indeed, was the connexion between infected water and cholera that in some towns—notably in Madrid, Toledo, and Seville—the doubtful sources were closed by public edict, and the pure supply was even patrolled day and night by armed guards to prevent the possibility of accidental pollution. These precautions seem to have been in every case successful.

Annotations.

"Ne quid nimis."

HEALTH OF ENGLISH WATERING-PLACES.

THE statistics bearing upon the recent health of English watering-places published in the Registrar-General's Quarterly Return, just issued, must afford considerable satisfaction to the thousands who are now migrating from our large towns to these holiday resorts. It appears that the mean annual death-rate during the three months ending June last among the more than a million of the resident population of forty-six seaside and inland watering-places of England and Wales did not exceed 15·6 per 1000. This rate was 2·4 below the general rate in the whole of England and Wales, and 1·9 below the mean rate among the nearly eleven millions of persons living in the rural districts, comprising the country parishes with their small towns and villages. With regard to the zymotic mortality in these watering-places, the report is scarcely less satisfactory. The annual death-rate from the principal zymotic diseases in these forty-six holiday resorts was 0·97, against 1·55, the mean rate in England and Wales, and 1·36 in England and Wales exclusive of the seventy-eight large towns. No zymotic diseases were registered during the quarter in Weston-super-Mare or in Tenby, while the rates in the other watering-places ranged upwards from 0·22 and 0·23 in Torquay and Whitby, to 2·11 in Eastbourne, 2·15 in Southend, 2·16 in Folkestone, and 2·63 in Herne Bay. In most cases in which the zymotic death-rate showed an excess this was due to the epidemic prevalence (during the three months ending June last) of measles or of whooping-cough. Measles was somewhat fatally prevalent in Hastings, Exmouth, and Blackpool; whooping-cough in Scarborough, Lowestoft, Folkestone, Eastbourne, and Worthing; scarlet fever caused 6 deaths in Yarmouth; and diphtheria mortality showed an excess in Southend, Folkestone, Rhyl, and Blackpool. It should also be stated that "fever," principally enteric, caused an exceptionally high death-rate in the watering-places on the Kentish coast, especially in the Isle of Thanet and in Dover. It should be borne in mind that the Registrar-General's figures afford no information of more recent date than the end of June, since which it is quite possible, for instance, that the outbreak of "fever" in the Isle of Thanet, which appears to have about equally affected the registration subdistricts of Margate and Ramsgate, has entirely disappeared. It would be judicious and useful to intending visitors if watering-places at this season of the year published monthly health bulletins readily accessible to the public. The health of English watering-places has now reached a general standard, and their reputation has most to gain from publicity and most to fear from false reports arising from the difficulty of getting promptly authentic information respecting their health and mortality statistics.

THE HAPPINESS OF "ANIMALS."

IT seems to us that a great fallacy underlies the interrogative proposition "Are animals happy?" and that the whole controversy arising out of the question raised by Mr. Cargill in the *Nineteenth Century*, together with any conclusions which have been arrived at, must be vitiated thereby. Practically the proposition amounts to this: man may be happy as an animal, and being thus happy, the question arises whether he is the happier or less happy because he has a bigger and better brain; or, to put the question in an inverted form, as Mr. Cargill would probably prefer to put it, "Are those animals which have less brain-power than man more or less happy than he?" The inquiry resolves itself into an endeavour to distinguish between the lower sensory and the higher cerebral forms of consciousness. If we were to cast this into a scientific form, it would be proximately, though not absolutely, accurate to say that one part of the experience of happiness depends on the activity of the cerebrum and the other on the functional energy of the sympathetic ganglia, and that the comparative prominence of these several sources of the experience of happiness is really what Mr. Cargill has been trying to determine. In like manner, one part of happiness depends on the absence of pain or irritation, and another on the sensation of what we call pleasure. In short, the search for any fixed point in the investigation pursued on the lines laid down by Mr. Cargill is fruitless. To speak frankly, the author does not possess that acquaintance with his subject which is indispensable to the prosecution of the inquiry he has instituted. Animals, including man, are happy—first in inverse proportion to their unhappiness by reason of a sense of suffering or the consciousness of need; and, secondly, in direct proportion to their capacities and opportunities for active pleasure. We have no means of knowing how much or how little of the so-called "happiness" of animals is negative or positive, or "physical" or "mental"—to use terms which are not definitive. The most we can do is to argue from the known to the unknown on the line of personal experience and assumed analogy. We can only judge of the consciousness of the speechless animals by their behaviour. It is possibly right to assume that, when a dog wags his tail and barks on being allowed to run loose, he is happy; but he also wags his tail and barks when he is eagerly awaiting the piece of meat which is being dangled before him. It may be the delight of anticipation which prompts him to express himself in this way, but there is no absolute proof that it is. Again, it is doubtless fair to assume that, if a bird chirps and hops about briskly, it is happy; but there is nothing to show that it is less happy when sitting quietly perched on a twig. We are only approximately right in inferring happiness from what is called "liveliness." Children are generally brisk when they are happy, but they are not always miserable when they are quiet. We fail to perceive the purpose of the investigation or to understand what is to be gained by it. Beyond question, very much of the happiness of mankind, and presumably also of the lower animals, is connected with the gratification of instinctive cravings and the avoidance of such suffering as results from unsatisfied needs. Hunger and thirst are distressing, and cause unhappiness; the appeasing of hunger and the assuaging of thirst give happiness because they put an end to unhappiness. Appetite and taste are diminutives of the sensation of hunger; and doubtless these are spread out and elaborated by development, so that degrees of appetite and specialties or refinements of taste minister to the sense of enjoyment both in anticipation and in fact. In this way the higher, or more highly developed, animal has

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an advantage over the lower, or less developed, animal in the matter of powers and occasions of happiness; but collaterally, and in directly inverse ratio with the powers and capacities of being happy, are the powers and capacities of being unhappy. Whether the good outweighs the evil is a question, not of difference between "animals" and "man," but of fact, to be estimated, if at all, by experience and observation. If animals are happier, or less unhappy, than man, we should incline to think that the preponderance in their favour is mainly due to the immunity they enjoy from distrust of the future. He would be a bold man who should say that the human consciousness is presently the happier for its possession of powers and capacities of looking forward; but even in this respect the question is one of degree; for the dog that begs, and hopes, and licks his lips in anticipation of the morsel of food held before him probably enjoys a pleasure akin to that of the man who exults in the hope of future happiness. Meanwhile the dog runs merrily into the lethal chamber of death, and the sheep, unless he sees or smells blood, does not recoil from the slaughter-house; whereas man through fear of death is in bondage, and lives sadly for years because he must some day die. Doubtless this great drawback of our intellectual development, and what is called "enlightenment," is a fruit of our teaching and training; but that it is widespread throughout the human race cannot be questioned, and that it is a serious cause of unhappiness to the majority of men no one will venture to deny.

PROGRESSIVE PERNICIOUS ANÆMIA AND BOTHRIOCEPHALUS LATUS.

SINCE Biermer first described certain forms of anæmia which differed from those commonly observed in their progressive and serious character, the term "progressive pernicious anæmia" has found a place in our nosological nomenclature; but at first sight it seems strange that a disease which, in the form most commonly seen, is mild and easily amenable to treatment should now and again resist all our efforts, and slowly but surely tend to a fatal termination. Many authors doubt the existence of this particular malady, and the standard French authority, Jaccoud, regards it as possibly only an exceptionally grave form of the ordinary chlorosis or connected with a chlorotic cachexia. Any contribution which tends to increase our knowledge of the disease is much to be desired. An important step in this direction has been made in a paper in the June number of the *Deutsches Archiv für Klin. Med*, in an interesting paper by Dr. Reyher of Dorpat, in which an obvious and tangible cause was found in thirteen cases presenting all the appearance of this disease. The etiological factor in these cases was bothriocephalus latus, which had taken up its abode in the alimentary canal, and which had obviously been the cause of the anæmia and accompanying state of disease, since on the removal of the worm the symptoms disappeared and health was quickly restored by the exhibition of simple remedies. Whether all cases of pernicious anæmia will in future be found to have a similar causation now that attention is directed to the point is doubtful; but the importance of the fact that cases appearing in all respects typical have been found to be due to the presence of internal parasites is great, and the medical man in presence of a diagnosis of pernicious progressive anæmia will do well to remember that such cases have been described, and he will take steps to ascertain whether in any given case such may not be the etiological factor, the discovery of which is so important both for prognosis and treatment. In most of the cases the presence of worms was unsuspected until attention was called to it by the appearance of fragments in the stools, or by questioning the patient as to whether such had at any time been seen. To give an idea of the cases we will briefly describe the author's first case:—The patient was a woman sixty-six years of age, who presented herself in a state of extreme debility and anæmia, which had continued for a year and a quarter and steadily gone on increasing during this time in spite of the fact that she had been under the treatment of several medical men. From the absence of evidence of internal disease, the duration of the symptoms, and the great severity of the anæmia and debility, the diagnosis of pernicious anæmia was made, and treatment was directed to a diarrhœa which was evidently exhausting the patient, but after a short period of time portions of a flatworm appeared in the stools, and with the exhibition of filix a complete bothriocephalus latus was expelled, head and all. From this date all the symptoms rapidly ameliorated, and in a few weeks complete health was restored, and the patient could go about her household duties. This mere sketch of a case will serve to indicate the lines on which the others run. In all, the anæmia and its accompanying symptoms disappeared after the expulsion of a bothriocephalus, and simple tonic treatment completed the cure.

THE WINDSOR TOWN IMPROVEMENT SCHEME.

AFTER four months' silence the possibility of improving the town of Windsor has again been discussed by the Town Council. The town clerk made a report, from which we gather that it will be necessary to acquire Parliamentary powers. After a very long discussion, it was decided that an expert should be consulted and requested to report as to the probable cost of obtaining an Act of Parliament granting compulsory powers to purchase: that is all. Even if the Act be ultimately obtained, we fail to detect in the scheme submitted any clause dealing with the gravest sanitary defects of the town. Windsor will be beautified, doubtless, its approaches rendered more worthy of a Royal borough which tourists from all parts of the world are in the habit of visiting; and there is to be a promenade along the banks of the Thames. The widening of the top of Bier-lane and the cutting through of Garden-court (a slum to the rear of Bier-lane) are the principal sanitary advantages. This will not suffice to redeem the reputation of Windsor. These are not the worst parts of the borough. It is far more urgent to do away with South-place, especially that side of the street where the houses have no back windows, no back yards, and no closets. One or two artisans' dwellings would take all the population now crowded in low and small cottages, such as those of the continuation of South-place, called Charles-place and Charles-street, where there have recently been cases of small-pox. These cottages take up much room just where there is no land to spare, and give very little accommodation. If Parliamentary powers must be obtained, a bold and thorough scheme should be put forward. By purchasing all the bad property the town could rebuild on the sites acquired houses that would let at such prices as to provide the means for an easy redemption of the debt. Windsor would thus possess in time a constant and rich source of income. Why look to rates, when rents are so much more profitable? The financial difficulties can be overcome more quickly by collecting rents instead of rates, and it would be easier for the town to keep its own property in sanitary order than to compel a number of small leaseholders and freeholders to see to the necessary repairs. Mr. Oberlin-Harris said, in the course of the discussion, that Windsor "meant to stand well in the eyes of the world, and prove that she really was a thoroughly healthy town. They knew that there was a tide in the affairs of men, and they knew, also, that there was a tide in

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the affairs of the town, when they should take things and lift them up to a higher level." These are brave words, and should be taken to heart by every inhabitant of Windsor; and we would urge that it is high time such action should be taken as to no longer give any occasion of complaint or criticism. To the credit of the Town Council be it said, a vote of six to four was given in favour of consulting an expert on the improvement scheme. This is but a beginning, but still it is better than the "masterly inactivity" which has previously characterised that body.

MEDICAL WORKS AND THE LAW OF COPYRIGHT.

THE unfortunate state of international law as regards copyright is well illustrated by what has happened with regard to Dr. Dickinson's third volume on Renal Diseases, and which is most ably and kindly exposed by the Editor of the *American Medical Journal*. As issued by Longmans, this volume, which represents ten years of Dr. Dickinson's best work, contains 689 pages. It has been issued in New York as the August (1885) number of a "Library of Standard Medical Authors." In this mutilated form there are but 337 pages! This is significant enough, but the extent of the evisceration can only be understood by some instances given. Illustrations and cases are omitted wholesale, while it is coolly said that such omissions in no way interfere with the continuity of the work. In the chapter on Chyluria alone, thirteen and one-third consecutive pages of clinical report have been omitted, including two valuable tables. A case received into Guy's, in which two drachms of corrosive sublimate had been taken, is given without mentioning that the patient had suppression of urine or that he lived four days, and the facts of the post-mortem are omitted, of course without harm to the reader, who supposes he is getting Dr. Dickinson's careful work. We thank our American contemporary in the name of English journalists and publishers for the criticism. We sympathise deeply with Dr. Dickinson in seeing his great work thus misrepresented, and we feel sure that all visitors from the United States will join us in denouncing a system which is unjust equally to American readers and to honest and hard-working English authors.

LOSS OF WEIGHT IN EPILEPSY.

DR. F. HALLAGER, assistant-physician to the lunatic asylum at Viborg, has endeavoured to find an explanation of the diminution of the weight of the body after an epileptic attack. Kowalewsky was the first to draw attention to this fact. He states "that all persons suffering from any form of epilepsy lose in weight after each attack." "This occurrence is not equally great in every case, but depends on the duration of the disease and the intensity of the attack. The loss of weight is greatest after the first attack of a series of epileptic fits." Dr. Hallager has drawn up a table indicating the weight of the body and the quantity of urine and fæces excreted by the patients each day during his researches. Solid or liquid nourishment was given to the patients in proportion to the frequency and violence of the attacks. By a chart accompanying the paper in the *Nordisk. Med. Arkiv* it appears that whenever the curve of weight is considerably depressed after an attack there is also a corresponding elevation in the urine curve, of which no explanation is afforded by any increase of diet. When a loss of several pounds takes place, it is owing to the secretion of an abnormal quantity of urine. Dr. Hallager has been unable to determine whether the production of urea is also increased by the attack, but he believes the increased formation of urea is not sufficiently great to be of importance in the loss of weight. The diminution of weight caused by an epileptic attack he considers to be due to an increased secretion of urine after the fit. M. Kowalewsky insisted that psychic epilepsy, as well as the *grand* and *petit mal*, is followed by a diminution of weight. This is contrary to Dr. Hallager's opinion, who believes that there is no diminution during this psychic state except when the patient refuses all nourishment, and that the quantity of urine secreted is much less than normal. This is no doubt due to a reaction after the preceding augmentation. The fact that psychic troubles of an epileptic origin (especially when of long duration) may, like other maladies, cause a loss of weight is natural; but this loss which arises from general emaciation, has nothing in common with the diminution of weight after an epileptic attack, which results from a diminution of the quantity of water in the body, due to preceding augmentation of urine.

LONDON DUSTBINS.

DR. DANIELL, chairman of the Wharves and Plant Committee of the Kensington vestry, calls our attention to a paragraph in our last number on this subject, which appears to imply that the vestry still trust to contractors for the removal of house refuse. The difficulty the vestry have to overcome is not that of removal, which is in their own hands, but that of disposal of the refuse after its collection; and this difficulty, Dr. Daniell tells us, is hourly increasing. We trust the special committee recently appointed will see their way to recommending a method which will finally solve this problem, and set an example which other parishes may with benefit copy. Mr. J. W. Wood, of Liverpool, writing on the same subject, tells us that he has invented and patented a dustbin which can be used in houses, where the dust can be removed from a passage behind the house and emptied immediately into the dust-cart without incurring the risk of dropping the refuse or the necessity of temporarily depositing it on the ground. The apparatus will be exhibited in a few days at the Liverpool Exhibition, and from the description appears well calculated to answer its purpose.

THE INFLUENCE OF SMALL-POX HOSPITALS.

DR. TRIPE, in his last annual report to the Board of Works for the Hackney District, recurs to the subject of the diffusion of the small-pox infection around the Homerton Hospital. During 1883-84 there had, quite apart from the actual treatment of cases in the hospital, been a large traffic in small-pox patients to and from the hospital on their way to the hospital-ships, as many as 859 cases being thus removed in one single month. In the year now dealt with—namely, 1884-85—the largest number per month was 113, and it is believed that all these had received treatment in the hospital. With this diminution of cases the amount of spread around the hospital has also diminished; but still Dr. Tripe is able to show, by means of a map and of tables, that the rate of attack from small-pox is, as heretofore, more prevalent within the quarter- and half-mile radius around the hospital than elsewhere in his district; and he is further of opinion that the risk to a locality in which such a hospital is placed is not to be measured only by the number under treatment at any one time, but partly by the number moved to and from the hospital. Dr. Tripe also considers that the evidence adduced by Mr. Power as to the probability of the disease being spread through the air when only some nine or ten patients are under treatment is very strong, although it does not follow that similar results would ensue on every such limited aggregation. Here he is in entire accord with Mr. Power, who has all along indicated that other considerations, such as meteorological conditions, probably have a strong bearing upon the case. But as to the

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reality of aerial infection Dr. Tripe has no doubt, and he takes the opportunity of stating his belief that the large ward system at present in use in the Asylums Board hospitals is more likely to be injurious than small wards containing only four or six patients. And if this be so—and we are entirely in accord with Dr. Tripe—what must be the effect of large aggregations of small-pox patients, such as are even now being contemplated? The fact is that we have come to a point in the history of small-pox in which it becomes important to learn whether some of our small-pox hospitals, and especially those within the metropolitan area, are not, as at present organised, tending rather to secure the maintenance of the infection in our midst than to get rid of it. Dr. Tripe very properly says that the whole question requires much more investigation. This investigation can only be properly made by the medical staff of the Local Government Board, and, looking to the responsibility of that Board as to the doings of the Metropolitan Asylums Board, it is certainly time that a complete and searching inquiry should be made into the behaviour of small-pox, as influenced by the hospitals maintained for the purposes of the metropolis.

THE NINTH INTERNATIONAL CONGRESS.

CIRCULAR No. 2 is issued by order of the Executive Committee. The Congress will meet in the city of Washington, the capital of the United States, on Monday, Sept. 5th, at noon. The patrons of the Conference will be the President of the United States (the Hon. Grover Cleveland), the Secretary of State (the Hon. Thos. F. Bayard), the Presidents, respectively, of the Senate of the United States, and the Speaker of the House of Representatives. The President of the Congress will be Dr. Nathan S. Davis, Professor of Medicine, Chicago. Our own British Schools will be well represented, if we may judge from the list of vice-presidents, which includes Dr. McCall Anderson of Glasgow, Professor Annandale of Edinburgh, Mr. Golding Bird of Guy's, Dr. Dolan of Halifax, Professor Fraser of Edinburgh, Sir William Mac Cormac, Sir Dyce Duckworth, Dr. Klein, Professor Macleod of Glasgow, Dr. Murrell, Mr. Richard Quain, Dr. J. Burdon Sanderson, and Mr. Simon. Other European countries will be duly represented in the vice-chairs. The Executive Committee invite all regular medical men to the Congress. Communications relating to appointments for papers should be addressed to Dr. John B. Hamilton, Secretary-General of the Congress, Washington, District of Columbia. All communications referring to the business of the Executive Committee should be addressed to Dr. Henry H. Smith, Chairman of the Executive Committee of the Ninth International Medical Congress, Philadelphia, Pennsylvania. There are several errors of name, title, and address in the circular, which should be corrected speedily.

BACTERIUM TERMO TREATMENT.

DR. ROQUER Y CASADESUS of Barcelona having a case of laryngeal and pulmonary phthisis of an advanced character, and wishing to test the value of Cantani's bacterio-therapeutics, asked Dr. Rodriguez Mendez, a well-known microbiologist, to assist him. The condition of the patient was carefully ascertained in consultation, cavities being found in both apices. There was a high temperature, also profuse sweats, diarrhœa, profuse expectoration, great dyspnœa—in fact every sign of acute pulmonary tuberculous degeneration. The patient was in the seventh month of pregnancy. A pure culture of bacterium termo was then prepared by Dr. Botey, and made use of both by means of inhalations twice a day and by intra-laryngeal applications. After a few days the patient's condition was improved, the temperature having fallen from 39° to 38° or 38·4° C. This improvement continued till labour came on, which was of a normal character, but shortly after delivery the woman's condition became alarming, and she died in twenty hours. Dr. Roquer concludes from this case that, whether the remission of temperature was or was not due to the treatment, the bacterium termo was perfectly innocuous, as Professor Cantani states it to be. Dr. Philipovich, who has made several trials of the treatment of phthisis by the inhalation of cultures of bacterium termo, has published a paper describing the results obtained in the reports of the Odessa Medical Society. In one case the inhalations had to be stopped in consequence of the condition of the patient becoming worse, three cases died, and two were discharged. Dr. Philipovich's observations agree in general with those of Dr. Görbersdorf, and are decidedly inconsistent with those of Professor Cantani. The expectoration did not diminish, but it was rather more easily secreted, and so the dyspnœa was less. This, however, was probably due to the action of the water and the better aeration of the lungs, rather than to the microbe. In one case the quantity of sputum was increased, and it became more liquid and very offensive. At the necropsy in this case cavities were found containing tolerably pure cultures of bacterium termo. In none of the cases did the tubercle bacilli in the sputum disappear or even diminish, though the inhalations were continued for seven weeks. Again, no effect was produced on the temperature or sweats, and in all the patients there was noted a greater or less loss of weight. The author concludes that no beneficial effect can be looked for from the use of this method of treatment; indeed it would rather appear, from the post-mortem appearances above mentioned, that inhalations of bacterium termo may be positively hurtful to the human organism.

MUZZLED OR LED.

A DOG in the streets must be either muzzled or led by some competent individual. There is no alternative. He is not under proper control if led by a little girl or boy, from whose feeble grasp or easily frightened hold the dog may readily escape. The object of the police regulations is to stamp out hydrophobia in man by the abolition of rabies in the dog. The police will not have a chance if the regulations are not strictly enforced. Lovers of the canine race must be called "hysterical," "overweeningly sensitive," &c., if they persist in arguing that the muzzle is a torture or the restraint of being led an inhumanity. The total number of dogs not under control taken by the police to the Dogs' Home during the month of July was 2898. Of this number 52 were killed in the streets as rabid, and one developed rabies at the Home. There were no less than 587 summonses taken out against owners of dogs not under control. We are glad to state that the majority of these resulted in convictions. Sixty-five persons are known to have been bitten during the month. One case of death from hydrophobia has been reported as having occurred in July in London.

PHYSIOLOGICAL ACTION OF LUNG TISSUE.

AT the twenty-sixth July meeting of the Paris Academy of Sciences, M. L. Garnier commented on the physiological action of pulmonary tissue in the exhalation of carbonic acid. He observed that it is difficult to explain by simple physical action the passage of carbonic acid from venous blood into the atmosphere of the pulmonary alveoli; that displacement would, however, be easily intelligible if chemical action intervened to set it in motion. M. Garnier's experiments appear to demonstrate the existence in the pulmonary tissue of an acid body, differing from taurine, capable of decomposing the carbonic combinations of venous blood and setting free carbonic acid gas.

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SMALL-POX AND VACCINATION.

OUR attention has been called to a communication in the *New Zealand Times* of April 28th in connexion with this subject. It is possible that its author thought it would escape the notice of those who knew, and in any case have the desired effect on those who did not. The primary object was to sow the tares. The pertinacity with which statements are repeated that have been refuted over and over again shows the poverty of the material in the way of so-called facts which the imaginative but mischievous opponents of vaccination have to make use of. The way in which, too, these statements are made to do duty is amusing to those who know how such matters are worked. After a tour at home, followed by the inevitable contradiction, they reappear in the colonies. Now let us examine a few of the statements. It is not true that eighty-one cases of small-pox occurred among the revaccinated European army in Egypt in 1882, of which seven proved fatal. The number of cases recorded for that year was three, and no deaths. It has not been maintained, as asserted, that the army is a perfectly vaccinated class, but rather that if the provisions for vaccination and revaccination could be absolutely carried out it should be so. Mischievous and irresponsible "faddists" have no doubt done all they can to foster ignorant prejudices, but it is a ridiculous exaggeration to say that the operation of revaccination in the English army is regarded with unmitigated dread and disgust. Small-pox is a very common complaint among the native population, not only of Lower Egypt, but also all up the valley of the Nile, and our troops have been almost constantly exposed to its contagion. Revaccination has been attended with much difficulty in Egypt, for various reasons. Since the arrival of the British troops in that country in 1882 up to the end of 1885, with an average annual strength of between 11,000 and 12,000 men, there has been a total of thirteen deaths from that disease. The communication we are reviewing literally bristles with inaccuracies. Let us take two quite indiscriminately. There is no need to select. It is stated that some years ago thirty recruits from Stockport were vaccinated at Shorncliffe, of whom thirteen died of the operation. No information to that effect can be obtained from any official record or from any other source. A quotation is made with inverted commas from a particular page of the forty-fifth annual report of the Registrar-General. We turned to the page in question, but failed to find it there or anywhere else.

COCAINE POISONING.

DR. LUCAS CHAMPONNIÈRE'S *Journal de Médecine et de Chirurgie* for last month devotes an article to cases of poisoning by cocaine, based on researches of M. Chatellier. The employment of the valuable remedy is not contra-indicated by the occasional manifestation of toxic effects, nevertheless it is important to know them. In a case cited by Dr. Speer, a man was in the habit of self-injecting cocaine to combat the effects of drunkenness. The action closely resembled opium poisoning, but the patient recovered under appropriate treatment. A woman, aged twenty-five, to combat hay fever, had a watery solution containing fifteen centigrammes of hydrochlorate of cocaine injected into the nose. In about twenty minutes she became giddy, was oppressed by a sense of weakness, and could not see distinctly. A little later she was in a semi-comatose condition, pulse not countable, slight dyspnœa, pupils dilated. These symptoms disappeared in the course of three hours under the influence of internal stimulants and external friction. Dr. Ziem of Dantzic reports that he injected under the conjunctiva of a man, aged forty, two drops of a 40 per cent. solution. In the course of a few minutes the patient became pale, the forehead bedewed with sweat, and respiration embarrassed. He states that seventeen cases of cocaine poisoning have been reported by oculists. In three the agent was injected hypodermically; in fourteen merely into the conjunctival cul-de-sac. The usual symptoms are pallor and clamminess of the face, vertigo, and great prostration, sometimes lasting for days. Headache and vomiting are infrequent. In one case, after sub-conjunctival injection of fifteen drops of a 2 per cent. solution, the gait became uncertain, articulation indistinct, and memory lost. In another case sub-conjunctival injection of eight drops of a 3·5 per cent. solution produced loss of consciousness and convulsions. M. P. Tissier relates the case of a child, aged four, affected with whooping-cough and coryza, whose nasal fossæ were pencilled with a 1 in 30 solution of hydrochlorate of cocaine. In the afternoon the eyes became distorted and the child convulsed, but these symptoms disappeared without treatment.

MIDDLESEX HOSPITAL RESIDENTIAL COLLEGE.

WE have received a copy of the prospectus of a Company formed for the purpose of building a Residential College in connexion with the Medical School of the Middlesex Hospital. An opportune time appears to have been chosen for initiating such a scheme, as the desirability of affording some safeguards against the dangers which surround medical students, and of imparting something of the collegiate spirit to their life in London, is now attracting considerable attention. We are glad to observe that whilst the Earl of Latham and Major Ross, M.P., chairman of the Weekly Board of the hospital, are amongst the directors of the Company, the medical and surgical staff are also fully represented—an earnest, we take it, of that hearty co-operation of the lay and medical elements which has always been so pleasing a feature of the hospital. The college, which will accommodate thirty students, under the supervision of a resident warden, will overlook the hospital garden and will immediately adjoin the new school buildings which are about to be erected. Such a scheme cannot but commend itself to many parents of students, and should conduce to the best interests of the school. We heartily wish it success.

CHOLERA IN SOUTHERN EUROPE.

CHOLERA would appear to have acquired a firmer hold on Southern Italy than it had a few weeks ago, and fresh places on the Adriatic continue to be attacked, the last place being Biscaglia. The epidemic is still most severe at Barletta, but the daily number of deaths has been reduced from some 60 to 28. In all, 310 fatal attacks have taken place there during the week ending August 17th. It is evident that much of the news as to cholera in Southern Italy is not officially announced, and there is hence every reason for believing that the epidemic there is of greater severity than has as yet been apparent. In North-eastern Italy the disease is still maintained at most of the places last announced as being infected, and a few additional towns within the same area have been newly attacked since our last report. In some towns, notably in Venice, Verona, and Padua, the rate of mortality is still small as compared with the number of attacks. The most continuous records of maintained cholera reach us from Bologna and Ravenna, where 41 and 60 deaths respectively occurred from Aug. 11th to Aug. 17th, and from Verona and Padua. In all, during the week under consideration, the fatal attacks of cholera in Italy have numbered 582, but it is well known that the disease is widely prevalent in many of the smaller townships in the province of Venice and elsewhere, as to which no records are as yet issued. In Naples 9 deaths have occurred amongst immigrants from infected localities. Cholera is still maintained at Trieste, where the deaths in the week ending

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the 17th inst. have been 24; it is less prevalent in Fiume, but one or two fresh places in Istria have been attacked. In the Croatian villages, whence news comes most sparingly, the disease is somewhat widespread, and it was recently announced that up to Aug. 11th there had been 228 cases and 118 deaths in various portions of the province.

INFLUENZA IN HAVANA.

DR. JOSÉ R. MONTALVO gives an account in *La Enciclopedia*, a Cuban medical journal, of an epidemic of influenza (*gripe*) which occurred last year in the children's wards of the Havana Casa de Maternidad. When the temperature was high, and it sometimes rose to 41·5° and 42° C., he found frequent baths at 35° C. of the greatest value, especially, of course, in the cases where the pyrexia itself appeared to constitute the chief element of danger. These baths were given to children of ages varying from six months to three years, and were supplemented by internal treatment with digitalis, carbonate of ammonia, brandy, port wine, and, where necessary, by ipecacuanha emetics. Where there was diarrhœa the subnitrate of bismuth in quantities of from one to nearly four drachms per diem was given, West's plan of giving minute doses of castor oil and emollient enemata being substituted where there was inflammatory diarrhœa. Dr. Montalvo's paper would have been more valuable if he had given some statistics of the number of cases at different ages and the results. Still, as more than one author whose works he consulted had omitted all mention of the affection, his paper will be valuable in calling attention to it and its treatment on rational principles.

SURGERY AT BRIGHTON.

THE discussion on supra-pubic cystotomy occupied the Surgical Section during the whole of the afternoon of Wednesday, at the Brighton meeting of the British Medical Association last week. Sir Henry Thompson introduced the subject, which has been so recently discussed in London that novelty was hardly to be expected at Brighton. But, on the whole, the feeling of the meeting was evidently in favour of giving this operation a fair trial, not only in cases unfitted for any other form of lithotomy, but also in cases independently of their fitness or suitability for lithotomy or lithotrity. There can be no doubt that grave consequences—incontinence of urine and loss of sexual power—have sometimes followed apparently successful perineal lithotomies. Mr. Cadge was appealed to for information on these points; with a very large experience in lateral lithotomy, and in a provincial town, it was thought he might possess facilities for discovering in what proportion of cases such accidents had occurred. Then again, as a strong point in favour of the supra-pubic method, Mr. Cadge's experience of the frequency of recurrence after lithotrity was quoted. It was urged that the supra-pubic operation was quite easy of performance, and was one which did not need any large operative experience, and was therefore especially adapted for surgeons in the country. Several speakers, on the other hand, referred to the difficulty of the lateral operation in young children; moreover, lateral lithotomy was known to be followed in some few cases by sexual incompetence. It must be admitted that the advocates of the high operation have several important arguments in their favour, while the opponents have not a single strong point to urge against its adoption, even as a routine practice. The great divergence of opinion in regard to many technical details—such, for instance, as to the desirability or otherwise of suturing the bladder,—showed that surgeons need that knowledge which experience alone can bring. Meanwhile, we hope that all cases in which this operation is practised will be carefully recorded; for the merits of the operation cannot be adequately tested except on a clinical basis. On the Thursday, a discussion on the surgery of the liver was arranged for, but for some reason it fell flat, notwithstanding that several interesting papers were contributed. The general opinion arrived at appeared to be that patients were not much benefited by cholecystotomy. On the Friday, Mr. Horsley's paper on the most recent advances in the surgery of the central nervous system attracted a large and enthusiastic audience. Besides showing the possibility of accurately diagnosing the seat of disease and of successfully removing it, Mr. Horsley claimed these results as a direct outcome of experimental investigation on animals. In addition to the foregoing set subjects for discussion, a large variety of other surgical papers was contributed.

MICROSCOPICAL DIAGNOSIS OF A NEPHRO-INTESTINAL FISTULA.

NEPHRO-INTESTINAL FISTULÆ are certainly rare. Dr. R. Wernicke, who publishes his observations in the *Anales del Círculo Médico Argentino*, has only met with three cases in literature, and so believes his to be the fourth. In May last he was asked by Dr. Montes de Oca to examine a sample of urine in a flask. The colour was yellow and there was some turbidity, also a copious yellow sediment containing grey clots of irregular shape. The reaction was alkaline, and the liquid after filtration contained albumen. The turbidity was evidently due to putrefactive microbes and leucocytes. The sediment on microscopical examination showed the presence of leucocytes, red blood-corpuscles, vesical epithelium, caudate or pyriform epithelial cells from the pelvis of the kidney, granular casts, particles of fatty matter (highly refracting and of a yellow tint), quantities of small aggregations of granules (highly refracting, some of the granules being attached to one another, and some surrounded by a yellow, structureless envelope, being in fact coagulated milk); and lastly, a number of striated muscular fibres, stained with biliary pigment, the striæ being more or less obliterated, according to the stage of digestion which had been reached. As there was no question that the whole of the contents of the flask had been passed from the urethra of a man, there could be no doubt that a communication existed between the urinary and digestive passages. The cause of this ulceration was also diagnosed by further microscopical examination of the sediment, which revealed the existence of tubercle bacilli, which were so clearly recognised both by their form and their behaviour with reagents as to leave no doubt in Dr. Wernicke's mind of their precise nature. The case not being under his care, no clinical details are given. It is seldom, however, that the microscope alone enables so much of a diagnosis to be made in a rare and intricate case such as this.

PROSECUTIONS UNDER THE DENTISTS ACT.

WE are glad to see that the British Dental Association are steadily carrying on their prosecutions under the Dentists Act. In the present cases Herr Arnemann was summoned before the Nottingham magistrates last week that he did unlawfully take and use the name or title of dentist, implying that he was registered. For the defence it was urged that he had a diploma from the University of Berlin; but as this foreign qualification is not recognised, the magistrates convicted the defendant, and ordered him to come up for judgment when called upon, and added that in this event he would be severely punished. The other prosecution was of a similar nature. August Friederik, practising at Walthamstow, was summoned at Stratford on the 18th inst. for, not being registered under the Dentists Act, 1878, using the letters D.D.S. or some other title implying that he was

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registered under the said Act, or that he was a person specially qualified to practise dentistry. It was urged on the defendant's behalf that he was a fully qualified man, that he held an American diploma in dental surgery, and that he was willing to go through any examination in that art. The magistrates imposed a fine of 20*s.* and costs.

THE BACILLUS OF MALARIA.

IN 1879 Professor Tommasi-Crudeli published, in the *Atti della Reale Accademia dei Lincei* at Rome, a memoir on the distribution of the subsoil water of the Roman Campagna, and on its influence in the production of malaria. In this research, which proved the starting-point of new studies on the etiology of malaria, the author traced the natural history of this morbigenous ferment, discarding many errors and prejudices of old medicine, and maintaining that the causal agent of the disease could only be a living organism. Towards the close of the same year Tommasi-Crudeli and Klebs published in the same *Atti* a memoir embodying the results of inquiries on malaric airs and soils, and of experiments on rabbits, proving that the living organism is a schizomycete, named by them "bacillus malariæ." As the result of researches on the individual affected with malaria, Marchiafava and Celli announced that within the red-blood globules are constantly found plasmatic bodies (*corpi plasmatici*) endowed with lively amœboid movements, in which the hæmoglobine is transformed into melanine (melanæmia); and in a further memoir which they have published this year, they suggest as a more probable hypothesis the opinion that those plasmatic bodies are the living organisms which produce malaria. Thus Marchiafava and Celli confirm in substance Tommasi-Crudeli's opinion, that a living organism is the cause of malaria, but they regard its form as differing from a schizomycete. These observations are embodied in a note with which Todaro prefaces a communication by Tommasi-Crudeli in the April number of the *Lincei*, on "a bacillus found in the malaric atmosphere around Pola (Istria)." This bacillus resembles the most typical forms of the bacillus malariæ which Tommasi-Crudeli and Klebs found in the air and subsoil of the Roman Campagna, which is *par excellence* the home of malaria. Since identity of form does not necessarily imply equality in infective power, Tommasi-Crudeli reserves his definite opinion on the bacilli discovered in the air of Pola, until they shall have been submitted to experimental research, a plan of which he has sketched.

CREMATING DUSTBINS.

IN a recent report to the Marylebone vestry Mr. Wynter Blyth directs attention to what he calls the "cremating dustbin" attached to the Queen Charlotte's Lying-in Hospital. It is simply a small crematorium, built in the shape of a dustbin, of fire-proof bricks, with an iron lid, proper doors and gratings, and a long chimney-shaft carried up to and beyond the roof of the building. This dustbin is charged with combustible material and the various offensive matters which are necessary refuse of every hospital, and they are from time to time consumed. The heat is intense, there is no nuisance, and experience has shown that ordinary house refuse contains so large a quantity of carbon that no additional fuel is required. It is suggested, further, that it would be to the advantage of all hospitals, hotels, large boarding-houses, schools, and other institutions if each were provided with one of these cremating dustbins. In an ordinary household all vegetable refuse and offensive matter should be destroyed in the kitchen range; and to avoid nuisance it is an excellent plan to throw all vegetable refuse into the cinder-tray beneath the fire, where it gets dried up and partly charred, before finally putting it into the fireplace itself.

SUBLIMATE INJECTIONS IN GONORRHŒAL CYSTITIS.

THE history of an obstinate case of gleet and cystitis is given in *El Dictamen* by Señor García Andradas, which after being treated unsuccessfully by means of injections of nitrate of silver, yielded very quickly to injections of corrosive sublimate. The patient, who was a river fisherman, contracted gonorrhœa, which was treated for a month with balsams and astringent injections. The discharge then became serous, and exquisitely painful vesical tenesmus supervened, the calls to urinate being so frequent as to give the man no rest. An attempt to pass an instrument occasioned the greatest agony when it came in contact with the prostatic portion of the urethra. The diagnosis made was that of acute prostato-cystitis consequent on gonorrhœa, and so the local application of a sublimate solution appeared to be the most rational treatment, as it had in the author's hands proved very beneficial in cases of subacute cystitis due to the same cause; but it was thought well to try first Guyon's treatment. With great difficulty, owing to the extreme sensitiveness of the urethra, an elastic catheter was passed to the prostatic portion, and ten grammes of a 1 per cent. solution of nitrate of silver injected. A few minutes afterwards urine was passed with great pain, so a warm bath and an opiate were ordered, which gave only temporary relief, the opium having to be repeated at night. The next day the patient's condition was the same as it had been before the injection. Three or four days afterwards a similar injection was given, with no better result. Four days later, as there was no improvement, the use of sublimate injections was commenced. The catheter was passed as far as the prostate, and forty-five grammes of a 2 per mille solution of sublimate in warm water were injected. This the patient was compelled to retain for three minutes; the subsequent micturition was very painful, but at night he was able to rest and retained his urine for three hours. The next day the urine was less turbid, and it was voided less frequently. His condition continued to improve for three days, when a second sublimate injection was given of double the quantity of solution. This occasioned some pain, but it quickly passed off and the patient was able to rest. In four days' time he requested to be discharged, as his urine was clear and he had no pain on micturition. Thus, the author remarks, two injections sufficed to cure completely an affection usually most obnoxious to treatment of an ordinary kind. The superiority of sublimate injections has shown itself in several cases of a somewhat analogous character in which he has employed it. These he proposes to publish and discuss on some future occasion.

MILK AND THROAT DISEASE IN CANTERBURY.

THE medical officer of health of Canterbury has reported a sudden outbreak of throat disease, which in eight days attacked no less than 231 persons, without fatal effects in any instance. So far as can be judged, the epidemic was due to milk, for of 160 houses served from the dairy which is in suspicion no less than 94 were affected, and, as far as can be gathered, out of 36 houses supplied partly from the same dairy and partly by other milkmen 21 were affected. In the other instances of houses affected the persons in question seem almost exclusively to have been those who were either attacked late during the outbreak, and under circumstances which admitted of their having derived the infection from antecedent cases, or else persons who may easily have partaken of the suspected milk elsewhere than in their own homes. So far, the reports on the case are, we trust, incomplete, for by far the most interesting feature of the case is the implied sickness of animals in connexion with the outbreak, and the history as to this is as yet very

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imperfect. Indeed, we only learn of a lamb in the suspected dairy premises having suffered "from sore-throat," and of cows having had "diarrhœa." The connexion now established between disease in the human subject and affections of a specific character in lower animals, and especially in cows, is of far too great importance to admit of such a case being passed over by such vague accounts in so far as these animals are concerned. It is to be hoped that skilled veterinary and pathological aid was secured, either through the Local Government Board or otherwise, and that a more complete report will be issued.

THE IRISH DIRECT REPRESENTATION.

A CORRESPONDENT says that "Dr. Jacob has neither resigned nor proposed to resign his corporation post." We certainly read Dr. Jacob's address differently. It is a point, however, on which there should be no doubt, and on which it is the duty of the Irish profession to inform themselves by direct appeal to Dr. Jacob. If the appeal is not satisfactory, there are other candidates who would well represent Irish practitioners, amongst them Mr. Thomas Laffan of Cashel, who is not only a general practitioner, but who has written on the subject of Medical Reform, and is the author of a Carmichael prize essay. There has never been in the Medical Council a representative of the provincial practitioners of Ireland, who play such a special and important part in that country. Mr. Laffan would meet this defect.

ASSOCIATION OF GERMAN NATURALISTS AND PHYSICIANS.

THE fifty-ninth annual meeting of the Association of German Naturalists and Physicians promises to be a very brilliant affair. It is to take place in Berlin from the 18th to the 24th of September, and the programme of its proceedings, issued under the authority of Professors Virchow and Hofmann, occupies six pages of our contemporary, the *Berliner Klinische Wochenschrift* (Aug. 16th). There are no fewer than thirty sections, and the number of contributions promised is very large.

THE DELICACY OF THE SENSE OF SMELL.

THE delicacy of the sense of smell in the dog, the shark, and insects is well recognised. Man is not greatly gifted with the olfactory sense compared with these; but if we may place reliance on the experiments of Professor Valentine, the delicacy is fairly great even in human beings. If we can sniff a tenth of a pint of air containing bromine in the proportion of a thirty thousandth of a milligramme, or the same quantity of air impregnated with the two millionth of a milligramme of sulphuretted hydrogen, we cannot mathematically have ground of complaint against our olfactory sense. Still less can this be the case if we can, as seems likely, detect the 230-millionth of a milligramme of sulphuretted alcohol or mercaptan.

THE SALE OF BAD EGGS.

MR. BARSTOW recently made an order at Clerkenwell for the destruction of 12,000 eggs seized in the parish of Clerkenwell by the officers of the Sanitary Authority. The vestry's solicitors have now informed them that no proceedings can be taken against the owner of the eggs, as no existing Act could be made to apply to this article of food. We are glad to learn that the vestry propose to seek an amendment of the law, for there is no reason to think that eggs when in a state of decomposition are less injurious to health than some other articles of food which cannot be exposed for sale without penalty attaching to the vendor.

CHARTERHOUSE SCHOOL.

WE observe with much satisfaction that steps are now to be taken to remedy the defective drainage of the houses occupied by some of the masters of the Charterhouse School. It seems to be acknowledged that these houses have not been effectually drained, and that although the masters have endeavoured to the best of their ability to remove this defect, they have failed to do so. It is of little importance to us whether this has been due to the refusal of the rural sanitary authority to provide an outfall for the drainage or to the successful opposition of the governors of Charterhouse to the Bill brought into Parliament by the Godalming authorities for a large and comprehensive system of drainage, including the school and masters' houses. The result has been unfortunate as regards the health of the boys. We are now assured that the difficulties have been overcome, and "that before the boys return from their summer holidays all danger from insufficient sewerage will be removed, and the house masters relieved from what has been a constant source of anxiety and expense to them." We trust this may be so, and that the governors may at the same time take the opportunity to modify the regulations affecting the position of the medical officer as regards sanitary recommendations, and require of him periodical reports to be made to themselves of the health of the school and of the conditions by which it is likely to be affected.

FOREIGN UNIVERSITY INTELLIGENCE.

DR. STEFFAL has been appointed Professor of Anatomy and Dr. Joseph Reinsberg Professor of Forensic Medicine in the Bohemian University of Prague.

Dr. von Dittel, Extraordinary Professor of Surgery in Vienna, is about to retire.

Professor Karl Schönborn, Director of the Surgical Clinic in Königsberg, has been unanimously elected by the Medical Faculty of Würzburg to the vacant Chair of Surgery in that university.

Dr. A. Wolff has been appointed Professor of Dermatology and Syphilis and Director of the Dermatological Clinic in Strasburg, in succession to Professor Wieger.

Professor Winckelmann has been appointed Professor of Physics in Jena, in place of Professor Sohnke, who has gone to Munich.

It is stated that the two old Swedish universities of Upsala and Lund are shortly to be supplemented by two new ones, situated in populous places—viz., Stockholm and Gothenburg.

ALLEGED INSUSCEPTIBILITY TO VACCINATION IN SPAIN.

ACCORDING to a local medical journal, the practitioners of Castellon in Valencia have nearly all observed during the present year a singular insusceptibility to vaccination from both calf lymph and human lymph obtained from a distance. This insusceptibility seems to be confined to no particular class of persons, and it is said to be observed in people who have been operated on by very different methods.

ANIMAL AUTOMATISM.

AUTOMATIC MAN (*l'Homme automate*) is the subject of an elaborate psychological dissertation by M. A. Fouillée in the *Revue des Deux Mondes* of August 1st. He opens with a reference to Huxley's criticism of Descartes' doctrine on the automatism of beasts. It is claimed for Descartes that under the name of *undulatio reflexa* he described the automatism of reflex actions, but he erred in placing man in a separate category. Experimental physiology has conclusively demonstrated that the reflex and automatic

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functions of the spinal cord are common to all animals, man included; and it is reasonable to hope that with a deeper study of physiology and psychology as one science, the profoundly interesting subject of animal automatism may be better understood. Meanwhile thanks are due to M. Fouillée for a memoir rich in erudition and suggestiveness.

OUTBREAK OF ANTHRAX IN LEICESTERSHIRE.

AT a village (Arnesby) in the above county, some few miles from Leicester, there has been an outbreak on one farm of splenic apoplexy, which has proved fatal to some eight or ten beasts. On the 31st ult. a carcase of one of these was sent to the Leicester market, and the man in charge of it scratched his hand with the bone thereof, and died in a week from a severe attack of malignant pustule. At least two other men have suffered severely, also from the disease, who had to do with the killing of the animals. The veterinary inspector stated at the inquest on the fatal case that he never condemned beasts suffering from splenic apoplexy, as he considered them fit for food if thoroughly cooked. Some of the carcases were, it appears, sent to the London meat market, but were not, it is stated, sold there as human food.

CONGENITAL ABSENCE OF LEFT KIDNEY.

AT the Anatomical Society of Paris on April 9th, M. Albert Cayla presented specimens from the body of a child one year old, who had died in hospital of broncho-pneumonia. The child had a large congenital right inguinal hernia, but had no left kidney. The corresponding renal artery and vein were also absent, and there were only two openings in the bladder—the urethra and right ureter. Both supra-renal capsules were present. The right kidney, enlarged and of regular shape, was in the normal position; it weighed sixty grammes, and measured nine centimetres in length and four and a half in width. The pelvis and ureter were dilated, their walls being thinned.

ANTISEPTIC PAPER DRESSING.

DR. DON ANTONIO MORALES PEREZ describes in the *Revista Médica* of Seville a simplified antiseptic or Listerian dressing, consisting of bibulous paper heated to 110° C. and soaked in a solution of carbolic acid, boracic acid, or corrosive sublimate. This is placed over the wound in about eight layers, and covered with sheet gutta-percha or mackintosh, the whole being secured by an indiarubber bandage. The writer claims for this dressing the advantages of cheapness and portability, and thinks it will be found very serviceable in the field and in small hospitals.

DIPHTHERIA AT WEST COWES.

DIPHTHERIA, which has occasionally been prevailing in West Cowes, has again broken out there, as many as five patients being stated to have been attacked in one house. The sanitary arrangements of the town are said to be, in many important respects, seriously defective. It is not very long since a medical inspector of the Local Government Board visited the place, and a strong representation has now again been presented to that Board for an exhaustive inquiry into the causes of the diphtheria. It is fully expected that the application will at once be acceded to.

CHYLOUS ASCITES.

M. L. STRAUS, in the *Archives de Physiologie* (Paris, May 15th), publishes an elaborate memoir on chylous ascites, and enunciates the following conclusions. A rare kind of ascites exists as the result of effusion of chyle into the peritoneal cavity, and therefore rightly named chylous ascites. Such effusion is always due to a lesion of, or obstacle in, the chyliferous vessels, the ganglia, or the thoracic duct. The irruption of chyle into the peritoneum is either due to transudation or to actual solution of continuity of the chyle vessels, or of the thoracic duct. Clinically, the chylous nature of the extravasation may be affirmed with certainty by the following characters: the milky and homogeneous appearance of the liquid, the extreme thinness and regularity of the fatty emulsion which it contains, its poverty in white and red globules, and the rapidity of its reproduction with the same characters.

MR. GEORGE LAWSON, F.R.C.S., has been appointed Surgeon-Oculist in Ordinary to Her Majesty, in the place of Mr. W. White Cooper, deceased.

ABSTRACT OF

THE BRADSHAWE LECTURE ON DIABETIC COMA.

Delivered at the Royal College of Physicians on Aug. 18th, 1886,

BY JULIUS DRESCHFELD, M.D., F.R.C.P.

Many Causes of Coma in Diabetes.—Sudden death in a comatose state frequently occurs in the course of diabetes; but it is necessary to distinguish between the various forms, for some are common to diabetes and other diseases, whilst the more strictly speaking diabetic coma presents features of extraordinary interest. *Cerebral hæmorrhage* may cause death in coma when diabetes is the disease from which the patient is suffering. *Acute croupous pneumonia* may cause death in diabetes without the usual symptoms of pulmonary inflammation, much in the same way as sometimes occurs in Bright's disease; the prominent phenomena being dyspnœa and coma. Dr. Dreschfeld considered, with Stokvis, that albuminuria is very frequent in diabetes, though the amount of urine passed may interfere with its detection. Death in coma may be the result of *interstitial nephritis* complicating diabetes. Mention was made of two cases of the kind in which headache, vomiting, and convulsions with marked dyspnœa rapidly developed and ended fatally; there was albuminuria, but no odour of acetone in the breath, and no evidence of aceto-acetic acid in the urine. Again, *intercurrent* affections may have a resemblance to true diabetic coma. Death from slight operations in diabetic subjects appears to result from paralysis of the heart-muscle or nervous centres. A case of urethral stricture was referred to, in which death occurred ten hours after the necessary operation from collapse; aceto-acetic acid was not detected in the urine; the bladder was hypertrophied and dilated; the heart free from fatty degeneration. This might be regarded as a case of catheter fever occurring in a diabetic.

Three kinds of Diabetic Coma.—In 1881, Dr. Dreschfeld read a paper before the Midland Medical Society in which he differentiated three chief forms of diabetic coma. Twelve months after Frerichs expounded the same views in the *Deutsch. Zeitsch. für Klin. Med.*, and adopted an identical classification, whilst distinguishing more clearly between the first and other forms.

Dr. Dreschfeld next proceeded to give an account of the three forms. The first, called *diabetic collapse*, which had been recognised by Prout, consisted in the development of drowsiness with extreme coldness of the surface, quick pulse, and shallow breathing; death occurs with falling temperature in from ten to twenty hours. The urine, which may be passed voluntarily during the early stage, contains from 5 to 8 per cent. of sugar, but no aceto-acetic acid, and a little albumen. Active delirium and convulsions are absent; the pupils, though sluggish, react to light. The necropsy reveals no marked naked-eye changes; the body is usually stout and well-formed; the heart has been found to be fattily degenerated, or its fibres in a state of granular degeneration; whilst the liver has presented greyish patches of fatty metamorphosis. This form is most frequent in people above forty, who have had diabetes for some time—cases

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that Hoffmann has described as the *constitutional* diabetes of stout people. Some extra physical exertion or sudden shock, or error in diet or drinking, has not unfrequently been the exciting cause. The proximate cause is most likely fatty degeneration of the heart, as Frerichs believed; this organ has frequently weighed but four or five ounces. This hypothesis of the cause of death is supported by what we know of similar deaths in other diseases, as in fatty liver &c., Addison's disease, and pernicious anæmia.

In the second or *alcoholic* form of diabetic coma the patient has all the appearance of acute alcoholic intoxication. Typical cases of this kind were detailed; one of a middle-aged man who commenced by singing and swearing, the pulse being accelerated and conjunctivæ injected, deep coma ensuing on great excitement. Sugar and alcohol were found in the bladder; yet circumstances rendered it impossible that the man could have obtained alcoholic liquor.

Of the third form of diabetic coma in which dyspnœa (Kussmaul's symptom) with coma were the main symptoms, Dr. Dreschfeld had had sixteen cases, ten of which were completed by a necropsy. This form was usually ushered in with lassitude, slight dyspnœa, or severe gastric pain; headache, restlessness and excitement, drowsiness, dyspnœa, and coma are also observed,

A detailed account of the symptoms, as they could be gathered from a study of eighty cases, was next given. The severity of the abdominal pain; the frequency of the dyspnœa, first inspiratory and later expiratory as well, the chest apparently expanding properly in all dimensions; the dry red tongue—diminution of the glycosuria, even to disappearance; the frequent excessive acidity of the urine, in which Minkowski had detected oxybutyric as well as aceto-acetic acid; the constant occurrence of albuminuria and sometimes of hyaline and granular casts, and occasionally of fat; the initial rise of body temperature, which is followed by a great fall even to 90°, as Sir W. Foster had observed; and the variable proportion of fat in the blood,—were some of the chief features dwelt upon. Ninety per cent. of the cases proved fatal, and the great bulk within a few days. Seventy per cent. of the eighty cases examined occurred between the ages of twenty and forty. This form of coma had been known to occur in children even as young as five. From six to twelve months usually elapsed from the onset of the first symptoms of diabetes before coma occurred. Diabetic coma is known to occur in families. A girl of sixteen died of coma, and lost her brother, aged nineteen, and uncle, aged twenty-nine, from the same disease (Greenfield). Charcot mentioned a series of four, in which the sister of one case, together with the father and uncle, probably died of diabetic coma. The exciting causes were very like those of the alcoholic form.

Pathological Anatomy.—The nervous system shows no constant changes. Fat embolism as a cause of death was found but once. Necrotic changes in the epithelium of the convoluted tubules of the kidneys was discovered in six cases. The presence of excess of glycogen in the tissues of the brain was an isolated observation. The heart was frequently small; the pancreas small and atrophied. Distended hepatic capillaries, with atrophy and fatty degeneration of the liver tissue, were specially referred to.

Pathology.—The symptoms so exactly resembled an acute intoxication of the blood that Dr. Dreschfeld considered a blood-poisoning as the only probable explanation of the pathology of diabetic coma. He discussed the questions of lipæmia and acetonæmia, and also of aceto-acetic acid and oxybutyric acid poisoning. The last three bodies are nearly related, as oxidation of oxybutyric gave aceto-acetic acid, and oxidation of the latter acetone and carbonic acid.

Experiments.—Many experiments were made on man and rabbits by Dr. Dreschfeld, with a view to ascertaining whether acetone, aceto-acetic acid, and oxybutyric acid were capable of causing the symptoms of diabetic coma. The general conclusion arrived at was that man and animals can take large doses of these bodies without suffering in any marked way, provided the excretory organs were in good working order. Large doses of acetone in man caused drowsiness and headache occasionally. Dr. Dreschfeld next pointed out that acetone may be detected in the breath, and aceto-acetic acid in the urine in other diseases than diabetes. (See THE LANCET, vol. ii., 1885, on Diaceturia.) In a case of syphilitic cirrhosis of the liver symptoms of vomiting, headache, and great depression, rapidly passing into coma, and simulating the diabetic form, proved fatal in thirty-six hours.

Dr. Dreschfeld's view of the pathology of diabetic coma may be thus summed up. As the result of some frequently definite exciting cause, various bodies—acetone, aceto-acetic acid, oxybutyric acid, and possibly others—arise in the blood, which would be rapidly eliminated therefrom if all the emunctories were acting efficiently. But in diabetes the kidneys and liver are seriously deranged, as witness the necrotic changes in the renal epithelium and the atrophy and fatty degeneration of the liver with distended capillaries. As a consequence these bodies accumulate and poison the nervous centres with the production of the serious symptoms. The impairment of the normal functions of the liver is regarded as of equal if not greater importance than the disturbance of the kidneys. The fact that albuminuria is rarely absent in diabetic coma is held as corroborative of these views. Some authorities have held that the symptoms are to be ascribed to the diminution of the alkalinity of the blood, but this theory of acidification of the vital fluids is disputed by many. Finally, Dr. Dreschfeld thinks there is a certain analogy between uræmic poisoning and diabetic coma. Urea, like acetone, is not a direct poison itself; but if elimination is prevented, it and other products of albuminous disintegration may accumulate and so give rise to morbid phenomena. To the question, Where are these bodies—acetone, &c.—formed? no certain answer can be given; they have been regarded as resulting from the oxidation of sugar, but their deviation from albuminous bodies is the more likely supposition (see Jaksch on Acetonuria and Diaceturia). Whether a ptomaine-like body is developed in the blood, and causes the symptoms, must be regarded thus far as mere speculation.

Treatment should consist in the avoidance of those exciting causes—active exertion, mental or physical, and sudden alteration in diet—already mentioned. The prevention of constipation is also an important matter. The employment of antiseptics and bicarbonate of soda in large doses (on the acidification theory) has not yielded satisfactory results. Altogether the prognosis is very gloomy, and the diabetic must be regarded, with Prout, as "walking on the brink of a precipice."

HEALTH OF THE ARMY.

No. I.

THE report by the Director-General of the Army Medical Department on the health of the Army during the year 1884 shows the average strength of the troops serving at home and abroad, exclusive of colonial corps, to have been 167,686. The admissions into hospital were in the ratio of 1092, the deaths 8·42, the discharges by invaliding 17·98, and the constantly non-effective from sickness 56·38 per 1000 of the strength—all being somewhat higher than in 1883, except the deaths, which show a reduction of 1·15 per 1000. There was a very marked reduction in the admissions in the West Indies and China, and a moderate one in Ceylon; in all the other commands there was an increase compared with the preceding year. The death-rate in Egypt was much lower than in 1883, and it was also lower in Ceylon, the West Indies, and Gibraltar, but was higher in all the other foreign stations. The average strength of the troops in the United Kingdom was 83,135; of whom 870 were admitted into hospital, 8·42 died, 17·98 were discharged as invalids, and 56·38 were constantly non-effective from sickness per 1000 of strength. The admissions and mean daily sick were above, but the mortality and invaliding under, the average of the preceding ten years. Scarlet fever and measles prevailed to some extent among the troops at Aldershot, London, Woolwich, Portsmouth, Winchester, Devizes, and Dublin, but in a mild form, only one death having occurred from the former. Enteric fever was slightly less prevalent and fatal than in 1883, but closely corresponded with the average of the last five years; the greatest number of cases occurred at Dublin, Limerick, and Aldershot. Nine cases with three deaths occurred at Limerick, the origin of which is stated to have been traced to "defective sanitary condition of waterclosets." Erysipelas was more prevalent than in the preceding year; it was the cause of 244 admissions and two deaths, and seems to have been pretty generally spread over the military stations. Only four cases of diphtheria with one death were reported

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during the year—two at Norwich, one at Chatham, and a fatal one at Aldershot, where the disease is said to have been prevalent among the civil population. The usual detailed information is given respecting the prevalence of syphilis, which shows a very marked increase in the admissions, especially of the primary form, compared with the preceding five years, when the Contagious Diseases Acts were in operation. The increase has been chiefly, though not exclusively, at the stations which were under the Acts. A fatal case of hydrophobia occurred at Woolwich; the man died about twenty hours after admission. No particulars are given in the report. There were 210 admissions by alcoholic poisoning and delirium tremens, being in the ratio of 2·53 per 1000 of strength, and seven of them terminated fatally. Fifteen deaths by suicide were returned, being ·17 per 1000 of strength; nine were by firearms, two by cut-throat, two by poison, one fracture of skull, and one not stated.

The highest proportion of admissions into hospital, 1011, was from the Foot Guards, and the lowest, 642, from the Royal Engineers; but the latter furnished the highest death-rate, 8·69, while the lowest was in the Household Cavalry, 4·10 per 1000. The Royal Engineers had the lowest and the Foot Guards the highest proportion constantly sick, the respective ratios being 29·34 and 48·35 per 1000. The sanitary reports by the principal medical officers of the districts affords evidence that an efficient supervision is exercised with regard to the barracks and hospitals.

At Gibraltar the average strength for the year was 4712; the admissions were in the ratio of 967, the deaths of 4·03, the mean sick of 55·65, and the invaliding to England of 33·10 per 1000. The deaths were 2·90 below the average of the preceding ten years, but all the other ratios were above it; there was, however, a decrease of 6 per 1000 in the mean sick compared with the ratio in 1883. There was an increase in the admissions for continued fever, attributed to "the frequent changes that have taken place in the garrison, and to the large percentage of young soldiers in the regiments." But it is worthy of note that, notwithstanding this, there were only three admissions and one death from enteric fever. There is little to observe regarding the prevalence of disease at Gibraltar during the year, except that "in August, when cholera was epidemic in the south of Europe, diarrhœa, accompanied by colic and vomiting, appeared in an epidemic form at this station. The attacks were, for the most part, of short duration, averaging from twenty-four to thirty-six hours, and were very amenable to treatment, but they were very general throughout the garrison, few, either civil or military, escaping. It commenced about the beginning of August and lasted till the beginning of September, the weather during most of the time being intensely hot. The severe cases were characterised by violent diarrhœa, accompanied by cramps in the bowels and legs, and incessant vomiting." It could not be traced to any local insanitary condition, and none of the cases died.

The average force at Malta was 4637; it furnished 840 admissions, 9·27 deaths, 30·41 invalids to England, and 55·84 constantly sick per 1000 of strength. These ratios, though higher than those of 1883, correspond very closely with the average of the last ten years, except the mean daily sick, which shows an increase of 8 per 1000. One-half of the deaths resulted from enteric fever. The admissions by this disease amounted to 20·3, and the deaths to 4·74 per 1000 of strength. The greatest number of cases occurred in the Cottonua district in May, June, and July. In the Valetta district a large number of admissions took place in November. The medical officer in charge at Cottonua says: "It is remarkable that only two cases occurred among the women and children, occupying the same quarters and with the same water-supply [as the men]. I am of opinion that this disease is seldom contracted in barracks, but in the very insanitary houses of the natives which the soldiers frequent." The Principal Medical Officer concurring in this opinion, 44 grog shops in the Cottonuan district were put out of bounds for the troops by the authorities, as the water in the tanks was reported to be polluted and unfit for drinking. No information, however, is given as to the effect of this action. A number of cases of pneumonia "occurred among the young soldiers of the 2nd Royal Irish Regiment, which occurred in the month of March from England; 15 cases were admitted into hospital immediately after the regiment disembarked, and 14 were transferred from hospital on board ship." It is not stated whether there was any special inquiry into the condition of the troops on board the ship from which these cases were landed.

The Royal Malta Fencible Artillery, 347 strong, appear to have enjoyed excellent health during the year, the admissions having only been 660 per 1000, without a death; the mean daily sick was 22·19, and the proportion discharged as invalids 11·52 per 1000. There were no cases of enteric fever or of tubercular disease.

In Cyprus the average strength of the troops was 495; the admissions into hospital were 753, the deaths 16·16, invalids sent to England 34·34, and the mean sick 31·77 per 1000. These ratios are all considerably higher than in the preceding year, but this increase is entirely attributable to the 1st Royal West Kent Regiment having been replaced in June by the 3rd King's Royal Rifles from Egypt. The admissions and death-rate on the former, during the first half of the year, were in the *annual* ratio of 7·52 and 7·01 per 1000; while in the latter, from the time of its arrival, they were 1103 and 23·80 per 1000, a result of its previous service in Egypt. There were three cases and one death of enteric fever, all in the Rifles and contracted in Ramleh. During the season three drafts of 50 men each were sent to Troodos from Egypt, as convalescents, and derived considerable benefit from the change, especially those convalescent from fever and general debility from various causes. From the month of June till the middle of October, all the troops, except a few necessarily left at Limassol, were quartered on Mount Troodos.

The strength of the troops at Halifax, in the Dominion of Canada, was 1265. The admissions into hospital amounted to 779, the deaths to 6·32, the mean sick to 50·81, and the invalids sent home to 20·55 per 1000 of strength. With the exception of the invaliding, these ratios are all a little over the average; but as regards the deaths three only in a total of eight were the result of disease, the other five having been caused by accidents and violence and by suicidal poisoning. Two cases of enteric fever were admitted, but the disease is stated in both to have been contracted at Bermuda. The fatal cases of disease were one of phthisis, one of pneumonia, and one of nephritis, giving a ratio of only 2·37 per 1000 of strength.

The strength of the troops in Bermuda was 1551; the ratio of admissions among them was 618, of deaths 10 96, and of constantly sick 32·40 per 1000. There were no invalids sent to England during the year. The admissions and mean sick were slightly under, and the deaths 3·46 above, the average. The excess in the mortality was chiefly due to an outbreak of enteric fever at Prospect. The admissions by this disease were 62 and the deaths 10, being respectively 40 and 6·45 per 1000 of strength. It prevailed from the middle of August to the end of the year. The Principal Medical Officer says: "It appears to have been connected with an excessive rainfall, following on an unusually dry summer, and the coincident impervious condition and resulting accumulations in and around certain drains and catchpit used to carry off the surface, washhouse, and urinal drainage. On these conditions being rectified, and the old disused cesspits being emptied, deodorised, and filled in, the disease gradually declined." It is difficult to understand why these important sanitary measures had been so long delayed. It is stated even now that "the system of drainage as regards the disposal of urine, water of washing and ablution rooms, is very faulty. A special sanitary committee has reported on the insanitary conditions, and has forwarded recommendations for a new and thorough system of drainage." Of the six remaining deaths, three were by drowning and one from poisoning—the case of a man who "partook of a large quantity of preserved lobster for supper; during the night he was attacked with violent pains and vomiting. He was taken to hospital, but died a few hours after admission."

The average strength of the white troops in the West Indies was 970, and their health appears to have been satisfactory. The admissions were 749, the deaths 11·33, the mean sick 39·84, and the invaliding to England 27·83 per 1000; all but the last being under the average of the preceding ten years. Only five cases of enteric fever were reported, all severe but none fatal; they occurred at Barbadoes, and could not be traced to any insanitary condition. Of the deaths, two were from phthisis, two from heart disease, three from pneumonia and bronchitis, one from hepatitis, one from Bright's disease, one from a fall, and one from a suicidal gunshot wound. The strength of the Black Troops was 1150. They furnished 926 admissions, 11·30 deaths, 26·96 invalids, and 60·49 constantly sick per 1000; the first

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two being considerably under and the last two slightly above the average. Four deaths occurrrd from remittent fever, two at Jamaica and two at Honduras; the deaths from phthisis were much below the average, but those from heart disease considerably above it.

On the West Coast of Africa the strengh of Black troops was 530; the admission rate was 1276, the death-rate 16·69, and the mean sick 67·51 per 1000; none were discharged as invalids. These ratios are much under the average, except the mean sick, which shows an increase of 4 per 1000. One case of enteric and one of yellow fever occurred at Sierra Leone, both fatal. There is a satisfactory reduction in the prevalence and mortality of tubercular diseases among these troops.

The average strength of troops at the Cape and St. Helena was 3157, the detachment at St. Helena being only 173. The admissions into hospital from the whole force were in the ratio of 679, the deaths of 7·91, the invaliding to England of 23·76, and the mean sick of 44·10 per 1000, the two former being considerably higher and the others considerably lower than in 1883. The increase in the admissions was probably due to the arrival in the command of several regiments sent as reinforcements for the Bechuanaland expedition. There were fifty-three admissions and eight deaths of enteric fever, one of each at St. Helena. At the Cape there were two outbreaks of the disease, one at Pinetown and the other at Rorke's Drift. At the latter station the disease began in October, when three cases occurred, followed by thirty in November, and one in December, some of them proving fatal. It was chiefly confined to the young soldiers of the 2nd South Lancashire Regiment, which had just moved from England. Eight cases occurred at Pinetown in May, and three in November, the latter believed to have been contracted at Rorke's Drift. There were also five cases at Maritzburg, three of them contracted at Rorke's Drift, and one case at Etchowe contracted on the march from Pinetown. Polluted water was believed to have been the cause in all these cases. Exclusive of those from enteric fever, the deaths were only in the ratio of 5·42 per 1000. It is stated that the vicinity of Cape Town "continues to call for remonstrance on the part of the military authorities on account of faulty drains and neglected sluits."

In the Island of Mauritius the strength of the troops was 363; the admissions were 2295, the deaths 22·3, the invalids to England 46·83, and the mean sick 95·73 per 1000 of the force. These are all considerably above the average of the last ten years, and also, except the mean sick, higher than in 1883. The great amount of sickness and mortality was due, as before, to the prevalence of paroxysmal fever, by which the admissions were 1358, and the deaths 11·02 per 1000 of strength. The Principal Medical Officer says: "the evil influences which have of late years so seriously affected the health of the troops stationed in the line barracks at Port Louis are unabated, and the only prospect of substantial amelioration is the transfer of the infantry to Curepipe; this measure is in course of execution by the gradual increase of branch accommodation at that station." The value of such a change is shown by the fact that fifty-five men who were sent from Natal, to replace a similar number, were sent at once to Curepipe, and "there has been seemingly an almost complete immunity from ague and the ordinary remittent fever from among them." Surely, when one-tenth of the force is constantly non-effective from sickness, every exertion should be made to carry out without delay so very desirable a change.

The average strength of the European troops in Ceylon was 1988; the ratio of admissions into hospital was 980, of deaths 7·04, of invalids sent to England 32·49, and of mean sick 67·49 per 1000. The deaths and invaliding were considerably under, and the admissions and mean sick above, the average of the preceding ten years. Compared with 1883 there was a very marked decrease in the cases of fevers, diseases of the digestive system, and injuries, but a great increase in syphilis, particularly the primary form, and gonorrhœa. There were only two cases of enteric fever, but both fatal at Colombo. Diseases of the digestive system were the most frequent cause of death, two men having died from dysentery, two from peritonitis, and one from hepatitis. The native troops consisted of only eighty-five gun-lascars, of whom thirty-two were admitted into hospital and two died, the fatal diseases being debility and phthisis.

At Hong-Kong and the Straits Settlements the European troops were 1088; the admissions were 980, the deaths 7·04, the invalids sent home 38·33, and the men sick 46·89 per 1000, all considerably under the average of the preceding ten years, and the admissions and mean sick much under the proportion in 1883. As in the preceding year, the sickness and inefficiency were lower at Hong-Kong than in the Straits Settlements, but the deaths and invaliding were higher. There was a very marked reduction in fevers, both of the continued and paroxysmal types, and also in debility, so often the result of fever. No cases of enteric fever were reported. The decrease in sickness is attributed to improved drainage and sanitary conditions.

The Asiatic Troops in the command, 180 strong, were not so healthy as the Europeans, the admissions having been 1050, the deaths 22·22, and the invalided 33·33 per 1000.

IRISH MEDICAL SCHOOLS' AND GRADUATES' ASSOCIATION.

THE Provincial meeting of the above Association, which now includes more than 400 members, was held on Wednesday, August 11, in the Royal Pavilion, Brighton. The President (Dr. Macnaughton Jones, F.R.C.S.I.) stated that the late Government had, in consequence of representations made by a deputation from their Association, inserted in the Medical Acts Amendment Bill (now on the statute book) a clause by which the members of the King and Queen's College of Physicians in Ireland, and those holding the degree of Master in Obstetrics of the two Irish Universities, were entitled to have their diplomas and degrees entered on the Medical Register. A grievance of those seeking Poor-law appointments had thus been removed through the instrumentality of their Association.

The Honorary Secretary (Dr. STEWART) brought under the notice of the meeting a grievance from which Irishmen holding qualifications as high as could be obtained anywhere were suffering still, owing to the "boycotting" of the Fellows of the King and Queen's College of Physicians and Royal College of Surgeons in Ireland by the Boards of Governors of several large public hospitals in England. The latest instance of this occurred in his (Dr. Stewart's) own neighbourhood, the Bristol General Hospital governors having as recently as June last confirmed a rule which disqualifies a Fellow of either of the Irish Colleges from holding the post of physician or surgeon on the staff.

Sir WILLIAM STOKES said he would be sorry to think that the governors of the institution referred to made that rule with a desire to insult the College of which he had the honour of being the President. Their action had probably arisen from their being unacquainted with the requirements necessary in order to obtain the F.R.C.S.I., the examination for which was a most searching one.

Sir THOMAS CRAWFORD, K.C.B., thought the Association ought to take the matter in hand immediately.

The PRESIDENT said the only logical ground on which such a distinction as that made by the Bristol Hospital could be justified was a superiority of qualification, and, as a Fellow of the Royal College of Surgeons in Ireland, he denied altogether that holding the English Fellowship proved the possession of higher professional attainments. The tests of the Irish College of Surgeons were quite as high as those of the English, and ought to command equal right to compete for appointments on the staff of any hospital, no matter in what part of the United Kingdom situated. He promised to get the Council of the Association to move in the matter without delay, especially as the Bristol Hospital was not alone in this exclusive action. The governors of these institutions should remember that they were bound to obtain for the sick poor the best advice possible, and they were not fulfilling their trust if they excluded from appointments men possessing the highest professional qualifications because their diplomas happened to be obtained from an Irish College. He could hardly agree with the charitable remark of Sir Wm. Stokes that the Bristol Board of Governors had no desire to cast a slur upon the two Irish Colleges referred to. The grievance was a real one, and one which he felt sure would be admitted by all Englishmen who were acquainted with the facts of the case.

The death of Dr. James Thompson, founder and honorary treasurer of the Association, was reported, and a vote of condolence with the family of the deceased was passed.

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Brigade Surgeon W. Alexander, M.D., Q.U.I., was appointed to the office rendered vacant by Dr. Thompson's death.

The members of the Association and their guests, in all fifty-two, dined together the same evening. The chair was occupied by the President (Dr. Macnaughton Jones), and on his right sat the guest of the evening, Dr. N. S. Davis, of Chicago, President of the 1887 International Congress. Among the other guests present were several American physicians at present on a visit to England.

POOR-LAW MEDICAL OFFICERS' ASSOCIATION.

THE annual meeting of this Association was held at Brighton last week, during the meeting of the British Medical Association. The chair was taken by Dr. Joseph Rogers.

In the course of the proceedings, Dr. NORMAN KERR proposed the following resolution: "That this meeting congratulates the President, Dr. Joseph Rogers, on his recovery from serious illness, thanks him warmly for his noble and unselfish efforts on behalf of Poor-law medical officers, and of the welfare of the poor, and trusts that he may be long spared to continue the work to which he has so generously devoted the best years of his life." He did not think it necessary to add much in support of this resolution, which, he was sure, Dr. Rogers would feel came quite spontaneously. He was convinced all their hearts must have gone out to him in the very serious illness through which he had passed, and they hoped, not only for their own sakes and for the general cause of medical reform, but also for the benefit of the suffering poor—and the poor ought to be, and he hoped always would be, their first consideration—that he would be long spared to adorn their profession, and to do good to his fellow-men.

Mr. SIMPSON seconded the motion, which was carried by acclamation.

The PRESIDENT said he was extremely obliged for the generous observations of Dr. Kerr. It had certainly been his privilege for the last twenty-five or twenty-six years to fight the battle of the question of administration and relief of the poor. He commenced that work because the condition of things in the old Strand Workhouse was something more horrible than it was possible to imagine. They had succeeded in abolishing that condition of things, and in substituting a more righteous system. He might mention, for it was desirable that they should know it, that in consequence of the Metropolitan Poor Act the salaries and emoluments of the Poor-law medical officers for the metropolis was increased by no less a sum than £18 a year; therefore the sum of £18 a year in addition was put into the pockets of the workhouse and district medical officers in the metropolis consequent upon that accidental gathering in November, 1865, which had led to the formation of the Workhouse and Reformatories Association, and subsequently of this Association, as the outcome of the agitation then commenced. They had thus done some good pecuniarily to the workhouse medical officers, and they incidentally succeeded in doing a good deal of good throughout the country, but not to the extent that they could have desired. He did not know whether he should be permitted to preside over another meeting of that Association. He certainly had been most seriously ill, but he had been spared, and as long as health lasted he would continue in his work.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 5994 births and 3300 deaths were registered during the week ending August 14th. The annual death-rate in these towns, which had been 20·6 and 19·9 per 1000 in the preceding two weeks, further declined last week to 18·9. During the first six weeks of the current quarter the death-rate in these towns averaged 19·6 per 1000, and was 2·0 below the mean rate in the corresponding periods of the ten years 1876-85. The lowest rates in these towns last week were 12·5 in Derby, 13·9 in Hull, 14·4 in Bristol, and 14·8 in Brighton. The rates in the other towns ranged upwards to 23·7 in Salford, 24·1 in Blackburn, 24·1 in Birkenhead, and 26·9 in Cardiff. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had been 877 and 871 in the preceding two weeks, declined last week to 718; they included 531 from diarrhœa, 54 from measles, 44 from "fever" (principally enteric), 33 from whooping-cough, 30 from scarlet fever, 26 from diphtheria, and not one from small-pox. The lowest death-rates from these zymotic diseases were recorded last week in Newcastle-upon-Tyne, Hull, and Oldham; and the highest in Salford, Leicester, and Cardiff. The mortality from diarrhœa showed a general decline, though the rates from this disease showed an excess in Salford, Norwich, Cardiff, and Leicester. Measles caused the highest death-rates in Blackburn and Preston, and "fever" in Portsmouth and Cardiff. The 26 deaths from diphtheria in the twenty-eight towns included 15 in London, 3 in Liverpool, and 2 in Plymouth. Small-pox caused no death either in London and its outer ring or in any of the twenty-seven large provincial towns. The number of small-pox patients in the metropolitan hospitals situated in and around London, which had been 8 on each of the preceding two Saturdays, had declined to 5 at the end of last week; no new case was admitted to these hospitals during the week. The deaths referred to diseases of the respiratory organs in London, which had been 172 and 148 in the preceding two weeks, were last week 150, and 36 below the corrected average. The causes of 76, or 2·3 per cent., of the 3300 deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Brighton, Norwich, Nottingham, Hull, and in four other smaller towns. The largest proportions of uncertified deaths were registered in Oldham, Liverpool, and Derby.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 19·8, 19·5, and 18·8 per 1000 in the preceding three weeks, further declined to 17·4 in the week ending August 14th; this rate was 1·5 below the mean rate during the same week in the twenty-eight English towns. The rates in the Scotch towns last week ranged from 12·5 and 13·1 in Greenock and Perth, to 19·0 and 23·4 in Glasgow and Paisley. The 430 deaths in the eight towns showed a decline of 34 from the number in the previous week, and included 21 which were referred to whooping-cough, 18 to diarrhœa, 12 to scarlet fever, 5 to measles, 4 to diphtheria, 3 to "fever" (typhus, enteric, or simple), and not one to small-pox; in all, 63 deaths resulted from these principal zymotic diseases, against 67 and 77 in the preceding two weeks. These 63 deaths were equal to an annual rate of 2·6 per 1000, which was 1·5 below the mean rate from the same diseases in the twenty-eight English towns. The deaths referred to whooping-cough, which had been 18 and 23 in the preceding two weeks, were last week 21, of which 16 occurred in Glasgow and 4 in Aberdeen. The fatal cases of diarrhœa, which in the previous two weeks had been 34 and 28, further declined last week to 18, and included 11 in Glasgow and 3 in Paisley. The 12 deaths from scarlet fever showed a decline of 3 from the number in the preceding week, and included 7 in Glasgow and 3 in Edinburgh. Of the 5 fatal cases of measles, 2 occurred in Leith and 2 in Glasgow. The 4 deaths from diphtheria exceeded the numbers in recent weeks, and included 3 in Glasgow, where 2 of the 3 fatal cases of fever were also returned. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 66 and 60 in the preceding two weeks, rose again last week to 71, and exceeded by 22 the low number in the corresponding week of last year. The causes of 60, or nearly 14 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been 17·3 and 17·6 per 1000 in the preceding two weeks, further rose to 20·8 in the week ending Aug. 14th. During the first six weeks of the current quarter the death-rate in the city averaged 19·9 per 1000; the mean rate during the same period was 20·6 in London and 18·9 in Edinburgh. The 141 deaths in Dublin last week showed an increase of 22 upon the number in the previous week, and included 4 which were referred to diarrhœa, 2 to "fever," 1 to measles, 1 to scarlet fever, and not one either to small-pox, diph-

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theria, or whooping-cough. These 8 deaths from the principal zymotic diseases showed a decline of 7 from the number in the preceding week, and were equal to an annual rate of 1·2 per 1000, the rates from the same diseases being 4·5 in London and 1·2 in Edinburgh. The 4 deaths referred to diarrhœal diseases showed a further increase upon recent weekly numbers. The 2 fatal cases of fever corresponded with the number in the previous week. The deaths from scarlet fever, which had risen from 1 to 7 in the previous three weeks, declined again to 1 last week. Seven inquest cases and 5 deaths from violence were registered; and 49, or more than one-third of the deaths, were recorded in public institutions. The deaths both of infants and of elderly persons considerably exceeded those recorded in the preceding week. The causes of 19, or more than 13 per cent., of the deaths registered during the week were not certified.

Correspondence.

"Audi alteram partem."

SMALL-POX AT WINDSOR.

To the Editor of THE LANCET.

SIR,—I must protest against the publication of such injurious misstatements as are contained in the report of your Windsor correspondent. It is quite untrue that small-pox has prevailed in the slums previously denounced by him. The quarters which he particularly condemned were Bier-lane and its courts, South-place, and Sydney-place, and in these districts altogether only one case has occurred. There was another in Love-lane, which street, however, he barely mentioned. From neither of these two patients did any spread of infection take place. Charles-street is not in any sense a continuation of South-place, for it is at right angles to it, and of different construction and circumstances. The sensational story of a man dying of small-pox at 4, Charles-place, on a heap of shavings in a back room without ventilation, and lying too long unburied, is a fiction altogether, for the case which no doubt suggested it was that of a man who died of apoplexy. He occupied a front room, which was quite well ventilated, and he was buried on the third day after death. After such a flagrant instance of your reporter's inaccuracy it is scarcely worth while to answer him further. The errand-boy at 31, South-place, who excited his pity as having lost his place through the unjust conduct of the sanitary authority, was himself the sufferer from small-pox. We have now a hospital camp for the isolation of patients, but before it was ready it was of course necessary to prevent persons from going in and out of infected cottages; but compensation was (your Commissioner will be surprised to hear) given to those who were thus thrown out of work. The precautions taken were in almost every instance perfectly successful in preventing the spread of infection, and had it not unfortunately happened that the existence of one or two cases was for a time concealed, the outbreak would probably have been early stamped out. As it is, it has been of slight severity; only one death has occurred within the urban district, and the epidemic, if so it must be called, appears to be at an end. In one thing I quite agree with your Commissioner. It is true that his former report was fruitless of good result, but, on the contrary, it did much harm, and the ill-feeling which it excited is the greatest obstacle to the success of any scheme for the improvement of Windsor.

I am, Sir, yours obediently,

EDWARD CASEY, M.D. Lond.,
Medical Officer of Health.

Windsor, Aug. 17th, 1886.

*** In reply to the above letter, it is barely worth while discussing whether Charles-street is a continuation of South-place. The fact that the last house of the one thoroughfare almost touches the first house of the other thoroughfare is, we should imagine, sufficient; but, if necessary, we could publish a plan of the neighbourhood. Our Sanitary Commissioner is pleased to frankly recognise that he was incorrectly informed, and committed an error in stating that the man who remained some time unburied died of small-pox. Small-pox did occur at No. 4, Charles-place, but the man who died of small-pox lived at the corner of Charles-place and South-street, and the man who remained some time unburied died at No. 1, Charles-place. At the time of this last death there were nine cases of small-pox within a few yards of the unburied body, and close to a public-house and a hairdresser's shop. It is easy to question details and to show that some little confusion arose, that some particular case of small-pox occurred four yards to the right instead of four yards to the left of a given point. People inhabiting such districts reply to questions in an excited and somewhat incoherent manner; but the fact remains that Windsor possesses disgraceful slums, that small-pox has broken out in those slums and still continues, if not precisely in the district under Dr. Casey's care, yet quite close enough to the borough to be a menace to visitors and residents. The other great fact, that the Windsor authorities did not possess a proper fever hospital, is also demonstrated by the epidemic. We are extremely gratified to learn that compensation has been given to those on whom quarantine was imposed, which is much to the honour of the Windsor authorities. We cannot believe that our report on Windsor has excited any ill-will among those who are actuated solely by the desire to ensure the public good. There may be, of course, a few persons whose only thought is the fear of expense, but with these we are not in the least concerned.—ED. L.

HYDROPHOBIA AND ITS CURE.

To the Editor of THE LANCET.

SIR,—Last month a patient was admitted into hospital, having been bitten about half an hour previously by what he declared was a rattle-snake. On the web between the fore and middle finger of the right hand I found the characteristic punctures produced by the snake's fangs, and the back of the hand was much swollen and semi-fluctuant. The man was retching violently, with rapid, small pulse. I immediately made a free incision into the most prominent part of the swelling, and about half an ounce of black fluid blood spurted out. Hot applications were used and bleeding freely encouraged. The vomiting at once stopped, and in three days he was dismissed well. Immediately after this THE LANCET of April 24th came to hand with Surgeon-Major Pringle's paper on the Treatment of Hydrophobia by incising the part and encouraging bleeding by suction, the very same treatment as I had adopted in my case of snake-bite. This seems to me a most rational method of treatment of recent bites, whether from the rabid dog or the venomous reptile. The poison, I presume, in the great majority of cases takes some considerable time for its absorption into the general circulation. Such being the case, by freely extracting blood locally, which will be in a state of congestion, if not stasis, in the capillaries, it seems reasonable to presume that a large portion, if not all, of the poison will be thus eliminated. But, supposing the case is not seen at once, but after the lapse, say, of eight or ten hours, I think it would still be advisable to incise freely the bitten part, in the hope that there still remained in the region of the bite a greater or less quantity of unabsorbed venom. With local incision would it be unreasonable to adopt general bleeding, say, from the arm? By this means the actual amount of poison in the system would be lessened, and proportionately the chances of escape increased. Of course, the objection will at once arise, that if the poison be in the form of a living germ, until the last germ is removed the danger will still be latent. But surely the fewer germs we have to attack the more hope there will be for the third stage in the treatment—viz., the subcutaneous injection of the permanganate of potassium.

I claim no originality for suggesting the use of this remedy. It has been much vaunted in the case of snake-bites, and is extensively used by the large *fazendeiros* in this country. But a few weeks ago I observed in a native non-medical newspaper—the *Jornal do Commercio*, published in Rio—a statement by a medical man that he had received a

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letter from a *fazendeiro* who had had two slaves bitten by a dog, which was afterwards proved to have been hydrophobic. The man (for what reason I know not) injected the permanganate solution at once in the region of the bite, and neither of the slaves, after a long interval of time, had shown any symptoms of the dreaded malady. The doctor was appealing in the newspaper for some hydrophobic dogs in order that he might experiment with the permanganate.

Now, whether the happy result in the case of the two slaves mentioned was *post hoc* or *propter hoc* is a point which can only be determined, like M. Pasteur's treatment, by experience. Like the rest of the world, I am waiting with anxiety the result of this eminent man's treatment. But if ultimately successful, is there any hope of simplifying the methods of procuring the vaccine and also the process of application? If not, I fear after a little time country practitioners and poor people will be little better off than they are now, as a trip to Paris is beyond the means of most people. The method of treatment I have suggested has this advantage, it is within the reach of all, and certainly it appears more reasonable than merely passing a piece of nitrate of silver over as much of the lacerated flesh as can be conveniently got at.

To summarise: 1. If the bite is seen at once, stop as far as possible circulation through the part, as is recommended in the text-books; freely incise the part and encourage bleeding, as recommended by Surgeon-Major Pringle; treat the wounds on antiseptic principles, rendering them as far as possible aseptic; inject the permanganate of potassium subcutaneously. 2. If some hours have elapsed, in addition to the above treatment I would suggest general bleeding to a moderate degree, repeated at intervals and followed closely by the free administration of the permanganate.

I am, Sir, yours obediently,

W. LONDON STRAIN, M.B. Glas.,
Late Res. Asst. Glas. West. Infirmary.

Morro Vello Hospital, Brazil, June 18th, 1886.

To the Editor of THE LANCET.

SIR,—The imitative faculty—the link Simian—is strong in man. As soon as Virchow promulgated a doctrine of cells, cells were found everywhere. Now that the cellular pathology has for a time been superseded, microbes are found everywhere and in every disease. The microbic theory of hydrophobia is the natural outcome of imitation. We have recently had several announcements of the discovery of special microbes of hydrophobia, found in brain or cord. Strange to say, in the place or in the secretion where we would expect a microbe to be found, no result has been attained.

A rabid dog runs along the street and bites some one. He implants in the wound *something*, the saliva presumably being the medium. Now here we have the first stage in the problem. Has the dog simply exploded a nerve cell in the brain, and transmitted by nervous force a microbe from the brain, into the wound, or are the dog's teeth charged with microbic germs? A *reductio ad absurdum!* Rather, does not the bacteria lie in the saliva, just as in snake poisoning? And should we not look to this saliva and here carry out researches and ascertain—1. The exact nature of the saliva in the rabid dog, chemical and microscopical. 2. The exact changes in a wound caused by a rabid dog from the day the bite was first inflicted until the day of death, if such a result follows. 3. The infective nature of the wound must be also tested, &c. 4. When death takes place the total changes in all the tissues must be noted. The salivary glands, the brain, cord, &c., are all worth attention and control. Experiments should be made with all parts of the body. I could multiply the number of experiments required. It is manifestly unscientific to begin with the last part affected. The brain substance, the medulla, are implicated we know in the final stages, but as the rabid dog does not implant when he bites any part of his brain substance the initial lesion is what concerns us more particularly.

Against a microbic theory of hydrophobia many facts militate:—(1) The period of incubation; (2) the symptoms; (3) the local action in the wound; (4) the dosage; and (5) the general history of the disease. It does not affect this argument that a kind of pseudo-hydrophobia can be produced by injecting direct into the brain of a dog a cultivated fluid called rabic. Almost any kind of material, injected into the medulla of the rabbit, will produce such symptoms, and the animals will die with symptoms like those of the rabbits killed in the Paris laboratory. Carried on consecutively from rabbit to rabbit in the same way a cultivating fluid can be made. If we inject into the skin of a man some of this fluid, we do perhaps as little harm as Pasteur has done to his patients, but this part of my thesis has not yet been done. In some of the recent researches on rabies, I find a lack of originality. The microbes have rather cobwebbed the field. Those who are experimenting will, I trust, shine out into a field of their own, and leave off imitating.

I am, Sir, yours very truly,

Halifax, August 2nd, 1886. TH. M. DOLAN, M.D.

CASEY *v.* IMLACH.

To the Editor of THE LANCET.

SIR,—Your views concerning intra-peritoneal hæmatocele, however consistent they may be with the teachings of old and respected text-books, are wholly irreconcilable with the facts of modern abdominal surgery. I have now operated on twenty-five cases of intra-peritoneal hæmatocele, with one death; and I have seen about twenty-five post-mortem examinations of this condition. In every one of these cases the cause of the hæmatocele was a ruptured tubal pregnancy. Of all the cases that were left alone there was not a single recovery, and of all the cases operated on there was one death. You say that intra-peritoneal hæmatocele is a condition frequently met with, and that extra-uterine pregnancy is comparatively rare; but you must admit that my tabulated and published experience is absolutely the reverse, and I believe all experience, without operation or post-mortem examination, in this matter to be mere guesswork.

The symptoms given by the plaintiff in the witness-box, together with the description of the operation by those who saw it done, led me to believe that this hæmatocele was an old ruptured tubal pregnancy with recurrent hæmorrhage, and with this view I had to regard it as unique. I certainly have seen none like it.

I am greatly surprised to find in the classic columns of THE LANCET a continuation of that extraordinary confusion of terms between "spaying" an animal and "removal of the human uterine appendages." Animals are spayed before puberty to prevent its access, and the consequent development of a sexual appetite and powers, and the powers of procreation. The ultimate object of the process of spaying is an improvement in our food supply or in our domestic service by animals.

Removal of the human uterine appendages is performed after puberty—generally long after puberty. It has no influence, so far as I know, in destroying the sexual powers; indeed, it constantly restores them after disease has destroyed them. It does not usually destroy the procreative power, for that (in the great majority of instances) has been already destroyed by the disease for which the operation has to be performed. Finally, the operation has no other purpose than the saving of life and the relief of suffering. The operation of spaying an animal and the removal of the human uterine appendages have therefore no conceivable resemblance. Consequently, to talk of "spaying women" is to display great ignorance or to indulge in wilful misrepresentation for purposes of giving offence.

Concerning the frequency of the operation, that will always be relative, like everything else. The man who has a reputation for seeing patients safely through pneumonia will surely have a large number of cases of that disease; so the man who can cure the agonies of pyo-salpinx, or arrest the bleeding of a myoma with a low mortality, will surely get many cases sent to him for removal of the uterine appendages.

It will be left to those who cannot recognise the cases when they see them, and who can operate only with a murderous mortality, to talk nonsense about the "wholesale spaying of women." Whatever authorities have condemned it are found to be those like the minority of one at the recent meeting of the Obstetrical Section at Brighton, who confessed that he knew nothing of the subject, and was now too old to learn from those who did. At the Brighton meeting we had an authoritative and final discussion of the subject, and a verdict which will encourage the progress of abdominal surgery.

That the human uterine appendages have been removed

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n cases where they ought not to have been is very likely, just as chloral was used when it ought not to have been, and just as every new advance is misused by indiscriminate and incompetent experimenters. In America, and perhaps here to a less extent, this has no doubt been the case, because too many operators are rushing into the field; but in London the fault is in the other direction. There are hundreds, if not thousands, of women who ought to be, and who could be, cured by removal of their appendages, but the high mortality of the operation in the metropolis, so far as we know it, hinders progress.

I am, Sir, yours faithfully,

Birmingham, Aug. 16th, 1886. LAWSON TAIT.

P.S.—I have not referred in this letter in detail to errors in the report from which you quote, and which very materially misrepresents what I did say, because such details are hardly pertinent to the broader questions now discussed.

DISCUSSION ON SUPRA-PUBIC LITHOTOMY AT THE BRIGHTON MEETING OF THE BRITISH MEDICAL ASSOCIATION.

To the Editor of THE LANCET.

SIR,—I very much regret I was unable to take part in the discussion upon supra-pubic lithotomy which took place last week in the Section of Surgery during the meeting of the British Medical Association at Brighton. Business of an important character detained me in another section, consequently I could not complete my engagement to speak. The operation of supra-pubic lithotomy, as now practised, is not the operation which Cheselden performed. The manner of its performance is different, and so is the preliminary and after-treatment; and I cannot help thinking that, if Cheselden could only have known our present method, he would never have forsaken the high operation. I feel convinced that in the future supra-pubic lithotomy will become a strong competitor of lithotrity. I take it that the significance of the revival of this operation lies in the fact that lithotritists have learned that there is a limit to the successful performance of lithrotity. We thus see that surgeons are again directing their attention to lithotomy as the better means, under certain circumstances, for the removal of vesical calculi; and remembering the mortality which followed lateral lithotomy for large stones, they are again invoking the aid of the operation we are discussing.

Speaking generally, my own opinion is that for stone in the bladder of male infants and boys perineal lithotomy is the best; for male adults with stone of a moderate size and with uncomplicated bladder conditions lithotrity is preferable; but for large or very large-sized calculi supra-pubic lithotomy will prove to be safer for the patient as well as easier for the operator. I was much surprised to read that Mr. Jessop, excellent surgeon as he is, should speak of lateral lithotomy in a small child as a difficult operation. I have operated upon numerous children, and I have never found any difficulty. Several times I have operated upon two children, one after another, and upon two occasions three children, on an operating day, and no mishap has ever been encountered, the operation generally being completed in thirty-five seconds. Mr. Cadge, in his recent lectures at the Royal College of Surgeons, speaks of the possible difficulty of getting the forefinger into the bladder of a small child, and advises that a pair of dressing forceps should be used instead. With the utmost respect for Mr. Cadge's opinion, I do not consider his recommendation a good one. The blades of a pair of dressing forceps, if the stone is not caught immediately, being opened and closed within the bladder, seem to me very likely to inflict considerable injury upon the mucous membrane. A better procedure would be, if the difficulty above referred to were encountered, at once to desist from all efforts to enter the bladder with the finger and to run a director along the groove of the staff into the bladder, and after the staff has been withdrawn upon the director, the forefinger or fine lithotomy forceps can easily be conducted into the vesical organ. I have long had in my possession an instrument intended to be used in the manner I have described; it is a director made of steel, measuring in length six inches, the handle of which is broad and flat, and bent to an angle midway between the straight position and a right angle, and two inches and a quarter long.

Mr. Jacobson says "he should very much like to know something of the personal history of those who had been cut for stone while young. What was the real fact as regards the emasculation which was asserted to follow in a proportion of the cases?" As a surgeon who has operated by lateral lithotomy upon nearly one hundred male children, some of these not more than twelve months old, I can only say I know of no instance; no case of the kind has ever been reported to me; and as many of my patients were sent to my care by medical men, I cannot but think that if any case of sexual incompetency had been observed it would have come to my notice.

I remain, Sir, yours faithfully,

Wolverhampton, Aug. 17th, 1886. VINCENT JACKSON.

THE HOSPITALS WEEK.

To the Editor of THE LANCET.

SIR,—It cannot but be gratifying for you to know that, apart from the benefit which the hospitals have received from the increased contributions on Hospital Sunday, as a result of the establishment of the Hospitals Week, with which the Special Supplements will ever be associated and remembered with gratitude, the appeal which the authorities of this hospital have made during the past two months has produced a monetary return greater than that of any similar appeal to the public on behalf of any of the London hospitals with the financial management and secretariat of which I have been personally associated during the last eight years.

I am induced to trouble you with this communication because I was present at the meeting of the representatives of the London hospitals which the Lord Mayor convened at the Mansion House, when the committee of the Hospital Sunday Fund decided to institute the Hospitals Week. At this meeting the representatives of St. George's and University College Hospitals, with others, strongly opposed this new departure on the part of the Hospital Sunday Council, on the ground that it would interfere with the proper work of individual hospitals and tend to lessen the amount of direct pecuniary support which they already receive from the general public. Mr. Burdett vigorously combated this view, and maintained that the greatest benefit to individual hospitals would prove to be the result. It is indeed gratifying to know, by actual experience, that not only were those objections based upon unsound premisses, but that the exact opposite to the contention of the objectors has resulted to an important hospital like St. Mary's.

Thanking you on behalf of my governors for what you have done, and with gratitude for the increased interest that has this year been awakened for the London hospitals by independent efforts on the part of both clergy and laity,

I am, Sir, your obedient servant,

PIETRO MICHELLI, Secretary.

St. Mary's Hospital, Aug. 12th, 1886.

LIVERPOOL.

(From our own Correspondent.)

THE GREEK GIPSIES.

THE Greek gipsies alluded to in a previous letter still continue at the Zoological Gardens, Walton, and constitute a danger against which it may be well to warn other local authorities. It is said that they were brought over by some public entertainer and then abandoned. The managers of all the American steamers decline to receive them, partly on account of their filthy state and refusal to conform to sanitary requirements, and partly from a belief that the authorities in America will refuse to allow them to land in that country. It is feared that there will be some trouble in getting rid of them.

ACCIDENTAL DEATH OR MANSLAUGHTER?

An inquest was held by the borough coroner, on the 18th instant, which adds one more to the melancholy list of fatalities from firearms. The deceased, a youth of eighteen, was shot by his brother, aged fourteen, and died the same

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evening in the Royal Infirmary. The evidence was somewhat conflicting, the owner of the gun declaring on oath that he left it unloaded; the boy, whose handling of it caused his brother's death, declaring with equal emphasis that he never loaded it. It is, however, much more probable that the former was mistaken, and left it loaded. The boys had no business in the room where the guns were, but the history of this and similar fatalities shows that firearms ought to be kept under lock and key, or at least out of the reach of young people.

DEATHS FROM DROWNING.

Within the last month there have been many cases of death from drowning in the river Mersey, and in the Leeds and Liverpool Canal. In most of them there was an absence of any evidence of foul play or self-murder. The circumstances pointed rather to accident, combined with total inability to swim sufficiently to keep afloat for a few minutes. Liverpool abounds with swimming baths, where youths may bathe for a very small charge, and also learn swimming on terms within reach of all, except the very poorest. A more general knowledge of the art of swimming would save many valuable lives, and it is greatly to be desired that School Boards and other public school authorities should take the matter up. A few prizes for boys under ten, who can swim round a public bath, would be a most popular as well as laudable movement,

A HEALTHY WATERING-PLACE.

Llandudno presents an admirable illustration of how a place may rise when promoted with due regard to sanitation and other public requirements. Thirty years ago it was a small village giving but faint prospects of ever attaining to its present proportions. It is now one of the most popular seaside resorts in the kingdom, combining all the advantages of easy access by rail and boat, excellent sea-bathing, ample accommodation, and, what is most important of all in a medical aspect, the low death-rate of 14·1 per 1000. Dr. James Nicol, formerly medical officer of health, who has paid great attention to the climate and other advantages of the locality, declares that the range of temperature is 1° less than the average of the united seaside places, and 3·5° less than the average of inland places. He also shows that there is an almost entire absence of smoke or fog, that the temperature is by the sea raised in winter and lowered in summer, and that the rainfall is some inches below the average. But—and this is most important of all—the system of sewerage, which cost £36,000 ten years ago, is not to be surpassed anywhere, the water-supply being abundant, exceptionally soft, and perfectly free from organic impurity. There is an excellent swimming bath, renewed with every tide, and altogether Llandudno possesses great attractions to the inhabitants of this city, who are frequent visitors to it.

Liverpool, Aug. 18th.

MANCHESTER.

(From our own Correspondent.)

VICTORIA UNIVERSITY.

At the recent medical examinations of the Victoria University the numbers showed a steady increase. The total number of successful candidates in the Pass, the Intermediate, and the Preliminary Scientific (Faculty of Medicine) was thirty-seven, of which twenty-three were students of Owens College and fourteen from University College, Liverpool, the only two colleges at present affiliated to the University. The new Hulme Hall of residence in connexion with Owens College will, in all probability, be ready for the reception of students in October, and the Rev. E. L. Hicks, M.A., rector of Fenny Compton, has been appointed the Principal. He comes with very high credentials both as a scholar and a teacher.

SIMPSON MEMORIAL COLLEGE.

On Saturday last Professor Ward laid the foundation stone of this College, at Moston, one of our northern suburbs, which bids fair to become in the future an important medical institution. The late Mrs. Fay, *née* Simpson, bequeathed more than £20,000 for the purpose of founding that establishment in her native township. Professor Ward enlarged upon the relation which the university was destined to hold in regard to all these higher educational bodies, and also touched upon the same subject as Dr. Moore at Brighton—namely, the higher education of women, provision for which is one of the main features of the Simpson Memorial scheme.

SIR H. ROSCOE.

An influential deputation waited upon a special committee of the Council of Owens College recently in reference to the resignation by Sir Henry Roscoe of the chair of chemistry in the College, urging that if possible his connexion should not be entirely severed, but that some arrangement should be made whereby his services and long experience in all that relates to the chemical department might be available when required, and his advice and direction not entirely lost to this important branch of study. At the recent festival of the founding of the University of Heidelberg, the honorary degree of doctor of medicine was conferred upon Sir Henry.

THE MAYORALTY.

It was stated in these columns that Mr. Alderman Schofield had been selected as mayor for the coming year. This gentleman, who has so long presided over the health department of the corporation, has, however, declined the honour, and Mr. Alderman Curtis will be elected, this being the third time he has filled the office. It bids fair to be an important year, for the proposed exhibition is now a matter of certainty, more than £100,000 having been subscribed to a guarantee fund. The site chosen is the same as that on which was held the Art Treasures Exhibition some thirty years ago.

HOLIDAYS AND PLAYGROUNDS FOR TOWN CHILDREN.

The children's holiday fund has not this year met with the support that it deserves; only some £500 has been subscribed, with which 590 children have been sent into the country. It was hoped that at least £1000 would have been at the disposal of the committee, who have had to refuse numerous applications from lack of funds. Under another organisation a camp has been formed at Llandudno, where from twenty to thirty boys are accommodated, taken from the poorest and lowest parts of the towns, and who are literally gutter children. It is hoped that 500 of these may be sent to the seaside for a short time during the season. The Local Board of Stretford has, with commendable public spirit, been lately taking steps for the acquisition of open spaces for playgrounds in the more densely populated part of their township—an example which might well be followed by other local boards round the city, before the land has reached such value as almost to make it prohibitive for this purpose.

THE COLLIERY EXPLOSION.

Another disastrous colliery explosion occurred at Leigh on Friday last, whereby nearly forty lives were lost. A peculiarity of the present catastrophe is the fact that one of the survivors appears to have seen the actual ignition of the fire-damp from which the explosion arose, and this took place in a "safety" lamp carried by one of the workers. None of our safety lamps are really safe in a dangerous atmosphere; and a miner's safety lamp, in the true sense, is still a thing to be produced by the scientist of the future.

Manchester, Aug. 18th.

NORTHERN COUNTIES NOTES.

(From our own Correspondent.)

SUNDERLAND INFIRMARY.

At the annual meeting of the Sunderland Infirmary, held this week, the report spoke favourably of the general working of the institution during the past year, and added that the income had been well maintained, and, notwithstanding the long-continued depression in trade, which had been hanging over the town for the past two years, the workmen's subscriptions had increased. Amongst the subscriptions to the new wing, as a memorial of the late Mr. James Hartley, were promises of £500 from Mr. Laing, and £100 from the new Lord-Lieutenant of Ireland.

YORK EYE INSTITUTION.

Dr. Tempest Anderson, in the annual report of the York Eye Institution, says that the number of patients has been 761, which compares not unfavourably with former years.

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The number of operations was 51, which is not up to the average. This arose in most part from the state of the cottages, which were damp and out of repair, and on this account were not opened during the year. Several cases of cataract were now waiting for operation. The financial state of the charity was said to be satisfactory.

DEATHS FROM SULPHURETTED HYDROGEN.

A very sad series of fatalities took place last Monday night at the Newcastle chemical works, near Gateshead. In the first place a little boy, nine years old, fell into a ventilating shaft, about twenty feet deep; then a workman who made an attempt at rescue was overcome by the gas, which is that proceeding from chemical refuse, sulphuretted hydrogen, and very deadly. A second man in attempting to rescue both was likewise overcome; he was got out alive, but died of pulmonary congestion the next night, so that in all, three lives have been lost.

SUNDERLAND AND NORTH DURHAM EYE INFIRMARY.

The half-yearly report of this institution states that 570 new out-patients have been admitted and 32 in-patients; 4238 attendances have been made and 80 operations performed.

TYNE PORT SANITARY AUTHORITY.

At a late meeting of the Tyne Port Sanitary Authority, it was stated that during June and July the following inspections were made:—British steamers, 1121; British sailing vessels, 358; foreign steamers, 443; foreign sailing vessels, 259; extra visits, 345—total number of visits 2526, including 96 fishing vessels. Sanitary defects were found in 53 British steamers, 18 foreign steamers, and 19 foreign sailing vessels, and orders given to remedy these defects have been complied with. Vessels from the Mediterranean were still watched on account of cholera.

DEATH FROM LEAD-POISONING.

An inquest has been held here in the case of a female worker at one of our large lead works, who recently died from the effects of lead-poisoning. Sir William Chator, inspector of factories, informed the coroner that he was well acquainted with the factory, and that it was provided with all means for preventing lead-poisoning.

Newcastle-on-Tyne, August 14th.

PARIS.

(*From our own Correspondent.*)

M. HERMANN FOL ON RABIES.

A LITTLE more than a year ago, M. Hermann Fol, Director of the Laboratory of Villefranche, published the results of his researches on the nature and treatment of rabies, and it will be remembered that on that occasion he believed that he had succeeded in demonstrating the existence of a microbe which he was able to cultivate, and with which he inoculated animals with success. The *Semaine Médicale* of this week contains a report of his experiments since that period which was read at the last meeting of the Société Helvétique of Natural Sciences, held at Geneva. M. Fol had operated on 169 animals and took the virus from four dogs which were killed at Geneva, where he was formerly Professor of the University. Nine animals, one of which was a dog, became positively rabid after having been inoculated with the cultures; but it must be observed that the success is small in proportion to the number operated on. M. Fol sets himself up as an apologist for M. Pasteur, who, he says, has been most unjustly maligned. Nevertheless, he considers that the possibility of the non-success of the anti-rabic inoculations has the effect of drawing attention to the question of the best treatment to be applied for bites of mad dogs. M. Fol has performed several experiments with substances which may be employed to replace the actual cautery. He says that cauterisation with the latter is inapplicable precisely in the gravest cases, such as those of deep bites in the head. Oxygenated water, which is an excellent antiseptic, does not, according to M. Fol, act in any way on the rabic virus. Solutions of corrosive sublimate, to be of any use in such cases, would have to be employed in a concentrated form, which would render them hardly practicable. He states that the essence of turpentine is a very efficacious remedy, even in very small quantity, and he thinks that in a state of concentration it might render real service in the treatment of persons bitten in the head.

REFORMS IN THE FRENCH ARMY.

General Boulanger, the present French Minister of War, is a radical in every sense of the word, and since his assumption of office has acquired a certain notoriety. He has effected many radical changes in the army, which none of his predecessors have dared to undertake; but whether the changes be tantamount to reforms remains to be seen. It will be remembered that General Campenon, the late Minister of War, consulted about a year ago the generals of division and other superior officers as to the desirability of the beard being worn in the army. I have learned, on good authority, that the majority of the officers consulted were against it. This was sufficient for General Boulanger to order the wearing of the beard, which decision does not appear to have given general satisfaction. The non-commissioned rank and file alone are ordered to wear the beard, but it is left optional with the commissioned officers. Why this difference is best known to the General, for what is considered good or necessary for one military man ought to be so for another. For the present the French soldiers with their beards look even more untidy than they did before. But whatever may be said against some of General Boulanger's innovations in the army, the French soldier will be thankful to him for others. For instance, the soldiers get only two meals per day, consisting of soup at 10 A.M., and "rata," or a sort of stew, at 5 P.M. The latter was always composed of boiled beef and vegetables. This was the daily ration, without any change, but General Boulanger has ordered that the composition of the stew be varied as much as possible with other meats and vegetables. In addition to these two meals a ration of black coffee, with a small glass of cognac, is served out to each soldier at six in the morning. These rations are, of course, intended for garrison service in time of peace, and would appear to be but poor fare, but the French soldier seems to thrive well on it. Aspirants for the liberal professions, particularly those for the medical profession, have reason to be thankful to General Boulanger for an innovation in their favour. You are aware that service in the French army is reduced to three years, and every Frenchman will have to become a soldier, there being no more volunteering or finding substitutes. This arrangement must necessarily interfere with the career of young men who have entered on business or commenced their studies. Those belonging to the liberal professions will be required to serve in the ranks for at least one year, and they will be allowed to prosecute their studies during the other two years, being of course liable to be called out at any moment that their services may be required. As for medical students, they may be employed as assistants in the military hospitals during their year of actual service.

A PARISIAN MYSTERY.

An example illustrating the necessity of post-mortem examination of the bodies of all persons who have died under suspicious circumstances or from any unknown cause has recently occurred in Paris. The dead body of a little girl was found in a street (Rue Vertbois) about a week ago, and as no person came forward to claim it, this of course gave rise to all sorts of suspicions as to the cause of death. This, however, was soon cleared up at the Morgue, where at the necropsy Dr. Descouts discovered in the trachea of the child an intestinal worm (the ascaris lumbricoides) fifteen centimetres long, to which he attributed the cause of death by asphyxia.

PASTEURISM IN RUSSIA.

The *Semaine Médicale* states that on the 1st of July last there died at the hospital of Odessa the first patient treated according to Pasteur's method by Dr. Gamalei, Director of the Bacteriological Institute of that city. The patient was a peasant, sixty-four years of age, who had been bitten by a mad wolf.

Professor Chatin, Director of the School of Pharmacy of Paris, has been placed on the retired list, but has been allowed to retain his rank honorarily.

Paris, August 18th.

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MONTREAL.

(From a Correspondent.)

THE College of Physicians and Surgeons of the province of Quebec has just concluded one of its semi-annual meetings in Montreal. Several important changes have been made in the bye-laws of the College, one of which is the institution of a central examining board, to take the place of the assessors, whose duty was to attend the examinations at the different medical schools on behalf of the College of Physicians and Surgeons. This central examining board will meet annually, in Montreal or Quebec, as it may be directed by the College, and examinations will be conducted in the language of the candidate—that is, in French or English. In thus instituting a central examining board, Quebec is following the lead of Ontario, where the system has prevailed for some time, and has been found to work very well. Another change made is in the method of electing the governors of the College. Hitherto a few members who attended the meetings have secured a number of proxies, and have practically controlled the election. Now, each member will have a ballot paper sent him by the secretary, and will only be entitled to vote for a representative from his own district. The fees for the diploma of membership have also been raised.

A good deal of pressure is being brought to bear on the government to secure the appointment of a Port Physician for Montreal, the plea being that the quarantine station at Grosse Ile and the Port Physician at Quebec are inefficient. So far there does not seem much probability of one being appointed. There has been some laxity both at Grosse Ile and Quebec, but the damage is done before the ship reaches Montreal, as passengers and their effects are all landed at Quebec.

The honoured Principal of McGill University, Sir J. W. Dawson, is at present in England, having gone to attend the meeting of the British Association for the Advancement of Science. In the medical faculty, Dr. A. A. Browne, who succeeded Dr. MacCallum in the chair of Midwifery, has had to retire after only three years' service, on account of increasing practice and delicate health. His place is taken by Dr. J. C. Cameron, who has already proved himself an efficient teacher, having held a chair in Bishop's Medical College for some years.

Dr. Laberge, the medical health officer of the city, and the Board of Health have been working hard to rid the city of such nuisances as soap and candle factories, and have now turned their attention to the Government Hides Inspection Stores, which have been complained of. The sanitary condition of the city is better than it has been for some time, though there is still room for improvement in some respects.

Montreal, July 16th.

THE SERVICES.

WAR OFFICE.—Army Medical Staff: Brigade Surgeon Charles Edward Smith, M.D., is granted retired pay, with the honorary rank of Deputy Surgeon-General; Surgeon-Major Henry Theodore Chapman is granted retired pay, with the honorary rank of Brigade Surgeon.

INDIA OFFICE.—The Queen has approved of the retirement from the Service of the undermentioned officers of the Staff Corps and Indian Military Forces:—Deputy Surgeon-General Alfred James Dale and Surgeon-Major Alexander Gibb Grant, both of the Bengal Medical Establishment. The undermentioned officer has been permitted to resign the Service:—Surgeon Robert Jas. Taafe, of the Bengal Medical Establishment.

ADMIRALTY.—In accordance with the provisions of Her Majesty's Order in Council of April 1st, 1881, Fleet Surgeon William John Rankin, M.D., has been placed on the retired list of his rank.

The following appointment has been made:—Staff Surgeon Jas. B. Drew, to the *Boscawen*.

The undermentioned Volunteer medical officers have presented themselves for examination at the office of Surgeon-General J. Headley, C.B., the principal medical officer at the Aldershot station, in accordance with paragraphs 237 and 238 Volunteer Regulations:—Surgeon F. H. Appleby, 2nd Notts Rifle Volunteers; Acting Surgeon H. R. Heather Bigg, 22nd Middlesex Rifle Volunteers; and Acting Surgeon H. S. Moore, South Middlesex Rifle Volunteers.

ARTILLERY VOLUNTEERS.—1st Dorsetshire: John Richard Philpots, Gent., to be Acting Surgeon.—1st Lincolnshire: Surgeon and Honorary Surgeon-Major T. Small resigns his commission; also is permitted to retain his rank and to continue to wear the uniform of the corps on his retirement.

RIFLE VOLUNTEERS.—1st Volunteer Battalion, Princess Charlotte of Wales's (Royal Berkshire Regiment): Surgeon and Honorary Surgeon-Major O. C. Maurice resigns his commission; also is permitted to retain his rank, and to continue to wear the uniform of the battalion on his retirement.

Obituary.

DR. HERMANN MAAS.

DR. HERMANN MAAS, professor of surgery at the University of Wurzburg, one of the foremost of German surgeons, whose death occurred on the morning of July 23rd, was born at Stargard, Pomerania, Prussia, in 1842. He received his early education in his native town, entering the University of Greifswald in 1861. In 1863 he began his clinical studies in Breslau. After passing his final examinations in 1866, he was appointed assistant to the surgical clinic at Breslau, then under the direction of Middeldorpf, who had inspired him with an ardent love for his future profession. In the same year he won his first laurels in the Austro-Prussian war, whither he accompanied his teacher. From the close of the war until 1873 he continued in his position as clinical assistant in Breslau. In 1877 he was called to Freiburg, to fill the chair of surgery, where he certainly contributed much to the rise which the medical faculty of that university experienced during the years of his professorship, from 1877 to 1883. In 1883 he was appointed the successor of von Bergmann at Wurzburg.

Professor Maas had been ailing for several years. He had, with much perseverance, brought the last winter term to a close, and after a short sojourn in San Remo, from which he derived little benefit, he was compelled to take to his bed at the beginning of the summer session, not to leave it again. Twenty years ago he suffered from acute articular rheumatism, in consequence of which symptoms of heart trouble developed during late years, to which he now finally succumbed.

Professor Maas was one of the most popular teachers of medicine at German high schools. His clinical demonstrations were eloquent and stirring, and their value was enhanced by concise and appropriate references to pathology. He has contributed much to medical literature, either personally or through his assistants and scholars, and it certainly was not his least merit that he was capable of exciting an interest in scientific work with those who enjoyed the benefit of his instruction. In leisure moments he was a genial companion and everywhere welcome for his eminent social qualities. In 1879 he paid a short visit to England, where, doubtless, many professional friends also mourn his decease.

Medical News.

UNIVERSITY OF LONDON.—The following is a list of the candidates who passed for Honours at the recent Intermediate Examination in Medicine:—

ANATOMY.

FIRST CLASS.

*Platt, John Edward, Owens College.
†‡Parkin, Alfred, Guy's Hospital.

THIRD CLASS.

Firth, John Lacy, King's and University Colleges.
Tate, Walter William Hunt, University College.
White, Gilbert Benjamin Mower, University College.

* Exhibition and Gold Medal. † Gold Medal.
‡ Obtained the number of marks qualifying for the Exhibition and Gold Medal.

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MATERIA MEDICA AND PHARMACEUTICAL CHEMISTRY.

FIRST CLASS.

*Grange, Frank, Charing-cross Hospital.
¶Fenwick, William Soltau, London Hospital.
Parkin, Alfred, Guy's Hospital.
‡Locke, Frank Spiller, St. Bartholomew's Hospital.
‡Pickard, Ransom, St. Bartholomew's Hospital.

SECOND CLASS.

Boyce, Rubert William, University College.
Mothersole, Robert Devereux, Guy's Hospital.
Bird, Robert, St. Bartholomew's Hospital.

THIRD CLASS.

Fernando, Hilarion Marcus, University College.
Roberts, Charles Hubert, St. Bartholomew's Hospital.
Killick, Charles Rowe, London Hospital.
Whitehead, Henry Edward, St. Bartholomew's Hospital.
Pierce, Bedford, St. Bartholomew's Hospital.
Firth, John Lacy, King's and University Colleges.

ORGANIC CHEMISTRY.

FIRST CLASS.

*Blackman, Frk. Frost, B.Sc., St. Bartholomew's Hospital.
†Parkin, Alfred, Guy's Hospital.
Fernando, Hilarion Marcus, University College.

SECOND CLASS.

Roberts, Charles Hubert, St. Bartholomew's Hospital.
Locke, Frank Spiller, St. Bartholomew's Hospital.
Pierce, Bedford, St. Bartholomew's Hospital.

THIRD CLASS.

Bird, Robert, St. Bartholomew's Hospital.
Roberts, Edward Augustus, St. Thomas's Hospital.
Mothersole, Robert Devereux, Guy's Hospital.

PHYSIOLOGY AND HISTOLOGY.

FIRST CLASS.

*Firth, John Lacy, King's and University Colleges.
†Fernando, Hilarion M., University College.

SECOND CLASS.

Parkinson, John Porter, University College.
Blackman, Frederick Frost, St. Bartholomew's Hospital.
Locke, Frank Spiller, St. Batholomew's Hospital.
Parkin, Alfred, Guy's Hospital.

THIRD CLASS.

White, Gilbert Benjamin Mower, University College.
Boyce, Rupert William, University College.
Pickard, Ransom, St. Bartholomew's Hospital.
‡Brindley, Albert Edward, Owens College.
‡Pierce, Bedford, St. Bartholomew's Hospital.
Bird, Robert, St. Bartholomew's Hospital.
Williams, Herbert, St. Bartholomew's Hospital
Ridley, Nicholas Charles, St. Mary's Hospital.
Berry, George Arthur, Owen's College.

* Exhibition and Gold Medal. † Gold Medal.
‡ Obtained the number of marks qualifying for the Exhibition and Gold Medal.
¶ Obtained the number of marks qualifying for a medal.
The bracket denotes equality of merit.

SOCIETY OF APOTHECARIES.—The following gentlemen passed their examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received certificates to practise, on Thursday, the 12th inst.:—

Annesley, W. Oliver Tyndale, Church-terrace, Lee, Kent.
Barber, Robert David, the General Hospital, Nottingham.
Bronner, Hermann, Manor-row, Bradford.
Carden, Warburton Vandeleur, Lawn-road, Haverstock-hill.
Gee, Frederick William, University College Hospital.

DEATH OF ANOTHER OF M. PASTEUR'S PATIENTS.—News has arrived from Bordeaux of the death from rabies, at Leste, of a boy aged three years and a half. He was bitten by a rabid dog on June 14th last, and was at once taken to Paris by his parents, to be treated by M. Pasteur. He underwent ten inoculations. The first symptoms showed themselves on the 12th, and he died on the 15th inst.

UNSOUND MEAT.—On the 11th inst. a butcher named Martin was fined £20 and costs, or two months' imprisonment with hard labour, by the Brighton magistrates for having unsound meat in his possession. It was stated that the defendant got his living by selling unsound meat, and that he had been three times previously convicted.—At Spalding, on the 17th inst., a butcher was fined £7 10*s.* for exposing for sale meat which was unfit for human food. It was alleged that the beast in question was suffering from milk fever, and whilst engaged in slaughtering it three men had been attacked with blood-poisoning owing to its diseased state, one of them now lying at the hospital in a critical condition.

THE late Dr. Oreshehowski has bequeathed more than £20,000 to the Warsaw Charitable Society.

GEORGE ALEXANDER MOORHEAD, M.D., has been placed on the Commission of the Peace for the King's County.

DR. BIRMINGHAM, of Ballinrobe, has been presented with a set of surgical instruments prior to leaving Ireland for one of the Colonies.

HIS Excellency the Marquis of Londonderry has ordered the fruit and flowers of the Viceregal gardens to be distributed among the Dublin hospitals.

THE first congress of Russian alienists is to be held at Moscow at the end of the present year, simultaneously with the second general congress of Russian medical practitioners.

VACCINATION GRANTS.—Mr. Jas. Allen Bright, of Glastonbury (sixth time), Mr. Edward A. Piggott, of Clare, Suffolk, and Mr. Horace Lowther (second time), have received the Government grant for efficient vaccination in their respective districts.

UNIVERSITY OF GLASGOW.—In the list of gentlemen who obtained the M.D. on July 29th, and which was published in our issue of the 7th inst., the sign indicating "commended for thesis" should have been placed before the name "Auld Alex. Gunn, M.B., C.M."

THE Hackney Board of Guardians, after hearing a statement by Dr. Millar, their representative at the Metropolitan Asylums Board, on Thursday last passed a resolution condemning the proposal of the Asylums Board to expend £160,000 on the erection of a permanent hospital for the accommodation of convalescent small-pox patients at Darenth.

A HOME FOR INFANTS.—An addition to Mr. Barnardo's already extensive philanthropic work on behalf of orphan and destitute children, in the shape of a building to be known as "Babies' Castle," where homeless children of the tenderest age will be received, was inaugurated by the Duchess of Teck, at Hawkhurst, on the 9th inst. The institution will afford accommodation for 100 infants and their nurses, and has been erected at a cost of £3747. At a luncheon held after the ceremony subscriptions amounting to upwards of £250 were announced.

BOOKS ETC. RECEIVED.

CHATTO & WINDUS, Piccadilly, London.

How to Use our Eyes, and to Preserve them from Infancy to Old Age. By John Browning, F.R.A.S., F.R.M.S., &c. Fourth Edition. pp. 104, with Illustrations.

CHURCHILL, J. & A., New Burlington-street, London.

General Index to the Year-book of Pharmacy for the years 1864 to 1885 inclusive. pp. 246.

The Diseases of the Prostate, their Pathology and Treatment. By Sir Henry Thompson, F.R.C.S. Sixth Edition. pp. 237, Illustrated.

Spasm in Chronic Nerve Disease (Gulstonian Lectures). By Seymour J. Sharkey, M.A., M.B.Oxon., &c. pp. 99.

Short Sight, Long Sight, and Astigmatism: an Elementary Guide to the Refraction of the Eye. By G. F. Helm, M.A., M.D., &c. pp. 103, with Illustrations.

Guy's Hospital Reports. Edited by Fred. Taylor, M.D., and N. Davies-Colley, M.A., M.C. Vol. XLIII. pp. 514, with Illustrations.

FRIEND, D. B., Brighton.

Handy Guide to Brighton. pp. 192, Illustrated.

GRIFFIN, C., & Co., Exeter-street, Strand, London.

A Text-book of Human Physiology, including Histology and Microscopical Anatomy. By Dr. L. Landois. Translated from the Fifth German Edition, with Additions, by Wm. Stirling, M.D., Sc.D. In Two Vols. Second Edition. pp. 1270, with very numerous Illustrations.

JAGO, W., Brighton.

The Chemistry of Wheat, Flour and Bread, and Technology of Breadmaking. By William Jago, F.C.S., F.I.C. pp. 474, with Illustrations.

LEWIS, H. K., Gower-street, London.

Bright's Disease and Allied Affections of the Kidneys. By Charles W. Purdy, M.D. Q.U.I. pp. 294, with new and Original Illustrations.

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Paralyses, Cerebral, Bulbary and Spinal. A Manual of Diagnosis for Students and Practitioners. By H. Charlton Bastian, M.A., M.D., F.R.S. pp. 671, with numerous Illustrations.

Handbook of Diseases of the Ear. By Urban Pritchard, M.D.Ed., F.R.C.S.Eng. pp. 207, with Illustrations.

Massage as a Mode of Treatment. By William Murrell, M.D., F.R.C.P. pp. 78.

LONGMANS, GREEN, & Co., Paternoster-row, London.

The Rotifera, or Wheel-Animalcules. By C. T. Hudson, LL.D., and P. H. Gosse, F.R.S. Part V.

MACLACHLAN & STEWART, Edinburgh.

Lays of the Colleges: being a Collection of Songs and Verses by Members of the Æsculapian, Medico-Chirurgical, and other Professional Clubs in Edinburgh. pp. 268, with Illustrations.

MACMILLAN & Co., London and New York.

Elements of the Comparative Anatomy of Vertebrates. Adapted from the German of Prof. R. Wiedersheim, by Prof. W. Newton Parker. With Additions by the Author and Translator. pp. 345, with 270 Woodcuts.

NEW SYDENHAM SOCIETY, London.

Lexicon of Medicine and the Allied Sciences. By Henry Power, M.B., and Leonard W. Sedgwick, M.D. Part XII.: Gly—Her.

SAMPSON LOW, MARSTON, SEARLE, & RIVINGTON, London.

A System of Medicine by American Authors. Edited by William Pepper, M.D., LL.D.; assisted by Louis Starr, M.D. Vol. V.: Diseases of the Nervous System. pp. 1328.

The Techno-Chemical Receipt-book. Edited, chiefly from the German, with Additions, by William T. Brandt and William H. Wahl, Ph.D. pp. 495, with 78 Engravings.

SCIENTIFIC PUBLISHING COMPANY, Buckingham-street, Strand.

The Gas Engineer's Chemical Manual. By J. Alfred Wanklyn, F.C.S. pp. 76.

TRÜBNER & Co., Ludgate-hill, London.

L'Embaumement la Conservation des Sujets et les Préparations Anatomiques. Par le Dr. S. Laskowski. pp. 154.

WARNE & Co., London and New York.

Health, Beauty, and the Toilet. By Anna Kingsford, M.D.Paris. pp. 232.

L'Acide Sozolique; par H. Serrant (Berthier, Paris).—The Wear and Tear of London Life; by Robson Roose, M.D., F.C.S. (Chapman and Hall).—Contribution à l'Etude de la Tuberculose du Rein; par le Dr. R. D. Fardel (Masson, Paris).—A Retrospect of Clinical Teaching in Dublin; by J. W. Moore, M.D. &c.—The Function of the Recurrent Laryngeal Nerve; by F. Donaldson, jun., B.A., M.D.—Studies from the Biological Laboratories of the Owens College, Vol. I.; edited by Prof. Milnes Marshall.—Index Medicus, Vol. VIII., No. 6.—Hydrophobia and M. Pasteur; by Vincent Richards, F.R.C.S.E.—Monomanie sans Délire; by A. Wood Renton, M.A., LL.B. (Clark, Edinburgh).—The Peroneal Type of Progressive Muscular Atrophy; by H. H. Tooth, M.A., M.D. (Lewis).—Memorias leidas en la Sociedad Española de Laryngologia, Otologia y Rinologia; por los Drs. Suñe, Bassols, y Verdós.—Hard Chancre of the Eyelids and Conjunctiva; by D. De Beck, M.D., Cincinnati.—Materia Medica Labels adapted for Public and Private Collections (Lewis).—Vital Statistics of the City of Glasgow; by J. B. Russell, M.D. Part II.—Our Dress and Food in relation to Health; by D. E. Flinn, F.R.C.S. (Gill, Dublin), 1s.—Our Empire of Rivers; by R. T. Cooper, M.A., M.D.—Good Words, Sunday Magazine, for August; Leisure Hour, Sunday at Home, Boys' Own Paper, Girls' Own Paper, for August.—Is Enteric Fever a Cattle Disease? by Jas. F. Allen, M.D., Pietermaritzburg.—Transactions of the Obstetrical Society of London. Vol. XXVIII.—The Royal London Ophthalmic Hospital Reports. Vol. XI., Part 2.—The Revival of Trade by the Development of India; by William Birkmyre.—Index Medicus. Vol. VIII., No. 7.—Some Conditions of Neurasthenia; by Dennis de Berdt Hovell, F.R.C.S.E. (Churchill).—Papers upon Genito-Urinary Surgery; by A. T. Cabot, M.D. (Clapp, Boston).—St. Moritz in the Winter Months; by Henry St. Clair Feilden, M.A.—The Discipline and Dietary of the Southern Counties Asylum.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

BRIGHT, JAMES ALBERT, M.R.C.S., F.S.A., has been appointed Honorary Consulting-Surgeon to the Sir George Bowles Hospital, Butleigh, near Glastonbury.

CAUDWELL, HENRY, L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Resident House-Surgeon to the Buckinghamshire General Infirmary, Aylesbury, vice John Redley, M.R.C.S., resigned.

COOMBS, S. WELLESLEY, F.R.C.S.Ed., L.R.C.P.Ed., has been appointed Medical Officer for the First District of the Worcester Union.

CREASY, ROLF, M.R.C.S., L.R.C.P.Lond., has been appointed Medical Officer for the Second District of the Winslow Union.

DAVIS, HENRY, M.R.C.S., L.S.A., has been appointed Teacher and Administrator of Anæsthetics to St. Mary's Hospital.

FOWLER, J. KINGSTON, M.A., M.D.Cantab., F.R.C.P., has been appointed Physician to the Metropolitan Life Assurance Society, vice W. Moxon, M.D., deceased.

PRESTON, HENRY T., M.D., M.R.C.S., &c., has been appointed Surgeon to the Kidderminster Infirmary, vice J. Spofforth, resigned.

WOODWARD, WILLIAM, M.D.St.And., M.R.C.S., has been appointed Medical Officer for the Third District of the Worcester Union.

Births, Marriages, and Deaths.

BIRTHS.

CLARKE.—On the 18th inst., at 21, Lee-terrace, Blackheath, the wife of Ernest Clarke, M.D., B.S., of a daughter.

COLLINGRIDGE.—On the 16th inst., at Tresillian-road, St. John's, S.E., the wife of William Collingridge, M.A., M.D., of a son.

FAUNCE.—On the 18th ult., at Meean Meer, Punjaub, the wife of Charles Faunce, Surgeon, Army Medical Staff (prematurely), of a daughter.

FINEGAN.—On the 10th inst., at Navan, co. Meath, Ireland, the wife of L. P. J. Finegan, L.K.Q.C.P.I., L.R.C.S.I., of a daughter.

GOOD.—On the 12th inst., at Dorchester, Dorset, the wife of William Ernest Good, M.R.C.S., of a son.

HAYES.—On the 16th inst., at Oaten-hill, Canterbury, the wife of Surgeon Julian Philip Swindell Hayes, Army Medical Staff, of a son.

HUMPHREYS.—On the 14th inst., at Cromwell-road, South Kensington, the wife of J. H. Humphreys, M.D.Lond., of a son.

MILWARD.—On the 10th inst., at Deerhaddan, Brixton-hill, S.W., the wife of W. Clement Milward, M.B., of a son.

SILVERLOCK.—On the 3rd inst., at Sheffield, the wife of Richard Greenhill Silverlock, M.R.C.S., L.S.A., of a son.

THOMPSON.—On the 14th inst., at Teignmouth, South Devon, the wife of Surgeon C. M. Thompson, M.B., Madras Medical Service, of a son.

MARRIAGES.

CREASY—MARKBY.—On the 23th ult., at 2.30 P.M., at Holy Trinity Church, Paddington, by the Vicar, the Rev. D. Moore, assisted by the Rev. J. B. Whiting, uncle of the bride, Rolf Creasy, M.R.C.S., L.R.C.P.Lond., of Winslow, Bucks, son of the late Sir Edward Creasy, Chief Justice of Ceylon, to Mary, second daughter of Henry Markby, of 155, Westbourne-terrace, W., and 57, Coleman-street, E.C.

JONES—BURT.—On the 12th inst., at the Parish Church, Widdington, near Newport, Essex, Maurice Parry Jones, M.D., B.S.Lond., to Helen, daughter of the Rev. J. T. Burt, Rector of Widdington.

MACKENZIE—MACFIE.—On the 10th inst., at West Glen Caladh Cottage, John MacKenzie, M.D., J.P., of Tighnabruaich, Argyllshire, to Margaret Jane, eldest daughter of the Rev. Daniel Macfie, late of Portnahaven, Islay.

OTWAY—FILMORE.—On the 17th inst., at St. Mary's, Fulham, by the Rev. F. B. Grant, M.A., Henry Carrol Otway, L.R.C.P., &c., youngest son of the late C. W. Carrol Otway, F.R.C.S., to Lucy Hill, eldest daughter of Lewis Filmore, Esq., both of Kensington. No cards.

ROGERS—ARTHUR.—On the 12th inst., at St. Dunstan's, Stepney, George Arthur Rogers, M.R.C.S., to Ellen, youngest daughter of the late Robert Arthur, of Magherafelt, co. Derry.

ROSS—DANIELS.—On the 17th inst., at St. Peter's Church, Brighton, by the Rev. Julius Hannah, Douglas McKissock Ross, M.B., to Emma Frances, only daughter of Wm. Chas. Daniels.

SUTTON—CHRISTLIEB.—On the 10th inst., at the Protestant Church, Bonn, by Dr. Theodore Christlieb, Professor of Theology, and University Preacher, father of the bride, Henry Martyn Sutton, M.R.C.S., L.R.C.P., Medical Missionary, C.M.S., at Bagdad, seventh son of Alfred Sutton, of Reading, to Helene Amalie, eldest daughter of the above.

THRUPP—KETTLEWELL.—On the 17th inst., at St. Matthias, Earl's-court, James Godfrey Thrupp, M.R.C.S., to Emilie Sutherland Kettlewell, of South Kensington.

WOODS—PHILIPPS.—On the 12th inst., at St. Philip's Church, Kensington, by the Rev. John Graves, Chaplain of Kensington Palace, John Francis Woods, Medical Superintendent, of Hoxton House Asylum, to Nora, youngest daughter of James Rees Philipps, of 3, Berkeley-place, Cheltenham.

DEATHS.

CHEYNE.—On the 16th inst., at Fairholme, Croxted-road, West Dulwich, S.E. (after a very short illness), Robert Romley Cheyne, F.R.C.S., L.S.A., aged 75.

CONNELLAN.—On the 6th ult., at Mount Troodos, Cyprus, Surgeon-Major Edward Connellan, Army Medical Staff (of abscess of the lungs), aged 45.

MARRINER.—On the 29th ult., on board ss. *Kaikoura*, Hugh Marriner, M.B., C.M.Ed., M.R.C.S., of Palmerston, North New Zealand, aged 38.

POPPELWELL.—On the 10th inst., at Brook-street, Bath, Brigade-Surgeon G. B. Poppelwell, in the 56th year of his age.

THOMSON.—On the 12th inst., at Ashton, Torquay, Spencer Thomson, M.D., formerly of Grangewood Lodge, Leicestershire, aged 69.

N.B.—*A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.*

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METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, August 19th, 1886.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Aug. 13	29·59	S.W.	61	60	109	71	58	·07	Cloudy
,, 14	29·79	N.E.	61	59	95	68	58	...	Overcast
,, 15	30·08	W.	65	61	109	74	57	...	Cloudy
,, 16	29·92	W.	65	61	120	74	60	·13	Cloudy
,, 17	29·95	W.	60	57	108	68	55	...	Overcast
,, 18	30·21	N.E.	59	56	97	67	56	·01	Cloudy
,, 19	30·18	W.	60	59	...	66	57	·04	Raining

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

We cannot undertake to return MSS. not used.

THE MEDICAL MISSION AT CAIRO.

AN appeal has been issued on behalf of Miss M. L. Whately's medical mission at Cairo, which is the only agency in that part of the country where gratuitous help and remedies are given to the poor. Although the strictest economy has been observed during the past year, the great increase in the number of patients has entailed necessarily greater expenditure, and funds are now urgently needed. After the annual fast of Ramadan, especially when, as now, observed in the hottest season, there is always a great increase of sickness. The weather is now exceptionally hot, and the eye cases are terribly numerous. We trust that the contributions in response to the appeal may be in proportion to the needs of, and the benefits conferred by, this mission.

W. H. O.—We do not prescribe.

"THE USE OF COCAINE IN CIRCUMCISION."

To the Editor of THE LANCET.

SIR,—I shall be obliged if you will allow space in your journal for a few remarks in reply to the letter of Dr. Snow, on the treatment of congenital phimosis, which appeared in your last issue. He suggests dilatation of the preputial orifice as a substitute for the operation of circumcision. There are a few cases to which this method is applicable, but in the great majority the prepuce is elongated in addition to its orifice being small. If the long prepuce be left the child will still (in spite of the dilatation) run the risk of the retention of secretion in the cervix and on the surface of the glans penis, unless it is completely retracted at short intervals and the parts carefully washed. The effect of this procedure on the *morale* of the boy is not beneficial. The risk attending the circumcision of a child is infinitesimal and, in my opinion, not to be compared with that which is run in leaving the long and useless prepuce. Further experience in the use of cocaine may enable us to avoid the slight danger involved in the administration of a general anæsthetic. My observation of large numbers of children leads me to believe that the mischief accruing from the peripheral irritation due to the neglect of circumcision is frequently under-estimated, and that many children are subjected to long courses of medicine whose health might be quickly and completely restored by this simple operation. In this opinion I am supported by a large number of my professional *confrères*. I should unhesitatingly answer Dr. Snow's question "Is circumcision (for congenital phimosis) a justifiable operation?" in the affirmative, and indeed should be disposed to go further, and say that, in a large number of boys, the non-performance of it seriously injures their prospects of healthy development. The decision must of course, in every case, be left to the parents, but if their consent be not obtained after fully explaining the circumstances to them, the responsibility is removed from the medical man to themselves.—Your obedient servant,

Inverness-terrace, Hyde-park, Aug. 16th, 1886. GEOFFREY HETT.

SUICIDE IN RUSSIA.

SOME instructive statistics are published by a St. Petersburg paper (the *Novosti*) with regard to the concurrent increase of suicide and insanity in Russia. The inmates of the asylums at St. Petersburg have doubled within the last ten years, and this is ascribed by the *Novosti* to the great spread of pessimistic and Nihilist doctrines. In the early part of the century the number of suicides was at the rate of only 17 per 1,000,000 inhabitants, while it is now nearly 30 per 1,000,000, and in St. Petersburg itself there are more suicides than in any other capital of Europe except Paris, there being 206, as against 170 in Berlin and 87 in London. The increase commenced about twenty-five years ago, and of late years it has been so rapid that while the population has risen by only 8 per cent., the increase in the proportion of suicides has been 76 per cent. The number of cases of insanity has not kept pace with the number of suicides, though they, too, have increased at the rate of 35 per cent.; and it is pointed out that, while meat is 20 per cent. and house rent 35 per cent. dearer than it was, the number of suicides has been out of all proportion greater, so that want cannot be the sole cause of this increase. The most distressing part of this return is that which tells how no fewer than 42 boys and 15 girls between eight and sixteen years of age committed or attempted to commit suicide in the last ten years, mostly because their parents maltreated them.

Mr. Lawson Tait (Birmingham).—The announcement appeared in our last issue, page 324.

Mr. Robert Rentoul should apply to the editor of the *Philanthropist*.

THE MEDICAL PROFESSION IN BARBADOES.

To the Editor of THE LANCET.

SIR,—In your reviews of books in your issue of the 24th ult. I noticed one on the Rev. J. H. Sutton Moxly's book on Barbadoes as a sanatorium. As a native of the place, and one in constant communication with the island, I should be very grateful if you would allow me to make a few remarks on the statement which Mr. Moxly has made with regard to our profession. He states that many of the members are "charlatans" with "bogus degrees," &c. Now, as this statement would be very misleading to readers ignorant of the island, I will supplement it by stating facts. In the island there are twenty-nine practitioners. Three of them have the degree of McGill College, Montreal, five have a M.D. of America, one the M.B. of Aberdeen, one the M.D. of Paris and M.B. of London; the remainder have the M.D. or M.B. of Edinburgh or the M.R.C.S. and L.R.C.P. of London. The American M.D.'s of the five gentlemen are genuine in so far as they had to pass examinations for them, and I never heard that they were "bogus" in the sense of being bought; but I cannot say if they all spent the minimum period of four years in their studies. Under the new Act there are commissioners who examine any new man's diplomas, and no licence to practise in the island can be obtained unless the commissioners are satisfied that such diplomas are genuine. If there is no provision in the Act that men with foreign diplomas should have spent four years at their studies, it is an oversight which ought to be remedied at once. I cannot suppose that Mr. Moxly refers to any of the gentlemen with British diplomas and degrees when he speaks of the "bogus degrees"; so that the five gentlemen with American degrees are evidently the ones to whom he refers. If the presence of these gentlemen with American M.D.'s makes the state of the profession in the island "eminently unsatisfactory," then the existence in London and England of so many herbalists professing to cure all tumours without cutting and to perform other professional miracles makes the state of the profession "eminently unsatisfactory" in England—a statement which would not receive any credence if anyone were rash enough to make it.

My reason for writing this letter is that many young men might think, from the paragraph you quote from Mr. Moxly's book, that Barbadoes is a sort of medical oasis where a properly qualified man could make a good living. The reverse, however, is the true state of things. The profession is fully represented there, and there is not much opening for young men, even if they enjoy the advantage of a local connexion.

I have not yet read Mr. Moxly's book; but the parts you quote with regard to the sewerage and water-supply for the poorer classes are perfectly true. Still, in spite of this, thanks to its being continually bathed in a sea breeze, the island is very healthy, as I can testify from my own personal experience.

In conclusion, I may state that I have known one or two people with incipient phthisis whose health has been materially improved by residence during the winter months in Barbadoes.

I have the honour to be, Sir, yours faithfully,

BLENMAN B. GRAYFOOT, M.R.C.S., L.R.C.P.

Corinne-road, N., August, 1886.

ASSOCIATION OF LICENTIATES OF SCOTTISH CORPORATIONS.

To the Editor of THE LANCET.

SIR,—Would you kindly allow me through your columns to ask any gentlemen desirous of forming an association as above to forward their names to me, with a view of holding a preliminary meeting.

I am, Sir, yours faithfully,

ARTHUR H. WOOD, L.R.C.P. & S.Edin.

49, Wells-street, Oxford-street, W., Aug. 17th, 1886.

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"SHIP SURGEONS."

To the Editor of THE LANCET.

SIR,—I have read the letter of "M. A. P.," and also that of Mr. Harris, on the above subject. Although communications on this question have appeared from time to time in your columns, no improvement in the position of ship surgeons seems to result. I have sailed in different ships and in different lines, both as surgeon and as passenger, and I think there is much room for improvement. In the merchant service the surgeon holds no rank recognised by the Board of Trade; at least, in signing articles his name, I understand, comes after that of the steward—certainly after the names of all those who are known on board as officers. The position he holds, being given by the courtesy of the owners, he cannot claim as a right. His pay is miserably inadequate, considering his education and his responsibility at sea. It ranges from £50 to £100 a year; anything more that he might get from passengers is given as a "tip," in the same way and for the same purpose as the "tip" is given to the steward. It is true that he is generally a very young man, and the pay he gets is as good as he would get as an assistant on shore; but the difference in responsibility between the two positions is very great. His quarters are rarely, if ever, what they should be. If he sleeps in the saloon his room is the worst there, placed in the bend of the ship's run and almost over the propeller; if it is not in the saloon, it is beside the engines, and often next to the barber or butcher. In some of the new ships there is a small room opening from the surgeon's sleeping room, which is the dispensary; but in many ships he must keep his drugs, books, instruments, &c., in the sleeping room. If gifted with tact, and he can sing, play, and talk well, the surgeon will probably be a great favourite, and will find the life on board ship one of the pleasantest, if he likes the sea; if he is not so gifted, he will find his pleasure dependent entirely upon the goodwill of the captain, who is in many instances arbitrary and disagreeable.

It is strange that the medical officer's position should be so doubtful when his presence seems to be so necessary. The fact that a surgeon is carried is constantly held out as an inducement by many of the large lines, which have lately taken to advertise their ships in THE LANCET and other journals as a great means of restoring health. I consider that the doctor should rank next to the captain socially—in such matters, for instance, as his seat at table and the place of his name on the printed passenger list. If there is but one table, he should sit at the foot, or at the head when the captain is not present; if more tables than one, he should be at the head of the second. His bedroom should be one of the best, and he should have a separate place for a dispensary. His pay could remain as it is, but he should be at liberty to charge for professional advice, at least to the first- and second-class passengers, at the rate of, say, 5*s.* and 3*s.* 6*d.* each consultation. This would not cost the company anything, or the passengers any more than the present "tip" does. I think if this were done it would improve very much the social status of the medical officer in merchant ships. It would probably also serve the interests of the companies; for many good practitioners who are fond of sea life would remain in the service, and thus the companies could advertise with truth, and people would believe, that their ships carried experienced surgeons, and sea voyages, which I think are among the best health restorers, would be much more largely taken advantage of.

I am, Sir, yours truly,

July, 1886. J. H. O.

ABSENCE OF THE AMNIOTIC FLUID IN PREGNANCY.

To the Editor of THE LANCET.

SIR,—I would feel much obliged if any of your readers would give me their opinion and offer suggestions in the treatment of the following case.

A lady five feet in height, about thirty years of age, of a neuralgic, nervous temperament, with shallow pelvis, suffered from several miscarriages at three months and one at eight months. On my correcting a retroflexion from which she suffered, she again became pregnant, and continued to wear the instrument for six months. A good deal of uterine pain was complained of at different times, and there was an irregularity and want of roundness of the abdomen which was striking. The fœtal head and limbs could be made out by manipulation. When seven months pregnant she did not appear larger than if she was four months and a half or five months. She suffered somewhat from leucorrhœa occasionally, but never very badly. With great dietetic care and the adoption of the horizontal position on a sofa all went well until the end of the seventh month, when a slight attack of diarrhœa (nervous in its character) happened, and continued for some days. About a week after this uneasy sensations were felt, and soon miscarriage occurred. On expulsion of the fœtus (a footling presentation), I found that there was scarcely any amniotic fluid—in fact, I might almost say none, and that the body, which was thickly covered with sebaceous matter, was badly nourished, and had been dead for some time. From what I could learn, the first miscarriage (that at eight months) was exactly similar, the special feature being the absence of "waters." Is this abnormality in quantity of fluid the cause of these miscarriages? As a reason for the uterine pain, the irregular shape, and slight life-movements it is easily understood. There was no discharge of fluid, with the exception of the leucorrhœa above referred to, during the pregnancy. As an heir is anxiously longed for, what hope can be offered of the probability of a viable child being born, and can anything be done to remedy the fault of want of fluid?

I am, Sir, yours truly,

August, 1886. SOUTH AFRICA.

LABOUR FOLLOWED BY SUPPRESSION OF URINE.

To the Editor of THE LANCET.

SIR,—The case reported by Mr. Williams in your issue of the 7th inst., page 248, reminds me of a case which I attended nearly eighteen months ago. Unfortunately, I did not keep notes of the case, so can give only a brief summary of the symptoms. This, however, may be of assistance to Mr. Williams in his endeavour to elucidate the pathology of his case.

Mrs. H——, aged thirty-seven, the mother of several children, was delivered of a live child before my arrival. The labour was natural, but hasty. On my calling the next day I learned that the patient had passed no urine. I ordered the usual remedies. The next day I introduced a catheter; but as no urine came away I directed my attention to the kidneys, and ordered poultices over the loins, &c. I saw her again in the evening, and found she had not voided any urine. I passed a catheter, and found the bladder empty. The patient seemed quite comfortable, and had no symptoms, except that the lochia were very scanty. In the middle of the night her husband called me up, and said his wife was either dead or dying. When I arrived I found her comatose. I passed the catheter, which brought away about half a pint of clear urine; but she remained in this state of coma for two days. As she returned to consciousness the urine became very abundant, and at the same time phlegmasia dolens of both legs came on, and congestion at the back of both lungs. While under treatment for the phlegmasia dolens an attack of hemiplegia came on. The left side of the face and left arm and leg were affected, and there was well-marked aphasia. The paralysis of the face and leg disappeared in a few days, but the arm continued powerless for three weeks. The patient was able to be about the house in two months' time. When I saw her six months ago she seemed strong and well, except that the aphasia had not quite disappeared.

In the above case it would appear, from the paralysis and aphasia, that clots or emboli had been at work. Might it not be possible in Mr. Williams's case that a clot was the cause of the sudden death? I looked into several books to gain some knowledge of the pathology of such cases, but without effect. I shall therefore anxiously await the result of Mr. Williams's inquiries.

I am, Sir, your obedient servant,

Street, Somerset, Aug. 14th, 1886. J. LESLIE CALLAGHAN.

Mr. G. B. Leonards.—THE LANCET for Oct. 23rd, 1875, and three following numbers contain information on the subject which may be interesting to our correspondent. There is not to our knowledge a special treatise published on the subject.

Enquirens.—B should have intimated to A the fact that he was asked to see A's patient, and should have been careful to see the patient with A. A is entitled to remonstrate, and to ask for more care on B's part.

HOUSE-BOATS ON THE THAMES.

To the Editor of THE LANCET.

SIR,—It is quite time that something should be done to prevent the pollution of the river by means of the above; and as the evil could easily be remedied at little cost to the owners of house-boats, it appears almost incredible that the Thames Conservancy have not long ago enforced the steps to so desirable an end. House-boats in themselves are a happy and healthful feature on the river, and present a gay and attractive spectacle at regattas, and all that is needed to make them innocuous and inoffensive to the public is a system of dry-earth closets for the disposal of the sewage. If this were rigorously enforced, and the sanitary laws already in existence stringently applied, no objection need be urged against a manner of residence on the river which affords so agreeable a change to many during the summer months.

I am, Sir, yours faithfully,

Finsbury-square, Aug. 18th, 1886. J. BERESFORD RYLEY, M.D.

Senex.—Two to three miles is the customary radius in the suburbs, one mile to one mile and a half in London itself, and seven to ten miles in country districts.

M. Whalley.—We know nothing personally of the gentleman named, except that he holds the post mentioned.

EARLY MENSTRUATION.

To the Editor of THE LANCET.

SIR,—Perhaps the following case may be of sufficient interest to record in your journal.

A lady consulted me in reference to her daughter, just ten years of age, who had, she said, passed a little blood "from the back." She also said the right breast was a little enlarged. The child appeared perfectly healthy; so I proposed an examination, and found that she was in the midst of her first menstrual nisus, a distinct oozing of blood being perceptible. I need hardly say the mother was not less astonished at the fact than I was. It lasted five days. It is curious that only one breast should have been enlarged, the other being just as in a girl of her age. Even in India this would be considered an extraordinarily early age to commence menstruating; but in England it is quite exceptional.

I am, Sir, yours truly,

Clapham-road, S.W., August, 1886. W. PIERCY FOX.

Metic us (Manchester).—The standard works on surgery are not silent on the subject.

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COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Ground, Maidstone; Mr. Ryan, Gympie; Dr. Casey, Windsor; Mr. Bickerton, Liverpool; Dr. Martin, Blackburn; Mr. Hawkins-Ambler; Dr. E. B. Truman, Nottingham; Dr. Dreschfeld, Manchester; Dr. Beresford Ryley, London; Dr. Menzies, Venice; Mr. Leonards, Liverpool; Mr. M. B. Sparrow, Burton-on-Trent; Mr. Hyde, Buxton; Mr. Astley Bloxam, London; Dr. F. G. Lee, London; Mr. A. G. Francis, Cambridge; Mr. Bentoul, Liverpool; Dr. Quinlan, Dublin; Mr. Simeon Snell, Sheffield; Mr. Padley, Swansea; Dr. J. Stewart; Mr. Lawson Tait, Birmingham; Dr. Bell Pettigrew, St. Andrews; Mr. Michelli, London; Dr. Drysdale, London; Dr. G. Hett, London; Mr. Sibley, London; Mr. F. B. Jessett, London; Dr. Shore, London; Mr. E. M. Crookshank, Brighton; Mr. J. Startin, London; Mr. W. F. Menzies, Maidstone; Mr. P. G. Lewis, Folkestone; Messrs. Whitehead and Co., London; Mr. Hughes, Notts; Dr. Heser, London; Mr. Wylie, Belfast; Dr. Buchanan, Glasgow; Mr. Beresford, Bison; Mr. Park, Canonbie; Dr. Beattie; Miss Hitchcock, Braintree; Messrs. London, Torquay; Mr. Vigo, Oxford; Mrs. Duncan; Mr. Headley, Haverstock Hill; Mr. Fox, Dewsbury; Mr. Lloyd, Liverpool; Messrs. Benjamin and Son, London; Mr. Furneaux, Shanklyn; Messrs. Boulton and Paul, Norwich; Dr. Rayner, Malvern; Mr. Stanley, Manchester; Mr. Thomas, Carmarthen; Mr. Torrance, Norwich; Mr. Walker, Aberdeen; Mr. Jones, Cannock; Mr. Byerley, Portsea; Messrs. Kilner Bros., London; Dr. Williams, Liverpool; Dr. Buchan, Plymouth; Mr. Forrest, Bournemouth; Mr. Nicholl, Ditchling; Messrs. Beal and Sons, Brighton; Messrs. Burgess and Co., London; Messrs. Haller and Co., London; Messrs. Whitehead and Co., Manchester; Mr. White, London; V. C.; Advertisement; Sanitas; Mrs. P., Kensington; L. D., Clapham; Voyageur; Chirurgus, London; An M.D. of New York; Delta.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Hodson; Messrs. Squire and Co., London; Mr. Hughes, Risca; Mr. Fox, New Barnet; Dr. Swainson, Keswick; Mr. Jones, Ruthin; Dr. Gramshaw, Walton-on-the-Naze; Mr. Harris, Saltburn-by-the-Sea; Mr. Flint, Westgate-on-Sea; Mr. Ward, Baildon; Mr. Dixon, Pewsey; Mr. Rober, Newport; Mr. Clarke, Sheffield; Dr. Hall, Leigh; Mr. Reader, Lyme Regis; Mr. Gibson, Cowes; Mr. Warren, Ealing; Mr. Butler, Castle Dorrington; Mr. Clark, Edinburgh; Mr. Guest, Darlington; Mr. Jones, Rotherham; Mr. Chesebrough, Brampton; Dr. Raymond, Wymondham; Mr. Parrish, Worthing; Mr. Grace, Maidstone; Dr. McNaught, Newchurch; Messrs. Bell, Swansea; Mr. Marsh, Hindley; Mr. Ward, Stevenage; Mr. Tweddel, West Hartlepool; Dr. Armstrong, South Shields; Mr. Gibson, Bromley; Mr. Ward, London; Mr. Teague, Manchester; Mr. Bunting, Nottingham; Mr. McLintock, Church Stretton; Messrs. Debenham and Co., London; Messrs. Maythorn and Son, Biggleswade; Mr. Randell, Englemere; Messrs. Burgoyne and Co., London; Mr. Saunders, Romgrove; Messrs. Woollams and Co., London; Mr. Roberts, Kirkby-by-Stephan; Mr. Pickering, Wood Green; Mr. Holley, Brighton; Mr. Clark, Lee; Messrs. Cassell and Co., London; Mr. Rushworth, Bradford; Mr. Wall, Wigan; Mr. Fox, London; Mr. Hughes, Birmingham; Dr. Eberle, Thirsk; Mr. Morris, City-road; Mr. Mackay, St. Columb; Mr. Patchett, Great Harwood; Mr. Garrside, Sheffield; Mr. Morgan, Islington; M. W., Preston; Surgeon, Burton-on-Trent; H. O., Carmarthen; L. M. N.; Medicus, Wandsworth; Physician, Longtown; O. S. W., Darwen; Tunbridge Wells; Cheal, London; Don; Alpha, Aberdeen; Mignon; Medicus, Hinckley; Locum, Werneth; Medicus, Sutton; A. B.; Medicus, Birmingham; J. S., Streatham; S. D., Cheltenham; Veto; B. A., Leicester; R. W.

Evening News, Leeds Mercury, Llandudno Advertiser, Jewish Chronicle, Windsor Express, Windsor Gazette, Kent and Sussex Courier, Dumfries Standard, Keble's Gazette, &c., have been received.

Medical Diary for the ensuing Week.

Monday, August 23.

ROYAL LONDON OPHTHALMIC HOSPITAL, Moorfields.—Operations, 10.30 A.M., and each day at the same hour.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.

ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesdays, same hour.

CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2 P.M.

HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.

Tuesday, August 24.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.

CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

Wednesday, August 25.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesdays and Thursdays, 1.30 P.M.

ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department, Tuesdays and Fridays, 9.30 A.M.

ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.

LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.

GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.

KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; and on Friday, 3 P.M.; and Saturday, 1 P.M.

Thursday, August 26.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

Friday, August 27.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Saturday, August 28.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.

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Clinical Remarks
ON
EXPLORATION OF THE BLADDER BY SECTION THROUGH THE PERINEUM.

By HENRY SMITH, F.R.C.S.,
PROFESSOR OF SURGERY IN KING'S COLLEGE, SURGEON TO KING'S COLLEGE HOSPITAL.

On recently making an examination of a man who had undergone this operation in the hospital, I drew the attention of my class to this particular case, and made some remarks on the proceeding generally as a remedy for those distressing cases of bladder affection which are chiefly marked by excessive irritability of the organ—a condition which, dependent as it is upon various causes, has hitherto been deemed, if not incurable, at least extremely difficult to relieve with effect. Lately, however, this operation of cystotomy, so-called—which is a bad term, as the bladder itself is not cut into,—has been prominently brought forward by Sir Henry Thompson, and has been attended with the best results. I have had several opportunities of putting it in force, the patient alluded to being the last of three who had been in the ward at the same time, and each being entirely relieved of their severe troubles. The principle of the operation consists in searching the bladder by means of an incision carried through the perineum into the membranous portion of the urethra by the middle line, removing any cause of irritation which might be found, such as some morbid growth or undetected stone, and then thoroughly draining the bladder by means of a tube fixed in the opening thus made, and thus giving the organ complete rest. It is somewhat curious that the proceeding in question had not been established long since, as in my own knowledge Sir William Fergusson, upwards of thirty years since, had performed a somewhat similar operation for relief of an extreme case of irritable bladder in an old man, with excellent results. I recollect well Sir William discussing the matter with me before the operation. Like other good things, however, it was laid on one side for a time, but it now bids fair to become a thoroughly established proceeding and to be eminently useful and a credit to surgery.

I wish to say a few words about each of the three cases which have been recently under my care, more especially as, though the operation in each was the same, and performed with the same object, the cases differed somewhat materially.

The man whom I have referred to is between fifty and sixty. He had suffered upwards of six years from extreme irritability of the bladder, for which he underwent various forms of treatment in hospital and elsewhere, without relief. On admission the man was pallid and worn, and presented in a marked degree most of the signs of stone in the bladder, the chief feature, however, being the excessive irritability of the bladder. There was also some induration of the right testis. There was not any stricture, and careful and repeated use of the sound failed to detect any stone. Various means of relieving the intense irritability were used without effect, and it was then determined to explore the bladder. On performing the operation, I was enabled to feel the interior of the organ, which was found to be thickened and contracted, but there was not any foreign body. The relief, as in other cases, was marvellous, the patient, for the first time for years, having passed a tranquil night, and he soon became free from all his sufferings. The tube was retained for several weeks, and was then removed. Some, however, of his symptoms returned, and it was thought advisable to reintroduce and retain it for a few weeks longer, when, the man's health being completely re-established, the tube was removed, with the happiest result. A full-sized catheter was passed three times daily, the actual cautery, by means of a hot wire, was passed into the track of the wound until it was completely healed, and the patient is about to leave the hospital, he having gained considerably in weight. This case, although not so successful in one sense as the other two, inasmuch as it was necessary to retain the tube so long, was in other respects more so, as the poor fellow's sufferings were not only much more intense, but they had existed for a very long period of time, and thus the relief was all the more striking.

The patient in the next case, who has only recently left the hospital, was a man aged thirty-eight, who had suffered much the same as the last patient, but not longer than two years. Many of the symptoms of stone were present, but on sounding him a foreign body could not be detected, and there was not any stricture. Treatment of all kinds had been adopted in a London hospital and elsewhere without relief. The operation was performed in King's College Hospital, with the result of giving immediate relief. The tube was retained only for ten days, the bladder was washed out daily with hot water, a catheter was passed through the urethra three times daily, the application of the hot wire through the perineum closed the wound, and he was discharged well, having been taught to pass an elastic catheter for himself. In this case the result was very satisfactory also, as it was not needful to allow the tube to remain in the wound for a longer period than ten days. This was due to the fact of the symptoms not having lasted anything like so long as in the case previously detailed.

In the third case the operation was performed in a similar manner, but not for the same condition of things as obtained in the other men. The patient, who was a dissipated costermonger, aged fifty-five, well known at the hospital both from his distorted visage and frequent attendance, had suffered from severe stricture for years, and had been under treatment at various times, with the result of producing great relief; but he neglected himself, and retention, atony of bladder, turbid urine, and re-contraction of the urethra supervened. This condition occurred in the last autumn, and he was admitted into the hospital. After some weeks he was dismissed, with his urethra well dilated. He, however, again neglected himself during the severe winter, and was readmitted in February, when it was found that, although a good-sized catheter could be passed, the man could only expel a very small quantity of turbid urine at a time, and, moreover, he could not pass any except in the sitting posture. The treatment consisted in emptying the bladder thoroughly every few hours with the catheter, but the only benefit resulting was an improvement in the condition of the urine. The operation was therefore determined upon with the view of exploring the bladder and thoroughly draining it, for it was surmised that something would be discovered which acted as an impediment to the passage of urine except in the sitting posture. On performing the operation and introducing the finger into the bladder, it came into contact with what appeared to be a prominent fold of hypertrophied mucous membrane on the left side, but not distinctly circumscribed or pendulous. A tube was introduced and fixed, and thus the bladder was kept thoroughly empty. Some serious bleeding occurred a few hours afterwards, and it was thought advisable to introduce a tampon, which was retained for two days. The original tube was reintroduced, and taken out at the end of two weeks. A catheter was passed by the urethra twice a day, and the bladder was washed out daily with hot water. Six weeks after the operation urine ceased to come by the wound. In another ten days the patient was able to pass his urine freely whilst in the erect posture, and shortly afterwards was discharged well.

The cases referred to, with others which have undergone this operation, show what a valuable resource the surgeon has in the treatment of these severe affections of the bladder, and it may be resorted to as a means merely of giving relief in those instances where very severe suffering is produced by malignant disease of the bladder, and where nothing in the way of ordinary treatment is of any service. The operation itself, if cautiously and deliberately executed, as all procedures in connexion with these parts should be, is neither difficult nor dangerous. The membranous portion of the urethra should be struck and freely opened so as to admit the point of the left forefinger, which is slowly and without force insinuated through the wound into the bladder, when, with care, the whole of the interior of the organ can be examined, and for the avoidance of bleeding as large a tube as possible should be introduced and fixed. Of course, if any foreign body, such as a stone or morbid growth, be detected, it is to be removed by avulsion or extraction.

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CLINICAL OBSERVATIONS
ON THE
ACTION OF ANTIPYRIN AND THALLIN.

By RAYMOND JOHNSON, M.R.C.S.,
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THE following observations on the action of Antipyrin and Thallin were made at the suggestion of Dr. Ringer on patients admitted under his care into University College Hospital. My main object has been to investigate the utility of these drugs in the treatment of acute articular rheumatism, and to compare their action with that of Salicylate of Soda. Notwithstanding the voluminous literature on this subject which has appeared during the last few years, further observations would seem to be desirable when we consider the somewhat conflicting opinions at which different observers have arrived. After the admission of a case of acute rheumatism, no drug, or merely a placebo, was given for the first twelve or twenty-four hours. By so doing any error due to the simple effect of complete rest on the temperature was as far as possible avoided. The fall of temperature from this cause is often not inconsiderable, amounting in some cases to one or two degrees Fahrenheit. Dr. Ringer points out that the first temperature taken after admission is often the highest. The administration of the drug was then commenced, and in those cases in which it did not appear to be beneficial it was followed by the administration of the salicylate of soda. The following are brief details of some individual cases:—

Cases of Acute Rheumatism treated with Antipyrin.

CASE 1.—T. R——, aged twenty-two, was admitted on Oct. 12th, 1885, with his first attack. The right elbow and wrist were swollen, red, and very painful, and the left shoulder was painful on movement. There was a faint systolic murmur at the apex. During the twenty-four hours after admission the temperature varied between 100° and 101·4°. At 3 P.M. on Oct. 13th (day after admission) twenty grains of antipyrin were given, and repeated at 4 P.M. and 5 P.M. The temperature fell gradually from 101·4° at 3 P.M. to 98·4° at 12 P.M.; the physical condition of the joints remained the same, but the pain was rather less. On the following day at 11 A.M. the temperature had risen to 100·4°; twenty grains of antipyrin were given, and repeated every two hours until 6 P.M., the result being a fall to 98° at 7 P.M., without the slightest effect on the symptoms. At 3 A.M. on Dec. 15th the thermometer rose slowly to 99·8° at 11 P.M. At 11 A.M. on the following day twenty grains of salicylate of soda were given, and repeated at intervals of two hours. The result was a fall from 99·8° at 11 A.M. to 97·8° at 3 A.M. on the following morning (Oct. 17th), when "the pain had all gone" and the swelling subsided. The temperature remained normal, and recovery was rapid. In this and all other cases the salicylate was continued in gradually diminished doses until at least one week after the temperature had fallen to normal.

CASE 2.—F. J——, aged seventeen, was admitted to the hospital on Dec. 7th, 1885, with his first attack. Both wrists and both knees were swollen and painful, the right shoulder was painful, and there was a soft systolic murmur at the mitral area. The temperature at 3 P.M., shortly after admission, was 102·2°; it fell to 99·8° at 11 A.M. on Dec. 8th without treatment, and at noon was 100·2°. Twenty grains of antipyrin were then given, and repeated hourly until 6 P.M. Two hours after the first dose the temperature was 99°, and fell quite uniformly to 96° at 10 P.M. The pulse fell from 66 to 60. There was no increase of sweating, and no prostration; the symptoms remained unchanged. The temperature rose to normal at 11 A.M. on the following day, and the antipyrin was not repeated. The joints were rather less painful, and the right wrist less swollen. On the following day at noon (temperature 98·4°) twenty grains of salicylate of soda were given, and repeated every three hours. Towards evening the pain became much less, and the next morning was gone, and all swelling had disappeared. The temperature remained normal. During his stay in the hospital signs of slight aortic disease developed, but no cardiac symptoms were present.

CASE 3.—F. B——, aged nineteen, was admitted on Dec. 1st, 1885, with his second attack. The left elbow and wrist and the left knee and ankle were affected. The temperature at 11 P.M. (twelve hours after admission) was 101·8°. Twenty grains of antipyrin were administered, and repeated at 12 P.M. and 1 A.M. The temperature fell slowly to 99·2° at 7 A.M. on Dec. 2nd. The right elbow and wrist had during this time become swollen and painful, so that the antipyrin was not repeated; but at 3 P.M. salicylate of soda was ordered in twenty-grain doses every two hours, with a resulting fall to normal at noon on the following day, and a complete alleviation of the symptoms. On admission a systolic murmur was audible at the apex, and on Dec. 5th a diastolic murmur was for the first time heard at the base; but there were no cardiac symptoms, and on Dec. 16th the patient left the hospital quite well.

CASE 4.—H. S——, aged thirty-one, admitted on Oct. 8th, 1885, with his second attack. Right wrist and both knees and ankles affected. No signs of heart affection. At 11 P.M. on the day of admission the temperature was 102·6°. At 3 A.M. on the following morning the salicylate of soda was commenced in twenty-grain doses every two hours, with a resulting fall to 99·4° at 7 A.M. The symptoms were, however, scarcely affected. On the following day severe headache and buzzing in the ears having developed, the salicylate was only given every four hours. The temperature on the 12th rose again to 102°. During the fortnight after admission this treatment was continued without success, and the swelling of the knee-joints became very great. Blistering was tried with some benefit. On Oct. 23rd, at 11 A.M., the thermometer registered 101·6°, and twenty grains of antipyrin were given at 3 P.M., and repeated at 4 and 5 P.M.; at 7 P.M. the temperature was 98·4°. On the following day (Oct. 24th) ten grains were given every two hours. The temperature did not rise above 99·4°. The dose was gradually lessened, and the various affected joints were blistered. On the 28th the swelling of the knees had quite disappeared, and after this the patient made a steady though slow convalescence.

Cases of Acute Rheumatism in which Thallin was employed.

CASE 1.—E. S——, aged thirty-five, was brought to hospital with her second attack on Dec. 29th, 1885. Both wrists, both ankles, and the left knee were affected. The temperature on admission was 100·2°; at 1 P.M. on the following day, 102·6°. Thallin was then commenced—one grain of the sulphate every hour. The temperature fell steadily to 100·6° at 6 P.M., and then rose to 101·6° at 9 P.M. At 10 P.M. the dose was increased to two grains hourly, after which the temperature fell with slight fluctuations to 98·8° at 9 A.M. on the following morning (Dec. 31st); it then began to fluctuate between 98·8° and 100·4°. (The temperature was taken hourly.) The symptoms were absolutely unchanged. At noon the dose was increased to three grains hourly, and at 4 P.M. 99° were registered. After the next four doses the patient vomited, so that the drug was stopped at 8 P.M., the temperature standing at 100°. At 3 P.M. on the following day the salicylate was commenced in twenty-grain doses every two hours. The same evening the symptoms were much lessened, and on the next morning they had disappeared and the temperature was normal. The patient made a rapid recovery. No cardiac complications developed.

CASE 2.—J. T. G——, aged twenty, was admitted on Dec. 21st, 1885, with his first attack. Had right hemichorea when fifteen years old. Both knees and ankles and right shoulder affected. Apex systolic murmur, and pericardial rub audible. Temperature on evening of admission 102·8°; at 11 A.M. on next day, 102·2°. Thallin then commenced, one grain hourly. Temperature at 6 P.M. 100·8°; at 11 P.M., 101·4°. Dose increased to two grains hourly. The temperature fell uniformly to 98·8° at 2 A.M. on next morning (Dec. 23rd), and then rose with considerable fluctuations to 101·6° at 8 A.M. No improvement was noticed in the symptoms, and both wrists had become swollen and painful. The thallin was stopped at 8 A.M., and at 8 o'clock P.M. the thermometer stood at 102·4°. The salicylate of soda was then given—twenty grains every two hours. At 3 A.M. on the following morning the temperature was normal, and at 11 A.M. the patient expressed himself quite free from pain, and the swelling had entirely subsided. The pericardial rub disappeared on the third day after admission, and no fresh murmurs presented themselves. He was discharged on Jan. 5th. During the administration of the thallin the urine assumed a dark olive-green colour and smelled strongly of

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the drug. Ferric chloride gave a dirty-brown precipitate soluble in excess to a dark reddish-brown solution. This effect on the urine was almost constantly noted. It rapidly disappeared when the drug was stopped.

CASE 3.—S. G——, aged forty-five, was admitted on Dec. 18th, 1885, with his third attack. There was affection of both elbows and wrists, and to a less extent of the knees and shoulders. Temperature on admission 102·2°; at 9 A.M. on the following morning, 101·4°. One grain of sulphate of thallin was given every hour, until 6 P.M., when the temperature was 99°. It was then stopped on account of the great nausea it produced and the copious sweating which occurred. It had no effect on the joint symptoms. At 11 A.M. on the next day twenty grains of the salicylate were ordered every two hours; the temperature was then 99°, and was normal three hours later. Rapid removal of symptoms followed and recovery was uninterrupted.

Professor Dujardin-Beaumetz of Paris, after an extensive trial of antipyrin, concluded that when used in acute rheumatism it brought down the fever, but did not materially affect the joint symptoms. Many other observers, including Neumann of Berlin,[1] and Pribram,[2] have considered the drug equal to the salicylate in rheumatic fever. My own experience, although very limited, certainly coincides with the first opinion—viz., that antipyrin cannot claim any specific action in rheumatism. An important fact clearly brought out by the above cases is that after the temperature has been reduced to normal by the antipyrin, the other symptoms of the disease are rapidly removed by the administration of the salicylate; this, it seems to me, indicates a marked difference between the former, which merely removes one symptom of the disease—viz., the fever,—and the latter, which appears to strike at the root of the mischief. Case 4 is an example of those unusual cases in which the sodic salicylate failed. Here antipyrin appeared of some service, and in such cases, as well as in those attended with hyperpyrexia, the drug deserves further trial. In none of the cases of rheumatism in which antipyrin was given did it produce any of the toxic effects—vomiting, prostration, &c.—which have been described as resulting from its use, and some of which have occurred in cases at University College Hospital. With regard to thallin, the general opinion of those who have employed it seems to be that it compares very unfavourably with salicylate of soda in the treatment of acute rheumatism. Thus, Dr. Jakseh[3] found that although the fever was reduced by its action, yet the other symptoms all remained. The above cases tend to confirm this conclusion. The considerable extension of the disease which occurred in Case 2 during the exhibition of the drug, notwithstanding the lowering of the temperature, would be inexplicable were we to believe that the antipyretic effect was due to any influence of the thallin on the disease process itself. The frequently repeated doses necessary, and the very transient effect produced, compel us to consider thallin very inferior to antipyrin, notwithstanding slight advantages, such as rapidity of action, which it may possess. We must therefore conclude that salicylate of soda remains *par excellence* the cure for acute rheumatism, but that antipyrin may be useful in those rare cases in which it fails to exert its apparently specific action on the disease.

I will now proceed to give brief details of a few cases of Phthisis in which Thallin and Antipyrin were employed.

CASE 1.—C. Q——, aged seventeen years and a half, was admitted on Oct. 10th, 1885, with a severe attack of hæmoptysis. He had had a cough for nearly three months, and once before had spat blood, on Sept. 30th. He had several attacks of hæmoptysis during the few days after admission, and was treated with ergotine, gallic acid, &c. There was evidence of consolidation at the right apex. During the week after admission the average morning temperature was about 102° and the evening temperature between 102° and 103°. On Oct. 19th, at 11 A.M. twenty grains of antipyrin were given, and repeated at noon and 1 P.M. There was a fall from 101·4° at 11 A.M. to 98·4° at 11 P.M. At 12·30 A.M., the temperature having risen to 100·2°, ten grains of antipyrin were ordered every three hours. This was continued for two days, and the thermometer only once registered 100°, standing usually at 99°. On the day after it was stopped the evening temperature was 102°. On Oct. 26th three hourly doses of from ten to twenty grains were given. The temperature fell from 102·6° to 99·2° in five hours. Shortly after the third dose the patient became very collapsed, the extremities very blue, the pulse small and fluttering, and there were marked tremors in the limbs. This condition lasted about an hour, and he gradually revived after brandy with ammonia and ether had been given freely. Fifteen hours after the last dose the temperature was 96·4°, and then slowly rose, without shivering, to 100·2° during the next seventeen hours. Death occurred on Oct. 30th, and the necropsy revealed extensive disease of both lungs. During the few days that antipyrin was given in ten-grain doses every three hours the night sweats were certainly lessened, but no other improvement was evident in the general condition.

CASE 2.—D. W——, aged twenty-one, was admitted on Jan. 18th, 1886, with a history of severe cough, rapid wasting, and night sweats of five weeks' duration. There was evidence of consolidation and small vomicæ at both apices. During the three days after admission the morning temperature was 101·2°, 100·4°, and 100·4°, and that of the evening, 103·8°, 102·8°, and 103·6°. On Jan. 22nd, at 6 P.M. 105·2° was reached, and at 7.30 P.M. thallin was commenced in one-grain doses every hour; this was doubled at 10.30 P.M. At 5 A.M. on the next day the temperature was 99·4°, and rose rapidly, with severe shivering, to 105° at 9 A.M., although thallin was continued. During the day the lowest record was 100°, and the highest was 105°. At 12 P.M., with violent sweating, the temperature fell to 98·4°, and the thallin was stopped on account of vomiting. In four hours a rise of 5° occurred. During the next three days variations between 102° and 104° were registered. On Jan. 27th, at 10 A.M. (temperature 102°) twenty grains of antipyrin were administered, and repeated at 11 A.M. and noon. The thermometer at 1 P.M. was 97·2°. A rise without shivering followed, 104·2° being reached at 7 P.M.—7° in six hours. The drug was then ordered in twenty-grain doses every four hours. This was increased on Jan. 30th to twenty-grain doses every three hours, and continued until Feb. 5th. The chart during this time showed great daily variations—from 97° and 99° in the morning to 103° and 104° in the evening. The sweating was increased, but no other ill effects were noted. Stopping the drug had a marked effect on the temperature chart, which showed that although the evening rise remained the same (103°-104°), the morning fall was about 2° less (100°). The lung disease rapidly extended, symptoms of peritonitis and persistent diarrhœa set in, and the patient died on Feb. 27th. Cavities at the upper part of both lungs were found; there was general peritonitis and extensive tubercular ulceration of the small intestine.

CASE 3.—H. G. F——, aged twenty, had suffered from severe cough and night sweats, and had been wasting during the three months before his admission on Dec. 31st, 1885. There were signs of a considerable cavity at the apex of the left lung, and consolidation of the right apex. Expectoration profuse, muco-purulent. Patient very weak and emaciated. Morning temperature during first three days in hospital 100°-101°; evening, 102°-103°. At 11 A.M., on Jan. 3rd, 1886, thallin was commenced in one-grain doses hourly. At 5 P.M. the temperature was 98°, and at 9 P.M. 103·4°. Similar fluctuations continued, and on Jan. 5th the dose was doubled. The result was a temperature varying between 98·4° and 101·6°. At 11 P.M. on Jan. 6th the thallin was stopped, and the temperature rose in four hours from 100° to 103·6°. On Jan. 12th, three fifteen-grain doses of antipyrin were given at intervals of one hour. The temperature fell from 101° at 11 A.M. to 99·8° at 3 P.M., and then rose to 101·6° at 5 P.M. On Jan. 13th fifteen-grain doses were ordered every four hours. On the next three evenings 101° were registered. After this, until Feb. 25th, the morning temperature was usually normal, and the evening about 99·6°, rarely touching 100°. On three consecutive days during this time no antipyrin was given, and the evening temperature reached 101°. The general condition improved, the night sweats became very slight, and the expectoration less abundant. The cavity at the left apex showed distinct signs of drying up, the râles became much fewer, and the upper intercostal spaces became depressed. On Feb. 25th the patient left for Eastbourne, much improved, and having gained several pounds in weight during his last month in the hospital. During several weeks after leaving the hospital he continued to take three fifteen-grain doses of antipyrin daily. Whilst he remained under observation the evening temperature varied between 99° and 99·6°.

With regard to thallin it may be stated that in the above

[1] Klin. Wochenschrift, Sept. 14th, 1885.
[2] Prager. Medicinische Wochenschrift. Oct. 1884.
[3] Wien. Med. Wochenschrift, 48, 1884.

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and other cases of phthisis in which it was employed no appreciable benefit resulted. The almost constant effect on the temperature was a great increase of the daily variations, the minimum temperature being often lowered by 2° or more, whilst the maximum remained the same. Each fall of temperature was accompanied by sweating, and each rise frequently by shivering, and not rarely by distinct rigors. These necessarily added considerably to the discomfort of the patient. I can find no records of cases of phthisis benefited by the use of thallin. The very good result obtained by the continued administration of antipyrin in the last case recorded above agrees with similar results obtained by other observers. In the *Practitioner* for May, 1885, Dr. Holland, of St. Moritz, gives details of several cases which were materially improved by the use of antipyrin, after quinine, salicylic acid, digitalis, and other antipyretic drugs had failed. In one of his cases vomiting was produced. Two similar cases were described in a paper read by Dr. Macalister before the Cambridge Medical Society on August 7th, 1885. The sweating produced was counteracted by the use of minim doses of the solution of sulphate of atropine. In my case the sweating was greatly lessened, and cases recorded by Huchard showed a similar result. In Case 1, recorded above, some slight benefit was derived from the administration of antipyrin, but in three other cases, of which I have notes, no benefit was obtained. The conclusion to which we are led seems to be that the effects of antipyrin in phthisis vary in different cases. In some it acts no better than thallin, and merely lowers the temperature without improving the general condition of the patient or retarding the course of the disease; whilst in other cases it is of great benefit—lowering the temperature, lessening the night sweats, and improving the nutrition. Whether the antipyrin thus acts by merely removing those conditions which are secondary to long-continued fever, or whether it has any more direct action on the disease-process, remains to be shown. The hæmostatic action which has been attributed to antipyrin by several experimenters has suggested a possible further recommendation for its use in phthisis when accompanied by hæmoptysis. It may perhaps be worth mentioning that in Case 1 the severe hæmoptysis was not apparently lessened by full doses of antipyrin.

The most important difference between these two drugs, which is demonstrated by almost all the cases in which they were used, is in the duration of their effects. The lowering of the temperature produced by antipyrin lasts usually for many hours. In one instance the temperature did not rise above 98·6° for thirty hours after the drug was stopped. The rise is gradual and occupies several hours. Thallin, on the contrary, produces a very transitory effect, the rise often beginning within two hours after stopping the drug. This rise is very rapid, and hence is often accompanied by shivering. The influence of antipyrin and thallin on the pulse and respiration appears to me to be very slight. The pulse is usually only slowed by a few beats per minute. In one case, in which antipyrin produced a fall of temperature from 100·2° to 96°, the pulse was only slowed by four beats per minute, and the rate of respiration was unaltered. The experiments of Dr. K. Bettelheim, made in the laboratory of Professor v. Basch at Vienna, led him to a similar conclusion. Professor Pribram,[4] however, considers that antipyrin has a marked effect on the pulse and respiration.

The various toxic effects produced must now be briefly considered. Vomiting has been frequently noted after the use of antipyrin; much more rarely after thallin. In two cases at University College Hospital antipyrin produced severe vomiting: once in a girl aged twelve years suffering from typhoid fever, after fifteen-grain doses; once in a case of phthisis after twenty-grain doses. The same symptom occurred after the administration of thallin in three-grain doses to a patient with rheumatic fever, who was similarly affected by salicylate of soda. In one other case, nausea, but no vomiting, followed the drug. During the administration of these drugs symptoms of collapse were carefully watched for. In the first case of phthisis detailed above, marked prostration followed the use of antipyrin in three doses of ten, twenty, and twenty grains respectively. Similar symptoms were observed in a boy to whom three fifteen-grain doses were given at intervals of one hour. In no case did thallin occasion any prostration. Looking to the literature on the subject, we find reference made by several observers to cases in which prostration appeared to follow the use of antipyrin. In THE LANCET of Feb. 28th, 1885, a case was recorded by Mr. Blore, of the Leeds Fever Hospital, in which extreme collapse, terminating fatally, followed the administration of antipyrin, and he concluded "that the extreme depression accompanying the fall of temperature was directly due to the action of the drug." The sweating which accompanies the fall of temperature appears to vary considerably in different cases. As a rule it is not marked, and causes no inconvenience, but in the two cases in which antipyrin caused collapse the fall of temperature was attended with very profuse sweating. In their tendency to produce shivering or rigors the two drugs differ. This we should expect from a comparison of the rapid rise following the fall produced by thallin with the gradual rise after antipyrin; and all observers seem agreed that shivering and rigors frequently follow the use of thallin, but rarely of antipyrin. In every case of phthisis in which thallin was employed for any length of time shivering frequently accompanied the rapid variations in temperature. In one instance a severe rigor, lasting nearly an hour, occurred during the use of one-grain doses hourly. The temperature rose from 100° to 104·8° in two hours. In the case of typhoid fever above mentioned a similar effect was produced. One grain of thallin was being taken every hour on the twenty-first day of the disease. The temperature rose from 101·8° at 9 A.M. to 105° at 2 P.M., and at 1 P.M. a rigor commenced, and lasted for thirty minutes. An exanthematous eruption following the administration of antipyrin was first described by Dr. Ernst of Zurich, and has been seen by many other observers. Thallin more rarely causes a similar rash. This eruption occurred in the case of the boy mentioned above, in whom symptoms of collapse followed the use of three fifteen-grain doses of antipyrin. The rash appeared about one hour after the last dose was given. It consisted of small rosy-red spots over the chest and abdomen, and to a less extent on the limbs. On the face and neck the rash was confluent, and closely resembled scarlet fever. It lasted about an hour, and then gradually faded away. The peculiar appearance of the urine in patients taking thallin has been already mentioned, and constantly occurred. It closely resembles that so often seen in the surgical wards from the absorption of carbolic acid.

Taking all things into consideration, it seems to me that the evidence is strongly in favour of antipyrin. Any slight advantages which thallin may possess are more than counterbalanced by the transitory nature of its action, the frequently repeated doses which are therefore necessary, and the great liability to the occurrence of shivering or rigors. This conclusion agrees with that of most German observers. Unless, therefore, future investigations shall disclose some yet undiscovered advantages in thallin, we may, I think, decide to employ antipyrin in preference to it in any case in which a rapid antipyretic effect is desired. Still more is antipyrin to be preferred in cases such as phthisis, where a long-continued use of the drug is necessary. Regarded as a purely symptomatic remedy, the unanimous verdict is that antipyrin is a most efficient agent.

In conclusion, I beg to offer my best thanks to Dr. Sydney Ringer for allowing me the opportunity of carrying out these brief investigations whilst acting as his house-physician at University College Hospital.

[4] Prager, Med. Woch., October, 1884.

THE MORTUARY QUESTION IN LONDON.—At an inquest held on the 21st inst. at Fulham on the body of a domestic servant who had committed suicide, it was pointed out that in this extensive parish there was no public mortuary. In the present case, the body of the deceased, who had been suffering from an infectious disease, had to be taken to the mortuary of the adjacent parish at Hammersmith. Now that the attention of the authorities has been directed to such an anomaly, it is to be hoped that the want will speedily be supplied.

NORTH-WESTERN ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.—At a meeting of the members of this Association on the 19th inst., Dr. Hime, who has had occasion twice to visit M. Pasteur in Paris, delivered an address on M. Pasteur's treatment of persons liable to hydrophobia, and explained the processes of inoculation adopted by that scientist in his experiments. At the conclusion of the address, Dr. Tatham moved a vote of thanks to Dr. Hime, which was seconded by Dr. Wills and cordially passed.

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ON

THE CAUSATION AND NATURE OF HYPERTROPHY OF THE PROSTATE.

By REGINALD HARRISON, F.R.C.S.,
SURGEON TO THE LIVERPOOL ROYAL INFIRMARY, AND LECTURER ON CLINICAL SURGERY IN THE VICTORIA UNIVERSITY.

In a previous paper[1] I have pointed out that residual urine will be frequently found to precede physical signs of prostatic enlargement, and that this inability to empty the bladder may be traced to structural alterations in shape and imperfect power of contractility which chiefly involve the most dependent portion of the bladder area—namely, the posterior wall. From these observations I deduce that the initial lesion in enlargement of the prostate is the conversion of the latter into a kind of muscular buttress for providing against a structural incapacity in a contiguous part. I have further laid stress on the view which has been advanced by competent observers that the prostate is to be regarded essentially as a muscle, and not as a gland, in the ordinary acceptation of the term. In endeavouring to explain how it is that the prostate muscle may be brought under the influence of the same laws which seem to regulate the development of hypertrophies in other parts of the body, and which for the most part are compensating in their nature, there are many points connected with its clinical history and pathology, when enlarged, which may with advantage be referred to here.

In the examination of the bladder, both after death and in the course of surgical operation, it is impossible not to be struck with the altered relations which frequently exist between the viscus itself and its neck or outlet. In early adult life the bladder may be regarded as an abdominal rather than a pelvic organ; as years advance it gradually sinks within the pelvis, whilst still later on it will often be found to have become further depressed within the pelvic cavity. In this way I have seen a prominence given to the floor of the prostate what was really due, not to the development of more prostatic tissue, but to the bending back of the posterior wall of the bladder. When it is considered that the prostate is almost immovably fixed by ligament in its position, whilst the bladder can rise or fall according to circumstances, it is not difficult to understand how this can be, and how an obstacle may be put in the way of micturition which does not necessarily involve an increase in the amount of prostatic tissue. This mode of forming a prostatic bar may be very readily imitated. That an undue sinking of the bladder within the pelvis such as I have referred to would be likely to induce hypertrophy of the prostate as a compensating process seems to me to be not unreasonable. It is stated by Sir Henry Thompson[2] "that actual hypertrophy of the prostate exists in about 34 per cent. of men at and above sixty years of age; that it produces manifest symptoms in about 15 or 16 per cent." From this it would appear that 18 per cent. are not injuriously affected by this change, a circumstance which almost seems to suggest that the majority of persons with large prostates are in some way or other benefited by them. These are illustrations where the compensation is precise. How frequently it happens in our daily practice that we come across instances of persons having very large prostates, but who are not conscious of suffering any inconvenience thereby. It is only very recently, when examining the rectum of a patient, I discovered that he had an enormous prostate, but beyond experiencing some degree of vesical irritability a few years ago he had now nothing to complain of so far as micturition was concerned. A good idea of the amount of support that is afforded to the most dependent portion of the bladder by a large prostate may be formed by examining such a patient as I have just referred to with the finger in the rectum when he is placed in the erect position. By this means we can judge of the value—I was going to say the comfort—of a large prostate to some elderly males with incompetent bladders.

But it may be urged that, though some cases of enlarged prostate appear capable of explanation on the ground that they are essentially hypertrophies in the usual acceptation of the term, there are others where such an explanation is not so apparent. In the latter category reference no doubt will be made to those instances where the prostatic mass is made up of more or less lobulated projections. These I would speak of as the upheavings of a frequently contracting muscular ring. In a muscle or part undergoing hypertrophic growth, and where the process is prompted by circumstances which are obviously liable to some degree of variation, tissue production may be excessive or become unnecessary. Such excess would naturally tend, under the contraction of the part, not only to protrude itself where the resistance was least, but to assume a more lowly organised form than that originally produced. In this way I believe these masses of more or less degenerated prostate tissue are formed, and just as there is a wide difference between the irritability of the bladder associated with the initial stage of the hypertrophying prostate and that caused by the fibrous projections of the gland just referred to, and which produce symptoms quite as irritating to the bladder as any stone, so is there a corresponding difference in the residual urine which accompanies each of these states. In a paper by Mr. Savory[3] on the Relation of Partial Retention of Urine to its Decomposition within the Bladder, he points out that the mere retention of a certain quantity of changing urine, though constantly occupying the bladder, cannot be regarded as explanatory of its decomposition. Because a bladder does not completely empty itself, as in the initial stage of prostatic hypertrophy, this by no means implies that what it contains is stagnant and liable to decomposition. A constant stream, though a small one, through a standing pool of water ensures sufficient interchange to prevent putrescence or anything approaching it. So long as normal urine enters a bladder capable of expelling, though incompletely, so long will what is retained remain unchanged, provided that nothing is brought in relation with the interior of the bladder which can act the part of a foreign body. A prostate with fibrous outgrowths is positively more irritating to the interior of the bladder, more productive of cystitis and mucous exudation, than almost any calculus that can be met with. It is under these circumstances that we have a very different form of residual urine to that previously alluded to. In practice it is necessary that these distinctions should be recognised.

A few words, in conclusion, may be devoted to certain pathological conditions of the prostate as bearing upon the remarks that have been already made, and relative to its uses other than as a muscle. The only form of inflammation to which the normal prostate, so far as my experience goes, is liable, is that which primarily involves its numerous follicles; by the suppuration and coalescence of these follicles the whole area of the prostate may be converted into an abscess. Though I have known several instances in adults about the age of puberty, where the secreting portion of the prostate must in this way have been completely and permanently damaged, I cannot say that I ever knew such a suppuration followed by either sexual or procreative inability. And though the prostate may not be damaged to the same extent, in most cases of lateral lithotomy and operations of a like nature, if it were essential to procreation, we might expect to find a certain number of fairly well authenticated cases where this function was thus brought to an end. My experience of these operations, which has been tolerably large, does not furnish grounds for believing that the procreative power has been interfered with by them. That so important a function should, as it were, be made dependent on the integrity of two organs situated at a distance from each other seems on the face of it to be unlikely. It appears to me that the office of the prostate relatively to the sexual act is that referred to by Dr. Handfield Jones[4] in the following passage:—"These considerations furnish some ground for regarding the prostate as rather an assemblage of mucous follicles than really a distinct conglomerate gland; its part in the generative function is probably not to prepare any essential element of the fecundating fluid, but merely an appropriate viscid material, involved in which the seminal animalcules may be more securely transported on their destined route." The wide difference that exists in the pathology of the prostate and the testis seems to point, I submit, to their being engaged in very different functions; the former comprehend those changes which we might

[1] THE LANCET, March 6th, 1886. [2] Diseases of the Prostate.

[3] THE LANCET, Oct. 14th, 1882.
[4] The London Medical Gazette, vol. v., 1847.

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expect in a part consisting of follicles embedded in muscle, whilst in the latter they are those which can only happen to a highly organised gland where everything is subservient to the secreting process. I should sum up the function of the prostate relatively to the sexual act as supplying a reaction which mechanically enables the fecundating fluid to act with greater certainty, at the same time supplying a muscular buttress against which the ejaculatory muscles of the urethra may advantageously act in the emission of the semen.

In a future communication I hope to refer to certain clinical points arising out of the views I have expressed in connexion with this subject.

Liverpool.

CASES OF POISONING BY SQUILLS.[1]

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ON March 2nd, 1886, I received for analysis a bottle with fluid contents, in relation to the following cases:—

Three in a family of children had had whooping-cough, and their mother had given them a mixture obtained from a chemist (Mr. A.), and composed as follows: Ol. amygdal. ℥ij., syrup. violæ ℥ivss, vini ipecac. ℥iss, syrup. scillæ ℥j, and containing, therefore, half its volume of syrup of squills. The three children, Isaac, Ethel, and Thomas, had taken teaspoonful doses of the mixture twice a day for ten weeks, a fresh supply, consequently, being required rather oftener than twice a week. A fourth child, Lilian, was not suffering from whooping-cough, and her mother only gave her a teaspoonful from the last bottleful, altogether.

On Feb. 17th, Dr. Mutch, of Sneinton-road, Nottingham, was called in to see Isaac, aged three years and a half. He complained of pain in the legs, and of their giving way; during the night he had slight difficulty of breathing.—18th: He took a hearty breakfast, and seemed in his usual health, until about 11 A.M., when his mother noticed him looking pale. Dr. Mutch saw him at 4 P.M., when his skin was pale generally, his eyes sunk, his face pinched, his lips and finger-nails livid, his respiration quick, and there were mucous râles at the front and back of the chest; the pupils were normal. Death occurred at 11 P.M.

On Feb. 23rd Dr. Mutch was called in again to see Ethel, aged five years. She was out of doors on the 22nd, and complained of her legs giving way; she fell several times, and vomited at intervals. When Dr. Mutch saw her, her eyes were rather sunken, her face was pale, the respiration and temperature were normal, there was no lung symptom, the pulse was irregular, intermitting one in four beats, and the pupils were normal. She complained of pain in the legs, and still had slight attacks of vomiting.—24th: The pulse was the same; lips livid.—25th: Eyes more sunken, face paler, temperature normal, pulse (?) She was cheerful and took nourishment well.—26th: Breakfasted; seemed better and more cheerful, but died suddenly about 11 A.M.

In consequence of the supervention of the second death, Dr. Mutch's suspicions were aroused, and he declined to give the death certificate. An inquest was held, and the coroner ordered a post-mortem examination to be made on the body of Ethel. This was performed by Dr. Mutch, in the presence of Dr. Brookhouse, Mr. Buckoll, and Mr. Cooper, on Feb. 28th, forty-eight hours after death.

Post-mortem examination.—Rigor mortis well marked, much hypostatic congestion, nails black, eyes sunken. On opening the thorax, the lungs were found to be rather pale, but filled the pleural cavities; there were no adhesions; the posterior borders of the lungs were congested, but otherwise the lungs were healthy; there was no accumulation of mucus in the bronchial tubes. The left ventricle of the heart was contracted and empty, the right ventricle was empty, the pericardium was healthy, and there was no effusion in its cavity. The liver was healthy, the gall bladder distended. The intestines were normal, and there was no peritonitis. The stomach contained a small quantity of food; there were a few inflammatory patches on its anterior surface and lower border internally. The blood throughout the body was fluid and dark, and there was no clot to be seen.

A third child, Thomas, aged six years and a half, was seen on Feb. 27th, when he was lying tranquilly in bed, his facial expression not being at all a distressed one. Pulse 104 per minute, intermitting 1 in 4; respiration 24 per minute. There was free diaphoresis, partly caused perhaps by the linseed poultices that had been applied. He had vomited last about twenty-four hours previously; tongue clean and red. He took his last dose from the bottle of medicine at 5 A.M. of the preceding day, the 26th. The pulse intermitted 1 in 4 on the 27th and 28th, 1 in 14 on the 29th, and 1 in 20 on the 30th, and continued to vary for a week. The medical men who were present at the post-mortem saw this case, and agreed that the symptoms were due to some cardiac poison.

Lilian, aged eight, the only one of the four who did not have whooping-cough, had only one dose of the mixture for a little attack of coughing. This dose she had at 5 A.M. of Feb. 26th. This was followed by vomiting; she became languid and drowsy about 10 A.M., and complained of pain in her legs; her pulse intermitted 1 in 14. On the 27th she was tranquil, and had no symptom except a very occasional intermission of the pulse. This was shown by the pulse-beat varying from 24 to 26 per quarter minute. This observation was made six times in consecutive quarters of a minute.

The preceding history of cases, and of the post-mortem examination, I owe entirely to the kindness of Drs. Brookhouse and Mutch, who furnished me with notes of the same.

Chemical and physiological examination.—In consequence of a wish expressed by the coroner's jury, the remainder of the mixture that had been given to the children was handed to me, with a request that I should examine it for digitalis, or other heart poison. At the post-mortem the heart was found to have ceased in systole; this phenomenon is a result of poisoning only in the case of three drugs in the British Pharmacopœia list, and these three, presumably the most likely to be present in the mixture, are, digitalis, squills, and veratrum viride. I proceeded in the first place to ascertain whether the mixture contained a poisonous quantity of a heart-poison, poisoning by producing cessation of the heart's action in systole; and then to attempt to identify which of the three above-named poisons it might be. The bottle, a 4-oz. scent-bottle, contained 220 grains (equal to 182 minims) of a liquid having a specific gravity of 1209. I took half of this quantity, equal to a dose and a half of the mixture, reserving the other half. This first half (equal to 110 grains) I evaporated to dryness; this and all other operations being carried on at a temperature not exceeding 50° C. The extract I dissolved in water feebly acidulated by acetic acid, shook up with petroleum ether to remove fat &c., added ammonia shook up with chloroform, and evaporated the chloroform solution. I obtained a mere film, which I proceeded to test physiologically. In this series of physiological tests I had the great advantage of the co-operation and assistance of Dr. Whitelegge, the medical officer of health for the borough of Nottingham.

In the first place, on March 2nd, as a means of comparison, I took a frog (the Rana temporaria, not the R. esculenta, which is not nearly so well adapted for this purpose), exposed its heart, and injected into the lymph sac ·001 gramme of digitaline. This slowed the heart-beats in forty minutes, from 26 to 10 beats a minute. On the 7th I took three frogs: in the first frog I exposed the heart only; in the second I injected ·001 gramme of digitaline; in the third I injec ed the residue obtained as above described from 110 grains of the mixture. (The residues mentioned were dissolved in an extremely dilute solution of acetic acid before injecting.) In the first frog the heart-beats rose in thirty-eight minutes from 20 to 22; in the second, in thirty-two minutes the beats fell from 22 to 5; in the third, in which was injected the extract from the mixture, in twenty minutes the beats fell from 24 to a total cessation in systole. This showed that in the mixture there was a powerful cardiac poison. Had a mistake been made in dispensing? Had tincture of digitalis got in in place of one of the ingredients? To clear up this point, the coroner himself visited the druggist's shop, and requested him to make up the mixture according to the prescription quoted at the commencement of this paper. There can be no doubt that under these circumstances the prescription would be accurately made up. As a means of comparison, the prescription was also made up by an independent chemist, Mr. B.

[1] In this paper I have, to save space, omitted quotations from various authors on the subject dealt with; but a copy of the article, in its extended form, will be forwarded to the librarian of the Chemical Society.

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Using the chemical process mentioned above, I obtained residues from 110 grains of A.'s second edition of the mixture, from 110 grains of the mixture made up by B., and also from 110 grains of tincture of veratum viride. On March 14th I exposed the heart in four frogs: the first frog I did not interfere with, using it as a control experiment; into the second I injected the residue from the mixture of B.'s dispensing; into the third I injected the residue from the 110 grains of tinct. verat. viridis; and into the fourth I injected the residue from 110 grains of A.'s second edition of the mixture. In the first frog, in 105 minutes the heart-beats rose from 22 to 24; in the second, after 105 minutes the heart-beats were the same at the end as at the beginning of the period—viz., 24; in the third, in twenty-five minutes the beats fell from 14 to 6; and in the fourth, in seventeen minutes they fell from 24 to a total cessation in systole. To the veratrum case I shall return shortly.

The fact of a powerful heart poison being thus shown to be present in the accurately made up mixture, it remained to ascertain to which of the four ingredients the toxic property was due. The oleum amygdalæ and the syrupus violæ appeared to me to be out of the question, there being no preparation of digitalis or veratrum sufficiently thick to be mistakenly mixed up with either of the other two; the choice lay between the ipecacuanha wine, into which some digitalis might have found its way, and the syrup of squills. I accordingly obtained some of the original syrup of squills and ipecacuanha wine from Mr. A., and some of the same preparations from Mr. B. It was noticed that both A.'s mixture and his syrup of squills were much more bitter than those from Mr. B. On March 16th I exposed the heart in four frogs, and injected into the lymph sac of the first frog 10 minims of ipecacuanha wine obtained from B. and in the second 10 minims of ipecacuanha wine from A., in the third 10 minims of syrup of squills from B., and in the fourth 10 minims of syrup of squills from A. In the first frog, in 150 minutes the beats rose from 30 to 32; in the second, in sixty-five minutes they fell from 30 to 26; in the third, in 150 minutes they fell from 24 to 10; and in the fourth, they fell from 28 to 16 in eighty minutes, and ceased in systole in 120 minutes.

This series of experiments pointed out that the syrup of squills was the toxic agent, and also that, though to a less extent, the same effect was produced on the frog's heart by B.'s syrup of squills as by A.'s, A.'s being evidently much the stronger of the two. In order to eliminate any error arising from differences in the physical condition of the injection, and to compare better with the first results obtained, I took the various quantities mentioned below and made chemical extracts containing the active principles, as in the first experiments. I took 30 minims of syrup of squills (as representing the quantity actually taken by each child, in its teaspoonful dose) from syrups furnished by Mr. C. (a second independent chemist), Mr. B., and Mr. A. Furthermore, I took 10 minims of ipecacuanha wine obtained from Mr. A., being the quantity contained in one teaspoonful of the mixture, and 10 minims of tincture of digitalis from the same source, as a control experiment. The residues I injected into the lymph sacs of five frogs on the 18th, with these results:—In the first frog, the residue from C.'s syrup of squills in forty minutes slowed the heart-beats from 38 to 36; in the second, the residue from B.'s syrup of squills in forty-seven minutes slowed the heart-beats from 36 to 10; in the third, the residue from A.'s syrup of squills in thirty-eight minutes slowed the heart-beats from 36 to cessation in systole; in the fourth, the residue from A's ipecacuanha wine in twenty-seven minutes slowed them from 39 to 34; in the fifth, the residue from A.'s tincture of digitalis in twenty minutes slowed the heart-beats from 39 to 18. These results will be more clearly seen in a tabular form in the next column.

It will be noticed that in Experiments 4 and 8, made with the first and second edition of A.'s mixture, the results are as nearly identical as may be expected in two different subjects; the second mixture, if anything, being more poisonous than the first. Comparing Exps. 12 and 15, in Exp. 12 a third of the dose given in Exp. 15 takes almost exactly three times the number of minutes to kill, $12\frac{1}{2}^0 = 40$, instead of 38. These figures show that the results obtained, although occurring in different subjects, may be fairly compared.

It is evident from Experiments 1, 4, and 8, that 110 grains or 90 minims of the mixture, or 45 minims of syrup of squills, contain a dose of the toxic agent more powerful than ·015 grain of digitaline ($=\frac{1}{67}$ grain), as in Exp. 4, twenty minutes were sufficient to cause cessation of the heart's action, whilst $\frac{1}{67}$ grain of digitaline in forty minutes, or twice the time, slowed the heart's beats only from 26 to 10 per minute in Exp. 1. After considering the great difference in these two results, we may safely assume that the dose given—viz., a teaspoonful of the mixture, although only two-thirds of the 110 grains employed in Exps. 4 and 8, would contain such a dose of a toxic agent as is equal in potency to $\frac{1}{60}$ grain of digitaline—i.e., a full dose for a child. Perhaps the most remarkable comparison may be made between Exps. 15 and 17, by which it is seen that 30 minims of Mr. A.'s syrup of squills, or the quantity given in each teaspoonful dose of the mixture, killed a frog in thirty-eight minutes, whilst 10 minims of tincture of digitalis in twenty minutes only slowed the heart's action from 39 to 18; this twenty minutes also in Exps. 4 and 8 was the period in which a dose and a half of A.'s first and second editions produced death. So that a dose and a half certainly was much more powerful than 10 minims of tincture of digitalis. Again, comparing Exps. 15 and 1, it is seen that (if it is granted that the frogs were equally susceptible to poison) 30 minims of Mr. A.'s syrup of squills—i.e., the quantity contained in a teaspoonful dose—was more powerful than $\frac{1}{67}$ grain of digitaline. On the whole, we may consider that the dose of mixture given was equal in potency to $\frac{1}{60}$ grain of digitaline, or 10 minims of tincture of digitalis. The observations did not in every case cease at the periods denoted in the table, but are so given as to afford a fairly easy means of comparison.

Experiments.	Substance injected.	Original No. of beats.	No. of beats at end of time given.	No. of min.
1	Digitaline, grain ·015	26	10	40
2	Control	20	22	38
3	Digitaline, grain ·015	22	5	32
4	Residue, 110 grains, A.'s 1st mixture	24	cessation	20
5	Control	22	24	105
6	Residue, 110 grains, B.'s mixture	24	24	105
7	Residue, 110 grains, tinct. ver. vir.	14	6	25
8	Residue, 110 grains, A.'s 2nd mixture	24	cessation	17
9	10 minims, vin. ipec., B.'s ...	30	32	150
10	,, ,, A.'s ...	30	26	65
11	,, syr. scillæ, B.'s ...	24	10	150
12	,, ,, A.'s ...	28	16 and cessation	80 120
13	Residue, 30 minims, syr. scill., C.'s...	38	36	40
14	Residue, 30 minims, syr. scill., B.'s...	36	10	47
15	Residue, 30 minims, syr. scill., A.'s	36	cessation	38
16	Residue, 10 minims, vin. ipec., A.'s...	39	34	27
17	Residue, 10 minims, tinct. digit., A.'s	39	18	20

In these experiments, the action on the frog's heart of digitaline, of the mixture, and of syrup of squills was identical. The first change noticed in the heart's action was an irregularity in the contraction of the muscular surface. Part of the muscle contracted and part did not, presenting the appearance of white, bloodless patches, where the muscle had driven blood out of the capillaries, intermixed with protrusions of a crimson colour, the protrusion being due to the relaxed condition of the muscle, and its crimson appearance to its containing blood in its capillaries. The systole gradually became lengthened in duration, and recurred less frequently, until at last the diastole never supervened—i.e., the heart ceased in cystole, becoming tetanised in fact, and assuming a bluish white, cyanotic hue, as if the contraction of the cardiac muscular fibre had driven all the blood out of the capillaries of the heart. This last and lasting contraction came on suddenly; the heart's beats slowed down to 8 or 6 per minute, and the heart suddenly contracted for the last time without any gradual slowing down; for long after this final contraction of the heart, two or three hours after in some cases, the frog moved, swam, jumped, responded to stimuli, and gave the usual reflexes.

With respect to Exp. 7, the veratrum viride case, in twenty-five minutes the heart beats fell from 14 to 6, when the diastole was noticed to be very imperfect. In seventy minutes the ventricle was contracted tonically and sacculated, showing the protrusions as in the case of digitalis and of squills. The ventricle was not nearly so firmly contracted, or of so cyanotic a hue, as in the heart poisoned by the mixture, or in that poisoned by digitalis. The auricles were

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beating 8 per minute, and this continued for two hours after all voluntary and reflex movements had ceased. This experiment reveals a marked distinction between the action of veratrum and that of squills or digitalis. In veratrum poisoning, the voluntary and reflex movements are the first to cease, and the heart is the last to die; in digitalis or squill poisoning, as ascertained by other experiments of the series, the heart is the first to die, respiratory and other muscular movements continuing for three hours (recorded) after the heart's action had ceased.

In Exps. 13, 14, and 15, the action of the squills from the different chemists, C., B., and A., can be well compared, as the initial beats approximated so closely as 38, 36, and 36. Yet, whilst with C.'s syrup the beats only fell from 38 to 36 in forty minutes, in B.'s they fell from 31 to 10 in forty-seven minutes, and in A.'s from 36 to cessation in 38 minutes, showing the varying strength of the syrups as sold in the shops.

(To be concluded.)

REMARKS ON COLOUR-BLINDNESS.[1]

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WHEN in the year 1794 the distinguished English chemist, Dalton, published a description of his sense of colour, the scientific world was surprised to find that there existed individuals whose perception of colour differed in an extraordinary way from that of their own. To say that an individual possessed the sense of sight was tantamount also to saying that he possessed the sense of colour, the latter being considered an integral part of the former, but Dalton's report clearly showed that the two senses, that of sight and that of colour, were separate and distinct; and that while an individual might have a perfect appreciation of form, he might also be quite unable to perceive any difference between two distinct and different colours. Previous to Dalton's report on his own case, two cases had been published in the London Philosophical Transactions,[2] the one in 1777, where an account is given of the colour vision of a shoemaker; the second in 1779, being the report of a gentleman on his own colour sense.[3] Both these cases, from the lucid accounts given, are evidently cases of colour-blindness, but no notice appears to have been taken of them; and it was not until Dalton related his own experience that the subject was brought into prominence. Dalton was twenty-six years of age before he had any suspicion that his colour vision was in any way different from that of others. He was interested in the study of botany, and must therefore have been thoroughly familiar with the names of colours; and the fact is worthy of note that in his lectures on Natural Philosophy he had actually lectured on the "doctrine of colours." Yet he had no idea of his defect until he observed one evening that by candle-light the flower of the geranium zonale, which was to him sky-blue by day, had changed to a distinct red. This, when his friends assured him that the colour of the flower was the same as by daylight, he could not understand; and it was this accident that caused him to investigate his own colour vision by means of the solar spectrum; and by his investigations he conclusively proved the existence of a condition in which opposite colours, such as red and green, appear as one and the same colour.

Having established this fact, observers on the Continent, and also in this country, were led into an inquiry into the frequency of the defect; but it was not until a comparatively very recent date that the practical importance of the subject was prominently brought forward. And it is the practical side of the question that I wish now to discuss, though a short notice of the classification of colour-blindness, and of the various theories which have been advanced to account for this condition, may not be without value. It may be divided into three classes. First, the blindness for colours may be total, a condition rare, in which the person is devoid of colour perception, colours simply being seen as shades of black and white. Second, the blindness may be partial, one or two colours only being indistinguishable, the remaining colours being seen comparatively normally. Under this head are classed those who are blind for red—red-blinds; those who are blind for green—green-blinds; and those who are blind for violet—violet-blinds. Third, the colour-blindness is slight, no one colour being absent, but the acuteness for all colours, or a part of the colours, being more or less diminished. As to the perception of colours, it may be of some little interest to briefly mention the theory advocated by Mr. W. E. Gladstone and Professor Hugo Magnus. Gladstone, and secondly Magnus, came to the conclusion from evidence derived from the Hebrew scriptures, the works of Homer, and various other ancient books, that as recently as the days of Homer there was no such sense as the sense of colour, and that where we see colour, man in Homer's time could only distinguish differences of luminous intensity, or that at the utmost he could only distinguish red and yellow. Starting from blindness to colour in the primitive man, they proceed to prove that progressive education of the colour sense took place, and that it took place in four stages. In the first stage the eye perceived the difference between red and black; later on the colour yellow was added; in the third epoch green and its varieties became visible; and the fourth stage of development brought us in an acquaintance with blue; and they argue that the colour-blindness of the present day is simply a survival of the primitive condition.

This theory of the post-historical acquisition of the sense of colour by the human race receives but little acceptance, the arguments against it being numerous and to most minds conclusive. One common-sense argument is, that a few hours spent in the British Museum among the mummy cases, and enamelled bricks dug up from the cities of Memphis, Thebes, and Nineveh, afford abundant proof that not only did the people who worked at the designs possess the colour sense, but that they possessed it in its highest degree, although they existed at least six or seven centuries before Homer made his appearance on this world's scene. A second theory as to the perception of colours, the Young-Helmholtz one, is that which prescribes to the eye the possession of three kinds of fibres, stimulation of the first producing the colour red, of the second green, and of the third blue, stimulation of all three fibres in varying proportions producing the intermediate shades and colours. By this theory the absence of the first, second, or third set of fibres produces blindness for red, or for green, or for blue, absence of all producing total colour-blindness. Hering, again, believes that there is no such thing as single blindness for red alone, or for green alone, or for blue alone; but that an individual blind to red is also blind to its complementary colour, green—red-green blindness; and that an individual colour-blind for violet is also blind for yellow—violet-yellow blindness; that instead of there being three kinds of blindness—red, green, and blue—there are only two—red-green and yellow-blue; and his belief has an increasing number of supporters.

My first acquaintance with the subject was in 1880, when serving on the London Committee for Investigating the Prevalence of Colour-blindness, and being struck by the large number of people who, unknown to themselves, were colour-blind, and the subject having much interest to me, I have since worked at it. In an investigation of this kind it is necessary, in order to obtain reliable statistics, to examine a large number of people, and the material has been obtained by examining the inmates of schools and other such-like institutions, and I have to offer my best thanks to the governing bodies for the ready aid that has in every case been accorded me. During the last five years the number examined personally has been 5087. Of these, 3087 were males, 1841 females, and 64 were male and 95 female lunatics. The method of examination has been that recommended by Professor Holmgren of Upsala. It consists in each individual picking out from a large number of differently coloured wools all those wools which have in them any tint of the particular test colour placed before him. The test colours used have been—(1) A very pale pure green; (2) a rose colour (a mixture of red and blue in the proportion of 2 to 1); (3) a brilliant scarlet; (4) an olive-green; and (5) an olive-brown. Now, the large majority of people will, when given the first test, pick out to the very last every skein which has in it any tint of green, however delicate, and they may be passed as perfect; but a certain number will choose some colour, such as grey, or yellow, or red to match with the green, or they will omit to pick out some of the greens. In either case they are referred to the second test, and the majority failing

[1] Read at the Liverpool Medical Institution, March 18th, 1886.
[2] Vol. lxvii., pp. 260–265. [3] Vol. lxviii., p. 611.

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at No. 1 will fail also at this, blue, purple, or blue-green being mixed with the rose colour. Test 3 is now proceeded with, and the majority of those failing at No. 2 will mix with the brilliant scarlet, light- or dark-green and light- or dark-brown. Should any doubt still exist as to the case, Tests 4 and 5 may be given. It will be noticed that in Tests 2 and 3 a certain order appears to be maintained, those mixing blue and purple in Test 2, choosing dark-green and dark-brown in Test 3; while those who match blue-green with Test 2, choose light-green and light-brown with Test 3. This gave rise to the separation of colour-blindness into the two divisions, the one being called red-blindness, the other green-blindness.

For my own part, I am assured that the division is misleading, and for practical purposes it is not necessary. Examining the numbers critically, of the 3087 males tested, 179 failed at Test 1, either by omitting greens or by putting in some other colour. Of these 179, 74 passed successfully the remaining tests, and may be considered to have but a very slight chromatic defect, which may be disregarded. It was a matter of surprise to me that so many failed at Test 1 who passed the subsequent tests correctly; and I can scarcely think the errors due to ignorance of what was required of them; for in these cases each individual was shown the correct colours to pick out, and each case was given at least three trials. At the same time I am willing to admit that ignorance in a few of the cases may have been the cause, and that in these few cases further practice in colours might enable them to do the test correctly. Rejecting, therefore, the 74, we have 105 cases of colour-blindness—a percentage of 3·40. Going more into detail: of the 105 cases, 64 failed in Tests 1, 2, 3, and 4; 22 in Tests 1, 2, and 4; 11 in Tests 1 and 4; and 8 failed in Tests 1 and 2. Of the 1841 females examined, 3 only were to a greater or less extent affected—·162 per cent. One was a case of total colour-blindness—a very rare condition in the female sex; one was a red-blind, and the third was very slightly affected. Leaving the latter case out, we have two pronounced cases, or ·108 per cent. The percentage of 3·40 in males, as against ·108 in females, shows at a glance the striking difference in the two sexes to the liability of colour-blindness. In addition to these numbers, I have examined 64 male lunatics, finding one complete and one incomplete case, and 95 female lunatics, all of whom were correct. A certain number of policemen also have been examined and colour-blinds found amongst them, but all not having submitted to the test, it would be useless to draw conclusions from a part. The social status of those examined has varied from the lowest to the highest, and the age ranges from five years upwards, the large majority being under twenty-one.

Besides those included under the head of very slightly colour-blind, there were others whose colour perception was feeble. Amongst the lower social grades as represented by the children in orphanages and reformatories, a very considerable number made mistakes in the examinations, and these errors were made not only by those of dullish intellects, but also by those who, according to their mistresses, were sharp girls. Cases such as these have been retested after some months' tuition in colours, and in most cases where ignorance was suspected the second trial has proved the correctness of that conclusion; but there were others, who although they did the test, did it with the utmost difficulty. It is therefore very necessary, as Dr. Joy Jeffries of Boston points out, in his admirable work on colour-blindness, not to confound ignorance of colours with colour-blindness; and this may easily happen, he remarks, "if sufficient care is not taken by the examiner, for carelessness and stupidity simulate colour-blindness closely, and unless every precaution is taken, cases may be marked as colour-blind, or as at least partially so, which are not really deficient in the colour sense." Of the 105 cases of colour-blindness, not one so affected was aware of the defect, and I may remark in passing, that a number of them do not believe it to this day. It may seem curious that people who cannot distinguish as different colours red, green, and brown, and in some few cases blue and yellow also, do not themselves discover their peculiarity in their vision for colours; yet strange as it may be, so it is, and you will find it the exception for a colour-blind to realise in the first instance the defect himself.

In the majority of occupations it matters little whether a person is colour-blind, or not; but, on the other hand, there are some occupations where a perfect colour perception is essential, and I refer now to the two classes sailors and those employed on the railways. I take it that all will agree that individuals employed in either of these positions of life should possess in its highest degree the colour sense, and that none but these should be admitted into these services. We will now see what is the amount of care taken so far as sailors are concerned. Of the 3087 males examined, 788 were either sailors or were being educated as sailors in training ships, or were inmates of the Liverpool Seamen's Orphanage. Of these 788 there were no less a number than twenty-eight colour-blind, giving a percentage of 3·553, a larger percentage than is given by the whole. On board the training ship *Conway*, out of 154 boys two were colour-blind. One, aged fourteen, had been on board two years; the other, aged thirteen and a half, had been there eighteen months. Both were fond of the sea, both were unaware of their defect, and both (on their friends being informed of the matter) were removed from the ship. On the training ship *Akbar* there were four colour-blinds in 148 boys. On the training ship *Indefatigable*, out of 238 boys twelve were colour-blind to a greater or less extent, the ages of the lads ranging from twelve to sixteen. Many of these boys, but for the accidental examination, would have been drafted into the mercantile marine, and in future life many, if not all, would have had on occasion to act promptly. Coming nearer home, it will scarcely be credited that of forty-eight of the Birkenhead ferrymen two were colour-blind, yet such is the case. One of them, J. A——, aged forty-three, has been a seaman all his life. For fourteen years he was master of a flat, and for the last seven years he has been in the employ of the Woodside Ferry Company, and in the position of mate has on many occasions taken charge of the ferry boat. Both of these men on being tested with coloured lights as often as not called the red lights green and the green lights red. The practical outcome of this therefore is that any man, whether he be colour-blind or not, may be a sailor, and as such is permitted to risk the loss of property which would carry with it in many cases the loss of life also. It might be answered, Yes, but an ordinary sailor does not have command of a vessel; that is entrusted only to the officers—the captain and the mates,—and they cannot obtain their certificates as such until they have passed the Board of Trade examination in colours. Granted; and we will now inquire into the Board of Trade examination.

In 1877 the Board of Trade came to the following conclusion, "That all candidates for examination for a master's or mate's certificate shall pass a test examination as to their ability to distinguish the following colours which enter largely into the combinations of signals by day or night used at sea—namely, black, white, red, green, yellow, and blue," and they state that they "have been led to this decision because of the serious consequences which might arise from an officer of any vessel being unable to distinguish the colours of the lights and flags which are carried by vessels." Since 1877, therefore, on a sailor wishing to become an officer, he is tested by a Board of Trade official as to his colour vision, the Board of Trade examiner usually being a retired officer. I have the official return of the Board of Trade of all those who, on applying for certificates, were found defective between May, 1879, and May, 1884, and it will be found that eighty-five were rejected on account of colour-blindness. Of this number, thirty-nine again applied, and twenty-six of them passed on the second examination, thirteen being rejected, and of these thirteen, five on again presenting themselves were allowed to pass on a subsequent occasion. Therefore, of eighty-five colour-blinds as recognised by the Board of Trade, thirty-one eventually passed and were granted mate's or captain's certificates. Now, it is admitted by all authorities on the subject that congenital colour-blindness is incurable, or that once colour-blind always colour-blind, and we are driven by the Board of Trade official statements to one of two conclusions, either the twenty-six men rejected for colour-blindness at the first, and the five rejected also at the second, examination, but who subsequently passed, were not colour-blind, or that we have officers in the mercantile marine who are colour-blind. The following case will aid us to decide the point.

Mr. A. B——, aged twenty-nine, called recently to ask if he was colour-blind. He went to sea when fourteen years old in the White Star Line, and when twenty-one years old obtained his second mate's certificate. Shortly after he went in for his first mate's certificate, but was rejected for colour-blindness, and on three subsequent trials he has also failed. But he has his second mate's certificate, and as second mate he has regularly sailed in the employ of four large teamship companies sailing from this port, and in his

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turn of duty has entire command of his ship. This gentleman is a complete colour-blind, and is still sailing as second mate. In justice to the steam-ship companies I must remark that they are unaware of his defect. I could mention other illustrative cases, but I have I think brought forward sufficient proof, not only of a danger that does exist, but also that adequate care is not taken, in the case of sailors, to guard against that danger. And the danger is no myth, though many are inclined to think that it is much exaggerated. The number of sailors in Liverpool has been calculated for me by Dr. Hope, the assistant medical officer of health, to be 27,136. Taking 3·40 per cent.—the percentage found in the 3087 cases—to be colour-blind, we have a total of 922·99 men in that line of life who have not an accurate colour perception.

In a very able article[4] Dr. Brailey points out that the regulation side lights on a vessel, the red and the green, should be recognised in clear weather at a distance of two miles, and that in the case of two vessels meeting at night, until therefore they are within two miles of each other, they can get no indication of their relative positions. That if the night is not clear or the lights badly trimmed, the distance at which the lights can be seen is greatly diminished. Supposing two steamers going at a rate of twelve miles an hour (the Holyhead boats travel at the rate of twenty), he points out that they would meet in five minutes, a short enough time for a course to be altered. If therefore there is any hesitation on the part of those in command, a calamity such as has recently occurred may take place. The subject is one that may be worked at by all, and one that would be found of interest by all, and as the medical profession have generally been the means of pointing out existing dangers, so in this case I expect it is only through them that this subject will attain the attention due to it.

HÆMATURIA FOLLOWED BY RETENTION OF URINE.

By HENRY GRAMSHAW, L.R.C.P.L., M.R.C.S.

E. R——, aged sixty-nine, of Lowestoft, a stout, fairly healthy-looking tradesman, called at my surgery to consult me on Sept. 5th, 1880. He complained of some difficulty in micturition at night, and remarked that the fluid he voided was dark in character, and somewhat diminished in quantity. I gave him a purgative, and prescribed a gallic acid mixture with henbane and infusion of buchu. He called again on the 7th, bringing with him a bottle of coffee-ground-looking fluid, evidently urine, mixed with blood, and said he felt a little better, and rested longer at night, since taking the medicine. On the 9th he called to say he was much better, and that the urine was almost clear again. On Friday, the 10th, he presented himself with a less favourable report, and brought more urine, charged with blood, as before. He has been continuing his medicine, with the addition of some acetate of lead and opium pills, but without experiencing much benefit from it. He had rather imprudently taken a railway journey to Yarmouth on the Thursday, and sat up late; further on in the day he sent for me to visit him at his house, but being absent at the time, my assistant went, and, finding that the patient was unable to micturate, he passed a No. 8 gum-elastic catheter, and drew off about four ounces of bloody urine, which apparently afforded him much relief. This was at 5 o'clock. An hour later I saw him myself, and found him walking about the room in great distress. I passed a catheter, and drew off about a teacupful of bloody fluid. I tied the catheter into the bladder, and left him. Between 12 and 1 o'clock I was sent for again to see the patient, and my friend Mr. Clubbe kindly met me in consultation. We decided to give him a mixture containing opium and ergot, and to leave the catheter *in situ*; there was a small quantity of fluid oozing from it. On Saturday, the 11th, I found the patient had passed a tolerable night, with occasional sharp paroxysms of pain. The cloths and bedclothes were saturated with blood and urine, which had flowed down the catheter. I had them removed, and placed the end of the catheter into a glass bottle to ascertain the amount actually passing. At my mid-day visit I found that about eight ounces had escaped. I emptied the bottle, and replaced the catheter. About 9 o'clock the same evening Mr. Clubbe met me again. No urine had passed since my last visit, a space of eight hours, and we decided to withdraw the instrument, expecting it had got plugged, and to substitute a fresh one. We passed both gum elastic and silver prostatic catheters consecutively into the bladder, but no fluid came away, and we felt a little doubtful if by any chance a false passage had been made, though it did not appear so, as no difficulty was experienced with the catheter.

Not to be tedious, I will briefly say that during the next day (Sunday) Mr. Clubbe and I made several attempts to empty the bladder, but failed to do so, and we were a little surprised to find, as time passed on, that our patient's symptoms were not more urgent than they appeared to be, as the retention was complete. The pain, such as it was, he felt principally at the end of the penis, there being comparatively little about the vesical region. The grave aspect of affairs led us to deliberate on the next best mode of procedure; and we asked ourselves the question if it would be wise to proceed to puncture the bladder per rectum or otherwise. Having laid the facts before the relatives, I counselled them to allow me to telegraph for Mr. Cadge of Norwich to assist us with his opinion and advice in the emergency. Consent being given, that gentleman came over and saw the patient, with Mr. Clubbe and myself, at half-past ten on Monday the 13th. Just before his arrival a little additional light was thrown on the case in consequence of the patient having passed in a clot of blood about twelve small calculi. The history of the case up to the present time having been laid before Mr. Cadge, he at once gave it as his opinion that the patient's bladder was fully distended and blocked up with clotted blood, and that in all probability when catheterism was performed, the catheter went fairly into the bladder, piercing the blood-clot, which was too solid to flow down it. He said he was strongly averse to puncturing the bladder by the rectum in the case of an elderly, fat man, with prostatic enlargement, as it would probably be a procedure attended with no benefit, and, if need be, he should prefer either to puncture the bladder above the pubes or to aspirate it—which latter might be considered a more new-fashioned plan of procedure; but before electing to undertake either operation, he would try what could be done *per vias naturales*—i.e., by the urethra itself.

Accordingly Mr. Cadge passed a No. 8 (with an unusually large eye), and afterwards a No. 10, into the bladder without much difficulty. A very little currant-jelly-like fluid escaped. After a long and most painstaking process of breaking up the clot in the catheter with a stilette, and gradually and judiciously forcing the clot down the catheter by firm and yet gentle pressure on the bladder, there was discharged a chamber utensil half full of clotted blood, mixed with ammoniacal-smelling urine, giving the patient substantial relief. The proceeding itself involved fully two hours of patient and skilled manipulation on the part of the operator, at the end of which time the patient fell back and slept comfortably for several hours. At 9 P.M. a similar process had to be repeated by Mr. Clubbe and myself.

Sept. 14th.—10.30 A.M.: Patient has had a very restless night; complains of more intolerance of the loaded bladder than he did previously. When the catheter is passed clot and thick treacly liquid comes at first, but little else; aided, however, by Clover's catheter with elastic suction-bottle, after first throwing into the bladder a little warm water, I got the patient to stand up, when a stream of bloody urine flowed down the catheter, amounting to twenty ounces or more. 8 P.M.: Used Clover's catheter again this evening. Patient passed more urine than he has yet done, and of a better colour and greater fluidity. There has also been free action of the bowels. The patient can take only milk. Gave him an opiate at night.—15th: Patient better; appetite returning. A considerable quantity of bloody urine withdrawn three times during the day by catheter. Ordered camphor and hyoscyamus, five grains of each, at bedtime, and to take the following three times a day: Solution of dilute sesquichloride of iron, twelve minims; water to one ounce. From this date the patient got slowly better, requiring catheterism three times a day for nearly a month, after which time he quite regained his usual health.

Remarks.—I have been tempted to give the details of this case rather fully, because it is the sort of case one might meet with any day in practice, and would always give the

[4] Brit. Med. Journ., Nov. 24th, 1883.

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surgeon in attendance considerable anxiety. It also exemplifies the advantages of patience and perseverance. I gathered from Mr. Cadge's remarks that in all cases where retention of urine from the presence of a large quantity of clotted blood in the bladder took place he would be disposed to temporise, believing sooner or later that the clot would liquefy and break down, and be removable by means of a good-sized large-eyed catheter.

Walton-on-the-Naze.

THE SIGNIFICANCE AND TREATMENT OF CERTAIN FORMS OF ALBUMINURIA.

BY A. G. AULD, M.D.

Acute Albuminuria.—Acute albuminuria or acute nephritis is a remarkable disease. Excepting its occurrence from the scarlatinal or other specific poison, it is in the great majority of cases ascribed to "cold and wet." Yet of a hundred cases of exposure to these agencies probably not more than one will be visited by this disease. Again, in scarlatina no adequate reasons can be given for its development in any particular case. It must therefore be confessed that its intrinsic causes are unknown; and not only so, but likewise the *modus operandi* of these causes *ab initio*.

Looking, then, at the known facts, increase of arterial tension is the first observable symptom. Occasionally there is hæmoglobinuria. The invasion may take place insidiously, unattended with any constitutional disturbances perceptible to the subject, who may be suffering from debility; or sudden and fierce, giving rise to grave constitutional states. In the asthenic form, dropsy is usually the first symptom noticed by the patient if his attention be not previously drawn to the state of his urine. But, however established, uræmia is equally liable to supervene, and may even be the first symptom to give the alarm.

These modes of onset of this disease are not without parallel. For instance, it is known that acute pneumonia, though in the majority of instances having a sudden onset, may yet be creeping into a lung, and become pretty extensively established before the individual be sufficiently ill to think of leaving off work. There are also other striking points of resemblance in the natural histories of these diseases.

I suppose there is no disease of which it may be more truly said than of nephritis, that it spurns our artificial medication. Many persons pass safely through it without ever seeking medical aid; and when treated, if happily it should disappear, that result is of course by many set down in orthodox fashion to the particular remedy or remedies employed. It is not so very long since many highly respectable practitioners prescribed a course of mercury in this disease, and, *mirabile dictu!* very often with the result of a cure. It is a good thing that Nature still works as heretofore.

The eminent Sydenham, treating of the dropsy, remarks that the curative indications are to evacuate the water and to strengthen the blood.[1] The first of these he fulfilled by speedy and smart purging, provided the patient was strong if of a weak habit, he found purgatives harmful, and resorted to diuretics and strengthening medicines. This mode of treatment was that generally adopted up to the time of Christison. Since then diuretics have fallen into comparative disuse, while the purgatives have been retained, which, together with hot baths, starvation diet, the imbibition of large quantities of water or other harmless fluid, and occasionally bleeding, form the cardinal measures now in use.

Unfortunately it has become the practice of many to adopt most or all of these heroic measures in every case of acute nephritis. It is said that diaphoretics and purgatives do the work of the kidney. That to some extent they do so cannot be gainsaid. They do produce a transient and superficial relief, but it is equally certain that their indiscriminate use is often productive of the greatest harm, especially if indulged in for any length of time. There are doubtless contingencies wherein one or other of these heroic measures are called for; where, namely, pyrexia runs high, where vascular tension overleaps the bounds of safety, where the march of uræmic symptoms is unchecked by the natural means, or where the advancing tide of œdema threatens to invade the vital organs. But each case is to be dealt with on its own merits, and the weakly will often quickly recover on tonic treatment, while irretrievable damage might be inflicted by any such exhausting processes as a course of purgatives and hot baths.

Whatever benefits are supposed to accrue from the energetic means so universally adopted, it is certain that physiologically they are antagonistic. The hot bath causes a great increase of the general blood-pressure and of the temperature, a bounding heart, with distended vessels and injected capillaries. Purgatives and antiphlogistics cause lowering of the blood-pressure and of the temperature and a depressed heart; while fluids imbibed in quantity heighten pressure and dilute the blood. I think, to pursue such a course of treatment can scarcely be justified on scientific grounds. Where is the *rationale* of placing cupping-glasses over the loins and then filling the kidneys with blood, of abstracting the water of the blood and then pouring water into it?

There is one of these agents, however, which must be discussed more in detail, and that is the hot bath. Senator has proved that when the temperature of an animal is raised by from 1·5° to 3° C. albuminuria results; and if the temperature be very rapidly raised to an extreme degree, blood and often hyaline and granular casts are present in the urine.[2] Albuminuria also occurs in the human subject from a very high bodily temperature. The kidneys being greatly distended with blood, rupture of capillaries is liable to take place. Yet hot-water baths, sufficient to produce these effects in some measure, are employed for the cure of inflammation of the kidneys. The warm bath, with its many beneficial effects, is set aside in favour of baths which cause an enormous rapidity of the pulse-rate and respiration, and sustain a great height of temperature; indeed, lately a St. Petersburg physician for these very reasons strongly advocates the use of hot water in preference to hot air or wet packing.[3] It is also an interesting fact that cases of scarlatinal albuminuria are most frequent during hot, relaxing weather, as the statistics of the London Fever Hospital show, and very frequently apparently healthy persons pass a little albumen in these circumstances. This being so, another method must be sought for the production of diaphoresis, and nothing is more admirably fitted for this purpose than the hypodermic injection of pilocarpine. Given in doses of from a quarter to a third of a grain, profuse diaphoresis is induced, without any vascular stimulation, but, on the other hand, with fall of tension. If, however, smaller doses are given, there is an initial stage of stimulation, which quickly passes off. Not only is this the best remedy for dropsy, but also for threatened uræmia and for uræmic convulsions, should purging prove ineffectual.

So far, then, as I have observed, I should prefer to adopt in the first instance a somewhat expectant plan of treatment in this affection. In the early stages, should no urgent symptom arise, small doses of aconite will suffice, with due attention to diet, which should be fairly nourishing and include abundance of milk. Should the disease threaten to become subacute, abundant nourishment, with cod-liver oil and iron, should be administered. I could relate several instances, some of them amusing, of patients who were kept in bed half starved, and steamed for weeks, with but little amelioration of their symptoms, who got up and returned to their usual diet and modes of living, and speedily recovered.

Acute albuminuria may terminate suddenly or gradually. Complete recovery may ensue after the dropsy has been six months or even a year established; and it may occur many times in the course of a life without causing any chronic affection of the kidneys. If, however, the disease should attack one who has got diseased blood-vessels, however slight, he can never perfectly recover.

Albuminuria of Debility.—If a medical man examines the urine of all who may consult him without reference to any disease of the kidney, he will frequently find albumen. In the majority of cases he will also be able to discover its cause. I wish to notice here the form of albuminuria associated with debility without any renal lesion. A great many cases of transient albuminuria and so-called cyclic albuminuria, which are variously ascribed to impure blood, slight congestions from cold, dyspepsia, nervousness, and other causes, also called albuminuria of adolescents, may shortly be said to be due to debility. In a strong person, a nervous

[1] Works, edited by Swan, pp. 593-595.

[2] Senator on Albuminuria (New Sydenham Society), pp. 49-50.

[3] THE LANCET, 1885, vol. ii., p. 1016.

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shock, or gymnastic exercise, or a night's dissipation will not likely be followed by albuminuria. But if the tissues be vitiated, various states of the nerves and vessels arise which readily explain its occurrence. It will thus be found sometimes due to the mere nervousness many persons experience on coming into the consulting-room. By systematically examining the urine of as many patients as possible, I have been fortunate enough to discover a few presenting this form of albuminuria, but cannot say that I have observed anything which justifies the application of the term cyclic to them, unless it be the absence, as a rule, of any albumen in the evening and morning. The albuminuria appears with the exciting cause, and varies with the general health. It is doubtless due either to spasm or paralytic dilatation of the renal vessels. "Whenever," says Hutchinson, "the circulation is specially liable to reflex derangements, and congestions or their opposite occur with unusual facility, we are safe in declaring that the tone is low. It is part of the nervous system to duly regulate the supply of blood to various parts, to prevent local arterial spasm, and under the varying conditions of daily life to maintain the normal balance of the circulation. When this power is deficient, the various causes of disease act with increased effect."[4]

Regarding the treatment of these cases I have seen the albumen entirely disappear after a course of cod-liver oil. Abundant nourishment should be taken and a good amount of exercise. There appears to be nothing so very remarkable about them as some would suppose, and it is not improbable that a little albumen is now and then passed by everyone in sufficient quantity to be easily recognised by ordinary tests.

Wick, N.B.

MEASLES DURING VACCINATION.

By A. K. CHALMERS, M.B.,
LATE PHYSICIAN-SUPERINTENDENT, JOINT BURGHS FEVER HOSPITAL, MARYHILL, GLASGOW.

It seldom happens that the date of exposure to the contagion of measles can be fixed so accurately as in the following series of cases.

On April 20th, B——, a child, two months old, was vaccinated, and on that day week had two well-developed vesicles. It seemed in perfect health, and three children were vaccinated from it by the direct method. On the following day, after a few hours' fretting, a measles rash appeared and followed a normal course. There were no distinctive premonitory symptoms, and the course of the vaccine vesicles was not affected by the measles. Of the three children vaccinated from this infant, one, F., five months old, developed a typical measles eruption on the afternoon of the eighth day of vaccination (May 4th). No stage of premonitory symptoms, and course of vaccine vesicles unaltered. Another of the three, H., five months old, had some lacrymation on May 4th (one week after vaccination), was restless and sneezing during the following day, and on May 6th presented a blotchy and ill-developed rash of measles on the trunk and limbs. The vaccine areola here was of considerable size and hardness. The third child (S.) displayed a papular eruption (vaccine lichen) in the second week, but no measles, and may now (three weeks after exposure) be assumed to have escaped the infection. In connexion with the child H., another case arose in an infant of a few days. This patient, the child of a neighbour, was born on April 26th. On May 6th it vomited, and on the 7th was completely covered with a typical rash of measles, which followed the course of a normal one in older children. From May 2nd a hoarse "measly" cough was present. When the child first mentioned developed measles, it became of importance to watch the probable inception of the disease in the others. They were children of families living widely apart, and only brought in contact for vaccination. The vaccinifer, as afterward appeared, was then in the pre-eruptive stage of measles, but no catarrhal symptoms had developed. What part, if any, would the lymph play? Could it act as carrier of poison from a source which had given no indication of being contaminated? If the children vaccinated from this one became infected, how had the contagion reached them.

The fourth case related, in the child of eleven days, suggests, if it does not determine, the manner of infection. The rash here followed, within twenty-four hours, its appearance on the neighbour's child (H.); and unless the incubation period of measles can be reduced to a vanishing-point, these two cases have only an accidental relationship. Indeed, this youngest child seems to come within the primary circle of infection, and to have derived its infection indirectly from the source which affected the children F. and H. How far, however, the first case may be held as causing the others is uncertain. We recognise the pre-eruptive stage of measles as probably the most infectious, but catarrhal symptoms have been held necessary to fix the beginning of the infective period. This child had no such stage; the eruption was amongst the earliest symptoms. The other children of its family went through an epidemic of measles about six months before. In the interval they removed from the house they then occupied, but carried the contagion with them. A passing depression of the child's system, consequent on vaccination, supplies the necessary fuel, and the poison awakens to fresh activity. But unless we regard the clothing of this child or its mother as containing the contagion which infected two of the children vaccinated from it, and by transmission, in the clothing of the child H. or its mother, reached the newly born infant, we must accept an infective period, preceding the eruption of measles, which is non-catarrhal, and has no symptoms by which it can be recognised. The child which escaped infection is probably an example of the possibility of pure cultivation of vaccine virus in an infected medium.

Mossend, Lanarkshire.

[4] Pedigree of Disease, p. 131.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

FISH AS AN INVALID DIET.

By J. STUART NAIRNE, F.F.P.S.G.,
SURGEON TO THE GLASGOW SAMARITAN HOSPITAL FOR WOMEN.

In the summer of the year 1879 I attended a young gentleman in Crosshill suffering from typhoid fever. The course of the disease was very sharp, but he came favourably through it; and when I left for my holidays, four weeks after the commencement of the disease, he was regarded both by myself and another medical man as convalescing. Less care was then exercised with regard to regulating his diet, and the medical attendant called only occasionally to see him. He partook of fresh white fish, and of only a small piece for breakfast. During the same evening my friend was called in hurriedly to see him. There had been a sudden rise in temperature, a relapse of the fever, with dark-coloured stools, and he died in a few days.

Last summer the sister of a medical friend in the country took ill of typhoid fever of a lingering type, with a not very exalted temperature. She seemed to be convalescing favourably, although slowly, when she was given a little fresh fish, boiled. The fever assumed an acute form, she suffered from pains in the bowels, followed by dark-coloured stools, and she died in about ten days.

A little boy in Pollokshields had a mild attack of gastric fever. The temperature was never very high, languor, debility, and wasting being the prominent symptoms. At the end of three weeks he seemed to be progressing favourably, and I had diminished my attendance on him. He had a small piece of fish given him, which was immediately followed by a relapse of the fever, an aggravation of all the symptoms, and pain in the abdomen. It was fully three months before he recovered, although previously to his taking the fish I could have pronounced him to be well.

A young lady was suffering from hæmatemesis, the result probably of a gastric ulcer. She was reduced to an excessive degree of pallor. Her diet was regulated, and she took Morson's pepsine. She seemed to make a good recovery, and I ceased my attendance for several days. In the interval she had broken through the regulations for her diet, and partook of a little fresh fish, as being, she said, a very light diet. She afterwards became suddenly ill, and vomited a large quantity of blood; she also passed dark clotted blood at stool.

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An old gentleman in Mount Florida suffered from what was presumably malignant disease of the pylorus. He both vomited and passed dark blood at stool. Palliative measures were adopted, and his diet was regulated. Fish, which had not been particularly forbidden, was partaken of one day, and this was followed by excessive vomiting of blood and by death.

A lady in Glasgow is at present suffering from what has been variously diagnosed as disease of the stomach, pylorus, omentum, and liver. At any rate she is jaundiced, wasted, and subject to severe pains and sickness shortly after taking food. She feels frequently very sick, vomits frothy fluid and dark bilious matter, and occasionally passes decomposing, loose, bloody, dark matter of a most offensive smell. On every occasion on which she has partaken of fish these symptoms have been aggravated if present, and have been brought on if absent.

Cases such as these have been continually cropping up and causing great anxiety. It seemed to me that, under any circumstances of debility, fish, instead of being a genial diet, is a very dangerous one, and I had got into the routine practice of almost always forbidding it; but I have been induced to put these cases on record because I believe now that it is the preparation, the cooking, of the fish that is at fault, and not the fish itself. Recently I have been able to see all the recognised benefits of this diet from using it steamed, and not boiled. And for this hint I am indebted to the intelligence of a patient. I had, as usual, forbidden fish to be eaten, explaining my reasons. I was told that fish steamed, as was done in that house, was as tender as could be, and never disagreed with them. The fish so prepared was partaken of both with relish and benefit. I got a steamer for myself, have recommended this plan of cookery to my patients, and have had satisfactory results. Dieting is the half, and sometimes the best half, of medical treatment; and, perhaps a little to my chagrin, I find that this system of preparing fish has been specially recommended by various schools of cookery. Perhaps, however, many medical men, like myself, may be unaware of the fact, simple as it is, that boiled fish, fried fish, and almost any other kind of cooked fish, are all inferior in digestibility to steamed fish. The kettle[1] I have used is a simple and efficient steamer. The fish is never touched from the moment it is put on the drainer in the kettle till it is cooked, and the drainer is so constructed that it can be removed from the kettle with the fish and placed upon the dish for the table.

I have ventured to put these few cases on record both on account of the dissatisfaction I have had formerly and the satisfaction I have now in ordering a cheap, nourishing diet.

Glasgow.

NOTE ON A RARE DISLOCATION OF THE ELBOW-JOINT.

BY C. GEORGE BATTISCOMBE, M.B., C.M. Aber.

ON April 9th I was called to see a gentleman who had met with an accident while hunting. I found him lying in a field, and was told that his horse, after jumping a fence with a long drop, had fallen over backwards upon his right arm and leg. He complained of great pain in the elbow-joint on the slightest movement. It was very much altered in shape, and evidently severely injured. I secured the arm in a sling, and had him removed to the Cottage Hospital (Chislehurst, Sidcup, and Cray Valley), which was close by.

On his arrival at the hospital I examined the arm, and found it in the following condition. The forearm was fixed at rather more than a right angle to the arm; all power of natural movement of the elbow-joint was lost; and any attempt at forcible movement caused great pain. The hand was partially pronated, but on turning it pronation and supination could be readily performed. The elbow-joint appeared too wide from within outwards and from before backwards; it presented two prominences below, an inner and outer, and one above the latter, which projected backwards and was continuous with the forearm. The inner angle of the joint was too high, so that the arm appeared to be shortened. There being no amount of swelling, the following points could be clearly made out. The ulna and olecranon were missing from their natural position in relation to the humerus, the two condyles of which could be distinctly felt with the notch between them. The ulna and olecranon were resting fully half an inch above the external condyle of the humerus, the elbow projecting about an inch beyond the latter. The radius could be felt above with its head resting against the outer border of the humerus. It was not separated from the ulna, and rotated readily on pronating and supinating the hand.

I put the patient under chloroform, and carefully examined for any fracture. I could find none whatever, and concluded that it was a case of complete dislocation outwards of both bones of the forearm. I then proceeded to reduce the dislocation. Grasping the forearm with one hand, and the elbow with the fingers of the other, I pulled it steadily downwards, endeavouring to get the olecranon over the external condyle. It took some minutes to do this, and required a good deal of force. Then, holding the olecranon below the condyle with the left hand, I seized the forearm lower down and used it as a lever, and while forcibly extending the forearm I rotated it outwards. On continuing the extension, the olecranon suddenly slipped into its natural position. The joint immediately answered to all its proper movements, but when left alone tended slightly to return. I fixed it at a right angle on a posterior angular splint.

When I called in the evening the patient was free from pain, and complained only of a feeling of numbness in the arm and hand of the injured side. The next morning, when I arrived at the hospital, he had gone home; but I ascertained that, beyond the numbness and a little swelling, he was very comfortable. A week afterwards he was doing well, could move the joint pretty freely, and was free from pain.

Complete lateral dislocation of both the bones of the forearm is, I believe, extremely rare. I have seen no description of it, though it is mentioned in several surgical works.

St. Mary Cray, Kent.

HYSTERIA OR TETANUS?

BY JAMES LAFFAN, L.R.C.S.I.

THE following case presents some interesting features:—

On Easter Sunday last I was hurriedly called to attend a young girl, a servant, who had been accidentally shot. I found her lying on a bed bleeding profusely from a large ragged wound, which seemed to have carried away the greater part of her right cheek. She had received the contents of a gun—a large charge of small (No. 6) shot—discharged at a distance of not more than four feet. It being late in the evening, I satisfied myself that there was no fracture of importance, and merely arrested the hæmorrhage.

Next day I found that the charge of shot had struck between the molar teeth of the upper and lower jaws, which must have been in apposition at the moment. The teeth were uninjured. The pellets glancing off the teeth had distributed themselves in every direction. Some had gone almost vertically upwards, breaking off the inner end of the zygoma, and finally lodging themselves beneath the eyelid in the inner angle of the orbit. Others had been deflected downwards, others back as far as the parotid gland, others again forward to the angle of the mouth. A few had penetrated deeply through the canine fossa, and lodged themselves beneath the zygoma. All the muscles of this side of the face were more or less bruised and lacerated, and there was much sloughing.

After three days' incessent poulticing and syringing all the sloughs and foreign bodies came away, leaving a clean, healthy wound. I extracted in all 311 shot. On the fifth day the patient complained of a good deal of pain about the jaw, also of stiffness in that region (the latter was attributed to the bandages), and of a burning pain in the stomach. On the sixth day she was seized with violent tetanoid convulsions. I was sent for, and on my arrival found her in a state of perfect rigidity, moaning with pain. Opisthotonos was well marked. I gave chloroform, and after a little while the spasms ceased. I then ordered her full doses of bromide of potash and chloral hydrate. She was quiet until the next day, when she was again seized with similar symptoms. They again yielded to chloroform. She was attacked again twice during the night of that day, but much less violently. Her condition was one of stupor now, from the effect of the hypnotics. The following day

[1] Patented by Orme, Evans, and Co., of Wolverhampton.

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she had a slight rigor, which recurred faintly during the night. I kept her under the influence of the bromide and chloral for four more days, gradually diminishing the dose, and she had no further bad symptoms. The wound has now completely cicatrised, and a parotid salivary fistula, which threatened to be troublesome, has ceased its discharge.

There is no previous history of hysteria, but the girl was fanciful and obstinate. I hesitate to believe that this was a case of pure tetanus, there being such an extensive area of peripheral nervous irritation and so much tissue destroyed—tissue which has such intimate relationship with important ganglia. I am inclined to believe that had neuritis been set up, followed by tetanus, a fatal result would have been inevitable. This girl, however, completely recovered under very ordinary treatment.

Larnaca.

WOUND OF THE ORBIT.

By WM. FRASER, M.B. Dub.

THE following note may interest your readers as showing what escapes some people have.

Harry H——, aged eleven years, was brought to me at 5.45 P.M. on May 24th last, the schoolmaster saying that the boy was running with others to school, and while climbing the gate he slipped, running a slate-pencil he had in his hand into his eye (this was about 3 P.M.). On raising the upper lid of the right eye, I could see the end of a slate-pencil protruding at the inner canthus, between the lower lid and sclerotic, the direction being downwards, inwards, and towards the nose. With a forceps I was just able to catch it, and it took a steady, hard pull to extract it, the point being tightly lodged in the bone. It measured 1⅛ in., 1½ in. being out of sight. The wound was dressed with benzoic acid on damp cotton-wool.

May 25th.—Not much swollen; no ecchymosis at all. The boy can see quite clearly. There is a little tenderness towards the bridge of the nose.

27th.—I cannot detect where the pencil entered. The patient feels quite well.

30th.—All swelling gone; no pain—in fact, he has quite recovered, and resumes school to-morrow. He has not complained of the eye since.

Ashburton.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias colligas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. THOMAS'S HOSPITAL.

A CASE OF CYST OF THE BROAD LIGAMENT AND ONE OF HYDRO-SALPINX; ABDOMINAL SECTION AND RECOVERY IN BOTH.

(Under the care of Dr. GERVIS and Mr. SYDNEY JONES.)

THE following cases are not only interesting in themselves, but form important contributions to the department of surgery to which they belong. In both the symptoms and physical signs were somewhat alike, and it was only after removal and careful examination of the parts removed that the exact nature of the disease could be determined in the first case. In Case 1 the symptoms had existed for six, and in Case 2 for four years, and during that time the patients had been almost completely incapacitated from exertion of any kind. Since operation they have been free from pain and enabled to perform the ordinary duties of their position. A curious feature during the after-treatment of both patients was the difficulty experienced in keeping them quiet; they appeared unable to exercise any control over their actions. For the notes of the cases we are indebted to Mr. Leonard Wilde, dresser.

CASE 1. *Cyst of the Broad Ligament; Cystic Degeneration of both Ovaries; Removal of Ovaries and Appendages; Recovery.*—E. D——, aged thirty, married, a Welshwoman, was admitted under the care of Dr. Gervis on Jan. 5th, 1886. There was a strong history of phthisis in the family, two sisters and a brother having died of it. Her health had never been very good; she had always had a good deal of cough. Two or three years ago she spat up a little blood from time to time with the cough. She had not suffered from night sweats, and for the last year or so the cough had been better. The catamenia began at the age of fourteen, and have been regular, lasting about three or four days. She has been married six years, and has one child five years of age. The confinement was difficult, forceps being required. Ever since that time she has had to keep her bed more or less, being unable to sit up. The catamenia recommenced two months after her confinement, and every fortnight since she had lost a good deal, the period lasting from five to nine days. She complained of burning pain in the back, loins, and thighs, and severe itching of the vulva. The pain was worse during the periods. The bowels were usually constipated, and the patient suffered severe pain during defecation. Occasionally she had difficulty in passing urine, but now and then micturition had been too frequent, and accompanied with pain; sometimes there had been incontinence. The sound passed easily into the uterus, which appeared normal. An oval, tender tumour, resembling a prolapsed ovary could be felt in Douglas's pouch. The abdomen was not distended, but there was slight dulness in the left iliac region, which was very tender to the touch. There was no difference in the two sides on measurement. The lower margin of the liver extended for some distance below the ribs, and there was some epigastric tenderness, but the other organs appeared healthy.

After consultation with Dr. Gervis, Mr. Sydney Jones took the patient under his care on February 19th, and performed abdominal section on the 23rd. Under full antiseptic precautions an incision about two inches in length was made in the median line above the pubes, and after opening the peritoneum and examination of the uterine appendages, this was prolonged somewhat upwards and downwards. Both ovaries were found enlarged, and in connexion with the right a cyst was felt and seen. The intestines were drawn upwards and to the left, and the right ovary more fully exposed. Apparently springing from the back of the Fallopian tube was a small cyst, thin walled, with a network of vessels spreading over the wall. The ovary was cystic, and was removed with the cyst after the application of a double silk ligature to the inner side of the cyst and the Fallopian tube. The left ovary was then examined, and found cystic and pendulous, one of the larger cysts giving way during the manipulation. The Fallopian tube was congested; this was removed in a similar manner. After careful cleansing of the parts, deep silk sutures were passed through the abdominal wall, not, however, including the recti. Superficial catgut sutures were also passed. The full antiseptic dressing was employed.

Feb. 24th.—A subcutaneous injection of one-fourth of a grain of morphia was given last evening, but she had a restless night. Pulse weak, 104. Suffers from flatulence, but has had no vomiting. Temperature at 8 P.M. yesterday, 98·4°; this morning at 2 A.M., 101°; at 8 A.M. 100·6°.

25th.—Catamenia commenced this morning. Temperature 102°. Slept fairly well; complains of great thirst and headache; pulse 124. Taking half a teaspoonful of milk every half-hour, with ice every alternate half-hour.

26th.—Has been very restless, and had slight delirium during the night. Is having injections of morphia. Temperature A.M., 103·2°; 8 P.M., 100·4°.

27th.—She is very restless, tries to get out of bed, and to remove the dressing. She has no pain, and slept for six hours during the night. Pulse 96; tongue dry and furred. The wound was dressed on the 26th, and was looking well; some stitches were removed.

March 1st.—Taking food well, quieter, and sleeping well. Pulse 108.

2nd.—Has flatulence and pain about the lower abdomen. Pulse 100. Temperature from 99·6° to 100·4°. An enema was administered; there was much pain caused, but no action of the bowels.

3rd.—Slight suppuration found in the lower part of the wound; vomited in the evening. Highest temperature 99·6°.

The bowels acted after an enema on March 6th. On the 10th the union of the wound was found to have partly

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broken down, and there was a good deal of suppuration The dressing was changed to fomentations of hot boracic acid lotion. On the 6th, 7th, and 11th she vomited once, and between the 8th and 13th there was marked distension of the abdomen, with pain and flatulence, but with remarkably little tenderness or elevation of temperature, which only exceeded 100·6° on one occasion, and was not higher than 99·6° after the 11th. On the 17th the patient was able to eat fish. The wound was healed. From this date until the 21st she had rather severe night sweats, but no other symptoms. An abdominal belt was ordered, and she left the hospital on March 29th. Throughout, after the operation, the diet was most carefully regulated.

CASE 2.—*Hydro-salpinx; Abdominal Section; Cure.*—A. L.——, aged nineteen, was admitted under the care of Dr. Gervis (Adelaide Ward) on April 29th, 1886. She had been in good health until four years before, when she was delivered of a child at full term. She got up a fortnight after the confinement, and has never been well since. The catamenia began when she was thirteen years of age, continued regular until the pregnancy, recommenced two months after delivery, continued regular for three months, then ceased for two or three months, and have been irregular since, lasting from four to five days. Five months after the confinement a pessary was introduced owing to some prolapse of the uterus; this was worn for eighteen months. She has had dragging pain in the lower part of the back and hypogastrium, also pain in the groins, especially the left, ever since the confinement, with slight leucorrhœa between the periods.

On admission she was complaining of this pain. On examination there was some swelling of the abdomen, and tenderness in the left iliac fossa. The measurement from the umbilicus to the left anterior superior iliac spine was half an inch less than the corresponding one on the opposite side. The uterus was found on vaginal examination centrally placed, but with impaired mobility. The sound passed easily and without pain. The axis was normal in length and direction. High up in the left fornix a softish elastic swelling could be felt; this was very tender.

May 8th.—She is complaining of headache and pain in the abdomen. The period which has just terminated was rather more profuse than usual, and was accompanied by a good deal of pain. Since admission she has been taking medicine containing bromide of ammonium and tincture of hyoscyamus.

11th.—Temperature 97·8°. General condition satisfactory; no evidence of disease other than that for which she was admitted. This afternoon, at 2 o'clock, Mr. Sydney Jones, under whose care the patient had now been placed, after consultation with Dr. Gervis, performed abdominal section. An incision about two inches long was made in the middle line down to the peritoneum, which was carefully opened after the arrest of all hæmorhage. The ovaries and Fallopian tubes were then carefully examined, and in connexion with the left Fallopian tube a rounded soft tumour was felt, the tube itself being distended near it. The original incision was extended towards the pubes, the intestines held tightly, and the tumour and left ovary brought to the surface, but not without difficulty. The tumour was seen to be a thin-walled pedunculated cyst, containing a dark sanguineous fluid. There were some small cysts, with clear contents, in the broad ligament. The pedicle was transfixed, and secured with a double silk ligature, and the cyst removed. The ovaries were healthy. Deep silk sutures were passed, including the peritoneum, and superficial catgut sutures were passed between them. The operation was performed under the carbolic spray. Ordinary antiseptic dressing was applied, also salicylic wool, the dressing being secured in position with gauze bandages, a flannel roller being firmly applied over all. She vomited at 6.30 P.M., after the ether. A subcutaneous injection of a quarter of a grain of morphia was given, after which she had a good night.

12th.—She is very restless and slightly delirious, constantly calling for drink. She has been allowed small quantities of ice every hour. She complains of pain in the abdomen and loins. Temperature 100·2°; skin hot. Thirteen ounces of urine drawn off by catheter since the operation.

13th.—Did not sleep well during the night, although she had three injections of morphia during the previous day, the last being at 9.30 P.M. Quantity of urine small; six ounces during the night.

14th.—There is tenderness over the iliac and hypogastric regions, but no abdominal distension. She has complained of pain and been very restless during the night. Tongue dry and furred; very thirsty. Pulse 102; temperature 100·4°. Is allowed to pass urine without the catheter. The wound was dressed under the spray. There was complete union, and the deep stitches were removed.

15th.—Pulse 100, weak. Patient improving.

19th.—Bowels relieved by a simple enema. Sleeps well after morphia; is not restless; still complains of some pain in the abdomen and round the loins. Tongue furred and red at the edges. Temperature last night 101°; this morning 99·8°.

22nd.—Wound redressed; some suppuration in the lower part; there is no pain or tenderness in the abdomen.

On the 28th the wound was redressed, and strapping applied across the abdomen above and below a point where union had partially broken down. There was slight tenderness on pressure over different parts of the abdomen.

The patient, who was very nervous and intolerant of control, was very carefully dieted for some time after the operation, being only allowed fluid nourishment until the 22nd, when custard was ordered; the temperature rose that evening to 101°, and fluids were again given; solid food not permitted for some days later. There was no rise of temperature after the 19th. She left the hospital on June 17th, having been provided with an abdominal belt.

EDINBURGH ROYAL INFIRMARY.

A CASE OF RUPTURE OF THE BLADDER; LAPAROTOMY.

(Under the care of Mr. J. DUNCAN.)

FOR the following report we are indebted to Mr. Henry B. Melville, resident surgeon.

Wm. E——, aged thirty-eight, was admitted at 10 P.M. on May 5th, 1886. The patient stated that about 5 P.M. that day one of the wheels of a cart, which with its contents weighed about 25 cwt., had passed over the lower part of his abdomen. He complained of abdominal pain of a somewhat spasmodic character, and aggravated by movement. He said that he had passed no urine since about four o'clock, and that he felt intense desire to micturate, but was unable. A history of stricture was obtained.

On examination, no evidence of fracture of the pelvis or of injury to the spine was found, but there was considerable bruising and abrasion of the front of the thighs at the upper part. The abdomen was distended, resonant, and very tender to touch. There was no absolute dulness over the pubes. An attempt was made to pass a catheter. From the presence of an extremely tight stricture near the triangular ligament and numerous false passages, it was found impossible to pass the smallest instrument, even after the use of a hot bath and morphia suppository. The patient while in the bath passed a small quantity of blood-stained urine with great difficulty. No further attempt was made to pass instruments that night. The patient slept for about nine hours, and awakened with the pain still unrelieved. In the morning the temperature was 99·8°. There was vomiting with distension and tenderness of the abdomen. The pulse was regular, but rapid, small, and hard. At 2.30 P.M. Mr. Duncan saw the case, and tried, without success, to get an instrument into the bladder. Aspiration over the pubes was performed, but no fluid came through the cannula. Chloroform was administered, and a full-sized bougie was passed down to the stricture and cut down upon. The stricture was divided on a probe, and Mr. Duncan passed his finger into the bladder and was able to explore all its extent except the upper part of the posterior wall. Pressure above the pubes and on the anterior wall of the rectum failed to bring that portion of the bladder within reach of the finger. The fluid which escaped from the bladder when it was opened appeared like turbid urine and was small in amount, and afterwards there came away a quantity of material which looked suspiciously like semi-liquid fæces; but no fæcal odour could be detected. Fluid injected into the bladder through the perineal wound was only partly returned. Mr. Duncan now considered the existence of a rupture of the bladder almost certain, and thought it possible that the presence of what looked like fæcal matter might be accounted for by the existence of a rupture of some part of the intestine. He therefore determined to open the abdomen and thoroughly wash out all urine and other foreign matter, and examine the bladder from above,

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and as far as possible the intestine. When the transversalis fascia was reached it was seen bulging forward with fluid behind. When the opening was completed a strong rush of blood-stained fluid took place. The exploring hand detected a rupture on the upper and posterior part of the bladder wall. It was about two inches and a half in length, and ran from above downwards and to the left. No injury to the intestine could be made out, and no material similar to that which came from the bladder was found. The abdomen was thoroughly washed out with hot water, a glass drainage-tube passed into Douglas's pouch, and the rest of the wound was closed by gut sutures. A drainage-tube was passed into the bladder through the perineal wound.

After the operation the sickness still continued. The pulse was weak and rapid, respiration also rapid; but the patient stated that his pain was very much less than before operation. Urine passed freely by the tube in the perineum, and a small quantity of bloody serum was from time to time sucked up through the glass tube from the abdominal cavity. Next day (Friday, May 7th), the patient's pulse had improved, and the pain was still less. There was still some distension of the abdomen, with tenderness on pressure; but the patient passed flatus freely. The temperature, normal at midday, was 99·6° F. at night, and the urine was flowing freely from the perineal wound. Towards evening it was observed that the flow of urine was lessening, and after midnight it ceased entirely. The sickness still continued, and nutrient enemata were given throughout the day. The amount of serum drawn off from the abdomen was less, and there were some lymphy flakes in the discharge.

The following day, May 8th, the suppression of urine still continued; the patient was visibly weaker, and was still vomiting. Respiration shallow, rapid, entirely thoracic; pulse weak (120). No pain except on vomiting. During the day the following medicine was repeated every two hours: One drachm of sulphate of magnesia, ten grains of carbonate of magnesia, in half an ounce of peppermint water. In the afternoon the sickness had very greatly abated, the patient being able to tolerate small quantities of iced champagne by the mouth. By the evening the patient's condition had somewhat improved, and the pulse was less rapid and fuller. The suppression of urine still continued, though constant hot fomentations were applied to the loins, and repeated dry cupping was resorted to.

9th.—Early on Sunday morning the patient became rapidly more collapsed, with cold extremities and scarcely perceptible pulse. Ether was given hypodermically and the amount of champagne increased, and the patient rallied for a few hours, but in the evening he again sank, and complained of increased abdominal pain. About 8 P.M. one-third of a grain of nitrate of pilocarpine with twenty minims of sulphate of ether was given hypodermically, but produced no sweating, only profuse salivation. The patient died at 9 P.M.

At the post-mortem examination the body presented the following appearance:—There was very little peritonitis, but around the drainage-tube some matting together of the intestines. There was a considerable effusion of blood behind the peritoneum on the left side, extending as high as the left kidney. No communication existed between the rectum and the bladder, and no rupture of the bowel at any point. The bladder wall was thickened and fibrous, with numerous hæmorrhages into the submucous tissue. There was in the posterior wall to the right side a rupture, about two inches in length on the peritoneal and an inch on the mucous aspect of the bladder. The margins of the wound were beginning to unite, but the adhesions were soft and easily broken down. A dense mass of cicatricial tissue was seen in the urethral wall in front of the bulb, at the seat of the stricture, and several old false passages. The kidneys were pale, cortex thickened, capsule slightly adherent at points, indicating probably some interstitial change with fatty degeneration of the epithelium of the tubules. Liver fatty; hypostatic congestion of both lungs; some thickening of the wall of the left ventricle of the heart; valves competent.

A MUNIFICENT GRATUITY.—A gratuity of £10,000 has been granted from the Bavarian Civil List to the widow of Professor Guden of Munich, who perished with the late King of Bavaria in the lake at Castle Berg. He left a family of eleven children.

Reviews and Notices of Books.

Investigations into some Morbid Cardiac Conditions. By WILLIAM RUSSELL, M.D., M.R.C.P. Edin. Edinburgh: Bell and Bradfute. 1886.

THERE are few subjects more interesting to the clinical observer, or which have given rise to greater controversy, than the correct interpretation of the cardio-vascular phenomena that characterise the anæmic state. This subject forms the major part of the volume before us, and we may honestly say that we have seldom had it presented in a clearer light. It is introduced by a historical retrospect upon the question of inorganic murmurs, and it is satisfactory to find that the share taken by Hope, too often overlooked, is fully recognised. Dr. Russell brings the results of observations in the post-mortem room to disprove the statement of Walshe and Balfour that the pulsation in the second left interspace is due to the left auricle. He shows conclusively—by cardiographic tracings as well as by morbid anatomy—that such pulsation is of right ventricular origin. Indeed, he assigns a far larger share to the right side of the heart than is usually given it, and we must think that he does well in reminding us that we have to reckon with two sides rather than one. The steps of his argument, supported by numerous observations—that the basic murmur in chlorosis is a tricuspid regurgitant murmur, and that no arterial murmur (other than an artificial one, produced by pressure of the stethoscope) exists,—must be followed in the work itself, for we cannot do justice to it here. As to venous murmurs, he is of opinion that the quality of the blood is a factor in their production, but that more or less constriction of the vessels is the essential element. There is also an interesting chapter upon tricuspid murmur and mitral stenosis, and one upon the differential diagnosis of vegetative or verrucose endocarditis. The book is one which shows the author to be a careful clinical observer, and it cannot fail to be read with profit both for the facts it brings to light and for the ideas which it suggests. He has chosen topics which rank among the most debatable as well as those which are least studied in cardiac disease, and he has materially added to our knowledge of them.

Medical Missions: their Place and Power. By JOHN LOWE, F.R.C.S.E., Secretary of the Edinburgh Medical Missionary Society, and Superintendent of its Training Institutions. With Introduction by Sir WILLIAM MUIR, K.C.S.I., LL.D., D.C.L., late Lieutenant-Governor, North-West Provinces of India, and Principal of the University of Edinburgh. London: T. Fisher Unwin. 1886.

MR. LOWE'S book is one that was much needed, and for writing which his experience as a medical missionary in Travancore and his long connexion with the Edinburgh Medical Missionary Society well fit him. The medical mission work and the training of medical men for it, as far as Great Britain is concerned, have had very much to do with Edinburgh, and to give an account of the work of the Edinburgh Medical Society is virtually to survey the whole field. The Edinburgh movement began with Dr. Abercrombie, who was chosen President of the Society, which originated in a meeting in his house, at which an account was given of the work of Dr. Parker, an American medical missionary, who had laboured long and successfully in China. Charity begins at home, and so it was with this good movement. Dr. Handyside, an anatomist and surgeon of great accomplishment, obeyed the request of the city missionary to see bad cases among the poor of the Cowgate. Then the poor of Ireland were the first objects of attention of the Society. Now the Society has a local institution for the training of medical

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missionaries, to which all the great societies refer, and from which some of the best medical missionaries have hailed. It cannot be too clearly realised, however, that to the piety of its great local physicians and surgeons Edinburgh owes the creation and success of the Society. Abercrombie, Alison, Handyside, Miller, Coldstream, and Benjamin Bell are classical names in Edinburgh medical history, and they were all active promoters of this Divine cause. If anyone doubts the impression for good made on uncivilised or unchristianised nations, he has only to read this book, though it by no means exhausts the statement of medical work done or impression made. One very excellent feature of Mr. Lowe's book is his insistance on the thorough and complete training and qualification of those, whether men or women, who go out to do medical missionary work. Their surgical and obstetrical training should be even more complete than that of average practitioners, seeing that they have no help in consultation or co-operation with others, as in difficult cases at home. The rapid progress of this Society is gratifying. In 1861 its income was £590; in 1871, £1314; in 1881, £5506; while during the last decade £15,000 were raised for special objects. There are at present 170 qualified medical missionaries in active service at home and abroad, whereas before 1871 only thirty were in the field. Can London say that she has done her share in this useful work? The noble and devoted Robert Moffat said that a medical missionary was a missionary and a half, or rather a double missionary. Many other generous testimonies from clerical colleagues to the value of medical pioneering in missionary work are given in these pages, which leave no doubt that, as the early history of Christianity was associated with great gifts of healing, so its extension is to be. We earnestly commend this book to the sympathy and attention of our readers.

Handbook for the Instruction of Attendants on the Insane. Prepared by a Sub-committee of the Medico-Psychological Association. London: Baillière, Tindall, and Cox. 1885.

Lectures on the Care and Treatment of the Insane, for the Instruction of Attendants and Nurses. By W. C. WILLIAMSON, M.D. Paramatta. Printed at Sydney. 1885.

THE intention of the short manual of sixty pages issued under the auspices of the Medico-Psychological Association is of the most commendable kind, there being no greater desideratum in the treatment of insanity than well-trained and instructed attendants. The directions given for nursing and general duties are well compiled; while the information in regard to the forms of mental disorder and the directions as to the management of the different mental states are also distinctly good. The epitome of anatomy and physiology, however, with which the handbook begins, is of doubtful value and might confuse rather than instruct. On the whole, the handbook is a decided advance on the usual manuals of rules and instructions in use in asylums.

Dr. Williamson's Lectures are deficient in the amount of instruction and direction given in reference to the special management of the insane, and are redundant in information in regard to the treatment of diseases. They are, however, satisfactory in bearing testimony to the recognition in Australia of the importance of training attendants.

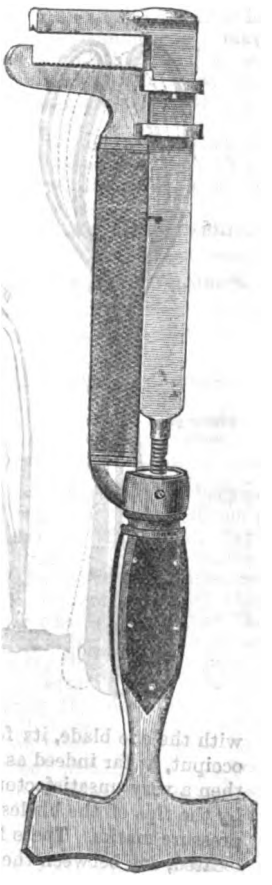
AN International Congress of Hydrology and Climatology will be held at Biarritz from Oct. 1st to 8th. The work of the Congress will be divided into, and papers read on, the three following sections:—Scientific hydrology, medical hydrology, and climatology. Numerous excursions have been arranged, and we are assured that a hospitable reception awaits those who attend the meeting from its promoters.

TWO deaths from eating poisonous fungi in mistake for mushrooms have just occurred at Nottingham.

New Inventions.

A NEW AND IMPROVED CLAMP FOR HÆMORRHOIDS.

THE method of crushing piles, instead of dealing with them by ligature, was an important advance in rectal surgery, and the question of the best form of clamp has followed naturally upon the adoption of the operation. The use of existing instruments during a term of years led the inventor of the present clamp to consider, with considerable interest, how far the necessities of the operation were met by the crushers at present existing, and how their shortcomings might be rectified. To many surgeons Benham's clamp has commended itself by its power, but at best it has always appeared a heavy and unwieldy weapon. To others Allingham's fenestrated crusher has been acceptable, as a distinct improvement, by its greater handiness, as compared with the former; but admirable as this undoubtedly is, there are certain points to which exception may fairly be taken—notably, that the pile seized by the tenaculum has to be drawn through the fenestrum, and that as by necessity a considerable amount of tissue is brought into the area of the crushing bars, a larger surface than is strictly necessary is crushed, and a correspondingly large wound remains to be healed. In the hope of overcoming these objections this new clamp was designed, and after much thought and consideration the principle of the familiar "spanner" or "screw-hammer" was adopted as a model. The instrument has been admirably manufactured by Messrs. Maw, Son, and Thompson, of Aldersgate-street, and whatever fault is found with it by expert rectal surgeons or the practitioner at large must be laid to the charge of the inventor, and not to that of the manufacturers. The accompanying woodcut will convey a very excellent idea of the *modus operandi*. It will be seen that the principle of the lever action has been discarded, and that the crushing power is obtained in a direct line by screw action, as in Allingham's, with this difference, that whereas in the latter the lower bar is forced upon the upper, here the upper bar is drawn down upon the lower. A slow screw has been adopted, as giving greater power to the operator. It may be contended that greater power is obtained with the older instrument, but in the opinion of the writer too much stress has been laid upon the power actually required for the complete destruction of the tissue; and, moreover, actual experiment has shown that the present instrument can be credited with the possession of a positively increased crushing power, while the results obtained have been sufficiently conclusive and successful to warrant the claim advanced for it as an "improved clamp," and as such it is confidently placed at the disposal of the profession.

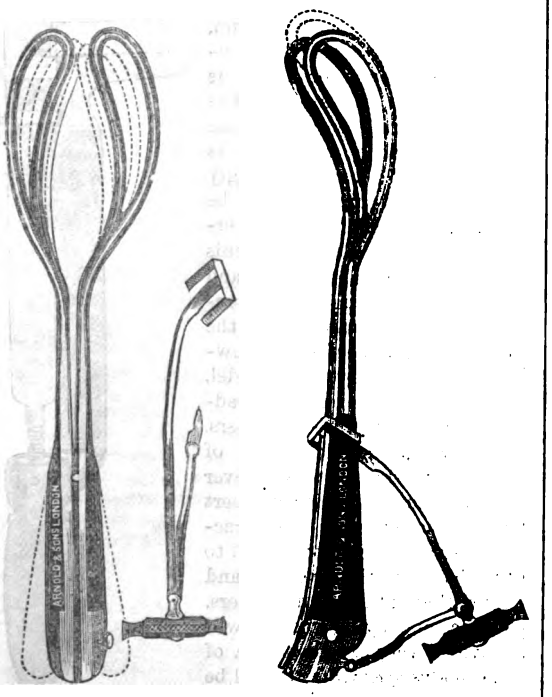


CHARLES JOHN SMITH,
Formerly Surgeon to the Farringdon Dispensary.
Selborne-road, Brighton, August, 1886.

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AN AXIS-TRACTION MIDWIFERY FORCEPS WITH SLIDING BLADES.

I DESIRE to invite attention to a midwifery forceps recently produced by Messrs. Arnold and Sons, of West Smithfield, embodying in a shapely fashion some suggestions of mine intended to increase the adaptability of the blades to the fœtal head, and to secure axis traction by as simple a mechanism as possible. The pelvic curve of the blades, now generally adopted, prohibits that free rotation about the long axis which with the straight forceps enables us to select the cranial meridian best suited to their application, and, in the absence of any compensatory adaptive movement, the restriction proves often a source of weakness and embarrassment. This is especially noticeable, for instance, when the head is detained above the brim in a transverse position. Here the occiput and the forehead suggest themselves as good resting-places for the blades; but, as an unfortunate rule, they are situated at very different obstetric altitudes, and the English lock peremptorily insists on symmetry. Hence, in order to get any hold on the forehead



with the one blade, its fellow has to be pushed beyond the occiput, as far indeed as the fœtal anatomy will allow, and then a very unsatisfactory grip is obtained, effected mainly by the tips of the blades, and causing proportionally severe pressure marks. These I have several times observed to be located, one between the orbits and the other close upon the vertebra prominens, and, in a case of spinal disease involving that vertebra, the mother tells me her infant had been badly cut just there by the instruments used to accomplish delivery, as well as on the upper part of the forehead, where a large scar is visible. With a sliding movement such faulty dispositions of the blades as the above imply seemed improbable, and my experience of the new forceps accords with this expectation; for I have found them to be secure in their grasp and gentle in their dealing with the integuments. The illustrations afford a good idea of the instrument; but on an exact side view the blades do not appear to join the stems at an angle, and the handles are seen to be slightly recurved at the lock. Longitudinal, somewhat circular sliding movement is provided for and controlled by two pins in the one handle and corresponding grooves in the other. The proximal pin, working as a screw, can be varied in length, and determines the span of the blades. Locking is effected by a separate piece, and the axis-tractor easily applied after the introduction of the blades, which it unites rigidly together under the simple operation of tractive force applied to its handle, whilst between the pains it can be unshipped at will by a slight push. Owing to the length of the stems the lock is always quite outside the vulva. There is no screwing together of the handles, and the head can be relieved of pressure by a turn or two of the proximal pin or by undoing the lock. One hand on the handle of the tractor commands the whole instrument. Regarding axis-traction, I would only remark that my experience convinces me its advantages have not been over-rated. The saving in muscular effort far exceeds my anticipations, and the probability of misdirecting the power seems very much lessened.

W. MC LAURIN, M.B., C.M.Glas.

Richmond-road, Barnsbury, N., Aug. 1886.

THE BRACHIONIGRAPH.

THIS instrument is a patented invention designed with a view to render the art of writing possible in the absence or uselessness of the hand. It can be thus adopted in cases of writer's cramp, certain cases of paralysis of the digits, and in loss of the distal extremity of the upper limb. The instrument is of sufficiently simple construction. It consists of a long light strip of iron, curved so as to be easily adapted to the ulnar border of the forearm. This splint is sewn into a casing of supple leather material, which is also shaped so as to form a kind of gauntlet or sleeve to the forearm. The gauntlet is fastened to the forearm by an ingenious arrangement of a screw hooks and studs, allowing of a very adjustable degree of pressure. The bar or splint carries at the distal end a mechanism with a universal joint, by means of which a pen may be held in any desired position. With this instrument the act of writing is performed by the muscles of the arm and shoulder, whilst those of the digits and thumb are thrown completely out of use. It is very easy to acquire the necessary dexterity for legible "handwriting." The invention is the work of Mr. W. Macgill, of the Academy, Fraserburgh, N.B.

DR. WRIGHT'S HYGIENIC DOWN BED QUILT.

THE advantages and usefulness of ventilating coverlets may now be said to be fully proved. The methods by which the quilt is rendered pervious to the exhalations of the human body during sleep are, however, somewhat varied. That adopted in Dr. Wright's quilt, in which lace insertions are introduced from the sides and the four corners to the centre, whilst contributing to beauty of appearance, is also very efficient in securing free ventilation, which has been the chief object aimed at by the designer of this handsome coverlet. It is manufactured by Mrs R. Thornton, Goldsmith-street, E.C.

IMMISCH'S PATENT METALLIC THERMOMETER.

THIS excellent little invention has received an additional improvement in the form of a screw mechanism attached to the ring of the watch. By its means the ring can be removed and its place taken by a long stem of whalebone. The object is to make the thermometer available for taking the temperature of the body in the vagina and rectum; it also, in our opinion, renders the registration of the mouth temperature more easy of attainment. The instrument may be obtained of all scientific instrument makers and opticians.

THE fourteenth annual meeting of the American Public Health Association will be held at Toronto, Canada, from Oct. 4th to 8th.

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THE BRITISH MEDICAL ASSOCIATION.

MEETING AT BRIGHTON.

THE following is the conclusion of our report of the proceedings in the Public Medicine Section on the 6th inst.

Dr. WILLIAM SQUIRE read a paper on the Influence of Increased Means of Isolation in Checking the Prevalence of Scarlet Fever in London. Infectious diseases, like small-pox and scarlet fever, are not, said the author, checked by such general sanitary improvements as are efficacious against enteric fever and diarrhœal diseases. Improved drainage and water-supply reduced the deaths from enteric fever in England and Wales—first, from 20,000 to 15,000, and then, since 1879, to less than 8000 annually. All this time the scarlet fever mortality, except for the years 1860-61, is about 12,000 annually, with epidemic leaps, as in 1864 and 1874, to 20,000 or 30,000. In London alone the mortality from this cause (the first year of compulsory school attendance) exceeded 6000; until the last two years this has always exceeded 2000. Last year this was reduced to 700, and for the first quarter of the present year to 102, about half of the previous year, or less than one-third of that of 1884. This lowest number ever registered for London is coincident with increased means of isolation and improvement in its method. Small-pox and scarlet fever must be noted in this connexion; they, with typhus, are the only true infectious diseases which have been dealt with on a large scale by isolation, and the means devised for the first have been adapted to the others, with such modifications as their different natures required. Typhus was soon arrested, but the other two, besides special wards and hospitals, required convalescent establishments. It is well known how rapidly and completely the last small-pox epidemic collapsed after the convalescent camp at Darenth was in full action. In dealing with small-pox, hospitals alone might have sufficed, for the first action of the London Asylums Board hospitals was to reduce the small-pox mortality in London from 9698 for the two years 1871-72 to 113 for 1873, and to 103 only for the two years 1874-75, lower figures than had ever till now been known for small-pox in London. Litigation and ill-advised restrictions had so far interfered with these means, that when, in 1876, small-pox reappeared in the north and north-east of London, there was no hospital of the Board open except the one at Stockwell. Next year hospitals at Fulham and Deptford were constructed, to aid the one at Homerton. At Fulham 320 acute cases were received in six months; of these 138 came from Kensington, 80 from Chelsea, and 39 from the Fulham district. Small-pox, which was extending in the neighbourhood before the hospital was open, had subsided in July, when it was in full use. Altogether 11,000 small-pox patients were treated in these hospitals, but the mortality showed that not half the severe cases had been isolated. In 1881 the transference of convalescents to Darenth much relieved the London hospitals. In 1884 and 1885 the increased accommodation and the use of two hospital ships at Dartford, with steam launches fitted as ambulances, had reduced the mortality to *nil*. From February, 1884, to the end of 1885, upwards of 11,000 sick and convalescent were thus safely sent down the river by these steam ambulances. Altogether 10,718 cases were treated in the hospital ships. Last year there were 5644 admissions; 4069 direct from their homes, 1575 from other hospitals. The deaths were 444, being a mortality of 7·6 per cent. Dr. Bird Wood, in his report (page 7), says the severe cases are treated together. "On the *Atlas* 30 acute cases have been in bed at the same time on one side of the deck. On the *Castalia*, 20 beds in No. 3 ward and 14 in No. 8 have been occupied by confluent cases for several weeks. Neither patients nor staff were injuriously affected." The extensive arrangements made by the Asylums Board for convalescents from small-pox enabled more and more space at their different London hospitals to be set aside for fever cases, and especially for scarlet fever; much may be done by an intelligent isolation at home of scarlet fever patients where the nature of the dwelling makes it possible. One reason why diphtheria has gone on increasing in London, while scarlet fever has been reduced to the lesser mortality of the two, is that our means for isolation of the sick hardly touch diphtheria any more than they do measles or whooping-cough; the increase of those diseases is chiefly kept up by schools. Even if it be premature to attribute the great subsidence of two epidemics exclusively to isolation, it is well to insist on the coincidence; for the period for epidemic increase of both is at hand, and neither Winchmore Hill nor Darenth are completed. Instead of deferring those works till the new increase appears, we ought to be beforehand with the first evidence of such increase. In the case of scarlet fever, too, isolation is our only defence; no personal immunity, as by vaccination, can be acquired.

On the question of the Duration of Infectiousness in Scarlatina, Small-pox, Measles, Mumps, and Diphtheria, Mr. VACHER (Birkenhead) said it seemed to him that a very great change had taken place in professional opinion in respect of the time when infectiousness commences or may commence. It used to be held and taught that the diseases under consideration, especially scarlatina and small-pox, were but slightly infectious during the early stages, and that, at all events if the patient were isolated as soon as the disease could be diagnosed, no risk would be incurred. Then as evidence accumulated that subjects who showed no rash or sore-throat occasionally communicated disease days before they were suspected of having it, this opinion became untenable. In particular, there was abundant testimony that measles was very infectious for fully four days before the appearance of the eruption. Now current opinion declared that possible infectiousness commenced with the manifestation of the earliest physical sign of disease. Quite lately Mr. Vacher was led to question the soundness of this doctrine as to the beginning of infectiousness. It is doubtless within the truth to say that infectiousness is not very active as long as the disease is wholly latent. Still, approaching the question from this direction, it appeared to him that the only defensible position to occupy is to admit the possibility of infection from any infected subject—that is, during the whole latent period. For the first twenty-four hours after inception, it may be, the risk of infection is almost infinitesimal, but it probably increases hour by hour, and Mr. Vacher sees no reason to infer that it is much less just before pyrexia than just after, or much less on the eve of the eruption than when the eruption is fully out. The result of accepting the propositions put forward would be that practitioners and officers of health would advise and take steps for the isolation of all subjects exposed to infection, as far as practicable. It may be said that this has been done already in districts where so-called "houses of detention" have been provided. This is so, but the avowed object has always been to take time by the forelock and be prepared for a possible danger in the future, and not under the apprehension that the subjects separated so long as they appear well could be themselves infectious. The question of the duration of infectiousness resolved itself into two distinct inquiries — (1) When does it begin? and (2) When does it end? It remained to discuss question No. 2. There was little difference of opinion as to the lines on which this question was to be

TABLE SHOWING DURATION OF INFECTIOUSNESS IN SCARLATINA, SMALL-POX, MEASLES, MUMPS, AND DIPHTHERIA.

	Scarlatina.	Small-pox.	Measles.	Mumps.	Diphtheria.
Time from inception to first precursory sign	3 days	12 days	10 days	14 days	3 days
Time from inception to commencement of eruption, of glandular swelling in mumps, and sore-throat in diphtheria	4 days	14 days	14 days	18 days	5 days
Time from inception till infectiousness ceased	5 weeks mean, 10 weeks max.	5 or 6 wks. mean, 15 or 16 wks. max.	4 weeks mean, 8 weeks max.	5½ weeks maximum	3½ weeks mean

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answered. Infectiousness terminated as soon as all infectious matter was eliminated. The practitioner sought to encourage this elimination, to sterilise the infectious matter eliminated, and to state when the process was completed. Mr. Vacher then proceeded to consider the length of time taken to eliminate all infectious matter in the case of each of the five diseases named. His experience of upwards of ten years as physician to the Birkenhead Fever Hospital and elsewhere enabled him proximately to set a limit to this time. A summary of his conclusions as regards the five diseases is given in tabular form above. Mr. Vacher remarked, in conclusion, that while it was possible, as regards cases isolated and treated. to set a limit to their infectiousness, there was almost no limit to the infectiousness of cases neglected and left at large. He had known of patients suffering from small-pox, scarlatina, and measles wandering about and going from lodging to lodging, sowing infectious particles in a town as a man sows wheat in a field; and he was assured that all the sweeping and scavenging, and "vague chemical libations and powderings," which urban authorities put faith in, would not prevent the crop from coming up.

Mr. PHILIP BOOBBYER (medical officer of health, Basford Rural Sanitary Authority, South Notts) read a paper on Scarlet Fever in relation to the Disturbance of Impure Subsoil and the Construction of Sewers. The Greasley division of the Basford Rural Sanitary District, South Notts, comprises an area of 24,230 acres, with a population of about 31,000, which is divided between several small townships, such as Kimberley and Eastwood, many colliery and agricultural hamlets, and scattered rural dwellings. Artificial drainage is exceptional, the soil and subsoil mostly porous, and the surface frequently much polluted with accumulated organic refuse. Scarlet fever, during the past five years at least, has been more or less endemic at its northern and southern extremities. At the beginning of December, 1884, a few scattered cases only existed among the rural population of the north; but after this date the fever spread, though slowly and unequally, along the eastern slope of the Earwash Valley. In the following February, during this slow extension, two hamlets widely separated from one another, and from direct sources of infection, were almost simultaneously invaded to a very general extent, whole families being attacked at once. In both these villages considerable surface- and sub-soil disturbance had taken place, with a wide distribution of long-accumulated midden contents as manure. Many cases of enteric fever and diarrhœa, and much health depression, existed contemporaneously. There was no diphtheria, however, and no tendency to epidemic extension of any disease but scarlet fever. The type of the latter, though distinct, was mild, and the death-rate exceptionally low. This epidemic rapidly declined during March. Towards the end of April, scarlet fever reappeared in the south—at the outskirts of the Kimberley township, where excavations had been commenced for a new sewage system. The fever spread here in a remarkably general way, following the course of the excavations in all directions. The place had been visited by it in February to a slight extent, but this renewed epidemic filled up the gaps left by the previous visitation, and in many cases, again, affected whole families at once. Its generalness was especially marked in an outlying part of the township, chiefly inhabited by colliers, which up to this time had been altogether undrained. The epidemic continued during the progress of the sewage works, its final disappearance being almost coincident with their completion. The mortality here, as elsewhere, was extremely low, not exceeding 3 or 4 per cent. of those attacked. Septic glandular symptoms were common, the submaxillary glands suppurating and even discharging pus from their ducts in many cases; such symptoms, however, were not usually of very serious augury. Several cases of late and deferred desquamation were observed, and many instances of second attack in the same individual reliably attested.

NEW HOSPITAL AT HASTINGS.—The memorial stone of the new Hastings, St. Leonards, and East Sussex Hospital, which is being erected at White Rock, opposite the pier, was laid on the 24th inst., by Lord Brassey of Bulkeley. The structure is estimated to cost £20,000, provides for about 70 beds, and will probably be finished towards the end of next spring. At the close of the ceremony contributions amounting to over £500 were handed to the secretary.

THE MEDICAL ACT OF 1886.

To the Editor of THE LANCET.

SIR,—In reply to "Nemo" in your issue of the 14th inst., I might venture to add "Mortalium omnibus horis sapit"; but "audi alteram partem." The Act of 1886 is retrospective as to recognition of diplomas otherwise than British. It is ridiculous to imagine anything so absurd as expecting American M.D.'s settling here to practise under such unfavourable conditions as the above Act will place them in in the future. Rather ought we to look at home first, and by our united efforts endeavour to prevent the hosts of unqualified practitioners from treading on our toes. To quote the *Eastern Argus* of the 14th inst., where a juryman at an inquest remarks that "one of the most menial servants, a boot-cleaner or dish-washer, might be termed a doctor's assistant, and sent out to attend patients." That this is practically the case I could easily confirm if called upon. But as regards the American Faculty, I must protest against the insinuations of your correspondent, as they are calculated grossly to mislead professional opinion. The subject is so well worn that it would appear superfluous to reiterate facts—viz., that it is not possible to obtain a diploma from any recognised school of medicine in America without having studied three years and passed the required examination before the Faculty. As a pupil of the late Dr. Austin Flint, I can safely say that a more eminent body of men (of which he was the Professor of Medicine) did not exist in my time. But contrast this with the Brussels M.D.: a man simply goes to that town, and after passing an examination is instantly dubbed M.D. Which is the most reliable qualification? It has been very much the custom amongst English professional men to look down upon their American *confrères*, without due consideration being given whence they emanate. Because black sheep exist, is everyone bound to be a negro? If so, how can you admit Oliver Wendell Holmes, John S. Billings, and Fordyce Barker to come amongst you? Your diplomas are respected in America; why not leave dirty water alone, especially as so much exists in their own besom. As to "Nemo's" remarks about *time* I think enough has been said; if it comes to *money*—I might say still more; for it certainly cost me a considerable sum before I obtained my M.D. degree.

I am, Sir, yours faithfully,

August 16th, 1886. AN M.D. OF NEW YORK.

DURATION OF INFECTIOUSNESS OF SCARLET FEVER, SMALL-POX, MEASLES, MUMPS, AND DIPHTHERIA.

To the Editor of THE LANCET.

SIR,—In your report of the "Brighton" discussion upon the above subject a list of infectious periods is given and attributed to Dr. Hope. May I correct this account by stating that I began the discussion and gave the table alluded to. Without giving all the details of cases upon which my record is based, but which I reserve for future publication, I submitted the following periods as characterising the infectious stages of the several diseases:—Measles from the second day of the disease, for three weeks; small-pox from the first day, for four weeks; scarlet fever from the fourth day, for seven weeks; mumps from the second day, for three weeks; diphtheria from the first day, for three weeks. Intimately associated with these are the so-called incubation periods. From some exceptional opportunities of observation I have found the following intervals to occur between the definite exposure of the patient to infection and the first symptoms:—Whooping-cough, fourteen days; mumps, eighteen days; measles, ten days; small-pox, twelve days; scarlet fever, three days; diphtheria, fourteen days. The statement about the last-mentioned disease is, I believe, new, as no observations seem to be recorded and nearly all authorities are completely silent. One distinctly says "the incubation period is unknown." From four cases I had reliable opportunities of fixing the period of fourteen days, and in two or three other cases almost exactly the same time elapsed, but there was some difficulty in fixing the exact date of invasion. I am Sir, yours truly,

Haslemere, Aug. 25th, 1886. T. FREDERICK PEARSE, M.D.

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THE LANCET.

LONDON: SATURDAY, AUGUST 28, 1886.

THE climatic treatment of disease having thoroughly established itself as one of the recognised resources of therapeutics, the multiplication of health-resorts has gone on apace, favoured by the spirit of an age of travel and geographical discovery. Our ancestors, when in search of health, sought our own southern coasts or the South of France, while Madeira or Egypt marked their furthest flights. Now every zone is laid under contribution, and the most inaccessible regions are freely recommended as affording those climatic conditions requisite for the cure which has baulked the efforts of medical skill. The claims of many of these bran-new and highly-vaunted sanatoria must be pronounced to rest upon the most unsubstantial foundations. Indiscriminate eulogies and unqualified assertions of extraordinary salubrity, penned frequently by persons whose impartiality is not above suspicion, and too often unsupported by a fragment of definite scientific evidence, cannot seriously affect the views or the practice of the profession. It would conduce to the advancement of a valuable branch of our art, and prevent many abortive volumes from ever seeing the light, if it were clearly recognised that any claim on behalf of a new sanatorium must be based upon a long series of careful meteorological records and some modicum at least of detailed clinical evidence. Amidst the excusable bewilderment engendered by the conflicting claims of a multitude of foreign sanatoria, it may not be inopportune to consider how far our own health-resorts meet the increasingly clear indications for the successful climatic treatment of disease.

The health-resorts of Great Britain and Ireland possess at least certain indisputable *primâ facie* advantages. Facility of access, the avoidance of the worry and expense of long journeys, proximity of the invalid to home and friends, superior accommodation and hygiene, and a better food-supply,—these are among the very important advantages which can be claimed for the home as compared with the foreign sanatoria. As against these must be set the inevitable drawbacks of a cool and humid climate, the long, dreary, sunless winter, the interference with out-door exercise and amusement, and the unfavourable influence upon many diseases of the combination of cold and damp. Let us consider how these opposing conditions affect the case of the three chief classes of sufferers who seek climatic treatment—viz., first, the large class of neurotic and dyspeptic patients; secondly, the gouty and rheumatic; and, thirdly, consumptives.

The first class is a very wide one, and includes those who, through over-work, vicious excess, or inherited tendency, suffer from debility of the nervous and nutritive functions. In many such cases climatic treatment is indispensable, but it is not possible to define precisely the meteorological conditions suitable to a group the members of which present many points of diversity. It may, however, be confidently asserted that for the treatment of such conditions it is only exceptionally necessary to go beyond the limits of these islands. If a marine locality be thought desirable, we have upon our extensive coast-line an unparalleled variety of watering-places, representing the most diverse types of local condition and therapeutic influence. Speaking broadly, the health-resorts of the east coasts are stimulating; those of the west, and especially those of the south-west, sedative; while those upon the south-eastern littoral hold an intermediate position. Ramsgate, Cromer, Redcar, and Whitby may be taken as representatives of the first class; Bournemouth, Torquay, Penzance, and Ilfracombe of the second; while Eastbourne, Folkestone, and Hastings are types of the third class. The selection must depend upon the physician's appreciation of the finer points in his patient's case, but it is far from being a matter of indifference, and the indiscriminate recommendation of sea air without regard to the diverse conditions presented by different watering-places is an inexcusable error, which is, we trust, becoming increasingly rare. If the dyspeptic or neurotic sufferer be intolerant of marine influence—a not uncommon phenomenon,—we have a sufficient variety of suitable inland resorts from which to make a selection. If we desire a mild and sheltered locality, for instance, Tunbridge Wells affords these indications; if a more tonic climate be requisite, such resorts as Malvern, with its charming scenery, delightful air, and admirable water-supply, are indicated; while Buxton, Ilkley, Harrogate, Weymouth, and Crieff may be mentioned as examples of health-resorts of the bracing and stimulant type.

For the treatment of the second class of invalids—viz., the gouty and rheumatic—the presence of mineral springs is important, and Nature has not been niggardly in her gifts to us of this kind. Bath, Cheltenham, Droitwich, Matlock, Leamington, Woodhall, and Harrogate in England, Moffat and Strathpeffer in Scotland, and Ballynahinch and Lisdoonvarna in Ireland, are a few of the many natural mineral springs in these islands. Yet the popularity of this class of our health-resorts seems unquestionably on the wane—not from any change of medical opinion, but as a consequence of the fluctuations of fashion and the increasing attractiveness of competing foreign resorts. Bath has not quite recovered its last century celebrity; Cheltenham is now noted less for its waters than for its educational establishments; and a similar tale of decadence might be told of Leamington; while thousands of Englishmen hurry annually abroad to drink at Aix-la-Chapelle or Carlsbad the waters which a former generation were content to take at home. It is certain that the great popularity of the foreign spas is not due solely or chiefly to the superiority of their waters, but rather to the perfection of their methods of balneo-therapy, to the influence of fashion, and the skill with which the foreigner caters for the amusement of his English patrons. If the stream of fashion could be diverted to our own mineral springs, and if the rigorous rules of diet and hygiene which are cheerfully acquiesced in abroad were similarly enforced at home, there can be little doubt that the results attained with us would rival those of the most noted French or German establishments.

The third class of patients seeking climatic treatment is in some respects the most important of all. More is expected from a judicious change of climate in the case

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of phthisis than in any other disease, and no question can be more important than to determine how far our own islands afford sanatoria suitable for combating the national scourge. Our consideration may be limited to those health-resorts which are suitable for the winter season, as consumptives usually elect to spend the summer amid their own circle of friends, without regard to climatic conditions. The southern coast has long claimed almost a monopoly of attention in the treatment of phthisis, and the merits and pretensions of Hastings, Ventnor, Torquay, and Bournemouth are familiar to the profession. That the results attained at these resorts frequently rival those gained at Cannes, Nice, and Mentone is unquestionable, and the indiscriminate ordering abroad of every consumptive is much to be deprecated. It must be admitted, however, that the great variability of the English seasons is an embarrassing factor in our calculations, and that there are some winters in which the constant prevalence of snow, rain, or cold winds limits outdoor exercise and amusement to a degree that cannot fail to be prejudicial. Ventnor and Torquay are the mildest of the English resorts, but prove somewhat too relaxing for some constitutions. Bournemouth sets much store upon its pine woods. In cases of stationary phthisis with retention of fair constitutional vigour, the results obtained at the more bracing resorts, such as Hastings or St. Leonards, are often very satisfactory. Less known, but not less noteworthy, are the southern Irish resorts. Queenstown possesses one of the best winter climates in these islands; and Glengarriff, at the head of the charming Bantry Bay, where the arbutus flourishes throughout the year, combines good hotel accommodation and delightful scenery with a singularly mild and genial winter climate.

The question has frequently been raised whether we can obtain within the limits of these islands any approximation to those conditions which have rendered the high altitude treatment of phthisis so famous at Davos and elsewhere. To this question the answer must be in the negative. The influence of rarefaction of the air upon phthisis appears to be slight under 1500 or 2000 feet, and we have no sanatorium at this elevation. Further, our winter presents meteorological conditions the most diametrically opposed to the brilliant sunshine and intense dryness to which the climate of the upper Alps owes no small portion of its efficacy.

DISEASES of the uterine appendages have been brought during the last ten years into great prominence—a prominence which has not yet been shown to be deserved. This state of things has been brought about, not by any careful study of the physiology of the organs involved or of the etiology and pathology of the diseases to which they are subject, but by the frequency with which women have been made the subject of the operation of spaying—in fact, by the clumsy method of "setting the cart before the horse." The great frequency with which the uterine appendages are the seat of disease demanding their removal has often been asserted, but on evidence which has quite failed to carry conviction to the mind of the profession in this country; while the beneficial results of the operation of spaying in such cases, although asserted and reasserted, have not as yet received such evidence in their support as to place the operation in the position in which those who frequently have recourse to it would fain see it. In the June number of the *American Journal of Obstetrics* is published a paper by Dr. HENRY C. COE, pathologist and surgeon to out-patients to the Woman's Hospital, New York, entitled, "Is Disease of the Uterine Appendages as frequent as it has been represented?" Dr. COE, from his official position as pathologist to the Woman's Hospital, has had a good field for observation. His experience, however, is not limited to the cases in that hospital, but many uterine appendages which had been removed on the supposition that they were diseased were sent to him for examination. The results of his investigations, and the conclusions he derives from them, are contained in his paper, and these conclusions we recommend heartily to the profession in this country as well as elsewhere. The ovary in health passes through a series of states which there is no reason to doubt are often described by operators as states of disease. In one stage it is small and ribbon-like; in another it is plump, full, with a smooth surface; in another it presents several vesicles on its surface; in a fourth it is enlarged, congested, œdematous, and swollen; in another, again, it is small, hard, firm, devoid of follicles, its surface fissured and thickened, cirrhotic. All these conditions are natural and healthy, and yet almost all of them have been made reasons for the operation of spaying. Dr. COE says, "Agnosticism in regard to ovarian and tubal pathology is viewed with small favour at the present day. A peculiar feature in the growth (if it really is growth) of abdominal surgery among us is that it owes its impetus to the surgeons rather than to the pathologists.....The gynæcologist will remove the ovaries and tubes, and will afterwards call upon the pathologist to justify the wisdom of the operation, which, to tell the truth, is often extremely difficult to do."

The criteria of disease of the ovary employed by the laparotomist, "who judges entirely by outward appearances," are "a considerable increase (or decrease) in the size of the ovary, thickening of the cortex and stroma, the presence of several cysts on its exterior—these are the common results which are alleged at the operation-table in justification of its removal." Dr. COE discusses these criteria, and shows that all the conditions mentioned are compatible with perfect health of the ovary. "But," adds the author, "of all the reasons urged in justification of oöphorectomy, that of cystic degeneration is the one most frequently heard. Time and again have I seen passed around in societies ovaries on the surface of which were three or four vesicles not larger than small peas, and rarely have I heard this diagnosis of 'cystic degeneration' called in question. ..... Now, without venturing to dwell upon such a disputed point, I would only call attention to the fact that if all these so-called cystic ovaries are to be viewed with suspicion as the forerunners of possible cystomata, there are few women who can be regarded as positively out of danger." This, however, is not all. Cystic degeneration, cirrhosis, &c., of the ovaries are not the only conditions which demand their removal. Dr. COE proceeds: "HEGAR makes the following peculiar assertion, 'There are unquestionably changes within the ovary, invisible, and not at all recognisable clinically, which may however, occasion severe

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and protracted symptoms of disease, so that castration may be indicated even when anatomical changes are not demonstrable.' Comment is unnecessary. Such doctrine may be reassuring to the indiscriminate operator, but to the more conservative it will savour not a little of barbarism."

The tubes have recently acquired an importance which they have not hitherto commanded, but this importance is surgical rather than pathological or physiological. It has been long known that the tubes are subject to inflammation and its consequences, closure of their lumen, adhesions of their extremities, &c.; but now their surgical diseases are pyo-salpinx, hydro-salpinx, catarrhal salpingitis, chronic catarrh, commencing pyo-salpinx, hypertrophy, stenosis, congestion, enlargement, dilatation, œdema, &c. It should be remembered "that a healthy tube is capable of a distinct increase in size under the influence of vascular engorgement, that its blood-supply is exceedingly rich, and that its mucous lining is so folded as to present a surface of large extent compared with the size of the tube. As seen during menstruation and at the operating table, the congestion is frequently so extreme that the tubes appear of a deep purple hue. Slight hæmorrhages from the mucous membrane have been noted. When rolled between the fingers, the tubes seem to be, and actually are, larger than they are after removal from the body. If, added to this supposed abnormality, the surgeon discovers a few adhesions attaching the fimbriated end of the tube to its ovary, and some small cysts on the surface of the latter, the indication is clear—it must come out!"

Dr. COE has never found catarrhal salpingitis except in the acute form in women who had died of acute peritonitis, consequent upon the extension of acute purulent endometritis. Atrophy of the muscular coat is less common than would be inferred from statements often made, while hypertrophy is by no means common. Dr. COE states that no small number of uterine appendages are removed in New York, both in hospital and private practice, and a large proportion of them passes through his hands: "I have found that undoubted pyo-salpinx existed in not more than one-fifth of the cases, hydro-salpinx still less frequently, while true hæmato-salpinx I believe to be extremely rare, having never seen but one undoubted example. I am profoundly sceptical regarding any diagnosis of pyo-salpinx in which a collection of pus cannot be demonstrated; you would certainly reject a diagnosis of abscess in which this element was wanting. Yet such diagnoses, acting upon no sound anatomical basis, are being constantly made."

We are heartily glad to see such good pathological work from an American gynæcologist. The mass of American gynæcological work—and it is very large—degenerates into treatment, and treatment of an operative kind, based upon nothing better than ignorance and fancy. The consequence is that operations and instruments are invented, which bear the name of the inventor, are practised or used by the unwary for a brief time, and are then cast away into forgetfulness. This unfortunately is the history of a very great part of American and English gynæcological work. The cart has been put before the horse, and both have come to grief. The paper of Dr. COE is, and will always remain, a valuable contribution to an obscure and much-abused subject; and cannot fail to be in America the beginning of a healthy scientific scepticism with regard to diseases of the uterine appendages and to spaying, which must lead to a more rational and less indiscriminate and fatal operative interference with women who suffer from but trivial diseases.

THE Arris and Gale Lectures delivered at the Royal College of Surgeons this year by Dr. L. C. WOOLDRIDGE dealt with questions of great physiological, pathological, and more general biological importance. We may say at once that the Arris and Gale lecturer endeavours to revolutionise at least two notions generally accepted in physiology. The chief revolution that he is desirous of effecting is the transformation of the liquor sanguinis from the comparative insignificance of a non-vital to the dignity of a vital fluid. His other chief notion is not put forward with such fervour, but is deserving of thoughtful attention. It is concerned with the perennial subject of spontaneous generation. But there is a certain antagonism between these two ideas. If we grant the first, the second loses whatever force it might have had; for if we allow that the blood is a vital fluid, it does not seem necessary to show that "life" may arise from it. To put this a little more perspicaciously: if the plasma of the blood be protoplasm in a state of excessive fluidity, is it at all surprising that it remains the "physical basis of life"? We confess to an intellectual sympathy with the first view of Dr. WOOLDRIDGE—that the blood-plasma has good claims to be considered as genuine protoplasm.

Let us follow the lecturer through the main arguments by which he seeks to establish his proposition. The coagulation of the blood has usually been regarded, since the important work of ALEX. SCHMIDT of Dorpat, as largely dependent on the presence of the white blood-corpuscles; this position is assailed by Dr. WOOLDRIDGE, who apparently shows that coagulation of the plasma of the blood can occur in the complete absence of the white cells of the blood. The coagulation of plasma without the participation of any cellular elements may be most advantageously studied in the form of peptone-plasma obtained by the injection of a solution of peptone into the circulation of a dog. A few minutes after the animal has been bled to death the blood does not clot, and by means of the centrifugal machine plasma can be obtained perfectly free from all formed elements. The injection of the peptone prevents the normal coagulation from taking place. A simple mechanical or chemical stimulus is all that is necessary in order to evoke coagulation in the plasma. Among the means by which the plasma can be made to coagulate are neutralisation with acetic acid or carbonic acid, dilution with water, or even salt solution, filtering through a clay cell or sometimes through filter-paper. This mechanical cause of clotting is very instructive, and may serve to explain the thrombosis that occurs in obstructed vessels, without having resort to the ordinary theory of thrombosis. A globule of mercury that completely blocks a vessel has no blood-clot around it, whilst a globule that imperfectly obstructs the circulation gives rise to a thrombus. ZAHN attributes the clotting under the latter circumstance to the white corpuscles, which are present in insufficient quantity when complete obstruction exists; but in view of the fact that mechanical stimulation of plasma suffices to induce

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coagulation in the absence of all formed elements, ZAHN's explanation is open to doubt. The power of the peptone-plasma to spontaneously coagulate is entirely lost if the fluid be cooled down to zero. But a precipitate is formed of peculiar microscopic appearance. It appears in the form of of regular round discs, three or four times smaller than red blood discs. After they have been separated some time they run together, and form small granular heaps. By a process of congregation and melting together, under the influence of a raising of the temperature of the plasma to the temperature of the room, the small discs may attain the size of red blood-corpuscles, and become biconcave in shape. It is these facts that lead Dr. WOOLDRIDGE to suggest the subject of spontaneous generation. The bodies separable from the plasma under the influence of cold are identical with the "blut-plättchen" of BIZZOZERO. During the coagulation of the plasma a ferment is formed capable of converting solutions of fibrinogen into fibrin. There is some analogy between the case of the pancreas cell and the blood-plasma. Trypsin is formed as the result of the disintegration of the former, and fibrin ferment from the latter. The capability of forming a large amount of trypsin goes hand in hand with the presence of a large amount of "granules" in the inner zone of the pancreas cell, and the capability of forming a large amount of fibrin ferment from blood-plasma depends on the amount of a substance which appears in the form of most definite "granules." Attention is also called to the fact that fibrin ferment appears to be the post-mortem ferment of muscle, thus greatly strengthening the analogy between rigor mortis and the coagulation of the blood. Histologists have distinguished between fluid unformed (paraplasma) and granular-formed protoplasma. The latter is believed to be specially concerned in the functional activity of the cell. Chlorophyll granules are an illustration of the functional activity of "granules." Regarded as protoplasm, blood-plasma has its granular formed protoplasma and its fluid unformed paraplasma, like any other mass of protoplasm. Genetically considered, the blood is derived from the same cord of protoplasm as constitutes the vascular wall. When the blood-plasma leaves the vessel wall, it is the plasma that undergoes alteration, on which coagulation depends, and not on the formed element of the blood, on Dr. WOOLDRIDGE'S view. Again, the analogy with the pancreatic ferment is interesting. Trypsin arises as the result of the death of the pancreatic protoplasm; and just as the fibrin ferment is incapable of attacking living blood-plasma, so pancreatic ferment is incapable of attacking living pancreatic protoplasm and living intestinal protoplasm. Fibrin ferment acts on a special body—fibrinogen; it does not act on plasma, because this contains no fibrinogen. Trypsin acts on proteids; it cannot touch a protoplasmic molecule. The essential chemical process in the coagulation of the blood, according to WOOLDRIDGE, is an interchange between protoplasma and paraplasma, both of which bodies consist of proteid and lecithin. In the process of coagulation there is a lecithin transference, the protoplasma losing, the paraplasmic moiety gaining, lecithin; the result being the formation of fibrin, which is also a proteid-lecithin mixture or compound. Coagulation is, then, not an ordinary fermentation process. But coagulation may be a type of processes occurring everywhere in protoplasm. It may be that the chemical processes of life are of like nature with coagulation, and not of the same order as fermentation. The blood ferment is essentially a post-mortem production, the result of the final explosion of the plasma molecule. The fibrin ferment will not cause coagulation of the plasma. The injection of a large quantity of fibrin ferment into the blood does not cause thrombosis. But the injection of a certain proteid-lecithin compound, not a ferment, will cause the blood to clot from one end of the body to the other, provided that enough of the substance be injected.

If the process of coagulation is rightly regarded as typical of many processes of life, these processes, far from being catalytic, are the result of the union in definite proportions of complex proteid-lecithin compounds. Lecithin and proteid are constantly present wherever there is life. As in the case of the blood, ferments may arise as epiphenomena of the main processes. That lecithin is profoundly concerned in the formation of these ferments is certain, so far as the blood is concerned.

DR. CLOUSTON'S address on "the Relationship of Bodily and Mental Pain," delivered at the opening of the section of Psychology at Brighton, is an able and useful summary of certain of the prominent known facts in connexion with the subject of pain in its leading varieties. It may be doubted whether the author was happy in the title of his paper. To draw a distinction between *bodily* and *mental* pain is to imply that the mind is something apart from the body, which would, of course, involve a fallacy in science. There is in this mode of reasoning the need—which, indeed, Dr. CLOUSTON recognises—of hypotheticating an *ego*, whether for man or earth-worm, when we speak of "feeling" in the sense of sensation, apart from the direct and immediate impression of forms of motion causing changes of structure. The so-called "mental" pain of mind caused by seeing or hearing something painful is, of course, identical with the pain caused by simply thinking of the same something; and the function of cortex activity is absolutely as directly bodily as the function of ordinary nervous activity in any peripheral part of the body. It is, therefore, a misleading policy to think or speak of some forms of pain as "bodily" and of others as "mental." It would be better practically, if not also more accurate, to speak of ideational and sensory pain. Not that pain of an ideational character primarily induced in the cortex, even when subsequently radiated to the periphery and supposed to be located in some distant part, as in what is sometimes called imaginary pains, is not sensory. In truth, ideational pain is as truly sensory as any other form of pain; and the so-called "imaginary" pains of the genuine "hypochondriac" or "hysterical" sufferer are quite as real as the pains excited by cutting or bruising. In short, the nature of pain is not determined or even affected by the accident of its being induced from without or set up within the body; but if we classify those forms of pain which are induced in the cortex as *ideational*, and call those which are, so to say, projected on to the cortex from without *sensory*, we do little violence to the language of science, and we do not indirectly lend countenance to the fallacy of supposing that there must needs be an *ego* to feel, and that to that *ego* is to

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be attributed the origination of mental acts, whether of volition or sensation.

Dr. CLOUSTON deals largely with MEYNERT'S hypotheses, and, we think, wisely questions the accuracy of his view that pain is of "vaso-constrictor" origin. It is certainly not true that the arteries are always contracted when pain occurs, even though we may concede to MEYNERT that the stage of constriction upon which he insists may be of very short duration and yet suffice to originate pain. Meanwhile, in spite of many laborious arguments to the contrary, we must adhere to the belief that pain is invariably induced by what may be called mechanical causes. Either there is motor irritation, or pressure, or tension, or stretching, or discordant activity in one or other form. The normal as regards the physical state of the tissues affected is changed, perhaps not at the part to which pain is referred, but at the point where it has been originated. We do not doubt that the cause may be transitory while the effect is persistent, but the essential factor of pain is change in the physical state. Even when pain is induced by ideation or cortex activity, it is by change in the nerve or blood state the effect is produced.

We must confess our inability to understand what Dr. CLOUSTON means by saying, "When MEYNERT claims credit for being the first 'to insist that the processes of innervation from the hemispheres, which constitute what we term volitional acts, are nothing more than the perception or memory of the sensations of innervation,' he states a proposition which conveys no definite meaning to my mind." It seems to us clear enough that MEYNERT is simply claiming to have been the first to propound the now generally accepted doctrine that the brain can originate nothing; that, in fact, it only perceives, collates, compounds, and reflects in forms which are kaleidoscopic in their *newness*, the ideas presented to it. Congenital ideas, so-called are, in so far as they can be said to exist—and we think they must be admitted in a limited degree,—the outcome of trains of work laid by the hereditary conformation; just as though a mechanical apparatus were contrived to perform certain actions, and provided with a coiled spring which being released the contained energy would be liberated in a predetermined direction and with foreseen results. It cannot be denied that something like this occurs in the reproduction of partially educated cells in the progeny of educated parents. Without such a hypothesis, it would be impossible to account for the mutation of species or the improvement of stock, whether animal or vegetable. The law of development necessitates this hypothesis, and it is manifestly a sound one; but beyond this the cerebrum is a *tabula rasa*, and indebted for al inscribed upon it, and apparently originated by it—more correctly, reflected from it,—to the impression of externals. This is all MEYNERT means, and it is what everyone must accept and endorse.

Dr. CLOUSTON'S paper will be studied with very great interest and profit by the multitude of practitioners for its sound and useful information on the relations of neuralgia and melancholia, and for the explanation it offers of the significance, if not also of the cause, of certain forms of cephalalgia which are increasingly common, and which give the medical man much trouble on account of their obscurity, and of the difficulty of treating them successfully.

Annotations.

"Ne quid nimis."

CHOLERA IN SOUTHERN EUROPE.

THERE has, during the week ending Aug. 24th, been a decided falling off in the severity of the outbreak of cholera, both in Italy and in the Austro-Hungarian Empire. From the latter, indeed, no news has been received since the 20th, up to which date 9 more deaths had occurred at Trieste, in addition to 4 fatal attacks in a village in Carniola. In Italy the newly attacked places are only two in number—namely, Cerignola, not far from Barletta, and San Marco in Lamis, also in Southern Italy. At Barletta itself the disease is still severe, but the daily number of attacks has fallen during the week from some 40 to about 12, and the deaths from over 20 to about 6. In North-eastern Italy the number of towns and provinces from which information comes has been materially diminished, but the disease is still maintained without any break in Vicenza, Ravenna, Padua, and Verona. There is, however, a doubt whether some of the returns have reference to the provinces or the towns affected. Under any circumstances, it is a matter of congratulation to see the month of August passing by without any material increase in the epidemic. Too much importance must not, it is true, be attached to this, for some of the most severe occurrences of cholera have taken place in Europe during September, and even the later autumn months. Besides which, cholera often exhibits a tendency to decrease before some sudden increase in the area and intensity of its diffusion. But, after all, the history of the outbreak this year is, so far, rather in favour of a cessation of the epidemic of 1884-86 than of its continuance.

DEFECTS OF VISION IN CANDIDATES FOR THE PUBLIC SERVICES.

AMONG the difficulties which have arisen in connexion with the system of competitive examination for admission into almost every branch of the public service, an important one has been to decide the amount of defective vision which ought to be considered a sufficient ground of disqualification. We are not aware of the existence of any specific instructions on the subject, except as regards recruits for the army. In the case of candidates for commissions, medical officers were instructed not to reject them on account of short sight, but to report the defect, stating whether it was remediable by the use of glasses, and leaving the final decision with regard to fitness to the military authorities. There was an exception made to this in 1871, in the case of candidates for admission into the Royal Military Academy at Woolwich, who were required to "possess a range of vision which will enable them to see clearly the 2' square bull's-eye at 900 yards." The want of definite rules has been in many cases a cause of great hardship, where young men have gone through a course of instruction and have been pronounced unfit on presenting themselves for admission to the examination. Sir J. Fayrer, in his capacity as President of the Medical Board at the India Office, has done very good service in preparing "Rules regarding defects of vision which disqualify candidates for admission into the various departments of the Indian Service." These have been published under the sanction of the Secretary of State for India, with an appendix containing the information given in Sir T. Longmore's Optical Manual as to the range of vision necessary to qualify a candidate for admission into the Royal Navy, British Army, and Civil Service. We trust the authorities of the Army, Navy, and Civil Service will follow the example thus set them, and publish an authorised code of instructions for the guidance of the examining medical officers, and

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for the information of parents and tutors of intending candidates. In the meantime these cannot do better than procure Sir J. Fayrer's little work, and be guided by the clear instructions which it contains regarding visual defects and the mode of testing them.

MEDICAL FEES.

WRITING on this subject in the columns of the *St. James's Gazette*, "F.R.C.S." arrives at the conclusion that, looking at the fees obtainable for consultation at great distances from home, "nothing was ever so lucrative as the railway journeys of the present day." The process by which this result is reached is the following, in the correspondent's own words: "What was the state of things formerly, which I recollect? Between 11 and 12 o'clock in the morning you received a letter (unpaid) from Brighton calling you to see a patient. If you went directly upon receipt of the letter, you sacrificed a whole day's fees in London, and had to spend twelve hours at least in a post-chaise before you got home. The fee was fifty guineas. The expenses of the journey: posting £5 (if four horses, £10), with the loss and tear consequent upon 100 miles of post-chaise travelling; expenses at Brighton, £2; loss of one day's patients, £21 10*s.*; total, £28 10*s.*—leaving a balance of £24. Now a practitioner receives at 8 o'clock a paid telegram asking for his attendance; he sees all his day's patients, leaves London at 5 o'clock, sees his patient at 6.30, and, if he likes to return home the same day, is back by 10.30. Should he sleep at Brighton, he is at home in time in the morning to see all his patients for the day, at a cost of, travelling and expenses at Brighton, £1 10*s.* The fee is now £31 10*s.*, leaving a gain of £30, with only a total of railway journeys of two hours and a half, with no loss of patients." "F.R.C.S." can have very little practice at home, or he must have been very much worried with long journeys in the past, and therefore feels the present state of matters to be comparatively a subject for complacency. Has he, however, forgotten the great difference which exists between the condition of things years ago and now? At the time of which he speaks everything went slower than it does now. The £24 balance left, after calculating expenses and loss, had a purchasing power quite equal to, if not in excess of, the £30 gained now; and even if the £21 10*s.* for patients be saved to the practitioner, the net value of his receipts on the average day's work is not so great as it used to be. Consultations at long distances occur much less frequently than in olden times, and they more seriously derange the routine business of the consultee. In short, for one fortune made in practice in the present day, there were probably three gained in the days to which the recollections of "F.R.C.S." carry him back.

THE VIRUS OF GLANDERS.

A VALUABLE communication has been made by M. Chauveau to the Académie des Sciences on the resistance of the virus of glanders to the destructive agency of atmospheric air and heat, the investigations having been carried out by M. Cadéac and Malet. The authors endeavoured at first to discover the conditions that preserve and those that destroy the virus under ordinary circumstances. They have ascertained how long the virulence persists (1) in the humours dried more or less rapidly, and in the diseased lung left to the action of the atmosphere at different seasons of the year; (2) in humours placed in an atmosphere saturated with moisture at the ordinary temperature of the atmosphere; (3) in humours diffused through water. The resistance of the virus to desiccation varies with the rate of desiccation, with the temperature of the medium, and with its humidity. In the laboratory it was found that the virulence lasts two days, no matter what the season of the year, if the virus be exposed in thin layers in watch-glasses. In the external atmosphere, however, the virulence may be harmless on the third day or persist till the ninth; the former happens mostly in the summer or end of spring; the latter in the month of December. Meteorological observations show that a high temperature prevails and a dry state of the atmosphere in the former case, whereas in the latter the temperature is low and the air moist. Thorough desiccation of the virus means its destruction; the active virus always retains some of its moisture. If the virus be desiccated rapidly, as in a stove, at a temperature of 40°C., from one to twenty-four hours, its virulence lasts for a longer period than when desiccation takes place more slowly. Thus, a virus dried in the stove for two hours retained its activity for six days. It seems probable that this difference in the duration of the activity of the virus, when slowly and rapidly dried, is to be attributed to the more prolonged exposure to the atmospheric oxygen, rather than to any difference in the state of moisture of the environment. Fragments of farcy buds from the lungs retain virulence in the central parts as long as twenty-four days, whilst the more external layers lose theirs at rates dependent on the facility with which they become desiccated in the atmosphere. An atmosphere saturated with moisture and at ordinary temperatures preserves the virulence of the morbid humours for very long periods of time—fifteen to thirty days. Boiling the virus for two minutes in water suffices to destroy its activity, but simply pouring boiling water on the morbid material does not destroy its virulence.

DR. WENDELL HOLMES.

DR. HOLMES has unfortunately left us long before we have had such opportunities as we could have wished of expressing our welcome to him. At the last moment, as the guest of the Liverpool Philomathic Society, he spoke kindly words of affection and respect for "dear, dear England," which will be felt and appreciated everywhere. But, though gone, he is still with us as one of our most "autocratic" companions, teaching us great broad lessons of sympathy with all that is human and divine. His medical distinction may be somewhat lost in his literary fame, but we claim him, nevertheless, as one of the men whose vision has been refined and intensified by the study of medicine, and who could not have drawn some of his most effective pictures of character and experience without this study. Who but a medical man could have done justice to "the little gentleman" with his diminutive and deformed body and his disproportionate thoughts, or who else could so eloquently have vindicated the true gentleness and kindness that underlie the apparent sternness and want of feeling of the surgeon. We trust he has received a fresh stock of health, and that in the atmosphere and association of the old country, which he loves like a true American, he has found a source of fresh inspiration, the expression of which will delight the "breakfast-table" for generations yet to come.

THE TREATMENT OF TYPHOID FEVER.

THE hope of cutting short the usual course of the specific fevers still lingers in the mind of practical physicians, though it must be confessed that there does not appear to be much encouragement in store. M. Pecholier of Montpellier is of opinion that he has discovered the means of causing the premature termination of ordinary cases of typhoid fever. The agent is the familiar quinine, administered in daily doses of not less than one gramme, and this from the very first days of the illness. The drug may be aided by the employment of tepid baths if there be considerable fever, and by small doses of digitalis, should the heart be specially disordered.

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A CONTRIBUTION TO THE KNOWLEDGE OF THE ACTION OF URETHAN.

DR. E. BRAUN, being a sufferer from insomnia caused by heart-disease, tried the action of urethan, and contributes his experience of this drug to the *Eira*. The first evening he took a dose of two grammes, hoping confidently to fall asleep in "from ten to thirty-five minutes." In this hope he was disappointed, as, instead of sleeping, he lay in a peculiar sort of trance, conscious of all that went on round him, hearing the striking of the clocks both at the hours and half-hours, and the voices of people in the street. The following evening he again took two grammes at 11 o'clock, and, as sleep did not follow, he took another gramme in an hour's time; the same peculiar condition occurred. The third evening Dr. Braun took three grammes at a time, but without any other result. He now gave up the experiment, as he was aware that large doses were not considered advisable. About a day or half a day later he suffered from difficulty and pain in passing urine, and found on examination that there were traces of albumen. Some hours later he had fever and a severe headache. The symptoms all vanished after forty-eight hours, with the exception of the difficulty in passing urine, which lasted for several days. Dr. Braun judges, from his own experience, that immunity from after-effects with urethan is not so certain as has been stated.

FOR AND AGAINST ALCOHOL.

THE total abstinence section of the British Medical Association never fail to testify at the annual meeting. About 160 members of the Association were present at the breakfast at Brighton given by the National Temperance League. We need not say that the speakers at this meeting were not of the opinion of a recent writer in the *Revue Scientifique*—M. Fournier de Flaix. M. de Flaix maintains that the outcry against alcohol is utterly unmerited, and that all vital statistics are more favourable in nations in proportion to the use of alcohol. In France, he says, the birth-rate is lower and the death-rate higher, where the consumption of alcohol is smaller. In England, again, more alcohol is consumed than in France, and yet in France the birth-rate, the death-rate, and the statistics of crime and suicide are less favourable than in England. Comparing other nations, he reaches the same conclusions, and maintains that alcohol is an alimentary element whose consumption should depend directly on climate. Very different were the teachings of the medical abstainers at Brighton—viz., Dr. Norman Kerr, Dr. Nathan S. Davis, Professor Geikie of Toronto Medical College, Dr. Simon Fitch of Nova Scotia, Dr. Bernard O'Connor, and Dr. Ridge, Secretary to the Medical Temperance Association. Dr. O'Connor said that during his fourteen years of practice he had never prescribed alcohol for any patient. Speaking as a physician to a consumption hospital, he maintained that phthisical patients did much better without alcohol—the night perspirations and the cough were less, and the morning exhaustion was less. But the principal speaker, of course, was Dr. Nathan S. Davis—the President-elect of the approaching International Congress. Dr. Davis's disparagement and denunciation of alcohol were absolute and unconditional. It does not nourish, it does not sustain heat, it does not assist convalescence, it does not improve the pulse in fever, and it is of no virtue in nursing. It is purely evil in its effects. So far from strengthening the heart's action, it depresses it—it paralyses it. In saying so, he relied not only on his own observations, but on those of Anstie and Parkes. He maintains that alcohol is simply anæsthetic; that it does not remove evils, but makes one insensible to them; and that it arrests and retards all healthy action of the tissues, and tends to the retention and accumulation of effete materials. It is a pity that M. Fournier de Flaix and Dr. Davis did not meet at the Brighton breakfast. There is perhaps a little extremeness on either side, but of the two sides we decidedly lean to that of Dr. Davis. We entirely agree with him and other speakers in thinking that the medical prescription of alcohol should be undertaken only on the strictest grounds. M. de Flaix must remember that France now is not far, if at all, behind England in the consumption of alcohol, and that, besides, she indulges in absinthe, and he will have to explain the fact that in the temperance section of life insurance offices in England the value of life is apparently much greater than in the ordinary section, so much so that in some offices teetotal lives are taken for less premiums or receive larger bonuses. When we read the indictment of Dr. Davis against alcohol, we are tempted to ask if it is the whole truth—if alcohol has no redeeming quality. Admitting that it does infinite harm, does it do no good?—does it prevent no evil? Can the able physicians who recognise its virtues be all mistaken? The question is one for scientific and thoughtful men to discuss gravely, and medicine will not be without much authority and, let us repeat, responsibility, in its settlement.

A MINISTRY OF HEALTH.

WE have repeatedly contended that there ought to be a Department of Health in the Government of this country, and that a Minister of Health should have a seat in the Cabinet. Public Medicine is preventive, and as such it can only be effective when it forms an integral part of State policy. Surely health is not secondary to wealth; and if trade needs to be specially controlled in the interests of the State, health-promotion has a not less urgent claim to be considered a constituent part of policy. We are glad to see that the question has been reopened, and is being agitated by Mr. Hamer, a practical worker in the field of health-promotion. There are urgent matters of sanitary enterprise which call loudly for help from the Government, and which it is not only inexpedient, but a cause of weakness, to neglect. The Prime Minister who shall perceive the need and take measures to satisfy it will deserve well of his generation and serve his country.

COCAINE IN GYNÆCOLOGICAL PRACTICE.

PROFESSOR AMANN gives in the *Münchener Med. Wochenschrift* of July 20th an account of the experience he has had with cocaine in gynæcological practice during a period of about a year. He employed solutions of the hydrochlorate varying from 5 to 10 per cent. Of the strongest of these he has sometimes used altogether two grammes (one drachm), and in one case nearly double that quantity, in applications to the mucous membrane made by means of a brush every five or six minutes. In cases of hyperæsthesia and inflammation of the vulvar and vaginal mucous membrane, rendering coitus very difficult and making the passage of a small cylindrical speculum extremely painful, the condition was greatly relieved by the application of a 5 per cent. solution every day for two or three weeks. Dr. Amann tried in two cases painting the vulva with a 10 per cent. solution, in the hope of being able to remove small warts painlessly, but the attempt proved almost useless. In pruritus of the vagina, a 5 per cent. solution applied for several days by means of cotton-wool gave no permanent relief, though Hoffmann obtained good results in these cases from a 3 per cent. cocaine and vaseline solution. Urethritis, with considerable swelling of the mucous membrane, with dysuria and painful micturition, was usually greatly relieved by painting the meatus with a 10 per cent. solution every second day, which diminished the hyperæmia and the tumefaction of the part. Blumenfeld also speaks

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of good results obtained by the use of a 2 per cent. solution for the purpose of facilitating the introduction of a catheter. In cases of erosion of the cervix, and cervical endometritis with contraction of the internal os, occasioning severe dysmenorrhœa, four to six applications of a 5 or 6 per cent. solution (exceptionally of a 10 per cent. one) by means of a sponge-holder or a Braun's intra-uterine syringe, with, if necessary, preliminary dilatation of the cervix, always effected a cure. In these cases, as well as in urethritis, the action of cocaine is of a vaso-contractile character. In order to show what powerful effects of this nature can be caused by cocaine, the writer goes on to give an account of an interesting case of long-neglected inversion of the uterus, the metrorrhagia, of which the patient had several attacks, at last yielding to the local application of a 10 per cent. solution. The quantity used here, however, was considerable, and the patient exhibited rather serious toxic symptoms.

THE TREATMENT OF PARONYCHIA.

DR. SELLDEN writes in the *Eira* that he has for years made a special study of this subject. The greater number of his patients have been miners, smiths, machine labourers, servants, and others whose fingers are exposed to injury. The disease commences in the subcutaneous tissue, and spreads to the periosteum. There are differences of opinion as to the varieties of this disease, some authors asserting that there are four, others that there are only two—the deep and superficial inflammation. Dr. Sellden, after a series of trials, found the following method most efficacious in the treatment of paronychia. When the patient will consent to an incision, the finger, after it has been opened, is instantly plunged in a tumblerful of hot water, which is then allowed to cool till it is nearly lukewarm. Half a teaspoonful of arnica is poured in, and a teaspoonful of the usual 10 per cent. solution of potash is added. This mixture is highly anæsthetic; the finger is held in it for from fifteen to thirty minutes, when the "bad matter" comes out. This expression is very characteristic of the phenomenon. The blood and pus exude in a thin stream about the size of a knitting needle, which forms circles in the alkaline liquid, and finally settles in a thick mass at the bottom of the glass. Fifteen minutes or half an hour after the finger is dried it is rubbed with vaseline ointment containing 10 per cent. of sulphide of potassium. The finger is then immediately enveloped in a poultice which continues warm till the next finger-bath, and thus hastens the cure. These finger-baths are taken from two to four times daily, and the wound is covered during the earlier days with sulphur ointment, and later with a boracic ointment. The finger is then bound up with a wadding compress and a bandage. Carbolic acid may be used in the finger-bath, but Dr. Sellden gives the preference to arnica, which he finds particularly useful in all sorts of injuries.

FEES FOR CERTIFYING LUNATICS.

THE Holborn Union Guardians are of opinion that a fee of two guineas is too high for the examination and certification of a lunatic. Would any member of that board contentedly place himself in a position of liability to action for false procedure at a less cost? Until the law affords due protection to medical practitioners in the discharge of their public duties, the authorities which require their service must be made to understand that it is necessary to pay for them. It is simply monstrous to expect any properly qualified medical man to devote the requisite time and attention to the study of a case of alleged lunacy, and to assume the responsibility of certifying, at a lower rate of fee than that charged. We are glad to see that the magistrates upheld the reasonable demand made.

ETIOLOGY OF GONORRHŒAL ARTHRITIS.

DR. SMIRNOFF, writing in the *Vrach* on the etiology of gonorrhœal arthritis, remarks that inflammation of the joints occurring after an attack of gonorrhœa has for a long time been looked upon as an outcome of some sort from the urethral disease, but although the genetic relation of the latter to the joint disease was generally allowed, the mode in which the metastasis takes place still remained in obscurity. It was said that the poison, which was probably of a chemical nature, found its way into the blood, and was thus distributed through the body, and so set up the joint inflammation. Since Neisser succeeded in finding gonorrhœal micro-organisms the cause of the arthritis ought to be more satisfactorily ascertained. Indeed, Petrone, Kemmerer and Prof. Afanasieff have actually demonstrated the presence of gonococci in the exudation of the joints in gonorrhœal arthritis. Taking into consideration, however, the fact that the significance of Neisser's gonococci in the etiology of gonorrhœa is not universally accepted, it cannot be considered that the arthritic inflammation is satisfactorily accounted for. An observation made by the author for the better elucidation of this matter in the Kazan Pathological Institute on the contents of a knee-joint affected with gonorrhœal arthritis is therefore of considerable interest. The case was that of a man of twenty-eight, in whom gonorrhœa showed itself on Jan. 1st, 1886. On the 5th orchitis supervened in consequence of too active exercise and on Feb. 1st the right knee became inflamed. After about a fortnight Professor Studenski drew off the fluid and washed out the joint. The quantity was about three ounces, and it was of a sero-purulent character. Thin films of it were placed on cover glasses, dried and stained with methylene blue (1 part to 33 of alcohol and 66 of water), remaining in the solution about a minute, and subsequently washed with water and re-dried. The examination was conducted by means of a Zeiss's oil immersion $\frac{1}{12}$ objective. Quantities of gonococci were seen in the preparations mingled with pus-corpuscles. Dr. Smirnoff is therefore able to confirm the previous observation of Petrone, Kemmerer, and Afanasieff as to the microbic origin of gonorrhœal arthritis.

INOCULATION OF TUBERCLE IN MAN.

SINCE the numerous facts which had been gleaned in former times on the subject of tubercle have been explained, and as it were arranged by the discovery of the bacillus, the question of the inoculability of tubercle is at once capable of comprehension and answer. The opinion that tubercle is capable of inoculation was held by many ancient writers, and Laennec himself, after a prick from a saw while performing a necropsy on a phthisical subject, thought that he witnessed an example of inoculation in a small tubercle in the skin; but twenty years afterwards the great clinician was in good health, though finally he died of phthisis. Cutaneous inoculation has been made experimentally in monkeys with perfect success, but at present facts are wanting to show that this can occur in man, however probable it may seem. In the *Archives de Physiologie* for July, Dr. Hanot, physician to the Hôpital Tenon at Paris, has collected six observations bearing on this point, which tend to show that such inoculation does take place, one case having fallen under his own observation, and the others being gleaned from recent medical literature. From these observations it would appear that tubercular matter inoculated into the skin forms at first a small papule from which a caseous kind of pus is discharged, and that this papule increases in size and extent, breaking down at the same time, so that finally an irregular ulcer is formed, which has no tendency to heal under the usual lines of treatment, and which slowly extends, so that after one or two years the

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ulcer has reached a considerable size. The sides of the ulcer are formed of embryonic tissue, with giant cells containing bacilli, and sometimes the lymphatic glands are involved, sometimes not. Whether pulmonary tubercle follows the cutaneous inoculation is difficult to say. In the particular case observed by Dr. Hanot, the patient was in the third stage of phthisis, and died soon after with a tubercular ulcer on the arm of at least two years' standing; while the history of cough only dated from the last ten months, which looks very much as if the skin lesion preceded the pulmonary, and was the cause of the phthisis. The sources of inoculation were necropsies on tubercular subjects, nursing phthisical patients, handling old bones, pricking the hand with a fragment of porcelain from the broken spittoon of a phthisical patient, and in four of the cases the tubercular character of the skin lesion was verified by finding the bacilli. The subject has considerable importance, for in presence of a skin lesion of this description, the medical man must not remain inactive, for at any time there is a chance of the bacillus generalising itself and producing its fatal results in internal organs, so that complete eradication is undoubtedly the treatment called for, and eradication in such a way that the chances of aiding the migration of the microbe are minimised, which indication is best carried out by the actual cautery or Paquelin's knife.

THE CHOLERA COMMISSION.

WE understand that Messrs. Rouse and Sherrington, who, it will be remembered, were commissioned by the Royal Society to visit Italy and report on the outbreak of cholera in that country, have come to the conclusion that there are no cases of cholera in Northern Italy or in the Po valley, although the newspapers daily announce cases of the disease. The so-called cholera hospitals at Alessandria, Verona, Vicenza, and Padova have been visited, and the municipal authorities consulted, but no cases have been discovered. The laboratory with which the commission was provided has therefore proved useless. In the south of Italy, where it is impossible to work the laboratory, there are, however, cases of true cholera, but in the infected districts there is no gas or water-supply, and no hospital. The work of the commission has consequently come to an end, and we understand that a speedy return to England is contemplated.

EFFECTS OF SYPHILIS IN PREGNANCY.

DR. LOUIS HIRIGOYEN, who has published a series of articles in the *Journal de Médecine de Bordeaux* embodying the results of observations on the effect of syphilis upon the course of pregnancy, states that in the Bordeaux Maternity Charity, in which five-sixths of the cases are those of unmarried women, the syphilitic are 5 per cent. of the whole number. The author's observations go to confirm Fournier's dictum that "a syphilitic woman becoming pregnant is more likely to abort than a pregnant woman who becomes syphilitic." For example: Of eight women who had been syphilitic for more than a year, five aborted, one bore a child which died on the eighth day, and two bore living but puny children. Of nine women who contracted syphilis within the first two months, six aborted at six months and three at seven months, all of macerated children. Of three women who contracted syphilis during the third month of pregnancy, one miscarried at seven months of a macerated child, and two of a similar child at eight and eight months and a half respectively. So that in all the twelve cases where syphilis was contracted before the commencement of the fourth month miscarriage of a dead fœtus resulted, even in those cases in which anti-syphilitic treatment was diligently pursued, the only apparent effect produced being the retardation of the period of miscarriage. Syphilis occurring after the commencement of the fourth month proved less fatal, for of four cases which took place from the fourth to the sixth month, one brought forth a healthy child at eight months; the second, who was treated medicinally, went her full time, and was delivered of a healthy child; while the other two women were confined at seven and eight months respectively of puny children, which died shortly after birth. Where the infection was delayed till after the beginning of the seventh month it proved still less fatal to the children. Thus, of seven cases of this kind four terminated in the delivery of apparently healthy children, and one more might have been born alive but for maternal dystocia. The bodies of the macerated children, as well as those which died after birth, were examined, and no definite syphilitic appearances could be discovered in the osseous or other parts. Of course, treatment was adopted where the woman was seen early enough, and in all cases stringent isolation and antiseptic precautions were enforced, with the result of the avoidance of all serious accidents.

INSTRUCTION IN SCHOOLS FOR STAMMERERS.

FROM time to time we have had occasion to refer to the oral education of deaf-mutes, and we are pleased to note that this form of teaching has now become fairly established as a part of the School Board system. There is, however, yet another class of persons troubled with defective speech, though less gravely afflicted, who may claim a similar consideration. These are stammerers. Treatment and cure in their case do not call for such elaborate care as in the case of mutes. They have not lost a sense, nor is that faculty which in them is deficient—the power of co-ordinating the movements necessary for clear enunciation—entirely absent. It is rather in the condition of rusty machinery; it will work, but not smoothly. There is much hope, therefore, of a good result by training such persons. History and common experience alike bear witness that stammering is curable, and the result of an organised attempt to remedy this impediment in the school children of Brunswick has proved, it is said, that it can usually be treated at an early age with complete success. A point worth noting is that, in consequence of the comparative commonness of this fault of speech, it should not be so difficult as in the case of mutes to form within a given area classes of sufficient size to justify their separate instruction.

"A LOCUM TENENS REQUIRED—UNQUALIFIED."

IT is inevitable, and even proper, that a medical man at least once a year should leave his patients. But he ought certainly to leave them in the care of a duly qualified *locum tenens*. A correspondence has arisen in the *Sheffield Daily Telegraph* on the significance of the following advertisement, taken from the columns of our contemporary: "*Medical.*—Locum Tenens required, unqualified; out-door. Good testimonials essential. Address Medicus, *Telegraph* Office." A correspondent professes some alarm lest such an advertisement should represent a common practice, and he is followed by others who think Sheffield exceptionally given over to unqualified assistants acting under the protection of the name of a qualified practitioner. We think we may assure our readers that such a practice is not common anywhere. The writers are only too accurate in saying that if unlicensed curates or solicitors were engaged to take the place of absent members of the other professions great scandal would result, and the clerical and legal authorities would be soon brought into action, whereas the medical authorities look on such irregularities with comparative indifference. But medical men generally are too much alive to the responsibilities of practice, and, we may add, to their own interests, to leave their patients in other than "qualified" hands. Unless the correspondents of our contemporary are much in error, the

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employment of unqualified assistants in Sheffield is carried to a great extent. They are said to be put in charge of so-called "dispensaries" and of branch practices on a large scale. We should be glad to receive some contradiction of this statement.

THE EPIDEMIC OF DIPHTHERIA IN SOUTH LONDON.

AT the present time there is an unusual amount of diphtheria in districts south of the Thames. At Guy's and St. Thomas's there have been many cases admitted, especially at the former, where some of the cases have been of a very severe type. Three nurses at the former hospital have contracted the disease, and unfortunately in one case, that of Miss Blomfield, a lady pupil, the disease proved fatal. She had not entered upon the nursing duties for more than a fortnight when she commenced attendance on a patient suffering from the disease. Twenty-four hours after she had taken charge of this patient she developed diphtheria of a most malignant type, and, we regret to say, died within twenty-four hours afterwards. The nurse in attendance on her also developed the disease, but it was of much milder character and she recovered. It is difficult to account for the greater severity of the type in the fatal case; possibly the nurse had not become acclimatised to the air of a large hospital, for it is the experience of many that those much engaged in ward work are especially prone to suffer at first from those affections which attack the throat.

THE MICROBE OF CHOLERA.

THE account of his research upon the Relation of Cholera to Schizomycete Organs, by Surgeon-Major D. D. Cunningham ("Scientific Memoirs of the Medical Officers of the Army of India," Part I., Calcutta, 1885), bears out in many respects the truth of Koch's discovery. The inquiry was limited to the following points:—(1) The association of curved schizomycetes with materials of choleraic nature; (2) the presence of similar bodies in other media; (3) the effect of variations in the nature of the medium in which they are developed in the curved schizomycetes occurring in association with choleraic materials. These organisms—comma bacilli—were found by Dr. Cunningham in twenty-six out of twenty-eight cases in which the alvine evacuations were examined; they were variable in number and character. In five cases the intestinal contents were examined after death, and in all these organisms were discovered. In not one of eight cases in which the blood was examined were the bacilli found in that fluid. Cultivations in agar-agar were made from these several sources. Characteristic colonies of comma bacilli were thus produced from thirteen out of eighteen specimens of the alvine evacuations, from three out of four specimens of the intestinal contents, but in no case from the blood. Dr. Cunningham remarks truly that the failure to detect the "commas" in the cultivations (which were made under adverse conditions) does not absolutely prove their absence in the specimen employed; and believing as he does in the polymorphism of these organisms, he finds here an additional explanation of the disappearance of characteristic forms. It is an interesting fact that in a case in which the evacuation contained comma-shaped organisms, but where cultivation failed to produce colonies, the diagnosis was found to be mistaken, the case proving to be a malarial and not a choleraic one. His results are summed up in the statement that the belief in the presence of easily cultivated comma-shaped organisms in the dejecta and intestinal contents of choleraic cases is well founded. On the second line of inquiry several specimens of normal alvine evacuations were examined, and in all "commas" were found, but in no instance did the cultivations yield commas,—the conclusion being either that bodies of the nature of choleraic commas are entirely absent from normal alvine evacuations, whether in actual or potential condition; or, if present, they are incapable of further development under conditions favourable to those of the choleraic organism. Dr. Cunningham also found, on examining specimens of tank water, an abundance of comma-organisms, mostly associated with and attached to the scum of Euglenæ that covered the water. His researches on this point were, however, interrupted, but in two instances he obtained characteristic cultivations. Lastly, he has studied somewhat exhaustively the changes in form which these organisms undergo in cultivation—a line of inquiry which has not hitherto been fully pursued.

THE MANUFACTURE OF QUININE BY SYNTHESIS.

A REMARKABLE discovery, by which the price of quinine may be reduced to something like 3*d.* per ounce, has been made by Mr. Cresswell Hewett. The synthetical manufacture of quinine was first suggested to Mr. Hewett in 1869 by the late Dr. Mattheson, of St. Bartholomew's Hospital, whilst giving his assistance in a course of experiments in connexion with apomorphia. Subsequently, Professor Parkes of Netley aided with his advice, and to these gentlemen, rather than to himself, Mr. Cresswell Hewett modestly explains that the process is due. The importance of this discovery is rendered greater by the fact that, while hitherto we have been depending for our quinine on the cultivation of the cinchona tree, from whose bark only about 2 per cent. of good quinine can be extracted, 98 per cent. being valueless, the drug can now be manufactured without limit by a very simple process from an article which can always be got in abundance in any part of the world. Mr. Hewett, we believe, intends to put himself in communication with the Government, who annually spend in India alone about £60,000 in the cultivation of the cinchona tree.

PUBLIC HEALTH IN SOUTH AUSTRALIA.

ACCORDING to the twelfth report of the Central Board of Health of South Australia, nearly all the local boards of health exercising jurisdiction over populous towns or districts have now attached to them medical officers of health, and a large number of townships have been personally inspected by the Board's own inspector. Amongst the more recent advances in the colony are regulations of the nature of bye-laws controlling such matters as the construction and management of cesspools, earth-closets, &c. In one respect the regulations as to the latter are in advance of anything in this country. With us, a local authority can control the construction of an earth-closet, but it can only deal with its faulty management by the cumbrous process of proving it to constitute a nuisance. In South Australia, on the contrary, the mere fact of an earth-closet not being kept constantly supplied with dry earth &c. constitutes of itself a nuisance under the Public Health Act of 1876.

RENAL TUBERCULOSIS.

M. RAYMOND DURAND FARDEL has studied the histology of renal tuberculosis, particularly with reference to the presence of the bacillus ("Contribution à l'Etude de la Tuberculose du Rein," Paris, G. Masson, 1886). The scope of his monograph is restricted to the lesions of miliary tuberculosis. It is therefore mainly of pathological interest, and it could be wished that his studies had been extended to the far more important (clinically at least) affection known under various designations as renal phthisis, scrofulous kidney, strumous pyelitis, &c. There is decidedly room for a good monograph upon this latter affection. However, so far as it goes, the *brochure* of Durand Fardel is of

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importance. He has demonstrated bacilli in acute miliary tuberculosis of the kidney, within bloodvessels, glomeruli, tubules, and in the interstitial tissue, and has detected them within the glomeruli and vessels even before the appearance of the anatomical lesions of tubercle—a remarkable fact worth verification. In the early stages the bacilli are to be found preferably on the surface of the glomerular tufts, but in more advanced stages they occur in the tubercular infiltration around the glomeruli, as well as within these bodies. The presence of bacilli in the afferent arterioles is held to demonstrate the generalisation of tubercular infection by the blood stream. The paper has, therefore, a bearing upon the general subject of tuberculosis

VENOMOUS SNAKES.

A BOY, aged fourteen, was admitted into St. Thomas's Hospital on Aug. 18th, suffering from the bite of a snake. It appears that he had gone to Sandown Park for the day, and whilst playing about on a bank he saw a snake moving in the grass. He seized it by the tail, thinking it to be one of the harmless kind found in many parts of the country, and the snake turned immediately and bit him on the right thumb. When the boy arrived at the hospital, seven hours later, there was no mark on the thumb to indicate the exact position of the puncture, but he pointed out a place on the dorsum just above the nail where he stated that he had been bitten. There was considerable swelling of the forearm and inner side of the arm, with swelling and much tenderness of the axillary glands. He was suffering from shock and was somewhat blanched; pulse 80, quick, and rather small. The next day there was more swelling of the arm and axillary glands, but no rise of temperature. He has since progressed favourably, though there is still some swelling of both arm and glands. It would be advisable that boys on visiting places where such snakes are known to exist should be warned of the danger of handling them, or, as in the Australian Board Schools, instructed in the difference between the harmless and venomous kinds.

INOCULATION OF HYDROPHOBIA.

WITH the virus taken from the spinal cord of a dog, which had died of hydrophobia in the Stockholm Veterinary Institute, three dogs were inoculated by Pasteur's method. To render it more certain, the meninges were chosen for the seat of operation. The dogs were carefully selected as being totally free from bites by other dogs which might have been suffering from rabies. The inoculation wounds healed after two days, and the dogs seemed quite healthy and lively. The sixteenth day after the operation two of them showed symptoms of rabies, and the third followed two days later. The first two dogs had fully developed rabies sixty days after the first symptoms had appeared. To save the third dog unnecessary suffering he was killed as soon as he developed decided symptoms of rabies.

BLOOD ENEMATA.

DR. GUTIERREZ gives an account in *El Dictamen* of a case where blood enemata proved of great service. The patient was a badly nourished woman, on whom the author had performed Hegar's operation of excision of the cervix uteri on account of hypertrophy. On the twelfth day a rigor occurred, which was followed by catarrhal pneumonia. The treatment employed relieved the pulmonary symptoms, but evening fever, partial sweats, anorexia, extreme prostration, and a highly anæmic condition persisted in spite of the employment of cod-liver oil, hypophosphites, and other remedies ordinarily prescribed. After a month had elapsed, without any amelioration of the patient's condition, Dr. Gutierrez determined to give enemata of blood. In three days after these were commenced the patient began to regain her colour, and the night temperature diminished. In a week she was able to take and enjoy her food, and to answer questions put to her. After the blood of eighteen lambs had been used, the cough had entirely disappeared; there was no fever, and the patient was able to get up and walk about; her colour had quite returned, and her spirits had regained their elasticity.

CHYLOUS ASCITES.

THE existence of cases of chylous ascites has been called in question by many observers. Some have asserted that all reported cases of this condition were merely of an inflammatory or cancerous nature, in which the products of the morbid processes had undergone intense fatty degeneration. M. Guinochet, of the Hôpital Tenon, has endeavoured to set this question at rest, and apparently satisfactorily. A patient suffering from a peritoneal effusion, believed to be largely reinforced by the escape of normal chyle into the serous sac was experimented upon in the following fashion: Two punctures were made, partly to relieve the tension and also to ascertain the chemical composition of the ascitic fluid. Thus the chemistry of the fluid was determined whilst the patient existed on ordinary diet. Before ascertaining whether any modification of the diet would be followed by a corresponding change in the chemistry of the ascitic fluid, the patient was placed upon milk alone, in which as much butter was emulsionised as the patient could tolerate. If the peritoneal effusion were really derived from the lymphatics, the fluid withdrawn after the administration of a diet so rich in fats as that mentioned should exhibit corresponding changes, not only in an actual increase of the fat, but also in the presence of butyrine—an article which does not occur normally in ordinary human fat, but which would be present in the chyle if butter were an article of consumption. The analysis made by M. Guinochet fully satisfied these requirements.

CHOLERA SCARES.

WHENEVER cholera is prevalent on the continent of Europe we get a number of cholera scares, often due to the unfortunate practice of registering cases of acute diarrhœa under the name of English cholera or some similar term. But the latest of these scares seems more than usually unjustifiable. It occurred at an inquest held in the East of London on the body of a young man, who, after having been to the Docks with another lad and having there eaten a large quantity of nuts and beans which were being unloaded, was, together with his companion, seized with vomiting and purging. The companion recovered, but the elder of the two young men, after improving, passed a quantity of blood, and died some five days subsequent to his visit to the Docks. According to the daily press, the jury are stated to have recorded a verdict in accordance with the medical testimony, that deceased died from "cholera." We, on the other hand, hold that such verdict was altogether opposed to the medical testimony, which gave a clear history of death due to the effects of the consumption of nuts and beans in the Docks. No inquiry as to the precise nature of the nuts and beans seems to have been made, whereas there can be no doubt they produced the illness in both of the young men, and led to the death in question. Juries, as well as others who have to do with specifying causes of death, would do well to be more careful, because erroneous certificates or verdicts are likely to do us a national injury, and there is absolutely nothing to be gained by carelessness as to the nomenclature of the affections which are in question.

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THE KIDNEY IN DIABETES.

IN a memoir lately published ("Le Rein dans ses Rapports avec le Diabète," Paris, A. Coccoz), Dr. P. S. Inglessis gives the results of his observations upon the renal changes that accompany diabetes mellitus—changes which he avers are more frequent than is commonly admitted. The most constant is hypertrophy of the kidney, a condition doubtless related to the polyuria that is mostly the chief indication of the functional derangement of the organ. This hypertrophy is, according to the writer, characterised not only by obvious enlargement of the kidney, but histologically by a notable increase of the cells of the convoluted tubules. Whilst renal hypertrophy characterises the earlier stages of the disease, renal inflammation is more common in the advanced period. Parenchymatous nephritis is the usual type, but it is difficult often to eliminate all other causes besides diabetes in many cases. In some, however, there is no question of the direct relation between the two affections.

DR. LANGENBECK.

THE numerous friends and patients of the eminent surgeon, Dr. Langenbeck, body physician to the Emperor of Germany, are to be congratulated that he has been dismissed from the Klinik perfectly cured, eleven days after the performance of an operation for cataract by Dr. Hermann Pagenstecher. His Imperial Majesty and many others have sent congratulatory telegrams and messages to the distinguished patient, and to the scarcely less eminent ophthalmic surgeon.

FOREIGN UNIVERSITY AND MEDICAL INTELLIGENCE.

Kharkoff.—Dr. P. Kovalevski, Extraordinary Professor of Neurology and Psychiatry, has been appointed Ordinary Professor.

Bordeaux.—Dr. Demons has been appointed to the Professorship of Clinical Surgery.

Graz.—Dr. Anton Wölfler, a former assistant of Billroth's, has been appointed to the Professorship of Surgery, vacant by the resignation of Professor von Rzehaczek.

Kazan.—Dr. Sasezki has been appointed Professor of General Pathology and Therapeutics, and Dr. Khomyakoff Professor of Clinical Medicine.

Lyons.—Professor Testut has been appointed Professor of Anatomy, and Dr. Fochier Professor of Clinical Midwifery.

Prague (German University).—Dr. Otto Kahler has been appointed Professor of Special Medical Pathology and Therapeutics.

Dresden.—Dr. Ganzen has been appointed Chief of the Lunatic Department of the Town Hospital, in succession to Professor Kraepelin, who has gone to Dorpat.

WE understand that the Commission appointed to inquire into the results of M. Pasteur's inoculations have prepared a draft report, but that they withhold it until they can ascertain the accuracy of the reports of fatal cases which have recently been published. The experiments conducted by Mr. Victor Horsley have, we learn, so far fully confirmed M. Pasteur's statements; but they are not yet complete, and will therefore be left to be detailed in the report.

IT is stated that after the beginning of next year the vacation courses of the Vienna Medical Faculty will be discontinued.

PROF. ARLT, the renowned ophthalmologist of Vienna, is, we regret to learn, suffering from gangrenous thrombosis of the leg.

A MEMORIAL is to be erected to commemorate the death of Mr. Isaac Ratcliffe Lane, of the Army Medical Staff, who was killed at Hasheen, Soudan; it is to be in the form of a "Latten" Brass from the works of Mr. Gawthorpe, of London. He was the youngest surgeon in the British army.

HEALTH OF THE ARMY.

No. II.

THE average strength of the European troops in India in 1884 was 55,252. The ratio of admissions into hospital per 1000 of the force was 1495, of deaths 13·03, of invaliding to England 31·87, and of constantly non-effective from sickness 67·37; the admissions and mean sick were somewhat above, but the deaths and invaliding considerably under the average of the preceding ten years.

The force in Bengal averaged 33,716; the admissions were 1645, the deaths 12·10, the invalids sent home 31·82, and the mean daily sick 70·86 per 1000. Except the deaths and invaliding, these ratios are above the average of the ten years. The death-rate was 6·64 per 1000 under the average, the reduction having taken place chiefly in cholera, diseases of the digestive system, in those of the nervous system, and in paroxysmal fevers. The Lahore division furnished the highest ratio of admissions—2486 per 1000; but it was also very high in the Peshawar, Gwalior, and Meerut divisions, the excess in all of them being chiefly due to the prevalence of fevers. The lowest ratio of admissions was in the Presidency and Oudh divisions. The death-rate was highest in the Gwalior division, amounting to 22·94 per 1000, and lowest in the Saugor and Sirhind divisions, in which it was 5·75 and 6·78 per 1000. Enteric fever was the cause of 423 admissions and 111 deaths, being in the ratio of 12·5 and 3·29 per 1000, both higher than in 1883 and above the average of the preceding five years. It was most prevalent in the second and third quarters of the year, 161 cases and 33 deaths having occurred in the former and 129 cases with 43 deaths in the latter. The disease was widely spread, cases having occurred at forty-seven different stations. Those which furnished the largest number were Lucknow, Morar, Sitapur, Mooltan, Fyzabad, Meerut, Agra, and Rawal Pindi. At Sitapur it was attributed to "an insanitary condition of the latrines near the barracks," and at Fyzabad to adulterated milk, but at none of the other stations could any special cause be traced. At Lucknow the medical officer in charge attributes its origin to "the influence of unaccustomed heat on young persons. This theory is strengthened by the fact that 29 out of 53 cases (in the cantonment) occurred in the Derbyshire Regiment, the most recent arrival in India, and which contained a larger proportion of young soldiers than any other corps in the garrison."

Cholera gave rise to 71 admissions and 45 deaths, being 2·1 and 1·33 per 1000 of the strength. Meerut furnished 28 cases with 13 deaths; Allahabad 10, with 5 deaths; and Dinapore 9, with 7 deaths. They occurred chiefly in the third and fourth quarters of the year. Three fatal cases of hydrophobia are returned: one at Sialkot, in which the period between the infliction of the bite and the death of the boy was 29 days; one at Bareilly, in which it was 81 days; and one at Umballa, in which it could not be exactly ascertained. Under the head of poisons 72 cases, with 1 death by delirium tremens, and 250 cases with 6 deaths by alcoholic poisoning are returned, being in the ratio of 9·55 admissions and ·21 deaths per 1000 of strength from the direct effects of intemperance. There were 22 cases of poisoning by hill nuts, "a species of jatropha," in a detachment on the march between Roorkee and Chakrata; they all recovered. There were during the year 1 judicial, 4 homicidal, and 12 suicidal deaths.

The average strength in Madras for the year was 10,812, the admissions into hospital were 1106, the deaths 9·25, the invaliding to England 32·37, and the mean sick 59·14 per 1000. The admissions were higher, but all the other ratios lower, than in 1883, and all except the mean sick were considerably under the average of the ten years. Rangoon was the station, exclusive of depôts, at which the ratio of admissions was highest, amounting to 1553 per 1000, and Port Blair that at which it was lowest. Of the larger stations

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Bangalore had the lowest death-rate—3·98; and Madras and Palaveram the highest—14·92. There were 19 cases of small-pox, with only 1 death; 9, including the fatal case, at Bangalore; 4 at Madras, 2 at Kamptee, 2 at Secunderabad, 1 at Rangoon, and 1 on the march; the disease was epidemic over Southern India. Enteric fever was more prevalent, but less fatal, than in 1883, the admissions being 11·9 and the deaths 1·66 per 1000 of the strength; 60 cases and 1 death occurred at Bangalore; 39, with 10 deaths, at Secunderabad; and 15, with 3 deaths, at Kamptee. No definite cause could be traced for these outbreaks, which occurred chiefly among young soldiers, many of them recent arrivals in India. One-half of the cases and deaths occurred in the third quarter of the year.

Although cholera was very prevalent in most of Southern India, the troops suffered very little from it, the cases having only amounted to 1·1 per 1000; of 12 admissions, however, 10 terminated fatally, and one invalid from Madras died of cholera on the passage home. Three cases occurred at Madras and four at Bangalore, where the disease was epidemic among the civil population. The troops in Madras appear to be very exempt from phthisis, the deaths in 1884 having only amounted to ·55 per 1000, and the average of the preceding five years to ·97 per 1000. Diseases of the digestive system gave rise to a higher ratio both of admissions and deaths than any other class, the former having been 2·29 and the latter 2·78 per 1000 of strength, the great mortality being due to hepatitis and abscess of the liver, the deaths by which amounted to 2·13 per 1000.

In Bombay the average strength for the year was 10,724; and the admissions were 1415, the deaths 19·76, the invalids sent to England 31·52, and the mean sick 64·70 per 1000. The admissions and invaliding were under, but the deaths and mean sick above, the average of the preceding ten years. The increase in the death-rate was chiefly due to cholera. The highest ratio of admissions, exclusive of the sanitaria, was at Quetta, where it amounted to 2001, and of deaths also, if the small station of Baroda be excepted and troops on the march. The latter suffered most severely, 61 deaths out of a total of 204 in the command, having occurred in an average annual strength of 577. The decrease in the admissions was shown chiefly in cases of paroxysmal fever, but there was scarcely a corresponding reduction in the mortality. Compared with the results for 1883, there was an increase in enteric fever and the deaths from it. It prevailed throughout the year, but especially in the first quarter, at Karachi, and in the last two quarters at Quetta. The prevalence at these stations could not be traced clearly to any insanitary condition of the stations. At Ahmednagar it was attributed to a contaminated milk-supply, and at Deesa, Nasirabad, and Baroda to the water. The cases at Quetta amounted to 27·9 and the deaths to 9·3 per 1000 of strength. Cholera was the cause of 66 admissions and 52 deaths, being in the ratio of 6·2 and 4·85 per 1000; of these, 48 cases and 39 deaths occurred in the 2nd Battalion, North Staffordshire Regiment, on the march from Quetta to Mhow. The disease broke out in it at a camp in the Bolan Pass, and could not be traced to any apparent cause. Exclusive of those among troops on the march the cases amounted to 1·39 and the deaths to 1·08 per 1000, or double the average of the preceding five years. Deolalee and Mhow furnished the largest number of deaths; no local insanitary condition could be found to account for it, but the disease is stated to have been prevalent among the civil population. Diseases of the digestive system were, next to paroxysmal fevers, the cause of the highest ratio of admissions, and, with the exception of cholera, also of deaths. Among the injuries there were seven admissions and six deaths by lightning, which struck the roof of a barrack supported by iron girders at Nasirabad, passed along the punkah wires in the upper storey, killing a man sitting on his cot, to the lower storey, where it killed five men sitting at a table. A severe accident occurred at Kirkee to some men employed in filling shells; the powder exploded, injuring eight men, of whom 2 died, one from fracture of thigh and shock, the other from tetanus supervening on compound fracture of both legs.

The force in Lower Egypt, including the small permanent garrison of sixty men at Suakim, averaged 6468; the admissions to hospital were 1266, the deaths 11·59, the invalids sent home 49·47, and the mean sick 76·85 per 1000. The most prevalent disease was syphilis, by which 266 admissions per 1000 of strength took place; and the most fatal was enteric fever, the death-rate by which was 4·95. There were 25 cases of small-pox with only 1 death; the disease was very prevalent among the natives at Cairo, and vaccination greatly neglected. The admissions by enteric fever were 24·9 and the deaths 4·95 per 1000; it was most prevalent and fatal at Alexandria, where the ratios were 53·7 and 11·56 per 1000; the greatest number of cases came from Ramleh Barracks. The medical officer in charge is of opinion that "the chief cause to be assigned for the prevalence of fever in these barracks must be looked for in the saturation of almost the whole of the soil underneath them by sewage matter in past years, caused by the cesspits and drains being built without inverts, the bottoms being thus left open, allowing the sewage to percolate into the soil." Sunstroke was the cause of 46 admissions and 4 deaths, of which 24 with 1 death took place at Abbasiyeh, "due to the reckless and imprudent exposure of insufficiently protected heads to the sun by young soldiers just arrived from home, aided, no doubt, in some cases by drink." The admissions by diseases of the eye amounted to 53 per 1000, but, with the exception of 1 of purulent ophthalmia, all the cases were of simple conjunctivitis. At Suakim, in an average force of 60 men, chiefly sappers, 3 deaths occurred, all from sunstroke. Fever was very prevalent among them, but did not prove fatal, and no case was returned as "enteric."

In the appendix to the report there is a medical history of the Nile expeditionary force from March 18th, 1884, to July 31st, 1885, by Surgeon-Major Mouat, which may be noticed here. The estimated strength of the regular forces employed with the expedition was 10,771; the admissions into hospital were 8953, the deaths 557, and the number invalided 630—in a period of 500 days. These numbers, therefore, give the *annual* ratio of 607 admissions, 37·75 deaths, and 42·70 invalided per 1000 of strength.[1] Of the deaths, 84 were men killed in action and 42 who died subsequently of their wounds, making a total of 126, or 8·54 per 1000, and leaving 29·21 per 1000 from other casualties and disease. There were 41 cases of small-pox, with 5 deaths—a high proportion in a vaccinated population, but probably due to the circumstancees in which the troops were placed on field service. The disease is stated to have been very prevalent among the natives at several of the stations. The greatest cause of mortality was enteric fever, of which 760 cases were admitted, and 277 died. These numbers give the *annual* ratio of 51·51 cases and 18·77 deaths per 1000, the latter being almost exactly half of the total mortality. Upwards of two-thirds of the cases occurred among men under twenty-five years of age, and three-fifths among those under five years' service. At Wady Halfa, where 178 cases and 47 deaths occurred, the disease was considered to arise, to some extent at least, from the insanitary condition of the camp ground and its vicinity, but elsewhere no specific cause could be assigned. The high death-rate was doubtless due in a great degree to the unfavourable conditions for treatment in which the cases were placed, the necessity for moving them without reference to their state, and the exhausting heat to which they were exposed in the desert. There were only 5 cases of scurvy during the whole time under report. Of sunstroke 64 cases were admitted and 13 died, being in the *annual* ratio of 4·34 and ·88 per 1000. Considering the circumstances under which the force was serving, this seems to be a very low proportion. The admissions for conjunctivitis were only 486, or 33 per 1000, considerably under the proportion among the troops in Lower Egypt; they were "mainly due to irritation from pustules of fine sand blown through the camp during dust storms." The admissions and deaths from dysentery and diarrhœa were in the annual ratio of 124 and 4·07. Towards the end of the campaign a too free indulgence in fruits and tinned provisions by the men retiring down the river was a fertile source of bowel affections. Of 39 deaths from injuries, exclusive of those received in action, 37 were by drowning. The wounds received in action occasioned 241 admissions, 42 deaths in hospital and 84 on the field of battle. A classified return of the wounds and injuries admitted into hospital is appended to the Report, and Dr. Mouat has given copious notes respecting their nature and extent and the treatment adopted.

The average strength of officers was 600. The admissions among them were in the *annual* ratio of 625, and the deaths of 49·88 per 1000; of the latter 17·03 were in action, or officers

[1] Surgeon-Major Mouat, in his report, has calculated the ratios upon the average strength of the force for the whole period, but as that extended over 500 days we have reduced them to the *annual* ratios.

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who died in hospital from their wounds. The invaliding amounted to 128 per 1000. These ratios are all considerably above those of the troops. Enteric fever was the cause of 57·2 admissions and 18·25 deaths per 1000 of strength, being very nearly the same as among the non-commissioned officers and men. The report gives an analysis of the wounds and injuries received in action and of the operations performed.

The strength of the men of the Royal Navy, Canadian voyageurs, kroomen and others attached to the expedition, was estimated at 2452; the admissions among them were 671, the deaths 71, and the invalided 16. Of the 71 deaths, 60 were due to disease, 3 to accident, and 8 to wounds received in action. We have not reduced their numbers to the *annual* ratios, as the information regarding this portion of the force is in some points defective.

ERRATA.—In the first part of this article, published in our last, several errors of importance unfortunately escaped correction owing to delay in the return of the proof. Thus, on page 370, line 18 from the commencement of the article, the average death-rate of the troops should have been stated as 5·33, not "8·42"; in line 5 of the second paragraph on page 371, for "Royal Engineers" read *Household Cavalry*, the sickness ratio of which arm was 35·19, whilst that of the Foot Guards was 57·53, instead of "29·34" and "48·35" per 1000 respectively. On page 371, first column, line 25 from bottom, insert "with the exception of the admissions" after "higher"; line 10 from bottom and elsewhere, for "Cottonua" read *Cottonera;* 4th line from bottom, for "occurred" read *arrived;* second column, line 17, for "7·52 and 7·01" read *7·52 and 7·09;* page 372, first column, line 7, for "530" read *539;* line 29, for "some" read *seven;* two lines further on, for "moved" read *arrived;* in second line of third paragraph of same column, for "22·3" read *22·03;* in following paragraph, lines two and three should read "was 985; the ratio of admissions into hospital was 1198; of deaths 11·17," &c.; in last line of the column, for 38·33 read *38·25;* finally, in second line of second column, for "and the admissions and mean sick" read *also, with the exception of the mean sick,* &c.

THE OUTBREAK OF ENTERIC FEVER AT LANCING COLLEGE AND SHOREHAM.

THE following is the gist of a report to the Steyning Rural Sanitary Authority by Dr. C. Kelly, sanitary officer of health for West Sussex:—

'GENTLEMEN,—I have to report to you an outbreak of enteric fever at Lancing College, of which I received information on the 23rd instant. On visiting the College on that day with Dr. Fuller, I found that there had been fourteen cases of fever, of which two had died and three had been removed, so that there were then nine boys ill with the disease. Three boys were admitted into the ward on July 7th, another on the 10th, three on the 12th, three on the 16th, and two on the 18th, but some of them felt ill two or three days before going into the ward. The dates of admission seemed to point either to great variation in the incubation period of the disease, or to a source of infection spreading over an interval of several days. Five of those attacked were in a dormitory in the second master's house, and four were in the school house, of whom three were in one room, and one patient, being very ill, was in a separate room. Two of the patients had died, and three had been removed before the date of my first visit. Lancing College contains about 200 boys, a head master, eleven masters, eight men servants, and fifteen or twenty women servants. Besides these, about sixty men are employed near the College in erecting a large chapel, but they had no direct communication with any part of the College. The College stands upon a spur of the chalk downs at an elevation of over 200 feet above the sea; on the north, south, and east sides the ground slopes rapidly away, while it rises to the west. The situation is open, airy, and dry, the grounds extending over an area of 160 acres. To the east of the College, and at the bottom of the hill, there is a large level cricket ground, between a large clump of trees and the river Adur. About a mile and a half away (in a straight line) to the south-east is the town of New Shoreham, where at this time there was also a large outbreak of enteric fever.

"The water-supply to the College is obtained from a fine spring at the base of the chalk downs, whence it is pumped up to a reservoir on the hill side, and thence is conveyed by a pipe across the river Adur up to the College buildings..... The same Company supply various other places, as Portslade and Southwick; but, as there was no outbreak of fever in either of these towns, it did not seem probable that there was any pollution of the water-supply. The drainage of the College is carried away to an outfall to the north-east of the buildings, in a large field, where it is used for irrigating the soil.....There was nothing in the condition of the water-supply or of the drainage system which seemed to account for the outbreak. There is a farm on the College grounds where a few cows are kept to supply milk to the boys; no butter is supplied from this dairy, and all the milk is sent up for the use of the College. The cows are all in good health, and yielded plenty of milk. There had been no cases of illness among those who worked on the farm. The eggs and milk came from the College farm, the bread was made on the premises, the cheese and butter came from Dorsetshire, and the meat from London; so that very little, if anything, came from local sources outside the College grounds. The boys would frequently go to Shoreham in the course of their walks, and they would often go to a confectioner's to buy pastry or sweets; but, except in this way, there was very little communication between Lancing College and Shoreham; and yet the fact that there was a simultaneous outbreak of enteric fever at Shoreham pointed to, or at least suggested, a common cause. In the College cricket field there are two buildings, one used by the cricketers and one used as a 'tuck shop.' Every afternoon Mrs. X., who lives at Shoreham, goes over to the 'tuck shop' to sell her goods. She obtained sweets and lemonade from Brighton, fruits of various kinds from Shoreham, and she had lately been supplying some cream which she maintained did not come from Shoreham, but from the Pad Inn, close to the entrance to the College grounds [where one cow was kept].....The cow yielded about two and a half or three gallons daily, but no accurate measurements were ever taken, nor were any accounts kept, as Mrs. X. paid each day for what she had. But the landlady remembered that she often called for cream as she went by, after the strawberries came in, and she recollected serving her with three pints on one day and two pints on another, besides smaller quantities on other days. She further remembered that these larger quantities were sold on the occasion of the Old Boys' match, because her husband was present, and he saw Mrs. X. coming up to the grounds from his house. This was a two days' match, and it was played on Friday and Saturday, July 2nd and 3rd. On such an occasion a great many were present, and Mrs. X. made provision for it by getting more fruit and cream.....Every boy who was ill had partaken of strawberries and cream, but it was also true that numbers partook of the cream who were not ill at all. A young lady, Miss H., who was present at the Old Boys' match, fell ill at Brighton with enteric fever five days after the match, and some boys who drank from the same portion of cream of which she partook escaped the disease altogether. Some boys who had been rowing on the river the same morning, being too young to play in the match, came back with one of the masters early in the afternoon; tired and hot, they refreshed themselves liberally with the fruit and cream, yet not one of them was attacked. Of the boys who fell ill with the fever, six were in the first eleven, and played in the match. No one can tell how many of those present regaled themselves with fruit and cream; but it was evident that far more escaped illness after partaking of them than the number of those attacked. It has been before stated that the dates of incubation varied very much, so that unless there is a great variation in the incubation period, it is hardly likely that a boy should take infected cream on July 2nd or 3rd, and be admitted into the ward on July 7th, or that Miss H. should fall ill about the same time. It seemed clear that the cream at the Pad Inn was not at fault; and certainly if it were, it could not account for the Shoreham outbreak, as no one from that town drank this milk. Dr. Fuller, the medical officer to Lancing College, from the first expressed a firm belief in the cream being infected. He was attending at this time several patients in the Shoreham Workhouse who were suffering from enteric fever, and they obtained milk from a dairy belonging to A., and those who were ill were chiefly women and children who drank a good deal of milk. Some men who worked on a railway bridge near A.'s dairy at the end of June drank skim milk supplied

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oy A., and three of these men fell ill, one of whom was the man who has been mentioned above as lying ill at Portslade. On visiting this dairy Mrs. A. showed by her books that Mrs. X., who supplied the 'tuck shop,' had had cream from her from June 25th to July 3rd, so that there must have been in the cricket field cream from two sources—one from the Pad Inn and the other from A.'s dairy. Mrs. X. had nearly a quart of cream from A.'s dairy on Friday, June 25th, a quart on the 26th, a quart on the 28th, a pint on the 29th, a pint on the 30th, ninepennyworth on July 1st, and sixpennyworth on July 3rd, after which date she had no more. If this cream were infected, those who drank of it were liable to infection during the whole of the week previous to the Old Boys' match on July 2nd and 3rd, as Mrs. X. supplied cream to no one else but those who frequented the cricket field. Further inquiry showed that there was a cricket match on Saturday, June 26th, in the College grounds, between the boys and an eleven from Tunbridge, and on this day a quart of cream was taken up by Mrs. X., who probably had some more on the same day from the Pad Inn. I think it is clear that these creams were kept in separate vessels. Mrs. X. brought A.'s cream in an oval tin, holding about half a gallon, while the cream from the Pad Inn was put in a jug or in a tin belonging to the inn dairy. The liability to catch the disease was probably greater on June 26th and on the first three days of the following week than on July 2nd and 3rd, when only small quantities of cream were obtained from A.'s dairy, while three pints were supplied on July 2nd from the Pad Inn dairy, and a quart from the same place on July 3rd. The price of cream at A.'s dairy was 2*s.* a quart, so that 9*d.* would purchase three-fourths of a pint, and 6*d.* would represent half a pint. Miss H. was at the match on June 26th with her sister, and they had on that day some cream, and it must have been on that day that she became affected; the cream which she had at the Old Boy's match, and which others shared without falling ill, was probably of good quality. The various dates on which the boys fell ill can now be accounted for, since the source of infection was present not for one day only, but for a space of seven or eight days. Miss H.'s sister was poorly for a few days, and, as her temperature on one occasion rose to 103° F., it is probable that she also was in some degree infected on June 26th. Of the boys who were attacked, one was fourteen years of age, one fifteen, two sixteen, seven seventeen, and three eighteen. The reason why none of the younger boys were attacked may be accounted for by the fact that the older boys having more pocket-money were able to buy the fruit and cream, while the younger ones put up with some cheaper form of refreshment. When it was quite clear that cream from A.'s dairy had been supplied during the last week in June, and when others had failed about the same time at Portslade and New Shoreham who had been drinking milk from the same dairy, it seems almost certain that there must have been a common origin for the outbreaks at the College and at Shoreham, and that the milk from A.'s dairy was the common source of infection. This view is confirmed by the fact that there has been no fresh case of fever at the College since July 18th, and the cream-supply was stopped on July 3rd, while there have been many fresh cases in Shoreham since that date amongst those who continued drinking this milk."

Dr. Kelly then proceeds to give a detailed description of the drainage and water-supply at A.'s dairy, with the result that he shows leakage from the drain into the well was at least a probability. He then states, "There was no case of illness in A.'s house, nor had there been any for a long time. There is no evidence of anyone having had enteric fever just before the outbreak, so that the sewers might have become infected with the discharges from such a case, but enteric fever has, of recent years, been very common at Shoreham, and the sewers are not very well ventilated..... There were six cows at A.'s dairy, but one of these was not in milk; they were said to be in good health and to yield plenty of milk. They were not seen until July 26th, so that their condition during the last fortnight of June could not be ascertained. Mr. Knight of Brighton, who has recently examined the cows, has found nothing in their condition to account for the outbreak. All proper precautions have been taken by Dr. Fuller as to the disinfection and burying of all discharges, and the drains have been well flushed. As no fresh cases have occurred since July 18th, the outbreak of enteric fever is now at an end, and the remaining patients are all recovering. The outbreak has, therefore, been due not to any defects in the sanitary arrangements of the College itself, nor to any pollution of the water-supply, but to impure cream being taken under conditions which cannot occur again. The well at A.'s dairy has been closed, and good water is now supplied there from the public main."

Worthing, July 29th, 1886.

BRITISH DENTAL ASSOCIATION.

ONE of the most successful meetings of the increasingly popular British Dental Association was held last week at the School of Mines, Jermyn-street, under the presidency of Sir John Tomes, the president of the year, Mr. Richard White, being unfortunately too ill to attend.

Of the papers read on the first day, that of Mr. George Cunningham, on the Relation of Dentistry to the State, was perhaps of the most general interest, and the moderation and practicability of the view expressed are sure to meet with general approval. He recognises fully that the army surgeon, who is already expected to be a veritable "Admirable Crichton" in surgery, medicine, midwifery, drill, ambulance, a capable administrator, able to select suitable sites for camps, to be competent to perform complex analyses of food and water, &c., cannot be expected to be likewise a dental specialist, but still he maintains that something might and ought to be done in conservative treatment of the teeth, something more than the radical cure—extraction; in fact, that the army surgeon should have to produce a certificate of having attended a course of lectures and gone through a course of clinical instruction in dental operative surgery at a general or special hospital. It seems, several have gone further than this, and qualified in dental surgery at the Royal College of Surgeons. The "regulation army extracting case" seems to be of a very antiquated description, the key, of which the modern dentist has had no experience, and forceps, which it would be difficult for a specialist to know for what purpose they were intended, are the armamentaria. The "stopping case," on the other hand, contains gold foil, as if the most skilful dental surgeon was expected, but omits a mirror to see the cavity, and tweezers to insert a dressing. We cannot now discuss further this paper, but we are sure that the Army Medical Department, who have done so much in recent years to promote the efficiency of the service, will improve and modify their dental equipment.

Messrs. Morton Smale and Hutchinson read an excellent paper on Dental Education, and very strongly urged that every dental student should take the L.R.C.P. and M.R.C.S. under the Conjoint Scheme in which we agree; they or one of them, should, however, be regarded not only as an advantage, but as a *sine quâ non*.

On Friday the great attraction was the Demonstrations, principally in gold fillings, at the Dental Hospital of London, and amongst the patients there was a well-known dental practitioner, which caused considerable amusement. Electricity, both as an illuminator and a motor, was conspicuous in the exhibit of dental apparatus. The day's proceedings terminated with the annual dinner, under the presidency of Sir Edwin Saunders, which took place at the Criterion. Sir Edwin, in a very apt and appropriate speech, proposing the toast of the Queen, enlisted the sympathies of his audience by stating that Her Majesty had once observed to him, "Yours is a most useful profession; for while some require the services of the oculist, a still smaller number the aurist, almost all, sooner or later, have need of those of the dentist." The principal toasts were that given by Mr. Sibley, "The Prosperity of the British Dental Association," to which Mr. Frederick Canton, the hon. secretary, replied, and "The Royal College of Surgeons," proposed by Mr. Smith Turner and responded to by Professor John Marshall; several others followed. The meeting was a great success, being well attended.

The business and festivities of the week culminated in the garden party, given by Sir Edwin Saunders, at his charming residence, Fairlawn, Wimbledon, which was a complete success, notwithstanding that many members of the profession and personal friends of Sir Edwin and Lady Saunders were prevented from attending. H.R.H. Princess Mary of Cambridge (Duchess of Teck) wrote expressing her regret that unforeseen circumstances prevented her from being present as she had intended and wished.

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WILLS OF MEDICAL MEN.

THE will and codicil of Mr. Wm. White Cooper, F.R.C.S., F.R.G.S., late of 19, Berkeley-square, who died on June 1st last, were proved on July 24th by Dame Mary Elizabeth Cooper, the widow, and Mr. George Cox Bompas, the acting executors, the value of the personal estate amounting to upwards of £28,000. The testator bequeaths £500, and all his household goods, furniture, pictures, plate, wines, and effects to his wife. All his real estate and the residue of his personal estate he leaves upon trust to pay the income to his wife for life; at her death he gives £1000 to each of his daughters, and the ultimate residue is to be held upon further trust for all his children in equal shares.

The will and two codicils of Thomas Boycott, M.D., late of 46, Montagu-square, who died on May 12th last, were proved on July 16th by Mr. Alfred Paget Humphry and Mr. Hugh McNab Humphry, the executors, the value of the personal estate exceeding £17,000. There are bequests to his wife, daughters, and son-in-law, and the residue of his property the testator leaves upon trust for his wife for life, and then for all his children in equal shares; his son-in-law, Mr. A. P. Humphry, to take the share of his deceased daughter, Elizabeth.

The will of Mr. Francis Mason, F.R.C.S., surgeon of St. Thomas's Hospital, late of 5, Brook-street, Grosvenor-square, who died on June 5th last, was proved on July 23rd by Mr. Edmund Routledge and Mr. Henry Sturt, the executors, the value of the personal estate amounting to over £5000. The testator bequeaths to his wife, Mrs. Jane Mason, the cash in the house and at his bankers, and his furniture, plate, household effects, horses, and carriages; and there are legacies to his own and his wife's godchildren, executors, domestic servants, and coachman. The residue of his real and personal estate, in default of children, he leaves as to the income of one moiety to his wife for life, and subject thereto for his nephews and nieces, the children of his late brother, John Nicholas Mason.

The will of Mr. Hutchinson Royes Bell, formerly of 44, Harley-street, but late of 12, Queen Anne-street, Cavendish-square, surgeon, who died on June 15th last, was proved on July 31st by John Hougham Bell, M.D., the brother, the surviving executor, the value of the personal estate amounting to upwards of £12,000. The testator leaves his real estate at Dunkeeling, Yorkshire, to his brother Mark Sever Bell, and legacies to his brother John Hougham Bell and to his sisters. The residue of his property he gives to his said two brothers in equal parts.

The will and codicil of Charles Girdlestone, M.D., late of the Château de la Falaise, Biarritz, who died on June 14th last, were proved in London on July 27th by Mrs. Eliza West Girdlestone, the widow, and Mr. Reginald Henry Thorold, the executors, the value of the personal estate being under £2000. The testator gives all his real and personal estate to his wife.

The will of John William Mudge, M.D., J.P., Deputy Inspector-General of Hospitals, on the retired list of H.M. Indian army, late of Middleham House, Ringmer, Sussex, who died on May 3rd last, was proved on July 20th by Mrs. Julia Mudge, the widow, and Major-General Lambert Henry Denne, the executors. The testator bequeaths £200, and all his furniture, plate, pictures, books, wines, and consumable stores, household goods and effects, horses and carriages, to his wife; and legacies to his two daughters and to a cousin. The residue of his real and personal estate he leaves upon trust to pay the income to his wife for life, and then for his two daughters in equal shares.

The will of William Benjamin Scott, M.D., late of 16, Stonebridge Park, Willesden, who died on November 2nd last, was proved on July 19th by Mr. Alfred Roots and Mr. George Roots, the executors. The testator leaves all his real and personal estate, except what he succeeded to from his mother, to Elizabeth Roots.

The following legacies have recently been left to hospitals and other medical charities:—Mr. Charles Charlesworth, of Heaton, near Bradford, Yorkshire, £500 to the Bradford Fever Hospital.—Mr. Robert Charles Ransome, J.P., of Ipswich, £100 each to the East Suffolk Hospital and the Suffolk Convalescent Home, Felixstowe.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Kensington.—The death-rate for this important parish during 1885 was 16·1 per 1000. The deaths from the so-called seven principal zymotic diseases were 57 more than in 1884, but 67 below the corrected decennial average. Dr. Dudfield's report deals with a large number of subjects having direct or indirect bearing upon the sanitary state and healthiness of his district as a portion of the metropolis, and he hence reviews the subject of scarlet fever in relation to disease in the cow, the state of preparation maintained in view of a possible importation of cholera, and the arrangements in force as to the removal of infectious cases, whether as regards ambulances or by means of the hospitals provided in and outside the metropolitan area. Indeed, the report forms an excellent summary of all the action taken hitherto by the Metropolitan Asylums Board in the fulfilment of their important duties. Pending the compulsory notification of infectious diseases, a voluntary system has been organised in Kensington, news being received as to deaths or cases of infectious diseases from registrars, relieving officers, the Asylums Board, the resident medical officers of the hospitals and dispensaries, the postal authorities, clergymen and district visitors, and at times from private medical practitioners; and, reviewing the results of this system, Dr. Dudfield shows by means of statistics that when the period of eleven years during which the system has been in operation is compared with a corresponding period antecedent to its inauguration, there has been a diminution in the number of "zymotic diseases" to the extent of 1441. He does not doubt that many causes have together contributed to this result, but he evidently cannot dissociate it from the early information received from the sources indicated. In addition to 956 sublet houses already registered in the parish, notice has been served in respect of 546 houses let in lodgings, and although the owners of these houses in several instances profess that their registration will do them an injury, yet experience is so far in an opposite direction, and in Kensington it is believed that registration will come to be regarded as a guarantee that the house is in a good condition, as soon as the vestry's instructions have had time to be fulfilled.

Wandsworth District.—In a population of 248,410, the birth- and death-rates for 1885 were 34·6 and 16·8 per 1000, the latter being a lower rate than any obtaining during the previous ten years; and it is interesting to notice that there has been an almost steady diminution in the death-rate during the series of years since 1851-60, when the average rate stood at 20·4 per 1000. The smallest death-rates for last year were 11·2 and 12·4 in Putney and Clapham, and 17·0 and 17·5 in Wandsworth and West Battersea respectively. Amongst the special causes of death, diarrhœa is referred to in connexion with the whole of the metropolis, and it is shown in a tabular form that there is a distinct relationship between excesses of death from this disease and high temperatures, the relationship being attributable to the rapid production of fermentative and putrefactive changes. The water-supply suffers from changes of temperature in so far as that which is derived from the Thames is concerned. Thus, the extremes of temperature for that supply have been 37·0° and 70·5° F., as compared with a variation between 53·6° and 58·1° only in the deep well-water distributed by the Kent Company. The need for a uniform constant service is urged in the report. In the Local Summaries each of the six medical officers of health presents a separate report.

Leicester Urban District.—Dr. Henry Tomkins, in issuing his first annual report on the sanitary condition of this borough, deals separately with all the more important circumstances affecting the health of the population, and in several respects he advocates that further progress should be made. Thus, Leicester being well provided with public slaughter-house accommodation, and cleanliness being so prominent a matter to hold in view in connexion with all food supplies, he urges that the time has come for the gradual abolition of the private slaughter-houses from amongst the houses of the people. He also points out that the existing borough infec-

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tious hospital, erected during a period of small-pox epidemic, does not properly meet the requirements of the district. It is freely admitted that the hospital has done, and is still doing, excellent service; but the accommodation provided is unsatisfactory, the means for separating cases needing special isolation are most imperfect, and some parts of the structure are old and worn out. Some alterations and extensions were made during the past year, but we fear that nothing short of a good deal of preliminary demolition of existing buildings will place Leicester in the position it should occupy in this respect. Referring to comments which have appeared in this journal as to the failure which has been evident in many towns having hospitals and immediate notification of infectious diseases, to reduce the amount of scarlet fever, it is admitted that as regards Leicester the only feature that one can point to with any sense of satisfaction is the low mortality that has occurred, and this especially as regards those who received hospital treatment. Small-pox appeared in the borough in four instances. All the cases were removed to the hospital outside the borough, and those persons known to have been possibly infected by them were induced to go to the "quarantine" wards, four more subsequently falling ill there, and the remainder being discharged after the lapse of the usual incubation period of the disease. The birth and death-rates for 1885 were 34·4 and 19·4 respectively per 1000; the latter being one of the lowest rates Leicester has experienced. The deaths under one year of age were 193 per 1000 registered births, this being the highest rate, except 218 at Preston, of any of the twenty-seven largest towns, metropolitan and provincial. Of the deaths producing this rate in Leicester, 276 were from diarrhœa.

Warrington Urban District.—On a population of over 45,000 the birth and death-rates for 1885 were 40·25 and 18·45 respectively, the latter rate being the lowest ever recorded in Warrington since statistics have been published. The rate from the so-called zymotic diseases was also a low one. Not a single death occurred amongst the inhabitants from either small-pox or scarlet fever; but of the latter disease 20 attacks were reported, 8 occurring in the workhouse, and 10 of the remainder being removed to the isolation hospital. Enteric fever has been of somewhat common occurrence in a special portion of the town, where sewer emanations and nuisances from pigstyes, stables, and middens are much too common. Since the Corporation opened their infectious hospital in 1877, the number of cases admitted has been 925; of these 27 were admitted last year. The cost of maintaining this very complete establishment was somewhat over £776 last year. But against this may be set the fact that, although Warrington possesses a system of compulsory notification of infectious diseases, Mr. Gornall is able to point out that the number of cases which it is found necessary to remove to hospital has diminished year by year, until it was in 1885 at its lowest ebb. Such a result cannot be otherwise than a substantial financial gain to the community concerned. The existence of the hospital, amongst other things, prevents resort, in times of disease prevalence, to "panic remedies," which are as a rule both costly and altogether unproductive.

Scarborough Urban District.—Dr. Taylor commences his report with a very complete meteorological history of Scarborough during 1885. The death-rate from all causes during the year stood at 16·7, which is by no means unsatisfactory, and the zymotic rate was as low as 0·7 per 1000; the two diseases of the latter class which caused most mortality being measles and diarrhœa. Considerable care has for some years past being exercised with a view of improving the standard of health in this watering-place, and the statistics which are recorded in the report go to show that this action has not been unrewarded. Great care is given to the disinfection of infected houses and articles, and the private sanatorium is spoken of as being of infinite service to the town for the immediate isolation and treatment of infectious disorders. Great improvements have been secured in connexion with the water-service, and a large amount of current sanitary work is continually in progress.

Stratford-on-Avon Combined District.—Mr. Fosbroke's re-election to this combination of districts after twelve years' service is evidence that his labours are appreciated, and this the more since the combined authorities desired to make the appointment without any limit as to duration—an arrangement which was objected to at Whitehall on grounds which were "not personal" to him. In other words, the ever-looming County Board Bill still blocks the way in this and in many other directions. The clashing interests of education and health are referred to under circumstances which, it might have been hoped, were such as could not occur in view of the provisions of recent Education Codes. The voluntary system of notifying infectious diseases in this district is stated to work without friction. In addition to the hospital in the Alcester district, it is to be hoped that one will be established for the Evesham joint district before the expiration of the present year. The plans have already been prepared and approved by the Local Government Board. Amongst the important sanitary works that have been dealt with, the completion of the Evesham water-works may be named; a scheme for the supply of Stratford-on-Avon is also wellnigh completed. Evesham and Stratford have revised their bye-laws, and the Alcester authority intend to take action in the same direction.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 5876 births and 3400 deaths were registered during the week ending August 21st. The annual death-rate in these towns, which had declined in the preceding three weeks from 20·6 to 18·9 per 1000, rose again last week to 19·5. During the first seven weeks of the current quarter the death-rate in these towns averaged 19·6 per 1000, and was 2·1 below the mean rate in the corresponding periods of the ten years 1876-85. The lowest rates in these towns last week were 11·9 in Derby, 14·4 in Wolverhampton, 15·1 in Bristol, and 15·5 in Blackburn. The rates in the other towns ranged upwards to 25·7 in Salford, 27·9 in Birkenhead, 28·9 in Liverpool, and 36·8 in Norwich. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had declined from 877 to 718 in the preceding three weeks, rose again last week to 805; they included 606 from diarrhœa, 52 from whooping-cough, 49 from measles, 40 from "fever" (principally enteric), 32 from scarlet fever, 26 from diphtheria, and not one from small-pox. The lowest death-rates from these zymotic diseases were recorded last week in Plymouth, Halifax, and Huddersfield; and the highest in Salford, Leicester, and Norwich. The mortality from diarrhœa showed an increase, the largest excess being recorded in Birkenhead, Leicester, Liverpool, and Norwich. Measles caused the highest death-rates in Preston; scarlet fever in Salford; whooping-cough in Preston and Sunderland; and "fever" in Preston, Portsmouth, and Cardiff. Small-pox caused no death either in London and its outer ring or in any of the twenty-seven large provincial towns. No small-pox patients remained under treatment in the metropolitan asylum hospitals at the end of last week, the number on the preceding two Saturdays having been 8 and 5 respectively. The deaths referred to diseases of the respiratory organs in London, which had been 148 and 150 in the preceding two weeks, were last week 151, and 38 below the corrected average. The causes of 89, or 2·6 per cent., of the 3400 deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Portsmouth, Norwich, Leicester, Newcastle-upon-Tyne, and in four other smaller towns. The largest proportions of uncertified deaths were recorded in Liverpool, Sunderland, Huddersfield, and Sheffield.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 18·8 and 17·4 per 1000 in the preceding two weeks, rose again to 17·9 in the week ending August 21st; this rate was 1·6 below the mean rate of the same week in the twenty-eight English towns. The rates in the Scotch towns ranged from 11·5 in Perth and 11·8 in Greenock to 20·5 in Glasgow and 32·1 in Paisley. The 441 deaths in the eight towns showed an increase of 11 upon the number in the previous week, and included 23 which were referred to diarrhœa, 22 to whooping-cough, 9 to measles, 8 to scarlet fever, 5 to diphtheria, 5 to "fever" (typhus, enteric, or simple), and not one to small-pox; in all, 72 deaths resulted from these principal zymotic diseases, against 77 and 63 in the preceding two weeks. These 72 deaths were equal to an annual rate of 2·9 per 1000, which was 1·7 below the mean rate from the same diseases in the

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28 English towns. The deaths referred to diarrhœa, which had been 28 and 18 in the preceding two weeks, rose again last week to 23, of which 15 occurred in Glasgow, 4 in Paisley, and 3 in Edinburgh. The annual death-rate from diarrhœa in these Scotch towns last week averaged only 0·9 per 1000, whereas the mean rate from the same cause in the twenty-eight English towns was 3·5. The 22 fatal cases of whooping-cough exceeded by one the number in the previous week, and included 18 in Glasgow. The 9 deaths from measles showed a further increase upon the numbers in the preceding two weeks, and included 4 in Glasgow, 2 in Edinburgh, and 2 in Leith. The 8 deaths from scarlet fever showed a decline of 4 from the number in the preceding week; 7 occurred in Glasgow. Two of the 5 fatal cases of diphtheria were recorded in Edinburgh, and 3 deaths from fever occurred in Glasgow. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 60 and 71 in the preceding two weeks, declined last week to 62, but exceeded by 11 the low number in the corresponding week of last year. The causes of 75, or 17 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had increased from 17·3 to 20·8 per 1000 in the preceding three weeks, further rose to 21·9 in the week ending Aug. 21st. During the first seven weeks of the current quarter the death-rate in the city averaged 20·2 ; the mean rate during the same period was 20·2 in London and 18·4 in Edinburgh. The 148 deaths in Dublin last week showed an increase of 7 upon the number in the previous week, and included 9 which were referred to diarrhœa, 5 to "fever," 4 to scarlet fever, 1 to whooping-cough, 1 to measles, 1 to diphtheria, and not one to small-pox. These 21 deaths from the principal zymotic diseases considerably exceeded the number returned in any recent week, and were equal to an annual rate of 3·1 per 1000, the rate from the same diseases being 3·8 in London and 1·8 in Edinburgh. The fatal cases of diarrhœa, which had been 2 and 4 in the preceding two weeks, further rose to 9 last week. The deaths referred to "fever" were 5, against 2 in each of the previous two weeks. The 4 fatal cases of scarlet-fever exceeded by 3 the number in the preceding week. Seven inquest cases and 3 deaths from violence were registered; and 38, or more than one-fourth of the deaths, were recorded in public institutions. The deaths of infants corresponded with those in the previous week, while those of elderly persons showed a decline. The causes of 18, or more than 12 per cent., of the deaths registered during the week were not certified.

THE SERVICES.

IN accordance with the decision to strengthen the medical department of the Upper Burmah Field Force, Surgeon-Major G. C. Roy, and Surgeons R. D. Murray, G. M. Dixon and W. Deane, are already ordered thither.

The services of Surgeon-Major Aylmer Hayes, Medical Staff, have been placed at the disposal of the Egyptian Government for duty with the Egyptian Army. Surgeon-Major Hayes proceeds at once.

Surgeon-Major J. F. Beattie, Medical Staff, now serving in the London district, has been ordered to proceed to Netley and assume the duties of Assistant-Professor of Medicine at the Army Medical School, Royal Victoria Hospital.

ADMIRALTY.—The following appointments have been made:—Surgeons George H. Milne, Alfred E. Weightman, James W. O. Underhill, Charles H. Upham, Frederick J. Burns, Alfred T. Rimmell, Daniel Patrick M'Nabb, James France, Charles Strickland, John Menary, Walter G. Axford, Walter C. Spiller, George T. Broatch, William Bett, Henry W. Rickards, Frederick A. Brise, and John W. Slaughter, to the *Duke of Wellington*, additional, for Haslar Hospital.

THE epidemic of fever which has existed for several weeks at Hare Island, off the coast of Cork, near Skibbereen, still continues, fresh cases being reported from the island and from the mainland close by.

Correspondence.

"Audi alteram partem."

THE HOSPITAL FOR WOMEN, LIVERPOOL.

To the Editor of THE LANCET.

SIR,—As the Consulting Medical Officer to the Hospital for Women, Shaw-street, Liverpool, and as one of the unwilling witnesses subpœnaed by the plaintiff in the case of Casey *v.* Imlach, may I ask you to give insertion to the following statement, which I think is due to my professional brethren and to myself, of what my action had been in regard to the surgical practice of that hospital, especially during the six months immediately prior to the trial.

I had during the autumn of last year come to be aware, although I had not actually been present at many of these spaying operations, that they were being performed with increasing frequency, and when the Hospital Medical Report for the year 1885 appeared on Jan. 28th of this year I made a careful analysis of its contents, comparing it with the Report for 1884, and was dismayed at the record of the year's work. I thereupon, on Feb. 3rd, took upon myself the responsibility of writing a letter to the committee of the hospital on the subject, stating the bare facts that, according to the Medical Report for the year 1884, there were in that year thirty-one women completely spayed; while, according to the Report for the year 1885, the number of complete spayings had risen to ninety-six. At the same time I called their attention to this enormous increase in these operations, and stated that, as far as I knew, there were only four real consultations prior to operation in the whole number of 169 abdominal sections, although Law 39 says: "No operation of a dangerous character shall be performed in the hospital without a consultation between one of the medical officers for in-patients, or one of the consulting medical officers [there is but one] and the operator." I then went on to say: "That these operations are occasionally necessary, and are a valuable addition to the resources of scientific surgery, every surgeon will freely admit; but considering the very important ethical questions involved in such extremely delicate matters, it is but natural and right that the profession, as a body ever jealous of its honour, should view with anxious watchfulness any appearance of these operations being performed without (1) all possible precautions against errors of diagnosis and prognosis; (2) without proved necessity; (3) without clear and full information of the exact nature and necessary consequences of such operation having been previously given to the patient and her immediate relatives. It has come to my knowledge of late that many members of the profession in this city think they have reason to believe that in the Hospital for Women such necessary precautions have not always been taken; such necessary information as to the nature and consequences of the operation has not always been previously given to the patient and her immediate relatives; and, indeed, that these operations have, in some instances, been performed without due proof of their necessity." I then called attention to the cases of hæmatocele and hæmatosalpinx, in which this operation of removal of the uterine appendages had been performed, and of the inadmissibility of which operation in this class of cases I expressed my decided opinion, on the ground of the almost uniformly successful result of the generally recognised treatment by absolute and prolonged rest, with or without the addition of very simple and well-known medical treatment. So successful has this treatment hitherto been, not only with all those leaders of medical opinion who have written on this subject during the last twenty years, but with ordinary practitioners of standing with whom one comes into contact in daily professional work, that it is quite exceptional to find one of these latter who can remember a fatal case. To say the least of it, judging by the Hospital Medical Report for the year 1885, removal of the uterine appendages for hæmatocele and hæmatosalpinx has not been a successful practice, for out of nine cases operated on there were three deaths, a mortality of 33 per cent. It would appear as if the disciples of modern abdominal surgery had ceased to believe in the recuperative powers of nature, except as a consequence of their own operations.

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The immediate consequences of this letter of Feb. 3rd to the committee were: first, that on the day following (Feb. 4th), at one of the largest meetings of members ever held in the Liverpool Medical Institution, it was unanimously resolved on my proposal to appoint a select committee of the leading members "to consider the grave questions of practice and ethics involved in the performance, in greatly increasing numbers, of these operations at the Women's Hospital, Shaw-street." (Being from home, I have not at hand the exact wording of the resolution, but what I have written is practically the substance of it.) The committee appointed at the same meeting, and without challenge, consisted of the following members: the president (Dr. Nevins), Dr. Cameron, Dr. Waters, Mr. Bickersteth, Mr. Mitchell Banks, Dr. J. H. Wilson, Dr. Macfie Campbell, and Dr. Alexander. Shortly after this, the committee of the hospital called upon their acting medical officers to report on every case of abdominal section during the year 1885, and their medical board to report as fully as possible on each case, with the condition of each patient up to the time of reporting; these reports to be sent into the Hospital Committee, who will transmit the same to the Medical Institution Committee for investigation and report. It will be readily understood how these reports, especially the following up the patients to their homes, many of them in the meantime having removed, and some more than once, have involved a great amount of time and trouble; but after several long and unavoidable delays, the report of the Medical Institution Committee will not now, it is expected, be very long delayed.

The trial Casey *v.* Imlach was an extremely unpleasant episode in this altogether unpleasant business, and not the least so to those who, like myself, were forced to appear in the disagreeable position of witnesses for the plaintiff, a person whom I had never seen, and about whose case I knew nothing until I heard her counsel make his opening speech. Holding the opinions I did as regards these operations, I can imagine no more unenviable position to be in; but it is a great consolation to know that you have written favourably of my evidence.—I am, Sir, yours truly,

August 23rd, 1886. THOMAS F. GRIMSDALE.

INTRA-PERITONEAL HÆMATOCELE.

To the Editor of THE LANCET.

SIR,—The difficulty in assenting to Mr. Lawson Tait's proposition, "that intra-peritoneal hæmatocele is fatal in 95 per cent. of the cases," does not seem to be removed by his letter in your current number. Take the cases where, during a menstrual period (the preceding period having occurred as usual), a patient, not rarely while making some violent effort, is suddenly seized with severe pain in the lower part of the abdomen, fainting, perhaps vomiting, and becomes markedly anæmic. These symptoms are often associated with temporary cessation of the menstrual discharge that was in progress, and its reappearance in a few hours. The next day a tumour is felt in the situation of Douglas's pouch, depressing the posterior fornix and pushing the uterus forwards. Sometimes the tumour is large enough to be felt through the abdominal wall above the pubes. Such cases are usually considered to be due to regurgitation of menstrual blood along the Fallopian tubes into the peritoneum. It is certain that a large proportion of cases with the train of symptoms and physical signs described recover completely. But for that very reason Mr. Lawson Tait cannot regard them as intra-peritoneal hæmatoceles.

I am, Sir, your obedient servant,
ARTHUR H. N. LEWERS, M.D. Lond.

Wimpole-st., Cavendish-square, Aug. 23rd, 1886.

THE CHOLERA EPIDEMIC IN VENICE.

To the Editor of THE LANCET.

SIR,—I beg to point out a peculiar feature in the "cholera epidemic" in Venice. It is essentially a poor man's disease The well-to-do are free from it, with rare exceptions. Not very long ago I asked a gentleman, who from his position was most competent to speak on the subject, how many well-to-do people he had known to have died of the disease. He could not get beyond four, and one of these, to my knowledge, was a very doubtful case. When soup-kitchens and a cheap supply of food were set on foot the cases rapidly diminished. This may also have been due to the absolute prohibition of the sale of shell-fish and crustaceans, which came into force at the same time; and also to special precautions being taken to prevent the sale of bad fish and vegetables. The quantities of these seized and destroyed are simply incredible. I was told a few days ago of a man who, convalescing from double pneumonia, chose to eat two "folpe" (octopi). He was seized by cramps and vomiting, and of course was supposed to have cholera. Quarantines and "observations" go on as usual, trade suffers, and half-starved workmen and their wives and children are ready victims to attacks which, in the case of well-nourished individuals, would only require a little rest and mild treatment. The lower classes in Italy are, as a rule, sober; but they have a habit of over-eating themselves on certain occasions, and then they suffer severely. A great feast day was always followed by an increase in the number of cases. I have not heard of any case in an hotel here, but have seen one case of catarrh from exposure to cold, where the severity of the symptoms might have given rise to suspicion. Appropriate treatment soon effected a cure. I cannot see any reason why tourists should avoid Venice, if they will only take reasonable care of themselves. Very many of them, already run down by over-work, work harder still at sight-seeing, and suffer more or less from long railway journeys with irregular meals. The only wonder is that more of them do not get ill. A good deal might be said as to why so much is made of this epidemic, but it would not be appropriate in your columns.—I am, Sir, yours faithfully,

J. A. MENZIES, M.D.

Palazzo Banco Veneta, Venice, August 15th, 1886.

THE INCUBATION PERIOD OF DIPHTHERIA.

To the Editor of THE LANCET.

SIR,—The extreme importance of the above must be my apology for wishing to intrude these few lines into your valuable space.

When house-physician at King's College Hospital last winter, it happened that we were able, in two particular cases of diphtheria, to fix the exact period of incubation. At 10 P.M., on November 8th, the house-surgeon performed tracheotomy on a case of diphtheria. The operation, being a difficult one, took a considerable time. On the evening of November 10th, the house-surgeon himself complained of sore-throat, which was followed next day by the appearance of membrane. The incubation period here being a little under forty-eight hours. On Nov. 15th, some jelly which the house-surgeon had begun to eat, but had not finished, was removed to the kitchen at the end of the ward, and between 1 and 2 P.M. one of the ward maids partook of some with the same spoon as the house-surgeon had used. In the afternoon of November 17th she was attacked with sore-throat, which was followed by membrane. Here the incubation period was a little over forty-eight hours.

I am, Sir, yours obediently,
PERCY G. LEWIS, M.R.C.S.,
Associate of Kings' College.

August 17th, 1886.

DIRECT REPRESENTATION OF THE PROFESSION.

To the Editor of THE LANCET.

SIR,—The medical journals are quite right in naming me as a candidate for the direct representation of the profession in the General Medical Council, and when the proper time arrives I shall issue my address. In the meantime I trust the general practitioners will stand fast, and hold firm to the determination not to support any candidate who is not in general practice.—I am, Sir, yours truly,

EDWIN MORRIS,
General Practitioner of forty-five years' standing.

Spalding, August 23rd, 1886.

HULL HOSPITAL SUNDAY MOVEMENT.—The annual report of the general committee of this movement shows that the collections last year realised £738, and after the payment of expenses £554 were given to the Royal Infirmary, £20 to the Hull Dispensary, £66 to the Children's Hospital, and £23 to other institutions, leaving a small balance. It was resolved to fix Oct. 31st for the next collection.

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IRELAND.

(From our own Correspondent.)

CASTLEBAR LUNATIC ASYLUM.

AT a meeting last week of the governors of this asylum, Dr. Finegan, resident medical superintendent, stated that that was the last meeting he could attend, in consequence of having been appointed to the charge of the Mullingar District Lunatic Asylum. Before leaving he pointed out as objectionable the practice adopted by the coroner of holding inquests in every case of death which took place in the asylum. This is a source of considerable inconvenience to the officials, and should only be carried out when a sudden death takes place, which is the usual practice in lunatic asylums, and the governors intend drawing the attention of the coroner to the subject. The Board unanimously adopted the following resolution:—"It having been notified to the Board by the Lord-Lieutenant that Dr. Arthur Finegan has been transferred to Mullingar District Asylum, the Board wish to record their satisfaction at the manner in which Dr. Finegan discharged his duties during the time he acted as resident medical superintendent, from July 1st, 1885. He has conducted the work of the institution with much efficiency, and has given every attention to the afflicted inmates who have been under his care."

THE LATE DR. JOSEPH LALOR.

This gentleman, who recently resigned the post of resident medical superintendent to the Richmond Lunatic Asylum, Dublin, died at Sligo on the 17th inst., aged seventy-five years. Previously to his appointment at the Richmond he acted as resident physician to Kilkenny District Lunatic Asylum. Dr. Lalor was a graduate in medicine of Glasgow University, and an ex-president of the Association of Medical Officers of Asylums and Hospitals for the Insane. He published some papers on Dysentery and Fever, and was a contributor to the *Psychological Journal*, &c. He was a very efficient superintendent, and under his care and management the Richmond Lunatic Asylum has become a model institution of its kind.

MEDICAL MAGISTRATES.

Dr. Ryan, of Emly House, Tipperary, who was lately appointed to the Commission of the Peace, served through the Franco-Prussian War in the Anglo-American Ambulance. Dr. Charles Edward Crean, of Windsor Villa, Ballyhaunis, has been appointed to the Commission of the Peace for co. Mayo.

LONGEVITY IN IRELAND.

During the past quarter, among the deaths registered were the following at very advanced ages—viz.: One at 101, one at 102, two at 103, one at 104, and one at 112 years respectively.

Dr. Hugh Brosnan, of Castleisland, in the county of Kerry, has been committed for trial at the next assizes for alleged complicity in a Whiteboy offence.

Dublin, Aug. 24th.

BELFAST.

(From our own Correspondent.)

BELFAST ROYAL HOSPITAL.

FROM the report read at the quarterly meeting of this charity on Monday we gather that during the past quarter there were 502 intern patients, while during the same time there were treated as extern patients 3580, making the large total of 3950 cases. The total receipts from all sources to the end of July amount to £7500 18*s.* 4*d.*, but the ordinary income has not kept up with the expenditure, for when the accounts due by the hospital up to the end of July are paid there will be a deficiency amounting to £777 11*s.* 9*d.*—a deplorable state of things considering the pressure and special demands which have of late been made upon the institution in connexion with railway accidents and local disturbances. The urgency of the claims has been such that many new beds have had to be fitted up, and great expenditure was needed for the surgical treatment of the cases, and while all this has been going on there has been a diminution of support. Of the 3580 extern cases in the last quarter, the altogether unprecedented number of 3200 have been surgical, and it is estimated that the cases treated at the hospital in connexion with the late unfortunate riots have cost the board of management between £700 and £800. During last quarter Dr. Calwell (formerly house-surgeon) was appointed house-physician, while Dr. Shuldham Dunlop was elected to the post vacated by the former. The two retiring members of the medical staff, Dr. Whitla and Dr. O'Neill, were unanimously re-elected. The report also states that at one of the meetings of the board they unanimously adopted the following resolution, and forwarded a copy of the same to the members of Dr. Mac Cormac's family:—"That the board record their high appreciation of the character and services of the late Dr. Mac Cormac, who for many years acted as one of the physicians of the hospital, and up to the time of his death was one of the consulting staff. They bear willing testimony to his great ability and concientiousness, and desire to express their sympathy with the members of his family in the great bereavement they have experienced."

ELECTION OF SENATOR OF THE ROYAL UNIVERSITY.

A vacancy having recently occurred in connexion with the Senate of the Royal University through the death of Dr. Curtis, an active canvass is taking place for the position, and a correspondence has been going on in one of the local papers. There are two local candidates, both members of the medical profession—Dr. W. K. McMordie, physician to the Samaritan Hospital, and Dr. Whitla, physician to the Royal Hospital. Mr. Farrelly of Dublin, and it is said Captain Fitzgerald of Cork, are also candidates. Dr. McMordie has issued an address for the post of elected representative to the General Medical Council. I hear of no other local candidate.

Belfast, Aug. 24th.

PARIS.

(From our own Correspondent.)

THE ACTION OF THE AIR AT CERTAIN ALTITUDES ON PULMONARY HÆMORRHAGE.

WITH reference to your editorial note of the 5th inst., on the *Rationale* of the High Altitude Treatment of Phthisis, a paper lately communicated to the Société Française d'Hygiène, by Dr. Deligny, on the Action of the Air at certain Altitudes on Pulmonary Hæmorrhage, may be of some interest. The paper began by citing Professor Lombard, of Geneva, who had brought to notice the fact that, in phthisical subjects, hæmorrhage is rarer at a certain altitude than on the plains. The same fact was noticed by Brehmer, Weber, and Kuchenmeister; and Prof. Jaccoud, in his clinical lectures, has laid down as a principle that hæmoptysis, or a tendency to it, is favourably influenced by occupying certain altitudes, and that they are in these cases of some utility. Dr. Deligny goes on to explain the action of mountain air as follows:—"From a height of 2000 feet to 3000 feet, the higher one ascends the more the air of the mountains modifies the functions of the circulation and of respiration, which is the consequence of the diminution of atmospheric pressure, the lowering of the temperature, and also of other factors which are of less importance. Upon the side of the respiration there is an augmentation of the pulmonary capacity, an enlargement of the thoracic cavity, and an acceleration of the expiratory movements. The respiration is more ample, the inspirations are more profound; in short, the entire lungs fully perform their function. This circumstance has been adduced to explain the immunity from phthisis which inhabitants of mountains enjoy. On the side of the circulation there is, as a first phenomenon, an acceleration of the beats of the heart, followed by an afflux of blood to the periphery, and turgescence of the cutaneous capillaries, indicated by a more intense colouration of the mucous membranes, as may be seen in those of the mouth and of the tongue. From this cutaneous congestion and the afflux of blood to the periphery result, according to Professor Jaccoud, an anæmia of the viscera, which, however, is relative and slight, and is marked by symptoms rather favourable than otherwise; the cerebro-spinal functions are more active, more easily performed;

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the respiration is easier; the power of locomotion is increased. The lungs participate in this anæmia of the viscera, and the circulation of the organ is thus relieved, the tendency to pulmonary congestion is less, and even the pre-existing congestion disappears. This action of the air of high altitudes on the circulation would explain its anti-hæmorrhagic effects. It has been asserted that a sojourn in a brisk and cold air facilitates pulmonary congestion. This is perfectly true for the cold and damp air of the plains, but the contrary is observed for altitudes, the air of which is cold and brisk, but remarkably dry. To ensure the anti-hæmorrhagic action of the air of great altitudes certain conditions are necessary before any appreciable effects can be produced. In the first place the altitude appropriate to individual cases must be taken into consideration. Professor Lombard divides mountain climates into two categories—1. Climates that are more sedative than tonic, which may be found at an altitude of from 2000 to 3000 feet. 2. Those that are more tonic than sedative, at an altitude above 3000 feet. The next condition necessary is acclimatisation, the period of which should depend on circumstances, and invalids should never be removed direct from the plains to the higher regions, but this should be done by stages before they proceed to the highest point prescribed above in order to avoid the risks already referred to. Acclimatisation is therefore an important element in the application of climatic therapeutics of altitudes. This opinion is in accord with that expressed by Professor Jaccoud. But while mountain air is favourable to pulmonary hæmorrhage, it would be injurious in hæmorrhages from the intestines, the stomach, and the uterus.

A CURIOUS CASE OF CATALEPSY.

A curious case of lethargy in a female patient at the Salpétrière is just now causing great sensation in Paris. The patient is forty-seven years of age, and, without any apparent cause, fell into a profound sleep, from which she awoke after eighteen days. During this sleep the respiration of the patient was very irregular. Insensibility was almost complete; one could thrust needles into her skin without provoking the slightest manifestation of pain. She was nourished with milk, bouillon, and eggs. Eudoxie Hedouin, which is the patient's name, is one of the oldest *pensionnaires* of the Salpétrière, where she was admitted in 1862 with hemiplegia of the left side, and since that time she has never walked. She is of extraordinary *embonpoint*, and at one time weighed 140 kilogrammes, or nearly 309 lb. avoirdupois. On awaking from her sleep last week she was seized with a violent nervous trembling, which was accompanied by burstings of hysterical laughter lasting about ten minutes. She then opened her eyes, and said "Bon jour" to someone whom she took for her mother, and never uttered another word on the first day. At the visit on Friday last she was offered an empty glass, making her believe that it was filled with champagne. At three different times, in putting the glass to her lips, she imagined that she had been drinking from the glass, and then manifested all the symptoms of inebriation; but on offering her a piece of aloes and trying to persuade her that it was sugar, she made a significant grimace on tasting it. During her sleep, Dr. Voisin, in whose ward she is, performed on her a most curious experiment. Without uttering a word in presence of his pupils, the doctor placed in the first instance on the chest of the patient a small packet containing tartar emetic, where he left it for a few minutes, and then replaced it by another packet in which there was nothing. Then, addressing his audience, he said in a loud voice: "You will see, gentlemen, the effect which the tartar emetic is going produce by simply placing it on the epidermis of the patient. In five minutes nausea and vomiting will appear." Accordingly, at the expiration of the time, the predictions of the doctor were realised. It must, then, be concluded that the patient, in spite of her sleep, heard what the doctor said. Since she has awakened she does not seem to be quite conscious, but drinks, eats, and sleeps as at ordinary times.

M. CHEVREUL.

The popular fêtes that are being organised to celebrate the hundredth birthday of M. Chevreul at the end of this month, as already reported in THE LANCET, are assuming more of a national character, as the official authorities and the public are vying with each other to do honour to the illustrious centenarian. On August 31st a grand banquet is to be given at the Hôtel de Ville by public subscription, after which there will be a grand military procession, with lighted torches and music, which will pass through the principal streets of Paris. On the morning of September 1st the inauguration of the buildings annexed to the Museum of Natural History will take place, under the presidency of the Minister of Public Instruction, when a statue of the champion of the day will be unveiled, and a eulogy will be pronounced by one of his colleagues, probably M. Frémy, the present director of the Museum. On the same day will be also opened at the Museum an exhibition recalling the discoveries of M. Chevreul, and their applications to industry. On Monday, the 30th inst., a special representation is to be given in his honour at the new Opera House, for which he has received an express invitation, which has been accepted by him. I learn that he has never been to the new Opera, and indeed he has never entered a theatre for the last twenty years. The presence of such a man under such circumstances is rather unique in the annals of history, and it is to be hoped that the venerable chemist will possess sufficient vitality to be able to resist the excitement caused by the demonstrations made in his favour.

Paris, Aug. 25th.

EGYPT.

(*From our own Correspondent.*)

GREAT FAIR AT TANTAH.

THIS festival, held every August in honour of a Moslem saint of great renown who lived in the thirteenth century is now drawing to a close, after nine days and nights of superstitious reverence and dissipation and revelry. Arabi's rebellion and the cholera epidemic have prevented this fair from taking place since 1881, though an impromptu gathering of large dimensions was brought together last year. This year the villagers, who are the chief visitors, flocked in great numbers to say a few prayers at the tomb of the saint, buy and sell cattle, and pass the rest of their time in pleasure, with little restraint. The numbers are said to have risen this year to 500,000, and this would seem possible, for there have been 8000 native marquees, each sheltering about fifty people, besides all the small tents of the fair and the men who sleep and live in the streets. Tantah has a population of about 60,000, and a daily mortality of five or six. It is remarkable that so great an influx of natives has not raised the death-rate. This is partly due to the tents being pitched on open ground, and to the measures enforced recently by the sanitary department. A native sanitary inspector and four assistants had divided the town and pilgrims into sections. They paid them constant visits, established latrines where necessary, cleaned the mosques, and attended generally to the conservancy arrangements. The feeding of this large mass of men is of no trouble to the State, for each family brings its own commissariat on camel or donkey back, but a brisk trade was being carried on in "popcorn" and sweetmeats, for which the fair is famous. Hasheesh (cannabis indica) tents were crowded with solemn, rather unhappy-looking devotees, who were cautiously furnished with the forbidden drug by the attendants with many mysterious nods and winks. No smoker took more than one inhalation, and then passed the pipe on to his friends, and afterwards to the poorer members of the fraternity. Most men can take fifty or more inhalations during an evening, and are then prepared to thoroughly enjoy any wit or punster's efforts, or are wafted into the sensual dreamland common in Egypt. Much native music and singing was to be heard in other tents, and the facial grimaces on the part of the men and the wonderful movement of the women's thoracic and abdominal muscles, which is usually called dancing, were very popular. Besides the absence of Europeans and the effendi class of natives, another remarkable feature is the presence of veiled women sitting with men in the cafés.

THE ONLY ARABIC MEDICAL PAPER.

Egypt boasts of only one medical journal, *El Shifaa* (The Cure), which was started last February, and so far has been a great success. It is published monthly, the price being 1*s.* 4*d.*, at the offices of a native scientific paper, and

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is edited by a Syrian in Cairo—Dr. Shemeil—and Dr. Milton. At its start the sanitary department offered to buy 120 copies and distribute them among their officials; but as it was at once found that the native doctors brought its circulation up to 400, the offer was declined. It already pays its way, and will, it is to be hoped, be of incalculable benefit to provincial doctors possessing no modern medical literature. The chief contributors are natives of Egypt and Syria, and Dr. Milton, besides publishing many hospital cases, is now writing on the Treatment of Wounds. Dr. Kartulis of Alexandria has recently contributed a paper on the Giant Amœbæ, which he maintains are specific of dysentery.

ENGLISH TROOPS IN EGYPT.

Malaria is almost unknown in Cairo, but cases occasionally occur at this time of the year, when the Nile is rising and inundating the fields. The Welsh regiment, which came here from Mauritius and the Cape of Good Hope, has suffered much lately, both from a paroxysmal fever of malarious type and from a continued fever, which is uninfluenced by quinine. The regiment has been moved from the river bank to barracks on the edge of the desert.

Cairo, August 14th.

TURKISH HOSPITALS AT CONSTANTINOPLE.

FROM A CORRESPONDENT.

(*Concluded from page 192.*)

THE Constantinople correspondent of the *Journal des Débats*, whose interesting description of the foreign hospitals in the Turkish capital I brought before your readers the other day, expresses himself as being very agreeably surprised at finding the Turkish hospitals themselves admirably managed and scrupulously clean. The only exception is in regard to the Bimar Hané, or hospital for the insane. This asylum is at Scutari, the building having been used as barracks for the soldiers of the Sultan Mahmoud, but converted into a lunatic asylum fifty-five years ago by Dr. Mongeri, who was the first physician in Turkey to substitute kind treatment for the brutality of which the insane were formerly the victims. The establishment of Bimar Hané is, however, very deficient in comfort, there being only two dormitories, containing about 150 beds, in which the unfortunate patients are huddled together, many of them having to sleep two in a bed. They have nothing in the way of clothing but a shirt, a pair of drawers, and a cotton cap, and there is no covered courtyard for them to take exercise in. They are supposed to have two meals a day, consisting of vegetable soup and pilaff, but the correspondent of the *Débats* describes the food as insufficient in quantity and poor in quality. There are few dangerous lunatics among the men, and the listlessness of mind and body which is always the chief characteristic of the Turk seems in this asylum to reach its maximum of intensity. There are, however, many cases of hysterical insanity among the women, though the negresses at Bimar Hané, who are rather numerous, seem to be immersed in gloomy reflections, as if longing for the burning sands of their desert. There are at the present time 450 men and 170 women, including 70 Christians, in the asylum, and the annual cost of this establishment is £11,600, of which a third is supposed to be contributed by the Government. This subsidy is, however, paid with Turkish punctuality, and the remainder is made up by grants from the different provinces, in accordance with the number of insané from each under treatment there. There are three doctors attached to the asylum, receiving salaries, one of £20, the two others of £7 a month, while there are 50 keepers and attendants, whose pay is only 16*s.* a month. The mortality is about 14 per cent., and the correspondent of the *Débats* adds that when he visited the asylum there were no fewer than 70 patients in the infirmary suffering from intestinal complaints.

The Gourabat Hospital, also called the Charity Hospital, is in striking contrast to the above; and it would be difficult to find a better managed establishment than this, which is under the charge of Ahmet Pasha, who followed his medical studies at Constantinople, and is thoroughly conversant with the progress of modern science. This hospital, situated at Stamboul, was built about forty years ago by the Sultana-Validé, mother of the late Abdul-Aziz, who took the greatest interest in it. A set of scales is shown to visitors in the pharmacy, which have a piece of string attached to them by the sultana, who removed a small silver chain, saying that "she would not have anything showy in the place." The Gourabat Hospital is a large quadrilateral building of only one storey, around the inside of which is a covered gallery with a garden in the centre. On to this gallery open 22 dormitories, each nearly 40 ft. square by 16 ft. high, well ventilated, and containing altogether 300 beds. Each bedstead is of iron, with curtains, two mattresses (one stuffed with maize and the other with wool), two pillows, and two blankets. Only male patients are received, and there is no restriction as to the nature of their complaint. The staff consists of the chief physician, Ahmet Pasha, three house-doctors, four surgeons, a pharmacist, and 51 nurses and attendants, the chief physician having the rank of brigadier-general; the others of colonel, with pay in proportion. The income of the hospital is about £12,000, derived from the rent of house property belonging to the foundation, and the expenses are about £7000, exclusive of the pay of the staff. Of the 4738 patients who passed through the hospital, 473 died, the rate of mortality being about 10 per cent. Out of the number of deaths, 125 were from fever, 113 from diseases of the chest and lungs, 102 from abdominal complaints, 76 from external or cutaneous complaints, and 57 from diseases of the brain. More than 10,000 gratuitous consultations are given in the Gourabat Hospital every year; and the correspondent of the *Débats* was much struck by the respectful attitude of the patients towards the staff, and by the absolute silence which prevailed throughout the dormitories.

The Hasseki Hospital is for females, and contains 120 beds, all of which are gratuitous except six, for which a charge of rather less than 2*s.* a day is made. The Hasseki Hospital is also at Stamboul, a magnificent konak, or villa, having been purchased two years ago for about £60,000. There s a ward with ten beds for women about to be confined, one of six beds for ophthalmic complaints, two of six beds each for children, while the rest are for general complaints. Three doctors and 25 nurses and attendants are attached to this hospital, the annual expenditure of which is about £4000, contributed by the municipality. The number of patients received last year was 596, of whom 111 died. There are eight military hospitals, with 3000 beds, the most important being the Naval and Seraskeriat Hospitals. The hospital of the navy is a magnificent building, situated upon the Golden Horn, with two storeys each, having thirty windows upon the façade. It contains 500 beds, distributed over 25 wards, the mortality being only 2 per cent., as the hospital only keeps the patients who can be cured, all the incurable cases being discharged. The management of the hospital is excellent, there being five doctors belonging to the different religions, besides 100 attendants all taken from the navy. The wards and beds are of irreproachable cleanliness, and a variety of naval engravings and models of ships are displayed upon the walls, in order to amuse the patients. The kitchens and pharmacy are beautifully clean, and no fewer than 7889 persons passed through this hospital last year, all the expense being borne by the Minister of Marine.

The Seraskeriat Hospital is a building of two storeys, containing 160 beds distributed over five wards, one of which has ten beds for officers. There are ten army doctors attached to it, one of whom, Mikaël Bey, ranks as a colonel. As at the Naval Hospital, the cleanliness and general management leave nothing to be desired, and the correspondent of the *Débats* can vouch for the fact that the food supplied is most appetising. The rate of mortality is very low, and as the Seraskeriat Hospital is the central one, its pharmacy is of great importance, more than 600 prescriptions being made up daily. Last of all comes the Miskin Hané, or Lepers' Hospital, at Scutari, which was founded by the Sultan Selim, and for a long time received a Government subsidy of twenty piastres a month for each patient. This sum is now insufficient, and the hospital, to which Dr. Zambaco devotes so much attention, is dependent upon casual charity. The Miskin Hané is the centre of the vast cemetery in which so many million bodies have been interred, so that the lepers are literally enclosed within a living tomb. The hospital is a quadrilateral about 120 feet long, and with one storey. There are only twenty rooms for the twenty-seven patients, who drag out a wretched existence in the most abject misery, only relieved by the devotion of Dr. Zambaco, who believes that leprosy is not contagious, and who comes twice a week, handling the lepers with perfect impunity

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MEDICAL NOTES IN PARLIAMENT.

Alleged Flogging at Hanwell.

IN the House of Commons on the 20th inst., Mr. Ritchie, in reply to Mr. Pickersgill, stated that his attention had been called to what, on the face of it, seemed to be the very cruel treatment of an inmate of the Hanwell Pauper Schools, and before deciding what course to adopt with reference to it he had thought it desirable to call for any explanation the drill instructor might have to offer upon the question, and he had also asked the guardians and managers of the school to favour him with any observations they had to make as to the statement that there was an unnecessary amount of flogging at the school. Mr. Ritchie added that the rules and regulations as to corporal punishment at these schools are very stringent, and under no circumstances whatever does it fall within the duty of a drill instructor to inflict corporal punishment.

The River Lea Committee.

Sir Charles Russell moved that the Select Committee of the last Parliament to inquire into and report upon the condition of the River Lea, and to make such recommendations as may appear necessary, be reappointed. The Chancellor of the Exchequer said that the Government would facilitate the reappointment of the committee on the earliest possible day next session, it not being possible that real progress could be made with the subject at the present time. Sir Charles Russell expressed his satisfaction with the statement, and did not press his motion, which was accordingly withdrawn.

Irish Lunatic Asylums.

A Bill to amend the law relating to private lunatic asylums in Ireland was brought in by Mr. W. Corbet, and read a first time.

Ventilation of the House.

On the 23rd inst., on the motion of Mr. Jackson, the Committee on the Ventilation of the House was reappointed.

Medical News.

BRITISH MEDICAL SERVICE.—The following is a list of candidates who were successful for appointments as Surgeons in the Medical Staff of H.M. Army at the competitive examination in London on Aug. 9th and following days:

Morgan, F. J.	3180	Gray, W. L.	2380
Hale, C. H.	3050	Salmon, L. E. A.	2370
Barnside, E. A.	2895	Holt, M. P.	2360
Poole, W. C.	2870	Steill, D.	2360
Horrocks, W. H.	2830	Morgan, J. C.	2340
Raymond, G.	2765	Weir, C. J.	2330
Thurston, H. C.	2750	Hinde, A. B.	2325
Relly, A. Y.	2660	Bullen, J. W.	2320
Scott, B. H.	2655	Inniss, B. J.	2310
Wade, G. A.	2655	Penton, R. H.	2310
Hore, H. St. G.	2650	Thacker, R. C.	2300
Watson, A. C.	2620	Pocock, H. J.	2290
Julian, D. K. A.	2610	Young, C. A.	2265
Corcoran, E.	2560	O'Brien, M.	2240
Cockerill, J. W.	2540	Hassard, E. M.	2235
McCullock, J. C.	2500	Hilliard, G.	2235
Macdonald, S.	2495	Murphy, W. N.	2200
Ritchie, J.	2490	Elliott, C. K.	2150
Gray, E. W.	2470	Clark, S. F.	2110
Minniece, J.	2460	Sinclair, F. C.	2090
Browne, E. G.	2380		

INDIAN MEDICAL SERVICE.—The following is a list of candidates for appointments in this Service who were successful at the competitive examination held at Burlington House on Aug. 9th and following days:—

Macnamara, R. P.	3165	Sellick, J. H.	2530
Pilgrim, H. W.	2970	Hare, E. C.	2490
Swinburne, J. McD.	2770	Clarkson, F. C.	2480
French, G. B.	2740	Castor, R. H.	2470
Thomson, F. W.	2735	Morris, H. M.	2470
Hall, G. C.	2730	Maidment, F. G.	2400
Henderson, S. H.	2715	Doyle, J. P.	2370
Green, C. R. M.	2710	Blancard, J. T.	2350
Dyson, J. B.	2650	Hall, B. A. W.	2340
Beasley, C. N.	2630	Scotland, D. W.	2340
Brown, E. H.	2620	Morwood, James, M.D.	2330
Grayfoot, B. B.	2570	Russell, A. R. P.	2315
Jordan, J. G.	2570		

Thirty seven candidates competed for twenty-five appointments. Thirty-three were reported qualified.

SOCIETY OF APOTHECARIES.—The following gentlemen passed their examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received certificates to practise, on Thursday, the 19th inst.:—

Robinson, Abraham Hepworth, M.R.C.S., Manchester-road, Hodenwood, near Manchester.
Sankey, Julius Ivor, Portland-road, Notting-hill.

A DEMONSTRATION in aid of the funds of the Beckett Hospital and Dispensary, Barnsley, was held on the 22nd inst. The amount realised exceeded £62.

THE Emperor of Russia has sent 40,000 roubles to the Pasteur Institute, the total subscriptions to which now amount to £64,000.

AN inquest was held at Bath on the 23rd inst. on the body of a woman aged sixty-four, who died from shock to the nervous system caused by the sting of a wasp.

THE Caucasian Medical Society has awarded its annual prize of 100 roubles, given for the best original paper contributed to the Society during the year, to Dr. Neumann for a work on the Pendjeh Sore.

WOLVERHAMPTON EYE INFIRMARY.—Mr. Horsman, to whom Wolverhampton is indebted for its art gallery, has just given £4000 to cover the cost of providing and furnishing the in-patient department of the intended new eye infirmary. This makes the total sum already subscribed £9500 towards the £12,000 required for the erection and furnishing of the new building.

JAPANESE WATER-SUPPLY. — On the authorities making an examination of the wells of Nakamachi recently 777 out of 939 were found to be unfit for drinking purposes, and the analysis of many showed traces of sewage contamination. Such a condition of the water-supply leaves room for no surprise at the statement that cholera has taken root in many places in the country.

HUDDERSFIELD INFIRMARY.—Messrs. John Brooke and Son have intimated to the president of this institution their intention to subscribe £500 to the fund which is being raised for the erection of a new ward for children and other extensions of the infirmary. The sums already promised amount to £3350, which is nearly one-half the amount required.

PRESENTATION. — On the 12th inst. a testimonial was presented to Mr. W. H. Thornton, M.R.C.S., on behalf of the vicar, churchwardens, and parishioners of the parish of Holy Trinity, Margate, on his retirement from the office of churchwarden, which he has filled for the long period of thirty-two years. The testimonial took the form of a silver teakettle and lamp, the former bearing a suitable inscription.

WEYMOUTH SANATORIUM. — At the thirty-eighth annual meeting of the supporters of this institution on the 19th inst., it was reported that the number of in-patients under treatment during the year had been 208, and of out-patients 863, making totals of 2621 and 35,560 respectively since the opening of the institution in 1848. The financial condition of the sanatorium continues to be satisfactory.

DEATHS OF M. PASTEUR'S PATIENTS.—A little boy residing at Rawtenstall, in Yorkshire, died on the 20th inst. from hydrophobia, having been bitten about six weeks ago. Within nine days after the injuries had been received he was treated by M. Pasteur, during his ten days' residence in Paris receiving thirteen inoculations. At Ferrol and Reus a woman and a man have also died from the disease; the sufferers in both these cases, too, had undergone a course of treatment in Paris under M. Pasteur.

THE DISPOSAL OF THE BODIES OF PAUPERS.—At a meeting of the Spalding Board of Guardians on the 23rd inst., a motion to secure the abandonment of the practice of forwarding the bodies of persons who die in the workhouse, and who have no relatives, to hospitals or colleges for dissection, was introduced, and it is expected that at the next meeting of the Board the minute relating to it will be rescinded. This action has been taken in consequence of the body of a labourer who died in the workhouse apparently without friends, having been sent to the Cambridge School of Medicine. The relatives, indignant at such a disposal of the corpse, aver that they would have buried it had inquiries been made.

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IN connexion with the meeting of the British Association on Wednesday next, an Industrial Exhibition has already been opened, which, though limited to towns within a radius of fifteen miles, will, it is expected, be of an attractive character.

GELOSINE.—In the "Bulletins et Mémoires de la Société de Thérapeutique" (Paris, July 15th), M. Guérin published a communication on gelosine, a mucilaginous principle which he has extracted from the *gélose* of Gelidium corneum, an alga of Japan. It is an amorphous, uncrystallisable, colourless, non-azotised substance, closely resembling lichenine of the lichens and fucine of the algæ. It is also similar to the pectose of ripe fruits which determines alimentary vegetable jellies. Gelosine is dissolved in boiling water, of which it solidifies about 350 times its volume. To give an idea of this very great suspensive power, 250 grammes of gelosine immobilise 250 litres of water. On cooling, this solution is transformed into a fine transparent jelly, capable of assuming any shape and varying consistence. Therapeutically this jelly constitutes a valuable new excipient: salts, acids, powders, and extracts may be dissolved in it and dispensed in any desired form. The price of gelosine is so moderate that it may be used in hospital practice, and, when properly sterilised, it promises to be of use in the researches of micro-biologists. As the substance is inalterable, it may be melted indefinitely with very little loss.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

HORNE, THOMAS, L.R.C.S., L.R.C.P.Ed., has been appointed Medical Officer for the Stockton District and the Workhouse of the Stockton Union.

LITTLEWOOD, HARRY, F.R.C.S.Eng., has been appointed Resident Surgical Officer to the General Infirmary, Leeds, vice F. H. Mayo, resigned.

WHITE, ERNEST A., M.R.C.S., L.R.C.P.Lond., has been appointed Medical Officer for the Fifth District of the Leeds Union.

Births, Marriages, and Deaths.

BIRTHS.

CAPON.—On the 22nd inst., the wife of Herbert J. Capon, M.D., of a son.

FINLAY.—On the 21st inst., at Dalkey, co. Dublin, the wife of Surgeon-Major Finlay, Medical Staff, of a son.

GOLDSMITH.—On the 28th ult., at Sutna, Central India, the wife of Surgeon-Major S. J. Goldsmith, of a son.

JOHNSTON.—On the 15th inst., at Guisborough, Yorkshire, the wife of George F. Johnston, M.B., of a son.

MARRIAGES.

BARTON—LAURENCE.—On the 19th inst., at Walesby, Edwin William Barton, M.D., of Market Rasen, to Helen Isabel, eldest daughter of the Rev. Perceval Laurence, Rector of Walesby.

PRICE—PAGE.—On the 24th inst., at St. Stephen's, Hampstead, John Alfred Parry Price, M.D., of Reading, to Frances Mary, eldest daughter of J. Bentley Page, Esq.

THIELE—DIXON.—On the 15th inst., at St. John's Church, Chatham, Herman Thiele, M.B., C.M., Surgeon, M.S., to Louisa Frances Kate, youngest daughter of S. E. Dixon, Esq., of Hastings, Sussex.

TOBIN—COSTELLO.—On the 17th inst., at the Church of St. Agatha, North William-street, Dublin, R. F. Tobin, Brigade-Surgeon (retired), A.M.S., to Fanny, daughter of James Costello, J.P., of Fox Hall, Raheny, co. Dublin.

WHITCOMBE—BUSBRIDGE.—On the 18th inst., at St. Mary, The Boltons, South Kensington, Philip Percival Whitcombe, M.B.Lond., to Blanche Beatrice, youngest daughter of George F. Busbridge, of The Lodge, West Malling, Kent.

DEATHS.

HAINS.—On the 22nd inst., at Bridge Town, Totnes, Devon, John Philip Frost Palmer Hains, Surgeon, aged 46.

PASH.—On the 13th inst., at Esbourn, Laurie-park, Sydenham, Wilson Pash, M.A., M.B.Camb.

WILLIAMS.—On the 19th inst., at Mold, William Williams, M.D., M.R.C.S., aged 68.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, August 26th, 1886.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Aug. 20	30·29	E.	60	57	101	72	53	·11	Fine
,, 21	30·13	S.E.	59	56	110	76	54	...	Hazy
,, 22	30·04	N.E.	61	59	105	78	57	...	Hazy
,, 23	30·02	N.E.	59	57	104	76	57	...	Overcast
,, 24	29·92	N.E.	64	61	107	80	59	...	Overcast
,, 25	30·00	N.W.	64	60	108	77	60	...	Hazy
,, 26	30·07	W.	65	60	...	...	57	...	Cloudy

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

We cannot undertake to return MSS. not used.

HOMŒOPATHY.

An Old True Blue asks various questions about homœopathy.—1. What is homœopathy? That is a poser. There are probably not six homœopaths in England who would accept the principles of homœopathy laid down by Hahnemann. Dr. Kidd, who is the most popular leader of the sect, says there are two principles: *similia similibus curantur*, and *contraria contrariis curantur*.—2. There is no homœopathic university in England, nor, so far as we know, in Europe.—3. There is no legal homœopathic licensing body in England.—4. Homœopathy is not the best practice according to the best science of the day, but is a fad and a fallacy.—5. The medical profession does not consider it honourable for a member holding a degree from a British university to practise homœopathy; but the law particularly forbids any examining body or other medical authority to refuse its qualifications to any gentleman on the mere ground of his holding peculiar or exclusive theories of medical practice.—6. There is nothing illegal in homœopathic dispensaries.

G.P.—The details of the case are hardly sufficiently numerous and precise to warrant us in offering an opinion upon it.

NAIL-SWALLOWING.

To the Editor of THE LANCET.

SIR,—If you consider the following worthy of insertion it may be of interest to some of your readers.

A. G——, a fine little fellow of four years of age, picked up a large brass-headed nail, two inches long, and commenced sucking it, when suddenly it slipped from his fingers down his throat. When I saw him, half an hour after, he was looking very pale and anxious, complaining of great weight in the stomach, and a feeling of sickness, which remained for three days, passing off and leaving the child, to all appearance, in perfect health. Four days after, just seven days from the time of the accident, the nail was voided, embedded in a hard mass of fæces. The treatment was from the first perfect rest, and the bowels confined with a mixture of two minims of solution of morphia and five minims of dilute sulphuric acid, every three hours.

I am, Sir, yours faithfully,

Colebrooke-row, City-road, N., August, 1886. J. W. SMYTH.

NEW POLISH MEDICAL JOURNAL.

THE *Przeglad Lekarski* states that the new Polish medical journal, *Wiadomosci Lekarski*—i.e., Medical Gazette—will be devoted chiefly to abstracts from foreign journals, including the Russian ones.

Mr. Bellamy.—Very shortly.

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JEWS AND MEDICAL PRACTICE IN RUSSIA.

THE Russian Medical Department has been collecting statistics showing the number of Jews who are practising medicine, pharmacy, &c. It seems that in Odessa there are of such 99 doctors (including 6 women), 3 veterinary surgeons, 9 dentists, 35 midwives, 10 feldshers, 19 apothecaries, and 4 apothecaries' managers—altogether 178. It is feared that the authorities contemplate making an order limiting the proportion of Jews allowed to engage in civil practice, in the same way as those in the military medical service are limited to a tenth of the whole.

Dux.—We see no reason why our correspondent should put himself on his defence in the circumstances mentioned. The change of mind was on the other side. He fulfilled all his engagements, and may rest satisfied with the *mens conscia recti*.

Mr. G. R. Newcastle.—We cannot depart from our rule.

THE DRAINAGE AND SEWAGE DISPOSAL OF LONDON.

To the Editor of THE LANCET.

SIR,—To drain London thirty years ago was looked upon by the uninitiated who had never studied sanitation as a somewhat gigantic affair. Mr.—afterwards Sir Joseph—Bazalgette had been elected Road Surveyor to the Metropolitan Board of Works, and to him belongs the credit of carrying out the work—a work which all admit has been very well done, according to what London was at the time. The first mistake was that he did not foresee and comprehend what London was to be in after-time. The result has been the ever-increasing pollution of England's noblest river, and the accumulation of a mass of filth, defying all the wisdom of the Board of Works to know what to do with. Yet, the remedy is as certain as that the Board of Works do not understand it, or with intensified obstinacy will not see it. When our Belgian, Colonial, and Indian visitors recently inspected the sewage works at Crossness, they must surely have been astonished that the discharges of fifty square miles of a thickly-populated district had to be received nearly thirty feet below mean high-water mark, and then at enormous expense of machinery and coal had to be pumped the same height again to be discharged into the river, after being treated by chemical means to decompose and unfit it for agricultural use, when the same or less amount of money differently spent would have made it a valuble commercial commodity. Those gentlemen could not have been much impressed with the value of the engineering and chemical skill that could perpetrate such a blunder. London, however, will in time be brought to see that as one mistake often generates another to remedy or conceal the first, so the first palpable deficiency in the scheme of Sir Joseph Bazalgette will necessitate a change in both drainage and sewage disposal that will be more or less expensive to complete, according to the time wasted in having it done.

I am, Sir, your obedient servant,

Batoum Gardens, W., Aug. 23nd, 1886. W. HEMPSON DENHAM.

Mr. Samuel Constable.—We think the action of the chemist was uncalled for; but it is scarcely worth while for a medical man to hold a dispute with a chemist on such a question.

Mr. E. S. Pattison.—Gastein, Kissingen, and indeed the majority of the German baths treat the condition named.

"THE USE OF COCAINE IN CIRCUMCISION."

To the Editor of THE LANCET.

SIR,—In reply to Dr. Hett's letter, which appeared in your issue of the 21st inst., will you permit me to point out that the elongated prepuce to which he refers is usually (if not always) a result of the neglected phimosis. If therefore the manœuvre I suggested be performed as soon as the child is found to have trouble in micturition, Dr. Hett's plea for circumcision will rarely, if ever, be valid. I feel by no means sure that, provided the phimosis be remedied, a long prepuce will cause any inconvenience at all; and I think we should be sure we are on very safe ground before we counsel any attempts to improve upon nature by mutilation. But Dr. Hett makes the strange remark that retraction of the elongated prepuce for purposes of cleanliness will be prejudicial to the *morale* of the child. Upon this principle it were well to inculcate the universal practice of circumcision. For, I take it that every male child should have its prepuce retracted from time to time, whether there be phimosis or not, and the parts carefully washed. To assert, then, that a proper act of sanitary cleanliness can possibly prejudice the mental or bodily well-being of the little boy is to me very startling doctrine indeed. I am, Sir, your obedient servant,

Norfolk-terrace, W., Aug. 25th, 1886. HERBERT SNOW.

PSORIASIS SOLARE.

To the Editor of THE LANCET.

SIR,—Could any of your readers suggest a remedy for psoriasis solare? There is no specific history, but the patient's grandmother suffered from the malady. It appears all over the body. The usual remedies have been tried—arsenic, iodide of potassium, chrysophanic acid ointment, &c. Has anyone found good results from Barff's boro-glyceride? If so, I should be glad to know the method of application, &c. Any other suggestion would be greatly esteemed.—I am, Sir, yours obediently,

Aug. 21st, 1886. HOSPITAL SURGEON.

THE PREPARATION OF SKELETONS.

AN account has recently been published of a novel industry, to which a large manufactory in the suburbs of Paris is devoted—viz., the preparation of skeletons for the market. The proprietor contracts for a supply of corpses from all the dissecting-rooms and hospitals in the city, and the raw material on its delivery is boiled for days in a cauldron. The grease which rises to the surface is skimmed off and sold; the bones are carefully cleaned and bleached in the sun, and finally assorted and converted into articulated skeletons. The preparation of frogs, lizards, and various reptiles occupies a separate department. The comparative cheapness and abundance of the skeleton supply from Vienna since the Russo-Turkish War has somewhat depressed the trade; but really good osteological preparations, as might be expected, always command a good price. For what purpose the grease which is sold is used is not stated, though we hope the silence is not to be regarded as significant.

R. N.—1. The examination of Englishmen for the degree of Brussels is through an interpreter in the English language.—2. The degree is not at present registrable in England, but may become so under the new Medical Act.—3. At St. Andrews, if holding British qualifications and above the age of forty.

Mr. J. Young.—The omission was corrected in our last issue, p. 380.

EXTRAORDINARY CASE OF NEGLECT.

To the Editor of THE LANCET.

SIR,—As showing to what a condition humanity may sink when surrounded by filth, drunkenness, and moral degradation, and because it has never previously fallen to my lot to witness such a case, I send the following.

At midnight on Friday last I received a note from the coroner of the district, requesting me to make a post-mortem examination on the following morning of the body of a girl aged nine years, the daughter of a tramp, who had died in a field at Swalecliffe about 2.30 that afternoon. The body lay in a barn, and upon entering a horrible sight presented itself. Innumerable maggots were crawling in all directions from the back of the head, and upon moving the body the entire mass of matted hair fell off, leaving the scalp as though it had been shaven. At the back of the neck was a large opening, through which could be distinctly seen the skull, stripped of its pericranium, and the entire space filled with a teeming mass of maggots; none were visible on any other part of the body. The day before her death the child had fallen down in a fit, for which brandy was administered, when she revived, and afterwards walked a distance of two miles. The next day she had two more fits, in the second of which she died. As the child had received no medical attendance, all that could be gleaned of her history was that she had measles four years ago, since which she had sores on her head; so that it seems probable that these sores, being neglected, formed a nidus for the fly, the larvæ of which exactly resembled those found on fly-blown meat. I am, Sir yours truly,

Whitstable, Aug. 25th, 1886. JNO. W. HAYWARD, M.R.C.S.

THE METROPOLITAN POOR-LAW MEDICAL OFFICERS.

THE Metropolitan Poor-law Medical Officers, instead of benefiting to the extent of only £18 a year, as stated by error in our last issue, have gained from the Metropolitan Poor Act, 1867, £18,000 per annum, this sum being wholly independent of what has been saved by the fact that they do not now find medicines or persons to dispense them—i.e., they get their salaries without deduction of any kind.

Mr. Edward C. Kingsford might with advantage apply to Moore and Co., 125, Houndsditch.

Mr. William Tebb.—We must decline.

TREATMENT OF STOMATITIS.

To the Editor of THE LANCET.

SIR,—Would any of your readers be good enough to advise me as to the treatment of a lady, aged thirty-five, who suffers from very frequent attacks of stomatitis, occurring in patches on the mucous membrane of the mouth, tongue, and œsophagus. The parts are red, raw-looking, and feel hot and sore. She has no appetite, and little sense of taste. Each attack comes on rapidly, and continues about a week; then she is almost well for a few days. Nitrate of silver, sulphate of copper, lime, tar capsules, &c., with regulation of diet and attention to general health, have been tried in vain. She becomes worse. For years she has been subject to severe sick headaches. I am, Sir, yours truly,

Aug. 19th, 1886. M.B.

SUBCUTANEOUS INJECTIONS OF MERCURY IN SYPHILIS.

To the Editor of THE LANCET.

SIR,—There is a slight error in Mr. Bloxam's paper on "The Treatment of Syphilis by Subcutaneous Injections of Mercury." Twenty minims of the solution he uses contain one-fourth of a grain of perchloride, not one-third. I am, Sir, yours faithfully,

Mary Abbott's-terrace, W., Aug. 21st, 1886. JAMES LATTEY.

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ERRATUM.—In the Manchester letter last week, p. 377, fifth line from the bottom of first column, for "medical" read *educational*.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Sir Joseph Fayrer, London; Dr. Cullingworth, Manchester; Dr. Herbert Snow, London; Mr. Bellamy, London; Dr. Pearse, Haslemere; Mr. Wetzel; Mr. W. Curran, London; Miss Mason, London; Messrs. Pratt and Co., London; Dr. Cherton, Leeds; Mr. Hopkins, Bath; Dr. Elliott, Aylesbury; Mr. St. Dalmas, Leicester; Mr. Saunders, Bromsgrove; Dr. Gay, Leamington; Mr. Moulding, Clotham; Mr. Furneaux, Shanklin; Mr. Cookson, Hendon; Dr. Reid, Staffs.; Messrs. Heard and Sons, Truro; Mr. C. Benson, Wiesbaden; Messrs. Newbery and Sons, London; Mr. Meadows, Hastings; Dr. Sinclair, Dundee; Mr. J. Weller, Sudbury; Dr. H. E. Richardson, Birkenhead; Dr. Emile Martin, Marseilles; Mr. G. M. Foy, Belfast; Messrs. Burroughs and Wellcome, London; Dr. Morris, Spalding; Surgeon G. H. Thomas, Umballa; Mr. W. H. Denham, London; Dr. Lewers, London; Mr. E. Humphrey, London; Mr. W. Tebb, London; Mr. W. Kimpton, London; Mrs. Hitch; Mr. Burgess, Manchester; Mr. W. A. Evans, Wolverhampton; Mr. T. Cook, London; Dr. Rae, London; Mr. H. Hayward; Mr. J. B. N. Cave, Mullinavatt; Dr. T. Reid; Dr. Sinclair, Dundee; Mr. E. H. Fenwick, London; Mr. C. Williams; Dr. Orton, London; Dr. Symes, Halifax; Mr. Hayward, Whitstable; Mr. P. Boobbyer, Nottingham; Dr. Macpherson, Weymouth; Dr. Burghardt, Manchester; Mr. Graham, Bristol; Mr. Boyeau, Paris; Mr. Thwaites, Bristol; Dr. Grimsdale, Liverpool; Mr. Paterson, Leeds; Mr. Walker, Pocklington; Dr. Tomkins, Leicester; Mr. Hawkins, London; J. T. M.; Lady John Manners, London; Mr. Collier, London; Clito; M.B.; R. N.; An Old True Blue; Dux; X. P.; C., Bradford.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Buchan, Plymouth; Mr. Harris, Saltburn-by-the-Sea; Mr. Furneaux, Stamford Hill; Dr. Kirwan, Galway; Mr. Kerr, Glasgow; Messrs. Cornish Bros., Birmingham; Mr. Cormoul, Dumfries; Messrs. Robertson and Scott, Edinburgh; Messrs. Loefund, London; Mr. Williams, Liverpool; Mr. Ryan, London; Mr. Gawthorp, London; Messrs. Beal and Sons, Brighton; Mr. Telford, Bury; Mr. Hope, London; Mr. Coltman, Leicester; Dr. Skerritt, Bristol; Mr. Morse, London; Messrs. Keith and Co., Edinburgh; Mr. Walker, Twickenham; Messrs. Isaacs and Co., London; Mrs. James, Walton-on-the-Water; Mr. Harrison, Cape Town; Dr. Reynolds, Boxford; Mr. Elliott, Carlisle; Miss Turner, Southampton; Dr. Beaumont, Shirley; Mr. McLaren; Mr. Stapleton, Sheffield; Mr Hains, Totnes; Dr. Heelas, Bonchurch; Mr. Faber, Stockton-on-Tees; Mr. Huggins, Malvern; Mr. Greenwood, Liverpool; Mr. Darke, London; Mr. Vince, Birmingham; Col. Maurice, Barnstaple; Dr. Wells, Holloway; Mr. Kynaston, Folkingham; A. B.; Matron, Bournemouth; M. J. B., London; Medicus, Southport; Cantab, Bayswater; A. B., Vauxhall; Cash; R. B., Worcester Park; Alpha, Blackburn; M.D., London; Surgeon, Chilford; X. Y. Z., Leeds; A. B. C., Wantage; A. M. D., Leeds; Tibia; Beta, Upper Tooting; Junius, Woolwich; Medicus, Spondon; J. J.; R., North Kensington; J. H. W., Darwen; Kessen, Hull; A. R.; R. W., Market Overton; Box, Uttoxeter; Cavell, Wigton; F., Liverpool; Cantab., Bristol; R. P., Newport; M.B., Leicester; F. B., Leicester; J. A. D., Bridgnorth; M.R.C.S., Uttoxeter; Alpha, Holloway;

West Briton and Cornwall Advertiser, Manchester Examiner, Australasian Sketcher, Charity Record, Charity Organisation Review, Windsor and Eton Express, Dumfries and Galloway Standard, Temperance Record, Sanitary Engineering, &c., have been received.

Medical Diary for the ensuing Week.

Monday, August 30.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.

ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesdays, same hour.

CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2 P.M.

HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.

Tuesday, August 31.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.

CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

Wednesday, September 1.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesdays and Thursdays, 1.30 P.M.

ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department, Tuesdays and Fridays, 9.30 A.M.

ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.

LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.

GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.

KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; and on Friday, 2 P.M.; and Saturday, 1 P.M.

Thursday, September 2.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M

Friday, September 3.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Saturday, September 4.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.

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Front Page, per Line	0	1	0
Quarter Page	1	10	0
Half a Page	2	15	0
An entire Page	5	5	0

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Clinical Lectures ON DISEASES OF THE EYE.

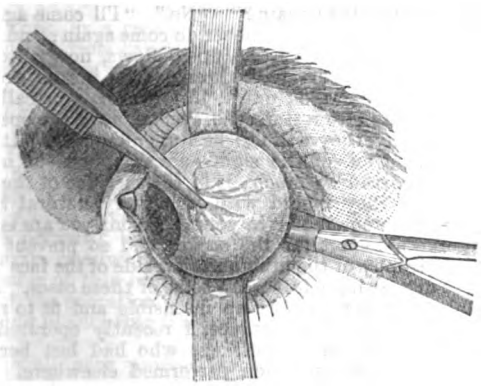
Delivered at the Nottingham and Midland Eye Infirmary.

By CHARLES BELL TAYLOR, M.D., F.R.C.S.,
SURGEON TO THE INFIRMARY.

LECTURE IV.

GENTLEMEN,—A short time ago I had in my service a somewhat eccentric old gentleman—since dead, I regret to say,—on whom I had operated for cataract in both eyes. In return for my kindness he said he would never leave me, and I managed to find employment for him in various ways. One of his errands was to fetch pigs' eyes from the butcher's shop. "What does your master do with those eyes?" said one day a curious customer, who had noticed his frequent visits. "Oh, he fills up the sockets of the eyes taken out at the infirmary with them." "And can the patients see?" "Certainly," he replied. "I have had both eyes done myself." My informant assured me that the man believed him. Perhaps he did—who knows? *Populus vult decipi.* Thousands, I am told, believe a newspaper canard to the

FIG. 1.



effect that a certain German professor has recently succeeded in grafting a rabbit's eye into a woman's head, and that his previously blind patient has since recovered most excellent sight. You and I know, of course, that such transplanted orbs, even if retained in whole or in part, must of necessity be sightless; but we cannot expect the general public to be equally well informed; and it is, moreover, a fact that we are able to accomplish far more in the way of transplanting both homogeneous and heterogeneous tissue than would *à priori* seem possible. For instance, I have succeeded myself in forming an excellent stump for an artificial eye by grafting a piece of prepared sponge into the orbit. And you have seen me again and again so far sever the existing connexions of the eyeball as to be able to turn it round, lift it out of the socket, and then replace it. (Fig. 1.)

Here is a patient on whom I performed this operation two years ago. She was sent to me in order that the right eye might be excised. I thought it a pity, however, to sacrifice such a good-looking organ, and therefore divided the optic and ciliary nerves. Now, as you see, she is as well as ever; motion of the eyeball in all directions is absolutely perfect, and, in point of fact, you cannot without careful examination tell which eye has been done. (Fig. 2.)

Here is another patient, a labouring man, operated upon six weeks ago, who has long suffered from recurrent attacks of pain and inflammation in the right eye. As these attacks resisted all treatment, including neurotomy of the supra-orbital nerve, adopted by his surgeon, it was decided to send him to me for excision. Again I thought it a pity to sacrifice a good-looking though sightless globe, and therefore divided the optic and ciliary nerves. As soon as the operation was over he exclaimed, "Thank God, my pain has gone." Now he is as well as ever; motion is perfect; you cannot tell which eye has been done; and he is trebly grateful—grateful for relief from pain, grateful for his preserved eye, and, last though not least, grateful because he has been spared the annual expense and daily annoyance of an artificial substitute, which latter to a working man is something greater than you can readily conceive. It has been suggested by a shrewd and excellent friend of mine that this case is a very pretty one so far as it goes, but that it is by no means certain that we have done with it. "It is," he says, "on the cards that the pain may return." True, no doubt it may return; it might return even if the eye were excised. I was once about to perform this very operation upon a gentleman similarly afflicted, when another surgeon intervened and excised the globe. In that case the pain did return, and of course it might return in this; I do not think it probable, however; and if it does, we are by no means at the end of our resources.

There are three principal objections to this operation. I will name them in the order of least importance. First, it has been asserted that the eye projects in a ghastly fashion after enervation of the globe; second, that it wastes away; and third, that the nerve becomes so perfectly reunited to the eyeball that the patient is in exactly the same condition very shortly after the operation that he was in before it was attempted. This line of argument reminds me of that adopted by the gentleman who was accused of laming a horse which he had hired. He said, first, that the animal was lame when he took him out; second, that he was sound when he brought him in; and third, that he never had him

FIG. 2.



at all. Gentlemen, it is not true that the eye protrudes in an unsightly fashion after optico-ciliary neurotomy, and experience has amply demonstrated that it is not materially altered either in volume or consistence; while, with regard to reunion of the nerve, we all know that if a nerve is divided and the cut ends maintained in apposition, it will reunite: there is nothing wonderful in that. Our veterinary friends have long been aware of this fact, and, in operating for navicular disease, are always careful to excise a portion. But apposition of cut ends is not a state of things that obtains after division of the optic nerve; the eye is an exceedingly mobile organ, and it is difficult under any circumstances to imagine such accurate reunion as would suffice to establish lymphatic circulation, such as modern pathology has taught us is necessary for sympathetic infection. Here is an eyeball the subject of neurotomy six years ago, which I excised, for reasons to be hereafter explained, last week. In this case, as you see, there is not the slightest re-formation of nerve tissue; in fact, the moment the nerve is divided the eye turns outwards and the cut ends are at right angles to each other—a position which may

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be readily maintained until all chance of re-attachment of the shrunk extremity to the globe is gone. Here is a patient in whom, as you see, I have taken this precaution. (Fig. 3.) Moreover, I am entirely of Professor Schweigger's opinion that the risk of reunion may be absolutely prevented by excising a portion of the nerve. Let me illustrate my meaning. The elephant is an animal that takes six feet at a stride, walks six miles an hour, and in the open can overtake the swiftest runner; yet it is well known that a trench of only seven feet in width will stop his progress absolutely—he cannot get over it to save his life; and I am convinced that if you will only cut a gap in the optic nerve of ten millimetres in extent or thereabouts, you will just as effectually stop the progress of that *bête noire* of the ophthalmic surgeon—sympathetic infection.

Now, gentlemen, I am quite prepared to be told that if this operation, so far as cutting off the connexion with the sound eye is concerned, is equivalent to enucleation, and if it possesses so many advantages as regards the life, comfort, and personal appearance of the patient, it is very strange that I should be constantly excising eyes at this institution, sometimes as many as three and four in a day. Well, it does seem strange; and there is no doubt that, in our overweening anxiety for the patient's welfare, we do excise many eyes that might be safely retained.

FIG. 3.



But the eyes that we take out at this institution are for the most part eyes that have been crushed by a blow that has probably at the same time felled the patient; eyes that are the site of neoplastic growths which may prove malignant; eyes that have been penetrated by foreign bodies, and which retain their dangerous guests, or which belong to patients who cannot be trusted either to take care of themselves or to return if threatened with sympathetic ophthalmia. In all such cases it is no doubt the best because the safest practice to excise the globe at once. The case is different, however, when the eye, although sightless, is to all appearances perfect; when it is merely affected by neuralgia, slight recurrent inflammations, or luminous spectra, which torment the patient; when it is desirable to render a stump insensible, to preserve a *moignon oculaire;* or when the patient is threatened with sympathetic ophthalmia and obstinately refuses to submit to enucleation of the globe. In all these cases, especially the last, neurotomia optico-ciliaris is a precious resource, and will, I feel convinced, be so regarded by all good surgeons whose motto is *primum non nocere*, and who are, as I am sure we all are, specially anxious that their patients shall be, if no better, at least no worse off for anything that has been done.

There are three principal methods of performing this operation—Landesberg's, Schoeler's, and Meyer's. Landesberg enters the orbit from the inside, Schoeler from the outside, and Meyer clears a large way by dividing both straight muscles. I prefer to operate from the inside myself, simply because the optic nerve enters the eyeball to the inside of its posterior pole, and is therefore more readily reached in this direction. I pinch up the conjunctiva immediately over the insertion of the internal rectus muscle, cut the tendon as in Graefe's operation for squint, pull the eye forwards, turn it inwards, and divide the nerve as far back in the orbit as possible; the eye is then rotated, and the piece of nerve left attached to the globe shaved off as close to the surface as possible; the cut ends of the muscle are then united by a suture, and the operation completed by the application of a compress bandage. Hæmorrhage, which sometimes proves a source of trouble, may be arrested by using the now insensible eyeball as a tampon, and pushing it well back into the orbit. I have never seen suppuration follow this operation, and only one case of slight ulceration of the cornea, which rapidly healed. One great advantage of the procedure is that you can always operate in time. Sympathetic ophthalmia never occurs until after the lapse of a month or thereabouts from the date of the injury to the exciting eye; and if the patient absolutely refuses to submit to enucleation, you have always this operation in reserve. Speaking on this point, Professor Meyer of Paris remarks that sympathetic ophthalmia "Une fois déclarée poursuit généralement son cours même après l'enucléation du premier œil. Cette opération [resection] doit donc être considérée comme un moyen préventif dont l'application constant est inévitable aussi long temps que l'on ne peut déterminer avec certitude les cas de ce genre que resteraient toujours à l'abri de l'ophthalmie sympathétique." "You had better let me remove the eye," I sometimes say to patients who come to this institution. "Are you going to take it out?" "Yes." "Shall you put it in again?" "No." "I'll come again on Thursday." Such patients never do come again; and I have a painful recollection of two fine fellows, now absolutely blind, who lost their sight through this insane dread of having their eyes "took out." If, however, you call them back and promise to restore the eyeball, as in the operation for neurectomy, they will not hesitate a moment. It is not the permanent loss of the sight—already gone—of one eye which they dread so much; it is the sacrifice of the globe itself which they regard with such very natural horror. Another advantage is that in young persons you are enabled to preserve a tenant for the socket, and so prevent comparative atrophy of the orbit and that side of the face which forms so distressing a feature in some of these cases. Again, it enables us to render a stump insensible and fit to receive an artificial eye. For instance, I recently operated on a lady for cataract in the left eye who had lost her right through a similar operation performed elsewhere. I was fortunate enough to succeed in restoring her sight, and when she could see she naturally wished to improve her appearance by wearing an artificial substitute. I said, "You must let me remove the remains of the lost eye." "Never," she exclaimed, so I divided the optic and ciliary nerves. Now she is able to wear an artificial eye, motion is as perfect as in the modern operation of exenteration, and she looks much better than she would have done had she submitted to my original proposition.

Gentlemen, I have heard it whispered that the operation of enervation of the eyeball has proved fatal. I can find no record of any such accident myself, and suspect that the number of these operations are as yet too few to have contributed their quota to the tables of mortality. If it should do so, however, in due course we ought not to be surprised, for the risks of this operation are precisely those of enucleation *bien entendu*, neither more nor less, and I have known two deaths from the latter operation myself, and quite a number have been recently recorded by other surgeons. It has also been alleged that this operation has been followed by sympathetic ophthalmia in the other eye. I can only find a record (Leber's) of one such case, but when neurectomies are sufficiently numerous I have no doubt that the number will be multiplied. Mooren, Knies, Smidt Rimpler, Pagenstecher, Steinheim, Horner, Critchett, White, Nettleship, Bowers, Ayres, Snell, Lawson, Carter, and others, all record cases of sympathetic ophthalmia following enucleation, and whatever follows enucleation may of course follow resection; the only difference between the two operations is that sympathetic ophthalmia is probably less likely to follow resection than enucleation, simply because in resection it is absolutely necessary to cut the nerve as far back in

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the orbit as possible, and you are thus more likely to remove the whole of the inflamed or infected portion of the nerve than in the ordinary operation of enucleation. No doubt we are occasionally obliged to enucleate after neurectomy; the eye you see on the table was enucleated by myself—I now believe unnecessarily—six years after neuroctomy from an excessive dread of sympathetic ophthalmia. It has also been alleged that recent researches, especially Poncet's experiments on animals, have tended to discredit this operation, but the contrary is the fact. The only experiments on animals with which I am acquainted are those performed daily by our veterinary friends, and they show conclusively that if a sufficient piece of nerve is removed it never reforms; moreover, it was formerly supposed that the channel of communication between the two eyes in sympathetic ophthalmia was through the medium of the ciliary nerves; that opinion is now exploded, Deutschmann's researches having conclusively shown that it is the optic nerve, its lymphatics, and lymph spaces, which are alone the source of danger, the only bridge by which sympathetic ophthalmia, or ophthalmia migratoria as it ought to be called, can travel from one eye to the other. Speaking on this subject, Professor Schweigger of Berlin remarks, "It is not necessary to remove the exciting eyeball if by exsection of a piece of the optic nerve we can remove the bridge by which the inflammatory process travels from the injured to the non-injured eye"; he adds, that "neurectomy, while as efficient a prophylactic measure as enucleation, has the great advantage that it neither sacrifices the eyeball nor renders an artificial eye necessary." Professor H. Knapp of New York, in a recent paper on exenteration, says, "the mutilation from enucleation is a source of life-long misery and misfortune to many a sufferer in all classes of society." I have myself heard one of our most eminent ophthalmologists remark that "anything is better than a glass eye"; and I know one noble lord who absolutely refuses to wear one. It is for the opponents of neurectomy to explain away these facts and answer these arguments, to prove that we may not in certain cases obtain all the benefits of enucleation by a less severe operation, and one which is not only a *moyen préventif*, but is also unattended by any mutilation whatever; meanwhile, whatever may be the result of further discussion of this important question and extended experience of the operation of neurectomy, I am sure you cannot go wrong in adopting it in such cases as those I have pointed out.

We shall now proceed to operate upon our patients. There are five cases needing attention: one of these is a small boy with neoplastic growth following injury of the eye, which will require extirpation; another is the subject of traumatic cataract, which I propose to extract *secundum artem*—i.e., according to recent enlightenment, without iridectomy; a third is suffering from infecting ulcer of the cornea, which I shall treat after Nieden's plan with the electric cautery; and two others, both adult males, who have singularly enough come in to-day, who will afford me an opportunity of showing you the operation of resection which I have just described.

Remarks after operation.—Gentlemen, I need not now detain you with any remarks upon the first three cases you have just seen. With regard to the last two, the elder is sixty years of age. He comes from a large town in Yorkshire, and for three years past has been suffering more or less, and at varying intervals, from the effects of an accident to his right eye, which was cut across the centre by a chip from a boiler which he was mending. I saw him for the first time to-day, and he informed me that he has been in an eye infirmary, and that the surgeon, whose skill is well known, wished to take his eye out, an operation which he declined then, and again when I suggested it to him to-day. He came here, he says, "because he thought I might relieve him without taking his eye out, and if I could not do so he should return as he came." I suggested neurectomy, to which he submitted without a moment's hesitation, and which, as you saw, was performed without misadventure. Now the eye is quite insensible, and I have no doubt that we shall have succeeded in relieving him from pain, annoyance, and attacks of recurrent inflammation, which have again and again prevented him from using the sound eye. The younger patient was injured by the bursting of a gun; his forehead was wounded by a chip of metal, and the right eye has been peppered with powder; he has bare perception of light with this eye; I cannot illuminate the fundus oculi, and the pain he has suffered since the accident three weeks ago has deprived him of sleep, and, according to his own account, rendered life unbearable. I could not ascertain that the eye had been penetrated by any solid substance, and it was clearly desirable that we should relieve his pain with as little injury as possible. I therefore, as you saw, divided the optic and ciliary nerves. As soon as the effect of the ether had subsided he declared that his pain had quite gone, and I think we have reason to believe that this happy state of things may continue. Should we, however, be disappointed, we always have enucleation in reserve. I may mention that some forms of neuralgia may be relieved by division of the ciliary nerves only, an operation which was first proposed by Von Graefe, and first successfully carried out by Professor Meyer. The operation was then performed by incising the eyeball, but it may be just as well accomplished by division of the nerves behind the globe, by separating the tendon of the internal and external rectus muscle and feeling *à tatons*, as it were, down to the optic nerve. I have here a little girl from the blind asylum who has been entirely relieved of neuralgia in this way, and two others—adult males—in whom the operation has been equally successful.

I thank you, gentlemen, for your attendance and assistance this evening. The next lecture will, I hope, prove specially interesting to you, as I intend to discourse upon eye diseases as they occur in general practice.

AN OBSCURE CASE OF FEMORAL HERNIA;

OPERATION; NECROPSY.

BY EDWARD BELLAMY, F.R.C.S.,

FELLOW OF KING'S COLLEGE AND SURGEON TO CHARING-CROSS HOSPITAL.

THE patient, S. H——, a female aged sixty-seven, came under my care on Nov. 5th, 1885, with what was diagnosed as a large left femoral hernia, evidently containing omentum. She had been ruptured, as far as I could ascertain, since 1867, and the hernia had never entirely returned within the abdomen since its first appearance. She had never worn a truss. Owing to bronchitis she had been coughing a great deal of late, and on the morning of the day I first saw her, after a more than usually severe fit, the rupture increased very much in size and gave her intense pain. Although she had been sick after the coughing fits for two months, she had had no *pain*, which would seem to fix (?) the period of strangulation to the morning of the 5th. The bowels were normally opened on Nov. 3rd, when there was a period of rest for several hours, and the symptoms were very slight, the tongue somewhat furred, pulse 100, and her vomiting *biliary*. At 8 P.M., under ether, an attempt was made at taxis, but resulted in failure. At 9.30 it was again tried and again failed, so I at once proceeded to operate, under strict antiseptic precautions. By a straight incision about four inches long I exposed a loop of intestine seven inches long, nearly black but still glistening, and a mass of omentum as large as my fist, but showing no signs of strangulation, and to which evidently the coil of intestine was attached. After dividing what I supposed were the constrictions, I found I could not reduce the bowel, and believing that my being unable to do so was possibly the adherence of the mass of omentum, after clamping it beyond, I excised it with scissors and tied each bleeding point separately. With a little manipulation I then succeeded in returning—as I thought, and as did those present—the liberated gut into the abdominal cavity.

Nov. 6th.—The patient was sick, but free from pain, and passed a motion. Pulse 120; tongue moist. The wound was dressed under spray, and looked very well.—7th: Again very sick, and some pain in abdomen, but no local tenderness. Pulse 116.—8th: The same. Pulse 130.—9th: The same. The temperature suddenly fell to 96°, and she died somewhat suddenly at midday. I may state that I had made up my mind to perform a second operation, but her condition clearly showed that no good could possibly come of it.

Before making any remarks, it will be advisable to read the post-mortem notes, as made twenty-four hours after death by my friend, Mr. Stanley Boyd:—Body well nourished, rigor mortis moderate. Post-mortem congestion marked.

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There is a wound about four inches long, a little below Poupart's ligament at its centre. There is a little greenish discolouration about its upper part. Slight union has occurred between the edges, but is easily broken down. The finger passes into a cavity which surrounds the femoral opening. On opening up the wound, a small piece of intestine, about the size of a pigeon's egg, is found to have descended through the canal and to have become strangulated. It is for the most part a deep purple colour, but its anterior part is yellowish, and may perhaps indicate commencing slough. Its surface is still polished. The saphenous vein runs upwards just internal to this opening. It is full of yellow red thick fluid. This had been clearly brought down again by coughing. The deep crural arch and the external pillar are notched to the depth of one-third of an inch immediately above the ring. Abdomen: The lower part is swollen and occupied by a considerably distended coil of small intestine, exhibiting the signs of early peritonitis. The large intestine and stomach are empty and uninflamed. The liver is driven up. There is very little fluid in the peritoneal cavity. Below, this distended bowel leads to the femoral ring, which it enters. Issuing from the wound is a perfectly collapsed piece of bowel, which occupies the deep part of the abdomen. Tracing the dilated portion upwards, it is found to cross the abdomen from right to left beneath the mesentery of that piece of bowel which is impacted in the femoral opening. This band is moderately tight, and does not seem to have produced any extra strangulation. On the left of it the bowel ends in the duodenum. Dependent parts of bowel are much congested, but no sign of nipping is found in any part of the intestine within the abdomen. On removing the dilated bowel, the omentum and small intestine (the former bringing down with it the transverse colon) are found matted together by adhesions, some of which are recent, but others, especially those binding the omentum to the abdominal wall, seem to be old. The piece of bowel immediately below the opening is of a blackish colour, and adherent by very soft lymph to a thick mass of omentum which is firmly adherent to the left side of the inner opening of the femoral canal. The femoral canal is now laid open from above. On the omentum, after removal from the canal, are found the two ligatures applied during life, so loose that the handle of a scalpel passes beneath them easily. Round about the omentum is a quantity of the same thick red fluid which was found in the saphenous vein. As to the bowel, that portion which lay external to the ring is found to be continuous with a considerably larger portion lying in the cavity between the peritoneum, on the one hand, and the horizontal ramus of the pubic bone with the obturator internus on the other. This cavity contains a little red fluid of offensive smell. The intestine in this cavity is everywhere of a deep purple colour, in many places becoming opaque. The sides of the coil are pretty firmly adherent to each other, and it seems to contain some rather solid masses. The strangulated portion joins the intestine in the abdomen by a strongly constricted neck, which remains well marked even after removal from the body and the removal of all constricting bands. A little force, however, sends gas from the strangulated into the intra-abdominal portion. The intestine contains the usual plum-coloured offensive fluid, with a little fæces. The thick masses are simply greatly swollen portions of bowel wall. Towards the omentum, everywhere the wall looks as if hæmorrhages had taken place into it. At the point of constriction the entering intestine is thin and fibroid, not ulcerated. The piece leaving the hernia shows no sign of nipping upon the mucous membrane. The bowel above is full of fluid fæces. That strangulated, and below the point of strangulation, contains a good deal of mucus in addition to the prune-juice-coloured fluid. It is now found that there is another cavity between the peritoneum and the body of the os pubis, shut off from that above described by a complete membranous septum having somewhat the feel of omentum. Below, it is continuous with the inner wall of the femoral sheath. What the contents of this may have been there is nothing to show. The strangulated piece is about 7 ft. up from the ileo-cæcal valve, and its length is about 6 in.

Remarks.—It seems to me that the case is one of extreme rarity, and that the following are the chief points of interest: the very short duration of the symptoms which called for operation, considering the age of the patient and the time she had suffered from rupture; the unsuspected condition found on the post-mortem examination, of which there was not the slightest evidence during the kelotomy; the persistence of symptoms after operation, or rather their recurrence, suggesting a second operation, which was about to be performed. From the condition of the parts, it is quite evident that the coils of intestine must, at each reduction on the patient's or medical attendant's part, have been invariably returned into one or other of the cavities above described. The secondary operation I should have performed would have been a laparotomy. The question is, How far, from what one knew of the case, there is evidence to have justified it being the primary one.

Wimpole-street, W.

ON CALCULOUS DISEASE.

BY CHARLES B. PLOWRIGHT, M.R.C.S., F.L.S.,
SENIOR SURGEON TO THE WEST NORFOLK AND LYNN HOSPITAL.

Distribution of Calculus in England, Scotland, and Ireland; Distribution of Allied Diseases—Gout, Rheumatism, and Diabetes; Annual Death-rate: Influence of Rainfall, of Season, of Cyder-drinking, &c.

THE proverbial frequency of calculus in Norfolk has called forth many explanations, none of which can be regarded as satisfactory. It has been attributed to the prevalence of east winds; to the consumption of the Norfolk dumpling, of beer, and of water impregnated with chalk; to the deficiency of milk, and to other causes. The town of King's Lynn is situated on the Great Ouse, and this river sharply limits the distribution of our stone cases. Of the last fifty cases treated at the Lynn Hospital, forty-eight came from the east side of the river and two only from the west. As this circumstance sweeps away the east wind, the dumpling, the beer, and the deficiency of milk theories, only the chalk theory is left. Professor Latham has written a good deal recently upon the formation of uric acid in the body, but neither he nor anyone else has yet explained how chalk in the human laboratory can be converted into uric acid. It happens, unfortunately for the chalk theorists, that those parts of the county of Norfolk in which calculus is most common are not the chalk districts; and, conversely, that the chalk districts, although not absolutely stone-free, produce a much smaller proportion of cases than do the gravelly and sandy districts. Next to Norfolk, as a stone-producing county in the United Kingdom, comes Aberdeenshire, a district from which chalk is absent. In Aberdeenshire the prevalent theory is the consumption of brose. But brose is unknown in Norfolk, and, moreover, is an article of diet not confined to Aberdeenshire; whilst in larger areas in Scotland where brose is consumed the disease is unknown—as, for example, Inverness-shire. With the above facts before us, it is clear that some other explanation exists which has not yet been offered. In the hope of finding the clue to the problem the present investigations were undertaken.

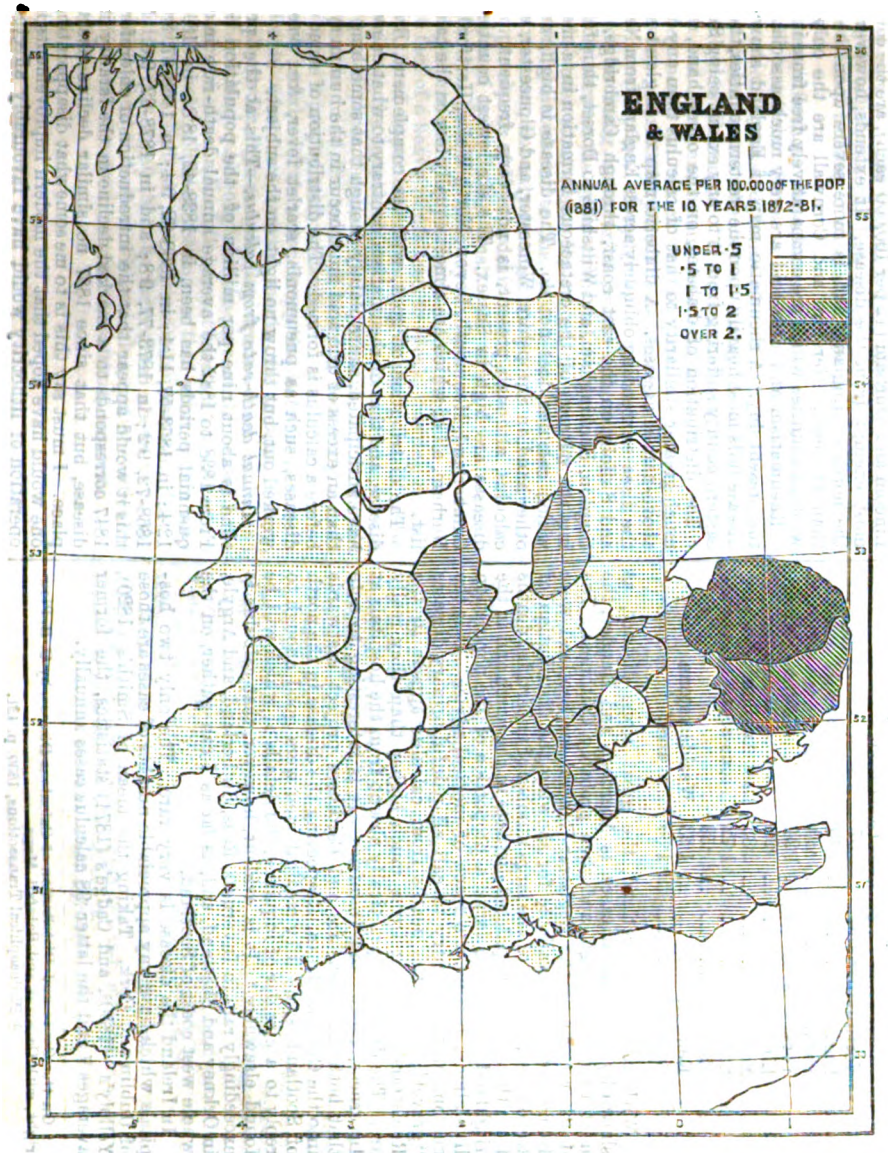
Before advancing any further theories which might or might not stand the test of the geographical distribution of the disease, the present communication will deal firstly with the distribution of the disease in Great Britain. For this purpose we may take the statistics of stone cases of the various county hospitals which have been collected by Dr. Dobson[1] in 1779, Mr. R. Smith[2] in 1821, and Mr. Cadge[3] in 1874. By comparing these we shall find that while no part of England is absolutely free from stone, yet it is much more common in some parts than in others. In the order of frequency are the counties of Norfolk, Suffolk, Huntingdon, Cambridge, Yorkshire, Worcester, Leicester, Nottingham, and Warwick. On the other hand, in the order of rarity are the counties of Hereford, Chester, Devon, Dorset, Derby, Lancashire, Wiltshire, and Cumberland. Unfortunately these statistics are more or less incomplete, no returns being shown from many hospitals. Neither are we able from them to form any trustworthy opinion as to the frequency of the disease to the population. For this purpose we must have recourse to the Registrar-General's reports. Now the great point is, are these reliable?—not from negligence in their compilation; but are the deaths from calculus registered as such really from this and not from allied diseases, such as stricture or enlarged prostate? A good deal of trouble was

[1] On Fixed Air. Chester, 1779.
[2] Medico-Chirurgical Transactions, vol. xi., p. 7 *et. seq.*
[3] Address in Surgery, THE LANCET, Aug. 15th, 1874, p. 234.

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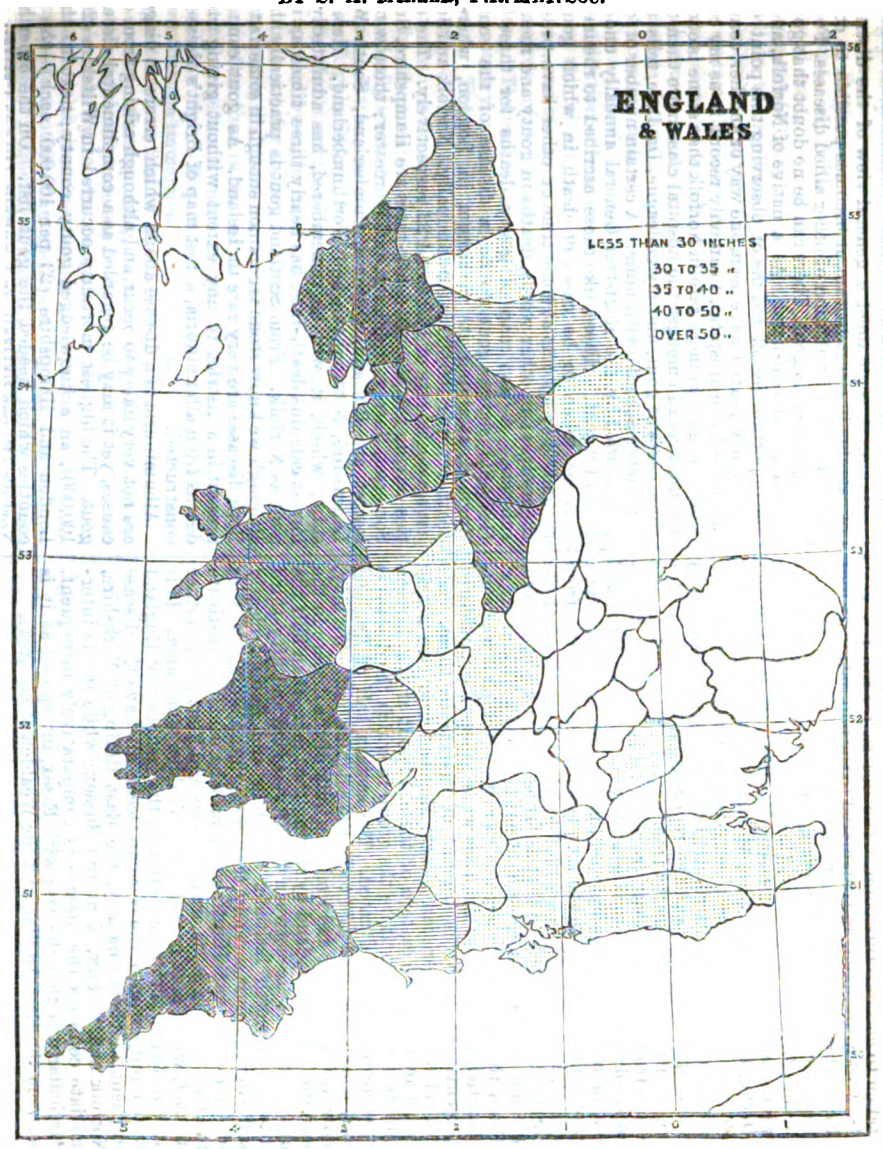
DEATHS FROM CALCULUS IN ENGLAND AND WALES.

By CHARLES B. PLOWRIGHT, M.R.C.S.



ANNUAL AVERAGE RAINFALL IN THE REGISTRATION COUNTIES OF ENGLAND AND WALES FOR THE TEN YEARS 1872-81.

By S. H. MILLER, F.R.MET.SOC.



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taken to clear up this point. The deaths for the ten years 1872-78 were taken, and calculated to the population of 1881. From this it appears that the counties in the order of frequency are Norfolk, Suffolk, Sussex, Huntingdon, Cambridge, London, Kent, York, (East Riding), Oxon, and Warwick; and in the order of rarity, Hereford, Chester, Rutland, Derby, Durham, Lancashire, Monmouth, Dorset, Devon, and Cumberland. There is a very fair accordance, therefore, between the county distribution of the disease as shown by the hospital statistics and the registration returns. In the registration returns, deaths from gravel are included with those from stone. A death from gravel is, however, an element of suspicion, because gravel is such a loose term, and one more likely to be employed by a non-professional than a professional person. In the six years 1875-80 the deaths from gravel, however, only amounted to 38, or ·02 per cent. of the total calculus deaths, so that as far as England is concerned, but not with Scotland, we need not fear this source of error. From the above data a calculus map of England was constructed, in which the counties were grouped and coloured proportionately to the amount of disease in them. The second western meridian bisects England into two nearly equal areas; in the eastern of these, 12½ out of the thirteen counties which constitute the group in which the disease is most prevalent are situated. The eastern half of England may consequently be said to be the calculus half. We may, however, go further and limit the bulk of the disease in the eastern half of England by stating that more than half the above counties lie between the fifty-second and fifty-third degrees of north latitude. Norfolk and Suffolk clearly suffering the most severely, they, with the adjoining counties of Cambridge and Huntingdon, may be said to constitute the East Anglian stone area. Sussex and Kent form another district, which may be called the Wealden stone area. It is noteworthy that those counties on the east coast of England which project into the German Ocean all have the disease frequent in them—namely, the East Riding of Yorkshire, Norfolk and Suffolk, Kent and Sussex; while in the intermediate counties the disease is comparatively infrequent. Particularly is this the case with Essex, interposed as it is between the East Anglian and the Wealden stone areas.

	Annual deaths from calculus per 100,000 population.	
Northumberland ...	·57	
Durham	·49	
York, North Riding .	·80	
York, East Riding ...	1·24	
Lincolnshire	·99	
Norfolk	2·83	East Anglian
Suffolk	1·72	stone area.
Essex...	·59	
Kent	1·23	Wealden stone
Sussex	1·35	area.

With regard to Scotland, the great stone district, as shown by the hospital cases, is Aberdeen and Dundee, the next to it Edinburgh, and then probably Caithness. The death returns of the Registrar-General for Scotland were found not to be available for showing the distribution of the disease, because of the large number of uncertified deaths from the sparsely populated districts in the north and in the Highlands, where so large a proportion of the population live almost beyond the reach of medical advice. It is the custom of the country to call all painful urinary diseases "gravel"; hence the deaths from calculus appear in the Registrar-General's returns much higher than they really are. The disease is practically absent from the hospitals at Inverness, Perth, and Dumfries. It is interesting to note that both Aberdeenshire and Caithness project eastwards into the German Ocean. Respecting the disease in the north of Scotland, some fifty medical men were good enough to reply to a circular of inquiries, the details of which will be found elsewhere.[4] It is evident, however, that calculus is exceedingly rare in Inverness, Ross, Sutherland, and Argyle, in Orkney and Shetland, and, as far as I can gather, on the whole west coast of Scotland.

In Ireland the disease is very rare. The only two hospitals which have any appreciable number of cases are those of Dublin and Cork. Taking the mean of Smith's (1820), Yelloly's[5] (1830), and Cadge's (1874) statistics, the former averages 7 and the latter ·98 calculus cases annually.

[4] On the Cause and Distribution of Calculous Disease, by C. B. Plowright, with Calculus and Rainfall Maps.

[5] Philosophical Transactions, 1830, p. 421.

Having thus obtained a general view of the distribution of calculus in Great Britain, it becomes possible to compare this with the distribution of other allied diseases. Foremost amongst these is gout. There can be no doubt that gout and gravel go hand-in-hand. As a native of Norfolk, and from the opportunities offered me of observing this point during the twenty years I have been, one way or another, connected with the Lynn Hospital, I can only record it as my conclusion that gout is more rare in Norfolk than stone is common. I cannot recall amongst the hospital class more than two or three cases of gout, and my colleague, Dr. Dale, tells me his experience accords with mine. A certain number of deaths are recorded by the Registrar-General annually under the head of "gout." These, like those ascribed to rheumatism, may be taken to be cases of death in which gouty or rheumatic symptoms at some time or other have presented themselves; in other words, deaths in gouty and rheumatic subjects. A test map of gouty deaths for three years (1879-81) shows gout to be a disease of the south of England, attaining its maximum in London, where the death-rate per 100,000 is 5·04 annually. Norfolk and Suffolk have a death-rate of 1·39 and 1·22 respectively. The counties having the highest death-rates are Hampshire, Sussex, Somerset, Surrey, Middlesex, and Worcester; those with the lowest are Rutland, Durham, Cumberland, South Wales, Lancashire, Nottingham, and Northumberland. Herefordshire, which, it will be remembered, has admittedly the lowest calculus death-rate, has nearly three times as much gout as Norfolk. From Scotland gout is practically absent, although we know stone is common enough in some districts. Both diseases are very rare in Ireland. As gout cannot be present in a district to any extent without giving rise to deaths from albuminuria, a test map of Bright's disease was constructed.

Albuminuria is a disease about which errors in diagnosis are not very likely to occur, and although arising from other causes, yet it may be regarded as a complimental disease to gout. The highest mortality occurred in Wiltshire (26 per 100,000), an acknowledged gouty county; next to this is London and Hampshire (23 per 100,000 each)—the two counties which headed the gout list. On the other hand, Norfolk (13 per 100,000) and Suffolk (10 per 100,000), with Lincoln and Durham (12 per 100,000 each), are the counties most exempt from the disease. It extends, however, into the north of England, and is more severe upon the west than the east. Hereford and Cornwall are the only two western counties which are comparatively free from it.

Rheumatism and uric acid are very much associated in the present day. A rheumatic map of England shows the disease falls most heavily upon the western counties, the only eastern county suffering from it to any extent being Sussex.

The distribution of diabetes, on the other hand, has a much greater similarity to that of calculus than any of the above-named diseases. A diabetic map of England shows the disease extending obliquely across England from Norfolk and Suffolk on the east coast, through Cambridge, Huntingdon, Buckingham, and Wiltshire to Dorset, thus following the outcrop of the cretaceous formation in a manner which calculus does not do. The disease is high, on the other hand, in Shropshire, Worcester, and Gloucester, where calculus, although present, is not very frequent. Both diseases are high in Sussex. The six lowest counties are Cumberland, Monmouth, Devon, North Wales, Hertford, and Durham, all of which are almost equally low on the calculus list.

The distribution of gout, with its complement, Bright's disease, and that of rheumatism, contrary to what one would have anticipated, show plainly enough that something more than an excess of uric acid must occur in the human system before a calculus is formed. The distribution of some other diseases, such as pneumonia, scarlet fever, &c., was also worked out, but throw no light on the subject.

Annual death-rate from calculus.—This at the present time is about nine per million of the population living. From 1838 to 1882 the average annual death-rate in quinquennial periods has been, in 1838-42, 18·8; in 1848-52, 12·4; in 1853-57, 11·4; in 1858-62, 9·4; in 1863-67, 8·8; in 1868-72, 9·2; in 1873-77, 9·8; and in 1878-82, 9·6. From this it would appear that the introduction of chloroform in 1847 corresponds to a marked decline in the fatality of the disease, but that since 1857 no similar decline has taken place. I must say this is to me somewhat disappointing, for one would have hoped that the modern improvements in the operation of lithotrity would have favourably affected the

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death-rate. It is interesting to note that the cholera epidemics of 1849, 1856, and 1866 have each been followed in the succeeding year by a slight rise in the mortality from calculus.

The influence of rainfall upon the distribution of calculous disease in England is very marked, and has been carefully worked out. My friend, Mr. S. H. Miller, F.R. Met. Soc., has been good enough to construct for the purpose of the present inquiry a rainfall map of England, showing the mean annual rainfall in the separate registration counties for the ten years 1872-81. Placing the map beside the calculus map, it is very remarkable to observe how the disease is confined to those districts in which the rainfall is least. In no English county having an annual rainfall above 35 in. does the disease attain a mortality of 1 per 100,000. Of the fifteen counties having a larger mortality than this, ten of them have a rainfall of less than 30 in. Just as we saw was the distribution of calculus, so we find the counties having the least rainfall all lie to the east of the second western meridian, and the majority of them between the 52nd and 53rd degrees of north latitude. The same holds good with Scotland. The bulk of the disease falls upon the eastern side of the country, where the rainfall is considerably less than on the west. The annual rainfall of Aberdeen city (1872-81) was only 32·8 in., and of Caithness 27·9 in.; while those counties which we know, either from the hospital returns or from the direct testimony of the medical men themselves, to be practically stone-free, have the following heavy rainfall: Inverness 52·0 in., Sutherland 43·9 in., Ross and Cromarty 41·0 in., Argyle 58·4 in., Perth 51·9 in., and Dumfries 53·5 in. Ireland affords another instance of a heavy rainfall being accompanied by a low death-rate from calculus. The reason for this is not far to seek. In the first place, a dry atmosphere means that more fluid is lost to the body by cutaneous transpiration than is the case in a humid atmosphere: hence the renal secretion is more concentrated in the former than in the latter case. But this is not all. It has long been shown that the immersion of the body in water of a lower temperature than that of the body itself lessens the acidity of the urine. Consequently, the more frequently the inhabitants of any district are exposed to rain-baths, the less will be their liability to the deposition of uric acid or calcic oxalate from their urine, neither of which substances are deposited from other than acid urine. Mr. Cadge has pointed out the greater frequency of calculus amongst the children of the poor than amongst those of the wealthy. This cannot be wondered at when we reflect upon the much greater frequency to which the children of the rich are subjected to the process of bathing as compared with those of the poorer classes.

Season influences the admission of stone cases into the Norfolk hospitals. From an analysis of 500 admissions to the Norwich, Lynn, and Yarmouth hospitals, it appears that fewest cases present themselves during the cold months—November to February. Their numbers increase during March and April, and attain their maximum in May (with us the month in which the atmosphere contains least moisture). Next to May most cases were treated in October.

The consumption of cyder as a beverage is popularly credited as being a powerful prophylactic against stone, probably because the cyder county of England, Hereford, is also the most stone-free. My friend, the late Dr. Bull, of Hereford, pointed out to me, just before his death, that stone was rare, not only amongst the poor, but also amongst the upper classes of Herefordshire, amongst whom the consumption of cyder is but small. There are, however, good reasons for believing that cyder and perry are better beverages than malt liquors for calculous patients.

The fact of a heavy rainfall, so to speak, washing out the disease, is of importance from a practical point of view. Not only are the counties in which it occurs suitable for the residence of those threatened with calculus, but we should also bear in mind the value of bathing, especially of cold bathing, as a prophylactic measure.

It only remains for me to tender my thanks to the numerous gentlemen who have assisted me in the present inquiry, especially to Dr. Ogle and the Registrars-General of Ireland and of Scotland. Although for the present the cause of the frequency of stone in Norfolk has not been solved, yet certain facts have been collected bearing on this point, which may probably form the basis of a future communication. In the meantime, it is hoped that the facts given above as to the connexion of other diseases with calculus, and the influence of rainfall and of season, may not be without interest.

King's Lynn.

CASES OF POISONING BY SQUILLS.

BY E. BECKIT TRUMAN, M.D., F.C.S.,
PUBLIC ANALYST FOR THE BOROUGH OF NOTTINGHAM.

(*Concluded from p. 392.*)

Chemical tests.—On the hypothesis that in the original mixture tincture of digitalis might have been substituted for ipecacuanha wine, or that in the case of both mixtures of A.'s dispensing tincture of digitalis might have got into the ipecacuanha wine bottle, and hence been dispensed in both cases, I took 10 grains of tincture of digitalis, and also 106 grains of A.'s second edition of the mixture (there being prescribed 90 minims of ipecacuanha wine in 960 minims of the mixture). These two quantities I separately extracted in the way described above. The extract from the mixture was of a light straw colour, that from the tincture of digitalis was of a light brown—showing that this substitution could not have taken place. The reaction known as Grandeau's test for digitaline was also tried, but the results need not be given. So distinguished a toxicologist as Dr. Stevenson[1] says, "I have found this reaction to succeed tolerably well with the French and German varieties, but I am doubtful whether it is characteristic of digitaline." And in a note to me, dated 9th of March, 1886, he says: "I have no faith in the chemical tests for digitaline. Squills in its action is like digitalis, I know, and others say its chemical reactions are similar." These chemical reactions are therefore to be taken for what they are worth, and as, at present at any rate, inconclusive.

Cardiac tonics, or cardiac poisons.—"With a larger dose, the stage of stimulation is followed by one of peristaltic action, and final arrest in systole."[2] These poisons include the following:[3] Corroval, which arrests the heart's action in the frog in five and a half minutes; Antiaria toxicaria (upas tree of Java), in from five to ten minutes; Veratrum viride, seven to eleven minutes; Tanghinia venenifera (Madagascar ordeal poison), five to fifteen minutes; Manganja (the Strophanus hispidus), eight to fifteen minutes; Digitalis purpurea, ten to twenty minutes; Urginea scilla, or scilla maritima, fourteen to twenty minutes; (corresponding to Experiments 4 and 8 in my list); Dajakah, thirteen to twenty minutes; Vao, fifteen to twenty minutes; Erythrophlæum guineense (a large African tree), Nerium oleander (the South Sea rose), Thevetia nereifolia, Convallaria majalis,[4] Apocynum cannabinum (Canadian hemp), and Adonis vernalis.

The special poison in the present cases.—So far as my reading goes, with the single exception of veratrum viride, there is at present no means of distinguishing between the members of this group of cardiac poisons, either by chemical or physiological tests. We require to have the active principles of these drugs separated, and to have them carefully examined by chemical and physiological methods, with a view to finding out reactions that are characteristic, before we shall be able to affirm with certainty the presence or absence of any one member of this group in a solution, or in the dead body (as we do not know that the action of veratrum viride is peculiar to it alone). If, however, the series of phenomena above described as occurring in the frog's heart, after hypodermic injection, be observed, we may certainly say that one of the drugs mentioned has been taken. Of the fifteen drugs mentioned, we may, in considering the cause of death in the present cases, exclude eleven as being most unlikely to be found in a chemist's shop, and by this means we may narrow the inquiry to the four remaining—viz., veratrum viride, digitalis purpurea, urginea scilla, and convallaria majalis. Veratrum is excluded at once, as it causes cessation of respiration before it arrests the heart's action. Digitalis may be excluded for the following reasons. The two officinal preparations are the infusion and the tincture; the experiment described first under the heading "Chemical Tests" shows that the residue from 10 minims of tincture of

[1] Guy's Hospital Reports, 1866, Fagge and Stevenson on Physiological Tests for certain Organic Poisons, and especially Digitaline, p. 44.
[2] Brunton: Pharmacology, Therapeutics, and Materia Medica, 1885, p. 276.
[3] Fagge and Stevenson, op. cit. Brunton, op. cit. Blyth, "Poisons," 1884.
[4] Dr. Sansom, THE LANCET, April 3rd, 1886, says that convallaria lowered the pulse from 112 to 80, 76, and 72.
[5] British Medical Journal, April 10th, 1886, p. 709.

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digitalis was of a bright and decided brown, whilst that from 106 grains of Mr. A.'s mixture was only of a light straw colour; and Exps. 4, 8, and 17 in the table of physiological tests show that whilst a nearly equivalent quantity, or 110 grains, produced cessation in systole in twenty and seventeen minutes, 10 minims of tincture of digitalis in the same time only slowed the heart's action from 39 to 18—i.e., the 110 grains of mixture were more powerful than 10 minims of tincture of digitalis, and yet that they did not contain 10 minims is shown by this colour test. The infusion may be excluded also, for a quantity equal in potency to 10 minims of tincture of digitalis, and therefore not so potent as the 110 grains of the mixture, would amount to at least two drachms—that is, the mixture would consist entirely of infusion of digitalis; and this is shown by the specific gravity of 1209, and also by the separation from it by chemical means of fixed oil and cane sugar, not to have been the case. The fourth drug mentioned, convallaria, is not officinal, and is not much used; still, it is possible, as suggested in an article on these cases in the *British Medical Journal* of March 27th, 1886, that "some of the bulbs of the lily of the valley might have become accidentally mixed with the bulbs of the squill, from which the vinegar had been prepared. The difference in size between the bulbs of convallaria and of squill is very great, but after they were sliced and dried, it is just possible that they might be confounded." Considering, however, that cases of poisoning by squills, although rare, are recorded, we may, I think, conclude that in these instances the syrup of squills was the toxic agent; being of exceptional strength, due to the variation in strength of the bulb, to which I shall refer shortly. It was thought that possibly the stock from which this exceptionally potent syrup of squills was obtained might be existing in the manufacturer's store. Dr. Goldie, the medical officer of health for Leeds, was written to, and requested to institute inquiries of the wholesale dealer who supplied Mr. A. He, however, found no evidence of want of care in preparing the syrup or vinegar; and we have not been able to ascertain the facts relative to the gathering of the samples of squills, either as to date or place of collection; nor to procure a sample from the stock supplied to Mr. A.

Remarks.—The symptoms of poisoning by digitalis, which were not present in the cases which are the subject of this paper, are insensibility and dilatation of the pupils. The recorded cases of death from squill poisoning are so few that before we can give a comprehensive and accurate list of the symptoms we must have a much extended list of cases. I can only find records of two fatal cases in man, and in one of them neither the symptoms nor the post-mortem appearances are given. In the other case, which Christison quotes from Lange, the stomach was found to be "everywhere inflamed." This is somewhat different from the post-mortem appearances in the case of the girl Ethel, where a few inflammatory patches were found; and very different from the appearances in Orfila's two dogs, if we admit them in comparison, where the digestive canal was "normal." The difference may have been due to a possibly fresher condition of the squill bulb that was the cause of death in Lange's case. By drying, the acridity is got rid of (Pereira). Hagar mentions a volatile oil which would be dissipated in drying, and Landerer found in the fresh bulb a bitter extractive, which he did not find in the dried one. The heart, in the case of the dog recorded by Fagge and Stevenson, was found full of blood; the heart had stopped in diastole. Concerning this I would quote Brunton, who says, in reference to the whole group of cardiac poisons, "This stoppage of the heart in systole occurs in frogs, but in higher animals the heart may stop in diastole." Hager mentions four active principles as present in the squill; of these, two arrest the heart's action in systole, and one in diastole. It may be that the two former are more readily absorbed by the frog's tissues than the third, and that the contrary is the case with the dog. The experiments which I have made and recorded here simply show (and are not intended to show more) that with the chemical extracts made from the mixture delivered to me I obtained the same results with the frog's heart as with a known poison belonging to the digitalis group, and pharmacologists and toxicologists agree in saying that the members of this group all produce the same effect on the frog's heart. Death of the heart ensued in Experiments 4 and 8 in seventeen and twenty minutes; whilst the time recorded by Fagge and Stevenson in poisoning by squills is fourteen to twenty minutes. That the symptoms in these children and the post-mortem appearances in the case o the one that died are consonant with what little we know of squill-poisoning I shall endeavour to show. These children had been taking half a teaspoonful of syrup of known squills twice a day for ten weeks. Squills is cumulative in its action; therefore small doses might occasion death after some weeks' administration. But we cannot suppose that this cumulative effect should occur at so nearly the same time in children of the age of three and a half and five, when both were taking the same dose. Add to this fact that a single dose of the mixture last made up caused intermission of the pulse in a child of eight (Lilian). Squill varies in strength; the outer scales are stronger than the inner (the outer scales contain more scillain); the fresh bulb is stronger than the dried (volatile oil and Landerer's extractive is lost in drying); the bulb gathered in summer is stronger than that gathered in autumn (in summer the squill contains less sugar, and the increase of sugar in the autumn is probably due to the sugar which is one of the two bodies into which glucosides split up): the red variety is stronger than the white. That the squill varies in strength is shown by Experiments 13, 14 and 15, in which the same quantity of syrup of squills from three different sources produced the following effects: In Experiment 13, in forty minutes it slowed the pulse from 38 to 36; in Experiment 14, in forty-seven minutes from 36 to 10; and in Experiment 15, in thirty-eight minutes from 36 to cessation. From some variation in the strength of the squill used — probably from imperfect drying — a syrup was presumably made, containing in poisonous proportion the active principles which are normally present, but in smaller quantities; and this exceptionally strong syrup was used in dispensing the last mixture which the children took. This view of the matter is confirmed by the fact that Mr. A.'s syrup, taken from the same bottle which he had used in making up this last mixture, had an intense and persistent bitter taste, like that mentioned as possessed by scillitoxin, the glucoside which arrests the heart's action in systole.

The following symptoms observed in these children are mentioned by authorities quoted:—Paralysis of the legs—Orfila (dog), Pereira (rabbit), Fagge and Stevenson (dog). Nausea and vomiting—Orfila (dog), Christison (man), Pereira (man), Fagge and Stevenson (dog). Drowsiness—Orfila (dog), Christison (man). Sudden accession of death—Orfila (dog), Fagge and Stevenson (dog). Hurried respiration—Orfila (dog), Pereira (lower animals). Intermittent pulse—not mentioned.

Post-mortem appearances.—Lungs normal—Orfila (dog). Intestines normal—Orfila (dog). Fluid blood—Orfila gives one case as containing only fluid blood, another had blood clots.

Conclusions.—1. That squill is not a safe drug to use for routine, and especially popular or lay, practice. 2. That being so variable and, when strong, so potent a drug, it should be looked upon by the profession as unsuitable for use until a solution of standard strength can be produced. 3. That in the meanwhile its use should be discontinued.

Nottingham.

REMARKS ON THE GENERAL TREATMENT AND DRESSING OF WOUNDS.

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DURING the last few years the treatment and dressing of wounds have undergone a marked change for the better. The introduction of the antiseptic system has led to improvements in both these ways which not long ago were undreamt of. Prior to this great epoch in surgery, wounds of any magnitude were daily to be seen discharging large quantities of pus, and at brief intervals epidemics of pyæmia decimated the wards of hospitals in a manner truly alarming. Under an antiseptic *régime*, however, these complications have been banished as if by the enchanter's wand, and at the present time suppuration is a factor with which we seldom require to deal, while pyæmia and hospital gangrene are scourges almost unknown. To all who were familiar with the difficulties surrounding the early elucidation of the subject, it need scarcely be remarked that the realisation of such a degree of excellence has not been achieved at a single bound. On the contrary, the standpoint now held by anti-

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septic surgery has only been attained after years of toil and as a result of much wearisome labour, for scientific research of permanent value is invariably a plant of tardy growth, and even under propitious circumstances can only reach maturity by degrees. Like all other departures from an old routine, the antiseptic system had many prejudices to overcome, and in its initial stages may be said to have been evolved slowly out of a perfect chaos of disorder. Those who were Sir Joseph Lister's pupils during the time he held office in the Glasgow Royal Infirmary will recollect that his first attempts to prevent putrefaction in wounds were exceedingly rude, but gradually under the light of increasing experience the methods pursued by this eminent surgeon became more perfect, though the principle as at first laid down by Lemaire remains unshaken to the present hour: "The wound which suppurates, as I hope to demonstrate presently, is a secreting surface, the products of which become altered under the influence of air, and give birth to a series of phenomena due to one and the same cause—fermentation."

If decomposition arises in a wound, the processes of repair become disturbed, nutrition is interfered with, and a condition of septicæmia of more or less pronounced type is necessarily established. Fortunately for patient as well as for surgeon, complications identical with those just described can be obviated by a rigorous adherence to antiseptic laws. In addition to the destruction and subsequent exclusion of the various forms of organism constantly present in the atmosphere, and which find in the living tissues a congenial habitat, there are a number of other points attention to which is essential for the successful progress of wounds generally. Prominent among these are arrest of bleeding and drainage. Blood when effused into a wound cavity should be permitted a ready exit, because when retained it clots in a comparatively short time, and with the transformation from the fluid to the solid condition all chance of future escape short of opening up the flaps is frustrated. If small the clot may be absorbed and thus prove of no consequence, but if present in excess a mass of this kind assumes the characters of a foreign body, and unless removed will speedily give rise to irritation. Hence the danger arising from the confinement of much effused blood, and consequently there stands out all the more prominently the need for the prevention of such a complication by the thorough arrest of hæmorrhage in wounds prior to the suturing of their edges. A little time spent in securing the different bloodvessels will amply repay the original outlay.

In carrying out excisions, it is a good plan to pack the fresh wound firmly with green protective and rolls of gauze dusted with iodoform[1]. The layer of protective should be inserted first[2]. By placing it next the tissues no débris of gauze is permitted access to the wound, and owing to its smooth, non-adherent surface, there is at the same time the additional advantage that when we remove the stuffing—which is best done forty-eight hours after the operation—the whole of it comes away easily in a body. By the end of this time all hæmorrhage has usually ceased, the steady compression exercised on the divided bloodvessels during the interval being in the great majority of instances sufficient to occlude their mouths, and the edges can then be approximated without trouble.

A dependent system of drainage is what we ought to aim at. Blood, so long as it remains fluid, obeys the ordinary law of gravity by seeking its lowest level; consequently, the lower the aperture for its passage outwards, the greater the area operated upon and the more complete the evacuation. Drainage may be carried out either with the aid of the indiarubber tubes of Chassaignac or by means of the decalcified chicken-bone tubes of Macewen. For recent wounds the latter are to be preferred to those of indiarubber, and if threaded with hair the principle of capillarity is called into play and a syphon action induced.[3] Hair has, however, the disadvantage of not draining pus, and where suppuration exists indiarubber tubes should be used.

The suturing of wounds demands care and attention. Dragging of the stitches is a complication which must be carefully guarded against, and if tension on the margins of the flaps supervenes, inflammation of the surrounding parts will certainly follow unless the strain be promptly relieved. In order to avoid this and secure immediate union of the edges, we frequently make use of button-sutures, and in excisions generally they are valuable auxiliaries in the conduct of the case.

The proper dressing of a wound is indispensable for its satisfactory progress. Unless in those instances where the discharge has become septic, dressings should be removed as seldom as possible, absolute rest being a *sine quâ non* for the progress of healthy repair. In the carrying out of this important item our great aim should be the selection of a dressing in which are united a capacity for ready absorption and a subsequent power of maintaining the parts in a state of asepticity. Fortunately we have at our disposal materials answering these requirements more or less completely. Of the various dressings which are placed in contact with the skin, there are none, *cæteris paribus*, superior to gauze. Being porous, it permits of the ready penetration of blood or serum through its meshes, and when properly prepared and in fresh condition its antiseptic powers are undoubted. Eucalyptus gauze is preferable to the carbolised variety, though at present it possesses the drawback of being the more expensive of the two. Owing to the volatile nature of antiseptic principles, both kinds of gauze should be placed in air-tight boxes as soon as saturation is effected. By this means evaporation of their essential constituents is prevented. For a number of years after the introduction of the antiseptic system layers of gauze surrounded by an outer layer of jaconet composed the dressing placed over a wound; but in following what was then the ordinary custom, experience soon showed, if there was much oozing, as there frequently is after major operations, that stains quickly made their appearance at the lower end of the dressing, thus necessitating its frequent removal, and thereby forcing us to adopt a most objectionable practice. In order to obviate this alternative, recourse can be had to layers of carbolised tow, which when thoroughly teased form an excellent supplementary dressing. The compression exercised by rolls of this material is regular and steady, and owing to the elastic nature of these when enveloping a limb the circulation is unlikely to be interfered with, even though the bandages are put on somewhat tightly. Any discharge which happens to pass outside the gauze is taken up by the tow, and in consequence of the impregnation of its fibres with carbolic acid a state of asepticity is maintained for a much longer time than could be done without it, and repeated changes of dressing are thus rendered unnecessary. Of late, however, tow, and to a considerable extent gauze, have come to be superseded by wood-wool as well as by wood-wool wadding, two forms of external dressing not without special merits. Both possess considerable absorbent power,[4] and when made into pads of the requisite size and thickness do admirably to envelop the first two or three layers of gauze. In the preparation of the wood-wool pads care should be taken to see that the wool is properly distributed throughout, so that the pressure which is afterwards brought to bear on the underlying structures may be equable.[5] It will be found, for example, that wood-wool is superior to tow in checking any tendency to oozing immediately after an amputation by the regular compression which it exercises over and for some distance around the stump, while the immobility which its presence confers is a factor in furthering the after-progress of repair, which should not be lost sight of. When a dressing is intended to remain on for some time, it is advisable to adopt the precaution of dusting the gauze and wood-wool we purpose employing with iodoform. The powder in question is a reliable germicide, and corroboration of this property has been frequently witnessed in several of the wards of the Glasgow Royal Infirmary, where a species of fungus used regularly to develop itself in the gauze which was at one time supplied, but it was always noticed that the organisms never appeared or encroached upon the area sprinkled with iodoform—a test which clearly proved the value of the compound in checking the spread of such s...

[1] In excisions of the elbow-joint this is best done prior to the removal of the elastic bandage.

[2] The protective plaster will answer the purpose best if perforated. When this precaution is taken, any effused blood speedily finds its way through the perforations into the gauze, and is thus removed *in toto* along with the stuffing.

[3] The hair is best removed at the end of forty-eight hours, as all serous or sanguineous discharge has usually ceased by that time; but when the dressing is intended to remain on for some weeks, this adjunct should be dispensed with.

[4] Wood-wool and wood-wool wadding take up blood or serum readily, but neither absorbs pus well, and where suppuration is going on the dressings require to be frequently changed.

[5] After the wood-wool is placed within the bag of gauze which holds it together, threads may be passed through the pads at regular intervals and secured on either side by means of buttons. If this arrangement is followed, shifting and consequently lumping of the wool are prevented

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form of life. The elastic bandage is a valuable agent in the treatment of wounds of any size. When properly applied, it maintains the dressing firmly in its place, and by so doing ensures the keeping up of steady compression—points which contribute in no slight degree to promote the general weal.

The ideal wound may be defined as one which heals with a single dressing. In Dr. Macewen's wards during the past year not a few amputations of limbs, as well as excisions of mammæ, have only received a primary dressing, and when looked at for the first time at the end of three weeks were found to be healed.[6] In all these, decalcified drainage-tubes without hair were used, and on the removal of the first dressing the whole extent of the tubes were found to have been consumed by the tissues, with the exception of the small portions or ends protruding from the lips of the wounds, and which on inspection were seen to be lying loose on the layer of gauze placed next the skin. It is obvious, therefore, that in aseptic cases, where we can maintain the dressing without change for several weeks, decalcified drainage-tubes are superior to those of indiarubber, from the fact that they leave no sinus behind, and after their first insertion require no further notice to be taken of them.

It is almost unnecessary to add that perfection in surgery, as in other pursuits, cannot be attained without the expenditure of much time and labour. In all the cases referred to the greatest pains were taken to secure the whole of the divided bloodvessels.[7] The stitches were carefully and regularly inserted, so that there was no dragging on the edges of the flaps. A thorough system of drainage was established, and by means of suitable dressings the parts were maintained in a state of asepticity and at absolute rest. Finally, the temperatures (taken twice daily in the rectum) were examined at every visit, with the view of detecting and rectifying the slightest departure from the normal order of things.

Glasgow.

ON CLERGYMAN'S SORE-THROAT.

BY THOMAS WHIPHAM, M.B., F.R.C.P.,

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PATHOLOGICALLY, the condition known as clergyman's sore-throat is but little understood; etiologically, perhaps, there is quite as much obscurity surrounding it. All writers on the subject are agreed that it affects persons who are in the habit of over-exerting their voice, and in Dr. Mackenzie's experience there is "in almost every instance evidence of constitutional delicacy, and most of the patients present an anæmic appearance."[1] Those who are especially liable to the affection are the clergy, singers, hawkers—persons, in short, who make undue use of their voice under more or less adverse surroundings. There is nothing surprising in the fact that the hawker or the costermonger is particularly prone to the disease, seeing that he is, in the pursuit of his calling, exposed to all the vicissitudes of the weather in England. Schoolboys shouting even in genial weather for any length of time become hoarse from laryngeal congestion; the costermonger, less well cared for, shouting for a much longer time, day after day maintains this congestion of his larynx, pharynx, and fauces as a chronic condition, which when once established is constantly aggravated by ever-recurring atmospheric changes. It seems, however, scarcely fair to compare the case of the clergyman, who suffers so much from this complaint, with that of persons who are compelled to vociferate in the open air. Moreover, the clergyman, unless he be of the Boanerges type, does not make such violent use of his vocal apparatus as does the hawker or the costermonger. Yet the clergyman, in spite of the fact that the exercise of his voice is limited by the walls of his church, in spite of his more comfortable surroundings, is especially liable to this inflammation of his pharynx, larynx, and fauces. A better comparison would be instituted between the clergy and the Bar—another profession in which great and prolonged vocal efforts are frequently required, and whose members are not, as a rule, sufferers as the clergy are. It may be interesting to compare the circumstances under which the members of each of these professions exercise their respective vocations.

The first point which naturally suggests itself is the prevailing atmospheric conditions in the two cases, and if it be conceded that a cold, damp, badly ventilated church might be an efficient cause of the malady in the one case, it cannot be contended that the stuffy and impure air of a court of justice would be likely to confer immunity in the other. Probably the reverse would obtain, for it is by no means uncommon for a person spending the evening in an unventilated theatre to become quite hoarse towards the conclusion of the play. Such causes, then, may be dismissed as being the prime cause of the disease in question. Doubtless they predispose to and aggravate the inflammation, but its origin and maintenance can scarcely be attributed to them alone. The internal arrangements of the church and the court of justice next arrest attention. Among the Greeks and Romans, whose amphitheatres were open to the sky, it was of paramount necessity that every assistance should be afforded to the orator or to the actor in the matter of acoustics. Consequently, the audience were placed above, or at least on a level with, the person who addressed them. Thus he could speak, *ore rotundo*, with his head erect. So, nowadays, in forensic practice, the judge and jury are seated on a plane considerably above the counsel, who speaks from the floor of the court. Theatres and lecture-rooms are in the main, for the same reason, arranged on this plan. In a church the position of the audience and the speaker is exactly reversed, and whether reading or preaching the officiating clergyman is always above the heads of the majority of his congregation. A few years since, before many of the modern restorations of churches had been effected, the position of the two was even worse; for then the clerk was on a level with the congregation, below the reading-desk, and the desk was below the pulpit, so that the preacher occupied, during the period when the most strain was thrown on his voice, a position which almost necessitated a forward and downward inclination of his head.

How far, then, is such an arrangement effective as a cause or aggravation of the condition known as clergyman's sore-throat? In order to ascertain what happens when the clergyman or the barrister is addressing his audience, it is only necessary that anyone should read aloud from a book any passage in a clear and distinct tone, holding his head erect, as the barrister does, with his chin perhaps slightly elevated. In this position the tone of his voice is clear and penetrating; moreover, phonation under such circumstances is performed with a minimum of exertion to the reader. Now let him continue his reading, and, so far as possible, neither increasing nor diminishing his efforts at distinct articulation; in other words, let him make no attempt to raise his voice, but at the same time let him, as he reads, allow his head to fall gradually forwards, as the clergyman does, so that his chin shall nearly rest on his sternum. The change in the voice will at once strike the ear of the listener, who will straightway appreciate the muffled and indistinct tones which accompany the forward inclination of the reader's head; while the impossibility of maintaining clearness in articulation, without a compensatory raising of his voice, is equally manifest to the reader. He becomes sensible of a want of tension of his fauces, uvula, and soft palate, and experiences a sensation of partial closure of the normal faucial orifice. If, with his head prone on his chest, he would attain the same power of voice as before, when his head was erect, he must increase his muscular efforts, and even so muffling of each word is to a great extent unavoidable. If, however, muffled words were the only outcome of reading or speaking with the head thus thrown forwards and downwards, the result might not be an important one. But the serious effect of it is that the friction of the air passing through the relaxed faucial aperture is very greatly increased, and this increase of friction tells especially on the fauces and the pharynx, against which the soft palate and pillars of the fauces are pressed. Thus, hyperæmia is established in the parts which are affected by this excessive friction; and temporary hyperæmia, if frequently encouraged, speedily becomes chronic congestion. Now, the clergyman, placed as he is above the heads of his congregation, is almost compelled, unless he be an extempore preacher, to perform the greater portion of the service with his head inclined forwards and downwards. Doubtless, many of the clergy know the prayers &c. by heart, but even so most of them from force

[6] The last sixteen amputations of limbs and the last five excisions of the breast have healed with a single dressing.

[7] In the amputations of limbs the greater number of the arteries were tied before the removal of the elastic bandage, so that this class of operations may be described as practically bloodless.

[1] Diseases of the Throat and Nose, vol. i., p. 31.

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of habit usually assume a position of the head as if reading from their book. In the case of leading men at the Bar, elocutionary efforts are often both severe and prolonged, and immunity from throat affection cannot in their case be claimed on the ground of the lightness of their labours in this direction. The attitude of the barrister, with his head erect when speaking in court, is widely different from that of the officiating clergyman. It is not difficult, therefore, to see in this fact alone a possible explanation of his immunity from this particular affection of the throat. Further, it is equally probable that failure to maintain the head erect in the performance of the services of the Church, furnishes the explanation of that chronic inflammation of the pharynx, fauces, and palate to which the clergy are so especially liable.

It is desirable that communications to a medical journal should be limited in length, and these remarks will be concluded by only a brief allusion to the cases of two clergymen, the most recent which have come under observation. One officiated in the East-end of London, the other in the midland counties; both suffered from the throat affection under consideration. The duties of the latter were performed under peculiarly trying circumstances, in that the country round was low-lying, damp, and often flooded; his church was a large one and "very difficult to preach in," and in the winter months was extremely cold and damp. In consequence of this he frequently caught severe colds. His throat, when he first came under notice, had been at various times a source of trouble and annoyance for eleven years; he was a good preacher, and was given to deliver long sermons. In the other case the symptoms were of shorter duration, and had commenced two years and a half previously—a time at which he had renounced alcohol for example's sake, and had entered on his ministrations at the East-end. The tonsils were especially affected in this instance, but the pharynx and pillars of the fauces were involved in the inflammatory process. Local applications—e.g., glycerin. boracis at first, and subsequently astringents, were prescribed, with rest and change of air in the latter case. Both patients, who confessed to a habit of "hanging the head" when in the reading-desk or pulpit, were duly cautioned against the practice; both subsequently expressed in strong terms their sense of "a speedy relief to their sufferings," owing to the ease and comfort with which their services were performed with the head in the natural position for phonation, and both were satisfactorily relieved for the time. Instances might be multiplied from among those engaged in reading to the sick or in teaching, but the two mentioned may, it is thought, be considered typical and of sufficient interest to direct the attention of the clerical profession to what may prove to be a simple though important factor in the treatment of a most distressing malady.

Grosvenor-street, W.

ON THE CAUSES AND PREVENTION OF FLAT-FOOT.

By M. P. MAYO COLLIER, M.S.Lond., F.R.C.S.Eng.
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SOME novel departures in the treatment of flat-foot have been lately brought before the profession. The fascination of novelty, and not necessity, is the mother of these inventions. The present treatment of flat-foot is founded on erroneous notions of its anatomy and causes.

It is incorrect to describe the antero-posterior arrangement of the bones of the foot as a bridge, and the astragalus as the keystone. A bridge usually has two extremities, fixed immovably, so resisting the tendency of forces from above to flatten the arch, the keystone being the highest point and centre of the convexity. Now, the arch of the foot has only one fixed point—the inner tuberosity of the os calcis; the other extremity of the arch is constantly changing its position, and moves considerably forwards when supporting the weight of the body. The astragalus cannot be likened to the keystone of a bridge, as it does not transmit equally to both extremities of the arch the weight of the body. The greater part of the weight of the body is transmitted directly through the os calcis to its inner tuberosity; only a small part, comparatively, is transmitted through the head of the astragalus and scaphoid to the anterior extremity of the arch. A glance at a vertical section of a normal foot will immediately convince one that such must be the case. The concavity on the under surface of the astragalus fits the saddle-shaped articular surface on the upper aspect of the os calcis accurately, permitting no gliding movement forwards, but only a rotation of the astragalus inwards on the sustentaculum tali as an axis. A movement forwards of the astragalus on the os calcis in the normal position of the foot is impossible, as the sustentaculum tali fits into the concavity between the two articular facets on the under aspect of the astragalus. A movement forwards is impossible when the sole of the foot is resting on a horizontal surface. As proof (if need be) of this assertion, in the normal position of the os calcis the astragalus, being unconnected by ligaments or other structures, will support any appropriately arranged weight, without slipping forwards or becoming displaced.

In the light of these facts, it is perfectly evident that the chief cause of "flat-foot" cannot be due, as stated by most authors, to "a general want of tone in the fibrous structures of the body." The plantar fascia and ligaments maintain the normal position of the os calcis, and these in their efforts are assisted by the tendons passing under the lesser process of the os calcis. Ligaments are only capable of bearing a certain strain, and when continually stretched will atrophy and yield. They yield because they are over-strained first; they perform their function satisfactorily as long as they have their normal duty to perform. They do not grow weak or atonic first, and then stretch, but after being unduly strained they then grow weak and stretch. I wish to point out and maintain that the flattening of the foot is not due primarily to weakness and laxity of the ligaments, but to an antecedent alteration in the position of the os calcis. I have stated that the os calcis is capable, in its normal position, of supporting the astragalus and any reasonable superimposed weight, without the intervention or necessity of ligaments or other bonds of union. This statement holds good as long as the foot rests on a horizontal surface. If the foot rests on a surface, so that the heel is raised above the level of the toes, the weight of the body is not transmitted so directly to the posterior half of the os calcis. The saddle-shaped surface on the upper aspect of the os calcis becomes an inclined plane, sloping downwards and forwards, and, consequently, favours a sliding movement forwards of the astralagus, thus throwing the weight of the body on the calcaneo-scaphoid, interosseous, and plantar ligaments. An intermittent and occasional strain these ligaments can well stand, but a constant and continuous strain ends in atrophy, weakness, and stretching. In pointing out how constantly this cause of flat-foot is at work, we have only to reflect that each and all of us walk and stand under these abnormal conditions; the heel always being raised above the level of the sole of the foot, and with some misguided individuals to the extent of several inches. In most cases the strain is intermittent, but where constant and continuous, as in omnibus and tram-car conductors, operatives in factories, shop-assistants, and others, where constant standing is necessitated, how common is this affection! Dr. Little says, "a slight degree of atonic valgus is common in girls, especially in those of the upper and middle classes; less common in boys." Why not in the less fortunate and often badly nourished females of the lower classes? Because the high heel is less prevalent in the lower than in the upper classes, and less common with men than women. For the prevention of flat-foot I would say, Don't wear a heel: let the sole of your boot be perfectly flat.

One word about treatment. It is a constant practice with surgeons in cases of flat-foot, when not too far gone—when the patient is capable of walking, although with discomfort,—to order a pad of leather or other material to be placed on the inner side of the boot to support the arch. Does this support the arch? And how can it? In flat-foot the arch is destroyed. It may compress the internal plantar nerve between the pad and the head of the astragalus, and so become intolerable; but if it does not do so, it is a source of considerable comfort to the patient. Why a pad in the boot on its inner side is a source of comfort to the patient is that it belts up the anterior extremity of the os calcis, and maintains it in its nearly normal position, counteracting the effect to some extent of the displacement, directing the weight of the body to the inner tuberosity of the os calcis, and removing the strain from the plantar structures. The treatment of these cases is simple when

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not too for advanced; good food, fresh air, and as much rest as possible, with a radical change in the construction of the boot. The toe and heel should change places, or, what amounts to the same thing, a good laced boot should be worn, with the sole quite an inch thick in front, fining off to a line or two at the heel. By these means the normal inclination of the os calcis would be maintained, and the weight of the body properly disposed of.

New Cavendish-street, W.

FATAL CASE OF CHOREA ASSOCIATED WITH RHEUMATISM AND CARDIAC DISEASE.

By MARTIN OXLEY, M.D.,
CONSULTING PHYSICIAN TO THE LIVERPOOL INFIRMARY FOR CHILDREN.

THE following interesting case has recently come under my notice:—

Harriet B——, aged ten years, had measles, scarlet fever, and whooping-cough before she was three years old. At the age of five she was in the Infirmary for Children suffering from rheumatism and chorea. She was admitted into the infirmary on the 21st of April of this year. Her mother stated that three weeks previously she began to suffer from rheumatic pains in her joints, and that one week before she was brought to the infirmary chorea set in. On admission the patient complained of pain in the right knee and right wrist. She was also suffering from a well-marked attack of chorea, most marked on the right side. The choreic movements were more violent during the night, when awake, than in the daytime. The heart's apex beat in the fourth and fifth interspaces, internal to the nipple line. There was slight epigastric pulsation. A rough systolic thrill could be felt over the apex. There was a loud grating systolic murmur heard most distinctly over the axilla. There was no œdema or albuminuria. A few days after admission she had clonic twitching of the right side of the face, accompanied by incoördinated movements (described by the house-surgeon as being like an infant's convulsion). The patient improved considerably, and on May 25th she was sent to our convalescent home at Waterloo. She remained there for three weeks, and seemed to be improving in health and benefiting by the sea air. On her return (June 14th) to the infirmary, it was noticed that there was much greater impulse over the cardiac region, and that the apex was now outside the nipple line. The chorea had disappeared, and she was allowed to be up and about the ward. A few days after her return she was noticed to have a slight rise of temperature at night (101°), and she was ordered back to bed. On July 2nd the heart symptoms became much more marked, and her face and feet became œdematous. From this time she became rapidly worse, and died on the morning of July 11th.

Post-mortem examination.—There was slight œdema of the legs and eyelids. Heart very much enlarged, displacing the lungs, especially the left, and extending, partially covered by the thin edge of the lung, about half an inch to the right of the sternum and to the lower border of the second left rib. Pericardium: A patch of thick, firm, white adhesion, about the size of a sixpence, situated over the right ventricle near its apex, attached the two layers of pericardium; there were no other signs of pericarditis. On the surface of the aortic, mitral, and tricuspid valves, minute vegetations about the size of a pin's head were to be seen grouped in clusters. The aortic and mitral valves were both incompetent. The lungs were congested and œdematous all over; the left pleura was slightly adherent at the back. The liver was most typical nutmeg, and a large and apparently recent infarct was found on section.

Remarks.—This case, taken with others which have been reported, help to strengthen the opinion held by many, that rheumatism and heart disease are responsible for chorea; and the fact that in chorea we frequently cannot find evidence of heart disease is no proof that there is no valvular disease. This was very well illustrated in a case which I brought before the members of the British Medical Association at their meeting in Liverpool in 1883. It just happened that many of my colleagues were examining cases in order to supply information to the Collective Investigation Committee, and a patient who was under my care at that time was frequently examined with the view of detecting heart disease. No cardiac bruit could be detected, and there was no apparent hypertrophy; yet, notwithstanding, after death, which occurred unexpectedly during the chorea from exhaustion, vegetations about the size of pin's heads were found to fringe the aortic and mitral valves. In both these instances the vegetations were very small, and were very readily detached from the valves. In two other fatal cases of chorea which I have had under my care, the patients being of the ages of seven and eleven respectively, one had vegetations on the aortic and mitral valves, while the other had well-marked pericarditis and nodular rheumatism as described by Drs. Barlow and Warner.

Liverpool.

NOTES ON

TWO CASES OF STRYCHNINE POISONING.

By FRANCIS E. MARSTON, L.R.C.P. LOND., M.R.C.S.

THE following cases of strychnine poisoning, one homicidal and the other suicidal, having come under my observation during the last seven months, may not be without some interest to the readers of THE LANCET.

I was called to see W. M—— at 6.35 in the evening of June 14th, 1886. The patient was lying on his shop floor, complaining of great pain over the epigastrium, a feeling of suffocation, and of being very thirsty; he was very restless, and his face wore a somewhat anxious expression. On being questioned, he replied that he had drunk some porter from a jug which had been given him. The jug was handed to me, and found to contain about a drachm of porter, with some small white crystals at the bottom and some clinging to the sides of the vessel; they had a very bitter taste. Thirty grains of sulphate of zinc were administered, and a stomach-pump was sent for. After the lapse of ten minutes from my arrival the patient was seized with convulsions of a tetanic character, which left no doubt as to the poison taken. Mr. Herbert Hawksworth, who had arrived on the scene, assisted in introducing the stomach-pump, and the stomach was thoroughly washed out with water, the washings being nearly colourless. The patient had two more violent convulsive spasms, with only a slight intermission. There was great lividity of the face; and the lips were retracted, showing the teeth firmly closed. He was quite conscious during the intervals of the fits, and requested to be turned over on his side. During the second spasms, which were of increased severity, the patient died (6.55 P.M.). The emetic acted only slightly. Probably about fifty-five minutes elapsed from the poison being taken until the time of death.

Mr. Hawksworth and myself made a necropsy twenty-one hours after death, when the following notes were recorded:—The whole of the body was extremely rigid, the upper extremities being slightly flexed and the hand clenched; feet markedly arched; no opisthotonos; the mouth tightly closed, and the face wearing a somewhat agonised expression. The membranes of the brain, and the substance of the brain itself, were congested; the medulla and upper part of the spinal cord were slightly congested, but otherwise appeared healthy. The stomach showed a few patches of congestion, and contained about five ounces of thick grumous straw-coloured fluid, consisting of partially digested particles of food, and smelling of alcohol. The duodenum and upper part of the small intestines were healthy, and contained fluid similar in appearance to that in the stomach. Lungs intensely congested, and engorged with blood. Heart of natural size; its muscular substance soft and flabby; cavities nearly empty, the little blood they contained being fluid and very dark. Here and in every other part of the body the blood was not coagulated. The rest of the organs appeared healthy. Bladder empty and strongly contracted. The trowsers contained an evacuation of fæces.

The stomach and its contents were sent to Mr. T. Blunt of Shrewsbury, the county analyst. One-tenth of a grain of commercial strychnine was found in the contents, and the washings obtained by the stomach-pump contained a little more than one-tenth of a grain. In the jug from which W. M—— drank the porter six grains of strychnine were found. Fifteen grains of strychnine is the quantity supposed to have been thrown into the jug.

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One fact about the case seems at first sight rather curious: why the washings obtained by the stomach-pump returned nearly colourless, when at the post-mortem five ounces of thick grumous material were collected from the stomach itself. This may have occurred, I think, in two ways: either that during the first spasm the stomach contracted and forced the contents into the duodenum, leaving the stomach empty, which regurgitated during the last spasm at the time of death; or that the stomach had an hour-glass contraction, the pyloric end containing the liquid, leaving the cardiac end empty. Though no signs were visible at the post-mortem, the former view seems the most likely; the duodenum, as mentioned before, contained fluid exactly similar to that in the stomach.

The other case of strychnine poisoning occurred in December last, when a man took the whole of a sixpenny packet of vermin-killer in a jug of stout with a suicidal intent. In this case the spasms occurred in about twenty minutes from the time of drinking the porter; and when I saw the man some ten minutes later, the tetanic convulsions were well developed, occurring every few minutes, but sometimes as much as seven or eight minutes occurred between the spasms; the least touch seemed to produce them. The patient was quite conscious between the fits, and when asked how he felt, made the somewhat graphic remark, "I feel as if I was floating round hell." Emetics were given without effect. Chloral and chloroform were resorted to; the convulsions decreased in severity, and at the end of eight hours had disappeared, and the patient recovered. He was a strong healthy man, over six feet in height. Each sixpenny packet of the vermin-killer contains on an average a grain and a half of strychnine.

Welshpool.

INFANT FEEDING.

BY E. PAGET THURSTAN, M.D. CANTAB.

THIS is a question of great interest to every medical man, and one on which the last word has not yet been said, I think. On the ground that the salivary and pancreatic secretions are hardly present in a new-born child, it is always stated in books that food of a farinaceous nature should be avoided entirely in arranging the dietary of very young children who require to be brought up by hand. In theory this is true; in practice it is not. Owing to the mechanical difference in the nature of the curds of human and cow's milk, there is probably always some difficulty for children in digesting cow's milk, while in some cases it is very great. This difficulty is generally recognised, and the usual explanation given is that the milk is too rapidly curdled, and sets into a single hard mass, to which the digestive agents can get no access. Fermentation proceeds too far, and the result is either vomiting of large masses of curds, or constipation, the motions also consisting mainly of undigested curd with marblings of green and yellow. I quite agree with this theory, but I do not agree with the usual mode of treatment advised.

It is generally recommended, if the milk curdles (1) to add lime-water; (2) to add barley-water; (3) to add dilute concoctions of linseed; (4) to employ solution of isinglass; (5) to use cream and water, excluding the curd; (6) to abandon milk altogether, and use veal-tea, beef-tea, or well-skimmed mutton-broth. This last plan is of great service, when in hot weather acid fermentation is quickly developed, or when alarming vomiting and gastritis occur; but it is obviously only a temporary expedient. As regards the other plans, the favourite and almost routine treatment is the lime-water plan. Now, lime-water, so far as my experience goes, sometimes *produces* sickness; and, any way, it cannot be right to give *medicine* daily for months if there be any reasonable alternative, for what we want in these cases is a diet which can be given for months together without producing indigestion. Of the other plans enumerated above, the cream-and-water diet, seems to be excluded by the fact that the curd alone possesses the nitrogenous casein which is necessary for perfect nutrition. The problem we have to solve is how to make the curd digestible; to exclude it altogether is to cut the Gordian knot.

The preparations of barley, linseed, or isinglass are not open to the above objections, but there are practical difficulties in the way of preparing them suitably in sufficiently small quantities at a time. The theory on which the use of these is founded is that in children with excessive secretion of gastric acid the milk can be prevented from curdling too rapidly by adding something to thicken the milk and entangle the curds as they form. This theory is plausible, and, to my mind, explains the facts fairly well. On this view the function of the barley-water or isinglass is mainly, if not entirely, mechanical. If so, why not allow a small amount of farinaceous food on the same ground? I have accepted the logical deduction from this reasoning in my practice, and I feel sure that no diet produces so uniformly good a result as milk thickened with farinaceous food of some kind. The crust of bread (when free from alum and large quantities of potato starch), Brighton biscuit, or one or other of the well-known infants' foods may be used, but only in very small quantities, so that the milk can still be sucked through the tube of a feeding-bottle. I do not think it much matters which "food" is used, as I believe that when given in this way in early life its function is mainly mechanical—viz., that the particles of solid entangle the curds as they form, and prevent them coalescing into one large mass. It must be borne in mind that many people hold the view that this tendency of cow's milk to form masses is not due to any excessive acidity in the child's stomach, but to a provision of nature, whereby the calf is able to regurgitate the milk and ruminate. I do not know whether it is a fact that calves chew the curd as their mothers do the cud, but it is certainly the case that the condition of acidity in the child has something to do with it, for it is a known fact that the offspring of gouty and rheumatic parents have more trouble in the way of digestion than the, in other respects, more delicate infants of scrofulous or tuberculous parents.

It has been proposed to overcome the difficulty of digestion by preparing milk with pepsine and pancreatine. Now this plan seems to me objectionable. Nature's revenge on all parasites is to deprive them of the organs which they refuse to exercise. If we habitually rear children without putting them to the necessity of digesting their food for themselves, we ought not to be surprised if we finally evolve a race of beings totally without digestive functions of any kind! Short of this extreme view, the tendency does not seem a wise one.

Finally, we ought perhaps to consider the claims of condensed milk. That the curd of this milk is more digestible than the curd of most forms in which milk is taken is, to my mind, indisputable. A new drawback, however, makes its appearance. Condensed milk is, in plain English, milk jam, and the excess of cane sugar produces indigestion in a new way, while, moreover, the condensation seems to deprive the milk of much of its saline constituents, and removes material required for bone formation.

We are forced back, then, to the farinaceous foods in very small quantities, added to cow's milk and water, as being the best artificial diet for children. The vendors of the various foods for infants lay great stress on the fact that the starch of the wheat has undergone some chemical change which renders it easier of digestion. This may be true to some extent; the diastase, when present, may convert a portion of the starch, but this (in the early weeks of life, at all events) is probably a secondary function. The following case which has recently occurred in my practice will illustrate my views, and, I think, confirm their correctness:—

The wife of a well-to-do tradesman was prematurely confined of a female child nine weeks before she was expecting; the presentation was breech and footling. When the child was born, it was cyanosed and made no attempt to breathe. After performing artificial respiration for five minutes the breathing became fairly established; but the child was still cyanosed, and did not cry. I cut the cord and bled the child to two drachms, after which it cried fairly strongly. The mother had never been able to nurse her children, and no attempt to do so was made now. It was fed on milk-and-water, half and half of each. The weather being hot, we had no difficulty in keeping up the warmth of the child, and for a few days all went well, except that the child could not be induced to drink more than half a pint of milk daily. Three days after birth it weighed 3 lb. 8 oz. A week later it weighed 3 lb. 9½ oz. In the meantime the cord and surrounding rag had come away, so that the actual gain could not have been more than an ounce, probably less. Shortly after this, sickness and slight diarrhœa came on. Veal-tea was ordered with the milk, and cream-and-water twice a day, instead of entire milk-and-water. Some

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powders were given, containing a third of a grain of mercury and chalk, with a little aromatic confection, ipecacuanha, and rhubarb. The diarrhœa and sickness abated, but the child was still taking very little. Eight to ten drops of brandy were added to the milk three times daily. At the end of another week the weight was 3 lb. 10 oz., being a gain of only ½ oz. The child was now fed on milk, thickened with a little patent farinaceous food. The following week the weight was 4 lb., the gain being 4 oz. The week after the weight was 4 lb. 9½ oz., being a gain of 9½ oz. The child is now doing well.

Here is surely a clear case of a life preserved by a change of diet, and a change, too, from a diet which I may call orthodox to one that is often spoken of as absolutely injurious.

Southborough, Tunbridge Wells.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. BARTHOLOMEW'S HOSPITAL.

STRICTURE OF THE RECTUM; COMPLETE INTESTINAL OBSTRUCTION FOR TWO MONTHS; PROCTOTOMY; RECOVERY; REMARKS.

(Under the care of Mr. HARRISON CRIPPS.)

THIS case is one of much interest, from the duration of the complete obstruction, and also from the example which it gives of the necessity of examining the rectum in all cases of intestinal obstruction, especially those of a chronic character. There is no statement that the patient had been under medical care previous to his admission into the hospital, nor as to any treatment adopted before that. Whatever it was, no improvement was to have been expected, the presence of this unusually tight stricture not being known. We would refer our readers to the remarks appended to the case on the treatment of this and similar conditions. For the following notes we are indebted to Mr. Elliot, house-surgeon.

J. B——, aged forty-two, was admitted on March 21st. He was quite well till about eight months ago, when he first noticed a fulness after eating, and was constantly troubled with wind. Soon afterwards the bowels became relaxed, the motions being small in quantity and dark in colour. These were passed with much straining, and caused a dragging pain about the anus. Periods of constipation alternated with diarrhœa. For the last two months he has passed no motion at all, but has had a slight discharge from the anus just sufficient to stain his linen. He has slept pretty well, and was able to do his work until a fortnight ago. Since that time he has been in bed. He has vomited once or twice, the vomit being sour, but not offensive. His appetite has been good, but he has purposely avoided solid food for some time. He has lost a considerable amount of flesh.

On admission he was a fairly-nourished man, very sallow and cachectic looking. Tongue furred; pulse 72, of good volume; temperature subnormal. He stated that he felt unwell, but not ill. The abdomen was enormously distended, measuring nearly forty inches round at the umbilicus. No peristaltic movements were visible. The abdomen was universally dull on percussion, and had a doughy feeling, especially in the iliac fossæ, where distinct impressions could be made in the swelling by pressure of the fingers. On examination of the rectum there was found to be a very tight stricture commencing just within the anal margin. The stricture was too tight to admit of even the little finger. With a little manipulation a No. 8 black soft catheter was passed into the stricture, and on withdrawal the eye was found to be blocked with fæcal material, showing that it had passed beyond the contraction. It was again introduced, and a small quantity of warm water passed through it by Higginson's syringe. This flowed back again much stained with fæces. About a couple of gallons of water were thus introduced by instalments of half-pints, coming back each time darkly stained. During the next few days these injections were given twice daily. By this treatment the circumference of the abdomen was reduced about an inch, but no really successful evacuations could be obtained.

On April 1st, under an anæsthetic, a long probe-pointed knife was introduced into the bowel well through the stricture, and the last two and a half inches of the rectum completely divided backwards in the middle line as far as the coccyx, after which several pounds of putty-like fæcal material were scooped out and washed away. During the next fortnight enormous quantities of fæces oozed away, so that by the 16th the girth of the abdomen was reduced to thirty-four inches. Subsequently the case did well. The patient gradually regained power in the muscles of the intestinal wall. A full-sized bougie was daily passed. He left the hospital on June 8th, having perfect control over his motions; and although the passage was free, there was still considerable induration in the last two inches of the rectal wall at the site of the previous stricture.

Remarks by Mr. HARRISON CRIPPS.—The case narrated is of interest in more than one respect. The length of time that complete obstruction lasted without producing urgent symptoms is remarkable. The obstruction had been absolutely complete for more than eight weeks, but during the first six weeks of this period the patient had been able to continue his work; while on admission, beyond the enormous distension of the abdomen, there were no urgent symptoms of distress. The treatment of such a case is a matter of considerable importance, and must depend both on the nature of the stricture and its height from the anus. If the contraction be beyond reach of the finger or so high up that its dilatation or division is impracticable, there can be no question that if enemata fail to give relief colotomy should be performed. If, on the other hand, as not infrequently occurs, the constriction is within easy reach of of the anus, the treatment to be adopted must depend as to whether the stricture is fibrous or malignant. In the majority of instances of malignant stricture the best treatment would doubtless be a lumbar colotomy. It is both an unsafe and an unsatisfactory procedure to divide a malignant stricture, even when close to the anus. The tissues cut through are so rotten that it is difficult to restrain hæmorrhage, while in a few weeks the cut surfaces rapidly develop huge fungoid masses which again block the bowel. On the other hand, in cases of fibrous stricture near the anus, a complete linear proctotomy, dividing the stricture, and including all the parts from the anus to the coccyx, is highly satisfactory. It not only affords immediate relief to the obstruction, but if care be taken to allow the wound to heal over a full-sized bougie, and to have this frequently passed for six months or a year, a cure may be often promised. Fortunately, it is not common for either malignant or fibrous stricture to be allowed to progress so far without treatment as to produce complete obstruction. In cases of cancer of the rectum, in which it has been decided that complete excision is impracticable, so soon as the symptoms of stricture become prominent a colotomy should be advised. To wait until complete obstruction occurs is to condemn the patient to many months of unnecessary suffering, and renders the operation far more hazardous. The operation of colotomy, when performed on an empty bowel in a patient not suffering from exhaustion, is comparatively a safe procedure, but when delayed and undertaken on a distended gut in a patient dying of obstruction the mortality becomes enormously increased.

WOLVERHAMPTON AND STAFFORDSHIRE GENERAL HOSPITAL.

TUBERCULAR ULCER OF THE TONGUE IN A WOMAN; REMOVAL OF THE FRONT PORTION, FOLLOWED BY COMPLETE CESSATION OF THE LOCAL PAIN.

(Under the care of Mr. VINCENT JACKSON.)

RACHEL L——, aged thirty-seven, an in-patient of the hospital, was transferred from Dr. Malet's wards to those of Mr. Jackson on account of a very painful ulcer of the point of the tongue. The woman had been married for several years, but had never been pregnant, and her family history showed that her youngest sister died of pulmonary con-

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sumption, a disease from which she was suffering in the upper portion of each lung. She states that six months ago she perceived a hard pimple on the front "edge" of the tongue, which was not preceded by any injury or by any irritation in the front teeth, which are well formed and free from caries. Three months afterwards an ulcer formed and has slowly enlarged, and on account of the great pain which eating and the various movements of the tongue caused, she was anxious, as all local applications had failed to give relief, for something more to be done.

On admission the tip of the tongue was seen to be occupied by a shallow ulcer, oval in shape, measuring half an inch across and a quarter of an inch from above downwards. The floor had a greyish look and was uneven and nodular, the edges being slightly undermined, but there was no surrounding induration, separate nodules, minute ulcers, or enlarged glands.

April 22nd.—The patient being in a semi-recumbent position on a couch, ether was administered, and the mouth being well opened by a gag worked from the left side, the tongue was pulled out and grasped by a pair of long-bladed forceps about an inch from the tip, and about three-quarters of an inch of this portion of the tongue was cut away with scissors. The mucous membrane of the two surfaces was united by ten points of interrupted suture of very fine silk. The tongue being released and no hæmorrhage ensuing, the mouth was closed and the patient removed.

26th.—All the sutures were removed.

May 4th.—Patient discharged. Wound quite healed. The operation has been followed by a complete cessation of all the distressing symptoms complained of previously.

Report of Ulcer of the Tongue, by Dr. HENEAGE GIBBES. The morbid changes consist of a number of tubercles dispersed throughout the substance of the tongue. Each tubercle consists of a number of small, round cells, and one or more multinucleated or giant cells; these vary much in number and size. These tubercles are in various stages; some, especially near the surface, have undergone necrosis in the central parts; and some of those just under the superficial epithelium have destroyed it, and in this way have caused ulcers on the surface. There are a few bacilli to be seen amongst the small cells in the tubercle, but none in the giant cells. This is their usual manner of occurrence in this form of tubercle.

SAMARITAN HOSPITAL FOR WOMEN, NOTTINGHAM.

TWO CASES OF OVARIAN TUMOUR, AND ONE OF HYDRAMNIOS; REMARKS.

Under the care of Dr. ELDER.

CASE 1. *Ovarian Cystoma; Ovariotomy; Recovery.*—Mrs. S——, aged fifty-five, was admitted on May 31st, 1886, suffering from an ovarian cystic tumour of the right side. At the operation the uterine body was found lying in front of the tumour, which had deep intra-ligamentous attachments, and was attached quite up to the right uterine cornu. The cyst was tied off by sections, and drainage was subsequently used. Three weeks after the operation the patient left the hospital well.

Dr. Elder remarked that his object in recording this case was to point out how dangerous, and possibly fatal, tapping under such circumstances would be.

CASE 2. *Ovarian Cystoma of Right Side; Torsion of Pedicle; Ovariotomy; Recovery.*—Mrs. W——, aged fifty-five, was admitted on June 1st with an ovarian cystic tumour. There was a very indefinite history as to the duration of the growth, and although the patient had been confined to bed eight weeks before admission, there was nothing in her state to indicate the condition of the parts as revealed at the operation. There had been no acute seizure indicative of strangulation, no rapid increase of the tumour, or urgent constitutional symptoms. What troubled the patient most prior to admission, and during the few days which elapsed before the operation, was a sense of physical prostration not usually found in the subjects of ovarian disease, coupled with nausea and loss of appetite. Attempts to get about had brought on abdominal pains, from which she was fairly free when lying in bed. There being no seeming urgency, the operation was delayed until June 7th, because of the scanty renal secretion. At the operation the cyst wall was found loosely adherent in front, and so softened that it broke down under the forceps and trocar; in fact, the cyst was semi-gangrenous. In addition to the parietal adhesions, it was also loosely attached to the small intestines, to the omentum, which was much thickened, and to the pelvic peritoneum on the right side. In separating these there was considerable bleeding, and a large section of the omentum had to be removed. The pedicle was found twisted from left to right and on the right side. This was secured by a Staffordshire knot, and after thoroughly washing out the cavity with plain water and sponging, a drainage-tube was left in. The patient made a good recovery, and went out in a little over three weeks. The cyst contents were thick and coffee-coloured; the cyst itself was very friable, in parts easily breaking down under the finger, and its interior was lined by layers of fibrin.

Remarks.—The noteworthy points about this case are (1) the utter absence of those symptoms which are usually associated with twisting of the pedicle; (2) the direction of the twist; and (3) the fact that it was found on the right side, as has by other observers been noted in the majority of instances.

CASE 3. *Hydramnios.*—Mrs. T——, aged forty-two, was admitted on May 5th, from Lincolnshire, as a possible example of ovarian disease. The previous health of the patient had been good, and she had borne ten children. Last November she ceased menstruating, and until six or seven weeks ago neither the doctor nor herself had reason to doubt a natural pregnancy. She then began rapidly to enlarge, and her legs and labia became œdematous. The sudden increase in size prevented her getting about, and in this state she was referred to Dr. Elder. The abdomen was found uniformly distended by an indistinctly fluctuant swelling. The flank percussion note was clear and unaltered by position, but dull in other parts. No fœtal heart-sound could be heard, but the placental souffle was distinct. Per vaginam the cervix was found shortened and broadened, with soft, velvety lips. No information could be obtained by attempted *ballottement*. The breasts were enlarged, secreting milk, and with darkened areolæ. In all other respects the patient's health was good, and careful and repeated examination of the urine showed no trace of albumen. The patient was sent home, with a letter to her doctor, who was advised to induce labour if urgent symptoms superseded. This had to be done shortly after her return, and she was confined of twins. She was dangerously ill, but ultimately recovered.

Remarks.—This is an example of a rare disease depending upon a local pathological condition usually found in women who have borne children, frequently in twin pregnancies, and fraught with great danger to mother and offspring. It has been stated that albumen is always found in the urine of such patients. That this is not so, this example proves.

ST. VINCENT'S HOSPITAL, DUBLIN.

CASE OF ACUTE CHOREA; DEATH.

(Under the care of Dr. QUINLAN.)

For the report of the following case we are indebted to Sydney Johnson, ward clerk.

B. O'L——, aged ten, was admitted on July 26th, suffering from severe chorea, which had been going on for ten days. The day before her admission, her mother, thinking she was "acting," chastised her severely, with the effect of greatly aggravating her symptoms; and, becoming considerably alarmed, she brought her to the hospital.

On admission, the patient was found to be suffering from very severe chorea, principally on the left side, with much tossing of the arms, which had to be gently restrained. The disturbance continued to a great extent through her sleep. She was ordered a dose of castor oil and turpentine.

July 27th.—She had passed a bad night; the symptoms unabated. The castor oil and turpentine to be repeated.

28th.—Chorea rather worse. Great crying whenever touched, and occasionally without being touched. Had slept very badly. Ordered two grains of sulphate of zinc three times a day, to be increased by two grains daily; also at bedtime, ten grains of hydrate of choral, with thirty of bromide of potassium.

29th.—Slept better, but choreic symptoms worse. Crying very much. On searching along the spine a tender spot was found over the root of the brachial plexus; when this was touched immediate opisthotonos was produced. A blister was applied over this spot. The chloral was repeated, and the sulphate of zinc increased in amount.

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30th.—Opisthotonos no longer produced, but choreic symptoms very bad. Sleep had been rather disturbed. Temperature 98·6°; pulse 104.

31st.—Choreic symptoms very bad. Sleep much disturbed. Circulation beginning to fail. To continue the sulphate of zinc, ten grains four times a day, and the chloral and bromide draught. Temperature normal; pulse 96.

August 1st.—Rather better; slept well last night, and was quite quiet during sleep.

2nd.—Rather quieter; a good night; taking milk freely. The vibration of the muscles of the forearm, which had previously rendered it very difficult to count the pulse, is much reduced. To continue the treatment.

4th.—Quieter; muscular spasms less; slept well last night. The sulphate of zinc increased to eighteen grains four times a day.

6th.—Considerable epistaxis at 1 A.M.; rather quieter. Sulphate of zinc increased to twenty-four grains four times a day. The sphincters of the bladder and of anus are beyond control, and the evacuations are passed unconsciously.

7th.—First sound of the heart very weak; pulse dicrotic; considerable effusion in the bronchial tubes; chorea less violent. Ordered twenty-six grains of sulphate of zinc with five minims of digitalis four times a day. An ounce and a half of brandy to be given in small quantities during the twenty-four hours, mixed with milk.

8th.—Quiet night; pulse stronger; lungs clearer, but some crying. Ordered thirty grains of sulphate of zinc with ten minims of tincture of digitalis four times a day.

9th.—Fair night; pulse steadier, 108; crying a little. Continue treatment.

10th.—A fair night; face pale; point of nose and extremities cold; not much movement, but great crying; pulse 140 and very dicrotic; first sound of the heart almost inaudible. Continue the sulphate of zinc with ten minims of tincture of digitalis four times a day; omit the chloral draught.

11th.—Had a fair night; chorea has ceased; heart's action very weak; pulse very dicrotic; evidently sinking. Died at 7 P.M. of weakness. A post-mortem examination was not permitted.

Medical Societies.

ACADEMY OF MEDICINE IN IRELAND.

Ununited Fracture of the Humerus, and a Method of Treatment thereof by Metal Screw-Taps.—Electrolysis for the Treatment of Urethral Stricture.

A MEETING of the Surgical Section was held on May 21st.

Mr. HENRY FITZGIBBON exhibited a brace fitted with drills and screw-taps for the fixation of resected bones, and reported a case of Ununited Fracture of the Humerus which he had successfully operated upon by this method. Mrs. T——, admitted into the City of Dublin Hospital on March 13th, 1885, with comminuted fracture of humerus which refused union, was sent to the seaside until Nov. 14th, when she was readmitted with permanent non-union. The patient was operated on successfully on Nov. 26th by means of screw-taps and wire sutures, which were removed on the twenty-first day after the operation. The patient was exhibited to the Academy, with firm union and a useful arm, on April 16th. Mr. Fitzgibbon attributed the non-union to the pressure of the comminuted fragment being displaced inwards so as to cause pressure upon the brachial vessels, depriving the lower fragment of sufficient blood-supply.—Mr. BENNETT corroborated Mr. Fitzgibbon's description of the operation, which, he said, was performed upon a woman who was an unfavourable subject for it both as regards age and nutrition, presenting, as she did, extreme flabbiness of muscle. The union was perfect not only as regarded junction of the bones, but also in their apposition and the line of direction of the humerus, so that there was little or no deformity. In mechanical detail Mr. Fitzgibbon's method offered some advantages; but iron pegs were preferable to silver, as being rigid and efficient, while the silver were flexible.—Mr. WHEELER, having seen the patient before, during, and since the operation, mentioned the result of his observation. The patient having a fracture of the humerus as described, the house-surgeon put up the arm in the usual method with two splints, which were well adapted, and it rested upon a pillow. Next morning the bones, being displaced, were readjusted. The cause of non-union was her indocility and restlessness, wishing to have the splints opened, and not, as Mr. Fitzgibbon had suggested, the want of blood-supply. At the same time, everything except electricity was used to excite inflammation and produce union, so as to avoid operative interference. The operation selected by Mr. Fitzgibbon was that most suitable, and as the result the patient recovered, with every motion perfect except the upward, which was not so perfect as it was before the accident. In his own practice he observed a noteworthy point which he had not seen recorded in the books—namely, that in fracture of the humerus, where there was much immobility, if the bone united, an immensity of callus was thrown out, and that was always on the inner side.—Mr. O'GRADY having operated in half a dozen cases of ununited fracture, said they varied so much in their conditions that no line of treatment in common could be laid down; for instance, the treatment of a transverse fracture of the humerus was different from that of an oblique fracture of the thigh. He had used ivory pegs till it was suggested that the pigs from which the material was obtained might have had tuberculosis, and thenceforwarded he used the plain iron pegs, which were driven by means of the common Archimedean drill with an up-and-down movement. His drill was the one the late Mr. Hutton had. In the after-treatment he adopted the strictest antiseptic procedure—namely, cleanliness and rest, but without the newly-developed paraphernalia.—Mr. CORLEY said there were already nineteen different methods for the treatment of ununited fracture, the large number suggesting that none of them could be regarded as perfect. Mr. Fitzgibbon's formed the twentieth, which he hoped would be perfect. The accident in question—i.e., the non-union of fracture of the shafts of long bones—was of rare occurrence, only one case having come under his observation during twenty years' experience as a hospital surgeon. No doubt, cases arose through the irritability or restlessness of the patient, or want of care on the part of the surgical attendant, pointing to the old adage that "prevention is better than cure." He approved of the ordinary Archimedean drill.—Mr. M'ARDLE mentioned the advantage of using a steel gimlet, with a thread the size of the screw, as giving a hold, and obviating the detritus which Mr. Fitzgibbon's instrument produced. He had used ivory screws, which became loosened sufficiently to draw out.—Mr. TOBIN considered it was an interesting question to determine how long would the screw bite in the bone, seeing that it ultimately loosened.—Mr. FRANKS thought that the method, while ingenious, was rather complicated, and that the surgeon should not be confined altogether to the use of screws. About a year and a half ago he had himself treated a case of ununited fracture of the humerus, the fracture passing through the neck of the bone below the attachment of the capsular ligament. In the first instance, the case had been wrongly diagnosed as a dislocation and put into splints. At the end of six weeks it was sent up from the country to him. He found the lower fragment projecting underneath the skin, which was so extremely thin he feared the slightest movement would send the bone through it. Having decided to remove part of the bone, he exposed it by an incision from the shoulder, and he then removed about two inches of the lower fragment. From the upper one he could take nothing, because it was bound by the capsular ligament. He scraped the bone to revivify it; then, with an ordinary bradawl, he drilled two holes through the head of the bone, passing through the capsular ligament, and two the other way through the lower fragment, and inserted two tolerably thick silver wires, joining and twisting them. Six months afterwards he removed the wires, which, but for the irritation they caused, he would have let remain. Following the operation, he used further antiseptic precautions, with cleanliness and rest. He preferred passing the wires through and thus joining the ununited bones, as being a simpler method than using screws. The less the surgeon trusted to complicated methods and the more he used his fingers the better.—Mr. FITZGIBBON replied. The argument of Mr. Bennett had convinced him of the advantage of steel screw-taps over silver. The grip of the screw was beyond question; for when he thought he had it sufficiently out to remove it with his fingers he had to readjust the brace to extract the last eighth of an inch of it. In the cases alluded to it might have been that the ivory screws being taken from measly pigs produced an amount of irritation and suppuration that would account for the loosening. So far from the brace being a complicated instrument, it

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was an ordinary carpenter's tool. To make the hole with a bradawl was objectionable, because of the continuous wabbling backwards and forwards, instead of in the same direction, like the brace. Having seen Hutton and Hamilton operate in ununited fracture, he noticed a great deal of difficulty in getting the wire through the hole in one fragment and then through the hole in the other. But there was no difficulty in introducing or removing the screw-taps.

Mr. P. J. HAYES read a paper on the Treatment of Urethral Stricture by Electrolysis, the comparatively novel method practised by Drs. Robert Newman of New York and S. T. Anderson of Bloomington. He gave the details of three cases in which he had himself adopted the method with encouraging results. Therefore, he strongly advocated the trial of electrolysis not alone in simple cases, but even for the most complicated forms of stricture as calculated to effect unhoped-for benefit, and as not at all interfering with the subsequent employment of other measures, minor or serious. The outcome of the experience of Dr. Anderson, with whom he had had the advantage of direct communication on the subject, combined with his own, indicated that electrolysis was best adapted for the treatment of annular strictures rather limited in length. Having ascertained the situation of the stricture, the tip or exposed metal bulb of an electrode ought if possible to be lodged within it, or, if this was impracticable, the tip must be in close contact with the anterior face of the stricture. Then a small galvanic battery was connected by its negative pole with the urethral electrode, whilst the positive might be attached either to a moist sponge electrode, or, better still, to a thin metal plate covered with moistened chamois leather. The positive electrode would be advantageously applied either to the patient's perineum or against the inner side of one thigh. As to the strength of the current to be employed the patient's own sensations would prove the best guide. The current should be perceived, but it ought not to be pushed to cause pain, nor should the surgeon attempt more than it was needful to effect at each *séance*, using only mild currents and manipulating the electrode with gentleness, and never pushing it through the stricture, as it accomplished more by being allowed to remain in the stricture than by being caused to quickly traverse it. The *séance* might be repeated every ten days if desired. Cauterising would be produced when strong currents were employed, but with mild currents the gradual breaking up of fibroid tissue was effected by a combination of chemical decomposition and vital absorption until but a thin lamella of cicatricial tissue remained to mark the seat of the stricture.—The PRESIDENT: Do you think there is actual chemical decomposition as the effect of the electrode which appears to liquefy the nitrogenous matter—in other words, that the effect is more chemical than physical?—Mr. HAYES: Certainly more chemical than physical. There is probably a combination of both.—Mr. FITZGIBBON said it would be a step in advance if electrolysis proved a permanent cure for resilient stricture.—Mr. TOBIN observed that there was a difficulty of a twofold character which the surgeon encountered—first, to know with certainty whether he was pressing on the stricture, and, secondly, whether it was permeable.—Mr. BENNETT suggested the desirability of taking precautions in directing the action of the current.—Mr. CORLEY indicated the number of false passages in the immediate neighbourhood of the urethra, not one of which could be distinguished from it, and asked would the point of the instrument have the same effect if it went into one of those false passages.—Mr. WHEELER assumed that Mr. Hayes did not propose that electrolysis was suitable for every case of stricture, the procedure being in some to dilate and in others to cut.—Mr. HAYES replied. Encouraged by his own success, he wished to induce others to try electrolysis. In one of his cases there should have been a cutting operation had he not employed electrolysis, which could be done in the majority of cases, and, if ineffective, any other method, major or minor, could be afterwards adopted.

The Section then adjourned until November.

CAMBRIDGE MEDICAL SOCIETY.

At a meeting held on Friday, July 2nd, Dr. J. B. Bradbury, President, in the chair, the following communications were made:—

Abdominal Tumour of Unusually Large Size.—The PRESIDENT brought forward this case. James B——, aged sixty-two, a labourer, was admitted into Addenbrooke's Hospital on Dec. 16th, 1885, and died on Feb. 20th, 1886. One sister died from cancer of the breast. His present illness began two years ago, with loss of strength, and vomiting, and a swelling appeared just below the xiphoid cartilage. The patient was much emaciated, and complained of distension of the abdomen, but not much pain. There was some œdema of both legs. The abdomen was greatly distended and the veins prominent. The swelling was most prominent above the umbilicus, and there was much bulging in the flanks. A large, painless, uneven tumour could be felt extending from below the ribs to one finger's breadth below the umbilicus in the middle line. The left flank was resonant, the right was dull. There was evidence of fluid in the peritoneal cavity. The upper limit of hepatic dulness was in a line with the nipples. Urine 1027, acid, no albumen; urea 2·8 per cent. A few enlarged inguinal glands on the left side. On Dec. 19th the aspirator needle was introduced in four places over the most prominent parts of the tumour, but only a drop of blood was obtained. The swelling continued to increase in size and the patient gradually became weaker, until towards the end constant vomiting set in and he died on Feb. 19th.—Mr. GRIFFITH gave the following account of the post-mortem examination, which had been made by him. The abdominal cavity was greatly distended with a large tumour, which was so large as to obscure all the viscera from the front, except in the left inguinal region, where coils of the small intestine appeared. This mass was apparently divisible into an upper and left half and a lower and right half by an oblique line running from above downwards and to the left; the former presented a coarsely lobulated, jelly-like mass passing upwards into the left hypochondrium, where it had become slightly adherent to the abdominal wall; the latter was enclosed in a firm, strong, fibrous capsule and closely adherent to the abdominal wall all over the right side. After removal of the mass, the normal relations of the intestine had not been much disturbed. The ascending colon passed upwards behind the mass, being only partially involved in it at the lower part, the small intestine was quite free, so that the tumour had grown in front of the ascending colon and pushed the small intestine to the only free part of the abdominal cavity—viz., the left inguinal region. The stomach, liver, and spleen had all been pressed upwards, carrying the diaphragm before them, and diminishing to a considerable extent the vertical diameter of the thoracic cavities. The mass itself weighed 33 lb., and was soft and jelly-like in consistency. On section it presented the same characters, and in addition large areas of softening and hæmorrhages. Microscopically, the parts near to the seat of hæmorrhages consisted of a very large number of delicate, thin-walled bloodvessels, with small hæmorrhages here and there along their course; between them connective tissue cells, irregular in size, shape and outline, with usually a single nucleus, embedded in a fine reticulum of fibres, besides a few large cells becoming transformed into fat cells. Other parts simply consisted of bands of connective tissue with large masses of fat cells between. All the organs were normal and healthy except the stomach (which was peculiar in being very small and contracted, forming nearly a straight tube stretching across the vertebral column); and the right kidney, which could not be found after the removal of the mass, nor could any trace of it be detected on very careful naked-eye examination. Unfortunately, the right ureter was not looked for and traced upwards to ascertain its presence or absence.—Dr. BRADBURY thought that the tumour was probably a sarcoma of the right kidney, judging from the post-mortem evidence, although there were no symptoms during life, except a small quantity of urine, to point to this conclusion. He found that hæmatura was absent in about half the cases of cancer of the kidney.

Recovery after Fractured Spine.—Mr. WHERRY related a case of recovery from Fracture of the Lumbar Vertebræ, with Paralysis of Legs; and one of recovery after Fracture of the Cervical Vertebræ, with Paralysis of Arms; death occurring twelve years after. Case 1: Charles C——, aged sixty, on Oct. 29th, 1873, fell 57 ft. from a scaffold, and at 28 ft. a plank checked his fall, and lower down he alighted on an office ridge roof. He was nineteen weeks in Addenbrooke's Hospital. A catheter was used for two years; he recovered power in his bladder by degrees, and from his invalid chair began to walk with crutches, and could go a hundred yards pretty well. He had enjoyed fair health during the past thirteen years; now his legs are swollen

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and ulcerated. His hands are suffering probably from the crutch palsy. The urine is retained ordinarily, but any beer or tea beyond a most moderate quantity is followed by incontinence. Case 2: Peter H——, nearly twelve years ago, in 1874, was standing on the top of a load of tares and hauling a rope which he thought was fastened down below, when he fell backwards on to the ground. He was in the hospital about a year, and had paralysis of the bladder for seven or eight days only; there was no paralysis of the lower limbs; there were large sloughs on the scapulæ. In carrying him to bed crepitus was felt. His breathing was entirely diaphragmatic. When he had been in bed about a year he began to gain flesh and strength, and sat up in a chair, and later walked about carrying his head erect and his neck stiff. Later he could walk vigorously, but his arms remained paralysed and fixed in the bent position, some slight power of extension was regained in the fingers of the left hand especially, and the upper limb could be moved as a whole a few inches away from the body. There was very little thoracic movement, as indicated by a tape around the chest. After nearly twelve years of excellent health he died thin and anæmic and with a large spleen. The specimen showed the bodies of the fifth, sixth, and seventh cervical vertebræ to be firmly ankylosed; no remains of intervertebral substance between the fifth and sixth, and very little between the sixth and seventh. The coalesced bodies of the fifth and sixth and the bodies above bend forwards so as to make an angle with the bodies of the seventh cervical and upper dorsal. The cervical spine has a marked curve with its concavity forwards. The canal shows a corresponding bend, the angle and the narrowest part of the canal are between the lamina of the fifth and posterior upper edge of the sixth body, an illustration of the usual mode of crushing the cord. The laminæ of the fifth, sixth, and seventh are firmly joined. The articular processes are also firmly united by bone. There is a separation between the articulations of the fourth and fifth, and also, but less, between the third and fourth. The transverse processes of the fifth, sixth, and seventh are closer than natural but not touching; the vertebral artery canal is patens. The intervertebral canal for the sixth spinal nerve is small and irregular in shape, and this cord must have been nipped at its exit from the vertebral canal. The dry specimen showed a general atrophy of the parts damaged, especially the bodies of the vertebræ; and a singular absence of callus.—Mr. WHERRY thought that the brachial cords were pressed upon or damaged at the intervertebral foramina, the spinal cord itself being very little injured. The *main en griffe* was explained by the extensors of the fingers regaining some power, but the interossei muscles remaining quite paralysed. It was hoped that further examination might be made of the wet specimen, which contained the spinal cord and nerves.

Onychogryphosis (*specimen*).—Mr. HYDE HILLS showed two of these nails, of unusually great length, removed from the great toes of a patient.

Reviews and Notices of Books.

Clinical Lectures on the Diseases of Women. By J. MATTHEWS DUNCAN, M.D. Third Edition. London: Churchills. 1886.

THE third edition of this work consists of the contents of the previous edition with the addition of fourteen new lectures and three new appendices, together with a greatly enlarged index. As the previous editions have been already noticed in these columns, we shall confine ourselves to the new matter. The new lectures appear to be those on Endometritis (No. 8), Retention of Menses (No. 13), Amenorrhœa and Vicarious Menstruation (No. 15), Lupus of the Pudendum (No. 22), Polypus Uteri (No. 23), Terminations of Peri- and Para-metritis (No. 28), Terminations of Uterine Fibroids (No. 35), Cancer of the Cervix Uteri (No. 36), Ovarian Cystoma (Nos. 40 and 41), Retroversion of the Gravid Uterus (No. 43), Chronic Inversion of the Uterus (No. 47), Diseases and Injuries of the Perineum (No. 48), and some Minor Ailments (No. 49); and the new appendices those on the Investigation of the Interior of the Uterus by the Carbolised Hand at long intervals after Delivery (No. 56), the Mechanical Dilatation of the Cervix Uteri and the Appliances used for the purpose (No. 57), and Notes of some Experiments on the rate of flow of Blood and some other Liquids through Tubes of narrow diameter (No. 58). The last two are not in any sense clinical lectures, but are experimental inquiries after the manner of many of the author's previously published and collected essays; still we are glad to see them published, even out of their proper place.

The work maintains its character as a healthy and high-toned guide to the practitioner, and indeed in this relation is invaluable. The lecture on Endometritis is a well-timed protest against the conversion of an old disease (cervical catarrh) into a new and fashionable disorder with a long name. The affection or group of affections of the uterine cavity proper known under this name are in a highly unsatisfactory state as regards our knowledge of them, and the title of most of them to the termination "itis" is more than doubtful. The subject of Vicarious Menstruation is also well treated; a recent discussion of the subject left those who deny the existence of such a disorder undisturbed from their position—the position held also by Dr. Duncan. Lupus has been recently dealt with by the author in a series of elaborate papers with excellent illustrations, which will be found in the last volume of the Obstetrical Transactions. The general opinion of the Society seemed to be that the nature of this affection or these affections is open to doubt. For the treatment of polypus the only mode of removal recommended is that by the vulsellum and scissors. It is true that bleeding after this treatment is exceedingly rare, but it is not quite unknown, and the écraseur is, in our opinion, in every respect the best instrument for this operation. In discussing the difficult subject of Hysterectomy for Uterine Fibroid, the author (p. 328) entirely rejects suffering as an indication for operation. This seems to us a mistake. It is true that suffering is not so easily justifiable an indication for operation as danger to life, but to refuse its admission altogether is surely carrying caution too far. No qualification is indicated with regard to the patient's occupation or station in life—an important consideration. One of the best chapters is that on some minor ailments. It is always interesting to read the cream of the note-books of a good observer of large experience. Of the appendices, all are of interest, especially the last two; the last of all (enumerated above) is of especial interest, as bearing on the subject of so-called mechanical dysmenorrhœa.

The least satisfactory lectures are those on Ovarian Cystoma and on Cancer of the Cervix. The latter is occupying, perhaps, more attention at this moment than almost any of the diseases of women, and its operative treatment, as well as its pathology, is making undoubted advances. The present lecture is in these respects not up to date; the practice indicated is not the best now available. In the lecture on ovarian cystoma Dr. Duncan pleads for late operation. In this, in the present condition of ovariotomy, we are sure he is wrong. At the present time the conditions differ widely from those which prevailed a few years ago, before antiseptic surgery was understood. In those days there was far less difference in the risk of "bad" and "good" cases than there is now, for the "good" cases died of septicæmia. Now the "good" cases mostly recover, and the majority of those that die are, we think, complicated cases—that is, cases complicated by twisted pedicle, bad adhesions, suppuration, kidney disease—all of which are, or may be, caused by delay of the operation. In counselling delay we believe that we are counselling great additional risk, and in advising early operation, greatly diminished risk.

Dr. Duncan's style is habitually clear and unaffected, but we would ask him whether, if "time is too precious to permit the survival of such long names as 'corporeal endometritis'" (p. 47), life is not too short for such words as 'pericystomatitis' and 'endocystomatitis'" (pp. 378-9),

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It merely remains for us to express the gratification that most of the additional work has given us, and to strongly recommend it, as we have done the two former editions, to medical readers.

History of the Royal College of Surgeons in Ireland and of the Irish Schools of Medicine; including numerous Biographical Sketches, also a Medical Biography. By Sir CHARLES A. CAMERON. Dublin; Fannin and Co. 1886.

IT is impossible to calculate the time and trouble involved in the compilation of the vast number of references and records which the energy of Sir Charles Cameron has succeeded in obtaining; and too much praise cannot be given for the industry, perseverance, and skilful treatment of the materials at his command. The volume is, indeed, a monument of enduring skill and talent, and its production during his presidential year of office at the College of Surgeons does the author infinite credit. With the space at our disposal it would be impossible to glance at more than a portion of this work, for it contains a complete record of the Irish College and a general summary of the history of medicine in Ireland, with biographical sketches of many eminent physicians and surgeons.

The annals of Tiernach are, with the exception of the Psalter of Cashel, the oldest Celtic manuscript, and it is stated in them that in the year 366 a princess died from having swallowed a *poisoned draught*, from which it may be inferred that even in that early age some knowledge of the preparations of drugs prevailed. Legendary lore assigns to the ancient Irish a high degree of surgical skill, and it is mentioned in an ancient manuscript that Josina, the son of a Scotch king who reigned about a century and a half before the birth of Christ, was sent by his father to Ireland to be educated among the physicians and surgeons of that country. In the libraries of Trinity College, Dublin, and the Royal Irish Academy there are large collections of manuscript works on medicine written in the Irish language. Many of them are dated in the fourteenth century, and the caligraphy of several of them is quite equal to anything of the kind met with in monastic manuscripts. Epidemic influenza is first described in an Irish manuscript of the fifteenth century under the names of *fuacht* and *sloadhan*. That medical men occupied a definite position amongst the Irish from the sixth to the fourteenth century is evident from the clauses referring to them in the Brehon, or Irish code of laws, and about 1000 years ago it became the practice in Ireland to adopt medicine as a hereditary profession. There were very few books published in Ireland during the sixteenth century, and there is reason to believe that the first medical work by an Irish author which appeared in type was Dr. Anguilbert's "Mensa Philosophica," published in Paris in 1530. Dr. Thadeus Dun practised in Switzerland and published in 1591 his "Epistolæ Medicinales," and was probably the first to suggest the use of the warm bath in tedious labour. The first medical work printed in Dublin was by Dr. Dermod O'Meara in 1619. Other authors of medical works were numerous, and include the names of O'Glacan, O'Connor, Stearne, Temple, Molyneux, Mullin, Patterson, Boyle, Greatrakes, Bellon, Allen, Bryan Robinson Rutty, Cope, Cheyne, Lucas, Hopkins, Silvester O'Halloran &c. The last-named in his writings shows that Petit was not, as generally supposed, the first to extract an opaque crystalline lens, that operation having been described by an Arabian physician, Jesus Hali Arculanus, and other ancient authors. O'Halloran was also the first writer who demonstrated that trephining was unnecessary in certain cases of depression of the bone; and was the first to perform amputation of the thigh by a long anterior flap and a short posterior one, formed by a circular division of the soft structures. In former times physicians, as a rule, were graduates of universities, while surgeons learned their art just as the goldsmith or the tailor, by an apprenticeship to a master; hence the surgeons were classed with the higher ranks of tradesmen and the physicians with the members of the liberal professions. This is the reason why surgeons did not receive until after their incorporation into a Royal College the title of "Esquire." On October 18th, 1446, King Henry VI. established by Royal Charter a Fraternity or Guild of Barbers. The Dublin fraternity were styled simply barbers, but "barber" was the exact equivalent for "surgeon" in those days. The Charter of King Henry enabled women to be admitted to the freedom of the guild—a proof that even in those early days women aspired to be disciples of Æsculapius. Queen Elizabeth's Charter was granted in 1572, and the third Charter was given to the Dublin surgeons in February, 1687, in the reign of James II. The Charter granted to the King and Queen's College of Physicians in 1692 prohibited any person practising medicine in Dublin, or within seven miles of that city, without a licence from the College; yet many graduates of British and foreign universities practised in Dublin, and were never licensed by the College. From the close of the seventeenth century the barber-surgeons appeared anxious that the members of the different crafts should keep to their special calling. Members belonging to the barbers' crafts were restrained from practising surgery, except bleeding or the drawing of teeth; and the medical barbers and the wig-makers were, under pains and penalties, prevented from practising pharmacy. A Charter granted by George II. incorporated the Dublin apothecaries into a guild, dedicated to St. Luke, and in 1792 an Act of Parliament constituted the apothecaries into the corporation of the Apothecaries' Hall, which still exists. In 1784 the union between the barbers and surgeons was dissolved *de facto*, though perhaps not *de jure*, by the creation of a Royal College of Surgeons in Ireland; and the Irish surgeon's privileges were no longer confined within the narrow boundaries of a civic trades' union, but he became a constituent of a national institution. The Barber-Surgeons' Company were, however, not dissolved, nor were they expressly forbidden to continue styling themselves the "Fraternity of Barber-Chirurgeons."

It is evident that there were very few opportunities of studying anatomy in Ireland up to the middle of the last century, and the instruction in the medical school of the University of Dublin appears to have been confined chiefly to professorial demonstrations. That the College of Physicians occasionally claimed the bodies of executed persons is shown by some records of that institution. An account-book, beginning in 1672, mentions the items of expenditure incurred in connexion with the dissection of a body. The total is £2 4*s.* 10*d.*, of which 9*s.* was given to the "souldiers who watched," and 3*s.* to "the said souldiers in drinke." Robert Hoyle was the first anatomical lecturer in Trinity College, and was succeeded by Bryan Robinson, an eminent *physician*.

The office of State Chirurgeon, or Surgeon, was created by patent on July 1st, 1774, the first State dentist was appointed in 1821, and the first State oculist the following year.

The first purely surgical examining board in Ireland was created under the provisions of an Act of the Irish Parliament, passed in 1765, establishing county infirmaries for the reception of poor persons suffering from non-infectious diseases, or diseases requiring surgical treatment. The Act provided that no surgeon should be appointed to a county infirmary unless he had been examined and certified to be competent by a board of surgeons. The board consisted of the surgeon-general and the surgeons to Steevens' and Mercer's Hospitals for the time being. On Sept. 1st, 1766, the first candidates were examined in the following subjects: anatomy, including osteology, myology, angiology

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neurology, and splanchnology; surgery, including wounds, fractures, and dislocations, tumours and ulcers, operations of the head, trunk, and extremities; and chirurgical pharmacy. The fee for examination was £1 2*s.* 9*d.* In 1791, the board passed a resolution in favour of transferring their powers to the College of Surgeons. On March 29th, 1780, a number of surgeons constituted themselves into the "Dublin Society of Surgeons," and having applied for a Charter, they obtained it in February, 1784, and their corporation was entitled the Royal College of Surgeons in Ireland. The College consisted of a president, six censors, and twelve assistants, Samuel Croker King being the first president. By the terms of this Charter all members of the College, so long as they practised surgery, were freed and exempted from the several offices of constable, churchwarden, and all other parish, ward, and leet offices, and from serving upon any jury or inquest in any county, city, or town in Ireland. The first meeting of the College, we may add, took place, in the Rotundo Hospital, the great maternity founded by Bartholomew Mosse. Before the establishment of the College of Surgeons, it was unusual in Ireland for physicians to meet surgeons in consultation, but in 1785 the College adopted the report of a special committee, recommending in the interest of the public that the members of the professions of surgery and physic should reciprocally consult together. In 1789 the College acquired premises in Mercer-street, and in this year the income of the institution was only £65 8*s.* 3*d.* In 1805 it received a grant of £6000 from Parliament, and in the same year an agreement was entered into for a new site, in the position in which the College now stands, and which previously was a cemetery belonging to the Society of Friends. The foundation stone of the new buildings was laid on March 17th, 1807, and a grant was obtained the same year of £4500, another in 1808 of £9517, and the same year a further grant of £5300.

Sir Charles Cameron's book, which contains 759 pages, is a large and handsomely got up volume, the type being remarkably good; and its perusal will be of interest not only to the medical profession, but to the community at large.

OUR LIBRARY TABLE.

Materia Medica: a Manual for the use of Students. By ISAMBARD OWEN, M.D., F.R.C.P., Assistant-Physician and Lecturer on Materia Medica at St. George's Hospital. Second Edition. London: J. and A. Churchill. 1886.—We have much pleasure in recording the appearance of the second edition of Dr. Isambard Owen's Materia Medica. It has no pretensions, as the author states, to be considered an original or complete treatise on the subject, and is simply intended to aid students by placing before them the main facts in such a manner that they may be clearly grasped and readily committed to memory. In the present issue a chapter has been added on the "medicinal uses" of the Pharmacopœial drugs, a subject on the accurate knowledge and understanding of which great stress is now laid by the various examining boards. Dr. Isambard Owen has performed a difficult task with discretion, and his work is deserving of much praise.

A Practical Treatise on the Sputum. By G. HUNTER MACKENZIE, M.D. Edinburgh and London: W. and A. K. Johnston. 1886.—The impetus given to clinical microscopy by the discovery of micro-organisms specific to such diseases as pneumonia and phthisis is reflected in this work, which is the outcome of much original observation, and is very well worthy of perusal. We note that the pneumococcus is not held to be distinctive of pneumonia, and a case of pulmonary congestion and hydrothorax is given where it was present. The value of elastic tissue in the sputum as diagnostic of acute phthisis is shown to be over-estimated, but the bacillus tuberculosis was found by the author in all but eight out of a total of 100 cases of phthisis, these eight cases including four of chronic phthisis, where bacilli are notoriously few or even absent. The work contains also a study of the sputum in laryngeal disease, and some striking examples of the value of this research in tubercular and malignant affections are given. Two chapters are devoted to therapeutic indications, the results of climatic treatment and of local and general medication upon the tubercular bacilli being of especial interest. The work is admirably illustrated by numerous coloured plates, and full directions are given for the methods employed in the examinations.

Contra-indications for Visiting the High Altitudes, with a Description of the Environs of Maloja, Upper Engadine. By A. TUCKER WISE, M.D. Pp. 22. London: Churchill. 1886.—This is a reprint of about four pages of the author's work entitled "Alpine Winter in its Medical Aspects," which relate to the class of patients who should refrain from seeking health at high elevations. The remainder of it, on the summer attractions of the neighbourhood of the Maloja, is also taken from the same work, with some useful additions. The *brochure* is evidently intended not for the profession, but for the class of persons who resort to Switzerland in search of health, and to them it may prove useful as a guide-book. We cannot, however, but regret the insertion at the end of the pamphlet of four pages of laudatory notices of the author's "Alpine Winter," reprinted chiefly from newspapers.

The Therapeutics of Hydrophobia. By Brigade Surgeon WILLIAM CURRAN.—This readable pamphlet contains a variety of information, chiefly of the amusing order. "Touching the measures or media that have been so much lauded or relied on in this connexion, they vary so much as to imply, by that variation, that they are quite worthless. They include every wild herb, insane root, or shocking substance that Dioscorides described or Pliny portrayed, and they range from adders' tongues and 'a bit of the dog that inflicted the bite' to the 'scrapings of a tin kettle or of a pewter pot.' Men and women, too, have been cupped or cauterised in pursuit of this phantom till their flesh fizzed like a rasher on a gridiron; they have been bled or blistered for it till they fainted away, or looked as red as a rose or as blotched as a boiled lobster."

Proceedings of the Medical Society of London. Vol. VIII. London: Harrison and Sons.—This volume contains the following valuable papers, among others:—Sir Joseph Lister: On Corrosive Sublimate as a Surgical dressing. Dr. Kingston Fowler: On Functional and False Murmurs. Dr. Markham Skerritt: Conduction of Physical Signs in Diseases of the Lungs. Sir Andrew Clark: Relapsing Pneumonia. Dr. S. West: Case of Aphasia, with lesions about the angular gyrus. Mr. Henry Morris: Surgery of the Kidney. Dr. Beevor: Paralysis Agitans without Shaking. Dr. Coupland: Malignant Endocarditis. Dr. Ord and Dr. Semon: Note on Laryngeal Paralysis in Locomotor Ataxy. Dr. H. Bennett: Brachial Monoplegia from lesion of internal capsule.

Outlines of Infectious Diseases, for the use of Clinical Students. By JAMES W. ALLAN, M.B. London: J. and A. Churchill. 1886.—This little book bears evidence of having been carefully compiled, and its author's position at the Glasgow Fever Hospital entitles him to write with authority. Dealing with the salient features of the leading infectious diseases, it conveys considerable information within a small compass; and being both concise and accurate, it should be of considerable service as a guide to students.

The Dublin Journal of Medical Science. March, 1886.—The original communications of the current number are—(1) Therapeutic Uses of Digestive Ferments, by Dr. Purser; (2) A Case of Spina Bifida treated by Excision, by Dr. Thomas Sinclair; (3) The Poor-law Medical Charities System of Ireland, by Dr. Jacob; (4) Goitre in the Himalayas, by Brigade-Surgeon Wm. Curran; (5) Experimental Researches upon Tuberculosis and Scrofula, by Edwin Wooton.

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THE LANCET.

LONDON: SATURDAY, SEPTEMBER 4, 1886.

James Goodchild Wakley, M.D.

In Memoriam.

IT is a happy dispensation of nature that sorrow is not a communicable evil from one person to another. And yet we feel sure that the deep personal sorrow in which we who are immediately connected with THE LANCET are this day plunged will touch the kindly sympathy of our readers all the world over as they learn that, under the disposing will of GOD, the chief directing hand connected with this journal is for ever at rest.

We cannot in these columns, at this moment, speak at any great length of him whom we knew so well, and whose active and useful sphere of human labour is now closed. We should feel it best to be most reserved. under the cloud of sadness which naturally oppresses us, at such a solemn moment; but we may with confidence say a few words respecting our late chief beyond what is merely biographical, and beyond what we could have ventured to have said while yet he lived.

No one exercising an important public post, and exerting through it a daily living influence on the profession of medicine, was ever more retiring from professional social life than the late Dr. WAKLEY. His father, the founder of THE LANCET, was essentially a public man; he was met in all circles, and enjoyed as much as anyone the life of society when it did not interfere with the duties pertaining to his laborious undertakings. But JAMES WAKLEY cared for none of these things. Punctual to his daily tasks as man could be, watchful over every line and word that was to be published under his direction, industrious in the steadiest sense of the word, he was only too happy, as the weight of each week's work was removed, to escape from the scene of it, and in country life, away altogether from the bustle of society and the arena of dispute, divert himself in his own way until the time came for him to be once more at the desk. This pronounced taste has had a remarkable effect on the tone of THE LANCET since it has been under his exclusive leadership. It qualified the intensity of the fire of the journal, while it kept the fire genially alive. A man so retiring escaped the danger of personal conflicts, and was enabled to treat the disputes of others, which came officially before him, with such fairness and goodwill that during the long period of twenty-five years of editorial responsibility no touch of rancour or personal injustice can, we believe, be discovered on any page. In addition, Dr. WAKLEY possessed what was essentially a gentle nature visible always when the little storms which sometimes disturbed it had passed away. The unsparing rod wielded by his father against all enemies, and the sometimes too great admiration extended by his father to attached friends—extremes which are so commonly marked in men of the most powerful order,—were extremes unknown in him. He is supposed, indeed, to have erred more than once in the opposite direction, and, from desire not to inflict pain, to have sometimes permitted editorial criticisms to fall perhaps too lightly. Some may have considered this a fault in an editor, but if so, it was a fault prompted by kindness, easily forgiven, and often too easily forgotten. In other respects he was, by instinct and training, every inch an editor. He did not write much himself, but he was skilful and keen in discovering men who could write, and what they could write; and he read every line that was written by his staff in which there was anything controversial with the most scrupulous nicety and supervision. He was bold in exposing evils of a general or public character; hearty in helping forward every public advancement; zealous to make THE LANCET the first chronicler of any new and promising progress in the science and art of medicine; and specially anxious to make it useful in works which were of a sound philanthropical and beneficent nature. His action in the investigation of abuses in the workhouses of the kingdom, and in the Metropolitan Hospital Sunday movement (his interest in which was recently strikingly shown by the suggestions he made for increasing the amount annually received) is sound proof of his generous nature as a public servant, teacher, and benefactor.

To say that he was fond of THE LANCET is to express a fact which everyone can understand. He loved it, and he lived for it, He was just old enough to remember through what struggles and difficulties THE LANCET had passed before it reached the commanding and successful position it had attained when he accepted the responsibility of conducting it. To succeed a man whose extraordinary strength of will, and power for the exercise of that will, were supplemented by acknowledged genius, was no light matter; and none knew better than Dr. WAKLEY the onerous risks involved in the task. He approached the labour determined to do his best, and if we, his successors, succeed in doing as well as he did, we shall, we trust, when the time comes, lay down the pen with equal resignation to the Supreme decree, and with equal hope of having helped to advance, in our sphere and to the best of our limited capacity, the comfort and happiness of our fellow-men.

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SINCE the almost simultaneous discovery in 1868 by NEUMANN of Königsberg and BIZZOZERO of Turin of the fact that bone marrow contained nucleated red blood-corpuscles, there have been many and repeated observations made upon this tissue with the view of establishing it as one of the main hæmopoietic organs, and of ascertaining how far it is affected in disease. The history of these researches is given by Herr GEELMUYDEN of Christiania, in a paper he has contributed to VIRCHOW'S *Archiv* (Bd. 105, Heft. 1), to which we may refer those interested in tracing such historical lines. But it will suffice here to follow the author along the course of his personal observations, which bear evidence of being as carefully made as they are clearly and succinctly stated. His purpose was to ascertain whether in disease the bone marrow undergoes any macroscopical or microscopical changes, and to study the various cell forms found in it, so as to ascertain how far the manufacture of blood-corpuscles takes place in this organ after the period of growth. Now it is well known that the marrow of the long hollow bones—e.g., the femur—differs from that filling the spongy tissue of such bones as the ribs, sternum, and vertebræ. It is a difference not only in colour—the one being yellow, the other red,—but also in constitution the former being largely fatty, the latter mainly composed of lymphoid tissue. It is in this lymphoid marrow that we may expect to find the hæmopoietic function seated, and its structure seems to denote this. It contains cells of various sizes, mostly rounded, and with a homogeneous or granular protoplasm. There are coloured nucleated corpuscles, some of which have more than one nucleus, but how such bodies became converted into the non-nucleated red corpuscle is not certainly known. Then there are the multi-nucleated myeloplaques, together with spindle-shaped and stellate cells, and pigmented cells—some of which contain red corpuscles embedded in their substance. Red corpuscles also abound, and fat-cells to a certain extent. In the fatty marrow which occurs in long bones there is little else but adipose tissue traversed by thin-walled bloodvessels, the variegated redness which is to be met with depending on the greater or less engorgement of these vessels, which readily rupture. The red or lymphoid marrow in certain conditions replaces the yellow or fatty, and, as just stated, exists always in certain spongy bones; and, histologically, it is composed of a framework of delicate connective tissue, sustaining thin-walled capillaries and vessels, which are surrounded by the cells above described, but with hardly any fat cells. In certain wasting diseases, such as cancer and tubercle, the fat disappears from the marrow of long bones just as it does from other parts of the body, and, not being replaced by any lymphoid tissue (as it is in pernicious anæmia), results in the conversion of the marrow into gelatinous material by mucoid change. Thus there are three varieties of bone marrow—the lymphoid, which occurs normally throughout the skeleton in fœtal life, and limited to spongy bones in adult life; the fatty, which fills the shafts of all tubular bones; and the gelatinous, which results from the degeneration of the latter. In certain diseases there may be a reversion of the fatty marrow to the lymphoid in the long bones.

It becomes, therefore, interesting to know under what morbid conditions the fatty marrow undergoes this conversion, and to that end the author has made many observations in disease, and collected recorded facts which he has embodied in an instructive table. He here gives in percentage the proportionate number of cases of various diseases in which the marrow of long bones presented the normal fatty condition and the abnormal lymphoid state; whilst, in parallel columns he has also placed the proportionate occurrence in the marrow of spongy bones of nucleated red corpuscles and pigment cells, indicative of blood formation. He thus contrasts cases of healthy individuals, killed by accident or in other ways, with cases of local disease and pure uncomplicated anæmia, as well as diseases in which there has been a general defect of nutrition—the secondary anæmias, so-called. To select only a few. The percentage of cases in which fatty marrow occupied the hollow bones was, in health, 100; in heart-disease, 83; in serous inflammation, 83; in anæmia from hæmorrhage, 83; in pernicious anæmia, 18; in Bright's disease, 100; in amyloid degeneration, 69; in cancer, 59; in chronic tuberculosis, 43. Lymphoid marrow was found in these bones in the following percentages: Heart disease, 8; serous inflammation, 17; pernicious anæmia, 82; amyloid degeneration, 6; cancer, 8; chronic tuberculosis, 13. Lastly, the gelatinous marrow occurred in 8 per cent. of the cases of heart disease, in 25 per cent. of those of amyloid degeneration, in 33 of cancer, and in 43 of chronic tuberculosis. Of diseases of the œsophagus, stomach, &c., which induce inanition, 80 per cent. yielded fatty marrow and 20 per cent. gelatinous marrow in the long bones. The most striking fact in these figures is the very high proportion of cases in which lymphoid marrow replaces fatty marrow in pernicious anæmia.

The reason why there should be this remarkable conversion of medullary tissue in such a disease as pernicious anæmia has been the source of considerable speculation. If the lymphoid form of marrow is concerned in the manufacture of red corpuscles, the only feasible explanation is that the change is of a secondary or compensatory kind, to make up for the corpuscular destruction to which the anæmia may be ascribed. Further support of this is found in the extremely large proportion of nucleated blood-corpuscles found in the marrow in this disease, indicating, it is conjectured, an increased activity of blood cell formation. It is true that COHNHEIM interpreted the presence of these nucleated corpuscles in another way—viz., that owing to defect in the formative process, the corpuscles remained in an immature embryonic state; but this view does not meet the question of the remarkable substitution of inert fatty marrow in the hollow bones by the active lymphoid tissue. Moreover, this substitution occurs, although to a less degree, in many other diseases which are characterised by anæmia, depending on loss or waste of blood constituents. In leukæmia the marrow is found to undergo hyperplasia similar to that which affects other lymphoid organs, and there is one case recorded by LITTEN where leukæmia developed on pernicious anæmia. This, however, is the only instance where a true hyperplasia has been found in pernicious anæmia, so that the phrase "medullary pseudo-leukæmia," applied to this disease, is a misnomer. A further peculiarity of bone marrow in pernicious anæmia is the frequent presence therein of large cells containing blood-corpuscles and pigment, suggesting that destruction as well as regeneration of corpuscles

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goes on in this tissue. It must not be supposed that this is the efficient cause of pernicious anæmia, for the same appearances are to be found in cases where the anæmia is less permanent. On the contrary, the presence of these corpuscle-holding cells is more likely due to the peculiar condition of the circulation in the marrow, rendering hæmorrhages more liable; and when to this is added the special proclivity to hæmorrhage that characterises pernicious anæmia, the presence of such cells and of pigment in excess is accounted for.

GEELMUYDEN has also examined the blood-forming organs (especially the marrow) of frogs, toads, newts, fowls, rabbits, and kittens, with the object of tracing the development of the red corpuscle. His research here was not very profitable, but in a few instances he obtained evidence of the division of blood-corpuscles (as in the frog's spleen), and of transitional forms between the colourless marrow cells and red corpuscles (as in the fowl). Although we cannot think that much advance has been made by this contribution, it has no small merit of clearly defining the aspect in which the bone marrow as a hæmopoietic organ should be regarded; whilst the statistics supplied as to the changes undergone by the marrow in disease may afford a valuable starting-point for further investigation. It is now hardly disputed that bone marrow is concerned in blood formation, but it is still undetermined to what extent this function is performed during adult life, and in particular are we as yet ignorant of the precise pathogenic history of progressive and so-called "idiopathic" anæmia.

THE term "spaying" is one whose meaning is well understood generally by medical as well as non-medical persons. It has this great advantage, as is pointed out in our columns this week by Dr. GRIMSDALE. As practised in this country upon animals, the operation consists in the removal of the ovaries and Fallopian tubes, or uterine appendages. Objections have been raised to the term on grounds which are untenable. An operation should be named not by reason of the, motive with which, or the purpose for which, it is done, but according to its nature from an anatomical point of view. In England spaying means removal of the uterine appendages, and castration the removal of the testicles, with whatever motive or for whatever purpose such organs are excised. In Germany there is but one term, "castration," for the two operations, and "castration der Frauen" is the phrase used for the removal of the uterine appendages in the human female, and is the equivalent of the English phrase "spaying of women." When BATTEY proposed the removal of one ovary in the human female for certain suffering, he suggested the term "normal ovariotomy" for the operation, because it consisted in the removal of an ovary still functionally active. This is not spaying, and the word "spaying" would have been inapplicable to it, for the word means removal not of one but of both ovaries. It was, however, soon discovered that the removal of one ovary was insufficient, and that if operations for the removal of active ovaries were to be performed at all, both glands should be removed in every subject. Now the term "spaying" became appropriate, and the only appropriate English word for the operation, and intelligible to everybody. At this juncture Dr. MARION SIMS proposed the expression "Battey's operation," and it was adopted, but in a half-hearted sort of way. Mr. TAIT calls the operation "removal of the uterine appendages," a phrase to which there can be no objection on anatomical grounds, but which is clumsy when compared with the single and expressive word "spaying," and has at the same time the disadvantage of being quite unintelligible to all except scientific persons. Some Americans have called it "Tait's operation." Three surgeons claim the discovery of this innovation: BATTEY in America, TAIT in Birmingham, and HEGAR in Germany. The operation has been called after the first two by some, both in England and in America, but no such folly has been perpetrated in Germany. There the term "castration" is applied to the operation, and no patient can mistake what it means; and with such an expressive English word as "spaying," understood of all—a word which was used for the operation before BATTEY, TAIT, or HEGAR thought of performing it in the human female,—with such a word for our use, it would be ridiculous and absurd to use a long phrase to designate it. We can conceive no objection to the word "spaying," but the patient upon whom the operation is to be performed should clearly understand what she is really about to undergo.

A CONSTANT current of electricity passing through a length of nerve causes a contraction in the muscle to which the nerve belongs only on making and breaking the circuit, or when the intensity of the current varies. The faradaic current, or rather series of shocks, causes a state of continuous contraction called tetanus. It is conceivable that a certain kind of nerve impulse might cause a continuous contraction of a muscle. As we cannot induce this by any known means, there exist sufficient reasons for doubting whether Nature works after this fashion, or whether she does not act in conformity with known principles. Most probably there is a series of impulses traversing the motor nerve when a voluntary contraction takes place—that a muscle then is thrown into a state of tetanus. Direct evidence of the tetanic nature of a voluntary muscular contraction has hitherto been wanting. The evidence on which the opinion is based, that the contraction is discontinuous, is by no means of a conclusive nature. It is asserted that a muscle contracting under the influence of the will gives a sound, of musical quality, composed of a definite number of vibrations caused by a corresponding number of muscular twitches fused into the tetanic contraction. This conclusion was apparently supported by the fact that the sound emitted by a contracting muscle corresponds, as far as can be made out, with that of a vibrating metallic reed or tuning-fork which is employed to interrupt a galvanic circuit stimulating the motor nerve. The first sound of the heart is almost certainly the product or accompaniment of a single act of the ventricular contraction, and yet this sound has the same characters as the muscle contracting under a volitional impulse. It has also been shown that the muscular note of voluntary contraction is not constant, but varies with the tension of the muscle. The note heard from a voluntarily contracting muscle consists of thirty-six to forty vibrations per second, but it is doubtful if this is any guide to the rate of muscular response. The experiments of HELMHOLTZ showed that the vibrations of the muscle were only about half as

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numerous as the number of vibrations in the note heard. He also pointed out that the muscular note is the resonance-note of the ear, and is capable of variation by merely modifying the resonance of the ear, as by performing VALSALVA'S experiment. The employment of the myographic method for demonstrating the discontinuity of the voluntary muscular contraction has in the hands of Mr. A. E. SCHAEFER, with the assistance of Messrs. CANNEY and TUNSTALL, proved of great service.[1] The conclusions of the authors are: 1. A prolonged voluntary contraction in man is an incomplete tetanus produced by eight to thirteen successive nervous impulses per second. 2. The average rate of muscular response to volitional impulses is approximately the same in man and many other mammals. 3. The average rate of muscular response to volitional impulses is the same approximately as the average rate of muscular response to rapidly recurring excitation of the motor nerve centres in animals. The average rate of muscular response to volitional stimuli in man is approximately the same as that obtained both in man and animals as the result of that excitation of the cerebral cortex that causes epilepsy (with explainable differences.) Further, the rate of muscular response to volitional stimuli in man is nearly the same as the rate of muscular response evoked by activity of the spinal cord alone.[2]

Annotations.

"Ne quid nimis."

CHOLERA IN SOUTHERN EUROPE.

CHOLERA continues to exhibit a further abatement in Italy. During the week ending August 31st, the recorded cholera deaths amounted to 227, as opposed to 318 in the week immediately preceding. There is also an absence of any further intelligence as to cholera from the Austro-Hungarian Empire. Reverting to Italy, it is noteworthy that the severe outbreak at Barletta, which at one time caused upwards of sixty deaths a day, is so far at an end that for several days during the past week the total daily cholera mortality has not exceeded one single death; and at the same time the only newly infected place in Southern Italy as to which statistical information has been received is San Giovanni Rotundo, close to San Marco in Lamis, which was first included in the mortality lists in the preceding week. But whilst this is the case, intelligence is received to the effect that cholera still holds its sway in Southern Italy in a large number of small villages, records from which are not transmitted abroad, and the *Roma* publishes a long list of those places where the disease still prevails. The outbreak in San Giovanni Rotundo is severe. The place has only some 8000 inhabitants, and over 100 have already died of the disease; indeed, in the last two days of August the attacks numbered forty-six and the deaths nineteen. The sanitary state of the town is spoken of as being very bad indeed; many of the inhabitants living in so-called grottoes, which, as a rule, are densely-crowded, underground apartments shared by members of more than one family. They are spoken of as "stables of human beings." In North-eastern Italy a decided abatement of the disease has taken place, and although records are still received declaring the prevalence of cholera in many localities, yet the low rate of deaths to attacks in some towns justifies the caution which has been issued as to regarding all the cases referred to as genuine cholera. But, on the other hand, the mere fact that this low mortality prevails here and there cannot do away with the inference to be drawn from the persistent prevalence of so fatal a disease as that which still obtains in such towns as Ravenna. In that place there were eighty-nine attacks and fifty-seven deaths in the last week of August, and we are not aware of any disease which can persistently week after week cause so large a mortality as this, and which can be continuously mistaken for cholera. Associated as the outbreak is with unquestioned cholera in the south, it is evident that this same disease prevails further north, although in some places fatal diarrhœa or some other allied disease may be included in the returns of cholera mortality.

[1] Journal of Physiology, vol. vii., No. 2.
[2] See THE LANCET, p. 359.

FRANTIC PHYSIOLOGY.

WE have not a word more to say on the subject of "fasting" girls and men, whether the agent of self-control in the process of starvation be hysteria or a morbid longing for notoriety. These performances ought to be put down, or, if that cannot be accomplished without undue encroachment on "the liberty of the subject," discountenanced by the press and public opinion. We hold it culpable on the part of the newspapers to lend their columns to the support of these wanton exploits, even in the season when, as the *Saturday Review* once put it, "everything persists in not happening." What if it be possible to fast forty days and forty nights, where is the good of the achievement? The practice of abstinence carried thus far is scarcely likely to be of any practical use except to ship-wrecked sailors or travellers in the regions of extremely bad cooking; and even in the face of such contingencies as may occur to the classes of society thus exposed, starvation will not, we venture to predict, be developed as a fine art. Meanwhile it is encouraging self-injury, if not actually self-murder, to countenance wanton risks of any sort, whether by voluntary starving in the midst of plenty, or by trying to "shoot Niagara" literally instead of metaphorically. There is, however, a phase of the sensational starving system in respect to which it does seem necessary to say a few plain words to physiologists who appear to be in danger of losing their heads scientifically. It is, we cannot help thinking, a peculiarly profitless, and may readily be made a mischievous, enterprise, to patronise the attempt to reverse the order of Nature by perversely and persistently refusing to satisfy her demands. The policy of the day in dietetics is confessedly one of "doing without" things. There may be reason in doing without certain creature comforts which habit has almost dignified with the character of necessaries, though even this abstinence may be carried too far, inasmuch as the whole question of necessaries and superfluities is one of *relativity*. For example, if we take certain forms of food, it is better to take therewith appropriate condiments. Even so simple a matter as roast beef digests, according to Beaumont, something like half an hour quicker with mustard than without. It is desirable to recognise this relativity, and to abstain from quoting absolute laws to interpret the working of relative processes. Apart from this, and strictly within the limit of plain facts, it is *not* desirable to waste scientific strength and time in the pursuit of phantoms. We do not need to know precisely how far the refusal of food may be pushed without causing death. Nothing would be gained by such knowledge, and it is a scandal to science that physiologists here or on the Continent should express or betray the slightest interest in such vagaries as those which are again in peril of becoming fashionable. It would seem needless, though in fact it is necessary, to remind the quasi-medical public that it is perfectly well known that coca leaves chewed with lime

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will so deaden the nerves of taste, and probably those of digestion also, that the organic need for food is not felt, and that by this practice the natives of certain districts do actually abstain from food for days together, particularly after eating so large a meal as to emulate the Greenlander's thirty-three pounds of blubber. It is probable that there are several varieties of leaves which will answer the same purpose as the coca. These are not, however, valid reasons why there should be a revival of the folly of starving for weeks together, and against this or any similar sensation, whether by the chewing of leaves or roots, or the drinking of infusions, decoctions, and elixirs, we most earnestly protest. If such things must be, let men of science and, above all others, medical scientists, show their sound sense in refusing them their countenance, even by the profession of an interest and curiosity which they cannot rationally possess.

TUBERCLE BACILLI AND HEREDITY.

DR. CURT JANI has examined the healthy sexual organs of nine phthisical patients for tubercle bacilli. No bacilli were found in any of these cases in the semen from the vesiculæ seminales, but, on the other hand, in five cases out of eight a small number were found in the testicle and in four out of six in the prostate. There was no pathological alteration in the tissue of the testes. Beside these cases, Dr. Jani found in one case of acute miliary tuberculosis numberless tubercle bacilli in the tissue of the prostate. He, further, examined two women who died of pulmonary phthisis, the ovaries both times presenting negative results; in one case of chronic pulmonary phthisis, with extensive intestinal tuberculosis, he examined the tubes and found tubercle bacilli. Dr. Jani is of opinion that the tuberculous poison may pass to the fœtus in two ways—through the semen of the male, and through the migration of the bacilli into the womb from the abdominal cavity. Infection of the ovum after impregnation by the placental circulation he thinks must be unusual, because the examination of the body of a woman, five months pregnant, who died from acute miliary tuberculosis, in whom the general infection took place through the growth of a caseous mass in a pulmonary vein, showed that there were no tubercle bacilli either in the placental attachment or in the lungs, liver, kidneys, or the epiphysial lines of the different bones of the fœtus. Dr. Jani, however, considers that it is by no means certain that in chronic miliary tuberculosis deposits may not form in the neighbourhood of the placenta, and thus infect the fœtal organism.

SEWAGE EXPERIMENTS AT GUILDFORD.

A REPORT has recently been presented to the Guildford urban sanitary authority on experiments made to test the efficacy of Mr. Conder's system for the treatment and purification of sewage by means of certain ingredients, a principal one of which is sulphate of iron. The report states that there are no proper drains in Guildford for sewage, that the whole of the drains of the district have been laid down for surface water only, and that the outfall is to the river. The method adopted which seems to have best succeeded was to construct an open wire-work cage in which the purifying material was placed, and then to let down the cage into the sewer, so that it should be immersed to the extent of about an inch and a half in the flowing sewage, the sulphate being thus dissolved by the sewage without occasioning any impediment. The result is reported to have been a vast improvement in the character of the liquids flowing from the drains into the river, and an abatement of nuisance at points where heretofore nuisance and offensive smells had been complained off. In so far as such results could always be secured, some place more worthy than Guildford might be found to which it should be applied, for, as the surveyor very properly remarks, any benefit to be derived from such a system in that town can only be regarded as temporary, the real need of a proper system of sewerage still remaining. If Guildford must resort to temporary expedients for a while, it may go on with this system with some advantage, but nothing that can be avoided should be allowed to stand in the way of removing from the borough its present reproach as to sewerage arrangements.

DELHI BOIL.

DR. CUNNINGHAM has discovered a peculiar parasitic organism in the Delhi boil ("Scientific Memoirs of Medical Officers of the Army of India," Part I., Calcutta, 1885). The organism in question, brought into view by the use of gentian-violet, was found amidst the lymphoid elements that form the substratum of the boil. The organism is on an average larger than a lymph-corpuscle, but great variations as to size and form were met with—some being circular, others elliptical, others lobate. They contain nuclear-like bodies, which have an affinity for the staining material, and in some specimens present an appearance like that of actinomycosis. The organism occurred in variable numbers in different specimens, and in some were apparently undergoing division. Their most frequent seat was the layer of granulation tissue beneath the papillary layer of the skin; but in places they occurred within the papillæ, and exceptionally even in the epidermis. They were also met with in the subdermal tissue. No definite conclusion as to their nature could be arrived at; but until their life-history can be studied they might be classed provisionally with the Monadineæ among mycetozoa. As to their connexion with the disease, it is obvious, Dr. Cunningham points out, that they cannot gain entrance by a raw surface, since no such condition exists, and the epidermis is abnormally thick and resistant. This very fact, however, suggests the notion of their being causally related to the affection—an idea further borne out by the endemic occurrence of the disease and its connexion with water-supply. It is possible that they gain entrance through the hair follicles and sweat glands, around which the inflammatory changes are most marked and the organisms most abundant. The distribution of the organisms also indicates the need for free excision in the treatment of Delhi boil. "It is quite possible," adds Dr. Cunningham, "that similar changes may be produced by other parasitic organisms, or that the lesions may arise apart from any parasitic agency."

THE INFLUENCE OF MEDICINES ON DIGESTION.

THE rational method in therapeutics is founded on knowledge acquired largely from the experimental laboratory. Any careful investigation in the chemical department of physiology must ultimately prove of value, even though its present effect on practice may be slight or altogether lacking. O. Petersen, of St. Petersburgh, has ascertained the influence of certain medicines on the duration of digestion. The inquiry was of the simplest order, as must necessarily be the case in exact experimentation. The problem Petersen set himself to solve was to ascertain the time required to digest twenty to forty grammes of dried albumen by the aid of 450 c.c. of an artificial gastric fluid made of one gramme of pepsin to a litre of water and ten grammes of hydrochloric acid. Alcohol in the proportion of 5 per cent. did not hinder the digestion, but when the percentage rose to 10 digestion was stopped, whilst first being retarded proportionately before that percentage was reached. Antipyrin, in doses of two to two and a half grammes, exercised no influence on the rate of peptonisation, though larger quantities slightly retarded the action. One or two

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grammes of bromide or iodide of potassium hindered the process a little. The organic preparations of iron scarcely affected the time required for the digestion, whilst the reduced iron and the inorganic salts slowed the action. Magnesium and sodium sulphates, even in moderate doses, were in the same case. A gramme dose of chloral hydrate had no slowing effect, though marked retardation occurred with a dose of one gramme and a half. The chloride of sodium, as might have been expected, did not retard digestion, even when employed in large doses.

NOTHNAGEL ON THE TREATMENT OF PERICARDITIS.

PROFESSOR NOTHNAGEL of Vienna, in a clinical lecture on the treatment of pericarditis, advises that in cases where there is pain in the cardiac region, fever, and the commencement of exudation, leeches varying in number from three to ten, according to the gravity of the symptoms and the constitution and strength of the patient, should be applied. The leeches should be renewed every four or six days. Cupping may be substituted, but leeches are preferable. An ice-bag should be applied, or a directing apparatus through which cold water can be constantly supplied to the part. Cold compresses are of no use unless they are laid on ice, and then they must be changed every five minutes. Digitalis for internal use is indicated under certain circumstances. It is useful if the cardiac action is greatly increased, especially if there are signs of the heart muscle becoming implicated, when it should be given in somewhat larger doses. Digitalis is not desirable in the earlier stages of the disease, but in the later ones, when there are signs of weakness of the heart muscle and the pulse is weak, it is indispensable. Other internal remedies are useless. Mercurialisation—viz., calomel in small doses of three-quarters of a grain internally, and grey ointment externally—has no effect. The pain is scarcely ever severe, and if it is persistent it may be relieved by cold and blood-letting. To this a high temperature is no drawback, as the fever subsides as the inflammatory appearances disappear. If effusion has begun, other means must be used—such as counter-irritation of the skin and the promotion of reabsorption. Ice and blood-letting are of no use in this case. The cardiac region must be painted with equal parts of gall and iodine tincture, or an ordinary cantharides plaster may be applied, which should be kept on from eight to twelve hours till a blister is raised. This is of greater use in subacute than in acute pericarditis. Digitalis does not directly promote reabsorption, but indirectly by its influence on the action of the heart. Should the patient's life be threatened by copious effusion, paracentesis of the pericardium must be performed. This operation is often employed, and with not unfavourable results. Great care must be observed; the pointed trocar of Dieulafoy's apparatus must not be used, but a blunt one like that of Dr. Fraentzel.

THE SANITARY STATE OF COWES.

AN official inquiry into the sanitary state of West Cowes by one of the medical inspectors of the Local Government Board, and this in connexion with a prevalence of diphtheria, is of especial importance at this time of the year when that place is made a favourite centre for yachting and other holiday purposes. There is, however, no doubt that diphtheria has off and on appeared in the place, and that a recrudescence of the malady has been recently attributed to the prevalence of defective sanitary circumstances. As yet we have not seen Mr. Spear's report, but it is locally stated that he, having failed to attribute the disease to importation or to food supplies, has been obliged to regard it as due to conditions which ought to have been remedied long ago. Offensive emanations from sewers and drains and the lack of a sufficiency of water for flushing and other purposes have for some time past been complained of both in West Cowes and in East Cowes, and it is alleged that the shore is badly contaminated by reason of sewage which passes down the Medina from Newport. We have already pointed out that strong representations have been made to the President of the Local Government Board as to these matters, and since both the medical and the engineering departments of the Board have made local inquiries into the circumstances, it is to be hoped that measures will before long be adopted to remove all causes of unhealthiness and disease from a locality which should be so circumstanced as to attract visitors instead of frightening them away.

IRISH MEDICAL FEES UNDER THE LABOURERS ACT.

WE are glad to notice that after a discussion by the Waterford Board of Guardians, initiated by a protest by Mr. J. B. W. Cane against the existing scale of fees for medical reports on cottage property under the Irish Labourers' Cottages Act, the fee for a report has been raised from 5*s.* to 10*s.* 6*d.* The fee was low enough in all conscience. According to the clerk of the Board, it would not in some cases pay the medical officer's car expenses in doing the work. But, low as it was, it seems only to have been paid in cases where the report was unfavourable. Mr. Cane in his letter said truly that this was an inducement to condemn houses all round. The chairman resisted the payment, and said that the Local Government Board had informed them that the medical officers were bound to give the certificate without pay. He surpassed the Board in unreasonableness by saying that every dispensary doctor who knew his district properly could sit down in his parlour and write down a certificate for any cottage in his district. What prodigiously clever men the dispensary doctors of Ireland must be! One sentence in the report of the Board interests us. The seconder of the motion for increasing the fee from 5*s.* to 10*s.* 6*d.*, said that 5*s.* was a fee that no guardian, even a poor one, would offer to a regularly qualified medical man for visiting his own family. We wish we could say as much for England, which is generally considered the wealthier country. We want to know a good deal more about medical services and their remuneration in Ireland. The motion finally was carried unanimously.

MICRO-ORGANISMS IN UNINFLAMED JOINTS.

THE occurrence of pathogenic micro-organisms in the synovial fluid of inflamed joints due to diseases of different kinds—as, for example, pneumonia, diphtheria, erysipelas, and glanders—having been amply demonstrated by Schüller (*Archiv für Klinische Chirurgie*, Bd. 31, Hft. 2), and no information existing in medical literature as to the examination of the synovia of patients suffering from infectious diseases without concomitant articular inflammation, Dr. Smirnoff of Kazan wished to discover whether in all cases of infectious disease pathogenic schizomycetes migrate into the joints, or whether this occurs only sometimes. He therefore made a series of observations on the bodies of patients who had died of various diseases, but had had no articular inflammation. As a rule the knee-joint was chosen for examination, though in cases of great emaciation from phthisis, where the fluid in the knee was too small in quantity for the purpose, the shoulder-joint was selected instead. It was first carefully inspected to ascertain that there were no signs of inflammation, as redness or swelling. The surface was then washed, together with the knife and the glass

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slides required, with a solution of sublimate. A lateral incision was then made, and some of the viscid synovia transferred to the slides and dried. They were then passed several times through a gas flame, and afterwards the preparations were stained with fuchsin, gentian-violet, methyl-violet, &c. and examined microscopically, the observations being in all cases verified by Professor Lubimoff. In five out of nine cases of uncomplicated croupous pneumonia, micro-organisms like Friedländer's diplococci with capsules were found. In two cases of pneumonia complicated with purulent meningitis staphylococci were distinctly recognised. Koch's bacilli were found in three out of eight cases of phthisis. In three cases of recurrent fever (*febris recurrens*), in two of miliary tuberculosis, and in two of Siberian plague no micro-organisms could be detected. Cocci were seen in one case of erysipelas, one of malignant pustule, and in one of frostbitten toes with septicæmia. Three more cases gave negative results—viz., one of burn, one of purulent meningitis, otitis, and caries of the petrous portion of the temporal bone, and one of pericarditis, peritonitis, pleurisy, caseous pneumonia, and perimetritis. The most frequently seen micro-organisms were spherical and ovoid cocci, small bacilli being found much less often, and spirilla and curved bacilli being never seen at all, apparently finding themselves unable to penetrate the joint.

PROFESSIONAL SECRECY AND INSURANCE OFFICES.

THE question of professional secrecy after the death of the patient has been discussed recently in a French court of law under rather peculiar circumstances. A tradesman who was insured in a life office having died, leaving children under the care of a guardian, the insurance office required as a condition for payment of the sum insured to the deceased's heirs a certificate from the medical attendant setting forth the cause of death. This the doctor refused to give, saying that his relations with the deceased were of a confidential nature, and he had received no permission from him during his lifetime absolving him from the obligation of secrecy. The guardian then, who considered of course that he was acting in the interests of the heirs, wished to take the responsibility of absolving the doctor from the obligation to secrecy, but the doctor did not think anyone could so absolve him except the person to whom the secret belonged—viz., the deceased himself. The matter was referred by the doctor to the local medical body, whose opinion coincided with his own, that under no circumstances could he now be absolved from secrecy. The guardian then brought an action against the doctor to compel him to furnish the required certificate. The court, however, found in the doctor's favour, and gave him his costs. The law in France is very distinct on the subject of professional secrecy, assigning a punishment of imprisonment of from one to six months and a fine of from 100 to 500 francs for revealing such secrets, except in the cases where the law requires criminal information to be given; and it applies not only to doctors, but also to "pharmacists, midwives, and all other persons, who by their condition or profession are made recipients of secrets confided to them." This severe regulation has the advantage, it is true, of affording an answer to the importunities of friends or relatives who may be anxious as to the nature of a patient's malady. It might, however, be fraught with troublesome consequences if a patient were to feel aggrieved at its having become known that he had had, say, rheumatism, about which probably the advisability of secrecy or concealment had never occurred to his medical attendant. With us such enactments are relegated to the domain of medical ethics, and we try to act as far as possible in the interests of our patients.

OVERWORK OF TRAMWAY MEN AND OTHERS.

THE pressure of overwork is felt in every calling. With some of those who suffer it is self-imposed and, after a fashion, voluntary. It may be persisted in or repented of in the interest of health or of some convenience more desirable for the time than a gain in money. Quite different is the lot of the large class of over-wrought *employés*. Their labour also is, no doubt, for their own profit, but it is in the circumstances of their case practically involuntary, and their life as we now see it must be lived and ended in a galling harness of paid servitude. The two cases are by no means parallel, though they are sometimes taken to be so. The difference of circumstance is a very important one; and when it is shown, as it has been shown on credible evidence, that the daily term of fourteen to eighteen hours is nothing unusual for barmen, while sixteen hours per day are exacted of tramway men, Sunday rest being as a rule forgotten, and meals, one may say, surrendered to chance, the need of reform must appear to be beyond question. No healthy frame could be guaranteed to stand such a strain for long. The mere standing on the feet day after day for many hours is a tax of endurance of which those who merely witness it can have no due conception. Add to this the petty worries and interruptions of the work, the weather exposure, and the necessarily short allowance of nightly rest, and we have surely more than enough given in exchange for the wages. What becomes of intellectual and moral development it is fruitless to ask. Under all the conditions, and particularly in the face of a liberal turnover, we fail to see that employers, be they companies or persons, are justified in thus blindly enforcing the law of supply and demand with regard to labour. It is to be hoped that even common shrewdness, if no better sense of justice, will teach the careless among us that an early change in the present system is needed, unless the best part of our national vigour is to be needlessly buried in the coffers of invested capital.

THE CONDITIONS OF NEURASTHENIA.

MR. DE BERDT HOVELL has been repeating at Brighton his well-known views on the subject of hysteria. They are to be carefully received as those of a shrewd practitioner of long practice and large experience. He strongly protests against the whole hypothesis of *hysteria*. He thinks the theory that localises the disease in the uterus is the mere survival of medical demonology, which located ill-humour in the spleen, blue-devils in the liver, and the soul in the pineal gland. He claims for hysterical patients more fairness of treatment and more discrimination. He attributes many of the cases to shocks, physical or moral, leading to deficient or depressed nerve-power, with all that this implies in the way of pain, irritability, inability for locomotion, &c. Mr. Hovell admits that the cases are difficult to cure; but he maintains that if we are to deal with them effectually, we must "set aside all consideration of the organs of reproduction, which most probably are not concerned, and transfer our attention to the moral nature.' Mr. Hovell gives several cases in which there was a distinct history of shock or exhaustive work to explain the breakdown in the nervous system. We live in days when the nervous system is getting its full share of attention from pathologists and physicians, and when even gynæcologists are finding out that the uterus and even its appendages, which are now blamed by some for everything, are not such culprits as has been supposed. Mr. Hovell will admit that the cases of so-called hysteria do occur chiefly, though by no means exclusively, in women. In their organisation there is *something* specially favouring the occurrence of this state or disease. It may not be in the special organs of the female so much as in the special

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organisation of the nervous system. Mr. Hovell deserves much credit for insisting on this point, and he may well be satisfied to know that the drift of opinion among physicians is towards the acceptance of his views. Women are more finely strung than men. They are more liable to pain or pains of all sorts from mere functional causes. Such a constitution is perplexing to the physician, but it has to be considered, and not treated as a sort of crime, as has too often been the case.

THE BIRMINGHAM MEETING AND DIRECT REPRESENTATION.

WE have received several letters on this subject. One correspondent asks why Birmingham should have been selected. Birmingham, we all know, has the reputation of being a place where elections are "worked"; it is the seat and centre of the caucus. This may excite a considerable prejudice against any action of the committee. It is a bold thing, too, on the part of any *one* committee, after the British Medical Association has declined action as an association in this matter, to seem to dictate to the practitioners of all England. But there is another side to the question—there is really good committee work to be done. And if there were not to be two or three committees, for which there is much to be said, Birmingham has no slight claim to have a voice in this matter. She contains two practitioners who have done valiant service in this cause. Mr. Sampson Gamgee was the originator of the first great monster petition for direct representation, which remains historical in this matter; Sir Balthazar Foster, during his brief stay in Parliament, had much to do in getting an extra direct representative for the profession. Birmingham will have quite enough to do in deciding which of these gentlemen is to be preferred as a candidate. They both labour under the serious disadvantage of not being general practitioners, but they are untrammelled by official connexion with corporations, and have given noble proof that they prefer the profession to any of its mere guilds. We are in no humour, therefore, to be too hard on Birmingham or on those who selected it, but clearly the movement will require to justify itself by impartiality and breadth of view; any cliquism would be immediately detected and resented. We gather from Dr. Carter's letter that the meeting at Birmingham will be a meeting of the profession in the broadest sense of the word, and will rise above all local or narrow feelings. We accept these representations in good faith.

ETIOLOGY AND TREATMENT OF DIPHTHERIA.

M. DELTHILL of Nogent, in an interesting communication read to the Nancy Congress, gave an account of the results of his method of treating diphtheria by the fumes of turpentine and coal-tar, with local applications of turpentine. Of 134 cases so treated 126 were cured, and prophylactic measures of the same nature being rigorously enforced, only three mild cases of infection occurred amongst 670 attendants. Amongst other observations, he found that the saliva of diphtheritic patients is always acid, that the incubation period is about five days, and that diphtheritic matter which has not been destroyed preserves its infecting power for more than a year; also that the disease may "vegetate in a chronic manner" for several months in an individual. Perhaps, however, the most interesting part of M. Delthill's paper and of the discussion which followed related to the connexion between diphtheria in human beings and epizootic diseases. M. Delthill mentioned the case of a child with diphtheria at a farmhouse, where upon inquiry he found that two months previously to the child's illness the fowls had died of the pip (*pépie*), and that the pigeons had suffered from the same disease. The child had been in the habit of playing in the farmyard where the fowls were kept. M. Bouchard mentioned that he, too, had had a case of diphtheria in a farmhouse near Paris, where all the fowls had died of the pip. He remarked that in England the pip in fowls is called croup, and that he had no doubt that it had some connexion with diphtheria in the human subject. M. Delthill referred likewise in his paper to intestinal diphtheria, the existence of which was undoubted in the human subject, and of frequent occurrence in the calf.

VACCINATION AND THE DEWSBURY GUARDIANS.

THE difficulties which, for a long time past, have existed in the Dewsbury Union as to the administration of the Vaccination Acts, have by no means been removed by the recent action of the Local Government Board on the one hand and by that of the guardians on the other. Owing to the part taken by the guardians and their late vaccination officer in this matter, the Local Government Board a short time since issued an order specifying the conditions under which the vaccination officer was to perform his duties; but the Dewsbury guardians, finding this unpleasantly precise and strong in the direction of the fulfilment of the provisions of the statute, came to London and interviewed those who were then at the head of the Board, with the result that the central authority, after years of experience as to the real feeling of a number of these guardians as to vaccination, gave in, cancelled the order, and prepared a second one in its place. This substituted order has now been discussed by the guardians. It provides for the appointment of a single vaccination officer, who shall be paid a specified fee; it also requires the guardians to appoint a vaccination committee, which shall meet at least once a fortnight to receive, amongst other things, an account from the vaccination officer of those cases in which he has served notices calling upon parents and guardians to fulfil the law as to vaccination; and it proceeds to say that the committee "shall thereupon give directions to the vaccination officer, with respect to the cases so reported, as to the legal proceedings to be taken if the requirements of the notices are not fulfilled within the time therein mentioned." Now, governed, as any such order necessarily must be, by the Vaccination Acts themselves, it would appear that the only legal effect of this order would be to interpose an interval of delay in the action which the vaccination officer must take under the statute to enforce compliance with the law, for no order can apparently relieve this officer from the performance of the duty "to enforce the provisions of this Act" specified in the statute. The guardians evidently see this, and although, as one of their number pointed out, they had been told by an inspector that "the Local Government Board would not alter the laws," yet they are making a further stand. One guardian, by way of opposing the terms of the order, moved that nine vaccination officers should be appointed instead of the one officer named in the order; but the case was more boldly met by a declaration that the whole difficulty lay in the use of the word "shall" in the order, and the speaker hoped the guardians would resent this, for he declined to be made a tool of even the most respectable Government. Unfortunately for the argument, however, the Vaccination Acts are compulsory, and not permissive; and hence we do not see how, even if the Local Government Board wished it, they can alter the "shall" into the "may" which would enable the guardians to do as they liked, instead of being the instruments for carrying out a beneficial and salutary law. In the end, objection was taken to that part of the order which necessitated the giving of instructions to the vaccination officer as to legal proceedings, and it was decided to prepare a letter to the Local Government Board explaining the reasons

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why an alteration in the order, in this respect, was needed. The real question which is raised by this Dewsbury case is whether the law as to vaccination is to be carried out or suspended at the whim of the local guardians. The chairman, in fact, explained that the object of the Dewsbury guardians "was to prevent prosecutions of poor and helpless persons who were strongly opposed to vaccination," or, in other words, of people who were ignorant of the value of the protection afforded to the community by the operation; and it is certain that if the guardians did not enforce the law against these "poor and helpless" ones, they would not enforce it against themselves. So also, if such an order as the Dewsbury guardians want could be obtained for their district, there would be no reason why it should not be made general, and in this way the law as to vaccination would soon be abrogated. This it is that a few people, such as some of the Dewsbury guardians, want; and it is precisely this that the country and Parliament, which has passed a law which is to protect the "helpless" children of ignorant and careless people against the wholesale slaughter which small-pox causes in an unvaccinated community, cannot grant, whether by means of an order or otherwise.

CHOLERA BY POST.

ITALY, so far as her medical hygienists represent her, has shaken off her belief in land quarantine and in fumigations as counteractives to cholera; but she is still of opinion, if official regulation means anything, that the malady can be conveyed by post. Poor as she is, financially speaking, she can yet afford to burden her Ministry of Public Works with a heavy outlay for the practice of postal disinfection. But the money loss is not the worst of it. The practice keeps up a pernicious impression among her people, tantamount as it is to an official admission that the cholera contagium can be transported from place to place by a letter or a newspaper, so deepening the conviction in the ignorant majority that the disease is pre-eminently contagious. If (the populace may well argue) the Government thinks itself bound to disinfect folds of paper merely on the remote suspicion that they have passed through cholera-stricken hands; if Government *employés* specially told off for such disinfections are under rigid orders to touch those paper packets only with the tongs, and to put them into chests, exhaling carbolic acid before laying a finger on them,—what must not the danger be of approaching or touching a cholera patient, or even a person who has come from a cholera district? To tell communes that fumigations are useless, even prejudicial, and not to be applied to the stranger arriving on their frontier, and at the same time to deliver their letters and newspapers only when reeking with carbolic acid, seems curiously inconsistent to the popular mind, and not very edifying as a sample of official logic. Yet this is precisely what the Italian Government has done by the circular issued from the Sanitary Office on August 15th, 1885, and at this very moment still in force. So true is the remark of Pettenkofer that the question of cholera prevention is less one of science than of common sense. "If these practices are rational," says a high sanitary authority in Italy, "why apply them only when fear of cholera is imminent, while either before or after that period the post continually brings in correspondence from places where the disease is endemic? Since 1869, with the opening of the Suez Canal, postal communication with India has been multiplied, and yet no relative augmentation of cholera in Europe has been the result. England, indeed, offers us a standing example of the uselessness of such disinfections, disregarding them as she does altogether, and maintaining constant postal communication with the most infected spots of Europe and Asia. Conclusive evidence of the groundlessness of the fear of infection from correspondence is seen in the fact that letter-sorters and the *employés* in public departments and newspaper offices, who are in constant receipt of postal communications, are as little subject to cholera as their neighbours. Postal disinfection, in short, should be discontinued, as tending to induce or keep up popular panic, as a burden on the treasury, and as equally irrational with land quarantine, sanitary cordons, and fumigations of the person."

COCAINE IN ANGINA PECTORIS.

PROF. LASCHKEWITCH has found good results from the internal administration of cocaine (in doses of one-half to one-third of a grain three or four times daily) in cases of angina. It does not cut short an attack, but diminishes its intensity, and after a few days' consecutive administration it gradually diminishes the force and duration of the seizures until they may wholly disappear (*Rev. de Méd.*, Aug., 1886). He details four cases; one was that of a man thirty-five years of age, the subject of aortic regurgitation and dilatation of the aorta. Anginal attacks occurred as frequently as eight times daily, and were of the characteristic kind. He was obliged to keep his bed, but the attacks also occurred during the night, preventing sleep. The disease had lasted two years, and had not been much benefited by oxygen inhalation. Half-grain doses of cocaine were prescribed, with the result that the attacks became less frequent and shorter, eventually disappearing. The patient died subsequently of an infectious disease. Another case was that of a man aged sixty-three, with mitral disease, aortic dilatation and general arterial sclerosis. Anginal attacks had occurred during the past six months on physical or mental exertion, and were only subdued by morphia. Here, again, cocaine acted admirably, the angina ceasing after three days' administration. In a third case the patient, aged fifty-eight, presented marked arterio-sclerosis; the angina disappeared after two days' administration of one-third of a grain four times a day. The fourth case, a man about forty years of age, was one of aortic regurgitation with marked dilatation of the aorta; and the administration of cocaine speedily cut short the anginal attacks, which had become severe and frequent. Prof. Laschkewitch says that the remedy produces slowing of the pulse, which gains in volume; at the same time the quantity of urine is increased. He thinks that by combining this treatment with that by inhalation of oxygen, which acts immediately in an attack, the anginal seizure may be arrested, and its reappearance prevented.

THE CIRCULATION IN KAKKE.

THE July number of the *Sei-i-kwai Medical Journal* (published at Tôkyô) contains a study of the condition of the circulation in kakké or beri-beri, by Dr. Wallace Taylor, in continuation of a series of articles he is writing upon this affection. He remarks that the condition of the circulation is the most striking and important feature of kakké—one group of symptoms, which has received the name "shiyoshin," resembling an attack of angina and frequently terminating the case fatally. Dr. Taylor has taken the pains to obtain sphygmographic tracings of a large number of cases, which are reproduced with the article and well illustrate the degree to which the cardiac power may be affected. In all the tracings there are to be observed the characteristics of a very sudden and high upstroke of the ventricular systole, a precipitous descent from the apex of the percussion wave, and dicrotism. The first departure from the normal is to be seen in the first-named feature, pointing to cardiac excitement, which occurs in early stages and mild cases of the disease. Then there is diminished arterial tension from loss of vaso-motor tone, indicated by the rapid descent of the sphygmo-

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graphic lever, readily observed in the character of the pulse as felt by the finger, and marked by coldness of extremities, with lividity as the case advances. It is pointed out that, in spite of the gravity of general symptoms, the prognosis is favourable so long as there is no indication of cardiac failure, and of the two factors in the circulation, loss of cardiac muscular power is less serious than loss of vaso-motor tone. This is the condition which is most likely to lead to "shiyoshin" above mentioned; and the explanation of the condition is to be found in the action of the *materies morbi* of kakké upon different portions of the cerebro-spinal nerves and sympathetic system.

THE INTRA-UTERINE GALVANO-CAUTERY.

DR. P. LANDOWSKI spoke at the recent Congress at Nancy in favour of the action of the electro-cautery in membranous dysmenorrhœa. He expressed his belief that though this condition is doubtless chiefly met with in women who suffer from cachexia or some general disease, still the general condition is very frequently the consequence rather than the cause of the uterine disorder. He mentioned two cases in which he had applied the galvano-cautery, the os being first dilated, and the time chosen being five or six days after the cessation of menstruation. In one of the two cases a complete cure resulted. In the other the pain accompanying menstruation was relieved, but a piece of membrane the size of a penny was expelled at each recurrence of the period. This was probably due to a portion of the intra-uterine wall having been insufficiently touched with the cautery. At the same congress M. Apostoli stated that he had employed the intra-uterine galvano-cautery in a large number of cases of chronic metritis and endo-metritis with very great success. He does not confine the patient to bed during the intervals between the applications, and improvement very quickly follows the first few cauterisations. The author compares this method with that of scraping the intra-uterine wall with a sharp spoon, and considers that it has the advantages over the latter of being capable of exact graduation, of being more easily localised, and of not being so instantaneous. The result of the cauterisations is to cause the formation of a new and healthy mucous membrane.

UNIFORMITY IN REPORTS OF WATER ANALYSIS.

IN a paper read at the recent meeting of the British Medical Association, Dr. Whitelegge called attention to the undoubted fact that the multiplicity of numerical and chemical standards adopted in reports of water analyses causes great inconvenience to those who have to compare and interpret such reports. One analyst will state most of his results as milligrammes per litre, but gives the chlorine and nitric acid in grains per gallon. Another will prefer to return his results in parts per hundred thousand, and, instead of nitric acid, will speak of "inorganic nitrogen," or "nitrates or nitrogen as nitrates and nitrites," or "previous sewage contamination." What is needed is not an act of uniformity with regard to chemical processes, but some plan by which results which are practically identical shall always be expressed in the same way—the model being rigid enough to allow direct comparison of corresponding details in different reports, while sufficiently elastic to comprehend the different analytical methods, and to allow the addition of further details when necessary. Much of this would be accomplished by agreement upon three points:—1. To adopt a fixed numerical standard upon which to state all quantitative results without exception. The greater simplicity of the decimal system and conformity with foreign usage recommend the million or hundred thousand basis; and the former seems, of the two, the more convenient, being a rounder number, giving results readily translatable as milligrammes per litre, and magnifying minute quantities which are apt to appear insignificant in the second or third decimal places. The 70,000 basis (grains per gallon) is scarcely retained, except in reference to chlorine and hardness. 2. To adopt fixed chemical expressions in place of the synonymous or convertible terms now in use, especially in regard to chlorine and "oxidised nitrogen." Chlorine is a better standard than sodic chloride, since the latter involves an assumption by no means universally correct. Oxidised nitrogen is a concise, accurate, and convenient equivalent of "nitrogen as nitrates and nitrites," into which it is easy to translate nitric acid, nitrates, and previous sewage contamination. It is a plain statement of fact, and involves no theory. 3. To regard the different processes for determining the organic matter as alternative and parallel means to the same end, of which it is rarely necessary to adopt more than one, and to group them together accordingly. We are thus in no way compelled to prefer any method, or to ignore any, in attempting to systematise reports. The organic matter in water being a complex and very variable mixture of known and unknown bodies, it is necessary to select some one or more element, factor, or derivative as a measure of them all. Each analytic process has a different index, and organic carbon and nitrogen cannot be directly measured against "albuminoid ammonia" or "total oxygen consumed," any more than a zymotic death-rate can be deduced from an infantile mortality-rate. This difficulty does not arise in the case of inorganic matters, which are for the most part returned in their true ascertained proportions, not repretentatively by an arbitrary index.

THE NATURE OF JAUNDICE.

FOLLOWING in the lines of M. Chauffard, Professor Kelsch, of Val de Grace, writes in support of the specific nature and infective origin of catarrhal jaundice (*Revue de Méd.*, Aug., 1886.) He confirms the clinical observations of M. Chauffard, especially as to the urinary excretion, but is unwilling to accept the doctrine that the condition is due to ptomaines formed in the intestinal tract, regarding an external agent as more probable. The observation of epidemics of jaundice in the army, of which he records instances, points to the conclusion that they are due to telluric conditions, and therein establishes a link between catarrhal jaundice and malignant jaundice. The latter is mostly admitted to be due to foul water-supply or bad drainage; and both varieties are frequently associated in epidemics. M. Kelsch, indeed, avers that the simple and malignant forms are one and the same affection, and therefore sums up his belief in the propositions that (1) sporadic or epidemic catarrhal icterus is a specific, infective disease; (2) that the infective agent is developed outside the organism; (3) that it is generated in marshes and in soil abounding in animal and vegetable matter; and (4) that owning thus a common origin with malaria and typhoid fever, the coincidence of epidemics of jaundice with ague and typhoid is explained.

LUNACY IN IRELAND.

THE thirty-fifth report on Lunatics in Ireland—which, by the way, is so summarised as to render it a task of considerable difficulty to ascertain the actual number of the insane officially known to the reporters—contains the following significant passage: "With reference to these admissions we cannot but think from personal observation or visits of inspection to asylums, and the opinions of resident physicians in them, that in the past year, much more than previously, acute attacks of insanity were caused by a want of nutritious

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food, and at the same time by a continuous indulgence in raw spirituous liquors of bad quality. The patients so affected, and physically of good frame, were recognisable from their pallid, emaciated features, extreme irritability, waywardness, and disposition to violence." This is a matter of much moment, and ought to be investigated. The reporters also speak of insanity feigned to obtain and secure the opportunity of self-destruction.

M. CHEVREUL.

OUR Paris Correspondent writes:—The programme of the fêtes in honour of M. Chevreul, an account of which was given in my letter of last week, is being punctually carried out. Yesterday at the meeting of the Academy of Sciences, which took place under the presidency of M. Blanchard of the Museum, M. Chevreul, on entering the hall, received the hearty congratulations of his fellow-members, who read numerous telegrams of a complimentary character. The President delivered an address on behalf of the Academy, congratulating M. Chevreul on having to count the days, weeks, and years of a new century, and expressing a hope that they might be numerous. M. Chevreul, in responding, cited as a proof that a man's reputation greatly depended upon the trial of time the examples of Newton and Liebnitz. "The latter said: 'Seek the demonstration first of causes.' Newton preferred the idea, much more prolific: 'Seek the cause of phenomena, and, when you have found it, inquire what is the cause of that cause.' There is a wide gulf between the two formulas. To my mind, Newton is greater than Leibnitz. Time has proved it."

DARENTH HOSPITAL.

AT a meeting of the Metropolitan Asylums Board held on Saturday last, a letter from the Local Government Board was read declining to sanction the erection of a permanent hospital at Darenth, and pointing out that a temporary hospital could be provided at a sum which only amounted to five years' interest on the larger sum which would be required for permanent building. The Board's letter has been referred to a committee, but much dissatisfaction was at the time expressed at its tenour. The Local Government Board are evidently feeling the difficulty of permitting large sums of money to be spent in the creation of hospitals constructed in the same manner as those which have been shown to be a fertile source of disease to the neighbourhood in which they are placed. Certainly there is need for an early determination of the question as to how small-pox hospitals should be built which can give all the necessary opportunity for isolating infectious persons, without in their own turn being sources of mischief.

ABSURDITIES OF THE RULE ABOUT DECORATIONS.

WHY in the names of common sense and social expediency should a subject of Her Britannic Majesty, who has been honoured by the sovereign of another state for services rendered to the cause of life and health, be denied the privilege of wearing the symbols of the honour conferred upon him, when the soldier, sailor, or consul similarly honoured for some deed of gallantry, or service of war, or politics, is permitted to wear his decorations? Nothing but carelessness or prejudice, surely, can account for the existence of so absurd a rule. If English practitioners of medicine are to be treated in this fashion, the matter had better be understood, and when the sovereign of a foreign State offers a decoration, it should be declined on the ground that, however acceptable in itself, it will be useless by reason of the narrow-minded jealousy that prevails at home. All the same, English physicians and surgeons will go on doing their utmost to save life and promote health, although the recognition of such services in other countries will be worthless in their own.

CONCUSSION.

A RAILWAY accident in which passengers are merely concussed may be the cause of a curious mixture of diseases. Concussion may be regarded as that form of shock which is independent of the conscious intervention of the individual concerned. Some of the passengers may suffer from symptoms that soon pass away; others will become the subjects of nervous diseases of long, if not permanent, duration. There can now be no doubt that organic, as well as functional affections, of the nervous system may arise as the outcome of an accident that causes concussion. The inflammation of the spinal cord that sometimes immediately follows concussion has a tendency to pass away; but this regressive quality is necessarily of slow kind, and may also be abolished in the presence of a syphilitic, gouty, or other pronounced diathesis.

DIRECT REPRESENTATION IN SCOTLAND.

DR. ROBERT SINCLAIR of Dundee has, we understand, entered the field as a candidate for the direct representation of the profession in Scotland in the Medical Council. This step has been taken at the instance of the Forfarshire Medical Association, of which Dr. Sinclair was secretary for several years. Dr. Sinclair claims to represent the practitioners as such independently of the interest of any teaching or examining body. A committee has been formed of medical men in Dundee and the neighbourhood, in the first instance, for the purpose of promoting his election. Dr. Greig is president and Drs. Stalker and Reid, joint secretaries.

HEAT DESTRUCTIVE TO THE COMMA BACILLUS.

AT a recent session of the Academy of Sciences in Amsterdam, Prof. Forster stated that he and Dr. van Geuns had found that the comma bacillus was destroyed by heating the substance containing it to 55° C. In their work "Les Bactéries," MM. Cornil and Babes state that the comma bacillus is destroyed by exposure to a temperature of 50° C. for a few days; also that a culture of comma bacilli can be sterilised by slowly heating it to 65° or rapidly to 75° C.

FOREIGN UNIVERSITY INTELLIGENCE.

Berlin.—Dr. Albert Guttstadt, who is known as an authority on medical statistics, has been appointed an Extra-ordinary Professor. Dr. Sell, who has hitherto given instruction in the chemistry of foods, and who is a member of the Imperial Sanitary Board, has been appointed to the newly established Professorship of Alimentary Chemistry.

Innsbruck.—Dr. Joseph Moeller, of the Vienna Forest Department, has been appointed to the Professorship of Pharmacology and Pharmacognosis.

Graz.—Though the Surgical Chair has been given to Professor Wölfler by the Government, his was not the name sent up *in primo loco* by the professorial body, this place of honour being reserved for Professor von Winiwater.

Prague (German University).—Dr. Richard Maly, of Graz, has been appointed to the Professorship of Chemistry.

Prague (Bohemia University).—Dr. B Edler von Jirus of Agram, has been appointed Professor of Pharmacology and Pharmacognosis.

Würzburg.—The Surgical Chair, vacant by the lamented death of Professor Maas, has been given to Professor Schönborn of Königsberg.

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BOLOGNA celebrates this week the first centenary of its townsman Galvani's discovery of animal electricity. On the façade of his house, 29, Via Ugo Bassi, has been placed a tablet with the following inscription translated from the Latin of its author, Don Mignani: "On the 1st September, 1786, as the sun was setting, Luigi Galvani observed the first movements of the dead frogs suspended from this iron railing."

THE adulteration of bread and chocolate has gone to such lengths in Italy as to bring the sale of these articles under the special surveillance of the criminal authorities. Dr. Carlo Anfosso, in two elaborate treatises, has the merit of having called attention to the subject.

THE International Statistical Institute, which was to have met in Rome in September, has had to adjourn its meeting until next year, owing to the apprehension that the cholera, which has been spreading in Italy, may extend further, and possibly to Rome itself.

INTELLIGENCE comes from Vernoe to the effect that cholera has broken out at Aksu, in Central Asia, and that Kashgar is also threatened. In consequence of this, quarantine regulations have been established on the Russian frontier.

Pharmacology and Therapeutics.

DEEP INJECTIONS OF YELLOW OXIDE OF MERCURY IN SYPHILIS.

DR. SHABEK gives in the Proceedings of the Kieff Medical Society an account of some observations made in Professor Stukovenkoff's clinic on the employment of yellow oxide of mercury injections in the condylomatous stage of syphilis. The solution used was prepared by rubbing up sixteen grains of the oxide with twenty of gum arabic, and an ounce of water. The injections were made not hypodermically into the subcutaneous tissue, but, according to a plan recommended by Professor Smirnoff of Helsingfors, the needle, which was four or five centimetres in length, being plunged almost vertically into the gluteal muscles. In three cases five injections were given; in one case, four; in one, six; and in one case, ten injections were administered at intervals generally of a fortnight; a grain of the yellow oxide being introduced each time by means of two separate punctures on opposite sides of the middle line. In some cases, however, half a grain was injected weekly. The writer found these injections well borne by patients, only very slight local signs of irritation being induced, and in many cases none at all. In one case there was a hard swelling as large as a nut, but it was not painful, and soon passed away. The mercury, too, was always very quickly absorbed, being detected in the urine in four of the cases after the lapse of twenty-four hours from the first injection, and at the end of forty-eight hours in the other two cases. Dr. Shabek remarks that this method is inexpensive, simple, and efficacious, and will probably be found particularly useful in what in this country would be described as club, union, and dispensary practice.

ANTIFEBRINE.

Drs. Cahn and Hepp have been investigating the therapeutic properties of a chemical substance, which has long been known under the names of acetanelide and phenylacetamide, the formula of which is $C_6H_5NHC_2H_3O$, and which they propose to call *antifebrine*. It is a white crystalline powder, soluble in alcohol or wine, and in hot, but not in cold, water. They gave it in considerable doses to rabbits and dogs, and, finding it entirely free from deleterious effects, they administered it to twenty-four patients with fever, eight having typhoid, five erysipelas, four phthisis, two articular rheumatism, &c. The doses given were from four to fifteen grains, as much as thirty grains being given during the day. The dose required varied with the case. Generally speaking, it was found that it produced about as much effect as four times the same quantity of antipyrin. So far, the writers have never seen any case in which antifebrine failed to lower the temperature. The effect began to show itself in about an hour, attaining its maximum in four hours, and ceasing to produce any diminution in from three to ten hours more. A dose which was strong enough to reduce the temperature to normal usually kept it so for from six to eight hours. The fall of temperature was generally accompanied by a redness of the skin and increased perspiration. The subsequent rise was not accompanied by cold sweats, though sometimes the patients complained of feeling cold. The pulse diminished in frequency *pari passu* with the fall in temperature. No disturbance of the digestive organs was ever observed. Sometimes, indeed, the appetite returned whilst the temperature was low. Occasionally there was thirst and an increased excretion of urine. In some cases, too, there was a blueness of the face and extremities. In one case of acute rheumatism the pain in the joints and the fever disappeared rapidly after commencing antifebrine. The price of the drug is moderate, being under fifteen shillings a pound.

HYPODERMIC INJECTIONS OF CALOMEL IN SYPHILIS.

Professor Stukovenkoff reports very favourably in the "Zemskaya Meditsina" on the antisyphilitic treatment recommended by Professor Scarenzio. This consists of the hypodermic injection of calomel suspended in glycerine, or, better still, in a mucilage of gum-arabic. The localities chosen for the punctures are the gluteal regions. A grain and a half of calomel is injected on each side, making a total dose of three grains. This double injection is repeated at the end of two or three weeks, and that as a rule concludes the treatment, for it is rarely necessary to have recourse to a third dose. The author has practised these injections for a whole year, and is convinced that they never give rise to serious evil consequences. In two or three days after the injection a swelling appears at the seat of puncture, but the skin is not reddened, and it diminishes in three days and passes away in a fortnight, never becoming an abscess. The syphilitic symptoms rapidly vanish; gingivitis and salivation never occur. Comparing this method of treatment with that of inunction with mercurial ointment, Professor Stukovenkoff says that from three to nine grains of calomel injected in the course of from four to six weeks are equivalent to from thirty to forty inunctions of half a drachm of grey ointment. This plan has the advantages of simplicity, convenience, and of extreme cheapness. The mercury can be detected in the urine from two to four weeks after the commencement of the treatment, or somewhat later, and in smaller quantity than when other methods of mercurial treatment are employed. Before the injection is given, it is important to shake up the mixture well; also to see that it is quite white, as a greyish tinge indicates that the calomel is being partially reduced, and that the preparation is unfit for use.

SULPHATE OF SPARTEINE.

Hans Voigt, working in Nothnagel's clinic, has come to the following conclusions respecting the therapeutical action of sulphate of sparteine. In small doses the salt increases the efficiency of the cardiac contractions and raises the arterial pressure. The number of heart beats is always increased. These effects are observed within an hour of the administration of the drug, and continue for twenty-four hours. The author recommends the suspension of the administration of the drug for some days, but it may be given for a week without risk. The remedy does not always regulate the rhythm of the heart beats. Its action on the respiration is variable. Diuresis appears to take place in proportion to the improvement of the cardiac action. A beneficial sedative action is often observed. Headache, vertigo, malaise, and other objectionable symptoms were but rarely met with as the result of the administration of small doses. The dose employed has been from one to four milligrammes. It will be remembered that in Sée's hands much larger doses (five to twenty centigrammes) were tolerated without cumulative or other objectionable effects

NAPHTHALIN AS AN ANTHELMINTIC.

Dr. Coriander of Samarkand recommends naphthalin as a valuable and economical remedy, especially in country and military practice, for worms, both tænia and ascarides. He gives children of from one to three years of age 2 or 3 grains twice a day. In the case of adults he gives from 20 to 80 grains a day in powder with sugar.

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JAMES G. WAKLEY, M.D.

ON the morning of Monday last, the 30th ultimo, Dr. James G. Wakley, who for the last five-and-twenty years has had editorial control and management of this Journal, died at his residence, Heathlands Park, Longcross, near Chertsey. About three years since, a small ulcer, induced by the irritation of a jagged tooth, appeared on the left side of the tongue. This ulcer in the course of time assumed an epitheliomatous character, and spreading towards the pharynx ultimately caused death by asphyxia. But, in spite of considerable suffering, Dr. Wakley continued to perform his editorial labours with his accustomed regularity and energy till a few months ago. Even when he was no longer able to bear a railway journey to town his interest in his life-work did not abate. Within two or three days of his death some proofs of articles which appeared in our last issue were submitted to his judgment and discretion. Such manly courage is at least worthy of praise. He knew he was the victim of a fatal malady, but, like a wise and brave man, he strove as far as his physical strength would allow to do the work of this life, while at the same time he humbly sought to prepare himself for the next.

Dr. Wakley was born in Thistle-grove, Brompton, in December, 1825, and was the youngest son of the late Thomas Wakley, M.P., the well-known coroner and politician, and founder of this Journal. His general education was conducted first at a private school at Hanwell, and afterwards at University College School, London; and his professional training was obtained at University College. He became a Member of the Royal College of Surgeons of England in 1849, and graduated Doctor of Medicine at King's College, Aberdeen, in 1852. He never engaged in medical practice, but at about thirty years of age began under his father's guidance a journalistic career. He was soon entrusted with a large share of editorial responsibility, and about the year 1859, when his father's health began to decline, he became actual, though not nominal, editor. Indeed, a loyal and jealous regard for his father's name and fame made him shrink from assuming the title of editor as long as his father lived. It was not till Mr. Wakley's death in 1862 that he finally took this designation, becoming at the same time half-proprietor of the Journal with his eldest brother, Mr. Thomas H. Wakley, F.R.C.S., who still survives him. It was no light or easy task to follow such an editor as the late Thomas Wakley, but events soon showed that the son was not unworthy to wear the father's mantle. Concrete and tangible proofs of his success as an editor and exponent of professional opinion and aspiration were speedily forthcoming. He not only maintained but extended the reputation which THE LANCET had acquired under its founder's direction for earnestness of purpose, strict integrity, and unselfish zeal for the public good and for the welfare of the best and permanent interests of the medical profession. The last letter which the late Mr. Wakley wrote to his son contained these approving and encouraging words:—

"Your exertions on behalf of the Journal are above all praise. They could not have been greater or more successful. The gratitude of the whole family is your due, and it will be freely bestowed. Your knowledge of the fact that your labours are so highly appreciated will, I trust, be a lasting source of satisfaction to you. ..... The Journal, I think—thanks to your late great efforts,—was never more prosperous than now: the three numbers which you have sent to me are admirable."

This high opinion was subsequently fully justified by the continued and growing prosperity of THE LANCET, and was endorsed in a significant and agreeable way in an address, which was presented only last week to Dr. Wakley by the present and past members of his editorial staff.

To this address, as the effort to speak produced much suffering, Dr. Wakley wrote the following touching reply, which may be regarded as the latest act of his editorial life:

"Heathlands Park, Longcross, Chertsey.
"August 30, 1886.

"MY DEAR FRIENDS,—On Thursday last, August 26th, Dr. Glover and Dr. Coupland paid me a visit for the purpose of presenting me, in your names, with a very handsome address on vellum, and a number of letters from individual Members of my Staff. No words could express my feelings of gratitude to you for having in such touching terms conveyed your kind and generous sentiments. It is most comforting, in what I feel and know to be my last illness, to learn that my life-long work for THE LANCET has merited and gained your esteem. Thanking you for your tender sympathy and regard, I am yours affectionately,

"JAMES WAKLEY.

"To the Members of the Staff of THE LANCET."

Though from his position Dr. Wakley necessarily played an important part in all matters concerning Medicine in its relations to the State, the public, and the profession, his life was, perhaps, less eventful than that of many lesser personages. It had a twofold aspect. In one he was absorbed in editorial labours; in the other he delighted in such pursuits and pastimes as a rural residence at once invites and supplies.

The editorial life of Dr. Wakley was one of peculiar devotion. He was seldom seen in London save in his editorial room, or on the way between Bedford-street and the Waterloo Station. Few men have met him in society during the quarter of a century that he has laboured so hard. Even his most intimate friends have never been able to detain him in town. The coldest winter night could not deter him from the long railway journey, and the bleak drive and ride across Chobham Common to his lonely but much-loved home at Longcross. This was largely due to his pure love of the country. He was never more at home than in his saddle, or with his gun, or among his dogs, save when he was in his editorial chair receiving one member of his staff after another, or half-a-dozen at a time, with a kind word for each, even if it covered a mild rebuke or a gentle disapproval of something written or proposed. And in this chair he was to be found with great regularity. Other people might take long and distant holidays, but they had no charm for him. He was essentially a journalist, and to make THE LANCET effective he spared no pains night or day, summer or winter. His first care was to make this journal the exponent of the views, scientific or professional, of medical practitioners in every

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part of the kingdom and of the empire. Such views might not always be perfect in form or in demonstration, but so long as they came out of honest observation and practical experience, they commended themselves to Dr. Wakley, and a place was found for them in THE LANCET, and for such criticism as they seemed to demand. In his estimation there was no calling like that of Medicine, and no life more useful or honourable than that of the medical man. The scene of the practitioner's labours might be but a village or a thinly populated country, but there was scope enough in such a sphere for every medical virtue. Wherever disease was to be found, and a worthy medical foeman was to be seen in active conflict with it, there was material for the admiration and vindication of Dr. Wakley. For such a practitioner to be underrated or underpaid, for him to be lightly esteemed either by the patients to whom he ministered or the Medical Bodies who had certified his competency to practise, was an injustice which he could not bear. But it was not merely the hard-worked practitioner whose labours and whose hardships excited the interest of Dr. Wakley. He had a keen eye for the men of promise and investigation in the profession. Such men had not to wait for accomplished fame before they attracted his notice. He was quick to see them, and proud to bring them into the service of the Journal which he loved with a filial love. Many a medical man now comfortably removed from professional anxiety, and enjoying the fruits of scientific and literary labour in medicine, will be ready to admit that Dr. Wakley was one of his earliest and kindest friends. One of the great tests of a good editor, indeed, is this eye for men of light and leading, and next to that the faculty of attracting them to himself and to his journal before they become hopelessly absorbed in the distractions of practice and in the pursuit of fame. Judged by these tests Dr. Wakley was an editor alike by inheritance and by nature.

But we should form a very inadequate estimate of the late Editor of THE LANCET if we thought of him as a mere medical man, who could not see anything but the medical profession and its interests. On the contrary, he held that what was best for the public was best for the profession. The whole history of THE LANCET, indeed, shows a far wider view of the uses and functions of a medical paper. Civilisation teems with questions having medical bearings, and which cannot be settled without the assistance of medical science. We need not go further back than the time of Dr. Wakley's editorship to find such questions, or to estimate the uses of a medical paper in settling them. Let us enumerate but a few of them: The duties of the State to the poor, especially the sick poor; to those affected with infectious disease; to the insane: the duty of the State to those needing protection from disease; from employments involving disease; from schools and educational systems of an unhealthy or unnatural kind. Dr. Wakley's interest in such questions was acute, and it never flagged. Those members of his Staff who can recall the energy with which he directed the inquiry into the state of the sick in workhouses, carried out by Anstie, Hart, and others, and the attention with which he followed the disclosure of every miserable defect of nursing, of bedding, of gas, of cubic space, and of food, and who can compare it with the interest with which he regarded the recent question of School-pressure, will best judge how sustained was his sympathy with all classes who could not help themselves. No class escaped his care or his criticism. He was as ready to investigate complaints against a Public School as those against a Board School; the defects of a palace used by our Royal Family as those of a workhouse bed too short for the projecting limbs of Timothy Daly. And so it came to pass that under his care, as under that of his respected father, a medical journal had no slight importance for the public, who looked to it for guidance in matters of health and happiness. Nor was his interest solely confined to human beings. He was a great lover of animals. Those who remember the cattle plague will recall his great interest in the investigations of Murchison, Gamgee, and others as to its nature and as to the best ways of dealing with such a national calamity. His love of animals led him, on the one hand, to be a stern advocate of carefully regulated vivisection, which has done so much to elucidate their diseases as well as those of man; and, on the other, to disapprove all careless or heartless treatment of the lower animals. Even those forms of sport which involved a very unequal contest between man and the lower animals were always denounced by him in his editorial and personal capacity. His views on the subject of medical legislation are well known, and it is no secret that he was deeply dissatisfied with the recent Act. He was not under the pleasant delusion, which seems to possess some, that the mere concession of direct representation will do everything. His great wish and object was to have procured a one-portal system and a reduction of the rivalry and competition of Examining Bodies. And it was not his fault that less adequate legislation was accepted.

Dr. Wakley's characteristics as an editor were very simple. He made no pretensions to great learning or a deep acquaintance with science. But he had an ample store of common sense, and a power of very quickly and surely gauging professional opinion. When he once formed an opinion he stuck to it with tenacity and courage. He was singularly free from personal or malicious feeling, though strongly tempted thereto occasionally in the conflicts raised by the views and criticisms of the Journal for which he was responsible.

We have spoken of Dr. Wakley's delights in a country life and in country pursuits; but these delights were by no means purely selfish. In the country, too, he enjoyed the luxury of doing good. Many of his acts of benevolence and philanthropy were too constant and far-reaching not to be on men's tongues; but not even his most intimate friends were permitted to see or know of all his generous deeds. The lives of hundreds of poor people in the neighbourhood where he resided have been brightened and their homes made happier by his kindly and discriminating help; and in his death he has not been unmindful of the difficulties and struggles and hardships which might otherwise be in store for many of those whom he aided and cheered during his life.

During the long months in which he calmly and resignedly awaited the approach of death, Dr. Wakley derived much

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peace and happiness from the consolations of religion, and from the ministrations of his friend the Rev. Thomas Stirling Coles, M.A., of Chobham.

Some time before his death he made a special request that the following confession of faith should be introduced into any notice of his life which might appear in the pages of THE LANCET:—"Feeling my deep responsibility to God for the position in which, in His providence, He has placed me, I desire to testify to the comfort derived during my sickness from a lively faith in our Lord Jesus Christ, and that I die in the sure hope of a glorious resurrection."

Dr. Wakley especially wished that it should be known that for a long series of years he was materially aided in anxious editorial work by Mr. Tweedy, by Dr. J. A. Marston, and by Dr. J. G. Glover. With these gentlemen he had for many years been very intimate, entertaining great regard and esteem for them, and having great reliance in the soundness and fairness of their judgment, their scientific and literary ability, and the integrity of their character. He was also anxious that tribute should be borne to the work done by Dr. A. H. Hassall, when THE LANCET exposed the adulteration of the food of the people, and to the long and faithful services of Mr. H. A. Beckett, the present Sub-editor of the Journal. For the last three years the late Dr. Wakley was assisted in his editorial duties by his nephew, Mr. Thomas Wakley, jun.

It would be an omission here not to notice the medical care and kindness which Dr. Wakley met with from his many professional friends during his long illness. The personal attention he received at home from Mr. Barford, of Wokingham, sometimes in the middle of the night, extended over a period of two years. Latterly Mr. Braybrook, a medical student, resided constantly in the house as a companion. And Dr. Angel Money and Mr. Pepper for several months past have gone down on alternate nights to Longcross, quite regardless of their own convenience. Such ministrations in sickness are the luxury of a medical man.

The interment will take place at Chobham Parish Church this day (Saturday), at 3 P.M.

HEALTH OF THE ARMY.

No. III.

DURING the year 1884 there were 66,882 recruits inspected, being 7448 more than in the preceding year; and the number rejected, including 254 found unfit within three months of enlistment, was 27,888, or 417 per 1000. But from this should be deducted 2289 under height, and 717 apparent age not in accordance with general order—both clearly military causes of rejection. Such recruits ought not to have been brought forward for medical inspection, but have been refused by the recruiting parties; this would reduce the ratio of rejections to 372 per 1000. There is a marked difference in the results of the primary examinations conducted by the medical officers and civil medical practitioners, the proportion rejected by the former being 415 per 1000, and by the latter only 177; but to this must be added 226 found unfit on secondary inspection, making a total of 403 per 1000 of the civilian examination. The proportion of recruits furnished by each country was—England and Wales, 753: Ireland, 139; Scotland 97; and the Colonies, 11 per 1000. The highest ratio of rejections was of the Scotch, and the lowest, of the colonial recruits.

The proportion rejected in the different arms of the service ranged between 427 per 1000 for infantry regiments and 350 for the Royal Engineers. Nearly one-fourth of all the rejections was for "under chest measurement," the cause assigned for 102 per 1000 examined; "under weight" was the cause of 60 per 1000, and defective vision of 38 per 1000. One man was rejected for "over height," but no information is given either as to his height or as to the regulation maximum height which he exceeded.

Compared with the results for 1883, the returns show a decrease in the number of recruits under eighteen years of age and in those from nineteen to twenty-two, but a considerable increase in those from eighteen to nineteen—a result which is, we think, to be regretted. The table of the heights shows a decrease in the proportion under 5 ft. 5 in. The chest measurements show a falling off in the numbers above 33 inches and a considerable increase in the proportion between 31 and 33 inches—a result most probably arising from the reduced ages of the recruits. As regards occupation, there has been an increase in the proportion of labourers, servants, husbandmen, &c., and of shopmen and clerks, and a reduction in manufacturing artisans and mechanics. The proportion of well-educated recruits shows a marked increase, while that of men unable to read has fallen to 113 per 1000. There is obviously, however, still a good deal of work to be done by the army schoolmasters. Of the recruits found fit for service, 917 per 1000 bore marks of vaccination and 28 of small-pox, while 53 per 1000 had no satisfactory marks; 32,416 were revaccinated and 914 primarily vaccinated. The beneficial effects of this system of vaccination are shown by the fact that in an aggregate force of 167,686 men scattered over the world, only 121 cases of small-pox and 9 deaths occurred during the year, or about 72 cases and 5·37 deaths in 100,000 men.

In the Appendix to the volume, although the events did not occur in the year under review, there is a report on the medical and surgical transactions of the Suakim expeditionary force, by Deputy Surgeon-General Oliver Barnett, who was principal medical officer. The period included was from March 1st to May 14th, 1885, or seventy-five days. The average strength of non-commissioned officers and men is stated at 7235. The admissions into hospital were 2146; the deaths, including under that term also the missing, 104, which would give an *annual* ratio of 1347 cases and 65·29 deaths per 1000. Of the deaths, 47 were in action and there were 40 returned as missing, the two making an *annual* ratio of 54·61 deaths under this class. The only other important cause of death was enteric fever. There were 88 cases of this disease, of which 11 terminated fatally, being respectively in the *annual* ratio of 55·2 and 6·90 per 1000. Except the death-rate, these are all higher than in the Nile expeditionary force in the preceding year. There are some interesting details given respecting the medical arrangements of the force and the nature of the wounds received in the three principal actions in which the force was engaged. We must content ourselves with noticing only two of the remarks on the general arrangements. The Principal Medical Officer states that, the field hospitals "being non-dieted, field rations were used, cooked according to requirements, and supplemented with medical comforts, such as beef-tea, arrowroot, milk, cocoa, port wine, and anything else the medical officer considered it necessary to obtain from the commissariat stores, which in this campaign were most liberally supplied for the use of the sick. The National Aid Society's stores were therefore superfluous, and in no instance were they required for the use of the sick." The other remark was made by the Surgeon-Major of the Coldstream Guards in medical charge of No. 4 field hospital: "No spirituous liquors have been used during the campaign, and I am of opinion their absence has largely contributed to the efficiency of the troops during the arduous duties performed by them." The report states that 5 officers were killed and 1 missing, 5 were wounded and 1 invalided, but there is no information as to the numbers among whom these casualties occurred. This opinion as to the benefit arising from the absence of the means of intemperance is corroborated by Deputy Surgeon-General Faught in his report of "Medical Transactions with the Bechunanaland Field Force, South Africa," which appears to have enjoyed remarkably

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good health, but no details are given as to the amount of sickness and mortality. Mr. Faught remarks that, "whatever may be said to the contrary, it was the absence of abuse of drink and—thanks to the G.O.C.—the impossibility of procuring it, especially in the months of March, April, and May, when fever exists, if it does not prevail, and could prove fatal in six days, that caused no aggravation of the cases that existed, and may have caused the low rate of mortality when enteric lesions existed; and I hardly think there is an officer or man in the force who is not now convinced that the great health of the force is mainly attributable to this cause—enforced moderation." There is also a report of the field hospital (base) for followers sent from India to the Soudan, by Surgeon Hindley of the Indian Medical Service. These were about 6500 in number. In the three months of their service in Egypt they appear to have lost 22 men, or in the *annual* ratio of 13·54. The most prevalent diseases were dysentery and ague, and the most fatal dysentery. Some tabular information is given as to the diseases most prevalent and fatal among natives of India, Arabs, and Europeans respectively, but unfortunately the relative numbers serving are not stated. There appears to be considerable need of an improved organisation of the corps, with a view to increase its efficiency. In connexion with the campaign of 1885 there is also an interesting report by Brigade Surgeon Gribbon on the hospital ship *Ganges*, giving a detailed account of the arrangements made to fit her for this special service, and of the work performed during the seven months she was so employed, with some suggestions as to the construction and equipment of hospital ships.

The subject of huts, hut hospitals, and tents has received a good deal of attention. Professor Longmore has furnished a report on the "Competitive Exhibition of Movable Hut-hospitals at Antwerp in September 1885, together with a descriptive account of the pattern to which the principal prize was awarded." The first prize was awarded to a hut designed by Captain Doecker of the Danish Army. Professor Longmore has given a brief but clear account of the special construction of these hospitals and their advantages for ambulance purposes. There is also in the Appendix a "Description of Huts for Troops at Suakim," with drawings showing their construction and the accommodation they afford. The merits claimed for them are: simplicity of construction, good arrangement from a medical point of view, and economy. "Experience in India and Egypt led to the conclusion that the roof should be constructed of such material and thickness as to exclude the heat of the sun's rays, that the hut should be provided with verandahs, and that it should be capable of the freest ventilation; in brief, that the troops should, as it were, live in the open air under the shade of a thick cover." To effect these objects the roof is constructed of cork covered with waterproof Willesden paper, and with metal cowls along its ridge for ventilation. The ceiling is of inch boarding, and the ward or barrack space is supplied with permeable walls of matting set in frames and removable at will. The air above the ceiling communicates with the outside air at the ends and sides. There is an outside verandah, the walls of which are to be provided locally with bamboo chicks or matting, to roll up, so as when down to exclude the sun, or when up to allow of any breeze passing into the hut. The doorways are provided with chicks of permeable matting. The hospital huts are intended to accommodate twelve beds, with a space of 850 cubic feet for each, and the floors are raised eighteen inches above the ground to admit of a free circulation of air underneath. The huts are placed with the ends east and west, and the sides north and south. There is a floored verandah on the north side of each hut, sufficiently wide to enable the invalids to be moved out in their beds if necessary. Lavatories and earth-closets are provided at the south-east corner, under the verandah. These huts appear remarkably well calculated for the purpose for which they are intended, and a great improvement upon anything yet carried into effect. We regret that no information is given as to the expense of construction. Surgeon-Major Fleming, in some "Notes on Equipment, &c., taken during active service in the neighbourhood of Suakim," discusses the question of tents for field service. As the result of his experience in the hot season during the last Afghan war, he has come to the conclusion that the bell tent in use in the British army is the very worst as regards healthfulness, and that "the best form of tent and the most suitable for field service in any climate is the ridge-pole double-fly tent, of a shape similar to those known as the Cabul pattern tents, and with a few modifications used by sportsmen, emigrants, &c., throughout the world." A drawing of this tent is given in the report. Dr. Fleming has also made some suggestions for the improvement of the equipment, which deserve consideration.

Besides those we have already noticed, there are some other papers of interest in the Appendix. Of these, we would specially indicate Notes on Cases of Hydrophobia in India and Statistical Notes on Suicide in the Army. We have the usual contribution by the Assistant-Professor of Military Surgery of the operations performed at Netley during the year, with short abstracts of the more important cases; but we have still to regret the absence of any communication by Professor de Chaumont on the progress of hygiene, or any account of the work done during the year in the sanitary laboratory at Netley; nor do we find any contribution from the medical branch of our great invaliding hospital. In spite of these omissions, however, we look upon the volume as containing much valuable matter, and reflecting great credit upon the Department.

PARTIAL EXCISION OF THE LUNG AND NEPHRECTOMY: RECOVERY.

IN the *Bulletins et Mémoires de la Société de Chirurgie de Paris* (tome xii., No. 6, July, 1886), Dr. Demons of Bordeaux publishes the very remarkable history of a man who recovered after removal of a portion of the left lung and of the corresponding kidney.

In the night of Aug. 30th-31st, 1885, P. C——, a robust labourer, aged forty-nine, was conveyed to the Hôpital Saint André with two wounds, which had been inflicted with a knife during a quarrel. One of the wounds, ten centimetres long and comparatively superficial, was on a level with the ensiform cartilage, and healed quickly; the other wound was on the left side of the thorax, between the ninth and tenth ribs, parallel with the intercostal space. It was 4 centimetres in length, its posterior extremity 14 centimetres from the spinous processes, while anteriorly it reached to within 27 centimetres of the ensiform cartilage. On this wound was visible a rosy, smooth, soft tumour, with the appearance of lung. There was no hæmorrhage, no hæmoptysis, and no subcutaneous emphysema. On percussion, the resonance of the left side of the lung was slightly augmented; on auscultation, the respiratory murmur was rather weak, and a slight metallic tinkling was audible occasionally. The patient was oppressed, and troubled with a frequent dry cough. The assistant on duty made no attempt to reduce the hernia of the lung, and merely applied an antiseptic dressing. The following morning the tumour was of deeper red colour and firmer consistence. Slight pressure neither produced crepitation nor decreased volume. The urine was deeply tinged with blood, inducing the belief that the knife, after penetrating the thorax, had passed into the abdomen and wounded the left kidney.

Sept. 1st.—Nausea; severe pain in the left flank. Temperature: morning, 38·8°; evening, 39·5°; pulse 120.—2nd: Very frequent bilious vomiting. Pain extending over the tympanitic abdomen; urine bloody. Ice internally and externally; opiate draught.—3rd: Slight dulness at base of left chest; abdomen very distended and painful.—4th: Pain and swelling localised in the left flank. Copious evacuation and marked relief, after a purgative enema. Temperature 38·9°; pulse 108.—5th, 6th, and 7th: Pain and doughiness more and more localised in the left flank. The patient is easier, but the protruded lung has acquired a greyish tinge, and the surrounding integuments are red and swollen.

Resection of the protruded piece of lung.—By means of the écraseur the protruded piece of lung was excised on September 8th. Although the instrument was worked slowly during half an hour, some dark blood exuded, and required the thermo-cautery for its arrest. No anæsthetic was administered, and the patient did not suffer during the operation. Listerian dressing. No hæmoptysis during the whole progress of the case.—9th: Œdema of the scrotum, chiefly on the left side.—10th: The inflammation which existed around the wound at the time of operation is more intense; slight œdema. Blackish and fetid pus evacuated through an incision of four centimetres; drainage.—11th: On withdrawing the drainage-tube, which was blocked, a con-

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siderable quantity of sero-purulent fluid escaped. On the following days the dressings were soiled by a quantity of ill-conditioned pus, which issued with difficulty during cough; this had increased for some days, and was followed by mucous expectoration.—13th, 14th, and 15th: Fever intensified; temperature 39·6°; pulse 116. The patient does not micturate involuntarily, but careful dressing and observation strengthen the conviction that the pus which escapes from the thoracic wound emits urinous smell. Some of the discharge collected with a sponge was analysed by M. Dannery, chief pharmacien to the hospital, and found to consist of urine mixed with pus, with 30 grammes of urea to the litre; whereas the urine passed per penem (only 450 grammes in the twenty-four hours) coutained 18 grammes of urea to the litre.

From Sept. 15th to the 25th, the local condition did not vary. Small abscesses formed around the thoracic wound, and the left hypochondrium continued swollen and painful. The temperature oscillated between 37·8° and 39·6°. On auscultation, some bronchitic râles were audible on both sides. At the left base there was a slight diminution of respiratory movement; no souffle; limited dulness in the same spot. The patient was losing flesh and strength.

Nephrectomy was performed on Sept. 26th under chloroform, with antiseptic precautions. A vertical incision fifteen centimetres in length was made at a distance of seven centimetres from the spinous processes, between the eleventh rib and the iliac crest. On incising the aponeurosis covering the quadratus lumborum, a large quantity (from 700 to 800 grammes at least) of fetid, greenish, thick pus escaped. When this flow, aided by pressure on the abdominal wall, had ceased, the abscess cavity was carefully cleansed. The kidney was then visible, denuded in great part of its fatty covering. From fifteen to twenty minutes were occupied in enucleating the upper part of the kidney, and the cortical substance was somewhat torn during the proceeding. Just when the kidney was being drawn upon to expose the pedicle fully, abundant hæmorrhage occurred. It was evident that one of the vessels in the pedicle had given way under traction. Hæmorrhage was arrested with two pairs of long forceps, and after dividing the pedicle close to the kidney, it was tied in two sutures with strong catgut and a Cooper's needle. For greater security a distal ligature included the whole pedicle. Some smaller vessels were tied, and the wound thoroughly cleansed, even into its smallest recesses. It was closed with four deep silver sutures and eight superficial silken ones. A drainage-tube as thick as the little finger was passed upwards to the bottom of the wound, and a similar one downwards. The edges of the thoracic wound were pared and united by three silver sutures.

Marked relief of all the symptoms followed the operation. Just before it the temperature was 39·4°, and it fell to 37·8° within forty-eight hours. The urine was neither bloody nor purulent, but became black in consequence of the absorption of carbolic acid, for which sublimate dressing was substituted the fifth day. The day after the operation the quantity of urine voided was 800 grammes, containing 8 grammes of urea; these numbers fell to 700 and zero respectively on the fourth day, and then gradually rose; so that on the tenth day 1200 grammes of urine were passed, with 18 of urea, and these figures reached 2200 and 42 on the seventeenth day. The wound healed by the first intention, except at the drainage-tubes, through which a considerable quantity of pus continued to flow. The tubes were shortened and finer ones substituted, but they were not wholly withdrawn until the expiration of two months; ten days before that date a parcel of sphacelated cellular tissue issued spontaneously from the upper part of the wound. It had been the cause of the persistent suppuration, which from that time rapidly lessened. The patient progressed favourably, and when he left the hospital, Dec. 21st, the urine was clear, amber-coloured, specific gravity 1022, without albumen; quantity in twenty-four hours 1920 grammes, with 10 grammes of urea. The patient resumed work and was seen in perfect health on May 20th, eight months within a week from the operation.

The piece of lung removed was of triangular shape and flattened. It measured 8 centimetres in breadth and 8½ in length. The breadth of the divided pedicle was 4 centimetres. The extirpated kidney was congested and 12 centimetres long. Its surface, in the upper half, presented several lacerations produced by the fingers during the operation. Possibly one of these wounds was inflicted by the knife at the time of the accident, but it is more probable that the kidney having been detached on a level with its inner margin, the wound which gave exit to urine was situated in the pelvis, or in the upper part of the ureter, and was included in the ligature of the pedicle.

THE BELFAST RIOTS.

THE following is a synopsis of the Report just presented by Mr. Foy, F.R.C.S.I. (visiting surgeon to the Whitworth Hospital, Dublin), the surgical commissioner sent down by the Irish Loyal and Patriotic Union to inquire into the nature of the injuries received in connexion with the late riots in Belfast.

It is only due to this gentleman to state that, as he says, this record is a purely surgical one, and as such, without tincture of politics, it is placed before the public. He bases his report on personal examination, supplemented by a large range of inquiries, and we propose to lay before our readers some of the principal points of interest in this document. The wounds were of two classes—gunshot and contused wounds,—these latter inflicted by stones, bâtons, and in only one instance that Mr. Foy could ascertain by the use of an iron nut. The gunshot injuries were of two kinds, those caused by bullets either from rifles or revolvers, and by buckshot. The bullet wounds were of the usual kind, and in the majority of cases ended fatally. The bullets were of the "regulation" size. The revolver wounds, the commissioner states, were, comparatively speaking, few in number, and as a rule were not fatal. Buckshot was very largely used, and in persons wounded at a considerable distance the shot barely entered the flesh, while in exposed parts and at near distances it was equally as dangerous as a rifle bullet. The greater number of the fatal injuries were inflicted on the head and chest. These injuries resulted in many instances from buckshot wounds, the pellets finding an entrance into the brain by the eye, or when fired at very close distances possessing sufficient momentum to penetrate the bony wall. Mr. Foy gives several instances of this penetration. It is curious that the majority of the injured were not in crowds, but were alone at the time they received their wounds, and this is markedly the case in those who received fatal injuries, and of this fact the commissioner gives ample evidence. The remaining class of injuries consists chiefly of bruises, mostly inflicted on the head, but occasionally on the legs, arms, and back. It is a very curious fact, as stated by Mr. Foy, that there was great freedom from broken bones, from rupture of bloodvessels, as well as from injury to the nervous system. The more serious bruises, especially those upon the head, and the few that were associated with fracture of the skull, were the result of bâton wounds. The knife was but little used. Mr. Foy gives the total of the number treated in connexion with the riots as 582, while the number of deaths may be taken, he thinks, at thirty-four. There were 146 serious gunshot wounds. Mr. Foy gives details of many cases, and in each of them to which distinct reference is made, special individual reports have been prepared, together with diagrams, which fully explain the exact nature and position of the wounds. The first gives instances of immediate death resulting from the infliction of wounds, one of the most painful of which was that of a woman, the mother of several little children, who was *enceinte*. She was shot through the skull. Mr. Foy gives examples of deaths from buckshot wounds, of cases where the bullets have remained embedded in the body, of cases remarkable for the narrow escapes the injured had, and of cases showing evidence of the slight power of penetration of buckshot pellets when fired through clothing. From cuts inflicted by sharp instruments the riots were particularly free. He has only been able to obtain evidence of twelve such. Bruises in these riots may be considered in two classes—those inflicted by missiles thrown, and those resulting from actual personal contest. Among the former the police were the principal sufferers. The commissioner thinks that from examination of the wounded, and from the amount of damage done by bullets on the bodies of those who died, there can be but one inference drawn—viz., that the firing was at close quarters. When death has been occasioned by bullets, the injury done was such as could only result from great force. In the case of pellets, the fact that the bones of the skull, and the whole depth of the body in some instances,

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have been penetrated by a pellet shows how close must have been the assailants to the victim. Our impression is that Mr. Foy under-estimates the number of those injured in the riots, and since his report has been published we observe that the Chief Secretary for Ireland, in reply to a member of the House of Commons who asked a question in reference to the injuries received by the police, stated that a head-constable had been killed and that five officers and thirty-six members of the constabulary had been seriously injured. In all, he said that 332 members of the force of all ranks were more or less injured, although in many cases the injuries were not serious. Further, there is an impression in Belfast that as the result of what has been styled the "Springfield fight," where several of the antagonists were armed with rifles, and which lasted a whole night, a number of people were killed and have been secretly buried, no record having been kept of them. No doubt at the forthcoming Commission a great deal of information bearing on all these points will be disclosed.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Berkshire Combined Sanitary Districts.—The mortality statistics for the several urban and rural districts combined in the area for which Dr. Woodforde acts as medical officer of health show that during 1885 the highest general death-rate—namely, one of 20·0 per 1000—was experienced in the Cookham rural district; and the lowest—namely, 14·2—in the Windsor rural district. That for the entire combination reached 16·5 per 1000. The most important mortalities from infectious diseases were: in the Hungerford rural district, 9 deaths from diphtheria, besides 6 from croup; 8 from diphtheria in the Bradfield rural district; and 6 from the same disease in the Windsor rural district. In many instances no connexion was traced between outbreaks occurring almost simultaneously, and although in some cases the attacks occurred under bad sanitary conditions and in low-lying damp localities, yet nothing was ascertained which tends to clear up any of the obscure points connected with the etiology of this disease. Occasion has evidently been taken to secure a number of improvements in the sanitary state both of villages and premises during the year, but some of the nuisances complained of can hardly be dealt with until some permanent measures of sewerage are found practicable in some of the more low-lying localities. This is the case, for example, as regards the discharge of sewage into the watercourse passing through Clewer Manor and the ditch at the side of Lover's Walk. Both diphtheria and small-pox cases occurred in the Windsor rural district, thus reminding the sanitary authority of the need for providing some permanent accommodation for the isolation of first attacks of infectious diseases. Had the warning been heeded, some of the existing troubles which have fallen upon the district might have been avoided.

Ulverstone Urban District.—The annual death-rate for 1885 was 19·4 per 1000, a by no means small rate for so small a district. In the autumn an extensive epidemic of sore-throat prevailed in a private school, and some of the cases were admittedly diphtheria. The disease also spread into adjoining sanitary districts. The ash-pit question needs very serious consideration. The structures are so contrived as necessarily to induce the maximum amount of nuisance. Sunk below the level of the surrounding soil, they admit of the soakage into them of surface water; being uncovered, they are open to rainfall, and wetness of contents being thus brought about, rapid decomposition is ensured, and a nuisance is created. Reconstruction of the receptacles, limitation of their capacity, and frequent scavenging arrangements are called for. New public slaughter-houses were to have been constructed, but after local inquiry the scheme was, for some reason or other, not sanctioned.

Ulverstone Rural District.—Dr. A. Thompson reports a death-rate of 16·0 per 1000 in this district. In several portions of the area water-supply and means of drainage are still urgently called for; but there is, at the same time, a record of good work, especially where the prevalence of infectious disease easily admits of intervention. It is evident that much work remains to be done in the direction of educating people to understand that there is real danger in the proximity of shallow wells and privies, which by soakage contaminate the surrounding soil.

Maidstone Urban District.—The death-rate of this borough during 1885 was 15·8 per 1000 living. Maidstone was several times invaded by small-pox imported from the metropolis; but the authority having provided themselves with an excellent hospital, that which would otherwise have threatened to produce a serious epidemic was held within reasonable limits. In all, the hospital received during the year 39 cases of small-pox, 3 of scarlet fever, and 2 of diphtheria. The only thing which the hospital is now stated to lack is some separation ward for doubtful or special cases. In connexion with the small-pox outbreaks, it is noteworthy that the only two children attacked were unvaccinated ones, notwithstanding during the past four years some 4000 children have been born in Maidstone. The fact is that vaccination has practically protected our infantile population, which formerly suffered so severely from this disease. Great improvements have been effected in the public water-service of the borough, and Mr. Adams takes the opportunity of this occurrence to point out some important considerations in regard to suspicious waters, and especially to indicate the need for watchfulness whenever any water is found to have departed, in its chemical composition, from the natural local standard, even slight deviations from the normal leading to the detection of pollution, when ordinary chemical evidence alone would fail even to raise a suspicion.

Grange Urban District.—Owing to the existence of fatal enteric fever, privies and water-supply were found to be in such relationship as obviously to constitute grave danger to health. It is unfortunate that in so many instances cases of this sort are, in numberless districts, not dealt with until after disease and death occur. They point to the need for periodical house-to-house inspection, and the maintenance of a record of the sanitary circumstances of all premises in the district. Such inspection, if properly carried out, is perhaps of all sanitary work, the most valuable. Dr. Thomson urges improved arrangements for the scavenging of the district, the provision of better cemetery accommodation, and a system of drainage in the place of a system which admits of the sewage being first stored in cesspools, and thence allowed to percolate into the soil or into the crevices of the limestone rock. Grange is said to possess all the natural advantages of a health-resort, but it certainly lacks the sanitary requirements of such a place. On a small population of 1200, the annual death-rate was 10·8 per 1000, but including visitors it reached 17·5.

Cardiff Urban District.—Dr. Paine commences his report for 1885 with a highly interesting history of cholera as affecting that borough up to 1866, the experience of Cardiff being shown to prove that, by increased sanitation, cholera is robbed of its chief terrors. In 1849 all the insanitary circumstances then attaching to towns generally obtained widely in Cardiff, but at the last outbreak in 1866 the disease was at once met and checked by improved sanitation and water-supply. So also, it is shown, in a tabular form, that the death-rate from the seven zymotic diseases has fallen during the four last decenniads from 9·8 to 5·4, then to 3·9, and in 1875-84 to 3·3. In the same way, the history of the borough with regard to infantile diarrhœa is traced through a series of years; the difference of feeding children with breast milk or with cow's milk and other diets being entered into at some length. Next follow chapters on the local meteorology, house inspections, food supplies, the water service, the dwellings of the working classes, and similar subjects affecting the health of the population. Indeed, the report is an admirable summary of the sanitary history of the borough, both as regards the past and at the present date. The death-rate during 1885 was 25·6 per 1000 on the estimated population, but only 23·1 on the inhabited houses estimate. This is a high rate, and it was mainly due to the prevalence of infantile diseases, a subject which is dealt with in some detail. Infants suffered especially from diarrhœa, 69 out of a total of 99 diarrhœa deaths occurring under one year of age; and amongst other conditions favouring this mortality, it is shown how temperature and rainfall influence it. Such general current work as disinfection, abatement of nuisances, inspection of bakehouses, cowsheds, dairies, and milk-shops,

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and the supervision of common lodging-houses, of the food supplies, &c., were continued during the year, and the inspectors of nuisances are credited with considerable zeal and activity in the performance of these several duties.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns 5494 births and 3497 deaths were registered during the week ending August 28th. The annual death-rate in these towns, which had been 18·9 and 19·5 per 1000 in the preceding two weeks, further rose last week to 20·1. During the first eight weeks of the current quarter the death-rate in these towns averaged 19·7 per 1000, and was 1·8 below the mean rate in the corresponding periods of the ten years 1876-85. The lowest rates in these towns last week were 13·9 in Bristol, 15·7 in Plymouth, 16·6 in Bradford, and 17·4 in Hull. The rates in the other towns ranged upwards to 24·9 in Salford, 25·4 in Cardiff, 25·6 in Newcastle-upon-Tyne, and 26·8 in Preston. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had been 717 and 806 in the preceding two weeks, declined again last week to 778; they included 562 from diarrhœa, 57 from measles, 49 from scarlet fever, 48 from whooping-cough, 35 from "fever" (principally enteric), 27 from diphtheria, and not one from small-pox. The lowest death-rates from these zymotic diseases were recorded last week in Plymouth Huddersfield, and the highest in Cardiff, Salford, and Preston. Diarrhœa caused the highest death-rates in Sheffield, Birkenhead, Salford, Preston, and Leicester; measles in Preston and Blackburn; scarlet fever in Cardiff, Derby, and Salford; whooping-cough in Norwich and Preston; and "fever" in Cardiff and Portsmouth. Small-pox caused no death either in London and its outer ring or in any of the twenty-seven large provincial towns. No small-pox patients were under treatment in the metropolitan asylum hospitals situated in and around London. The deaths referred to diseases of the respiratory organs in London, which had been 150 and 151 in the preceding two weeks, rose last week to 160, but were 13 below the corrected average. The causes of 68, or 1·9 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Portsmouth, Norwich, Leicester, Nottingham, Bradford, and in five smaller towns. The largest proportions of uncertified deaths were registered in Salford, Sheffield, Halifax, and Oldham.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 17·4 and 17·9 per 1000 in the preceding two weeks, declined again to 17·7 in the week ending August 28th; this rate was 2·4 per 1000 below the mean rate during the same week in the twenty-eight English towns. The rates in the Scotch towns last week ranged from 13·1 in Perth and 13·7 in Dundee, to 19·9 in Aberdeen and 23·4 in Paisley. The 436 deaths in the eight towns showed a decline of 5 from the number in the previous week, and included 36 which were referred to diarrhœa, 19 to whooping-cough, 16 to scarlet fever, 6 to "fever" (typhus, enteric, or simple), 3 to measles, 3 to diphtheria, and not one to small-pox; in all, 83 deaths resulted from these principal zymotic diseases, against 63 and 72 in the preceding two weeks. These 83 deaths were equal to an annual rate of 3·4 per 1000, which was 1·1 below the mean rate from the same diseases in the 28 English towns. The deaths referred to diarrhœa, which had been 18 and 23 in the previous two weeks, further rose last week to 36, of which 14 occurred in Glasgow, 8 in Dundee, and 4 in Paisley. The annual death-rate from diarrhœa in these Scotch towns last week did not, however, average more than 1·5 per 1000, whereas the mean rate from the same cause in the twenty-eight English towns was 3·2. The 19 fatal cases of whooping-cough showed a slight decline from recent weekly numbers, and included 16 in Glasgow. The 16 deaths from scarlet fever exceeded by 8 the number in the preceding week, and included 12 in Glasgow and 2 in Edinburgh. The 6 fatal cases of "fever" showed a slight further increase upon the numbers recorded in the preceding two weeks; 3 occurred in Glasgow and 2 in Paisley. Of the 3 deaths referred to diphtheria 2 were returned in Edinburgh and 2 fatal cases of measles occurred in Leith. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 61 and 59 in the preceding two weeks, rose again last week to 67, and exceeded by 12 the number in the corresponding week of last year. The causes of 62, or more than 14 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which in the preceding four weeks had risen from 17·3 to 21·9 per 1000, declined again to 18·2 in the week ending Aug. 28th. During the first eight weeks of the current quarter the death-rate in the city averaged 20·0; the mean rate during the same period was 20·0 in London and 18·2 in Edinburgh. The 123 deaths in Dublin last week showed a decline of 25 from the number in the previous week, and included 9 which were referred to diarrhœa, 5 to "fever," 3 to scarlet fever, 1 to whooping-cough, and not one either to small-pox, measles, or diphtheria. These 18 deaths from the principal zymotic diseases showed a decline of 3 from the number in the preceding week, and were equal to an annual rate of 2·7 per 1000, the rates from the same diseases being 3·7 in London and 1·4 in Edinburgh. The 9 fatal cases of diarrhœa, and the 5 deaths referred to different forms of "fever," corresponded with the numbers in the preceding week, while the deaths from scarlet-fever showed a slight decline. Two inquest cases and 4 deaths from violence were registered; and 29, or nearly one-fourth of the deaths, were recorded in public institutions. The deaths of infants showed a decline from the number in the previous week, while those of elderly persons showed a slight excess. The causes of 18, or nearly 15 per cent., of the deaths registered during the week were not certified.

THE SERVICES.

WAR OFFICE.—Army Medical Staff: Surgeon-Major George Bedford Sanders is granted retired pay, with the honorary rank of Brigade Surgeon.

The undermentioned Surgeons on probation to be Surgeons:—John Stewart Davidson, M.B.; James Will, M.B.; James Moir, M.B.; James Fallon; John Valentine Salvage, M.B.; John Francis Scott Fowler, M.B.; Arthur Russell Aldridge, M.B.; Robert Ashton Bostock; Joseph Fayrer; Charles Pope Walker, M.B.; Charles Joseph MacDonald, M.D.; Charles John Willmer Tatham; Thomas Harry Fredk. Clarkson; Herbert Ward Austin; Cathcart Garner, M.B.; Robert Wallace Wright; William Frederick Bailey, M.D.; Edwin Eckersley, M.B.; Reginald James Cope Cottell; John Gillespie Deacon, M.D.; David Middleton Greig, M.B.; James Rogers Burrows, M.D.; John Keatly; Daniel Hennessy, M.D.; David Michael Saunders, M.D.; Walter Kiddle, M.B.; Denis Moriarty O'Callaghan; Michael Joseph Whitty, M.D.; Henry Alfred Cummins, M.D.; Richard Edmund Kelly, M.D.; James Francis Donegan; John Donaldson; Hugh Broderick Mathias; George Bent; George Henry Barefoot; Foster Reuss Newland, M.B.; Reginald Joscelyn Windle, M.B.; Robert John Draper Hall; Edward Swan Marder; Charles William Allport, M.D.; John Joshua Russell, M.B.; Arthur Joseph John Simpson Edye; George Scott, M.B.; Thomas Browning; Albert L. F. Bate; William John Trotter; Andrew Hosie, M.B.; George Frederick Handel Marks, M.D.; Ralph Holyoake; Robert Napier Buist, M.B.; John James Carl Watson, M.D.; Thomas Whaite, M.B.; Henry Thomas Knaggs; Ferdinand Simeon Le Quesne; Victor Edwin Travers-Smith, M.D.; Norman Smyth, M.D.; Cecil Spencer Cronin; Willington Dowman; and Richard Ernest Foott, M.D.

ADMIRALTY.—The following qualified candidates for the Naval Medical Service have been appointed to be Surgeons in Her Majesty's Fleet—viz.: George Henry Foote, M.D.; Hamilton Edward L. Earle.

The following appointments have been made:—Staff Surgeon James D'A. Harvey, to the *Boscawen;* Staff Surgeon Alexander Flood, to the *President*, additional, for temporary service; Fleet Surgeon Thomas H. Atkinson, to the *Duncan*, additional; Staff Surgeon Charles C. Godding, to the *Northampton*, additional, for temporary service; Surgeon John F. Bate, to the *Pembroke*, additional; Surgeon Graham E. Kennedy, to the *Royal Adelaide*, additional; Surgeon John

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E. Webb, M.B., to the *Lion*, additional; Surgeon Martin H. Atock, M.D., to the *Indus*, additional; Surgeon James J. M'Donnell, to the *Defiance;* Surgeon Charles E. Geoghegan, to the *Asia;* Surgeon East Arthorpe, to the *Excellent*, additional; and Surgeons George H. Foote, M.D., and Hamilton E. L. Earle, additional, to the *Duke of Wellington*, for Haslar Hospital; Staff Surgeon Charles L. Vasey, to the *Britannia*, additional, for temporary service.

ARTILLERY VOLUNTEERS.—4th Lancashire: Thomas Babington Grimsdale, Gent., M.B., to be Acting Surgeon.

Correspondence.

"Audi alteram partem."

HÆMATOCELE, INTRA- OR EXTRA-PERITONEAL?

To the Editor of THE LANCET.

SIR,—The point raised in Dr. Lewers' letter, published Aug. 28th, is the *crux* of the question of hæmatocele. Such cases as he describes are common enough, and the great majority of them recover, because they are cases of hæmorrhage into the broad ligament—extra-peritoneal hæmatocele. In that most valuable and most strangely neglected book by Bernutz and Goupil there is abundant evidence from the post-mortem table, enough to settle the question, it seems to me; but the evidence now derived from abdominal section places it beyond dispute, and this evidence I hope shortly to present to your readers in the Ingleby lectures, for which you have kindly given me space in your columns.

Let me for the present only point out to Dr. Lewers that the fact he puts on record, that "sometimes the tumour is large enough to be felt through the abdominal wall above the pubes," is enough to settle the point, for the tumour so felt must be the distended broad ligament; how could an unlimited clot be felt as a tumour? When hæmorrhage occurs free into the abdominal cavity, it does not form a tumour, but is found as bloody serum and loose fragmentary clot all about the cavity, and has in every one of my cases given rise to fluctuation, the sign of effusion, and a vague uncertain dulness on percussion—precisely what was described in Dr. Imlach's case. When hæmorrhage occurs into the broad ligament, a firm rounded tumour distinctly limited is produced, such as Dr. Lewers describes. Extra-peritoneal (or broad ligament) hæmatocele is very common, and its most common method of production is precisely what Dr. Lewers speaks of—an abrupt arrest of menstruation. Of this variety probably 95 per cent. of the cases get well by being left alone, whilst the others suppurate and require to be opened. I used to open them by the vagina, but now I open them by abdominal section, with far better results. It is these operations which enable me to speak quite positively in support of the pathological facts so well and so carefully recorded by Bernutz and Goupil.

I am, Sir, yours truly,

Birmingham, August 30th, 1886. LAWSON TAIT.

CASEY *v.* IMLACH.

To the Editor of THE LANCET.

SIR,—While an "unwilling witness" in the case of Casey *v.* Imlach, Dr. Grimsdale stated on oath that the mortality in cases where this operation (i.e., abdominal section) had been performed at the Hospital for Women was 33 per cent. (*Times*, Aug. 9th).

I have performed abdominal section for pelvic hæmatocele eighteen times at our hospital, and am the only one that has performed it. All of the patients fully recovered from the operation, and seventeen of them are at the present moment alive and well. Six of these operations occurred in 1884, and five of them were reported in full detail in the *British Medical Journal*, May 16th, 1885. Mrs. Casey was the sixth. Her case was not published because I had forwarded my paper to the journal before she entered hospital, but your readers are now familiar with it. In 1885 I performed this operation nine times, and all recovered; but one with morbus cordis died subsequently from causes entirely unconnected with her operatien, and the circumstances were fully reported in a paper on pelvic hæmatocele published in the *British Medical Journal* of Feb. 20th, 1886. In the present year I have performed abdominal section three times for this condition; all have recovered, and the parts removed in the last of them (Aug. 27th) are now in the hands of Dr. Barron, pathologist to the Royal Infirmary, for examination. I find from my note-books that I have met with hæmatosalpinx, without intra-peritoneal hæmorrhagic effusion, about fifteen times. The indications for operation in these cases are entirely distinct from those of internal hæmorrhage which prompt us to interfere in pelvic hæmatocele. In general, hæmatosalpinx is associated with some other pathological conditions, and many cases are entered in our report as "myoma hæmorrhagica with occluded tubes," &c. When the patient is blanched it is only because of prolonged menorrhagia, and sometimes the chief symptoms are constant pelvic pain and inability to walk or work.

I find in the report for 1885 two fatal cases entered as hæmatosalpinx. One of these was complicated, not with intra-peritoneal hæmorrhage, but with a rectal abscess with which the tube communicated; and to class such cases with pelvic hæmatoceles is simply misleading. In any case these two are the only fatal results by which Dr. Grimsdale can make out that the operation in both classes of cases is attended with any mortality whatever. He carefully excludes from his statistics the case of Mrs. Casey and the whole series of pelvic hæmatoceles of 1884. He excludes also a successful case of operation for hæmatosalpinx in 1884, and another in 1885. He confines his attention to the report for 1885, and gravely miscounts its numbers. He includes two cases labelled hæmatosalpinx, but excludes a third, in which health was completely restored, and he is careful to include as a fatal operation the case of hæmatocele which fully recovered from the operation, but died under circumstances already referred to. But this goes beyond manipulation of figures, and will reflect upon himself the odium which he vainly endeavours to attach to a valuable means of saving life.

I am, Sir, yours obediently.

Liverpool, Aug. 31st, 1886. FRANCIS IMLACH.

"SPAYING."

To the Editor of THE LANCET.

SIR,—With your permission I should like to make a few remarks on one portion only of Mr. Lawson Tait's letter in your issue of August 21st. I mean that part in which Mr. Tait objects to the use of the word "spaying," as synonymous with the phrase "removal of the uterine appendages." He considers this an "extraordinary confusion of terms," and gives the following as his reasons and conclusions therefrom as regards spaying. 1. "Animals," he says, "are spayed before puberty to prevent its access, and the consequent development of a sexual appetite and powers, and the powers of procreation." 2. "The ultimate object of the process of spaying is an improvement in our food-supply, or in our domestic service by animals." As regards removal of the human uterine appendages: 1. This operation "is performed after puberty, generally long after puberty." 2. "It has no influence, as far as I know, in destroying the sexual powers; indeed, it constantly restores them, after disease has destroyed them." 3. "It does not usually destroy the procreative power, for that (in the great majority of instances) has been already destroyed by the disease for which the operation has to be performed." 4. "Finally, the operation has no other purpose than the saving of life and the relief of suffering. The operation of spaying an animal and the removal of the human uterine appendages have therefore no conceivable resemblance. Consequently to talk of 'spaying women' is to display great ignorance or to indulge in wilful misrepresentation for purposes of giving offence." Now these appear to me to be very extraordinary reasons for Mr. Tait's objections to the use of the word "spaying," and still more extraordinary are the conclusions which he draws from his premisses. Mr. Tait does *not* say that a certain operation (female castration) called "spaying," when performed on an

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animal, should have another name when performed on a woman; if he did, his argument would at least be intelligible. But what he really does say, and what the sum of all his arguments amounts to, is this, that the question whether the name of this operation "spaying" should when performed on a woman be altered depends on the following conditions:—1. The time of life at which it is performed. 2. The reasons for its performance. 3. The objects contemplated in its performance. And Mr. Tait finding none of these conditions the same in the woman as in the lower animals, not only insists that the name of the operation itself must be changed, but finds no conceivable resemblance between these operations. How Mr. Tait comes to the conclusion that the operation of spaying an animal and the removal of the uterine appendages in a woman—consisting, as these operations do, of the removal of the corresponding organs in each—have therefore no conceivable resemblance is quite beyond my powers of reasoning. And his final "consequently to talk of 'spaying women'" makes me fear that I am "displaying great ignorance," but I am quite sure I am not indulging "in wilful representation for purposes of giving offence."

I should be very sorry to impute any such ignorance, or any improper motives whatever, to those gentlemen who prefer always to use Mr. Tait's favourite phrase, "removal of the uterine appendages," to the more expressive, shorter, and better known name of "spaying"; but I would humbly submit that, when writing or speaking on this subject to the profession, Mr. Tait's phrase answers every purpose; but when writing or speaking to lay people, the older and shorter term "spaying" is more suitable, as being better "understanded of the people." And if it be agreed on all hands, as I presume it is, that a full and complete explanation of the nature and consequences of these operations should in every case be previously given to the patient and her nearest relative, then I think even Mr. Tait will admit that no simpler, no surer, method could be found for making all, even the more ignorant class of people, fully understand what is about to be done to them, than for the operator to say, "You must be spayed," or "I am going to spay you." This I take to be a great and unmistakable advantage, and I shall therefore continue to adopt the older, simpler, and more expressive term, and call a "spay" a "spay" when speaking to all those who, not being in the profession, even if decently educated, get but a hazy and indistinct idea from the more novel and more sonorous, but not very expressive phrase, "removal of uterine appendages."

One might go even a little further, and say that the final word "appendages" hardly expresses, or gives a hint of, the highly important character and functions of these organs; indeed, it would seem, as it strikes upon the ear, to give the idea of some comparatively unimportant additions to the important organs of gestation—the uterus and womb. This I consider to be a decided drawback to its general use now that the operation has come to be talked about freely in non-professional circles.—I am, Sir, yours truly,

August 23rd, 1886. THOMAS F. GRIMSDALE.

THE DIRECT REPRESENTATION OF THE PROFESSION.

To the Editor of THE LANCET.

SIR,—In recognition of the extreme importance that must attach to the selection of suitable representatives of the great body of English and Welsh medical practitioners on the General Medical Council, and feeling that such a selection cannot be well made by individual effort, a number of medical men from all parts of the kingdom have formed themselves into a committee with the single object of trying to arrive at something like a general consensus of opinion as to who are the best men to select. It is sufficiently indicative of the widespread interest that is felt in its action that the committee embraces among its members representative men from almost every large town in England and Wales; and what is, perhaps, of more significance still, from many of the smaller towns and villages; and as it is most desirable that the profession generally should be made fully aware of its aims, I venture to ask your insertion of this letter.

The committee is absolutely uncommitted to the support of any candidate, its sole object being to deliberate impartially on the claims of all, and ultimately to recommend to the consideration of the profession the three into whose hands it would appear to them to be safest to entrust the interests of that large body of the general practitioners of this division of the United Kingdom hitherto unrepresented on the General Medical Council. As the committee is bound to no candidate, so is it confined to no party, and with the view of making the ultimate selection a thoroughly satisfactory one it will hail with great satisfaction every suggestion that can be offered to it. Letters approving of its object, many of them containing suggestions of great practical value, have already been sent from every part of the kingdom. Some of these letters suggest the names of candidates, and it is proposed that every name thus mentioned shall be carefully considered. As the committee wishes to embrace every interest of the general practitioner, it is desired that all who agree with its objects shall associate themselves as members, and shall assist either by letter or personal attendance at its deliberations. It is proposed to hold a meeting at the Queen's Hotel, Birmingham, at 5 P.M. on Tuesday, Sept. 14th, to go over names. The honorary secretaries are Dr. William Carter of Liverpool, and Hugh R. Ker, Esq., F.R.C.S., Halesowen, Worcestershire, either of whom will gladly receive communications from any member of the profession desirous of joining the committee.

I am, Sir, yours faithfully,

Liverpool, Aug. 29th, 1886. WILLIAM CARTER.

DRY ANTISEPTIC POWDER.

To the Editor of THE LANCET.

SIR,—In your issue of the 21st inst. you note a form of antiseptic dressing by carbolised paper. For many years I have been in the habit of using a dry antiseptic powder in much the same way: oxide of zinc, carbonate of magnesia, and powdered boracic acid, with carbolic acid added so long as the powder retains its character as a powder. This dusted over the surface of a wound—an old indolent ulcer or a scald—at once reduces the discharge from the surface and renders it of a healthy nature. No matter how extensive the surface may be, it does not require to be cleaned off at any time, the only dressing requisite being to continue the dusting; in extensive burns or scalds the relief from painful dressing is very marked. In indolent ulcers a piece of old linen rag must be placed over the powder, and pressure exercised by means of an indiarubber bandage. In ulcers of the penis the carbolin of oxide of zinc, with resorcin and calomel added, forms a dressing which rapidly heals. I used the dry antiseptic dressing recently to dress the wound caused by the operation for strangulated inguinal hernia; it acted perfectly, there was not one drop of pus secreted, the wound healed by the first intention, and the patient was discharged from hospital in eight days. "Portability" is of great importance, and this powder is easily carried. A small receptacle similar to a pepper-box serves to dust the wound with. I have used a compound box which, being in form much the same as an ordinary round ruler, is easily carried, and contains chambers for four or six different powders. In specific ulcers, and where there is an unhealthy surface, it is advisable to destroy that surface with nitric acid or nitrate of silver before using the powder.

I am, Sir, yours truly,

Sheerness, Aug. 24th, 1886. PERCIVAL HUNT, F.R.C.S.E.

"THE MEDICAL ACT OF 1886."

To the Editor of THE LANCET.

SIR,—I am very much amused with the letter of "An M.D. of New York." He must know how easily an M.D. is obtained in America, and I think that no greater mistake was ever made than to admit foreign diplomas to the Medical Register. I have been a ship-surgeon, and have visited some of the American universities and medical colleges, and have formed a very low estimate of them. In fact at one of the universities in a Southern State I was informed by one of the professors that they could undertake to take a man off the cab-stand and make an M.D. of him in a few months, and I know of a case where an uneducated working man left England a few years ago, and, after being a short time in America, returned home with the degree of M.D., U.S.A. I

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think the new Medical Act will do more harm to the medical profession in England than any Act that has ever been passed, and it will undoubtedly lower the status of every member of the profession, and the overcrowding will be increased. I have written to two members of Parliament in reference to the registration of foreign diplomas. One of them replied as follows:—"It is notorious that foreign diplomas may be had on easy terms, and it is unfair to class them as equal to our own." The other member answered my letter thus:—"I ascertained that the leading members of the medical profession do not object to these being registered provided this is done in a separate list, so that there may be no confusion between British and foreign diplomas." The holders of foreign diplomas will not care for this so long as they can tell the public that they are on the Medical Register, and as to the opinion of the leading members of the profession, Medical Bills do not affect them as they do the mass of the profession, the general practitioners; and every Bill brought in ought to be on behalf of the profession; and although in the new Medical Bill the general practitioners have gained five representatives, they have paid too dearly for it in allowing foreign diplomas to be registered. I have no personal interest in this matter, as I have been a good many years in the profession, and have realised a competency, and have a good social and professional position; but for the sake of the rising young members of the profession who have been required to pass severe examinations, and who have to contend with an overcrowded profession, I do not see that they should be still further overweighted by admitting foreign diplomas, and I advise them to be up and doing, and interview their member of Parliament, and ask him to use his influence to repeal the clause bearing on foreign diplomas.

I am, Sir, yours truly,

A GRADUATE OF A SCOTCH UNIVERSITY.
(Possessor of three English and three Scotch diplomas, all of them registered.)

August 30th.

To the Editor of THE LANCET.

SIR,—Your correspondent, "An M.D., of New York," in contrasting an American degree with the M.D. Brussels, asks which is the more reliable qualification. I unhesitatingly say the M.D. Brussels; for, according to the rules of the Brussel's University, none but qualified practitioners are admitted to its examinations. This in itself is a guarantee that all candidates for its degree are men who have spent at least four years at a recognised medical school, and have successfully undergone the various examinations at some one or other licensing board and evinced their fitness to practise prior to their degree examination. When I add that out of these picked and qualified men at least from 30 to 50 per cent. are invariably rejected, it goes without saying that the lame, the halt, and the failures of other universities and corporations, who are apt to knock from door to door until they find an indulgent *alma mater*, have no place whatever here. Men selected and approved by a searching examination from amongst already British qualified practitioners, whose very qualifications bespeak a certain amount of knowledge and training, can only secure the degree, for M.D. Brussels not only implies a higher examination, but a British qualification as well. Can "An M.D. of New York" claim as much for an American degree?

I am, Sir, yours faithfully,

Aug. 23th, 1886. AN M.D. OF BRUSSELS.

THE INCUBATION PERIOD AND DURATION OF INFECTIOUSNESS OF DIPHTHERIA.

To the Editor of THE LANCET.

SIR,—Your correspondent, Dr. Pearse, is mistaken in saying that "no observations seem to be recorded" as to the incubation period of diphtheria. In a paper contributed by me in 1878 to the St. George's Hospital Reports (vol. ix., p. 711) are recorded three cases in which an attack of diphtheria followed a single exposure to a source of infection; in one the incubation period was two days, in a second four days, and in the third five days. In that same paper are also recorded eight other cases in which the exposure to possible infection had not been limited to a single occasion, so that only the outside limit of the incubation period could be determined; in none of these eight cases did the interval between the first exposure and the attack exceed a week, being in three cases two days, and in single cases one, three, five, six, and seven days severally. In one other case there was reason to believe that the incubation period was at least eleven days.

In the same paper will be found several observations as to the duration of infectiousness of diphtheria—that is, as to the time during which a person who has had diphtheria is capable of communicating the disease to others, and these observations appear to me to show conclusively that the infectiousness attaches to a patient for a much longer period than three weeks, which is the term assigned to it by Dr. Pearse.

I am, Sir, yours obediently,

WILLIAM OGLE.

Gordon-street, Gordon-square, Aug. 31st, 1886.

To the Editor of THE LANCET.

SIR,—Dr. Pearse fixes the incubation period of diphtheria at fourteen days. Two years ago I had two cases under my care, in which I found it to be two days only after exposure to the poison. Other practitioners will no doubt be able to calculate the period in cases they have treated. The treatment I have found most efficacious in cases of this nature is that by the biniodide of mercury in solution of potassic iodide, followed, on disappearance of the membranous effusion, by steel and chlorate of potash. Thus: Solution of bichloride of mercury, one ounce; iodide of potassium, half a drachm; citrate of ammoniated iron, one drachm; chloric ether, two drachms; water to eight ounces. One tablespoonful every two hours. I am, Sir, your obedient servant,

Clayton-le-Moors, Aug. 29th, 1886. C. R. ILLINGWORTH, M.D.

To the Editor of THE LANCET.

SIR,—In your issue of August 28th two cases are cited in which the incubation period of diphtheria would appear to have been about forty-eight hours. In connexion with the same subject I send you a note recorded about three years ago:—

F. B——, one of a numerous family, had a very severe attack of diphtheria. The other children were at once removed, and on the patient's recovery the house was well fumigated by the burning of sulphur, and, in addition, there was much washing with carbolic acid. The rooms were also repapered and whitewashed. The patient was sent away, and after he had been absent for twenty-five days three children of the same family were allowed to return. On the eighth day after their return I was called to the house, and found two out of the three with well-marked diphtheritic patches on the throat. They had remained quite well until the previous day.

I am, Sir, faithfully yours,

East Grinstead, Aug. 30th, 1886. JOHN MAGRATH, M.D.

EDINBURGH.

(*From our own Correspondent.*)

POST-GRADUATE COURSE IN EDINBURGH.

IN a former notice of this course of demonstrations one or two particulars were omitted which have since become more definitely known. In consequence of a statement of their opinion to that effect, it has been decided to adopt the view of the managers of the Royal Infirmary, that no fee should be expected from those who attend the course. Another item of some importance is, that the demonstrations are to be thrown open to all practitioners of medicine, and are not to be confined to graduates of the Edinburgh school, as was at one time in contemplation. In addition to the thirteen clinical and practical courses already alluded to in previous notices, arrangements have now been made for a complete series of demonstrations in bacteriology. These demonstrations, six in number, will be held in the pathological department at the new University Buildings, under the auspices of Professor Greenfield, and will be of as practical a nature as can be made consistent with a fairly exhaustive treatment of the subject. A large number

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of inquiries as to the arrangements of the classes have been already received, and numerous intimations of their intention to be present, from medical practitioners at a distance. The committee, however, are anxious that all who intend to take part in the course should communicate their intention as soon as possible to one or other of the secretaries—Dr. Muirhead and Professor Chiene (Charlotte-square), so that adequate arrangements for their reception may be completed.

THE CITY FEVER HOSPITAL.

After a prolonged period of waiting, the Town Council have at length resolved to give effect to the repeated recommendations of the city medical officer of health and vote a reasonable sum as an honorarium to the visiting physician to the City Fever Hospital. This decision has been rapidly followed by the appointment of a well-known Edinburgh physician to the vacant post. Dr. W. Allan Jamieson has accepted the post, and his appointment is one that will give general satisfaction here; and especially so as Dr. Jamieson has in his development of the Dermatological Department of the Royal Infirmary proved himself an able clinical teacher, and is therefore one who may be looked to as a clear exponent of diseased conditions, who will not lose opportunities of imparting instruction as soon as the authorities recognise the absolute necessity of opening their fever wards for the purposes of clinical teaching.

Edinburgh, Aug. 31st.

IRELAND.

(From our own Correspondent.)

THE Chair of Surgery in the Queen's College, Belfast, has become vacant, and applications for the post must be forwarded to the Under-Secretary at Dublin Castle not later than the 7th inst.

THE EPIDEMIC OF FEVER IN HARE ISLAND.

The patients attacked with typhus are doing well, but from a report of Dr. Hadden, dated Aug. 21st, it appears that another woman has contracted the disease, and has been admitted to hospital. One of the nursing sisters also has caught the infection, and has been removed to Skibbereen. The notice of motion given by one of the guardians of Skibbereen Union, that a medical man should reside on the island, has been withdrawn, as the proposed arrangement could not be carried out.

ROYAL UNIVERSITY OF IRELAND.

The Senate will, at its meeting in October, consider the appointment of one Fellow in the department of Medicine. The salary will be £100 a year, provided always that if any medical Fellow shall hold any fellowship or professorship in any other university, or college, he shall receive only such sum, not exceeding £100 yearly, as with the salary of the other fellowship or professorship shall amount to £400 per annum. The office is tenable for seven years, and the Senate appoint by open voting. As regards the duties to be performed, every medical Fellow holds his fellowship upon condition that he shall act as an examiner at the medical examinations of the University, and shall be bound, in conjunction with any other persons whom the Senate may add, to conduct the medical examinations of the University without further payment, save for expenses. It is probable that the contest for a member of the Senate, in the vacancy caused by the decease of Mr. Curtis, will mainly lie between Dr. Whitla, and Major Fitzgerald, a distinguished graduate of the University.

STROKESTOWN DISPENSARY.

In consequence of the sudden death of Dr. Murray, an election for a medical officer took place last week, and Dr. Duffy was appointed by a majority of votes. So great was the excitement in connexion with the election that the authorities considered it advisable to draft a number of extra police into the town from Athlone and other places.

LUNACY IN IRELAND.

The report for 1884 was not issued until February last, but the inspectors of lunatic asylums in Ireland on this occasion have published their report for 1885 with greater punctuality. A total of 14,279 persons were registered as being mentally affected at the beginning of last year; in the course of which, in addition to 9687 being located in district asylums, 2850 cases were admitted. Of these latter, 2240 were cases of first attack, and 610 relapses. From the proportion of recoveries on the daily average of patients, it would appear that about eighteen individuals in every 100 were directly benefited in a curative or ameliorative point of view from district asylum treatment; but if estimated on the basis of admissions, at about 53 per cent. The deaths numbered 856, and were somewhat lower than those which occurred in the previous year; four of these were suicidal. The inspectors justly refer to the inadequate pay and allowances granted to the subordinate resident staffs attached to district asylums, and they are of opinion that their position admits of a more liberal consideration, taking into account the irksome, responsible, and not infrequently dangerous occupations in which they are unceasingly engaged. The cost of supporting district asylums last year was £216,799 17*s.* 4*d.*, or at the rate of £21 19*s.* 5*d.* per inmate, being a decrease of £1 1*s.* 6*d.* per head as compared with the previous year. In poorhouses, 3733 persons, composed of lunatics, aged, utterly demented and tranquil, were located last year. Latterly, at some union boards, a strong feeling has been expressed that the insane of all denominations should be transferred to district asylums—a scheme which, if carried out, would entail a large outlay on new buildings, or on extensive additions to the existing ones, independent of an increased local taxation and a fresh call on the Government rate in aid. Some years ago it was proposed to erect large provincial receptacles for idiots, epileptics, and demented lunatics, but the project was abandoned from the likelihood of its failure. In the inspectors' report they state their objection to these depôts, as, independent of the outlay for their construction, the number of counties and cities attached to them would cause much embarrassment in their working, with continuous and unavoidable expenses and inconveniences consequent upon the conveyance and return of patients at the desire of their friends to and from remote localities, distant perhaps 100 or 130 miles. The full establishment cost of each for 800 or 1000 inmates might be reasonably estimated at from £25,000 to £30,000.

Dublin, Aug. 31st.

MEDICAL NOTES IN PARLIAMENT.

The Ventilation of the House.

IN the House of Commons on the 26th ult., Mr. Plunket, in reply to Mr. R. Cooke, said the Committee on the Ventilation of the House had been reappointed, and had held its first meeting. He was authorised to state that they were satisfied with the recommendations in the second report of the previous select committee. These recommendations would be carried out with as little delay as possible, and he hoped the works would be completed before the reassembling of Parliament.

The proposed Small-pox Hospital.

On the 27th ult. Mr. Pickersgill, who had given notice to ask the President of the Local Government Board whether he had received protests from several metropolitan boards of guardians against the proposal of the Metropolitan Asylums Board to erect a permanent small-pox hospital at Gore Farm, Darenth, at an estimated cost to the ratepayers of £116,000; whether he was aware that it was proposed to hold a conference of the metropolitan guardians at an early date to consider the question; and whether he would withhold the assent of the Local Government Board to the proposed expenditure, at all events until this conference had been held,—said he had now been informed that the Local Government Board had refused its assent. He wished to know if that was correct. In reply, Mr. Ritchie stated that it was quite correct.

The Metropolitan Asylums Board.

On the 30th ult., in reply to Mr. Pickersgill, Mr. Ritchie stated that it is the fact that the accommodation provided for imbecile children by the Metropolitan Asylums Board is at present insufficient for the needs of the metropolis. The managers are now, however, extending the schools for imbecile children at Darenth, and he understood that the buildings will be completed this summer. It is expected

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that, when finished, they will afford the accommodation required for children of this class. The managers have an asylum at Hampstead which is not at this moment occupied, but in the event of any serious increase of fever in the metropolis it would no doubt be necessary to use that asylum for fever patients.

Unlicensed Practitioners.

On the 2nd inst., Sir T. Esmonde asked whether it was a fact that there were at present a large number of so-called medical practitioners practising in London whose names did not appear on the Medical Register; and if it were a fact that several persons had been recently poisoned by them; and if so, what steps would be taken by the Government in the matter.—Sir H. Holland stated, in reply, that there was no information with the Privy Council Office to support the inference in the hon. gentleman's question. No doubt there were many unregistered persons practising in London who would be liable to prosecution. The Government did not think it necessary to take any steps in the matter, though their attention would be given to any case brought under their notice.

Medical News.

NAVAL MEDICAL SERVICE.—At the competition for commissions in the Medical Service of the Royal Navy, held on Aug. 9th and following days in the Hall of the University of London, the undermentioned gentlemen were the successful candidates:—

	Marks.		Marks.
Milner, G. H.	2960	Axford, W. G	2265
Weightman, A. B.	2885	Spiller, W. C.	2240
Underhill, J. W. O... ...	2580	Broatch, G. T.	2210
Upham, C. H.	2525	Bett, W.	2200
Burns, F. J.	2495	Rickards, H. W...	2150
Rimell, A. T.	2485	Brice, F. A...	2110
McNabb, D. J. P.	2465	Slaughter, J. W.	2110
Strickland, C.	2440	Foott, G. H.	2050
France, J. M.	2270	Earle, H. E. L....	2040
Menary, J....	2270		

SOCIETY OF APOTHECARIES.—The following gentlemen passed their examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received certificates to practise, on Thursday, the 26th ult.:—

Boxall, Frank, Oakley-square.
Brodie, Fredk. C., Fernhill-park, Wootton, Isle of Wight.
Haring, Nathan Charles, Upper Brook-street, Manchester.
Hounsell, Frederick Claud Wright, Woodlands, Torquay.
Jennings, Edgar, Sherriff-road, West Hampstead.
Miller, Frederic Richard, Ivy House, West Firs, Hants.
Orton, F. J. Johnson, Vine Cottage, Longford, near Coventry.
Sawell, Frank Leslie Pownall, Royal-crescent, Holland-park.
Tidey, Stuart Alex., Glenely, Springfield-park, Acton.

At the recent examination for the competitive examination for the prizes in Materia Medica and Pharmaceutical Chemistry, annually given by the Society, the following were the successful candidates:—

Toller, Seymour Graves, St. Thomas's Hospital; Gold Medal.
Cowen, T. Philip, St. Thomas's Hospital; Silver Medal and Books.

Dr. A. H. N. Lewers has been elected a member of the Court of Examiners, in the room of Dr. Fowler, deceased.

DR. JOHN SAVAGE, the oldest medical practitioner in Newry, Ireland, died last Saturday by a fall from a ladder.

IN consequence of the prevalence of scarlet fever at Dowlais, the Local Board of Health have directed the temporary closure of the public schools in that place.

AT a meeting of the managers of the Metropolitan District Asylums on the 28th ult., the chairman announced the gratifying fact that there was not at that moment a single small-pox patient in any of their establishments.

THE BRITISH ASSOCIATION.—Sir J. W. Dawson, F.R.S., F.G.S., Principal of McGill University, Montreal, delivered his inaugural address at the opening session of this Association at Birmingham on the 1st instant. The subject mainly dealt with was the geological history of the North Atlantic Ocean.

IT is stated that the Queen has signified her willingness to open the Metropolitan Free Hospital in Kingsland-road, on a date which has yet to be fixed. The building is rapidly approaching completion.

AN election for an assistant medical officer to the Richmond District Lunatic Asylum, Dublin, took place last Tuesday. There were a large number of candidates for the post, the governors electing Dr. George P. Cope.

THE Epping Rural Sanitary Authority have agreed to borrow £10,000, to purchase land for the Chingford outfall works, to carry out a scheme of drainage for the district; £2000 to be applied for the purchase of a site, and the remainder for the carrying out of the works.

A NEW edition of Professor Ferrier's treatise on "The Functions of the Brain" is in the press. The book has been almost entirely rewritten. The revised issue will include the results of new investigations by the author, as well as a critical survey of the more important physiological and pathological researches on the functions of the brain and nervous system that have been published during the last ten years.

ACADEMY OF MEDICINE OF PARIS.—At the last meeting of this Society, the Commission charged with the task of selecting candidates for the vacant post of foreign corresponding member, submitted three names to the Academy in the following order:—Dr. Bateman of Norwich, Dr. Ossian Bonnet of Rio Janeiro, and Dr. Crocq of Brussels. The result of the ballot was twenty-three votes for Dr. Bateman and one vote for Dr. Bonnet, the former being consequently declared elected.

DEATH OF ANOTHER PATIENT OF M. PASTEUR.—A child, three years and a half old, is reported, in the *Semaine Médicale* of last week, to have died lately from rabies at Teste. He was bitten by a mad dog on June 14th last. On the 16th, he was brought to Paris, where, during ten days, he was submitted to Pasteur's treatment. After his return to Teste on June 28th, the child was seized on Aug. 12th with the first symptoms of hydrophobia, to which he succumbed in a few days.

ST. JOHN AMBULANCE ASSOCIATION.—Mr. John Furley, Deputy-chairman and Honorary Director of Stores of this Association, has received from the German Samariterverein a diploma, illuminated on vellum, appointing him an honorary member of the latter Society, "in acknowledgment of his services in the universal extension of the knowledge in first aid to the injured, more especially in recognition of the encouragement and assistance given by him towards the establishment of the German Sanitarian Society."

HOSPITAL SATURDAY FUND.—At a meeting of the Board of Delegates of this fund on the 28th ult., the secretary reported that there was now standing to the credit of the fund at the bank £3000, proceeds of the last street collection, after payment of £700 expenses. About £300 remained in the hands of local committees, and a considerable amount in bronze coin was at the central office. Altogether, about £4800 would accrue to the fund from last Hospital Saturday—£500 less than in the preceding year. This was attributed to unfavourable weather. A recommendation of the Council that in October next a special appeal should be publicly made in the name of Lord Brabazon and other vice-presidents of the fund "urging its claims upon all classes" was, after some rather sharp criticism, adopted.

BRITISH PHARMACEUTICAL CONFERENCE. — At the commencement of the sittings of this annual conference on the 31st ult. at Birmingham, the president, Mr. T. Greenish, delivered an address on the inferiority of the British Pharmacopœia, and urged that a strenuous effort should be made to place it on a level with the progress made in pharmacy. The following papers, amongst others, were afterwards read and discussed:—"Crystallised Aconitine," by Mr. J. Williams; "Certain Derivatives of Hymen-Dictyonine," by Mr. W. A. H. Naylor; "A False Pareira Brava," by Mr. W. Kirby; and "A New Antiseptic," by Mr. J. Moss. On the 1st inst. Professor Hillhouse read a paper on the correlation of studies in botany and materia medica, after which it was resolved to undertake the preparation of a formulary of non-official remedies.

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A FORTUNATE UNIVERSITY.—Since 1879 the University of Sydney has received donations exceeding a million of dollars. One bequest, known as the Challis bequest, is expected to realise £200,000. The Macleay Natural History collection, another recent gift, is valued at £25,000, and a sum of £6000 has been promised for the endowment of a curatorship in connexion with it. For the purpose of founding a library a donation of £30,000 was made.

THE TRIENNIAL ASTLEY COOPER PRIZE.—This prize of £300 has been gained by Mr. Anthony A. Bowlby. The subject was "Diseases and Injuries of the Nerves, and their Surgical Treatment, together with the operations performed upon Nerve Trunks in the treatment of various diseases, and description of the changes which ensue in other structures as well as in the nerves themselves from these operations."

BOMBAY HOSPITAL FOR WOMEN.—The "Times of India" gives an account of the opening of the Cama Hospital (officered entirely by women) by his Excellency Lord Reay, Governor of Bombay, in the presence of a very large assembly of friends, on July 30th. The foundation stone of the hospital had been laid in November, 1883, by his Royal Highness the Duke of Connaught. In opening the hospital, Lord Reay remarked that there was no movement in India in which Her Majesty felt greater personal interest.

THE WATER-SUPPLY OF THE METROPOLIS.—In his report of the examination of the water supplied by the several metropolitan water companies during the month of July, Colonel Sir Francis Bolton states that the Thames water sent out by the Chelsea, West Middlesex, Southwark, Grand Junction, and Lambeth companies contained in every case less organic matter than the previous month's samples, and even less than those collected in May, the absolute amount of this organic matter being for river water exceptionally small. Of the water taken from the Lea, that distributed by the New River Company contained slightly less, and that by the East London Company very slightly more, organic matter than any of the Thames waters. All the waters were clear on delivery.

THE POPULATION OF FRANCE.—M. Bertillon, in the course of a lecture recently delivered at the Hygienic Exhibition in Paris, stated that out of every 1000 inhabitants of Paris only 360 are natives of the city, 565 belonging to the departments of France or the colonies, and 75 being foreigners. There are in proportion as well as in actual numbers more foreigners in Paris than in most other large cities, the proportion being 75 in 1000, as against 14 per 1000 in Berlin and Trieste. The movement of the population for the past year throughout France was also very unsatisfactory, the total number of births being 922,361, or upon the average 30,000 fewer than for the last fifteen years. Moreover, out of this total, 74,118 were illegitimate, or rather more than 8 per cent. of the whole, this being the largest number of illegitimate births ever recorded. Upon the other hand, there has been a slight reduction in the number of deaths, the total for 1885 being 836,897; but even so, it will be observed that the excess of births over deaths was only 85,464.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

BINDLOSS, EDMUND, F., M.R.C.S., L.R.C.P. Lond., has been appointed Medical Officer for the West Deptford district of the Greenwich Union.

BROCKATT, A. A., L.R.C.P., M.R.C.S., has been reappointed Resident House-Physician to St. Thomas's Hospital.

CLEMOW, FRANK G., has been appointed House-Surgeon to the County Hospital, Ayr, N.B.

CROWDY, F. D., M.B.Oxon., M.R.C.S., L.S.A., has been reappointed Resident House-Physician to St. Thomas's Hospital.

EVANS, C. S., M.R.C.S., L.S.A., has been appointed Assistant House-Surgeon to St. Thomas's Hospital.

GODFREY, A. B., L.R.C.P., M.R.C.S., has been reappointed Non-Resident House-Physician to St. Thomas's Hospital.

HIRD, T. ALFRED, M.B., has been appointed Surgeon to the Coventry Provident Dispensary, vice Littlewood, F.R.C.S.Eng., resigned.

HUTTON, J. S., L.R.C.P., M.R.C.S., L.S.A., has been appointed Clinical Assistant in the Throat Department of St. Thomas's Hospital.

JONES, J. KENRICK, L.R.C.P., L.R.C.S., L.M.Ed., has been appointed Medical Officer for the Llanrhaiadr-yn-Mocknant District of the Llanfyllin Union.

KIDD, H. CAMERON, L.R.C.P., M.R.C.S., has been appointed Assistant House-Physician to St. Thomas's Hospital.

MATHESON, AUG. A., M.D., has been appointed Assistant Medical Officer to the Edinburgh Provident Dispensary, vice Bairstow, L.R.C.P., L.R.C.S., resigned.

MONTAGUE, A. J. H., L.R.C.P., M.R.C.S., L.S.A., has been reappointed Clinical Assistant in the Skin Department of St. Thomas's Hospital.

NICHOL, F. E., L.R.C.P., M.R.C.S., has been appointed House-Surgeon to St. Thomas's Hospital.

PARSONS, F. G., L.R.C.P., M.R.C.S., has been appointed Clinical Assistant in the Ear Department of St. Thomas's Hospital.

PRESTON, HENRY T., M.D. Aber., M.R.C.S., has been appointed Medical Officer for the Wolverley district of the Kidderminster Union.

RITCHIE, E. D., M.B., B.C.Cantab., M.R.C.S., L.S.A., has been appointed House-Surgeon to St. Thomas's Hospital.

ROWLANDS, JOHN W., L.R.C.P.Ed., L.F.P.S.Glas., has been appointed Medical Officer for the Anglesea No. 3 district of the Bangor and Beaumaris Union.

STAVELEY, W. H. C., L.R.C.P., M.R.C.S., has been appointed Assistant House-Surgeon to St. Thomas's Hospital.

YEOMAN, C., M.B., B.C.Cantab., M.R.C.S., L.S.A., has been appointed Resident Accoucheur to St. Thomas's Hospital.

Births, Marriages, and Deaths.

BIRTHS.

DONALD.—On the 28th ult., at Ambleside-avenue, Streatham, S.W., the wife of David Donald, M.D., L.R.C.S.E., of a daughter.

MARTYN.—On the 25th ult., at Mansfield, the wife of Ernest Martyn, M.B., of a son.

ROBERTS.—On the 28th ult., at London-street, Reading, the wife of Arthur Roberts, M.R.C.S., of a son.

TOMLINSON.—On the 29th ult., at Abbots Heyes, Chester, the wife of Surgeon-Major W. Winslow Tomlinson, Medical Staff, of a daughter.

MARRIAGES.

BURTON—BRETT.—On the 25th ult., at St. Agnes', Kennington-park, Leonard William Burton, L.R.C.P., M.R.C.S., of Burton-on-Trent, to Gertrude Alice, second daughter of Henry R. Brett, of Longridge-road, South Kensington.

FENN—JOBSON.—On the 25th ult., at Churchill, Worcestershire, Ernest Harrold Fenn, Surgeon, Grenadier Guards, to Bertha Alison, younger daughter of the late Robert Jobson, of Churchill Court, Worcestershire.

HILBERS—MATHIAS.—On the 19th ult., at St. Thomas' Church, Haverfordwest, Hermann Gerhard Hilbers, B.A.Camb., L.R.C.S., L.R.C.P.Ed., L.F.P.S.Glas., to Grace Mabel Loyd, second daughter of Henry Mathias, Esq., of Haverfordwest.

LEAK—BAGOTT.—On the 25th ult., at St. John's Church, Dudley, by the Rev. Gilbert Bradley, M.A., Vicar of St. Edmund's, Dudley, assisted by the Rev. E. H. L. Noott, M.A., Vicar, Hector Leak, M.R.C.S., L.R.C.P., younger son of A. P. Leak, Esq., M.D., of Winsford, Cheshire, to Miriam Annie, younger daughter of Edward Bagott, Esq., of The Hawthorns, Dudley.

REYNOLDS—JACKSON.—On the 26th ult., at St. Mary Magdalene's, Munster-square, Frederick Reynolds, L.R.C.P., to Florence Edith, youngest daughter of George Jackson, Esq., of Bancroft, Hitchin, Herts.

SHEPPARD—IVES.—On the 25th ult., at St. Denys' Church, Southampton, by the Rev. T. Plunket Mooney, M.A., Vicar, Henry Anderson, Surgeon, Indian Medical Staff, youngest son of James Walter Sheppard, Esq., of The Avenue, Southampton, to Ellen Eliza (Nellie), eldest daughter of Robert Ives, Esq., M.R.C.S., L.R.C.P., &c., of Chertsey Lodge, Portswood, Southampton. No cards.

DEATHS.

CHADWICK.—On the 30th ult. (suddenly), at Buxton, Charles Chadwick, M.D., J.P., F.R.C.P., D.C.L., of Broadwater Down, Tunbridge Wells (formerly of Leeds), aged 71.

EDWARDS.—On the 26th ult., at Benarth, Hull, James Edwards, M.D., aged 76.

JEWEL.—On the 27th ult., at Sidmouth, Henry Jewel, M.D., late of Tregoney, Cornwall, in his 73rd year.

PARKER.—On the 1st ult., at Ferozepore, Punjab, India, Surgeon Hibbert Sullivan Parker, Medical Staff, F.R.C.P., F.R.C.S.Ed., M.R.C.S., aged 28.

WAKLEY.—On the 30th ult., at Heathlands-park, Longcross, Chertsey, Surrey, James Goodchild Wakley, M.D., for twenty-five years Editor of THE LANCET, youngest son of the late Thomas Wakley, M.P.

N.B.—*A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.*

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METEOROLOGICAL READINGS.

(Taken daily at 9.30 a.m. by Steward's Instruments.)

THE LANCET Office, September 2nd, 1886.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 9.30 A.M.
Aug. 27	30·15	W.	66	63	109	80	60	...	Fine
,, 28	30·00	W.	63	62	110	73	63	...	Fine
,, 29	30·07	S.E.	62	59	101	81	55	...	Fine
,, 30	30·04	W.	67	62	120	87	60	...	Fine
,, 31	30·10	W.	69	63	119	88	59	...	Hazy
Sept. 1	30·14	W.	65	62	113	87	62	...	Fine
,, 2	30·08	E.	64	61	...	...	61	...	Cloudy

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

We cannot undertake to return MSS. not used.

THE STUDENTS' NUMBER OF "THE LANCET" will be published on Saturday next, Sept. 11th. Those gentlemen holding official situations connected with medical institutions in the United Kingdom who have not yet forwarded the necessary information to our Office for publication in that number are earnestly requested to send it *without the delay of a single post.*

"PSORIASIS SOLARE."

To the Editor of THE LANCET.

SIR,—In reply to "House Surgeon," regarding his inquiry as to the efficacy of Barff's boro-glyceride in psoriasis, let me say that, in conjunction with internal remedies and a rigid attention to a restricted diet, I have had a most gratifying result in the local application of a saturated solution of boro-glyceride and glycerine (one ounce of boro-glyceride dissolved in two ounces of warm glycerine) on one undoubted case of psoriasis (probably specific). The solution has certainly the disadvantage of being sticky; but that one objection is more than counterbalanced by its being non-poisonous, having no unpleasant odour, and its speedily allaying the ofttimes intolerable irritation. The exact cause of the disease would indicate the more suitable internal remedies. I am about to give a trial to a similar solution of the boro-glyceride in a case of ulcerative (?) erosion of the cervix uteri, when I shall anxiously await the results. Should they prove satisfactory, I imagine that in all cases of stomatitis, and ulcerations generally of mucous membranes, its application would speedily be followed by a most gratifying relief of the symptoms.

I am, Sir, yours faithfully,

WM. BALFOUR FERGUSSON, M.D., M.S.

Newtown, Montgomeryshire, Aug. 30th, 1886.

To the Editor of THE LANCET.

SIR,—In answer to the letter of "House Surgeon" regarding the treatment of psoriasis, published in your issue of Aug. 28th, might I suggest to him the following ointment, recently recommended to the profession by Dr. Walter Smith of Dublin? Pyrogallic acid, forty grains; salicylic acid, twenty grains; lanolin, one ounce; adipis, one ounce. Fowler's solution, in small and regular doses, should be given for some weeks. I am, Sir, yours faithfully,

Darwen, Aug. 28th, 1886. ROBERT REILLY, L.R.C.S.I.

SCOTTISH MEDIÆVAL MEDICINE.

THE ninth King of Scots, if we may believe the early chroniclers, rendered his reign memorable by the high honour in which he held physicians. It was in Ireland, where he spent years of exile with his father, says Buchanan, that he became familiar with medicine and its practitioners. When settled on the throne of Scotland he so inspired the courtiers with his medical tastes that the healing art, particularly surgery, became quite a patrician accomplishment, and for centuries afterwards "nemo esset in Scotia illustriore loco natus, qui vulnerum curationem non teneret." Even down to the sixteenth century surgery, especially military surgery, was a *métier* in which the Scottish aristocracy were proficient. The gallant King James IV. pursued, according to Buchanan, the traditional practice of his race and ancestry with much zeal. "Unum e vetusta gentis consuetudine hausit avide, ut vulnera scientissime tractaret: cujus rei peritia toti Scotorum Nobilitati, ut hominibus in armis assidue viventibus, fuerat priscis temporibus communis." (One thing he imbibed eagerly from the ancient custom of the Scots—to wit, the thoroughly scientific treatment of wounds: a department in which, from remote times, the whole Scottish nobility, as men living constantly under arms, had shared a common skill.)

J. T. M.—Our correspondent, we apprehend, must vote for the division of the kingdom in which he is registered as residing. The arguments for electing a veritable general practitioner in Ireland, untrammelled by any official relations to the Colleges, are very strong.

Omega.—This question is essentially a legal one.

"THE USE OF COCAINE IN CIRCUMCISION."

To the Editor of THE LANCET.

SIR,—Dr. Snow commences his last letter by stating that "the elongated prepuce is usually (if not always) a result of the neglected phimosis." I trust he will pardon my saying that I cannot admit that this assertion is sustained by facts. Having been long impressed by the amount of injury and suffering caused among children by "neglected phimosis," I have for many years carefully examined every newly-born male infant who has come under my care, and found elongated prepuces in a considerable proportion of them. Dr. Snow further suggests that dilatation should be performed "as soon as the child is found to have trouble in micturition." I would point out that before this symptom appears irreparable injury has often been done to the nervous system of the child. I have no doubt that more than "inconvenience is sometimes caused by a long prepuce without actual phimosis, as I have had occasion to operate on several boys between the ages of six and eight whose health had much deteriorated on account of this condition, and in all of whom rapid improvement followed the circumcision. Dr. Snow's application of the word "mutilation" to the removal of a small portion of useless skin seems to me somewhat grandiloquent; and I would further remind him that forcible dilatation of the prepuce is an "attempt to improve upon nature," though generally, I think, a much less successful one than circumcision. Dr. Snow makes the rather Irish remark "that every male child should have its prepuce retracted from time to time, *whether there be phimosis or not*," forgetting apparently that the existence of phimosis precludes the possibility of this proceeding until remedial measures have been adopted. I am still of opinion that the occasional retraction of an elongated prepuce, under the protection of which the subjacent glans has become unduly sensitive, and the manipulation necessary in cleansing, are apt to produce sensations not beneficial in their effect upon the child. In addition to this, it is a very difficult matter to get this measure carried out regularly and efficiently After circumcision the necessity for it practically ceases, as the ordinary operations of the daily bath are sufficient to ensure cleanliness.

I am, Sir, your obedient servant,

Inverness-terrace, Aug. 31st, 1886. GEOFFREY HETT.

THE RELATION OF TONSILLITIS TO SCARLATINA AND DIPHTHERIA.

To the Editor of THE LANCET.

SIR,—Will you kindly allow me to make one or two comments on Dr. Hingston Fox's article on the above in your issue of July 31st.

There can, I think, be no question that certain poisons circulating in the blood may and do set up acute inflammation of the tonsils, the same as they do in the various lymphatics of the body. Yet there is in some persons an unquestionable tendency to strumous enlargement of the glands generally, with or without any corresponding enlargement of the tonsils, and *vice versâ*, while both may exist together; and if we say that tonsillitis is always the result of some scarlatinal or diphtheritic poison, we must also believe that the ordinary strumous enlargement of the glands is due to the same cause. But while it is certain that the tongue in ordinary tonsillitis does not bear any resemblance to that which exists in scarlatina, and that simple quinsy is non-infectious, it cannot be doubted that tonsils of a large spongy character are a favourite soil, as it were, for germ life and growth. My own opinion is that ordinary inflammation of the tonsils is similar to that which arises in various strumous glands, and has nothing of a specific nature about it.

I am, Sir, your obedient servant,

Surbiton, Aug. 27th, 1886. F. P. ATKINSON.

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ORGANISATION OF INDIARUBBER.

ACCORDING to an American contemporary, M. Professor Van Lair of Liège has announced to the Académie de Médecine the curious fact that a tube of caoutchouc placed between the two ends of a cut nerve becomes vascularised; the nerve-fibres prolong themselves into it, and finally the two ends of the nerve unite, the caoutchouc disappearing.

L. D. S.—There are many cases on record of facial paralysis which have been cured by the extraction of teeth, although there was little previous evidence to show that they were the cause of the paralysis. We should certainly recommend in this case, if the disease does not yield to other treatment, their removal; for no possible harm is done, even if the operation fails to relieve the affection.

A Constant Reader.—A book on the subject by Dr. Murrell is published by H. K. Lewis, 136, Gower-street, London.

A NEW AND IMPROVED CLAMP FOR HÆMORRHOIDS.

To the Editor of THE LANCET.

SIR,—As your correspondent, Mr. C. J. Smith, has sought to criticise my original invention for the above, I trust that, in justice to myself, you will permit me to offer a few remarks in reply thereto.

Prior to my invention I came to the conclusion that the cause of all of the very many ingenious clamps which had been constructed failing to effect sufficient parallel crushing power was the application of the force after the scissor fashion, notwithstanding that measures were adopted in many to ensure *theoretically*, but certainly not *practically*, that the jaws of the individual clamp should so approximate. I accordingly resolved to construct one to grasp the pile to be operated upon in the opposite direction, and on this principle effectual clamps could be made after various designs. But I felt that in order to obtain a clamp of the simplest and yet most powerful description it would be advisable to construct it in the shape of pincers, with the handles about four times the length of the other end, with the addition of a screw to be attached to the extremities of them (see THE LANCET, vol. ii., 1880, pp. 1 and 158; also vol. i., 1882, p. 602). Now, I maintain that your correspondent has grasped my idea of abandoning the scissor fashion, but has produced a clamp which I do not hesitate to characterise—having now had very large practical experience in the crushing operation of piles—as being most unreliable; and if he will kindly screw his clamp tightly together with a small mass, say, of brown paper, between the outer edges of the jaws, he will find that they will spring from the parallel direction, which I have not only found to be the case with the instrument, which I have seen at the maker's and figured in THE LANCET of to-day, but which fact also is well known to every intelligent mechanic—hence the now almost obsolete pattern of the hammer-spanner used. But he has figured in his sketch the lip at the extremities of the jaws and V-shaped piece particularly mentioned by me in THE LANCET, vol. i., 1882, p. 602. I also certainly do not agree with Mr. Smith that I lay too much stress upon the power actually required for the complete destruction of the tissues operated on; and I have yet to learn that his, now almost obsolete, screw hammer pattern has anything like the crushing power as compared with my clamp, apart from the most important fact that "the jaws do not approximate under pressure in a parallel direction." I confess that my clamp is somewhat heavy; but, considering that surgeons do not require to carry such an instrument in their waistcoat-pockets, it is no drawback to it, provided its performance is effectual, which I have not the slightest hesitation in asserting to be the case, having had, as I have before said, large practical experience in this branch of surgery. I am, Sir, yours faithfully,

Baron's Court, S.W., Aug. 28th, 1886. R. FITZROY BENHAM.

THE MEDICAL REGISTER.

To the Editor of THE LANCET.

SIR,—I have often seen in your columns complaints of the names of members of the profession having been struck out of the Medical Register without due inquiry having been made. The following statement will show how easily such a thing can be done, and what little trouble is really taken to ascertain the whereabouts of members before it is done. I have just received a communication stating "that attempts have been made in vain to communicate by inquiries sent to my registered address, the letters having been returned by the Dead Letter Office," &c. As physician to a large provincial hospital, and officer of health to a large combination, and receiving a score or more of letters daily, can it be possible that inquiries had been made in vain, or must not this have been the first inquiry? I have lately removed to Harrogate, and commenced practice there, and at once notified my removal to the registrar. Of this notification no notice was taken, and I heard nothing until I had sent me the strange communication above mentioned. I then wrote and asked why my notification had not received attention. The following is the reply:—"On investigation I find that your letter announcing change of address has been duly received, and the necessary correction made in the Register." No word of apology. Comment is needless. Should not it be made a *sine qua non* that before any name is struck out of the Register a *registered* letter should be sent to the registered address? I am, Sir, yours faithfully,

Harrogate, Aug. 26th, 1886. THOS. BRITTON, M.D.

"PERLÈCHE."

ACCORDING to the *New York Medical Journal*, M. Justin Lemaistre has recently described a contagious affection occurring among school-children in some country districts in France, which he thinks has never before been described, although the peasants have known it for some time under the name of *perléche*. It is of comparatively frequent occurrence in the country districts of Limousin. It appears at the angles of the mouth as a small abrasion, which in a short time extends along the labial commissures, forming cracks, or fissures, which give rise to pain and some hæmorrhage when the mouth is opened wide. The lesion has many of the objective characters of certain mucous patches and commissural rhagades in syphilitic children. The malady is a simple one, without constitutional disturbance, and usually lasts from fifteen to thirty days. The treatment, like the disease, is simple—merely touching the patches with sulphate of copper or alum is quite sufficient to ensure a cure.

Student.—The regulation of the General Medical Council requiring evidence of a preliminary examination in elementary mechanics came into force on Oct. 1st, 1886. It does not apply to those who passed the Preliminary Examination before that date.

A. Z.—Certainly so, if the introduction is not to a patient of the gentleman for whom our correspondent was acting.

UNQUALIFIED ASSISTANTS.

To the Editor of THE LANCET.

SIR,—In an article in THE LANCET of Aug. 28th, commenting on a correspondence in the *Sheffield Daily Telegraph* alleging the extensive employment of unqualified persons as assistants and *locum tenens*, the existence of such a practice seems to be doubted, and some information on the subject is asked for. I regret the system is not confined to Sheffield—it is pretty general throughout England; and in support of this statement permit me to record my own experience. Two years ago I acted as assistant to a medical man practising in the north of England. This gentleman, a M.D.Edin., had six assistants, in charge of as many distinct branches, and only two were qualified. Two more unqualified persons were practising in the district, and these had been assistants to the present incumbent's predecessor. The neighbouring practitioner had an assistant in charge of a branch; he also was unqualified. I now reside near Cardiff, and I know four medical men in this locality. Each has an assistant for the duties of general practice, and only one of the four is qualified. My friends report in much the same terms on other parts of England. These facts would seem to prove that at least one-half the assistants practising in the densely populated mining and manufacturing districts are unqualified. Surely, it is high time that something should be done to put a stop to this abuse. The system has nothing to recommend it. To patients it is a wrong; to qualified assistants a great hardship; to the profession in general a gigantic evil, for it has degraded the position of the medical man.

I am, Sir, yours truly,

Cardiff, Aug. 30th, 1886. C. REIDY, F.R.C.P. & S.ED.

"TREATMENT OF STOMATITIS."

To the Editor of THE LANCET.

SIR,—No doubt the most important point in "M.B.'s" case is to endeavour to improve the state of health which gives rise to the symptom. I think, however, if he will paint over the patches three or four times a day with a solution of 120 grains of boracic acid in an ounce of glycerine he will be pleased with the result. An intimation of the effect will oblige. I am, Sir, yours faithfully,

Margravine Gardens, W., Aug. 27th, 1886. H. B. BLACKBURN.

To the Editor of THE LANCET.

SIR,—I venture to suggest to "M.B.," in the case of his patient, that he try hamamelis virginica. Frequently I have found this drug to exert a wonderfully efficacious action on the mucous surface of the mouth, stomach, and rectum. The granular effervescent hydrobromate of caffeine may ameliorate the condition of the stomach and relieve the headache. Should this treatment not prove satisfactory, holding the open mouth over the fumes of calomel heated on a piece of tin over a spirit lamp may be worth a trial.

I am, Sir, yours faithfully,

Sept. 1st, 1886. T. E. B.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Hett, London; Mr. Benham, London; Mr. Tait, Birmingham; Dr. Davies-Colley, London; Dr. Handford, Nottingham; Dr. Havilland Hall, London; Mr Lyon, London; Dr. Herman, London; Dr. Nedwill, Christchurch, N.Z.; Mr. Hamilton, Stonehouse; Dr. Weaver, Southport; Mr. Hays, Dublin; Dr. Fraser, Romford; Mr. Fulton, Edinburgh; Mr. Coates, London; Mr. Pool, Shrewsbury; Messrs. Robertson and Scott, Edinburgh; Mr. Mercier, London; Messrs. Hunter, Gordon, and

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Smith, Aberdeen; Dr. Dolan, Halifax; Mr. Atkinson, Kingston-on-Thames; Mr. Baxter, London; Mr. Duncan, Glasgow; Dr. Morris, Baltimore; Mr. Mouritz, Upper Tooting; Mrs. Saunders, Tunbridge Wells; Mr. Mills, Glasgow; Mr. Rowe, Oakham; Messrs. Wright and Co., Bristol; Dr. Ganderia, Bombay; Dr. L. W. Fox; Mr. R. Davy, London; Mr. G. M. Gould; Mr. Fisher, Dundee; Mr. Eyles, New Hampton; Dr. Illingworth, Clayton-le-Moors; Mr. Percival Hunt, Sheerness; Dr. J. W. Fraser, Hull; Mr. Romo, London; Dr. Notley, Birmingham; Dr. Atkinson, Surbiton; Messrs. Oppenheimer and Co., London; Mr. Lewis, Folkestone; Mr. Cripps, London; Mr. Reid, Cardiff; Dr. Churchill, London; Mr. Crookes, London; Mr. Saunders, Wimbledon; Mr. Ransford, Burton-on-the-Water; Messrs. Burgoyne and Co., London; Dr. Williams, Cincinnati; Dr. Fergusson, Newtown; Mr. Carter, Liverpool; Dr. Fenwick, London; Dr. Magrath, London; Mr. Taylor, Edgbaston; Mr. Tanner, Audlem; Mr. Allen, Isle of Man; Mr. Pickering, Bristol; Mrs. Shield, Cork; Mr. Fraser, Ashburton; Mr. Morgan, London; Dr. Ward, Tottenham; Mr. Burt, Worthing; Mr. Imlach, Liverpool; Dr. Somerville, Ayr; Dr. Croke, Hull; Mr. Hilliard, Aylesbury; Mr. Hoyland, Ipswich; Mr. Watson, Glasgow; Dr. Davies, Glamorgan; Mr. Edwards, Herts; Dr. Spencer, Bristol; Mr. Saunders, Manchester; Dr. Shirtliff, Kingston-on-Thames; Mr. Birchall, Liverpool; Mr. Trubshaw, Mold; Dr. Churton, Leeds; Mr. Stenhouse, Glasgow; Mr. Blore, Leeds; Messrs. Bell and Sons, London; Mr. Gurner, Ilfracombe; Messrs. Sampson Low and Co., London; Mr. Cooper, Woking; Dr. Thomas, Glasgow; Dr. Bond, Gloucester; Mr. Edwards, Cowbridge; Mr. Myers, North Devon; Dr. Johnston, Sheffield; Dr. Britton, Harrogate; Mr. Cadiot, London; Bristol Royal Infirmary; M.B.Edin., London; Enquirer; University of Edinburgh; A Sympathiser; M.B.Edin.; A. Z.; A Graduate of a Scotch University; Omega; T. E. B.; Student; Tonie, London; R. W., Chiswick; Medicus, Sheffield; Layman, Southwark; H. W. P., Manchester; A. R. P.; M.D.; Hygeia.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Barkley, Worcester; Mr. Whiteside, Shap; Dr. Vernon, Yeovil; Mr. Lawson, Guernsey; Dr. Bateman, Norwich; Mr. Rose, Norfolk; Mr. Sherman, London; Mr. Gillander, Fortrose; Mr. Counsell, Hants; Mr. Butler, Castle Donnington; Dr. Hamilton, Hamilton; Messrs. Robinson and Sons, Sheffield; Mr. Harrison, Runcorn; Mr. Beaman, Newton-le-Willows; Mr. Collings, Harpurhey; Dr. Tilt, London; Dr. Mackay, Esk; Dr. Singleton, Kendal; Mr. Ward, Manchester; Dr. Dickey, Monmouthshire; Mr. Soulby, Grimsby; Messrs. Whitehead and Co., Manchester; Mr. Adams, St. Leonards-on-Sea; Dr. Cochrane, Broadford; Dr. Colmer, Yeovil; Mr. Flower, Melksham; Mr. Mills, Glasgow; Mr. Williams, Maidenhead; Dr. Kirkland, Motherwell; Mr. Beckton, London; Messrs. Berdoe, London; Mr. Mann, Ferry Bridge; Miss De Luttichau, Holloway; Q. B. J., Swansea; W. M.; Sister, London; Surgeon, Malmesbury; L.S.A.; Surgeon, Burton-on-Trent; Medicus, Barnsley; Medicus, Liverpool; Sigma; L., Wigan; H., Birmingham; Abyla, London; Veritas, Leeds; Iodine; Medicus, Staines; J. J.; M.D., Luton; M. W., West Hartlepool; L. C., Bradford; A. L. S., Essex; Mentone; M.D., Bromsgrove; B., Shepherd's Bush; Surgeon, Epping; Cantab., Burton-on-Trent; Homo, Stonehouse; A. M. D., Leeds; B., West Dulwich; Southwell; Medicus, Tottenham; Miss M., Notts; Alpha, Birmingham; A. W.; D. C. S., London; Locum, Birmingham; L.R.C.P.; M.D., London; Jacobus, Carlisle; C. F. S., Stratford; E. L., Huddersfield; P. Q. R.; N. B., Leicester.

East Cumberland News, Anti-Sweater, Herald of Health, Dundee Advertiser, Port Elizabeth Telegraph, Windsor and Eton Express, Windsor and Eton Gazette, &c., have been received.

Medical Diary for the ensuing Week.

Monday, September 6.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.

ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesdays, same hour.

CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2 P.M.

HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.

Tuesday, September 7.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.

CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

Wednesday, September 8.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesdays and Thursdays, 1.30 P.M.

ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department, Tuesdays and Fridays, 9.30 A.M.

ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.

LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.

GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.

KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; and on Friday, 2 P.M.; and Saturday, 1 P.M.

Thursday, September 9.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M

Friday, September 10.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Saturday, September 11.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.

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An original and novel feature of "THE LANCET General Advertiser" is a special Index to Advertisements on page 2, which not only affords a ready means of finding any notice, but is in itself an *additional* advertisement.

Advertisements (to ensure insertion the same week) should be delivered at the Office not later than Wednesday, accompanied by a remittance.

Answers are now received at this Office, by special arrangement, to Advertisements appearing in THE LANCET.

Terms for Serial Insertions may be obtained of the Publisher, to whom all letters relating to Advertisements or Subscriptions should be addressed.

Advertisements are now received at all Messrs. W. H. Smith and Son's Railway Bookstalls throughout the United Kingdom and all other Advertising Agents.

Agent for the Advertising Department in France—J. ASTIER, 66, Rue Caumartin, Paris.

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THE LANCET.

LONDON: SATURDAY, SEPTEMBER 11, 1886.

ADDRESS TO STUDENTS.

THERE are two different conditions of mind for which the medical profession proves equally attractive. These are the scientific or philosophical and the practical. They are not incompatible with one another, and medicine has need of both. So long as there remain in man unknown organic functions, unknown processes of disease and possibilities of treatment—and the end of that era we cannot foresee,—so long will there be room for the investigator, while the man of action will always find in medical practice a test of his endurance and resource. Happily, there is in medicine nothing which need sever, but much to unite, these two great types of intellect. By basing all its procedure on the proved attainments of science, it stimulates the spirit of inquiry, at the same time that it checks extravagant speculation, by requiring the tests of experience. It follows as a natural consequence that the best practitioner will be one who, from the beginning of his career, has learned with equal zeal the methods of his art and the reasons which guide their action. It is expected of such a one—and not in vain,—both by the public and his medical brethren, that while following an approved system he will observe and think for himself, and will strive in this way to enrich the common working capital of knowledge. The student in like manner must seek to be more than one-sided in his aims and studies. The mere getting of a livelihood is not everything to him; nor, on the other hand, is fame or knowledge in itself the whole object of his efforts. He will early see that in his calling, more evidently perhaps than in any other, use and reasoning, practice and theory, mingle without confusion. The course of his studies, if he diligently follow it, will impress this fact upon him, and he will be wise if he neglect no part. Let him take together now the why and wherefore along with the facts of disease and treatment, and he will best promote his own after-success. The age at which a medical course may most appropriately be entered on is a matter for consideration. Often, indeed, the student has no choice. He may have to decide at a period of life when no time is to be lost. This is certainly better than beginning too early. Many youths go straight from school to the classes of a medical college. Some of these are doubtlessly qualified by age and by education to grapple successfully with the problems to be mastered in the study of their chosen profession. Others, we have little doubt, are less favourably placed. It seems to us, indeed, that for a majority of intending students of medicine a period not earlier than from the eighteenth to the twentieth year is the most suitable at which to begin their course. There are, of course, cases in which time or means available would oppose the working of this plan, and this point of age is not so vital that we need press it as an essential.

We now come to the question of degrees and qualifications. Henceforth, it is probable that a result of the latest movement in medical legislation, the Medical Bill of 1886, will be that no student will be legally qualified to practise until he has acquired a fair proficiency in Medicine, Surgery, and Midwifery. This is so far satisfactory, and marks a distinct advance on the days of meagre single qualification. It guarantees an average intelligence on the part of practitioners which ought at least to assure public security. At the same time, we would advise all students whose opportunities allow to qualify themselves as highly as possible. At this stage of their career advantages are open to them which they may never again enjoy, and they will do well to consider that such degrees as the Doctorate in Medicine of most universities or the Fellowship in Surgery, besides attesting, as far as any qualification can, their thorough fitness to practise, can often help them to appointments which go far to assure professional distinction. With all this, however, it must be remembered that ultimate success is purchased by a man's own work, and not by any mere degree. The student is sometimes at a loss to know which medical school he should select as his *alma mater*. There are now so many hospitals and schools well qualified to afford him instruction that he can hardly fail to have his need supplied in any recognised centre of medical education in the three kingdoms. We would rather indicate what considerations are important in guiding his choice than name any one such centre. These are thoroughness in clinical and practical teaching and the possession of sufficient material for this purpose. If in any case these requirements are well met, proficiency in teaching the theory of medicine and its allied sciences may usually be counted on.

Having thus considered the various arrangements introductory to the actual beginning of professional study, we come to speak of the methods which commonly lead to success in the course itself. A point too little regarded in all schools of our day is that the true object of education is to strengthen the mind by teaching rather than merely to fill it for a time. The student has it in his power to correct the cram tendency in his own case in a considerable degree. He will do this if he can assimilate as well as learn. He must observe and practise along with his reading, and he must endeavour to do this as far as possible for every study in its own order. It is with a view to his so doing that we have laid stress upon the value of practical teaching in the medical curriculum. Again, he should not try to carry on too many subjects at once. Let him be content to work well in each department of study in its turn, and he will then find each interesting in itself, and his interest will grow as time and progress in his work reveal to him the bearings of one on the other. Moreover, he will thus be saved the anxiety and the labour, fruitless of solid advantage, which is involved in cramming hurriedly a mass of neglected subjects on the eve of some examination. Success is most assured to the steady worker, even though he may not shine in the lists of class distinctions. We do not undervalue class competitions; on the contrary, they are in several ways useful helps in education. They engender and develop interest in study; they afford opportunities for revision of which there can hardly be too many; they mark the rate of progress to the student's own perception; while, by teaching him to arrange his ideas and express them exactly, they serve as tutors for professional examinations proper, and they train him in conciseness generally. It will not be

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found a good plan to select certain subjects for special attention and to neglect others. Justice to all should be the learner's maxim. Nevertheless, there are differences in the relative importance of studies. Speaking generally, we may say that during the first two years clinical observations can be only very partially understood. The junior student should not on that account, however, fail to attend the hospital. He is sure to learn something there; but by far the greater part of his time must as yet be given to the purely scientific subjects. He should strive to attain a mastery of anatomical and physiological facts, and should labour to be a good dissector. Having thus well laid a foundation in the first principles of his profession, he will follow with comparative ease their evolution in the practice of medicine and surgery, and the perversions wrought by disease will not be hard to trace. Professional examinations ought certainly to be encountered in their prescribed order. Even if he fail, the student will be better prepared for a next attempt, and he will be wise if he do his best to avoid the uncertainty, confusion, and imperfect work which would otherwise result from the grouping of many studies. As a rule he can hardly fail by taking this course, if he is reasonably steady in carrying through his work from day to day. Examiners have no interest in rejecting candidates, but the contrary. It is not their aim to spur competitors to outrun one another, but to maintain an average of proficiency which, if not low in face of the responsibility which their office entails, is not so high but that it should be reached by the great majority of careful students of fair intelligence.

There are matters connected with the plan of study to which we would draw attention. In acquiring a knowledge of medicine, the faculties of observation and memory are, on the whole, more tried and trained than any other. This is the more true because the learner must not only come to know but must become familiar with his subject. He must in many cases carry away with him not merely a description but a mental picture of his work, and he will find that the most successful method of storing the mind is to forestall forgetfulness by frequent revision. Let him revise with all he learns anew, and revise very often. It is better to study by oneself than along with others, for in such pursuits concentration is everything. Many books do not bring much advantage, at least to young students. They rather confuse by offering different presentations of their matter. One good text-book, as a rule, or at most two, should suffice for a subject. It is a mistake to transcribe notes at home; many students waste time in this way, and allow their hours for study to pass in mere penmanship. While we are engaged with this theme another point suggests itself. Is there, after all, much profit in work which is done by the midnight oil? Sometimes, we grant, such work is unavoidable. As a general rule, however, we would recommend medical students and all reading men, whoever they may be, rather to study moderately in the evening and to make use of the morning hours. It is better thus to break in on work with timely sleep than, as some do, to drive away sleep with continuous application. If the plan can be carried out, it should certainly have a trial. Students do not always see the utility of junior and senior classes in a given subject. These are, nevertheless, in some cases an almost imperative necessity. On the principle of thorough revision the more important subjects should be thus reiterated in successive sessions. Anatomy, physiology, medicine, surgery, and midwifery are each deserving of such treatment, and the student must choose from his own sense of deficiency how far he will so favour some or others. Commonly the custom of his school will also guide him in this particular.

Apart from the merely scholastic side of student life there are matters of a more personal kind, which have yet so much to do with the result of a career that we should be loth to pass them by. At this period there are many opportunities for the formation of character, as also for the confirmation, and unfortunately also the perversion, of that which is already formed. Habits of life and work which arise at this stage are not easily forgotten. The student should be careful, therefore, to pay strict heed to the disposal of his time. Regularity and punctuality will help him much in his after medical practice. Their importance to him is not the least reason why his class attendances should be prompt and continuous. He will do well to recognise what some affect to despise—namely, the fact that class lectures, even if not always brilliant, have a real value for him, partly as decided helps to study and partly as preventives of idleness. Home reading alone will not do so well as this with a teacher's exposition. The true student is a class-man, and always has been where he could. Leisure time likewise has its use to all good workers, and its appropriate method. This is sometimes forgotten. We have known hard head-workers who also laboured hard in physical exercise in the intervals of study. This is, we would say, as a rule, too much for the majority. For the student physical exercises have their place, and deservedly; but it should be the second place. The better plan for most is to make work the prime object, exercise the customary recreation. The importance of good food and fresh air may be noticed here. A liberal allowance of each is desirable. Stimulants may in most cases be omitted from the diet with advantage. As to companionship, a great deal might be said did space permit. A few hints may now suffice, for though the theory of selection in the case of friends may be well known to many, there are aged men who do not understand its application. Idle sets and vicious sets—the two are near of kin—abound in all colleges, certainly not only and not exceptionally in medical schools. The honest determination to work, and the unpretentious assertion in act of moral principle will secure the respect, if not always the approval, of any set, and will best pilot their fortunate possessor through the sometimes dangerous entrance to a successful future. The student who really has this end in view must early perceive and enter into the purpose of his profession, for here, as in all things, purpose is the very essence of character, as that is the beginning and end of success. Until he has acquired such a spirit his time will be equivalent to mere pastime in the name of work, and in the end will only bring him disappointment. The want of zeal, however, is fortunately not a common failing among medical students, and a man of energetic inclination is therefore not likely to lack either the aid of example or the spur of healthy rivalry. After all has been said and done, however, doubts and perplexities are not abolished.

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The student in every such case should not hesitate to consult his professional teachers, whom he will find equally willing and able to advise him. There may be at times yet deeper necessities for which no human guide is sufficient, and in regard to such let him not hesitate to take counsel of the supreme authority, whose power he daily sees revealed in the forms and functions which it is his lot to study.

THE RECENT CHANGES IN MEDICAL EXAMINATIONS IN ENGLAND.

ALTHOUGH the advent of a uniform one-portal system of examinations has been indefinitely postponed, if not made impossible, by the passing of the recent Medical Act, yet a fairly near approach thereto is now offered to medical students by the combinations of some of the corporations for examination purposes. The Conjoint Examining Board in England of the Royal Colleges of Physicians and Surgeons has practically become the one-portal for the rising generation of English medical men, and most English students will enter the profession by passing the examinations held under the supervision of this authority. The first examination comprises (1) Elementary Anatomy and Physiology, (2) Chemistry and Chemical Physics, and (3) Materia Medica, and it was intended when the examination was instituted that it should be passed in its entirety by the end of the first year of medical study. Further experience, however, has shown that it is often necessary, in justice to the student and his teachers, that Materia Medica should be taken at a later period in the curriculum, and the examination therein can now be passed by the pupil without prejudice to further progress in either his first or second year of study. The second summer session is generally found to be the most convenient for this by those who have had no preliminary experience in pharmacy or medical practice. Elementary Anatomy and Physiology may be passed without any difficulty by a candidate of fair ability and average industry at the end of the first winter session, and Chemistry with Chemical Physics at the end of the first summer; this last subject usually requires more application than the other two, and, perhaps because its bearings on medical science and work are not so readily appreciated by the learner, failures in passing therein are very numerous. Chemistry and Materia Medica may be passed at any time after registration, even before entrance at a medical school, for any medical man or efficient teacher can give instruction therein and sign the required certificates. It must be clearly held in view, that unless these examinations in Anatomy, Physiology, and Chemistry be passed before the commencement of the second winter session, the student's further progress is practically hindered, if not absolutely barred, for six months must have elapsed after passing in these before the candidate is allowed to present himself for the second examination in Anatomy and Physiology. If, therefore, any part of the first examination (except Materia Medica) be postponed until the second winter, the candidate cannot devote that period to his further dissections and his advanced lectures in Anatomy and Physiology, and he will have to do this work in the summer months or in the third winter, when all his attention and energies ought to be given to Medicine, Surgery, and Obstetrics, and to ward work in the hospital. The necessity of passing the second examination at the termination of the second winter—viz, in the month of April—is again imperative, as a further term of two years' study is insisted on, after passing this, before a candidate is admitted to his third or final examination in Medicine, Surgery, and Midwifery. If therefore a student, with average ability and persevering industry, follows the curriculum laid down by the Conjoint Board, and passes the examinations in due order, he can obtain the double qualifications of the Royal Colleges of Physicians of London and Surgeons of England in four years from the commencement of his studies; but if he fail at any one step, even the earliest, he will be delayed and placed at a disadvantage throughout the remainder of his student work. The three examinations are held every three months, and students can pass in all the subjects of an examination taken together, or in any one subject separately. The great blot in the present regulations is the non-insistence on certificates of attendance and work by rejected candidates before they are again admitted to examination. After a student has presented himself once at a given examination and fails therein, the teacher loses all control over him, and he can offer himself over and over again for examination in the same subjects without his having been placed under any supervision in the interim, and without even his teacher's knowledge or consent. The whole system, indeed, is a little too machine-like in the precision of its details. At the Apothecaries' Hall the examinations have also been improved and brought into closer relation to those of the other bodies. Surgery is now a compulsory subject for the licence, and it must be passed before the medical part of the examination can be undergone. At the University of London two Preliminary Scientific Examinations in the year have been instituted, and after next year the Intermediate M.B. Examination will be held in January as well as in July. Other arrangements for facilitating the taking of degrees have been made by the provincial universities, such as a division into three examinations at Durham, a change in the time of holding the examinations at Manchester, the possibility of passing in the various parts of an examination separately at Cambridge, and a curtailment of the time absolutely required for taking the M.B. degree at Oxford. It is not so widely known among parents and school teachers as it should be that Elementary Mechanics—comprising the elements of statics, dynamics, and hydrostatics—is now included among the obligatory subjects which must be passed by the intending medical student before he can be registered, and if the examination in general education does not include this as well as Latin, English, and Mathematics, a separate examination therein must be passed. To meet this difficulty the Apothecaries' Society permit a candidate to take up any of the various subjects of the Preliminary Examination apart from the others, and the College of Preceptors will give a separate certificate in Mechanics.

A DEGREE FOR LONDON MEDICAL STUDENTS.

THE agitation which has been proceeding in London during the past year or two has clearly shown that the London medical student is at a decided disadvantage when compared with the students in other medical centres, should he aspire to a degree and not remain content with the diplomas of the qualifying corporations. A degree is the

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more important to the practitioner in recent years from the competition induced by the holders of degrees passing into general practice instead of remaining consultants, as was formerly the more usual custom. This is a direct consequence of the large increase in men who pass out from our various universities after having observed the necessary curricula and passed the required examinations. Formerly graduates were comparatively few, and those who held qualifying diplomas were an immense majority. Of late years this disproportion has undergone a great change, and now holders of university degrees can everywhere be found in the ranks of the general practitioner, and we hail this change as one of the surest proofs of a general rise in the social and educational status of our profession during the past twenty or thirty years. It must not be forgotten, however, that, coincidently with the development of the universities as centres of medical education, the corporations have also done much for its improvement, and have so greatly altered their requirements and strengthened their examinations that they no longer hold the position to the present which they did to the former generation of medical practitioners. By the formation of a Conjoint Examining Board in England for the two Royal Colleges, a plan has been evolved from the old chaos of medical education and medical examinations; and it is a matter of much interest to review the present position of the medical student in London, and to compare his advantages and disadvantages with those elsewhere. In the first place, there can be no question that his clinical opportunities—and these are the essentials for his future practical work—are far greater in the metropolis than in any other medical centre, and that in some of the smaller provincial cities, with large medical schools, his ward work and clinical instruction must dwindle to a minimum. Against this positive gain must be set the disadvantage of his having to choose between multiple schools, with teachers of varying capacity and eminence attached to each school, whilst distance prevents any choice of classes in different schools. Undeniably, university professors, especially when extra-mural teachers have free scope as rival teachers, teach better than many in our metropolitan schools, but then they are encumbered by large classes, and can give but little personal supervision or encouragement except to a select few of their *alumni*. A direct and personal form of teaching is so much required for practical and clinical work, that we hope our smaller metropolitan schools will in time transfer the theoretical and scientific education of our students to expert teachers in three or four centres, and devote themselves and their institutions to this final work, for which they are so remarkably fitted. If such a plan could be carried out, the medical education of the London student would be almost ideally perfect, and the recent changes with regard to teaching botany and chemistry, by the practical throwing open of the certificates in these subjects, must soon bring this reform into the domain of practical expediency. But even at present, it is only just that the London student should have the proper facilities for obtaining a medical degree, and so far as the stringency and thoroughness of the present medical examinations of the Conjoint Examining Board in England are concerned, nothing more is necessary or desirable. They are quite equal to most of those instituted by the universities, and are even superior to some in the efficiency of their practical tests. There is no feasible objection, except that of the multiplication of degree-giving bodies, which can be urged against the combined colleges forming the medical faculty of a university, and having a power to grant degrees in consequence, and this objection fails when we find now all universities examining students destined for general practice, and see how valuable is the influence of a new and living institution like the Victoria University. The University of London is cosmopolitan, and can only be an examining body for the empire. It cannot control teaching, and does not pretend to do so. Nor does it regard or concern itself with the average student of our London medical schools. A Teaching University in London can only come by assimilating our medical schools, and their concentration into a medical faculty under the controlling and directing influences of the Royal Colleges must be the first step toward such a desirable course. Meanwhile the Colleges should take every measure which would pave the way towards obtaining this necessary power, for the number of graduates who are capped grows every year, and the disadvantage of not possessing a degree is ever increasing. A matriculation examination which is more real than the registrable examination of the College of Preceptors or of the Apothecaries' Hall is the first necessity, and with a suitable examination in biology in the first year of study, and perhaps a thesis for the M.D. degree, the present scheme would be put on an honours footing, leaving it as it stands for a pass, whilst those who passed in honours would be fairly and justly entitled to a degree, which would in no way lower those now in existence, but would have a distinct value on its own merits. We trust that the agitation in favour of granting medical degrees to our London students on the same conditions as in the Scotch and provincial universities will not be permitted to wane, but will become stronger and more urgent, so that all our medical candidates may be placed on an equal footing, without being obliged to forego any of the advantages of pursuing their clinical work where opportunities for it are greatest and most readily available.

MEDICAL STUDY ABROAD.

THOUGH there is probably no place in the world where a better and more thoroughly practical acquaintance with disease in all its forms may be obtained than in London, it is well that students—that is to say, more especially advanced students—should be reminded that there are medical schools and universities with abundant and admirable arrangements for teaching medicine across the English Channel, and that much advantage may frequently be gained by a session or more spent at a judiciously selected continental university. There is, too, another and a larger class of readers of THE LANCET to whom some knowledge of foreign medical matters may not come amiss at the present time; we mean the whole body of registered practitioners, who will shortly have to elect representatives to serve on the Medical Council and to help to make and enforce regulations by which the education and practice of British medical practitioners will be governed. It is surely a matter of importance to all who would give intelligent and discriminating votes at the forthcoming election to know something of "how they manage these

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things" abroad, so that that which is good in foreign systems may be, if possible, assimilated, and that which is inherently bad, or which would be unsuitable to the general conditions of life in these islands, avoided.

The point on which, perhaps, we in this country differ most from our continental brethren is in the matter of preliminary education. Most continental nations require from the medical student some kind of "leaving certificate" showing that he has passed with credit through the highest class or form of a public school, or that he has had an education equivalent to what that would have implied.

In every continental country of importance, for the course for the full licence to practise a knowledge of Greek is compulsory, and generally a much more extensive knowledge of Latin, mathematics, and science than is requisite with us, even for some of the examinations belonging to a grade above the lowest. In France, for example, where the possession of the Bachelor of Letters and the Bachelor of Science (slightly modified) is compulsory on all students who desire the full privileges of practice, the requirements of the double degree may fairly be reckoned as decidedly higher than those of the London matriculation, and as covering more ground than the minimum examinations for Arts degrees at Oxford or Cambridge, though probably the stringency of the tests in the English universities is greater than in France, where nearly everything is *vivâ voce*. A preliminary education about equal to that indicated by an ordinary English university degree in Arts is required also in Germany, Russia, Holland, Austria, Norway, Sweden, Denmark, and Switzerland. In those countries the supply of practitioners is quite equal to the demand, for it is only in very sparsely populated districts that any complaint arises of insufficient medical aid. Indeed, the cry is just the opposite, for foreign medical journals teem, like our own, with lamentations over the increasing number of practitioners and the difficulty experienced both by the juniors and the seniors in finding enough practice. The minimum period of medical study varies considerably in different countries: being four years in France and Spain; four and a half in Germany; five in Austria, Russia, Belgium, and Portugal; six in Italy, Holland, and Denmark; seven in Norway; and ten in Sweden!

Licensing systems vary in different countries. A State examination, other than a university degree, is enforced on all in Germany, Greece, Holland, and Switzerland; also in Belgium on those who have not degrees from the two State universities. A university degree is compulsory in Austria, Denmark, and Italy, and, for the full right to practise, in France. In Norway, Portugal, Russia, Spain, and Sweden, the universities and other medical schools grant licences which constitute titles to practise. In these countries a further examination is required for the Doctorate, which in some cases, as in Norway and Russia, is of so difficult a character that few practitioners attempt it unless they aspire to professorships or important public appointments. The only country where a partial or restricted qualification is now granted is France, where the licence as *officier de santé* only gives the right to practise in the department in which it is conferred, and does not authorise the holder to perform serious surgical operations, except in the presence of a doctor. It, however, requires four years of medical study, or the same period as is necessary for the higher qualification; but the preliminary requirements are very much smaller, and the examinations are not so numerous or so stringent. At the end of the first year, the candidate for the lower grade licence is examined in physics, chemistry, natural history, osteology, and arthrology; at the end of the second year, in descriptive anatomy and physiology; at the end of the third year, in internal and external pathology. At the conclusion of the whole period he is subjected to three *examens definitifs:* the first consisting of anatomy, physiology, and practical dissection; and the second including pathology, therapeutics, materia medica, and operative medicine; the third is a clinical examination in medicine, surgery, and obstetrics. The candidates for the Doctorate have to undergo what may be considered eight examinations of a more advanced character, including, in addition to the subjects required of the *officiers de santé*, hygiene and forensic medicine. They have, besides, to defend a thesis. It may be remarked that the lower grade licence is usually found sufficient by British physicians wishing to practise in French watering-places. Leave can be obtained to undergo the final examinations only.

The German State examination is a very thorough and practical test, or rather series of tests, of the candidate's acquaintance with all branches of medical knowledge. It consists of two main examinations: The "Physicum" takes place after two years' medical study, and is conducted orally and publicly; the subjects are anatomy, physiology, chemistry, physics, botany, and zoology. The Final Examination is conducted by a commission, and before admission to it the candidate must have passed at least four years and a half in professional study, two years of which must have been subsequently to passing the "Physicum" Examination. He must have held appointments in the surgical, medical, obstetrical, and ophthalmic departments, and must have completed two labours in the presence of one of his teachers. The examination embraces anatomy, pathological anatomy and general pathology, surgery and ophthalmology, medicine, midwifery and diseases of women, and hygiene. In anatomy he has to dissect and put up a microscopic preparation; in pathology he must make a partial necropsy; in surgery, medicine, ophthalmology, and midwifery, cases have not only to be examined in presence of the examiner and reported on, but have to be taken charge of for several days under the examiner and full reports handed in daily. A labour has to be attended in the examiner's presence, and, in addition, the candidate is subjected to ordinary *vivâ-voce* tests, and has to perform certain operations on the dead body and on the obstetric phantom. The anatomical and physiological portion must be passed before admission to the other subjects. If the student fail in one of the latter, he may still present himself for the rest, and he may be re-examined in his "weak" subject in from six weeks' to six months' time, according to the degree of weakness. If, however, he should not pass it during the next year he must go through the whole again.

The mode of conducting medical examinations abroad differs somewhat from the plans adopted in this country, papers with several questions on the different subjects

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being unusual on the Continent, where the written examination—if there should be one—generally consists of extempore essays on some one topic, often drawn by lot, so that a man has a poor chance if he happens to get a theme upon which he knows little, even though he may be pretty well prepared generally. The British system would appear to be fairer, and, to use a students' expression, less liable to "flukes." We pride ourselves rather upon the improvement which has within the last few years been introduced into our clinical examinations, in which one or more patients are actually examined and reported on by the candidate; but even that, as a test, falls far short of the German system mentioned above, of giving candidates charge of cases for several days together, making them report upon the progress and, in case of death, on the post-mortem appearances. In this country it would be difficult to find facilities for this, and impossible to make candidates attend a labour in the examiner's presence.

In the case of most of our licensing corporations the number of times a candidate may fail can, perhaps, only be properly appreciated by "chronic" students and persevering "grinders," or by parents to whom application is made for repeated fees for the same examination. This kind of thing is not tolerated in some countries: for instance, after two failures in Germany and Austria it is difficult to obtain permission for another attempt; and in Austria, if this ends in failure, the unfortunate candidate is permanently debarred from ever obtaining an Austrian qualification, and also from the "nostrification" or recognition of one obtained elsewhere.

Continental universities and medical schools generally are quite willing to allow foreign students or practitioners to attend hospital practice and lectures—in some cases without any payment, in others on payment of lecture fees. Some, too, confer M.D. degrees on English practitioners—after, of course, an examination. Arrangements, for instance, are made in Brussels by which a fully qualified English practitioner can undergo an examination (in English), and, if successful, in a week's time return with the magic letters attached to his name.

Although the Brussels M.D. is the most accessible, it is not by any means the only foreign degree that is open to Englishmen without residence. Paris, Berlin, Naples, and a number of other universities, will accept as sufficient the English medical curriculum, but the examinations imposed are generally conducted in the national language, or possibly in colloquial Latin, and the facilities afforded to a foreigner are therefore not so great as at Brussels. Austrian and Russian degrees can scarcely be obtained by English practitioners.

Licences to practise can be obtained by qualified British practitioners by examination in France, Germany, and Switzerland; and are sometimes granted without examination in Belgium, Italy, and Spain.

RECENT MEDICAL LEGISLATION AND MEDICAL STUDENTS.

IT will naturally be asked if recent medical legislation has any interest for medical students? And, if so, in what way? The essence of the change of law effected by the recent Act, as far as it concerns students immediately, is this: that henceforth, or rather after a certain day in 1887, a person shall not be registered under the Medical Acts in respect of any qualification referred to in any of these Acts, unless he has passed such qualifying examination in Medicine, Surgery, and Midwifery as in this Act mentioned. Clause 3 of the Act defines Qualifying Examinations, and what bodies shall be recognised as holding such examinations. And this is a peculiarity of the Act, that it recognises in any of the existing Universities acting singly the power to grant such a qualifying examination. Whereas, in the case of the corporations, two or more must *combine* to give such a diploma. The combination must not be one of two similar corporations, but one at least of the bodies combining must be a corporation capable of granting a diploma in Medicine, and one at least capable of granting a diploma in Surgery. In other words, the possibility of getting on the Register with a single qualification is abolished. For this purpose it is no use for a corporation to give its diploma singly. Such a diploma could not be registered by itself. This result is much boasted of by those who approve the recent Act. It is no doubt proper that any person getting on the Register should be examined in the three great branches of practice. But this end had been practically gained in all the single corporations before the Act was passed. The English College of Surgeons has long examined in medicine. The London College of Physicians has long boasted of the completeness of its examinations and the doubleness of its diploma. Even the Apothecaries' Society has elected examiners in surgery. The Scotch corporations have always examined in the three branches, and two of the three Irish corporations have done the same. Henceforth, however, the ban of disability rests on corporations acting alone, unless it be the Apothecaries' Societies, for whom it would almost seem a special clause has been introduced into this Act (Clause 5). If the larger corporations refuse to come to terms with the Apothecaries' Societies or to admit them to a scheme for combination or surgical examinations, then they can apply under Clause 5 to the Medical Council for assistant examiners, and with this assistance their examinations may become Qualifying Examinations. Conceivably, then, and probably, there will be three ways of getting on the Register—through the qualifying examination of a university, through the qualifying examination of a combination of corporations, or through the qualifying examination of a corporation assisted by the Medical Council.

Will examinations be more strict under the new law? That remains to be seen. It may be hoped, at any rate, that they will not be less so, and that they will at least be more fairly uniform, and that a qualification in one division of the kingdom will be fairly equivalent to a similar qualification in another. The reason for hoping this is that the Medical Council is made specially responsible for securing the maintenance of the standard of proficiency For this purpose it is to appoint a number of Inspectors for the Qualifying Examinations. We regard this provision of the Act with some interest, and trust that it will conduce to fair play as between one division of the kingdom and another, and between candidates and examining bodies. There is plenty of complaint of bad students. It is possible

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that good examinations are too few. But with a good staff of well-selected and trained Inspectors better things may be expected.

One important feature of the new Act is the provision for electing Direct Representatives of the profession. The bearing of this on medical students and studies may not be immediately apparent. But we shall be surprised if it does not have some effect, especially if practitioners be elected who look at medical education from the standpoint of actual practice. This is the point for finding out defects in education, and the difference between hospital practice and general practice.

COLLEGIATE RESIDENCES IN LONDON.

FEW can have failed to observe the great difference in social aspect between the present generation of medical students and those which preceded it during the old apprenticeship system. Past medical students came to London with their habits and manners moulded in the country during the period (often four or five years) which they served under the tutelage and supervision of the country doctor. Idleness in the country was followed by idleness and roystering in town—industry by persevering application; and both extremes were well recognised by the profession and the lay public. The medical student of those days was fairly advanced in age, and he but rarely reformed if he had been allowed to run loose and do little or no regular work or reading during his country apprenticeship. If, on the other hand, he had been placed under a judicious master, habits of regularity, punctual attendance, and steady work rarely gave way when he came to town. But since the practical abolition of apprenticeship, the pupil generally passes from his school life into his medical studentship at a bound, and without any intermediate stage. For the first two years of the curriculum he is still in many cases to every intent and purpose a schoolboy, and as such should undoubtedly be more carefully looked after and guarded from evil influences than is either possible or useful in the case of the older student. To meet this many methods of living for students in London have been suggested. The question is of the utmost importance, for the same difficulties have arisen in regard to the theological and legal as with the medical students. The former generation almost always resided in lodgings chosen by themselves and left to themselves, if we except a few who had friends in London, or who boarded and lodged with members of the staff of the medical school or hospital which they attended. Collegiate residences were practically unknown until arrangements were made by the authorities at the foundation of King's and University Colleges for residential students. But with the modification in medical education, necessitating a residence in London during a most impressionable period of life, parents have become much more desirous of supervision of their sons, and the isolated life and absence of restraint have been freely held up of late years as the cause of and an excuse for laziness and other vices. The collegiate system and private care of pupils are in increasing demand, and for these residences—public and private—the registers of lodging-houses, under a quasi-supervision, which are kept by the authorities of many schools, are but a poor substitute. The collegiate system must spread from the four schools which have partially adopted it—viz., St. Mary's, St. Bartholomew's, King's and University Colleges—to the others, and Middlesex is now following in their path. But even in these the number of rooms is very disproportionate to the number of students, although, perhaps, not to the present demand. But this demand will grow larger and become more imperative now that attention has been so publicly and pointedly called to the question. At the older universities residence under supervision is absolute, and the other centres of medical education will be compelled to adopt some similar system. The provincial, Scotch, and Irish schools are in the same position as those of London, and must follow on the same lines.

THE CHOICE OF A TEXT-BOOK.

THE question which the student is always asking, and naturally, is what book will best serve his purpose in preparing for certain examinations. The answer to this question is one which becomes every year more difficult. The number of medical text-books of a high class is now very great; therefore to select a few from amongst them may seem invidious. At the same time a list, which by no means pretends to be exhaustive, can be drawn up that may prove of value as a guide to the student in his choice. As representing all the various examining bodies, we may take for this purpose the Examining Board for England (Royal College of Physicians and Royal College of Surgeons) and the University of London.

THE EXAMINING BOARD FOR ENGLAND.

For the *First* Examination of this Board the student will be required to have gained a fair knowledge of Elementary Anatomy and Physiology, of Chemistry, Materia Medica, and Pharmacy; and if he be diligent he should be able to pass both parts of the examination by the close of his first year. In *Anatomy*, he may have recourse to GRAY'S Text-book, and to the works on *Osteology* by WARD, HOLDEN, and NORTON. In *Physiology*, the Elementary Text-book of HUXLEY might well be mastered first. In *Chemistry*, ROSCOE'S Elementary book and ATTFIELD'S work. In *Chemical Physics*, FOWNES' Inorganic Chemistry edited by WATTS, or BALFOUR STEWART'S Elementary Physics. In *Materia Medica*, the works of MITCHELL BRUCE, ROBERTS, GARROD, and BRUNTON'S or OWEN'S Elements.

For the *Second* Examination (corresponding to the Primary Membership at the College of Surgeons), the subject of *Anatomy* may be well studied in GRAY'S Anatomy, ELLIS'S Demonstrations, or HEATH'S Practical Anatomy. The anatomical plates of ELLIS and those of GODLEE are very useful in supplementing practical work, or the handier volume of MASSE. In *Physiology*, the books most to be recommended are KIRKES' Handbook, G. YEO'S Text-book, and H. POWER'S Elements; and *Histology*, apart from the sections devoted to it in the works of GRAY and KIRKES, may be read in KLEIN'S Elements.

For the *Third* or Final Examination, in the subjects of *Surgery* and *Surgical Anatomy*, there are the Text-books of BRYANT, HOLMES, GANT, and ERICHSEN'S work, ably edited by MARCUS BECK, the System of Surgery edited by TREVES, the Practical Handbooks of BERKELEY HILL, CHRISTOPHER HEATH, PEARCE GOULD, and TREVES'S Applied Surgical

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Anatomy. For *Surgical Pathology* PEPPER or BILLROTH may be recommended. In *Diseases of the Eye*, LAWSON or NETTLESHIP. In *Medicine*, the Text-books of ROBERTS and BRISTOWE, preceded by the smaller works of CARTER or CHARTERIS. *Clinical Medicine:* FENWICK, FINLAYSON, or GRAHAM BROWN. *Pathology:* GREEN, COATS, and ZIEGLER (MACALISTER'S translation), and WOODHEAD'S practical work. *Therapeutics:* BARTHOLOW, RINGER, NAPHEYS, and FARQUHARSON. *Medical Jurisprudence:* the Text-books of GUY and TAYLOR. *Public Health:* WILSON. *Midwifery:* PLAYFAIR or GALABIN.

COLLEGE OF SURGEONS (FELLOWSHIP).

In addition to the anatomical and physiological works above mentioned, there may be read for the Primary F.R.C.S. (especially its histological and embryological sections)—QUAIN'S Anatomy, FOSTER'S Text-book of Physiology, LANDOIS' work edited by STIRLING, and GEGENBAUR'S Comparative Anatomy. Professor FLOWER'S Osteology of the Mammalia might also be read. For the Pass Examination, ERICHSEN'S work may be supplemented by chapters in the System of Surgery edited by HOLMES and HULKE. In *Operative and Practical Surgery*, there are works by STIMSON, FERGUSSON, and S. SMITH and HEATH'S ATLAS. PAGET'S or BILLROTH'S Surgical Pathology and ZIEGLER'S Pathology may be profitably read in connexion with works mentioned under the Conjoint Examination.

UNIVERSITY OF LONDON EXAMINATIONS.

For the Intermediate M.B. Examination of the University of London, the subject of *Organic Chemistry* may be studied in the Text-books of WILLIAMSON and of FOWNES. *Materia Medica*, besides the books above mentioned, is more fully treated in the works of BRUNTON, PHILLIPS, BARTHOLOW, and H. G. WOOD. *Physiology* as for the Primary F.R.C.S., with perhaps the addition of such books as that of POWER and HARRIS for practical work and of SCHAEFER for practical histology. The anatomical text-books are those recommended above. For the M.B. Examination, the subject of *Medicine* may profitably be further studied in NIEMEYER'S Text-book, in the exhaustive and scientific treatise of the late Dr. HILTON FAGGE, in that of AUSTIN FLINT, in REYNOLDS'S System of Medicine, and in TROUSSEAU'S Lectures. Special monographs (see M.D. Exam.) may also be consulted. *Pathology*, which should be worked at practically, may be studied in GREEN'S, COATS', or ZIEGLER'S Text-books, and also in the works of WILKS and MOXON, and in those of CORNIL and RANVIER; *Midwifery*, in the writings of PLAYFAIR, GALABIN, LEISHMAN, LUSK, and BARNES; *Gynæcology*, in those of GALABIN, LOMBE ATTHILL, EDIS, M. JONES, and BARNES; *Dermatology*, in the Text-books of TILBURY FOX, LIVEING, DUHRING, and M. MORRIS; *Medical Electricity*, in DE WATTEVILLE or POORE; *Medical Ophthalmoscopy*, in GOWERS' Handbook. For the M.D. Examination the candidate will do well to extend his reading to the better-known monographs, such as MURCHISON on Continued Fevers and on Diseases of the Liver; ROSS, CHARCOT, and WILKS on Diseases of the Nervous System; BALFOUR, BYROM BRAMWELL, and WALSHE on Diseases of the Heart; POWELL and WALSHE on Diseases of the Lungs; RALFE, W. ROBERTS, and DICKINSON on Diseases of the Kidney.

In the foregoing lists we have mostly indicated more than one work upon a subject; for it is, of course, impossible to make a single selection from among so large a number of excellent works. A certain amount of choice must be left to the student himself, who will do well to be guided in this respect by the opinion of his teacher in the particular subject.

ARMY, NAVY, AND INDIAN MEDICAL SERVICES.

THESE three branches of the public medical service maintain their popularity with the junior members of the profession, if we may judge by the numbers of candidates who present themselves at the competitive examinations held twice a year. If we mistake not, they were in the proportion of two candidates for each vacancy at the examination in August. These services certainly offer some very appreciable advantages, either as a career for life or as a temporary occupation for a few years. After a successful competition at the examination in London, the "surgeon on probation" for the Army and Indian Service is sent to Netley to undergo a course of special training for a period of four months, during which he receives pay at the rate of 8*s.* a day, with free quarters. We consider this course, which includes Military Surgery, Military Medicine, Pathology, and Hygiene, to be of great value. On its conclusion, the "surgeon on probation" is gazetted to the medical staff or Indian Medical Service as Surgeon, with the relative rank of Captain. In the Navy, the successful candidate is sent at once to Haslar and gazetted as Surgeon. He undergoes there a certain amount of special instruction, but we believe it is not at all to be compared with that given at Netley. The advantages of the public service are that the medical officer starts at once on his career with a fair amount of income, which is totally independent of the caprice or goodwill of his patients; that he goes on with the certainty of an increase of pay and improved position after a certain number of years, and, if he continue in the service, with a retiring pension after twenty years proportionate to the length of time he has served and the rank he has attained; or, if he wish to quit it sooner, he can do so at any time, receiving a gratuity after ten, fifteen, or eighteen years. The drawbacks to the service undoubtedly are the amount of foreign service and consequent absence from England, which must fall to the lot of all officers, and the unhealthy climates in which they may be called upon to serve; but this also has its attractions for those who care to be in foreign lands, and who are desirous of investigating the various forms of tropical disease, or who have a bias for the study of natural history. We cannot but think that the public services, as at present organised, offer a career which is well deserving the consideration of medical students who have not any special local ties or exceptional prospects of success in civil life.

PUBLIC HEALTH QUALIFICATIONS.

MR. EDWIN COONEY, hon. secretary to the Association of Medical Practitioners qualified in Sanitary Science, has favoured us with the following information.

As Public Health Qualifications have now received State recognition and are so much to the fore, perhaps a few statistics or particulars referring to such may not be out of place. By referring to the subjoined table, it will be ob-

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served that Trinity College, Dublin, commenced granting such qualifications as early as 1871, and since then the aggregate annual number has increased, with a notable falling off from 1878 to 1880. For the present year, it is not certain what the number will be, as most of the qualifications are given from September to December. Up to the present time 233 qualifications have been given, but as nine men hold two qualifications each, there are about 224 qualified. Edinburgh has given forty-five degrees, but as eight have proceeded from B.Sc. to D.Sc., thirty-seven only are noted:—

STATISTICS OF PUBLIC HEALTH QUALIFICATIONS.

Year.	Oxford Univ.	Glasgow Univ.	R. Univ. Ireland.	Roy. Coll. Phys. Lond.	London Univ.	K.Q.C.P. Ireland.	Univ. Durham.	Roy. Coll. Phys. Edin.	Univ. Dublin.	Univ. Edin.	Univ. Camb.	Total.
1871	...	...	...	...	...	...	...	...	4	...	...	4
1872	...	...	...	...	...	...	...	...	...	...	...	...
1873	...	...	...	...	...	...	...	...	1	...	...	1
1874	...	...	...	...	...	...	...	...	3	...	...	3
1875	...	...	...	...	...	...	...	...	2	1	19	22
1876	...	...	...	...	1	...	...	2	1	1	16	20
1877	1	1	...	...	1	...	...	...	1	7	10	21
1878	...	...	...	...	...	...	...	2	1	3	5	11
1879	...	...	...	...	...	...	...	...	...	1	5	6
1880	...	...	...	...	1	...	...	1	1	1	5	9
1881	...	...	...	...	2	...	...	3	...	1	15	21
1882	...	...	...	...	...	...	1	1	2	4	11	19
1883	...	1	...	...	1	5	1	2	2	7	16	35
1884	...	1	...	...	...	1	2	1	1	2	13	21
1885	...	...	3	4	1	1	2	...	6	4	10	31
1886	...	...	...	2	...	...	2	...	...	5	...	9
Total.	1	3	3	6	7	7	8	12	25	37	124	233

The distribution of those holding these qualifications are as follows: London, 52; Provinces, 90; Scotland, 16; Ireland, 16; Indian Medical Service, 22 (Bengal 15, Bombay 3, Madras 3); Army Medical Department, 11; Australia, 5; India, 3; France, 1; New Zealand, 1; Canada, 1; West Indies, 1; not known, 5.

Twelve out of fifteen bodies are granting Public Health qualifications. Of these, four are called Certificates in Public Health (Univs. Oxf. and Lond., Roy. Coll. Phys. Edin., F.P.S. Glas.); three are called Sanitary Science Certificates (Univs. Camb. and Durh., K.Q.C.P. Irel.); one is called B.Sc. or D.Sc. in Public Health (Univ. Edin.); one, Qualification in Public Health (Univ. Glas.); one, Diploma in State Medicine (Trin. Coll. Dub.); one, Diploma in Sanitary Science (Roy. Univ. Irel.); and one, Certificate in Hygiene (Roy. Coll. Phys. Lond.). It is not quite certain what the whole of the respective holders of these certificates, degrees, diplomas, and qualifications in Hygiene, Public Health, Sanitary Science, and State Medicine are to be called now that Public Health diplomas are registrable under Clause 21 of the Medical Act, 1886. The Irish Universities style their men "Diplomates," and the Edinburgh University "Bachelor" or "Doctor."

We gladly give publicity in the Students' Number to this interesting statement, which shows very clearly the increasing number of medical men who are certified by different educational bodies to have a special knowledge of Sanitary Science. The subject is one of much importance, because it may be anticipated that local authorities will regard with favour those who can claim to possess such qualifications. As yet the teaching of Hygiene and Public Health has not been regarded as of sufficient importance to necessitate special arrangements being made at all medical schools for a thorough course of instruction in this branch of professional knowledge. In another part of this Number will be found the tabular list of the classes, lecturers, &c., at the different medical schools, and students who may anticipate that in the future they may be called upon to hold Public Health appointments will necessarily have regard, in their selection of a school, to the arrangements which are made in each for the teaching of this subject.

THE ADVANTAGES OF THE STUDY OF PSYCHOLOGY.

IT is strange, but true, that although many of our examining bodies would never dream of permitting a student to practise medicine, surgery, or obstetrics unless he had given ample proofs of his qualification, yet he is allowed to incarcerate Her Majesty's subjects in an asylum without any proper evidence having been adduced that he possesses the requisite knowledge of insanity or of the laws which bear upon this most important branch of medicine. But few students recognise the advantages of a knowledge of lunacy. It may of course be said that only a few can attain to the envied post of superintendent of an asylum, that those who already have reached this summit of ambition are picked men, selected out of a large number of applicants by a severe system of competition; that, in fact, the race is to the swift, the battle to the strong. But it is not to this class of aspirants that we wish to address our remarks. It is rather to the general practitioner, he whose industry is rightly said to form the backbone of the profession, and to whom in the first instance the family fly for advice when one of their relatives becomes afflicted with unsoundness of mind. Such men, we regret to say, when they leave the schools, may have never seen a lunatic; they may have never been instructed in the simple act of filling up a certificate, and in consequence a large percentage of these certificates are returned as invalid. Then, again, with regard to the dangers incurred by those who ignorantly fill up these certificates. The records of the daily papers sufficiently prove that the pocket of the certifier may be seriously affected should he omit some apparently trivial and red-tape matter of detail, which is probably mentioned in the marginal notes. A certificate has been found invalid in a court of justice simply because the number of the house in which the patient resided was omitted from the "form." Some practitioners wisely abstain from signing

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certificates at all. Of late some action has been taken in the matter, and the Royal College of Physicians of London, the London University, the Society of Apothecaries, the Royal College of Physicians of Edinburgh, and, we believe, other qualifying bodies, have instituted an examination in psychological medicine; at most of our medical schools there now exists a course of lectures on insanity. And we have reason to believe that so far the work has been satisfactorily done. But we wish more especially to point out to students that should they require additional proof of their knowledge in mental therapeutics, whether with the object of seeking those coveted appointments to which we have already alluded, or simply with a view to protect themselves from litigation, now is the time to prove that they are in earnest. Quite recently the Medico-Psychological Association has established an examination for a certificate in psychological medicine, information regarding which can be obtained from any of the lecturers on insanity at our metropolitan schools. The details concerning the certificate are also given in full in the *Journal of Mental Science* for July. Briefly, the candidates must be twenty-five years of age, must have resided as clinical clerk or assistant medical officer in an asylum for at least three months, and must, of course, be duly registered. The examination is chiefly practical, no knowledge of mental philosophy or of microscopical anatomy being required. The idea has doubtless been taken from the success which has attended the establishment of a certificate in hygiene at Cambridge and at the College of Physicians. We have every reason to believe that the electing bodies for appointments of medical officers of health lay great stress upon the fact that a candidate has a special knowledge of the work he is about to undertake. And in the present day, when the public interest themselves far more about medical matters than was the case in the time of our grandfathers, it is reasonable to conclude that those who have availed themselves of the opportunities which now offer will have surely a better chance of attaining to the desired post of director of an asylum, and also will be more likely to secure the confidence of the relatives of a lunatic, if they can prove that they possess a knowledge of mental disease. We are glad to find that the tests for the certificate we have mentioned include the clinical examination of insane patients, and also that candidates are required to properly fill up medical certificates.

DENTAL EDUCATION.

DENTAL SURGERY has been attracting considerable attention of late years, and its practice rapidly gaining favour. The odium with which it was regarded on account of the large number of, to say the least, uneducated men who filled the ranks, has to a great extent been removed, and will entirely disappear now that no one will be allowed to call themselves Dental Surgeon without a diploma. For a student with a mechanical turn, the manipulations, the constant demands for the display of ingenuity, and the endless variations of the operations in dental surgery must have a great charm. One great advantage is that a man gets into practice earlier than in most other branches of the medical profession. In these days when long and elaborate operations are becoming more and more the practice, the capability of considerable endurance, both mental and physical, is required by the dentist.

In order to be legally entitled to practise it is not necessary that the student should have any diploma but that in Dental Surgery; but we would strongly urge anyone who hopes to attain a high rank in his profession, and who values his future social position, to add a medical qualification; and he cannot do better than take the L.R.C.P. and M.R.C.S. under the Conjoint Scheme, and we will briefly sketch how this may be effected.

The regulations for the diploma in Dental Surgery of th College of Surgeons of England, apart from those included in the general hospital course, are that the candidate should have been engaged in the acquirement of professional knowledge during four years; have attended at a recognised school two courses of lectures upon each of the following subjects—viz., Dental Anatomy and Physiology (Human and Comparative) Dental Surgery, Dental Mechanics, and one course of lectures on Metallurgy by lecturers recognised by the College; have been engaged, during a period of not less than three years, in acquiring a practical familiarity with the details of Mechanical Dentistry, under the instruction of a competent practitioner, except in the cases of qualified surgeons, when not less than two years instead of three will be sufficient; and, lastly, of having attended at a recognised dental hospital, or in the dental department of a recognised general hospital, the practice of Dental Surgery during the period of two years.

If the student have already passed the matriculation of the University of London or other examination allowed by the Medical Council, he must register as a *dental* student. The next step is to become articled to a registered dental surgeon, and upon the training received during this period will largely depend his future success in that important branch—Dental Mechanics, &c. It is the unanimous opinion that the three years prescribed by the College of Surgeons is not a day too long to enable the student to master its details. If a preliminary examination has not been passed, the student should nevertheless take up his articles, and present himself for such examination during the first or second year of his pupilage; for, by the regulations of the Medical Council, the three years' instruction in Mechanical Dentistry, or any part of them, may be taken by the dental student either before or after his registration; but no such year of mechanical instruction shall be counted as one of the four years of professional study unless taken after registration. Immediately he has passed the preliminary he should register as a dental student.

During his pupilage the student should familiarise himself with most of the subjects required for the First Professional Examination—Chemistry, Chemical Physics, Materia Medica, Elementary Anatomy, and Physiology, and more especially Dental subjects,—so that when he joins the hospitals his work may be more easy for him, and also that he may not during his apprenticeship "forget how to learn." This part of his career finished, the student should join a general hospital and register as a *medical student*. A word about the choice of a general hospital. It is of undoubted advantage to enter a school where there are several other men taking the same course; it is also convenient that the general and dental hospitals should be near together.

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For the course of instruction to be pursued at the general hospital reference should be made to another portion of this journal. The student should join the dental hospital after having passed the Second Professional Examination, which should, supposing he joined in October, be at the commencement of the second summer session. During this session, one course of lectures on Dental Surgery and Pathology and one on Dental Anatomy and Physiology and Dental Hospital Practice must be attended. During the third winter, one course on Dental Mechanics and Dental Hospital Practice. In the third summer, one course on Dental Surgery and Pathology, and one on Dental Anatomy and Physiology and Dental Hospital Practice. And in the fourth winter, one course on Dental Mechanics, and one on Metallurgy and Dental Hospital Practice.

SESSION 1886-87.

GENERAL COUNCIL OF MEDICAL EDUCATION AND REGISTRATION OF THE UNITED KINGDOM.

Registration of Medical Students.—The following are the General Medical Council's Regulations in reference to the registration of students in medicine:-

Every medical student shall be registered in the manner prescribed by the General Medical Council. No medical student shall be registered until he has passed a preliminary examination as required by the General Medical Council,[1] and has produced evidence that he has commenced medical study. The commencement of the course of professional study recognised by any of the qualifying bodies shall not be reckoned as dating earlier than fifteen days before the date of registration. The registration of medical students shall be placed under the charge of the branch registrars. Each of the branch registrars shall keep a register of medical students according to a prescribed form, and shall enter therein the name, the preliminary examination and date thereof, the date of registration, and the place and date of commencement of medical study, as certified by a master or a teacher, or an official in a medical school or hospital. Every person desirous of being registered as a medical student shall apply to the branch registrar of the division of the United Kingdom in which he is residing; and shall produce or forward to the branch registrar a certificate of his having passed a preliminary examination as required by the General Medical Council, and *evidence that he has commenced medical study*. The branch registrar shall enter the applicant's name and other particulars in the Students' Register, and shall give him a certificate of such registration. Each of the branch registrars shall supply to the several qualifying bodies, medical schools, and hospitals, in that part of the United Kingdom of which he is registrar, a sufficient number of blank forms of application for the registration of medical students. The several Branch Councils—and in England the Executive Committee, if its meeting be more convenient and the case be urgent—have power to admit special exceptions to the foregoing regulations as to registration, for reasons which shall appear to them satisfactory. A copy of the Register of Medical Students, prepared by each of the branch registrars, shall be transmitted on or before December 31st, in each year, to the registrar of the General Council, who shall, as soon as possible thereafter, prepare and print, under the direction of the Executive Committee, an alphabetical list of all students registered in the preceding year, and supply copies of such authorised list to each of the bodies enumerated in Schedule A to the Medical Act (1858), and through the branch registrars to the several medical schools and hospitals. The several qualifying bodies are recommended not to admit to the final examination for a qualification under the Medical Acts any candidate (not exempted from registration) whose name has not been entered in the Medical Students' Register at least forty-five months previously. In the case of candidates from other than schools of the United Kingdom, the Branch Councils—and in England the Executive Committee, if its meeting be more convenient and the case be urgent—have power to admit exceptions to this recommendation.

Pursuant to resolutions passed by the General Medical Council at its meetings on October 16th, 1884, and May 14th, 1885, the Regulations for Preliminary General Education, which take effect from October 1st, 1885, are as follows:—

On and after October 1st, 1885, no person shall be allowed to be registered as a medical student unless he shall have previously passed (at one or more examinations) a preliminary examination in the subjects of general education as specified in the following list:—1. English Language, including Grammar and Composition. 2. Latin, including Grammar, Translation from specified authors, and Translation of easy passages not taken from such authors. 3. Elements of Mathematics, comprising (*a*) Arithmetic, including Vulgar and Decimal Fractions; (*b*) Algebra, including Simple Equations; (*c*) Geometry, including the first book of Euclid, with easy questions on the subject matter of the same. 4. Elementary Mechanics of Solids and Fluids, comprising the Elements of Statics, Dynamics, and Hydrostatics. 5. One of the following optional subjects:—(*a*) Greek, (*b*) French, (*c*) German, (*d*) Italian, (*e*) any other Modern Language, (*f*) Logic, (*g*) Botany, (*h*) Zoology, (*i*) Elementary Chemistry.[2]

W. J. C. Miller, B.A., Registrar of the General Council and of the Branch Council for England, 299, Oxford-street, London, W.—James Robertson, Registrar of the Branch Council for Scotland, 4, Lindsay-place, George IV. Bridge, Edinburgh.—R. L. Heard, M.D., Registrar of the Branch Council for Ireland, 35, Dawson-street, Dublin.

REGULATIONS OF THE MEDICAL EXAMINING BOARDS IN THE UNITED KINGDOM.

UNIVERSITY OF OXFORD.

A student may take the degree of Bachelor of Medicine after he has been admitted to the degree of Bachelor of Arts, provided that he has passed the examinations prescribed for the B.M. degree.

For the B.A. degree a student must have kept the statutable residence—viz., twelve terms (three years) from his matriculation; and after passing Responsions and the First Public Examination must take honours in one of the seven Honour Schools, or pass the examination appointed for those who do not seek honours. The limit of time for honours in the Second Public Examination is sixteen terms, but if the candidate has taken honours in one of the schools the time is extended to twenty terms.

There are two examinations for the B.M. degree. The subjects of the First Examination are:—(1) Organic Chemistry in its special relation to Physiology and Medicine, (2) Human Anatomy, and (3) Human Physiology. Candidates who have taken a first- or second-class in Organic Chemistry or Animal Physiology are exempted from the corresponding part of the M.B Examination. The subjects of the Second Examination are: (1) Medicine, (2) Surgery, (3) Midwifery, (4) Pathology, (5) Forensic Medicine, and (6) Materia Medica and Pharmacy.

The subjects of Organic Chemistry and Materia Medica and Pharmacy may be taken alone, and the other subjects passed at a future examination.

The examinations are held yearly in the Trinity Term, the latter part of the Summer Term.

Any person who has taken the B.M. degree may supplicate

[1] Exception may be made in the case of a student from any Indian, Colonial, or Foreign University or College, who shall have passed the matriculation or other equivalent examination of his University or College, provided such examination fairly represents a standard of general education equivalent to that required in this country.

[2] In the case of students in Universities with a prolonged curriculum, where the examination in Mechanics required for their degree is taken at a more advanced period of study than before commencing medical education, registration can be effected only on having passed the examination in Mechanics, but their registration may be then antedated to the period at which the Preliminary was passed.

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for the degree of Doctor of Medicine, provided that he has entered on the thirty-ninth term from his matriculation, and that his name has been on the books of some College or Hall, or on the Register of Non-collegiate Students, for twenty-six terms, and that he has written a dissertation, which he shall deliver to the Regius Professor of Medicine.

Every person admitted to the degree of Bachelor of Medicine shall, *ipso facto*, be admitted to the degree of Bachelor of Surgery. He can supplicate for the degree of Master of Surgery after the twenty-sixth term from his matriculation, provided his name has been on the books twenty-six terms, and he has passed an examination in Surgery, Surgical Anatomy, and Surgical Operations, which will be held in Trinity Term, after the Second Examination for the B.M. degree.

More detailed information may be obtained from the University Calendar: the University Statutes, 1886; from the Student's Handbook to the University; from the Regius Professor of Medicine; from the Professors in the several departments; and from the Sub-Librarian in the Radcliffe Library at the Museum.

UNIVERSITY OF CAMBRIDGE.

The student must enter at one of the Colleges, or as a non-collegiate student, and keep terms for three years by residence in the University. He must pass the Previous Examination in Classics and Mathematics, which may, and should if possible, be done immediately on coming into residence in October, or, which is best, obtain exemption through the Oxford and Cambridge Schools Examination Board or the Local Examinations, before commencing residence. He may then devote himself to medical study in the University, attending the hospital and the medical lectures, dissecting, &c. Or he may proceed to take a degree in Arts, either continuing mathematical and classical study and passing the ordinary examinations for B.A., or going out in one of the Honour Triposes. The Natural Sciences Tripos is the most appropriate, as the subjects are the same as those for the First and Second M.B. Examinations.

For the degree of *Bachelor of Medicine* five years of medical study are required, except in the case of medical students who have graduated with honours as Bachelors of Arts, four years only being then required, though it is rarely sufficient. This time may be spent in Cambridge or elsewhere. The first three or four years are usually spent in Cambridge, the student remaining in the University till he has passed (say) the examination for the Natural Sciences Tripos and the first and second examinations for M.B. Cambridge being now a complete School of Medicine, all the requisite lectures and hospital practice may be attended here, and many students remain to attend lectures and hospital practice until they have passed the first part of the third examination for M.B. The supply of subjects for Dissection and Practical Surgery is unusually abundant.

There are three examinations for M.B. The *first* in Chemistry and other branches of Physics, and in Elementary Biology. These may be taken together or separately. The *second* in Human Anatomy and Physiology, and in Pharmacy and Pharmaceutical Chemistry. These may be taken together or separately. The *third* may be also taken in two parts—viz., (1) Principles of Surgery (with Clinical Surgery) and Midwifery and Diseases of Women, and (2) Pathology, Principles and Practice of Medicine, Elements of Hygiene, and Medical Jurisprudence. The examinations are partly in writing, partly oral, and partly practical, in the hospital, in the dissecting-room, and in the laboratories.

Previously to the first examination, lectures must have been attended on Chemistry (with manipulations). Previously to the second examination, the student must have attended Lectures on Human Anatomy, Pharmacy and Pharmaceutical Chemistry, and Physiology, have dissected for six months, and attended Hospital Practice six months. Previously to the first part of the third examination, he must have attended Lectures on Pathological Anatomy, the Principles of Surgery and Midwifery, the Surgical Practice of a Hospital with Clinical Lectures for a year, ten cases of Midwifery, and produce a certificate of proficiency in Vaccination. Previously to the second part of the third examination, he must have attended Lectures on the Principles and Practice of Physic, the Physiological Action and Therapeutic Uses of Drugs, and Medical Jurisprudence; also the Medical Practice of a Hospital with Clinical Lectures for three years, and have been Clinical Clerk for six months.

The degree of *Doctor in Medicine* may be taken three years after that of M.B. An Act has to be kept, with *viva-voce* examination; and an extempore essay has to be written on some subject relating to Physiology, Pathology, the Practice of Medicine, or State Medicine.

The candidate for the examination for the degree of *Bachelor of Surgery* (B.C.) is required to have passed the *first* and *second* examinations, and the first part of the *third* examination for M.B.; to have attended the Surgical Practice of a Hospital for two years, have acted as House-Surgeon or Dresser for six months, and have gone through a course of instruction in Practical Surgery. The subjects of the examination are Surgical Operations and the application of Surgical Apparatus; the Examination of Surgical Patients is now included in the first part of the *third* examination for M.B. Before *admission* to the degree he must also have passed the *second* part of the third examination for M.B.

For the degree of *Master in Surgery* (*M.C.*) the candidate must have passed all the examinations for B.C. two years. He is required to pass an examination in Surgical Anatomy and Surgical Operations, Pathology, and the Principles and Practice of Surgery.

An abstract of the Regulations and Schedules of the range of the examinations in Chemistry, Physics, Biology, and Pharmacy may be obtained by sending a stamped directed envelope to the Assistant-Registrar, Cambridge. Full information is contained in the *Cambridge University Calendar*.

UNIVERSITY OF LONDON.

The *Matriculation Examinations* take place on the second Monday in January and the third Monday in June. Candidates must be above sixteen years of age. The fee for the examination is £2. Provincial examinations are appointed by the Senate from time to time at specified centres. Several scholarships, exhibitions and prizes are associated with these examinations.

The *Preliminary Scientific (M.B.) Examination* takes place twice in each year, commencing on the third Monday in July and the third Monday in January.[3] No candidate will be admitted to this examination until he shall have passed the Matriculation Examination, nor unless he have given notice of his intention to the registrar at least one calendar month before the commencement of the examination. Fee for this examination, £5.

Candidates are examined on the following subjects:—Inorganic Chemistry, Experimental Physics, and General Biology. Candidates for Honours, who have entered for the whole examination, may also be examined in Botany and Vegetable Physiology, and Zoology, unless they have previously obtained an exhibition in any one of the subjects of this examination at the Intermediate Examination in Science, in which case they shall not be admissible to the examination for Honours in that subject.

Bachelor of Medicine.—Every candidate for the degree of Bachelor of Medicine will be required—1. To have passed the Matriculation Examination in this University. 2. To have passed the Preliminary Scientific Examination. 3. To have been engaged in his professional studies during four years subsequently to passing the Preliminary Scientific Examination[4] at one or more of the medical institutions or schools recognised by this University, one year at least of the four to have been spent in one or more of the recognised institutions or schools in the United Kingdom. 4. To pass two examinations in Medicine.

Intermediate Examination.—The Intermediate Examination in Medicine takes place twice in each year, once for Pass and Honours, commencing on the second Monday in July, and once for Pass candidates only, commencing on the third Monday in January, the January examination being held for the first time in 1888. No candidate shall

[3] Candidates for the degree of M.B. are required after Jan. 1st, 1885, by the Senate to pass the Preliminary Scientific Examination before commencing their regular medical studies, and are recommended to devote a preliminary year to preparation for it, according to the following programme:—Winter Session: Experimental Physics, Chemistry (especially Inorganic), Zoology. Summer Session: Practical Chemistry (Inorganic), Botany.

[4] Candidates who passed the Matriculation Examination in January, 1885, or previously, will be allowed to date the commencement of their professional studies, as heretofore, from that examination.

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be admitted to this examination unless he have passed the Preliminary Scientific Examination at least two years previously, and have produced certificates to the following effect:—1. Of having completed his nineteenth year. 2. Of having, subsequently to having passed the Matriculation Examination, been a student during two years at one or more of the medical institutions or schools recognised by this University, and of having attended a course of lectures on each of three of the subjects in the following list: Descriptive and Surgical Anatomy, Histology and Physiology, Pathological Anatomy, Materia Medica and Pharmacy, General Pathology, General Therapeutics, Forensic Medicine, Hygiene, Obstetric Medicine and Diseases peculiar to Women and Infants, Surgery, Medicine. 3. Of having, subsequently to having passed the Preliminary Scientific Examination, dissected during two winter sessions. 4. Of having, subsequently to having passed the Preliminary Scientific Examination, attended a course of Practical Chemistry, comprehending practical exercises in conducting the more important processes of General and Pharmaceutical Chemistry, in applying tests for discovering the adulteration of articles of the Materia Medica and the presence and nature of poisons, and in the examination of mineral waters, animal secretions, urinary deposits, calculi, &c. 5. Of having attended to Practical Pharmacy, and of having acquired a practical knowledge of the preparation of medicines. These certificates (as is the case also with all the certificates hereinafter mentioned) must be transmitted to the registrar at least fourteen days before the commencement of the examination. Fee for this examination, £5.

Candidates will be examined in the following subjects: Anatomy, Physiology, Histology, Materia Medica and Pharmaceutical Chemistry, and Organic Chemistry.

Every candidate for the July examination, on sending in his name for the examination, must state whether he intends to compete for Honours in any subject or subjects; and, if he does so intend, must specify the subject or subjects. No candidate will be allowed to take both the Pass and the Honours Papers in the same subject; but every candidate must take the Pass Papers in those subjects in which he does not offer himself for Honours. A candidate who enters for, but fails to obtain, Honours in any subject, may be recommended by the examiners for a Pass in that subject if they are satisfied that he has shown such a competent knowledge thereof as is required by the regulations for the Pass Examination.

M.B. Examination.[5]—The M.B. Examination takes place once in each year, and commences on the last Monday in October. Each candidate, two academical years after passing the First Examination, must produce certificates to the following effect:—1. Of having passed the Intermediate Examination. 2. Of having, subsequently to having passed the Intermediate Examination, attended a course of lectures on each of two of the subjects enumerated in Section 2 of the regulations for that examination, and for which the candidate had not on that occasion presented certificates. 3. Of having conducted at least twenty labours. Certificates on this subject will be received from any legally qualified practitioner in Medicine. 4. Of having attended the Surgical Practice of a recognised hospital or hospitals during two years, with clinical instruction and lectures on Clinical Surgery. 5. Of having attended the Medical Practice of a recognised hospital or hospitals during two years, with clinical instruction and lectures on Clinical Medicine. 6. Of having, after having attended Surgical and Medical Hospital Practice for at least twelve months subsequently to passing the Intermediate Examination, attended to Practical Medicine, Surgery, or Obstetric Medicine, with special charge of patients, in a hospital, infirmary, dispensary, or parochial union, during six months, such attendance not to be counted as part of either the Surgical or the Medical Hospital Practice prescribed in Clauses 4 and 5. 7. Of having acquired proficiency in Vaccination. Certificates on this subject will be received only from the authorised vaccinators appointed by the Privy Council. The candidate must also produce a certificate of moral character from a teacher in the last school or institution at which he has studied, as far as the teacher's opportunity of knowledge has extended. The fee for this examination is £5.

[5] Any candidate for the M.B. Examination who has passed the Intermediate Examination under the former regulations will be required to have also passed the examination in Physiology at some previous Intermediate Examination carried on under the present regulations, at which examination he shall not be allowed to compete for Honours.

Candidates will be examined in the following subjects: General Pathology, General Therapeutics and Hygiene, Surgery, Medicine, Obstetric Medicine, Forensic Medicine. The examinations will include questions in Surgical and Medical Anatomy, Pathological Anatomy, and Pathological Chemistry.

Any candidate who has passed the M.B. Examination may be examined at the Honours Examination next following the M.B. Examination at which he has passed for Honours in (1) Medicine, (2) Obstetric Medicine, and (3) Forensic Medicine. The examinations commence in the week following that in which the Pass Examination terminated. Except in the case of Forensic Medicine, they are conducted by means of printed papers, but the examiners will not be precluded from putting *viva-voce* questions upon the written answers of the candidates.

Bachelor of Surgery.—The examination for the degree of Bachelor of Surgery takes place once in each year, and commences on the Tuesday following the first month in December. Candidates must produce certificates to the following effect:—1. Of having passed the examination for the degree of Bachelor of Medicine in this University. 2. Of having attended a course of instruction in Operative Surgery, and of having operated on the dead subject. Fee for this examination, £5.

Any candidate who has passed the B.S. Examination may be examined at the Honours Examination next following the B.S. Examination at which he has passed for Honours in Surgery. The examination takes place on Tuesday in the week following the Pass Examination, and is conducted by means of printed papers.

Master in Surgery.—The examination for the degree of Master in Surgery takes place once in each year, and commences on the first Monday in December.

Candidates must produce certificates to the following effect:—1. Of having taken the degree of Bachelor of Surgery in this University.[6] 2. Of having attended, subsequently to having taken the degree of Bachelor of Surgery in this University, (*a*) to Clinical or Practical Surgery during two years in a hospital or medical institution recognised by this University; or (*b*) to Clinical or Practical Surgery during one year in a hospital or medical institution recognised by this University, and of having been engaged during three years in the practice of his profession; or (*c*) of having been engaged during five years in the practice of his profession, either before or after taking the degree of Bachelor of Surgery in this University. One year of attendance on Clinical or Practical Surgery, or two years of practice, will be dispensed with in the case of those candidates who at the B.S. Examination have been placed in the first division. 3. Of moral character, signed by two persons of respectability.

Fee for this degree, £5. The examination is conducted by means of printed papers and *viva-voce* interrogation.

Candidates will be examined in Logic and Psychology, or in Mental Physiology, and in Surgery.

Doctor of Medicine.—The examination for this degree takes place once in each year, and commences on the first Monday in December.

Candidates must produce certificates to the following effect:—1. Of having passed the examination for the degree of Bachelor of Medicine in this University. 2. Of having attended, subsequently to having taken the degree of Bachelor of Medicine in this University, (*a*) to Clinical or Practical Medicine during two years in a hospital or medical institution recognised by this University; or (*b*) to Clinical or Practical Medicine during one year in a hospital or medical institution recognised by this University, and of having been engaged during three years in the practice of his profession; or (*c*) of having been engaged during five years in the practice of his profession, either before or after taking the degree of Bachelor of Medicine in this University. One year of attendance on Clinical or Practical Medicine or two years of practice will be dispensed with in the case of those candidates who at the M.B. Examination have been placed in the first division. 3. Of moral character, signed by two persons of respectability.

[6] Candidates who have obtained the degree of Bachelor of Medicine previously to 18'6 will be admitted to the examination for the degree of Master in Surgery without having taken the degree of Bachelor of Surgery; and in the case of such candidates the attendance on surgical practice required by Regulation 2 may commence from the date of the M.B. degree.

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Fee for this degree, £5.[7] The examination is conducted by means of printed papers and *viva-voce* interrogation.

Candidates will be examined in Logic and Psychology, or in Mental Physiology, and in Medicine.

UNIVERSITY OF DURHAM.

A Certificate, two Licences, and three Degrees are conferred—viz., a certificate of Proficiency in Sanitary Science, a Licence in Medicine, and a Licence in Surgery; and the Degrees of Bachelor in Medicine, Master in Surgery, and Doctor in Medicine.

For the degree of *Bachelor in Medicine* (*M.B.*) there are three professional examinations: the first being held in September (in 1887, commencing on the 19th) and April (in 1887, commencing on the 18th); the second in September (in 1887, commencing on the 26th) and April (in 1887, commencing on the 25th; and the third in December (in 1886, commencing on the 6th) and in June (in 1887, commencing on the 13th).

The subjects for the first examination are—Elementary Anatomy and Elementary Physiology, Chemistry, with Physics, and Botany. Candidates must produce the following certificates:—(1) Of registration as a medical student. (2) Of attendance on the following courses of lectures: Anatomy, Physiology, Chemistry, with Physics, and Practical Anatomy (Dissections), each six months; Botany and Practical Chemistry, each three months. The subjects for the second examination are Anatomy, Physiology, Materia Medica, with Pharmacy. For it the following certificates are necessary: Lectures, &c.—Anatomy, Physiology, Practical Anatomy (Dissections), second courses of six months each; Materia Medica, Practical Physiology, and Practical Pharmacy, courses of three months each. The candidate must also produce a certificate of his having passed the first examination for the M.B., or the first examination of the Conjoint Board of the Royal College of Physicians of London, and the Royal College of Surgeons of England, together with the extra examinations in Chemistry and Botany of the University of Durham.

The subjects for the third examination are Medicine, Surgery, Pathology, Therapeutics, Midwifery and Diseases of Women and Children, Medical Jurisprudence, and Public Health. For it candidates must produce the following certificates—viz.: 1. Of being not less than twenty-one years of age. 2. Of good moral character. 3. Of having passed one of the following examinations in Arts: (*a*) the examination for graduation in Arts at one of the following universities—Oxford, Cambridge, Durham, Dublin, London, Queen's (Ireland), Edinburgh, Glasgow, St. Andrews, Aberdeen, Calcutta, Madras, Bombay, McGill College (Montreal), Queen's College (Kingston), Victoria (Manchester), and Royal (Ireland); or (*b*) the Preliminary or Extra-professional Examination for graduation in Medicine at one of the following universities—Cambridge, London, Edinburgh, Glasgow, St. Andrews, Aberdeen, Queen's (Ireland), Victoria (Manchester), and Royal (Ireland); or (*c*) the Preliminary Examination in Arts qualifying for the Membership of the Royal College of Physicians of London or for the Fellowship of the Royal College of Surgeons of England; or (*d*) the Preliminary Examination in Arts for the degrees in Medicine of the University of Durham (in 1887, commencing on March 22nd and September 20th). 4. Of attendance on the following course of lectures—viz.: Medicine and Surgery, each two courses of six months; Public Health, one course; Forensic Medicine, Midwifery and Diseases of Women and Children, and Pathology, each one course of three months; Clinical Medical and Clinical Surgical Lectures, each two winters and two summers; Medical Hospital Practice and Surgical Hospital Practice and Post-mortem Demonstrations, each three winters and two summers; Medical Clinical Clerking and Surgical Dressing, each six months; Clinical Obstetrics, three months; attendance on not less than twenty-one cases of Midwifery, and instruction in Vaccination.

N.B.—It is required that one of the four years of professional education shall be spent in attendance at the College of Medicine, Newcastle-on-Tyne. Candidates for the First Examination who have passed the First Examination of the Conjoint Board in England, and candidates who hold a qualification from a recognised Licensing Body in the United Kingdom, will be exempt from the First Examination of the University, except in the subjects of Chemistry, with Physics and Botany. Candidates who have passed the First and Second Examinations of the University will be exempt from the First and Second Examinations of the Conjoint Board.

For the degree of *Master in Surgery* (*M.S.*), the candidate must have passed the examination for the degree of Bachelor in Medicine and must have attended one course of lectures on Operative Surgery. Each candidate will have an additional paper on Surgery and additional clinical and *viva-voce* examinations, and will have to perform operations on the dead body.

For the degree of *Doctor of Medicine* (*M.D.*), candidates must not be less than twenty-four years of age, must have obtained the degree of M.B. at least two years previously, and in the interim have been engaged in medical and surgical practice. Each candidate will be required to write an essay on some medical subject selected by himself and approved by the Professor of Medicine, and to pass an examination thereon.

Candidates for any of the above degrees must give at least twenty-eight days' notice to the registrar of the College.

VICTORIA UNIVERSITY, MANCHESTER.

Colleges of the University: Owens College, Manchester, and University College, Liverpool.

Three degrees in Medicine and Surgery are conferred by the Victoria University—viz., Bachelor of Medicine (M.B.), Doctor of Medicine (M.D.), and Master of Surgery (Ch.M.).

All candidates for degrees in Medicine and Surgery are required—(1) To have matriculated in the University; and (2) to pass an examination called the Entrance Examination in Arts, or to have passed such other examination as may be recognised by the University for this purpose.[8]

Degree of Bachelor of Medicine.—Before admission to the degree of M.B. candidates are required to present certificates that they will have attained the age of twenty-one years on the day of graduation, and that they have pursued the courses of study required by the University Regulations during a period of not less than four years subsequently to the date of their registration by the General Medical Council, two of such years having been passed in a College of the University, and one year at least having been passed in a College of the University subsequently to the date of passing the Preliminary Examination in Science. All candidates for the degree of Bachelor of Medicine are required, after matriculating, to satisfy the examiners in the several subjects of the following examinations—the Preliminary Examination in Science, the Intermediate Examination for the degree of M.B., and the Final Examination for the degree of M.B.

The Preliminary Examination in Science.—The subjects of examination are as follows:—1. Chemistry. 2. Elementary Biology. 3. Physics. Candidates for the Preliminary Examination in Science must have attended during at least one year courses, both of lectures and of laboratory work, in each of the above-named subjects.

The Intermediate M.B. Examination.—The subjects of examination are as follows:—1. Anatomy. 2. Physiology (including Physiological Chemistry and Histology). 3. Materia Medica and Pharmacy. Candidates for the Intermediate M.B. Examination are required to have passed the Preliminary Examination in Science and to have attended courses of instruction in Anatomy for one winter session, in Physiology for two winter sessions (but one session will be accepted provided that not less than one hundred class attendances are presented by the candidate), and in Materia Medica and Pharmacy for one summer session. The certificates must show (1) that the human body has been dissected twice at least; (2) that laboratory instruction has been received in Physiology; (3) that practical instruction has been received in Materia Medica and Pharmacy.

The Final M.B. Examination.—The examination is divided into two parts, called the First Part and the Second

[7] This fee will continue to be £10 to all such as, having taken their M.B. degree under the former regulations, shall not have paid the fee of £5 at the Preliminary Scientific Examination.

[8] The Examinations at present recognised are:—1. The Preliminary Examination of the Victoria University provided Latin and Mechanics have been taken up. 2. The Matriculation Examination of the University of London. 3. The Previous Examination of the University of Cambridge. 4. Responsions and Moderations of the University of Oxford. 5. The Leaving Certificate Examination of the Oxford and Cambridge Boards, provided that it include Latin, English, Mathematics, and Elementary Mechanics. 6. The Final Examination for Graduation in Arts of any University in Great Britain and Ireland.

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Part respectively, which may be passed separately or on the same occasion, but the First Part cannot be taken before the end of the third year, and the Second Part cannot be taken before the end of the fourth year, of medical study in accordance with the University Regulations. The subjects of examination are as follows:— Part I.: 1. Systematic Surgery. 2. Pharmacology and Therapeutics. 3. General Pathology. Part II.: 1. Systematic and Clinical Medicine, including Mental Diseases. 2. Practical and Clinical Surgery. 3. Obstetrics and Diseases of Women and Children. 4. Morbid Anatomy. 5. Forensic Medicine. 6. Hygiene.

Candidates, before presenting themselves for the Final Examination, are required to have passed the Intermediate Examination, and to furnish certificates—1. Of having attended the Medical and Surgical Practice of a hospital or hospitals, approved by the University, during at least three years, of which years two at least must be subsequently to the date of passing the Intermediate Examination, except when exemption has been granted by the General Board of Studies, after report from the Departmental Board of Medical Studies. 2. Of having attended during at least twelve months demonstrations in the post-mortem theatre of a hospital. 3. Of having attended, under proper supervision, at least twenty cases of labour. 4. Of having during at least three months received in either a general or a special hospital, approved by the University, such Clinical Instruction in the Diseases peculiar to Women as shall be approved by the University. 5. Of having acquired proficiency in Vaccination. 6. Of having attended courses of instruction, approved by the University, in a College of the University or in a College or Medical School recognised for this purpose by statute of the University, in the following subjects:—(*a*) Systematic Medicine, (*b*) Clinical Medicine, (*c*) Systematic Surgery, (*d*) Practical Surgery, (*e*) Clinical Surgery, (*f*) Obstetrics and Diseases of Women and Children, (*g*) Pharmacology and Therapeutics, (*h*) General Pathology and Morbid Anatomy, (*i*) Forensic Medicine, (*j*) Hygiene.

Degree of Doctor of Medicine.—Candidates are not eligible for the degree of Doctor of Medicine unless they have previously received the degree of Bachelor of Medicine, and at least one year has elapsed since they passed the examination for that degree. Candidates for the degree of Doctor of Medicine are required to present a printed dissertation embodying the results of personal observations or original research, either in some department of medicine or of some science directly relative to medicine. No candidate will be admitted to the degree unless his dissertation, after report from the Departmental Board of Medical Studies, shall have been recommended by the General Board of Studies to the Council for acceptance in that behalf. Candidates may be examined on any subject connected with their dissertations.

Degree of Master of Surgery.—Candidates are not eligible for the degree of Master of Surgery unless they have previously received the degree of Bachelor of Medicine, and at least one year has elapsed since they passed the examination for that degree.

The subjects of examination are as follows: (1) Surgical Anatomy, (2) Surgical Pathology, (3) Practical Surgery, including the performance of operations on the dead body, (4) Clinical Surgery, (5) Ophthalmology.

UNIVERSITY OF EDINBURGH

Three medical degrees are conferred by the University of Edinburgh—namely, Bachelor of Medicine (M.B.), Master in Surgery (C.M.), and Doctor of Medicine (M.D.). The degree of Master in Surgery is not conferred on any person who does not also at the same time obtain the degree of Bachelor of Medicine.

No one is admitted to the degrees of Bachelor of Medicine and Master in Surgery who has not been engaged in medical and surgical study for four years—the medical session of each year, or *annus medicus*, being constituted by at least two courses of not less than one hundred lectures each, or by one such course and two courses of not less than fifty lectures each; with the exception of the clinical courses, in which lectures are to be given at least twice a week during the prescribed periods.[9]

[9] No course of lectures will be allowed to qualify unless the lecturer certifies that it has embraced at least one hundred lectures, or fifty lectures, in conformity with the requirements of this section. Three months' courses on Materia Medica, Pathology, and Midwifery do not qualify.

Every candidate for the degrees of M.B. and M.C. must give sufficient evidence by certificates—(*a*) That he has studied each of the following departments of medical science—namely, Anatomy, Chemistry, Materia Medica, Institutes of Medicine or Physiology, Practice of Medicine, Surgery, Midwifery and the Diseases peculiar to Women and Children, and General Pathology, each during courses including not less than one hundred lectures; Practical Anatomy, a course of the same duration as those of not less than one hundred lectures;[10] Practical Chemistry, three months; Practical Midwifery, three months at a midwifery hospital, or a certificate of attendance on six cases from a registered medical practitioner; Clinical Medicine, Clinical Surgery,[11] courses of the same duration as those of not less than one hundred lectures, or two courses of three months' lectures, being given at least twice a week; Medical Jurisprudence, Botany, Natural History (including Zoology), during courses including not less than fifty lectures. (*b*) That he has attended, for at least two years, the medical and surgical practice of a general hospital which accommodates not fewer than eighty patients, and possesses a distinct staff of physicians and surgeons. (*c*) That he has attended, during a course of not less than fifty hours' instruction, the class of Practical Materia Medica in the University of Edinburgh, or a similar class conducted in a university or recognised school of medicine, or a similar class conducted by a teacher recognised by the University Court; or that he has been engaged, for at least three months, by apprenticeship or otherwise, in compounding and dispensing drugs at the laboratory of a hospital or dispensary, by a member of a surgical college or faculty, a licentiate of the London or Dublin Society of Apothecaries, or a member of the Pharmaceutical Society of Great Britain. (*d*) That he has attended, for at least six months, by apprenticeship or otherwise, the out-door practice of a hospital, or the practice of a dispensary physician, a surgeon, or a member of the London or Dublin Society of Apothecaries.

Students of Medicine in the London schools, and in the school of the College of Surgeons in Dublin, can obtain there two *anni medici* out of the four required for the Edinburgh degrees in Medicine. One *annus medicus* may be constituted by attendance on Practical Anatomy and Hospital Practice during the winter session. Another *annus medicus* by attending either (*a*) full winter courses on any two of the following subjects—Anatomy, Physiology, Chemistry, Pathology, Surgery, Medicine, Clinical Surgery, Clinical Medicine; or (*b*) on one such course and two three months' courses on any of the following subjects—Botany, Practical Chemistry, Natural History, Medical Jurisprudence. If the student selects the arrangement prescribed in (*a*), attendance on a third course, although unnecessary to constitute an *annus*, will also be accepted. The other subjects and the additional courses, not given in London or Dublin, necessary for the degrees of the University, require to be attended at this University. In provincial schools, where there are no lecturers recognised by the University Court, a candidate can only have one *annus medicus*, and this is constituted by attendance at a qualified hospital along with a course of Practical Anatomy. But in a provincial school where there are two or more lecturers recognised by this University, a second *annus medicus* may be made by attendance on at least two six months', or one six months' and two three months', recognised courses.

Every candidate must deliver, before the 31st day of March of the year in which he proposes to graduate, to the Dean of the Faculty of Medicine a declaration in his own handwriting, that he has completed his twenty-first year, or that he will have done so on or before the day of graduation, and that he will not be, on the day of graduation, under articles of apprenticeship to any surgeon or other master; together with a statement of studies, accompanied with proper certificates.

Each candidate is examined, both in writing and orally, on Chemistry, Botany, and Natural History; on Anatomy, Institutes of Medicine, Materia Medica (including Practical Pharmacy), and Pathology; on Surgery, Practice of Medi-

[10] Certificates of attendance on Practical Anatomy must express not only the number of months engaged in dissection, but the names of the parts dissected, and the degree of care with which the dissections have been made. Students are recommended not to appear for an examination in Anatomy with a view to a degree until they have dissected the human body at least once.

[11] The Medical Faculty recommend that medical students should not attend Clinical Surgery during their first six months' attendance on Clinical Medicine.

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cine, Midwifery, and Medical Jurisprudence; clinically, on Medicine and on Surgery in a hospital. The examinations on Anatomy, Chemistry, Institutes of Medicine, Botany, Natural History, Materia Medica, and Pathology are conducted, as far as possible, by demonstrations of objects placed before the candidates.

Students who have passed their examination on the first division of these subjects may be admitted to examination on the second division at the end of their third year.

The examination on the third and fourth divisions cannot take place until the candidate has completed his fourth *annus medicus*.

Candidates may, if they choose, be admitted to examination on the first two of these divisions at the end of their third year, or to the fourth examinations at the end of their fourth year.

The degree of Doctor of Medicine may be conferred on any candidate who has obtained the degrees of Bachelor of Medicine and Master in Surgery, and who is of the age of twenty-four years, and produces a certificate of having been engaged, subsequently to his having received the degrees of M.B. and C.M., for at least two years in attendance on a hospital, or in the military or naval medical service, or in medical and surgical practice; provided always that the degree of M.D. shall not be conferred on any person unless he be a graduate in Arts of one of the universities of England, Scotland, or Ireland, or of such other universities as are above specified, or unless he shall, before or at the time of his obtaining the degrees of M.B. and C.M., or thereafter, have passed a satisfactory examination on *three* of the subjects mentioned in Section II. of the statutes relative to preliminary examination. Two of these must be Greek and Logic or Moral Philosophy, and the third is to be one of the following subjects, at the option of the candidate—namely, French, German, Higher Mathematics, and Natural Philosophy; and provided also that the candidate for the degree of M.D. shall submit to the Medical Faculty a thesis, certified by him to have been composed by himself, and which shall be approved by the Faculty, on any branch of knowledge comprised in the professional examinations for the degrees of M.B. and C.M., which he may have made a subject of study after having received that degree.

The fees for M.B. and C.M. are £22. Total fees and stamp for graduating as M.D. only, by regulations for students commencing before February, 1861, £25. The fees for examination must be paid at the secretary's office ten days before the dates thereof, and the fees for the degree of M.D. and the stamp duty for the latter must be paid on or before the 15th day of July in the year of graduation. In the event of the candidate not passing any one of the professional examinations the fee is not returned; but he may appear at one subsequent examination without paying an extra fee, and at any future examination on paying one-half the fee.

UNIVERSITY OF GLASGOW.

Three degrees in Medicine are granted—viz., Bachelor of Medicine, Master in Surgery, and Doctor of Medicine. The curricula of study and the examinations for the several degrees conferred are nearly the same as in the University of Edinburgh. The annual term for conferring medical and surgical degrees is the 1st of August. The Preliminary Examinations of medical students in branches of general education begin on the 6th of October, 1886, and on the 30th of March, 1887.

The fees for the degrees are £21 for M.B. and C.M., which are obtained together, and £15 for M.D.

The regulations under which the above degrees are granted and the notices of the subjects of examination may be obtained by application to the assistant-clerk, Matriculation Office, the University.

After the present winter session the examinations in the first, second, and third groups of subjects of the professional examinations for degrees will be held in July instead of October, as at present.

UNIVERSITY OF ABERDEEN.

The curricula for the several degrees conferred are nearly the same as in the University of Edinburgh.

Professional Examinations will be held twice in each year—namely, in April and July, directly after the close of the winter and summer sessions.

The fees for graduation are the same as in the University of Edinburgh. Matriculation fee, including all dues, for the winter and summer sessions, £1; summer session alone, 10s.

Candidates who commenced their medical studies before November, 1861, are entitled to appear for examination for the degree of M.D. after four years' study, one of which must have been in the University of Aberdeen.

Besides the Royal Infirmary, students have the opportunity of attending the following institutions: Sick Children's Hospital; General Dispensary, and Lying-in and Vaccine Institutions, daily; Royal Lunatic Asylum; Eye Institution, in which is given clinical instruction on the Diseases of the Eye, and on the Application of the Ophthalmoscope for their diagnosis.

Application for further information should be addressed to the Dean of the Medical Faculty.

UNIVERSITY OF ST. ANDREWS.

Two degrees in Medicine are granted—namely, Bachelor of Medicine and Master in Surgery (M.B., C.M.), and Doctor of Medicine (M.D.). The curricula for these degrees, and the regulations under which they are conferred, differ from those of the University of Edinburgh only in the particulars noticed below.

The degree of *Doctor of Medicine* may be conferred by the University of St. Andrews on any registered medical practitioner above the age of forty years whose professional position and experience are such as, in the estimation of the University, to entitle him to that degree, and who shall, on examination, satisfy the medical examiners of the sufficiency of his professional knowledge; provided always that degrees will not be conferred under this section on a greater number than ten in any one year. The examinations are held yearly towards the end of April. Candidates must lodge with the Dean of the Medical Faculty the following certificates, along with application for admission to examination:—1. A certificate of age, being a baptismal certificate or an affidavit of age. 2. Holograph certificates from at least three medical men of acknowledged reputation in the medical profession or in the medical schools, recommending the candidate to the Senatus for the degree, and testifying to his professional skill and position. As only ten can graduate yearly, candidates will be selected whose service and certificates seem to the Medical Faculty to present the highest professional claims, and where these seem equal preference will be given to age and priority of application. 3. A portion of the graduation fee (viz., £10 10s.) shall be forfeited should the candidate fail to appear or to graduate at the time appointed. A satisfactory examination, written and *vivâ-voce*, must be passed in the following departments—viz., Materia Medica and General Therapeutics, Medical Jurisprudence, Practice of Medicine and Pathology, Surgery, Midwifery, and Diseases of Women and Children.

No one will be received as a candidate for the degree of *Bachelor of Medicine and Master in Surgery* unless two years at least of his four years of medical and surgical study shall have been in one or more of the following universities or colleges—viz., the Universities of St. Andrews, Glasgow, Aberdeen, Edinburgh, Oxford, and Cambridge; Trinity College, Dublin; Queen's College, Belfast; Queen's College, Cork; and Queen's College, Galway.

Subject always to the condition here specified, the studies for candidates for the degree of Bachelor of Medicine and Master in Surgery will be under the following regulations. The remaining years of medical and surgical study may be either in one or more of the universities and colleges above specified, or in the hospital schools of London, or in the school of the College of Surgeons of Dublin, or under such private teachers of medicine as may from time to time receive recognition from the University Court. Attendance during at least six winter months on the medical or surgical practice of a general hospital which accommodates at least eighty patients, and during the same period on a course of Practical Anatomy, may be reckoned as one of such remaining years.

Every candidate for examination for the degree of M.B. and C.M. is required to lodge a declaration of age, a statement of his course of study, his inaugural dissertation, and all his certificates with the Dean of the Medical Faculty, on or before the 25th of March in each year.

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UNIVERSITY OF DUBLIN (TRINITY COLLEGE).

Matriculation.—All students in the School of Physic intending to practise Physic must be matriculated, for which a fee of 5*s.* is payable. No student can be admitted for the winter course after Nov. 25th.

Previous Medical Examination.—Candidates for degrees and licences in Medicine and Surgery are required to pass a previous examination in Physics, Chemistry, Botany, Comparative Anatomy, Descriptive Anatomy, and Institutes of Medicine (Practical Histology and Physiology) previously to their degree examination.

Bachelor in Medicine.—A candidate for this degree must be a graduate in Arts, and may obtain the degree of Bachelor in Medicine at the same Commencements as that at which he receives his degree of B.A., or at any subsequent Commencements. The medical education of a Bachelor in Medicine is of four years' duration, and comprises attendance on a single course of each of the following lectures—Anatomy, Practical Anatomy, Theory of Surgery, Chemistry, Materia Medica and Pharmacy, Physiology, Practice of Medicine, Midwifery, Botany, Medical Jurisprudence, Heat, Electricity, Magnetism, Comparative Anatomy; three courses of nine months' attendance on the Clinical Lectures of Sir Patrick Dun's or other metropolitan hospital recognised by the Board of Trinity College; six months' instruction in Practical Midwifery, including Clinical Lectures; a certificate of personal attendance on Fever cases, with names and dates of cases. Six months' dissections, three months' laboratory instruction in Chemistry, three months' Practical Histology, and one month's instruction in Vaccination are required. Any of the above-named courses may be attended at any medical school in Dublin recognised by the Provost and Senior Fellows. Fee for the *Liceat ad Examinandum*, £5; for the M.B. degree, £11.

Doctor in Medicine. A Doctor in Medicine must be M.B. of at least three years' standing, or have been qualified to take the degree of M.B. for three years, and must read a thesis or undergo an examination before the Regius Professor of Physic, in accordance with the rules and statutes of the University. Total amount of fees for this degree, £13.

Bachelor in Surgery.—A Bachelor in Surgery must be a Bachelor in Arts and in Medicine, and have spent four years in the study of Surgery and Anatomy. He must also pass a public examination in the Hall before the Professors of the School of Physic, having previously completed the prescribed curriculum of study, which includes the following additions to the courses named above for the M.B.: Operative Surgery, Two Courses of Dissections, Ophthalmic Surgery.[12] Candidates are required to perform surgical operations on the dead subject. Fee for the *Liceat ad Examinandum*, £5; for the degree of Bachelor in Surgery, £5.

Master in Surgery.[13]—A Master in Surgery must be a Bachelor in Surgery of three years' standing, or have been qualified to take the degree of Bachelor in Surgery for three years; and must read a thesis publicly before the Regius Professor of Surgery, or undergo an examination before the Regius Professor, according to regulations to be approved by the Provost and Senior Fellows. Fee for the degree of Master in Surgery, £11.

University Licences. Candidates for the licences in Medicine or Surgery must be matriculated in Medicine, and must have completed two years in Arts and four years in medical studies.

Licentiate in Medicine.—The medical course and examination necessary for the licence in Medicine are the same as for the degree of M.B. Fee for the *Liceat ad Examinandum*, £5; for the licence in Medicine, £5.

Licentiate in Surgery.—The surgical course and examination necessary for the licence in Surgery are the same as for the degree of Bachelor in Surgery. Fee for the *Liceat ad Examinandum*, £5; for the licence in Surgery, £5.

The total cost of the education and first degrees in Medicine and Surgery is as follows, in addition to the fees for education in Arts and B.A. degree (£83 4*s.*); Medical and Surgical Lectures, £60 12*s.* 6*d.*; Hospitals, £44 2*s.*; Medical and Surgical Examinations and Degrees, £26.

[12] Students in the School of Physic who matriculated before June 22nd, 1872, may obtain the degree of Master in Surgery according to the regulations in force previously to the creation of the degree of Bachelor in Surgery.

[13] Masters in Surgery must be of the standing of Master of Arts.

ROYAL UNIVERSITY OF IRELAND.

The following degrees are conferred by the University in this Faculty: Bachelor of Medicine, Doctor of Medicine, Master of Surgery, Master of Obstetrics; in Sanitary Science, a special diploma. All the medical examinations are held twice yearly—viz., towards the end of April and in October.

The course for degrees in Medicine &c. is one of at least four years' duration. Students who have commenced their medical studies since January 1st, 1884, must also produce a certificate of having been registered as students in Medicine by the Medical Council for a period of at least forty-five months. No one can be admitted to any degree in Medicine who is not fully twenty-one years of age. All candidates for these degrees are, in addition to attending the lectures and complying with the other conditions to be from time to time prescribed, required to pass the following examinations: the Matriculation Examination, the First University Examination, the First Examination in Medicine, the Second Examination in Medicine, and the Degree Examination.

The First Examination in Medicine.—Students are admitted to this examination after the lapse of one academical year from the time of their matriculation. The subjects of this examination are—Zoology, Botany, and a modern language (either French or German). Candidates who have passed in a modern language at the First University Examination in Arts are exempt from again presenting this subject at the First Examination in Medicine, except as a qualification for admission to compete for Honours, the answering of the candidates in the three subjects above-mentioned being taken into account in awarding Honours.

The Second Examination in Medicine.—Students are admitted to this examination after the lapse of one academical year from the time of passing the First Examination in Medicine, provided they have completed the First Period of the Course of Medical Studies. The subjects of this examination are—Anatomy, Physiology, Materia Medica (Pharmacology), and Chemistry.

The Examination for the Degree of M.B.—Students are admitted to this examination after the lapse of one academical year from the time of passing the Second Examination in Medicine, provided they have completed the Second Period of the Course of Medical Studies. The subjects of this examination are—Anatomy, including Practical Anatomy; Physiology, including Practical Physiology and Histology; Surgery, Midwifery, and Diseases of Women and Children; Vaccination; Theory and Practice of Medicine, Medical Jurisprudence; Mental Diseases.

M.D. Degree.—Candidates may be admitted to this degree after the lapse of two academical years from the time of obtaining the degree of M.B.; provided, however, that all persons who were students in Medicine in the Queen's University at the date of its dissolution shall be entitled, if they so desire, to obtain the degree of M.D., instead of the degree of M.B., upon passing the examination herein prescribed for the M.B. degree. Every candidate will be examined at the bedside, and required to diagnose at least six cases, medical and surgical, and prescribe treatment, and to write detailed reports on at least two cases to be selected by the examiners, and to discuss all the questions arising thereon. Every candidate must submit to the medical examiners, for their approval, a thesis certified by him (or her) to have been composed by himself (or herself). No thesis will be approved which does not contain some original or personal observations in Practical Medicine, Surgery, Midwifery, or in some of the sciences embraced in the curriculum, or else a full digest and critical exposition of the opinions and researches of others on the subject selected by the candidate, accompanied by precise references to the publications quoted.

The *M.Ch. Degree* will be conferred only on graduates in Medicine of the University. The examination will comprise the Theory and Practice of Surgery, including Operative and Clinical Surgery.

The *M.A.O. Degree* will also be conferred only on graduates in Medicine of the University. The examination will comprise the Theory and Practice of Midwifery, and the use of Obstetrical Instruments and appliances. Candidates will be required to undergo a special written examination in Midwifery, Gynæcology, and Diseases of Children, in addition to the other tests.

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ROYAL COLLEGE OF PHYSICIANS OF LONDON.

The licence of this College is a qualification to practise Medicine, Surgery, and Midwifery, and is recognised by the Local Government Board as a qualification in Surgery as well as in Medicine.

Licentiates.—Every candidate for the College licence (except when otherwise provided by the bye-laws) is required to produce satisfactory evidence to the following effect:—Of having attained the age of twenty-one years. Of moral character. Of having passed before the commencement of professional study an examination in the subjects of general education recognised by the General Medical Council. Of having been registered as a medical student in a manner prescribed by the General Medical Council. Of having been engaged in professional studies during at least forty-five months, of which at least three winter sessions and two summer sessions shall have been passed at a recognised medical school or schools, and one winter session and two summer sessions in one or other of the following ways:—

1. Attending the practice of a hospital or other institution recognised by the College for that purpose. 2. Receiving instruction as the pupil of a legally qualified practitioner having opportunities of imparting a practical knowledge of Medicine, Surgery, or Midwifery. 3. Attending lectures on any of the required subjects of professional study at a recognised place of instruction. Of having attended, during three winter sessions and two summer sessions, the medical and surgical practice at a recognised hospital or hospitals.[14] Of having discharged the duties of a medical clinical clerk during six months, and of a surgical dresser during other six months; and of having been engaged during six months in the clinical study of Diseases peculiar to Women. Of having received instruction in Chemistry, Practical Chemistry, Materia Medica, and Practical Pharmacy. Of having attended a course of lectures on the following subjects:—Anatomy (with dissections), during twelve months; Physiology; a practical course of General Anatomy during a winter or a summer session, consisting of not less than thirty meetings of the class; Pathological Anatomy; Principles and Practice of Medicine; Principles and Practice of Surgery; Midwifery and the Diseases peculiar to Women; Forensic Medicine. Of having attended Clinical Lectures on Medicine during nine months, and also Clinical Lectures on Surgery during nine months, and of having been engaged during a period of three months in the Clinical Study of Diseases peculiar to Women. Of having passed the professional examinations, of which there are three, each partly written, partly oral, and partly practical. The subjects of the first examination are:—Chemistry, including Chemical Physics—viz., Heat, Light, and Electricity; Materia Medica and Pharmacy; and Osteology. The subjects of the second examination are Anatomy and Physiology. The subjects of the final examination are Medical Anatomy and Pathology, including Morbid Anatomy; the Principles and Practice of Medicine; Surgical Anatomy and Pathology, including Morbid Anatomy; the Principles and Practice of Surgery; Midwifery and Diseases peculiar to Women; Forensic Medicine; Public Health and Therapeutics.

Any candidate who shall produce satisfactory evidence of having passed an examination on Anatomy and Physiology, conducted by a university in the United Kingdom, in India, or in a British colony, or by the College of Surgeons in England, Scotland, or Ireland, or the Faculty of Physicians and Surgeons of Glasgow, shall be exempt from re-examination on those subjects. Any candidate who shall produce satisfactory evidence of having passed an examination on Chemistry and Materia Medica, required for a degree in Medicine at a university in the United Kingdom, in India, or in a British colony, will be exempted from re-examination on those subjects. Any candidate who shall have obtained a degree in Surgery at a university in the United Kingdom, after a course of study and an examination satisfactory to the College, shall be exempt from re-examination on Surgical Anatomy and on the Principles and Practice of Surgery. Any candidate who shall have passed the examination on Surgery conducted by the Royal College of Surgeons of England, or the Royal College of Surgeons of Edinburgh, or the Royal College of Surgeons in Ireland, or the Faculty of Physicians and Surgeons of Glasgow, after a course of study and an examination satisfactory to the College, shall be exempt from re-examination on Surgical Anatomy and on the Principles and Practice of Surgery.

[14] A three months' course of clinical instruction in the wards of a recognised lunatic hospital or asylum may be substituted for the same period of attendance in the medical wards of a general hospital.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

REGULATIONS RESPECTING THE EDUCATION AND EXAMINATIONS APPLICABLE TO CANDIDATES FOR THE DIPLOMA OF MEMBER OF THE COLLEGE.

Professional Education.—The following are recognised modes of commencing professional education:—(1) Attendance on the practice of a hospital, or other public institution recognised by this College for that purpose. (2) Instruction as the pupil of a legally qualified surgeon, holding the appointment of surgeon to a hospital, general dispensary, or union workhouse, or where such opportunities of practical instruction are afforded as shall be satisfactory to the Council. (3) Attendance on lectures on Anatomy, Physiology, or Chemistry, by lecturers recognised by this College.

Candidates, prior to their admission to the First or Primary Examination on Anatomy and Physiology, will be required to produce the following certificates, viz.:—Of having, prior to the commencement of professional study, been registered by the General Medical Council. Of having attended lectures on Anatomy during two winter sessions. Of having performed dissections during not less than two winter sessions. Of having attended lectures on General Anatomy and Physiology[15] during one winter session. Of having attended a practical course of General Anatomy and Physiology[16] during another winter or a summer session, consisting of not less than thirty meetings of the class.

Candidates who commenced their professional studies on or after October 1st, 1882, and shall have pursued those studies in recognised medical schools in England, will be required, before presenting themselves for the Primary or Anatomical and Physiological Examination for the diploma of Member of the College, to produce certificates of having passed an examination in Elementary Anatomy and Physiology, such examination to be conducted by their teachers at the several medical schools. (1) The periods at which the examination shall be held will be determined by the teachers at the several medical schools, provided that an interval of not less than six months shall elapse between the date at which the candidates shall have passed the examination and the date of their presenting themselves for the Primary Examination at the College. (2) It shall be left to the teachers at the several medical schools to determine the nature and extent of the examination in Elementary Anatomy and Physiology.

Candidates, prior to their admission to the Second or Pass Examination on Surgical Anatomy and the Principles and Practices of Surgery, Medicine, and Midwifery, will be required to produce the following certificates—viz.: Of being twenty-one years of age. Of having been engaged, subsequently to the date of registration by the General Medical Council, during four years, or during a period extending over not less than four winter and four summer sessions, in the acquirement of professional knowledge. Of having attended lectures on surgery during one winter session. Of having attended a course of Practical Surgery during a period occupying not less than six months prior or subsequent to the course required by the preceding Clause 3.[17] Of having attended one course of lectures on each of the following subjects — viz.: Chemistry,[18] Materia Medica, Medicine,

[15] By the Practical Course referred to in Clause 5, it is meant that the learners themselves shall, individually, be engaged in the necessary experiments, manipulations, &c.; but it is not hereby intended that the learners shall perform vivisections.

[16] The certificates of attendance on the several courses of lectures must include evidence that the student has attended the practical instructions and examinations of his teacher in each course.

[17] The course of Practical Surgery referred to in Clause 4 is intended to embrace instruction in which each pupil shall be exercised in practical details, such as in the application of anatomical facts to surgery, on the living person or on the dead body; the methods of proceeding and the manipulations necessary in order to detect the effects of diseases and accidents on the living person or on the dead body; the performance, where practicable, of the operations of surgery on the dead body; the use of surgical apparatus; the examination of diseased structures as illustrated in the contents of a museum of morbid anatomy and otherwise.

[18] The course of lectures on Chemistry included in Clause 5 will not be required in the case of a candidate who shall have passed a satisfactory examination in this subject in his preliminary examination.

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Forensic Medicine, Midwifery (with practical instruction), and a certificate of having personally conducted not less than ten labours, and Pathological Anatomy during not less than three months. Of having studied Practical Pharmacy during three months. Of having attended a three months' course of Practical Chemistry (with manipulations), in its application to medical study.[19] Of instruction and proficiency in the practice of Vaccination.[20] Of having attended, at a recognised hospital or hospitals, the Practice of Surgery, during three winter[21] and two summer[22] sessions. Of having been individually engaged, at least twice in each week, in the observation and examination of patients at a recognised hospital or hospitals, under the direction of a recognised teacher, during not less than three months.[23] Of having, subsequently to the first winter session of attendance on Surgical Hospital Practice, attended at a recognised hospital or hospitals, Clinical Lectures on Surgery, during two winter and two summer sessions. Of having been a dresser at a recognised hospital, or of having, subsequently to the completion of one year's professional education, taken charge of patients under the superintendence of a surgeon during not less than six months, at a hospital, general dispensary, or parochial or union infirmary recognised for this purpose, or in such other similar manner as, in the opinion of the Council, shall afford sufficient opportunity for the acquirement of Practical Surgery. Of having attended during the whole period of attendance on Surgical Hospital Practice (see Clause 9) demonstrations in the post-mortem rooms of a recognised hospital. Of having attended, at a recognised hospital or hospitals, the Practice of Medicine, and Clinical Lectures on Medicine, during one winter and one summer session.

Special Notice.—Candidates commencing their professional education on or after the 1st of October, 1882, will not be admitted to the Second or Pass Examination until after the expiration of two years from the date of their passing the Primary or Anatomical and Physiological Examination for such diploma, except in the following cases:—When a candidate, before presenting himself for the Primary Examination, shall possess a recognised degree or diploma in Medicine or Surgery, or shall have completed the curriculum of professional education for the diploma. In the case of a candidate who, being desirous of obtaining the Fellowship, shall fail to present himself for the Primary Examination for the Membership at the end of his second year of professional study, but who shall pass at the end of his third winter session the Primary Examination for the Fellowship, it being required in such case that not less than one year of attendance on the Surgical Practice of a recognised hospital shall intervene between the date of his passing the Primary Examination for the Fellowship and the date of his presenting himself for the Second or Pass Examination for the diploma of Member. In the case of a candidate who, having commenced his professional studies by attendance on the practice of a recognised provincial or colonial hospital, and having completed a year of such attendance, shall fail to pass the Primary Examination at the end of his second winter session of attendance at a recognised medical school, provided that in his case not less than one year shall elapse between the date of his passing the Primary Examination and the date of his presenting himself for the Second or Pass Examination for the diploma of Member. When a candidate, owing to illness, duly certified by one or more of the teachers of his medical school, shall be prevented from presenting himself for the Primary Examination on the completion of his second year of professional study. And in the case of a candidate who, from some unforeseen circumstances, shall fail to present himself for the Primary Examination on the completion of his second year of professional study, it being left to the Court of Examiners to determine whether in such case the candidate shall or shall not be required to comply with the regulation.

Certificates of attendance upon the practice of a recognised provincial or colonial hospital unconnected with, or not in convenient proximity to, a recognised medical school will not be received for more than one winter and one summer session of the hospital attendance required by the regulations of this College. Those candidates who shall have pursued the whole of their studies in Scotland or Ireland will be admitted to examination upon the production of the several certificates required respectively by the College of Surgeons of Edinburgh, the Faculty of Physicians and Surgeons of Glasgow, and the College of Surgeons in Ireland from candidates for their diploma, together with a certificate of instruction and proficiency in the practice of Vaccination, and satisfactory evidence of having been occupied subsequently to the date of registration by the General Medical Council, at least four years, or during a period extending over four winter and four summer sessions, in the acquirement of professional knowledge; and in the case of candidates who shall have pursued the whole of their studies at recognised foreign or colonial universities, upon the production of the several certificates required for their degree by the authorities of such universities, together with a certificate of instruction and proficiency in the practice of Vaccination, and satisfactory evidence of having been occupied, subsequently to the date of passing the Preliminary Examination, at least four years, or during a period extending over four winter and four summer sessions, in the acquirement of professional knowledge.

Professional Examination.—This examination is divided into two parts. The First or Primary Examination, on Anatomy and Physiology, is partly written and partly demonstrative on the recently dissected subject, and on prepared parts of the human body. The Second or Pass Examination, on Surgical Anatomy and the Principles and Practice of Surgery, Medicine, and Midwifery,[24] is partly written, partly oral, and partly on the practical use of surgical apparatus and the practical examination of patients.

The Primary Examinations are held in the months of January, April, May, July, and October, and the Pass Examinations in the months of January, April, July, and October. Candidates will not be admitted to the Primary Examination until after the termination of the second winter session of their attendance at a recognised school or schools; nor to the Pass or Surgical Examination until after the termination of the fourth year of their professional education. The fee of £5 5*s.*, paid prior to the first admission to the Primary Examination, is retained whether the candidate pass or fail to pass the examination, but is allowed as part of the whole fee of £22[25] payable for the diploma. A candidate, after failure at any Primary Examination, is required, on admission to any subsequent Primary Examination, to pay a further fee of £3 3*s.*, which is retained, whether he pass or fail to pass the examination, and which further fee is not allowed as part of the whole fee of £22 for diploma.

The fee of £16 15*s.* is payable prior to each admission to the Pass Examination; but on each occasion of failure the balance of £11 10*s.* is returned to the candidate. A candidate, having entered his name for either the Primary or Pass Examination, who shall fail to attend, will not be allowed to present himself for examination within the period of three months from the date at which he shall have failed so to attend. A candidate referrred on the Pass Examination is required, unless the Court of Examiners shall otherwise determine, to produce, prior to his admission to re-examination, a certificate of at least six months' further attendance on the surgical practice of a recognised hospital, together with lectures on clinical surgery, subsequently to the date of his reference.

[19] The certificates of attendance on the several courses of lectures must include evidence that the student has attended the practical instructions and examinations of his teacher in each course.

[20] The certificate of instruction in vaccination must be such as will qualify its holder to contract as a Public Vaccinator under the Regulations at the time in force of the Local Government Board.

[21] The winter session comprises a period of six months, and, in England, commences on the 1st of October and terminates on the 31st of March.

[22] The summer session comprises a period of three months, and, in England, commences on the 1st of May and terminates on the 31st of July.

[23] It is intended that the candidate should receive the instruction required by Clause 10 at an early period of his attendance at the hospital.

[24] Candidates can claim exemption from examination in Medicine and Midwifery under the following conditions—viz: The production by the candidate of a degree, diploma, or licence in Medicine and Midwifery entitling him to register under the Medical Act of 1858, or a degree, diploma, or licence in Medicine and Midwifery of a colonial or foreign university approved by the Council of the College. A declaration by the candidate, prior to his admission to the Pass Examination, that it is his intention to obtain either of the qualifications in Medicine and Midwifery mentioned in the foregoing paragraph, in which case the diploma of the College will not be issued to him until he shall produce either the said qualification, or proof of having passed the several examinations entitling him to receive the same.

[25] This sum of £22 is exclusive of the fee of £2 paid for the Preliminary Examination.

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EXAMINING BOARD IN ENGLAND BY THE ROYAL COLLEGE OF PHYSICIANS OF LONDON AND THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

Regulations relating to the several Examinations applicable to Candidates who commenced their Professional Education on or after the 1st of October, 1884.

Any candidate who desires to obtain both the licence of the Royal College of Physicians of London and the diploma of Member of the Royal College of Surgeons of England is required to comply with the following regulations, and to pass the examinations hereinafter set forth. Every such candidate who shall commence professional study on or after Oct. 1st, 1884, will be required, at the times prescribed for the respective examinations, to produce satisfactory evidence—1. Of having been registered as a medical student by the General Medical Council. 2. Of having been engaged in professional studies at least forty-five months, during which not less than three winter sessions and two summer sessions shall have been passed at one or more of the Medical Schools recognised by the two Colleges. 3. Of having received instruction in the following subjects: (*a*) Chemistry, including Chemical Physics, meaning thereby Heat, Light, and Electricity; (*b*) Practical Chemistry; (*c*) Materia Medica; (*d*) Pharmacy. 4. Of having performed Dissections at a recognised medical school during not less than twelve months. 5. Of having attended, at a recognised medical school—(*a*) A course of lectures on Anatomy during not less than six months, or one winter session; (*b*) a course of lectures on General Anatomy and Physiology during not less than six months, or one winter session; (*c*) a separate practical course of General Anatomy and Physiology during not less than three months. 6. Of having attended at a recognised medical school—(*a*) a course of lectures on Medicine during not less than six months, or one winter session; (*b*) a course of lectures on Surgery during not less than six months, or one winter session; (*c*) a course of lectures on Midwifery and Diseases peculiar to Women during not less than three months; (*d*) systematic practical instruction in Medicine, Surgery, and Midwifery; (*e*) a course of lectures on Pathological Anatomy during not less than three months; (*f*) demonstrations in the post-mortem room during the whole period of attendance on clinical lectures; (*g*) a course of lectures on Forensic Medicine during not less than three months. 7. Of having attended, at a recognised hospital or hospitals, the practice of Medicine and Surgery during three winter and two summer sessions. 8. Of having attended at a recognised hospital or hospitals during nine months Clinical Lectures on Medicine, and during nine months Clinical Lectures on Surgery, and of having been engaged during a period of three months in the Clinical Study of Diseases peculiar to Women. 9. Of having discharged, after he has passed the Second Examination, the duties of a Medical Clinical Clerk during six months, and of a Surgical Dresser during other six months. 10. Of having received instruction in the practice of Vaccination.

Professional Examinations.—There are three Professional Examinations, called herein the First Examination, the Second Examination, and the Third or Final Examination, each being partly written, partly oral, and partly practical. These examinations will be held in the months of January, April, July, and October, unless otherwise appointed. Every candidate intending to present himself for examination is required to give notice in writing to the registrar of the Royal College of Physicians, or to the secretary of the Royal College of Surgeons, fourteen clear days before the day on which the examination commences, transmitting at the same time the required certificates.

The subjects of the First Examination are—Chemistry, Chemical Physics, Materia Medica, Pharmacy, Elementary Anatomy, and Elementary Physiology. A candidate may take this examination in three parts at different times, or he may present himself for the whole at one time. A candidate will be admitted to the examination on Chemistry and Chemical Physics, Materia Medica, and Pharmacy, on producing evidence of having been registered as a medical student by the General Medical Council, and of having received instruction in Chemistry, Materia Medica, and Pharmacy; but he will not be admitted to the examination on Elementary Anatomy and Elementary Physiology earlier than the end of his first winter session at a medical school. A candidate rejected in one part or more of the First Examination will not be admitted to re-examination until after the lapse of a period of not less than three months from the date of rejection, and he will be re-examined in the subject or subjects in which he has been rejected.

The fees for admission to the First Examination are as follows: for the whole examination, £10 10*s.*; for re-examination after rejection in either of the parts, £3 3*s.*

The subjects of the Second Examination are: Anatomy and Physiology. A candidate may present himself for examination in either of these subjects or parts separately, or in both at one time. A candidate will be admitted to the Second Examination after the lapse of not less than six months from the date of his passing the first examination, on producing evidence of having completed, subsequently to registration as a medical student, eighteen months of professional study at a recognised medical school or schools, and of having complied with the regulations prescribed in Section I., Clauses 4 and 5. A candidate rejected in either part or in both parts of the second examination will not be admitted to re-examination until after the lapse of a period of not less than three months from the date of rejection, and will be re-examined in the subject or subjects in which he has been rejected.

The fees for admission to the second examination are as follows: for the whole examination, £10 10*s.*; for re-examination after rejection in either of the two parts, £3 3*s.*

The subjects of the final examination are: Medicine, including Therapeutics, Medical Anatomy, and Pathology; Surgery, including Surgical Anatomy, and Pathology; Midwifery, and Diseases peculiar to Women. A candidate may present himself for examination in these three subjects or parts separately or at one time. A candidate will be admitted to the third or final examination on producing evidence:—1. Of being twenty-one years of age. 2. Of having passed the second examination. 3. Of having studied Medicine, Surgery, and Midwifery, in accordance with the regulations prescribed in Section I., Clauses 2 and 6 to 10. The Colleges do not admit to either part of the Third or Final Examination any candidate (not exempted from registration) whose name has not been entered in the Medical Students' Register at least forty-five months, nor till the expiration of two years after his having passed the Second Examination. A candidate rejected in the Third or Final Examination, or in one or more of the three parts into which he may have divided it, will not be admitted to re-examination until after the lapse of a period of not less than six months from the date of rejection, and he will be re-examined in the subject or subjects in which he previously failed to pass. Any candidate who shall have obtained a colonial, Indian, or foreign qualification which entitles him to practise Medicine or Surgery in the country where such qualification has been conferred, after a course of study and examination equivalent to those required by the Regulations of the two Colleges, shall, on production of satisfactory evidence as to age and proficiency in Vaccination, be admissible to the Second and Third Examinations.

The Fees for admission to the Third or Final Examination are as follows: for the whole Examination, £15 15*s.*; for re-examination after rejection in Medicine, £5 5*s.*; for re-examination after rejection in Surgery, £5 5*s*; for re-examination after rejection in Midwifery, £3 3*s.*

THE ROYAL COLLEGES OF PHYSICIANS AND SURGEONS OF EDINBURGH, AND FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW.

The above Colleges and Faculty have made arrangements by which, after one series of examinations, held in Edinburgh or in Glasgow, the student may obtain the diplomas of the three co-operating bodies. The general principle of this joint examination is that it shall be conducted by a board in which each body is represented in those branches which are common to both Medicine and Surgery, but that the College of Physicians shall take exclusive charge of the examination in Medicine, and the College of Surgeons, along with the Faculty of Physicians and Surgeons of Glasgow, of the examination in Surgery.

The three co-operating bodies grant their Single Qualifications only to candidates who are already registered as possessing another and opposite qualification in Medicine or Surgery, as the case may be. The Royal College of Physicians of Edinburgh may, notwithstanding this agreement, grant its licence on examination to candidates already possessed

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of one or other of the surgical qualifications mentioned in Schedule A of the Medical Act, 1858; and the Royal College of Surgeons of Edinburgh, and the Faculty of Physicians and Surgeons of Glasgow, may each grant its licence on examination to candidates, already Licentiates of one of the Colleges of Physicians of the United Kingdom, or Graduates in Medicine of a British or Irish University. Copies of the Regulations for the Single Qualification of any of the bodies may be had on application to the respective secretaries.

Professional Education.—Candidates must have been engaged in professional study during forty-five months after passing the examination in General Education,[26] which period will include not less than four winter sessions' or three winter and two summer sessions' attendance at a recognised medical school. At the meeting of the General Medical Council, in May, 1885, it was recommended that hereafter the duration of study should be five years.

The candidate must produce certificates or other satisfactory evidence of having attended the following separate and distinct courses of lectures: Anatomy, Practical Anatomy, Chemistry, Practical or Analytical Chemistry, Materia Medica, Physiology, Practice of Medicine, Clinical Medicine, Principles and Practice of Surgery, Clinical Surgery, Midwifery and the Diseases of Women and Children, Medical Jurisprudence, Pathological Anatomy. The six months' courses delivered in Scotland, with the exception of Clinical Medicine and Clinical Surgery, must consist of not fewer than 100 lectures. The three months' courses must consist of not fewer than 50 lectures. The candidate must also produce the following certificates: (*a*) Of having attended Six Cases of Labour under the superintendence of the practitioner who signs the certificate, who must be a registered medical practitioner. (*b*) Of having attended for three months' instruction in Practical Pharmacy, the certificate to be signed by the teacher, who must be a member of the Pharmaceutical Society of Great Britain, or the superintendent of the laboratory of a public hospital or dispensary, or a registered practitioner who dispenses medicines to his patients, or a teacher of a class of Practical Pharmacy. (*c*) Of having attended for twenty-four months the practice of a public general hospital containing, on an average, at least eighty patients. (*d*) Of having attended for six months (or three months with three months' hospital clerkship), the practice of a public dispensary specially recognised by any of the co-operating bodies; or of having been engaged for six months as visiting assistant to a registered practitioner. (*e*) Of having been instructed by a registered medical practitioner in the Theory and Practice of Vaccination. Candidates shall be subjected to three Professional Examinationer, herein called the First Examination, the Second Examination, and the Final Examination, to be conducted at separate times, partly in writing and partly practically and orally.

The First Examination will embrace Chemistry, Practical Chemistry, Elementary Anatomy, and Histology, and will take place not sooner than the end of the first year, including a winter and a summer session. The sum of £5 5*s.* must be paid to the Inspector of Certificates for this examination, not later than 11 A.M. of the Saturday preceding it. This sum will be considered as paid to account of the entire fee of £26 5*s.* payable for the three diplomas. In the case of a candidate being unsuccessful at this examination, he will be readmitted to examination after a prescribed interval on payment of £3 3*s.* if he has failed in all subjects, and £3 2*s.* if he has passed in one or more subjects.

The Second Examination will embrace Anatomy, Physiology, Materia Medica and Pharmacy, and will not take place before the termination of the summer session of the second year of study, including two winter and two summer sessions. The sum of £5 5*s.* must be paid to the Inspector of Certificates for this examination, not later than one week before the day of examination. In case of failure, the candidate will be readmitted to examination after the expiration of the prescribed period on payment of £3 3*s.* if he has failed in all subjects, and £2 2*s.* if he has passed in one or more subjects.

The Final Examination will embrace the Principles and Practice of Medicine (including Therapeutics, Medical Anatomy and Pathology), Clinical Medicine, the Principles and Practice of Surgery (including Surgical Anatomy, Operative Surgery and Surgical Pathology), Clinical Surgery, Midwifery (including Gynæcology), Medical Jurisprudence, and Hygiene, and it will not take place before the termination of the full period of study. Every candidate must produce to the inspector, Mr. James Robertson, solicitor, 4, Lindsay-place (George IV. Bridge), Edinburgh, or to Mr. Alexander Duncan, Faculty Hall, 242, St. Vincent-street, Glasgow—(1) satisfactory evidence of his having attained the age of twenty-one years; (2) a certificate of his registration in the books of the General Medical Council (see Chap. IV.); (3) the certificates of the classes above enumerated. Of the fee payable for this examination, which is £15 15*s.*, £5 5*s.* must be paid to the inspector not later than one week prior to the examination day, after which no candidate will be entered. The balance of £10 10*s.* must be paid before the candidate is admitted a licentiate of the co-operating bodies. In case of a candidate being unsuccessful at the Final Examination, he will be readmitted to examination after the expiration of the prescribed period, on payment of £5 5*s.*

[26] See the Laws relating to Registration.

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.

Examinations in the subjects of the First Professional Examination are held quarterly, in January, April, July, and October. Examinations in the subjects of the Final Examination for the licences in Medicine and in Midwifery of the College are held in the week following the first Friday in each month, except August and September. Every candidate for a licence must return his name to the registrar of the College, and lodge with him his certificates, bank (Royal Bank of Ireland) receipt of fees, and his schedule, at least four days before the first Friday in each month.

Licence in Medicine.—Every candidate for the licence of the College to practise Medicine must produce satisfactory evidence—1. Of character, from a Fellow of the College, or from two registered practitioners. 2. Of having passed an examination in general education, held by some one of the examining bodies recognised by the General Medical Council. 3. Of having been engaged during a period of four years in the study of Medicine. 4. Of having attended courses of lectures on the following subjects, at schools recognised by the College: Practical Anatomy, two courses; Physiology or Institutes of Medicine, Chemistry, Practical Chemistry, Materia Medica, Medical Jurisprudence, Practice of Medicine and Pathology, Surgery, and Midwifery—of each one course. 5. Of having attended for twenty-seven months a recognised medico-chirurgical hospital, in which clinical lectures and clinical instruction in Medicine are given, the attendance not to be for more than nine months in any one year—viz., six winter and three summer months. 6. Of having discharged the duties of Medical Clinical Clerk during six months, or of having taken notes, to the satisfaction of the physician in charge of the case, and certified under his hand, of at least six separate medical cases—including different varieties of acute and chronic diseases—in the wards of a recognised hospital; and of having attended, during the whole period of his attendance on hospital practice, Demonstrations in the post-mortem room of a recognised hospital. (This rule to be enforced in the case of all candidates who shall have commenced their professional studies after Sept. 30th, 1883.) 7. Of having studied Fever for not less than three months in a recognised clinical hospital, containing fever wards, and recorded from daily personal observation at least five cases of fever, to the satisfaction of the attending clinical physician, as attested by his signature. The word "Fever" to include the following diseases only—viz., Typhus, Typhoid, Enteric, and Scarlet Fever, Small-pox, Measles.[27] 8. Of having attended Practical Midwifery and Diseases of Women for six months at a lying-in hospital or maternity recognised by the College, or, where such hospital attendance cannot have been obtained during the course of study, of having been engaged in Practical Midwifery under the supervision of a registered practitioner holding public appointments; in either case not less than twenty labour cases must have been actually attended. 9 Of having been engaged in the practical study of Vaccination. 10. Of having lodged the admission fee in the Royal Bank of Ireland, Foster-place, Dublin, to the credit of the College.

[27] Candidates who commenced their hospital studies between September, 1878, and October, 1879, will be required to conform to Rule 6, or to produce evidence of having attended for nine months a hospital which contained fever wards.

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The professional examination is divided into two parts: 1. Anatomy, Physiology and Practical Histology, Chemistry, and Materia Medica. 2. Practice of Medicine, Clinical Medicine, Pathology, Medical Jurisprudence, Midwifery, Hygiene, and Therapeutics. Candidates may be examined in the subjects of the first part at the termination of the second year of study, on producing the certificates in the subjects, or in all the subjects of their education, on the completion of their medical studies. No candidate can be examined in the subjects of the first and second parts in the same month.

Candidates qualified as follows are required to undergo the second part only of the professional examination—viz.: (1) Graduates in Medicine of any university in the United Kingdom, or of any foreign university approved by the College; (2) Fellows, Members, or Licentiates of the Royal Colleges of Physicians of London or Edinburgh; (3) Graduates or Licentiates in Surgery; (4) Candidates who, having completed the curriculum laid down above, shall have passed the previous professional examination or examinations (where there are more than one) of any of the licensing medical authorities in the United Kingdom.

The Membership.—Members of the college alone are eligible to the Fellowship. Every candidate for the membership is required to produce satisfactory evidence:—1. Of having attained the age of twenty-five years. 2. Of being a licentiate of this college for three years at least; or a licentiate of one year's standing who shall be a graduate of Arts of a university in the United Kingdom at the time of his obtaining the licence; or a licentiate of one year's standing, who shall be a registered practitioner of seven years' standing at the time of his obtaining the licence. 3. Of professional conduct and moral character, as testified by a Fellow or Member of the college, or by a Fellow of the Royal College of Physicians of London or of Edinburgh. 4. Of not being engaged in trade; of not dispensing medicine, or making any engagement with a chemist, or any other person, for the supply of medicines; and of not practising medicine or surgery in partnership by deed or otherwise. 5. Of having held, during at least six months, the office of resident physician, or resident medical pupil, in a hospital recognised by the college; or of having acted for the same period as clinical clerk in the medical wards of such hospital; or of having been in medical charge, for at least twelve months, of any public institution for the treatment of the sick. 6. Of having lodged the admission fee of 20 guineas in the Royal Bank of Ireland to the credit of the college.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

Candidates for the Letters Testimonial of the College may present themselves either at a Stated or a Special Examination, as hereinafter set forth. Stated Examinations are held in the months of April, July, and November, commencing on dates of which due notice will be given beforehand by the Council of the College. Candidates *cannot be admitted to these examinations unless they be registered pupils.* They will be divided into two classes—junior and senior.

The junior class must produce certificates of—(*a*) having passed a Preliminary Examination recognised by the General Medical Council (into the curriculum of which the Greek language enters as a compulsory subject), and having attended the following lectures: (*b*) three courses of lectures on Anatomy and Physiology; (*c*) three courses of lectures on Practical Anatomy, with dissections; (*d*) two courses of lectures on Chemistry; (*e*) one course of lectures on Materia Medica; (*f*) one course of lectures on Botany; and (*g*) one course of lectures on Forensic Medicine. This class will be examined in Anatomy, Histology, Physiology, Materia Medica, and Chemistry. The fee for this examination is £5 5*s.* (in addition to the registration fee of £5 5*s.*).

The senior class must produce certificates of having attended the following lectures:—(*a*) Three courses of lectures on the Theory and Practice of Surgery; (*b*) one course of lectures on the Practice of Medicine; (*c*) one course of lectures on Midwifery; also certificates of attendance on (*d*) a recognised hospital for three winter and three summer sessions; (*e*) of instruction in Clinical Ophthalmology, three months, and of attendance for one month at the Cowpock Institution or some other institution approved of by the Council, or under the instruction of a public vaccinator specially recognised by this College for that purpose. This class will be examined in Surgery, Operative Surgery on the subject, and Surgical Appliances, Practice of Medicine, Medical Jurisprudence, and Prescriptions. Each of these examinations will be partly written, partly *viva voce*, and partly practical. The fee for the senior class examination is £15 15*s.*, returnable to the candidate in case of rejection, or to be allowed to him in case he presents himself a second time for the same examination. A further fee of £1 1*s.* is to be paid to the registrar.

THE SOCIETY OF APOTHECARIES, LONDON.

EVERY student purposing to study medicine must previously pass a public examination in Arts recognised by the Medical Council, before proceeding with his medical course. Such examination is held in the Hall of the Society four times a year, in March, June, September, and December, and is conducted by means of printed papers. Candidates will be examined in the English and Latin languages, Mathematics, Elementary Mechanics, and one of the following subjects at the option of the candidate—Greek, French, German, Logic, Botany, and Elementary Chemistry. The subjects may be passed at one or more examinations, and no re-examination is required in any subject passed. Registered medical students may present themselves for examination in special subjects if desired. A form of notice accompanying the regulations, obtained from the Society, has to be filled in by the candidate and sent with the fee (one guinea) fourteen days before the examination. Lists of successful candidates are published.

For a licence to practise every candidate will be required to pass two examinations, named respectively the Primary and the Final, each partly written, partly oral, and partly practical. The Primary is held on the first Wednesday and following day of every month. The Final is divided into two parts; Part I. is held on the second and fourth Wednesday and following day of every month; Part II. is held on every Wednesday and Thursday. The course of medical study required for a licence must occupy four years, of which not less than three winter and two summer sessions must be passed at a recognised hospital or school of medicine.

Every candidate intending to offer himself for examination must pay a fee of £6 6*s.*, which in the event of failure will be retained, but no extra fee is required on re-examination. He must also give seven days' notice, and produce the following certificates: (1) for the Primary Examination, a certificate of the commencement of attendance on lectures, and of the course of medical study pursued; (2) for the Final Examination, a certificate of having completed four years' medical study in conformity with the curriculum prescribed, of moral character, and of having attained the age of twenty-one. On such certificates being found correct a card of admission to the examination will be sent, stating the time of attendance. No unsuccessful candidate can be re-examined until the expiration of three months after the Primary and the first part of the Final Examinations respectively, and of six months after the second part.

Every candidate, before he can be qualified for the Primary Examination must have gone through a course of medical study in Chemistry, General and Practical; Botany; Materia Medica: Practical Pharmacy and Dispensing; Anatomy and Physiology, including Dissections and Demonstrations; and Histology, with Demonstrations. The above, including Prescriptions, Practical Chemistry in the Laboratory, and an examination on the living body, form the several subjects of examination for the Primary, which examination may be passed after the second winter session.

For the Final Examination the candidate must give evidence, before he can present himself, that he has gone through the following course of medical study:—Hospital Practice, Surgical and Medical, with Post-mortem Examinations; Principles and Practice of Surgery; Practical Surgery; Clinical Surgical Lectures; Surgical Clinical Clerk or Dresser; Principles and Practice of Medicine; Clinical Medical Lectures; Medical Clinical Clerk; Pathology; Forensic Medicine and Toxicology; Hygiene (its principles and application); Psychological Medicine; Midwifery and Diseases peculiar to Women and Children; Clinical Instruction in the same; attendance on not less than twenty Midwifery cases; and Practical Vaccination.

The Final Examination, which cannot be passed till after the completion of the medical course, and the expiration of forty-five months from registration as medical student, embraces the above; and, in addition, in Part I., Surgical Anatomy,

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Surgical Pathology, Surgical instruments and appliances, with a clinical examination of Surgical cases; in Part. II., Obstetric instruments and appliances, Microscopic examinations of morbid structure, and a clinical examination of medical cases. Part I. must precede Part II., and Part II. may be passed any time after Part I.

A candidate who has previously passed either a medical or surgical examination at one of the Medical Colleges or Universities of the United Kingdom is in some cases exempt from certain portions of the examination for the Certificate of Licentiate of this Society. In the case of Graduates of Colonial and Foreign Colleges and Universities, such examinations will be duly considered on their respective merits.

The Society give annually prizes for proficiency in Botany, in Materia Medica, and in Pharmaceutical Chemistry to registered medical students who compete and come up to the required standard, but no student is allowed to present himself for such examination until the end of the third year of his medical studies. Two examinations are held for this purpose in the month of June: the first on the third Thursday, at the Hall of the Society, chiefly written; the second, practical, on the following Saturday in the "Physic Garden" at Chelsea. A written notice must be sent to the Bedell before the 1st of June, which notice must be accompanied by evidence of registration and of attendance on their medical studies. The prizes consist of a gold medal, to be awarded to the candidate who distinguishes himself the most in the examination; and of a silver medal and a book, or books, to the candidate who does so in the next degree.

The examination of candidates for a certificate to act as an assistant in compounding and dispensing medicines, will be as follows:—In Translating Prescriptions; in the British Pharmacopœia; in Pharmacy, Pharmaceutical Chemistry, Materia Medica, and Medical Botany. Such examination is held every Thursday in the Hall; seven days' notice must be given, and a fee of two guineas paid, which in the event of failure is retained, no further payment being required for re-examination, before which is allowed three months must have elapsed.

Tickets of admission to the Society's Botanic Gardens at Chelsea, and to the Lectures on Botany when there given, can be had on application at the Hall of the Society.

APOTHECARIES' HALL OF IRELAND.

The Professional Education.—Every candidate for the licence to practise Medicine and Pharmacy must produce certificates to the following effect:—Of having passed a preliminary examination in Arts recognised by the General Medical Council previously to entering on professional study. Of registration in the Medical Students' Register. Of medical study, after registrations of at least five years. The course of medical study after registration should occupy at least five years, if the subjects of Elementary Physics, Chemistry, and Biology are included in that period, or at least four years if a satisfactory examination in these subjects has been passed previously to registration. Of being twenty-one years of age, and of good moral character. Of apprenticeship or pupilage to a qualified apothecary, or of having been engaged at Practical Pharmacy under the supervision of a duly registered medical practitioner, possessing the suitable means of instruction, for a period of twelve months subsequently to having passed the Examination in Arts. Of having duly attended the following courses—viz.: Materia Medica and Pharmacy, during three months; Botany and Zoology, during three months; Chemistry, during six months; Practical Chemistry (in a laboratory), during three months; Anatomy and Physiology, during six months; Practical Anatomy, with Dissections, during twelve months; Medicine (the Principles and Practice), during six months; Surgery (the Principles and Practice), during six months; Pathology, during three months; Midwifery and Diseases peculiar to Women and Children, during six months; Practical Midwifery; attendance on at least twenty cases in a recognised Lying-in Hospital; instruction in Vaccination from a duly registered medical practitioner; Forensic Medicine, during three months; Mental Disease, during three months; Hygiene, one course; attendance on the practice of a recognised medico-chirurgical hospital or hospitals, with the clinical instruction, during at least four winter and three summer sessions; practical instruction, with care of patients, as apprentice, pupil, clinical clerk, or assistant in hospital or dispensary.

The examinations for "the Licence to practise the Profession of Apothecary" is divided into three parts:—The first part comprehends Materia Medica and Pharmacy, Elementary Chemistry, Botany, Zoology, and Human Osteology; the second part Anatomy, Physiology, Histology, and Practical Analytical Chemistry; and the third part Medicine, Surgery, Midwifery, Mental Disease, Forensic Medicine, and Hygiene. The examinations commence on the first Monday in the months of January, April, July, and October, and are conducted by printed papers and orally.

Candidates are eligible for the first part of the Professional Examination at the termination of the second year of study; and candidates for the second part, after having passed the first successfully, at the end of the third year of study; and candidates for the final, after having passed the previous examinations successfully, at the completion of the prescribed courses of professional study. The fee for every examination and re-examination is £2 2*s.*, half to be returned in case of failure. Ten shillings is the charge for the licence of the Hall.

THE ARMY, NAVY, AND INDIAN MEDICAL SERVICES.

Admission into the Army and Indian Medical Services is gained as the result of competitive examination. Candidates for both services must, before being admitted to examination, possess the double qualification to practise Medicine and Surgery, and be registered under the Medical Act, and must also furnish satisfactory certificates of moral character. Candidates for the Army must be between the ages of twenty-one and twenty-eight, in good health, and both parents of unmixed European blood; for the Indian Service, between twenty-two and twenty-eight, of sound bodily health, and natural born subjects of Her Majesty. Both are examined as to physical fitness by a Board of Medical Officers. These conditions being satisfied, the candidate is admitted to the competitive examination, which is usually held in London twice a year, in the months of February and August. The subjects of examination are divided into *compulsory* and *voluntary*. The former comprise Anatomy and Physiology, Surgery, Medicine, including Therapeutics and the Diseases of Women and Children, Chemistry and Pharmacy, and a practical knowledge of Drugs. The eligibility of the candidate for admission into the service is determined by the result of this part of the examination. The *voluntary* subjects are French, German, Comparative Anatomy, Zoology, Natural Philosophy, Physical Geography, and Botany, with especial reference to Materia Medica, and for the Indian service Hindustani. Although the results of the examination on voluntary subjects do not affect the question of the eligibility of the candidate for a commission, they influence his position on the lists, which is determined by the numbers obtained under the two heads conjointly. After having passed this examination, the successful candidates for both services are sent to the Army Medical School at Netley as "surgeons on probation," with the rank of lieutenant and the daily pay of 8*s.*, to go through a four months' course of special instruction in the duties required of them in the service. The staff of the school consists of four professors, all of them men of acknowledged ability and high standing in their special departments. Surgeon-General Sir J. Longmore, Kt., C.B., is Professor of Military Surgery; Deputy-Surgeon-General D. B. Smith, M.D., of Military Medicine; Surgeon-Major de Chaumont, M.D., F.R.S., of Military Hygiene; and Dr. Aitken, F.R.S., of Pathology. To each of these an Army Medical Officer is attached as Assistant Professor. The lectures on Military Surgery include gunshot and other wounds, transport of sick and wounded, duties of army medical officers in the field, during sieges, and on board troopships and transports, &c. Those on Military Medicine treat of tropical and other diseases to which soldiers are exposed in the course of their service, the mortality and invaliding by disease, in peace and war, at home and abroad. The course of Hygiene comprises the examination of water and air, the general principles of diet, with the quality and adulterations of food and beverages, the sanitary requirements of barracks, hospitals, and camps, the clothing, duties, and exercises of the soldier, and the circumstances affecting his health with the best means of preventing disease, and instruction in the mode of preparing the various statistical and other returns required of the medical officer. The surgeons on probation are detailed for duty in the wards of the hospital, under the Professors and Assistant-Professors of Medicine and Surgery, and receive

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practical instruction in the mode of examining recruits. The Surgeons on probation are provided with quarters, and are members of the excellent mess established at Netley. After having passed through the course of instruction they are examined on the subjects taught in the school, and their position on the list recommended for commissions, is determined by the combined results of the competitive and final examinations. At the close of each session five prizes are awarded: the Herbert prize of £20 to the surgeon on probation who has obtained the highest number of marks at the London and Netley examinations conjointly; the Parkes Memorial Bronze Medal to the one who gains the highest number of marks in the examination on Hygiene at Netley, combined with those given for the answers to a special question set on the same subject; the Martin Memorial Gold Medal to the highest number of marks in the final examination on Military Medicine, with the addition of those gained for a special question connected with it; the Montefiore Gold Medal and £20, awarded in the same manner for Military Surgery; and the Montefiore Second Prize, consisting of works on Military Surgery, to the surgeon on probation who obtains the second highest numbers in this branch.

Surgeons are promoted to be Surgeons-Major on completing twelve years' full-pay service, of which three must have been abroad. Before being promoted they will be required to pass an examination intended to test their progress and proficiency in all those branches of knowledge which are essential to their continued efficiency as medical officers, which may be taken at any time between the fifth and tenth year of service. It will embrace the following subjects:—*a.* Surgery, operative and practical, including field surgery and transport of sick and wounded. *b.* Medicine and pathology, including practical pharmacy and modes of prescribing and administering remedial measures, food, drink, &c. *c.* Hygiene, within the limits treated of in "Parkes' Practical Hygiene." *d.* Duties of executive medical officers during peace and war at home and abroad, and at sea, as defined in the various codes of regulations issued for their guidance. Medical officers possessing the following qualifications will be exempted from examination in medicine, surgery, and hygiene respectively: *a.* The Fellowship of any Royal College of Physicians or Surgeons of Great Britain or Ireland, granted under a higher standard of qualification than that for Licentiate or Member, will be accepted in lieu of an examination in medicine and surgery. *b.* The diploma in Hygiene and State Medicine, or any corresponding diploma of any University in Great Britain or Ireland, such diploma being granted after examination, will be accepted in lieu of an examination in this subject. A certificate will be required from a recognised teacher of surgery in any medical school at home or abroad in which operative surgery is taught, showing that the medical officer has gone satisfactorily through a complete course of operative surgery during the period within which the examination must be taken, and that he is a competent operator. A report on any subject of a practical professional character to be selected by the officer himself, and certified to be his own composition, and in his own handwriting, will also be required.

The selection of Surgeons-Major for advancement to the grade of Brigade Surgeon is made on the grounds of ability and merit, in determining which the following points will be considered:—The officer to be so selected must have been favourably reported on by the several military and departmental officers under whom he may have served, as set forth in their Annual Confidential Reports. He must be physically fit for general service, and have the necessary qualifying foreign and Indian service under existing rules. He must, before he can be selected for promotion to the grade of Brigade Surgeon, establish before an examining board, appointed for the purpose by the Director-General, his efficiency in the following subjects:—*a.* Hospital organisation and administration in peace and war. *b.* The administration, interior economy, command, and discipline of the Medical Staff Corps and bearer columns. *c.* The relations of the medical to all other departments and corps of the army, as defined by the various Codes of Regulations in force. *d.* Recruiting and invaliding. *e.* The management of sick and wounded in war. *f.* Field Medical organisation. *g.* The transport of the sick and wounded by land and sea. *h.* The medical and surgical equipment and hospital arrangements for an army corps. *i.* The duties and responsibilities of medical officers, quartermasters, and non-commissioned officers and men of the Medical Staff Corps in regard to the charge and supervision of stores and equipments, and the nursing, dieting, and general management of the sick. *k.* The sanitary duties of medical officers in charge of camps and hospitals in the field and at the base of operations. *l.* The sanitary inspection and equipment of hospital ships and troop transports, and all other sanitary duties in camps, garrisons, and quarters. *m.* The origin, progress, and best methods of dealing with outbreaks of epidemic disease among troops under any given circumstance. *n.* The most approved methods of securing the sick, and especially the wounded, against pyæmia, septicæmia, and all other forms of blood-poisoning, and the management and treatment of such outbreaks when they occur. *o.* Questions on operative surgery and practical medicine will also form part of this examination. A medico-topographical report will be required of any district or country in which British troops have been, or are likely to be, actively employed, as well as a sketch of the medical arrangements suitable for an army corps operating in such a district or country, compiled by the officer, and certified to be his own composition and in his own handwriting.

Brigade Surgeons, to be eligible for selection as Deputy Surgeons-General, must have served abroad at least ten years, of which three must have been in India. All officers under the rank of Deputy Surgeon-General are placed on the retired list at the age of fifty-five, and those of that rank and Surgeons-General at the age of sixty.

INDIAN MEDICAL SERVICE.

From date of leaving Netley till embarkation, 10*s.* per diem. Pay and allowances in India.

Rank.	*Monthly pay.* Rs. a. p.	*If in charge of a Native Regiment.* Rs.	*Pension, annual.* £
Surgeon under 5 years' service ..	296 10 0	450	—
,, after 5 ,, ..	304 14 2	600	—
,, 6 ,, ..	392 5 2		
Surgeon-Major & Brigade-Surgeon: after 10 years' service	410 9 5	800	—
,, 12 ,,	640 14 6		
,, 15 ,,	677 6 11		
,, 17 ,,	..		292
,, 20 ,,	852 3 7		365
,, 25 ,,	888 12 0	1000	500
,, 30 ,,	..		700
Deputy Surgeon-General, 2 at ..	2250 0 0	(aft. 5 yrs.' service in rank addtnal. to service pension.)	250
,, ,, the rest at ..	1800 0 0		
Surgeon-General	2500 0 0		350
,, in Bengal	2700 0 0		

The regulations above noted respecting the promotion of Surgeons and Surgeons-Major are equally applicable to the Indian Medical Service.

ROYAL NAVY.

The conditions of admission into the Naval Medical Service are the same as those for the Army; but the candidate is also required to declare his readiness to engage for general service, and to proceed on duty abroad whenever required to do so. After having passed the competitive examination in London the successful candidate will receive a commission as surgeon in the Royal Navy, "and will undergo a course of practical instruction in Naval Hygiene at Haslar Hospital." At present Fleet Surgeon Walter Reid, M.D., has been appointed to Haslar "for instruction of surgeons on entry," and Surgeon Gilbert Kirker, M.D., "to assist in instruction of surgeons on entry"; but we have no information as to the length of the course, the conditions under which it is conducted, or the subjects professed to be taught.

Surgeons are promoted to Staff Surgeons after twelve years from date of entry, provided they pass the requisite examination, and Staff Surgeons to Fleet Surgeons after twenty years' service, if recommended by the Director-General. Deputy-Inspectors-General are promoted by selection from the Fleet Surgeons, and Inspectors-General from the Deputy Inspectors-General having three years' foreign, four years' mixed, of which not less than two have been abroad, or five years' home service in such appointments as preclude foreign service, provided they have not refused to go abroad when called upon to do so. Inspectors and Deputy Inspectors-General are retired compulsorily at sixty, and other grades at fifty-five years of age, and all ranks at any time if they have not served for five years. In calculating service for retired pay time on half-pay will be taken as equivalent to one-third service on full-pay.

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The Medical Student's Class Guide.

TABULAR LIST OF THE CLASSES, LECTURERS, FEES, AND DAYS OF OPERATIONS AT THE LONDON HOSPITALS AND MEDICAL SCHOOLS FOR THE SESSION 1886-87.

LECTURES, &c.	ST. BARTHOL. HOSP. & COL.			CHARING-CROSS HOSP. & COLL.			ST. GEORGE'S HOSPITAL.		
	LECTURERS.	DAYS AND HOURS.	FEES. One Course.	LECTURERS.	DAYS AND HOURS.	FEES. One Session.	LECTURERS.	DAYS AND HOURS.	FEES. One Course.
WINTER SESSION.			£ s.			£ s.			£ s.
ANATOMY AND PHYSIOLOGY	Dr. Klein	M. Tu. Th. 10	9 9	Dr. Mott	Daily	6 6	Dr. Delépine	T. Th. 3 S. 10	7 7
							Ditto, *Phys. Chem.*	T. W. 10, S. 11	3 3
ANATOMY, DESCRIPTIVE & SURGICAL	Mr. Marsh Mr. Langton	Tu. W. Th. F. 9	7 7	Mr. Bellamy	M. W. F. 9	6 6	Mr. Bennett	M. W. S, F. 4	7 7
ANATOMICAL DEMONSTRATIONS	Messrs. Clarke, Lockwood, and Jessop	Daily, 10 to 4	...	Mr. Cantlie	Daily	6 6	Mr Turner, Mr Ross	Daily	...
							Ditto, *Osteology*	T. Th. S. 10	...
							Histol. Dr Delépine	M W F 11½, T 2	3 3
CHEMISTRY	Dr. Russell	M. W. F. 9	6 16	Mr. Heaton	M. W. F. 4	6 6	Mr. Donkin	T. Th. S. 11½	6 6
MEDICINE	Dr. Andrew Dr. Gee	M. Tu. Th. 3½	6 16	Dr. Pollock	M. W. ½, Th. 3	7 7	Dr. Dickinson	T. Th. F. 4	7 7
SURGERY	Mr. Savory	W. Th. F. 2½	6 16	Mr. Barwell	Tu. Th. F. 4	7 7	Mr. Pick	M. W. F. 9½	7 7
HOSPITAL PRACTICE:									
PHYSICIANS	Dr. Andrew Dr. Church Dr. Gee Dr. Duckworth Dr. M. Duncan (*Obstet.*)	Tu. Th. S. M. Tu. Th. Tu. Th. S. M. Tu. Th. F. S.	6 mths. 15 15	Dr. Pollock Dr. Green Dr. Bruce	Daily, 2	6 mths. 10 10	Mr. Carter, *Oph.* Dr. Wadham Dr. Dickinson Dr. Whipham Dr. Cavafy *Obst. Phys.:* Dr. Champneys	W. 4 Daily, 1	12 mths. 10 10
ASSISTANT-PHYSICIANS ...	Dr. Hensley Dr. Brunton Dr. Legg Dr. Norman Moore	Tu. F. 11 W. S. 11 M. Th. 11	...	Dr. Abercrombie Dr. Lubbock Dr. Willcocks Dr. Murray	Daily, 1.30	...	Dr. Ewart Dr. Owen	Daily, 12	...
SURGEONS	Messrs. Savory, Willett, Smith, Langton, and Baker	Daily M. Th. F. S. Tu. F. S.	6 mths. 19 19	Mr. Barwell Mr. Bellamy Mr. Bloxam	Tu. F. M. Th. W. S. 2	6 mths. 10 10	Mr. Holmes Mr. Rouse Mr. Pick Mr. Haward	Daily, 1	12 mths. 10 10
ASSISTANT-SURGEONS	Messrs. Marsh, Butlin, Walsham, Cripps, and Bruce Clarke *Ophth.-Surgs.:* Mr. Power Mr. Vernon	Daily, 12 Tu. Th. S. 1½	...	Mr. Cantlie Mr. Morgan Mr. Stanley Boyd	M. Th. Tu. F. W. S. 1.30	...	*Ophth. Surg.:* Mr. B. Carter Mr. Bennett Mr. Dent *Assist. Ophth.:* Mr. Frost	Daily, 12	...
CLINICAL MEDICINE	Drs. Andrew, Church, Gee, and Duckworth	... F. 1	...	The Physicians and Assistant-Physicians	Weekly	...	The Physicians	M. 2	...
CLINICAL SURGERY	Messrs. Savory, Smith, Willett, Langton, and Baker	S. 12.45	...	The Surgeons and Assistant-Surgeons	Weekly	...	The Surgeons	Tu. 2	...
CLINICAL MIDWIFERY, &c.	Ds. Duncan, Godson	...	...	Drs. Black & Routh	T. F. 1.30	...	Dr. Champneys	F. 2	...
DENTAL SURGERY	Mr. Coleman	S. 10 Operations W. & S. 1½ Post-mort. exam, daily at 12 & 2½	...	Mr. Fairbank	M. W. F. 9	...	Mr. Winter-bottom	Tu. 10 Operations Thurs. at 1 Operations on the Eye, F. 1½	...
	[*Hygiene:* Dr. Thorne M. 10]								
SUMMER SESSION.									
MATERIA MEDICA, &c. ...	Dr. Brunton	Tu. Th. S. 10, W. 9	6 16	Dr. Willcocks	M. W. F. 9	4 4	Dr. Owen	M. W. F. 2	4 14
MIDWIFERY, &c.	Dr. M. Duncan	Daily, 9	5 5	Dr. Black	M. Tu. W. F. 3	4 4	Dr. Champneys	M. W. F. 9	4 14
BOTANY	Rev. G. Henslow	M. W. F. 10	4 4	Dr. Willcocks	M. W. F. 9	4 4	Mr. Murray	M. W. F. 10	3 13
MEDICAL JURISPRUDENCE	Dr. Hensley	M. Tu. S. 9	4 4	Dr. Abercrombie	W. F. 9	4 4	Dr. Wadham	Tu. Th. S. 9	4 14
PATHOLOGICAL ANATOMY	Dr. Legg	W. 9½	2 12	Mr. Boyd	Daily	...	Dr. Delépine	...	...
PRACTICAL CHEMISTRY ...	Dr. Russell	M. Tu. F. 11 to 1	3 3	Mr. Heaton Mr. Vasey	Daily M. Th. 3-5	5 5	Mr. Donkin	Daily	4 14
COMPARATIVE ANATOMY...	Dr. Norman Moore	M. Th. 11	2 12	Dr. Gerson	S. 9	3 3	Dr. Whipham	F. 3½	3 3
PATHOLOGY & MORB. ANAT.	Dr. Norman Moore and Surg. Regs.	F. 11 12, 2½	...	Dr. T. H. Green	Tu. W. F. 4	...	(in Winter)	...	...
OPHTHALMIC SURGERY ...	Mr. Power Mr. Vernon In Winter	Tu. W. 4 M. 2	2 12	Staff of Royal West. Oph. Hosp.	Daily	...	Mr. B. Carter *Pract. Med.:* Dr. Whipham	F. 3 T. Th. S. 9 in Summer	... 4 4
PSYCHOLOGY	Dr. Claye Shaw	...	2 12	...	...	...	Dr. Blandford	Tu. 3	...
DENTAL SURGERY	...	...	...	Mr. Fairbank	M. W. F. 9	...	Mr. Winter-bottom	Tu. 10	...
PRACTICAL SURGERY... ...	Mr. Butlin Mr. Walsham (and in Winter)	...	...	Messrs. Bloxam & Morgan (in Winter & Sum.)	...	5 5	Mr. Dent	M. W. F. 3	6 6
PRACTICAL PHYSIOLOGY...	Dr. Harris (and in Winter)	...	7 7	Dr. Mott (& in Winter)	M. W. F. 11-1	6 6	*Hyg.:* Dr. Bridges *Aural Surg:* Sir W. Dalby, T. 2	...	...
PRACTICAL PHARMACY ...	Pharm. Laborat.	...	...	Mr. Sandall	Daily	3 3	...	...	...
OPERATIVE SURG. (DEMONST.)	Messrs. Clarke and Lockwood	...	5 5	Mr. Bloxam	T. W. Th. F. S. 9	...	Mr. Turner *Pract. Midw.:* Dr. Champneys, W. 1	M. W. F. 9½	3 3
DISEASES OF THE EAR ...	Mr. Cumberbatch	Tu. F. 2	...	Mr. Cantlie	F. 9	...	Sir W. Dalby	W. 2	...
DISEASES OF THE SKIN ...	Mr. Cripps	F. 2½	...	Dr. Sangster	M. 2	...	Dr. Cavafy	Th. 1	...
ORTHOPÆDIC SURGERY ...	Mr. Walsham	F. 12½	...	...	...	...	Mr. Bennett	...	...
	[*Diseases of Larynx:* Mr. Butlin, Th. 2½]						[*Dis. Throat:* Dr. Whipham	Th. 2	
Fee for all Lectures and Hosp. Med. and Surg. Practice	...	...	191 5	...	...	994 10			£1250

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TABULAR LIST OF THE CLASSES, LECTURERS, FEES, AND DAYS OF OPERATIONS AT THE LONDON HOSPITALS AND MEDICAL SCHOOLS, FOR THE SESSION 1886-87—(CONTINUED.)

LECTURES, &c.	GUY'S HOSPITAL. Lecturers.	Days & Hours.	Fees. One Course.	KING'S COLLEGE AND HOSPITAL. Lecturers.	Days & Hours.	Fees. One Course.
WINTER SESSION.			£ s.			£ s.
PHYSIOLOGY	Mr. Golding-Bird Dr. Wooldridge	M. W. F. 4½ M. W. S.	7 7 7 7	Dr. Gerald Yeo	Daily, 12½	8 8
ANATOMY, DESCRIPTIVE & SURGICAL	Mr. Howse Mr. Davies-Colley	Tu. W. Th. F. 9	7 7	Dr. Curnow	W. Th. 11½, F. S. 9* M. Tu. W. Tu. 9†	9 9
ANATOMICAL DEMONSTRATIONS	Mr. Lane, Mr. Poland, & Mr. Dunn	Daily, 9 to 4	7 7	Dr. Curnow Mr. A. S. Kenny	Daily	7 7
CHEMISTRY	Dr. Debus Dr. Stevenson Mr. Groves	Tu. Th. S. 11	7 7	Mr. Bloxam Mr. Thomson Mr. Johnson	M. W. Th. 10½	8 8
MEDICINE	Dr. Pye-Smith Dr. Taylor	M. W. F. 3	7 7	Dr. Beale	M. F. 4, W. 5	8 8
SURGERY	Mr. Bryant Mr. A. E. Durham	Tu. Th. 3½ S. 2½	7 7	Mr. H. Smith	Tu. W. Th. 4	8 8
PRACTICAL SURGERY	Mr. Lucas	...	4 4	Messrs. H. Smith, Rose, Cheyne, & Barrow	...	3 3
HOSPITAL PRACTICE:	Sir W. Gull, Drs. Owen Rees & Wilks (*consult.*)	...	3 mths. 10 10	Dr. Beale, Dr. Duffin Dr. Playfair (*occ.*)	Tu. F. 2; W. S. 2 Tu. Th. S. 2	6 mths.
PHYSICIANS	Drs. Pavy, Pye-Smith, & Taylor Dr. Hicks (*cons. obst.*) Dr. Galabin (*obst.*)	M. Th. S. M. Th. S. M. W. F. M. Th. F.	1½ 6 mths. 15 15	Dr. Burney Yeo Dr. Hayes (*accou.*) Dr Ferrier,‡ Dr Curnow Dr. Tirard	Tu. F. 1½ M. W. F. 12½ M. Th. 1½ Tu. F. 1½	
ASSISTANT-PHYSICIANS	Drs. Goodhart, Carrington, White, & Horrocks (*obst.*)	M. Tu. W. F. Th. S. 12 (Out-patnts. at 12)	1 year 24 3 Perpet. 31 10	Dr. Dalton	W. S. 1½	
SURGEONS	Messrs. Cock, Birkett (*cons.*), Bryant, Durham, Howse, & Davies-Colley Mr. Bader (*consult. oph.*) Mr Higgens, Dr Bradley (*oph.*); Mr. Moon (*dent.*) Mr Pedler (*assist. dent.*) Mr. L. Purves (*aural*)	M. Th. S. M. Th. M. Th. W. S. M. T. Tu. F. Tu. Th. F. Tu. F.	1½ 3 mths. 10 10 6 mths. 15 15 1 year 24 3	Mr. Wood Sir Joseph Lister, Bart. Mr. H. Smith Mr. W. Rose Mr. S. H. Cartwright (*surg.-dentist*) Mr. McHardy (*ophthalmic*)	Tu. Th. S. 1½ M. W. F. 1½ M. W. F. 1½ Tu. F. 1½ Tu. F. 10 M. W. Th. 1½	6 mths.
ASSISTANT-SURGEONS	Mr. Lucas Mr. Golding-Bird Mr. Jacobson Mr. Symonds	W. Th. M. S. (Out-patients at 12)	24 3 Perpet. 31 10	Mr. Cheyne Mr. Barrow	W. S. 1 M. Th. 1½	...
CLINICAL MEDICINE	Drs. Pavy, Pye-Smith, & Taylor *In Summer:* Drs. Goodhart, Carrington, & White	S. 1½ W. 1½	...	Dr. Duffin Dr. Beale Dr. B. Yeo Dr. Ferrier Dr. Curnow	Alt. F. 3 Alt. Tu. 3 Alt. Tu. 3‡ Alt. M. 3 Alt. M. 3‡	...
CLINICAL SURGERY	Messrs. Bryant, Durham, Howse, & Davies-Colley *In Summer:* Mr. Lucas Mr. Golding-Bird Mr. Jacobson Mr. Symonds	W. 1½ F. 1½	...	... Mr. Wood Sir Joseph Lister, Bart.	... Tu. Th. 1½ M. W. 2	... To Med. & Surg. Practice £43 per. £18 18s. 1 year.
CLINICAL MIDWIFERY	Dr. Galabin Dr. Horrocks	W. 1½ Operations Tu. F. at 1½	...	Dr. Playfair	Alt. Th. 3	...
	[*Surgical Classes:* Mr. Jacobson	On the Eye, M. F. 1½			Operations W. 3, F. 4 S. at 1	
SUMMER SESSION.						
MATERIA MEDICA & THERAPEUTICS	Dr. Taylor	M. Tu. Th. 2	5 5	Dr. Tirard	Tu. W. Th. F. 8½	5 5
MIDWIFERY &c.	Dr. Galabin	Tu. W. Th. F. 9 A.M.	7 7	Dr. Playfair	Tu. W. Th. F. 9	5 5
BOTANY	...	...	...	Mr. Bentley	M. Tu. Th. F. 12½	4 4
BIOLOGY	Mr. Beddard	M. W. 1½	7 7	...	...	...
MEDICAL JURISPRUDENCE	Dr. Stevenson	Tu. Th. S. 10	5 5	Dr. Ferrier	M. Tu. W. Th. 4	5 5
DISEASES OF WOMEN	Dr. Galabin	M. 3	...	Dr. Playfair	...	...
PRACTICAL CHEMISTRY	Mr. Groves	M. W. F. 10 to 1	7 7	Messrs. C. L. Bloxam, Thomson, & H. Jackson	M. W. Th. 10½	6 6
PRACTICAL PHYSIOLOGY	Dr. Wooldridge	...	...	Dr. G. Yeo, Mr Groves, & Mr. Herroun	Tu. F. S. 10½	6 6
PRACTICAL BIOLOGY	Dr. Shaw	...	...	Mr. Groves	Tu. F. 2	3 3
NATURAL PHILOSOPHY	Mr. Reinold	M. 11	4 4	Mr. W. G. Adams	Tu. 2	...
COMPARATIVE ANATOMY	Dr. Bradley (*with Zoology*)	Tu. Th. 2½	5 5	Mr. F. J. Bell (in Winter)	M. F. 4	4 4
PATHOLOGY AND MORBID ANATOMY	Dr. Goodhart Dr. Carrington	Daily, 2½ (in Sum., S. 9)	7 7 3 3	Dr. Duffin	W. Th. F. 3	3 3
OPERATIVE SURGERY	Mr. Lucas	...	5 5	Mr. W. Rose	...	6 6
MORBID HISTOLOGY	Mr. Symonds	W. S. 1	4 4	...	...	...
OPHTHALMIC SURGERY	Mr. Higgens	Th. 3	...	Mr. McHardy	M. Th. 1	3 3
PSYCHOLOGICAL MEDICINE	Dr. Savage	Tu. 11, F. 10½	3 3	Dr. Sheppard	...	...
DENTAL SURGERY	Mr. Moon	Th. 12	...	Mr. S. H. Cartwright	Tu. F. 10	...
AURAL SURGERY	Mr. L. Purves	Tu. 12	...	Dr. Pritchard	Th. 2½	...
DEMONST. OF CUTANEOUS DISEASES	Drs. Pye-Smith & Carrington	Tu. 12	...	Dr. Duffin	F. 2	...
VACCINATION	...	...	...	Mr. Dunn	M. 10½	...
HYGIENE	Mr. Turner	M. Th. 1½	3 3	Dr. Kelly (in Wint.)	F. 3	1 1
PRACTICAL PHARMACY	Mr. Collier	...	3 3	Mr. Wilmot	Daily	3 3
Fee for Lectures, and Hospital Medical and Surgical Practice	...	...	£131 5	[*Clinical Therapeutics:* Dr B. Yeo, Th. S, in Win.]	[*Pract. Pathol.:* Mr. Cheyne]	126 11 6

* Elementary Course. † Advanced Course. ‡ In summer.

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TABULAR LIST OF THE CLASSES, LECTURERS, FEES, AND DAYS OF OPERATIONS, AT THE LONDON HOSPITALS AND MEDICAL SCHOOLS, FOR THE SESSION 1886-87—(CONTINUED.)

LECTURES, &c.	LONDON HOSPITAL. Lecturers.	Days and Hours.	Fees. One Session.	ST. MARY'S HOSPITAL. Lecturers.	Days and Hours.	Fees. One Session.	MIDDLESEX HOSPITAL. Lecturers.	Days and Hours.	Fees. One Session.
WINTER SESSION.			£ s.			£ s.			£ s.
PHYSIOLOGY	Mr. M'Carthy	Tu. Th. S. 9 A.M.	4 4	Dr. Waller	M. W. Th. 12	4 4	Mr. Lowne	M. W. F. 9	8 8
EXPERIMENTAL PHYSIOL.	Mr. M'Carthy	Daily	...	Dr. Waller	Tu. W. F. 10	4 4	Messrs. Lowne & Karop (in Summer)	M. W. F. 10	5 5
PATHOL. & MORBID ANAT.	Dr. Sutton	Daily	...	Mr. Silcock Dr. Maguire	Tu. F. 12	4 4	Dr. Fowler (in Summer)	M. W. F. 9	4 4
ANATOMY, DESCRIPTIVE & SURGICAL.	Mr. F. Treves	Tu. Th. 12 M. W. F. 9	5 5	Mr. Edm. Owen	M. Tu. Th. F. 9	7 17	Mr. Hensman	M. Tu. Th. F. 4 or 4½	10 10
ANATOMICAL DEMONSTRATIONS.	[*Pract. Anat.*]: Mr. C. M. Moulin	Daily, 10 to 5 (except S. aft.)	5 5	Mr. E. Lane Mr. J. J. Clarke	Daily 9–5	...	Messrs. Hensman, Sutton, Wynter, Brodie	Daily 9 till 4	6 6
CHEMISTRY	Dr. Tidy	M. W. F. 10.30	7 7	Dr. Wright	W. S. 9 Th. 10	6 16	Mr. W. Foster	M. W. Th. F. 3	6 6
MEDICINE	Dr. Stephen Mackenzie	M. W. F. 4	5 5	Dr. Broadbent Dr. Cheadle	M. W. F. S.	5 5	Dr. Cayley	Tu. Th. S. 9	8 8
SURGERY	Mr. Elvington	Tu Th. 4 S. 10 A.M.	5 5	Mr. Norton Mr. Page	M. Tu. Th. 4	5 5	Mr. H. Morris	M. W. Th. 3	8 8
PRACTICAL SURGERY	Mr. Reeves	Tu. Th.	...	Mr. Pepper	T. Th. 5	4 4	Mr. A. Clark	W. F. 9	6 6
HOSPITAL PRACTICE:	Sir A. Clark, Drs. Down, H. Jackson, Sutton, Fenwick,	Daily, 2	6 mths.	Sir E. Sieveking Dr. Broadbent	Tu. F. 1½	6 mths	Dr. W. Cayley Dr. Coupland	Daily, 1½	3 mths.
PHYSICIANS	Herman (*obstet.*), S. Mackenzie, A. E. Sansom F. C. Turner Dr. G. Smith	Daily, 2 Tu. F. 2	10 10	Dr. Cheadle Dr. Meadows (*obs.*) *To Out-patients:* Dr. Lees Dr. Phillips Dr. Maguire Dr. M. Handfield Jones (*obs.*)	W. 1½, S. 9½ Tu. F. 9½ W. S. 1½ M. Th. 1½ Tu. F. 1½ M. Th. 1½	5 5	Dr. D. Powell Dr. Finlay Dr. Edis (*obst.*) Dr. Duncan (*assist. obst.*)	Daily, 1½ Tu. F. 1½ W. S. 1	5 5
ASSISTANT-PHYSICIANS	Dr. F. Warner Dr. Ralfe	Daily, 1.30	...			...	Dr. Fowler Dr. Biss Dr. Pringle	Tu 3½, F 3½ M. Th. 1½ W. S. 1½	...
SURGEONS	Mr. Couper Mr. Rivington Mr. W. Tay (*Oph.*) Mr. M'Carthy Mr. F. Treves Dr. Woakes & Mr. T. M. Hovell (*Aur.*) Mr. Barrett (*Dent.*)	Daily, 2 W. S. 9 S. 9.30 Tu. 9	6 mths. 10 10 10 10	Mr. Norton Mr. Owen Mr. Page *To Out patients:* Mr. Pye Mr. Pepper Mr. Silcock Mr. Norton (*throat dis.*)	M. Th. 1½ Tu. F. 1½ W. S. 1½ M. Th. 1½ W. S. 1½ Tu. F. 1½ M. Th. 9½	6 mths. 5 5	Mr. Hulke Mr. G. Lawson Mr. Morris Mr. S. Bennett & Mr. Hern (*dental*) Mr. Lang (*oph.*) Mr. Hensman (*aural*)	M. Th. 1½ M. Th. 1½ Tu. F. 1½ M. 9½, W. 9 W. 9 F. 9½ Tu. F. 9 Tu. 9	3 mths. 5 5 ...
ASSISTANT-SURGEONS	Mr. Reeves Mr. C. Mansell Moullin Mr. Hurry Fenwick Mr. Eve (*Ophthal.*)	Daily, 1½	...	Mr. Critchett & Mr. Juler (*ophth.*) Mr. Field (*aur.*) Mr. Morris (*skin*) Mr. Hayward (*dental*)	Tu. F. 9½ W. S. 9½ M. Th. 9½ W. S. 1½	...	Mr. Andrew Clark Mr. Pearce Gould Mr. Claude Rogers (*assist. dental.*) Mr. J. B. Sutton [*Pract. Med.*: Dr. Coupland.]	M. Th. 1.15 Tu. F. 1.30 W. 9, F. 9½ W. S. 9 M. W. F. 10	... 6 6
CLINICAL MEDICINE	The Physicians and Asst.-Phys.	Twice week 2	...	Sir E. Sieveking Dr. Broadbent Dr. Cheadle	Twice week	...	The Physicians	F. 3	...
CLINICAL SURGERY	The Surgeons and Asst.-Surg.	Twice week 2	...	Mr. Norton Mr. Owen Mr. Page	Twice week	...	The Surgeons	Tu. 3	...
SUMMER SESSION.	[*Exp. Phys.*: Mr. Page, Tu. S. dur. Jan. Feb. Mar. 10½]	Operations, M. T. W. Th. & F. 2			Operations W. 1½ P.M. ex. at 2 daily		Superintend. of P.-M. exam.: Dr. Fowler	Operations W. S. at 1 P.M. at 2 daily	
MATERIA MEDICA	Dr. James	Tu. Th. F. 3	3 3	Dr. Lees	T. W. F. S. 10	5 5	Dr. Thorowgood	M. W. F. 4	2 2
THERAPEUTICS	...	...	...	...	...	...	Dr. Powell	M. Th. 3	...
MIDWIFERY, &c.	Dr. Herman	M. W. F. 9	4 4	Dr. A. Meadows Dr. M. H. Jones	Tu. W. Th. F. 9	5 5	Dr. A. W. Edis	M. W. F. 9	5 5
BOTANY	Dr. Warner	M. W. F. 12	3 3	Rev. J. M. Crombie	M. W. F. 11	4 4	Dr. Biss	Th. 10	2 2
MEDICAL JURISPRUDENCE	Dr. Sansom	M. Th. 3.30	3 3	Dr. Randall	M. T. Th. 10	4 4	Dr. Finlay	Tu. Th. S. 9	4 4
TOXICOLOGY	Dr. Tidy	W. F. 10	...	...	...	...	...	...	...
PRACTICAL CHEMISTRY	Mr. Page	M. W. 9, 10½, 2½; S. 9, 10½, 12	5 5	Dr. C. R. A. Wright	W. F. S. 9	4 4	Mr. W. Foster [*Psycho. Med.*: Mr. H. Case]	M. W. F. 3	3 3
COMPARATIVE ANATOMY	Mr. C. M. Moullin	Tu. Th. 9	3 3	Mr. Poulton	M. W. 10	2 12	Mr. J. B. Sutton	Tu. Th. 4	2 2
PATHOL. HISTOLOGY	Mr. Eve (W. & S.)	...	...	...	...	...	...	...	...
PATHOLOGY AND MORBID ANATOMY.	Dr. Sutton	Th. 12½, S. 10	3 3	Mr. Silcock Dr. Maguire	...	2 2	Dr. Fowler	Tu. Th. S. 9	4 4
OPERATIVE SURGERY	Mr. Rivington	...	3 3	...	...	...	Mr. A. Clark	...	...
PRACTICAL PHYSIOLOGY	Mr. M'Carthy	...	3 3	Dr. Waller	Daily	...	Messrs. Lowne & Karop	M. W. F. 9	4 4
HISTOLOGY AND THE MICROSCOPE.	Mr. M'Carthy (& in Winter)	Tu. Th. 9.15	3 3	...	Tu. W. F. 10	...	...	...	...
OPHTHALMIC SURGERY	Mr. Waren Tay	Tu. F. 4	2 2	Mr. Critchett	Th. 2½	2 12	Mr. Lang	W. S. 8½, W. 3	2 2
ANÆSTHETICS	Dr. Hewitt (W. & S.)	...	...	...	...	...	...	...	...
AURAL SURGERY	Dr. Woakes	Tu. 4	2 2	Mr. Field	F. 3	2 12	Mr. Hensman	Tu. 9	...
DENTAL SURGERY	Mr. Barrett	Tu. F. 4	2 2	Mr. Hayward (in Winter)	...	2 12	Mr. Storer Bennett (in Winter)	Daily, 9.30	...
DISEASES OF THE SKIN	Dr. Stephen Mackenzie	Th. 9	...	Mr. Morris (in Summer)	Th. 3	2 12	Dr. R. Liveing	F. 4	...
DISEASES OF THE THROAT	Mr. Mark Hovell	W. 4	2 2	...	...	...	Mr. Hensman	Tu. 9	...
PRACT. PHARM. & DISPENS.	Mr. Robertson	...	...	...	...	3 3	Mr. Fardon [*Pub. Health*: Dr. Finlay]	...	3 3
Fee for all the Lectures required by the Colleges and Hall	...	...	...	...	...	65 12	...	...	...
Fee for ditto, and Hospital Medical and Surgical Practice	£105, in three instalments, or £99 10 in one sum.			...	... Or in 1 sum.	112 7 / 106 1	...	...	£100

* Med. Tutor, Dr. Phillips; Surg. do., Mr. Pye; Obst. do., Dr. H. Jones—throughout year thrice weekly.

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TABULAR LIST OF THE CLASSES, LECTURERS, FEES, AND DAYS OF OPERATIONS AT THE LONDON HOSPITALS AND MEDICAL SCHOOLS, FOR THE SESSION 1886-87—(CONTINUED.)

LECTURES, &c.	ST. THOMAS'S HOSPITAL AND SCHOOL.		UNIVERSITY COLLEGE AND HOSPITAL.			WESTMINSTER HOSPITAL.		
	LECTURERS.	DAYS AND HOURS.	LECTURERS.	DAYS AND HOURS.	FEES. One Course.	LECTURERS.	DAYS AND HOURS.	FEES. One Course.
WINTER SESSION.					£ s.			£ s.
ANATOMY AND PHYSIOLOGY ...	Dr. J. Harley Dr. T. C. Charles	T. W. F. 4	*Professor E. A. Schafer	Daily, 10 (ex. S.)	2, 4, 5, & 7 gs.	Dr Heneage Gibbes	M. W. F. 1.30	6 6
PRACTICAL PHYSIOLOGY AND HISTOLOGY	Dr. T. C. Charles (in Summer)	M. Tu. W. F. 2	*Profes-or E. A. Schafer	Daily (ex. F. & S.) 12	...	Dr Heneage Gibbes and in Summer	Th. 1.30 M. W. F. 1.30	7 7 5 5
PHYS. DEMONSTRATIONS	Mr. C. peman.	W. F. 2	Dr. M'William Dr. Halliburton	...	...	...	...	...
ANATOMY, DESCRIPTIVE AND SURGICAL	Mr. Reid Mr. Anderson	M. T. W. Th. F. 9½	Prof. Thane	Daily, 12	11 11	Mr. Black	Tu. W. Th. F. S. 9	6 6
ANATOMICAL DEMONSTRATIONS	Mr. Reid, Mr. Anderson, Dr. Taylor, & Mr. Ballance	Daily, 10 to 4	Mr. J. P. Flemming Mr. J. R. Bradford	...	...	Mr. Hebbert [*Morbid Histology:* Dr Heneage Gibbes, Tu. Th. 11, £5 5s. in Summer]	Daily, 10 to 1	5 5
PATHOLOGICAL ANATOMY... ...	Dr. Payne & Dr. Sharkey	S. 11½ M. W. F. 9*	Mr. V. A. H. Horsley	Tu. & F. 4-6	2 2	...	...	...
CHEMISTRY	Dr. A. J. Bernays	T. Th. F. 10½	Drs. Williamson, Morley, Plimpton	Daily, (ex. S.) 11	7 7	Dr. Dupré	W. Th. F. 3	6 6
MEDICINE	Dr. Bristowe Dr. Ord	M. Th. F. 4	Dr. Ringer Dr. D. W. Buxton	Daily, (ex. M. & S.) 9	9 9	Dr. Sturges Dr. Allcoin	M. W. Th. 3	6 6
SURGERY	Mr. S. Jones Sir W. Mac Cormac	M. Th. F. 9	Prof. Marcus Beck	M. & S. 9, W, 4	7 7	Mr. Cowell Mr. Macnamara Dr. Allchin	Tu. Th. 4 F. 3 ...	6 6 ...
GENERAL PATHOLOGY	...	...	...	...	...	Dr. Ogilvie	...	3 3
NATURAL PHILOSOPHY...	Dr. Stone (*with Physics*)	S. 12	Pr. Foster, Dr. Fison	W. F. 12	6 6			
HOSPITAL PRACTICE:								
PHYSICIANS	Dr. Bristowe Dr. Stone Dr. Ord Dr. Harley Dr. Gervis (*obst.*)	Daily, Winter & Summer, 2	Drs. Walshe, Reynolds, Sir W. Jenner, Drs. Fox, Ringer, Bastian, Roberts, Gowers, Poore, Barlow, Hewitt (*ac.*) Williams (*obst.*), & Crocker (*Skin*)	Daily, 1 & 2 Each twice weekly Twice weekly	12 mths. 15 15	Dr. Sturges Dr. Allchin Dr. Donkin Dr. Potter (*obst.*) Dr. Colcott Fox (*Skin*)	M. Th. 1½ Tu. F. 1½ W. S. 1½ Tu. F. 3 W. 1½	12 mths. 15 15
ASSISTANT-PHYSICIANS	Drs. Payne, Sharkey, Gulliver, and Cory (*obst.*)	Daily, 1½	...	...	...	Dr. Hall Dr. Bennett Dr. Murrell	M. Th. 1½ Tu. F. 1½ W. S. 1½	...
	Semon (*Throat*)	T. F. 1½	Messrs. Quain, Erichsen, Sir H. Thompson			Dr. Grigg (*Obst.*) Dr. Hall (*Throat*)	Tu. F. 9 W. 9	
SURGEONS	Mr. S. Jones Mr. Croft Sir Wm. Mac Cormac Mr. MacKellar Mr. Nettleship (*ophthal.*)	Daily, 2	Profs. Marshall, B. Hill, & C. Heath Prof. Streatfeild & Mr. Jones (*ophth.*) Mr. Hutchinson & Mr. Ibbetson (*dent.*) Prof. M. Beck Mr. A. E. Barker Mr. R. J. Godlee & Prof. J. Tweedy	Daily, 1 & 2 Thrice weekly	...	Mr. Cowell Mr. Davy Mr. Macnamara Dr. Walker Mr. M. Smale (*dent.*) [*Ophth. Pract.:* Mr. Cowell] [*Orthopædic:* Mr. Davy]	M. Th. 1½ Tu. F. 1½ W. S. 1½ W. 9½ S. 9½ M. Th. 3 F. 2½	12 mths. 15 15
ASSISTANT-SURGEONS	Messrs. Clutton, Anderson, & Pitts	Daily, 1½	Mr. Victor Horsley	...	...	Messrs. Cooke & Bond	M. Th. 1½ Tu. F. 1½ T. F. 9	...
CLINICAL MEDICINE	The Physicians	After visits	The Physicians	Fortntly. & twice a week	...	Dr. Sturges Dr. Allchin Dr. Donkin	Weekly	...
CLINICAL SURGERY...	The Surgeons in rotation	After visits	By the Surgeons	Once a week and Fortntly.	...	Mr. Cowell Mr. Davy Mr. Macnamara		...
CLINICAL MIDWIFERY, &c.... ...	Mr. Croft Dr. Gervis [*Vac.:* Dr. Cory, W. 11½.]	M. 9,* T. 9 Tu. 4 Operations, W. S. 1½ *oph.* T. 4, F. 2	Dr. G. Hewitt Dr. Williams	Fortntly. Fortntly. Operations, W. at 2	...	Dr. Potter [*Morb. Anat.:* Dr. Hebb] [*Minor Surg. & Bandaging* in Summer]	Altern. F. 3 Post-mortem exam. 2 Operations, Tu. W. at 2	...
SUMMER SESSION.								
MATERIA MEDICA, &c.	Dr. Stone	M. W. F. 12 noon	Dr. Roberts	M 9, Tu W Th F 10	6 6	Dr. Murrell	M. W. F. 9	3 3
MIDWIFERY, &c....	Dr. Gervis	M. Tu. Th. F. 4	Dr. Hewitt	Daily, (ex. M. Th.) 9	6 6	Dr. Potter	Tu. W. Th. F. 4	4 4
BOTANY	Mr. A. W. Bennett	Tu. W. S. 10	Prof. Oliver	Daily, (ex. S.) 8	3 13	Mr. Wesley Benison	Tu. W. Th. 9 Th. 10	4 4
MEDICAL JURISPRUDENCE... ...	Mr. Clutton, Drs. Bernays & Cory	Tu. Th. S. 9	Dr. G. V. Poore	Tu. W. Th. F. 10	5 5	Dr. Hall Dr. Dupré	Tu. W. F. 3	3 3
PRACTICAL CHEMISTRY	Dr. Bernays	M. Th. F. 10 to 12	Dr. Williamson	Daily, (ex. M. S.) 11	5 5	Dr. Dupré	M. W. F. 10 to 12	4 4
STATE MEDICINE	Dr. E. Seaton	W. 4	Dr. Corfield	...	...	...	...	...
MENTAL DISEASES	Dr. Rayner	F. 12	...	...	...	Dr. Sutherland	...	...
HYGIENE AND PUBLIC HEALTH	...	...	Dr. Corfield	Tu. Th. 4	2 2	Dr. Hall	...	...
CLINICAL MEDICINE	The Physicians	After visits	As in Winter	...	...	As in Winter	...	...
COMPARATIVE ANATOMY	Dr. Gulliver (with Zoology)	M. Th. 9	†Prof. Lankester Dr. von Lendenfeld	T. W. Th. F. 1	6 6	Dr. L. Ogilvie	...	3 3
PATHOLOGY & MORB. ANATOMY	Dr. Sharkey Dr. Hadden	Daily, 2	Dr. Bastian Mr. V. A. H. Horsley	M. S. 10, Th. 4	6 6	Dr. Allchin (in Summer)	M. W. Th. 4	3 3
OPHTHALMIC SURGERY	Mr. Nettleship Mr. Lawford	Tu. F. 10	†Prof. J. Tweedy	M. W. 4	2 2	Mr. Cowell	M. 2½	...
DENTAL SURGERY	Mr. Truman	...	Mr. S. J. Hutchinson	...	...	Dr. Walker	W. 9½	2 2
PRACTICAL SURGERY	Messrs. MacKellar, Clutton, & Pitts	S. 9	†Prof. B. Hill †Mr. R. J. Godlee †Mr. Barker	M. Th. 4	6 6	Mr. Davy	F. 12½	4 4
OPERATIVE SURGERY	Mr. MacKellar, Mr. Clutton	...	Mr. R. J. Godlee	...	5 5	Mr. Davy	...	3 3
PRACTICAL PHARMACY...	Mr. Plowman	...	Mr. Gerrard	...	5 5	Mr. Cobden	...	3 3
FEES for Lectures and Hospital Practice	...	125 Guineas	...	...	131 5	In 1 sum, £100. In 2, £105. In 5, £115. No extras ex. dissections, & exp. physics.		

* In Summer. † In Winter.

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TABULAR LIST OF THE CLASSES, LECTURERS, ETC., AND FEES, AT THE PROVINCIAL SCHOOLS OF MEDICINE, FOR THE SESSION 1886-87.

LECTURES, &c.	BIRMINGHAM QUEEN'S COLLEGE.			BRISTOL MEDICAL SCHOOL.			CAMBRIDGE UNIVERSITY.			LEEDS SCHOOL OF MEDICINE.		
	LECTURERS.	DAYS AND HOURS.	FEES. One Course.	LECTURERS.	DAYS AND HOURS.	FEES. One Course.	LECTURERS.	DAYS AND HOURS.	FEES.	LECTURERS.	DAYS AND HOURS.	FEES.
WINTER SESSION.			£ s.			£ s.			£ s.			£ s.
ANATOMY AND PHYSIOLOGY	Mr. J. Berry Haycraft*	M. T. W. Th. F. 11	6 6	Dr. Smith	M. W. F. 10	5 5	Prof. Macalister Prof. Foster	Tu. Th. S. 1 and 9		Prof. Birch and Dr. Barrs	M. T. W. Th F. 9¼	5 5
ANATOMY, DESCRIPTIVE & SURGICAL	Dr. B. C. A. Windle	M. Tu. Th. F. 12	6 6	Mr. Cross	F. 11 Tu. Th. S. 9	5 5	Prof. Macalister Dr. Hill	M. W. F. 12	...	Prof. McGill and Mr. Robinson	Daily	5 5
ANATOMICAL DEMONSTRATIONS	Messrs. Jordan Lloyd, Haslam, & Foxwell	Daily	5 5	Mr. Harsant	...	...	Dr. Hill	Daily, 9-5	...	Mr. Travis	...	...
PRACTICAL PHYSIOLOGY	Mr. Haycraft	...	...	...	...	...	Prof. Foster (and in Summer)		...	Prof. Birch and Dr. Barrs	...	6 6
CHEMISTRY	Dr. W. A. Tilden*	Daily (ex. S.) 9½	5 5	Mr. Coomber	M. W. F. 9	5 5	Prof. Liveing	T. Th. S. 12	...	Prof. Smithells	M. Tu. Th. F. 4	5 5
MEDICINE THERAPEUTICS	Drs. Foster & Sawyer	Tu. W. F. 3	6 6	Drs Spencer & Skerritt	M. W. F. 9	5 5	Prs. Paget, Macalister Prof. Latham	M. F. 12 M. W. alt. F. 10	... ...	Prof. Eddison and Dr. Churton	M. W. F. 1	6 6
SURGERY	Mr. Pemberton Mr. F. Jordan	Tu. W. F. 4	6 6	Mr. Dobson	Tu. Th. S. 9 A.M.	5 5	Prof. Humphry	T. Th. S. 12	...	Prof. Jessop and Mr. Atkinson	M. W. F. 4	6 6
HYGIENE	...	...	...	Mr. Davies	M. F. 10 A.M.	2 2	Dr. Anningson	W. 1	...	Mr. Hartley	...	...
HOSPITAL PRACTICE:												
PHYSICIANS	GENERAL HOSPITAL AND QUEEN'S HOSPITAL.	...	31 10	BRISTOL ROY. INFIRMARY, AND BRISTOL GENERAL HOSPITAL.	Daily, 11½ to 3	...	ADDENBROOKE'S HOSPITAL. Prof. Latham Dr. Bradbury Prof. Macalister	Daily	Perpet. 12 12	LEEDS GENERAL INFIRMARY.	...	...
SURGEONS	(*See Additional Information on Schools.*)	...	...	(*See Additional Information on Schools.*)	...	...	Prof. Humphry Mr. Carver Mr. Wallis Mr. Wherry	Daily		Dr. Eddison Dr. Churton Messrs. Jessop, Atkinson, McGill, & Robson	...	...
SUMMER SESSION.												
MATERIA MEDICA, &c.	Dr. Rickards Dr. C. W. Suckling	Tu. W. Th. 12	4 4	Dr. Shaw	Tu. Th. S. 9 A.M.	3 3	Prof. Latham (and *Pharmacy*)	M. W. F. 9		Dr. J. B. Hellier	T. F. 9	4 4
MIDWIFERY, &c.	Mr. Clay and Dr. Bassett	Tu. W. Th. F. 1	5 5	Dr. Swayne Dr. Lawrence	Daily (ex. S.) 8 A.M.	4 4	Dr. Inge	M. T. Th. S.		Mr. Wright [*Dis. Wom.*: Dr. J. Braithwaite]	M. W. F. 11½	5 5
PRACTICAL SURGERY OPERATIVE SURGERY	Mr. Bartleet Mr. B. May	...	...	Mr. Prichard Mr. Keall	Tu. Th. S. 9 Tu. W. F. 10 A.M.	3 3 3 3	Mr. Wherry	Daily		Mr. Robson	...	...
BOTANY	Mr. W. Hillhouse*	M. W. F. 3	4 4	Mr. Leipner	Tu. Th. S. 8 A.M.	3 3	Mr. Vines	M. W. F. 1		Prof. Miall	M. W. F. 2	4 4
MEDICAL JURISPRUDENCE	Mr. Wilders Dr. A. B. Hill	M. T. 1 F. 12	4 4	Dr. Eager Dr. Harrison	M. Th. S. 10 A.M.	3 3	Dr. Anningson	T. Th. S.		Mr. Scattergood	M. Tu. Th. F. 12½	5 5
MENTAL DISEASES	Mr. Whitcombe	...	...	...	...	...	Dr. Rogers	...		Mr. Lewis	W. 3	...
PRACTICAL CHEMISTRY	Dr. W. A. Tilden*	T. Th. 2-4	4 4	Mr. Coomber	M. W. F.	3 3	Prof. Liveing	Daily		Prof. Smithells	Tu. Th. 10	4 4
PRACTICAL PHYSIOLOGY & HISTOL.	Mr. J. B. Haycraft*	M. W. F.	4 4	Mr. G. F. Atchley	9 A.M.	...	...	...		...	...	...
COMPARATIVE ANATOMY	Mr. Bridge	...	...	Prof. Morgan	Tu. W. F. 10 A.M.	4 4	† Prof. Newton (in Winter)	M. Tu. F. 1		Prof. Miall	...	...
PATHOLOGY AND MORBID ANATOMY	Mr. Barling	...	...	Dr. Spencer Dr. Skerritt	M. W. F. 9 A.M.	3 3	Prof. Roy	M. Tu. Th. F. 9		Dr. Jacob	...	3
PRACTICAL HISTOLOGY	Mr. Haycraft	...	...	Mr. Atchley (with Physiology)	M. W. F. 8 A.M.	3 3	Dr. Hill	S. 12		Prof. Birch and Dr. Barrs	M. W. F. 11½	6 6
DENTAL SURGERY	Mr. Sims	...	3 3	...	...	...	...	...		...	...	...
DENTAL ANATOMY & PHYSIOLOGY	Mr. Humphreys	...	...	...	...	...	...	...		...	...	...
DENTAL METALLURGY	Dr. W. A. Tilden	...	...	...	...	...	...	...		...	...	...
DENTAL MECHANICS	Mr. Elliott	...	...	...	...	...	...	...		...	...	...
CLINICAL MEDICINE	The Physicians of the two Hospitals.	...	...	...	Weekly	...	The Physicians	Daily		Drs. Eddison and Churton	Tu. 1	...
CLINICAL SURGERY	The Surgeons of the two Hospitals.	...	...	...	Ditto	...	The Surgeons	Daily		Surgeons of the Infirmary	...	...
FEES for all the Lectures required by the College and Hall	[*Hon. Currt. Mus. & Hon. Sec.*: Dr. Windle]	...	£63 0	...	...	£63 0	...	...		...	...	£63 0
Composition Fee for Hospital Medical and Surgical Practice	...	...	£42 0	...	...	£36 15	...	...		...	...	£42 0

The fee for each course of lectures or demonstrations is one or two guineas per term.

* Held in Mason Science College.

† With Zoology.

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TABULAR LIST OF THE CLASSES, LECTURERS, ETC., AND FEES, AT THE PROVINCIAL SCHOOLS OF MEDICINE, FOR THE SESSION 1886-87.

LECTURES, &c.	UNIVERSITY OF DURHAM COLLEGE OF MEDICINE, NEWCASTLE-ON-TYNE.			UNIVERSITY COLLEGE, LIVERPOOL.			OWENS COLLEGE (VICTORIA UNIV.) SCHOOL OF MEDICINE.			SHEFFIELD SCHOOL OF MEDICINE.		
	LECTURERS.	DAYS AND HOURS.	FEES. One Course.	LECTURERS.	DAYS AND HOURS.	FEES.	LECTURERS.	DAYS AND HOURS.	FEES. One Course.	LECTURERS.	DAYS AND HOURS.	FEES. One Course.
WINTER SESSION.			£ s.			£ s.			£ s.			£ s.
PHYSIOLOGY	Mr. Williamson Dr. Oliver	M. W. F. 10¼	5 5	Dr. Caton	Tu. Th. F. S. 9½	5 5	Prof. Wm. Stirling‡ (*with Histology*)	M. Tu. W. Th. F. 11½	...	Dr. Sinclair White Dr. Porter	W. 12¼ F. 4	3 3
PRACTICAL PHYSIOLOGY	Dr. Oliver (*in Summer*)	Tu. W. Th. 2½	5 5	Mr. Larkin (Demonstrator)	M. W. 2, F. 9½	...	Prof. Wm. Stirling Mr. W. H. Waters	Daily, 10 to 5	...	Mr. R. J. Pye Smith	...	3 3
ANATOMY, DESCRIPTIVE & SURGICAL	Dr. Mears	Daily, 9½ Tu. Th. 12	5 5	Mr. Banks	Daily, 11	5 5	Dr. Haslam Prof. A. H. Young	Daily (ex.S.) 1	5 5	Mr. E. Skinner Mr. Chas. Atkin	M. W. F. 6 Tu. Th. 5	4 4
ANATOMICAL DEMONSTRATIONS	Dr. Mears	Daily, from 10 to 5	5 5	Dr. Ross	...	3 3	Dr. A. M. Paterson Mr. Robinson	...	...	Messrs. Atkin, Kilham, & Dr. S. Roberts	Daily	2 2
CHEMISTRY	Prof. Bedson	M. W. F. 9½	5 5	Dr. Brown	M. Tu. Th. F. 3	5 5	Vacant Prof. Schorlemmer	Daily, 9½	3 10	At Firth College	M. W. F. 11½	4 4
MEDICINE	Prof. Philipson	M. W. F. 5	5 5	Dr. Glynn	Tu. Th. S. 9½	5 5	Prof. Morgan Prof. Sir W. Roberts	M. Tu. Th. 3 Tu. F. 9½	5 5	Drs. Bartolomé, Thomas, & Dyson	M. W. F. 5	4 4
SURGERY	Dr. Heath Dr. Arnison	M. W. F. 6	5 5	Mr. Parker	M. W. Th. 3	5 5	Prof. Lund Mr. F. Southam	M. W. F. 3	5 5	Mr. A. Jackson	M. W. F. 8 A.M.	4 4
PRACTICAL SURGERY	...	...	...	...	M. Th. 4	4 4	Mr. Jones (*with Operat. Surg.*)	Tu. 12	4 4	Vacant	...	...
PATHOLOGY	Dr. Drummond (in Summer)	M. Th. Tu. F. 4½	...	Dr. Davidson	Tu. F. 4	3 3	Prof. Dreschfeld Mr Young, *Surg. Path.*	M. W. Th. 2 Tu. 2	4 4	Mr. Coombe, Mr. fl. Lockwood	...	...
EXPERIMENTAL PHYSICS	Prof. Herschel	Tu. Th. 10	...	Dr. Lodge	4 times wkly.	4 4	...	...	...	...	...	...
PUBLIC HEALTH	Mr. Armstrong	T. 3	5 5	Dr. Hope	...	1 1	Dr. Ransome (*in Summer*)	Tu. F. 2	...	...	...	...
HOSPITAL PRACTICE:	NEWCASTLE INFIRMARY.			LIVERPOOL ROYAL INF.			ROYAL INFIRMARY.			SHEFFIELD GEN. INFIRMARY.		
PHYSICIANS	Drs. Philipson, Drummond, Oliver & Limont	Each twice weekly, 11	6 mnths 8 8 12 mnths	Dr. Waters Dr. Glynn Dr. Davidson	12 to 2½	6 mon. 6 6 12 mon. 7 7	The Physicians	Daily, 8½ to 12	Composition fee, full period, £42	Dr. Bartolomé Dr. Law Dr. Dyson	T. Th. S. 11 M. W. S. 11	Perpet. £15 15; £21 12 mths' prac. £10 10 6 months, £8 8s.
SURGEONS	Dr. Arnison Dr. Armstrong Dr. Hume Mr. Page	Each twice weekly, 10	£12 12 Comp. £26 5	Mr. Bickersteth Mr. Harrison Mr. Banks	12 to 2½	6 mon. 7 7 12 mon. 10 0	The Surgeons	...		Messrs. Favell, A. Jackson, & Shaw	M. W. Th. 8. 11½	
ASSISTANT-SURGEONS	Mr. T. A. Dodd Mr. Williamson	Once weekly, 11	...	Mr. Parker [*Dental Anat. & Phys.*: Mr. Paul, £3 3s.—*Dental Metallurgy*: Mr. Royston, £3 3s.]	...		...	...		PUB. HOSP. & DISP. *Phys.*: Drs. Thomas, Porter, & S. Roberts *Surgs.*: Dr. Keeling Mr. Thorpe, & Mr. Pye-Smith		
SUMMER SESSION.							[*Mental Diseases*: Mr. Mould]	Tu. Th. 4		[*Medical Tutor*: Mr. Lee]		
MATERIA MEDICA	Mr. McBean	M. W. 4, F. 5	5 5	Dr. Carter	Tu. Th. F. S. 9 A.M.	4 4	Prof. Leech	M. T. W. Th. 1	4 4	Dr. Young	M. W. F. 8 A.M.	3 3
MIDWIFERY, &c.	Dr. Nesham Dr. Gibson*	Daily, 9 A.M.	5 5	Dr. Wallace†	M. W. F. S. 9½	5 5	Dr. Cullingworth	M. T. Th. F. 1	4 4	Dr. Keeling, Messrs. R. Favell & Laver	M. W. F. 8 P.M.	3 3
BOTANY	Dr. Murphy	Tu. Th. F. 4	5 5	Dr Gee (*child. dis.*)	M. W. F. 11	2 2	Dr. Ashby (*Dis. Chil.*)	W. F. 3	2 2	Mr. Birks	Tu. Th. 8	3 3
MEDICAL JURISPRUDENCE	Mr. Page	Tu. Th. F. 3	5 5	Dr. Shearer	T. W. Th. F. 3	4 4	Prof. Williamson	Daily (ex.S.) 2½	2 12 6	Mr. J. W. Harrison	Tu. Th. 5	3 3
				Mr. Paul	M. W. F. 3	4 4	Dr. Cullingworth	M. W. Th. 2	4 4			
PRACTICAL CHEMISTRY	Prof. Bedson	M. W. F. 9½ to 12	5 5	Dr. Brown	M. T. Th. F. 10	4 4	Vacant	M. W. 10½	4 4	At Firth College	M. W. F. 11	3 3
COMPARATIVE ANATOMY	Prof. Brady	T. F. 4½	5 5	Dr. Herdman	4 times wkly.	3 3	Dr. A. M. Marshall† (*with Embryology*)	M. W. F. 10½	4 14 6	...	...	...
PATHOLOGY & MORBID ANATOMY	Dr. Drummond	M. Th. Tu. F. 4½	5 5	Dr. Barron (*Path. Histol.*)	Twice wkly.	1 1	Prof. Dreschfeld	...	...	Mr. Coombe Mr. Lockwood	...	3 3
OPHTHALMIC SURGERY	Mr. Williamson	M. 12	...	Mr. Brownet	W. 4	1 1	Dr. Little	W. F. 4	3 3	Mr. Snell	W. 12¼	...
DENTAL SURGERY & MECHANICS	Mr. Fothergill	Tu. F. 4	...	Mr. Phillips	...	3 3	Mr. L. Matheson	...	...	...	...	...
				Mr. Councel	...	3 3						
OPERATIVE SURGERY	Dr. Armstrong	7 A.M. & 3½ P.M.	5 5	Mr. Parker	Thrice wkly.	4 4	Mr. Jones	M. 4	4 4	...	...	3 3
CLINICAL MEDICINE	Phys. and Surg. of Infirmary	...	...	Phys. and Surg. of Roy. Infir.	...	...	Physicians and Surgeons of the Royal Infirmary	...	...	Phys. & Surg. of Gen. Infirm. & Pub. Hosp. & Dispensary	Tu. 6 P.M. Th. 6 P.M.	...
CLINICAL SURGERY	...	...	...	...	...	...	...	...	...			...
FEE for all Lectures required by the College and Hall	...	...	£63 0	...	...	£63 0	...	...	£63	...	...	£45
Ditto for Hospital Medical & Surgical Practice	...	...	£26 5	...	...	£42 0	...	...	£42	...	...	£18 18s.

* Diseases of Women and Children.

† In Winter.

‡ Physiol. Laborat., Prof. Wm. Stirling, daily, 3½ to 5.

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TABULAR LIST OF THE CLASSES, LECTURERS ETC., AND FEES, AT THE MEDICAL SCHOOLS OF SCOTLAND, FOR THE SESSION 1886-87.

LECTURES, &c.	ABERDEEN UNIV.		EDINBURGH UNIV.		SCHOOL OF MEDICINE, EDINBURGH.		GLASGOW UNIV.		GLAS. ROY. INFIRM. SCHOOL OF MEDICINE.		GLASGOW, ANDERSON'S COLLEGE.		GLASGOW WESTERN MEDICAL SCHOOL.	
	LECTURERS.	FEES. One Course.	LECTURERS.	FEES. —	LECTURERS.	FEES. First Course.	PROFESSORS.	FEES. One Course.	LECTURERS.	FEES. One Course.	LECTURERS.	FEES. One Course.	LECTURERS.	FEES. One Course.
WINTER SESSION.		£ s.		£ s.		£ s.		£ s.		£ s.		£ s.		£ s. d.
ANATOMY (Demonstns., &c.)	Dr. Struthers, 11, 9	5 5	Sir William Turner	4 4	Messrs. Symington* & M. Brown, 9 to 5	7 9	Dr. J. Cleland, 11, 2	6 6	Mr. Clark, 4	4 4	Dr. A. M. Buchanan, jun. 4, sen. 12½	4 4	Mr. J. T. Carter, 11	4 4 0
CHEMISTRY (Practical, &c.)	Mr. Brazier, 3	3 3	Dr. Crum Brown, 10 (Adv. Class in Sum.)	4 4	Dr. S. Macadam, Messrs. King, Macadam, & Drinkwater, 10	3 5	Mr. J. Ferguson, 10	3 3	Dr. Milne, 10 [*Dis. of Throat:* Dr. Newman, 3, in Summer]	2 2	Mr. Dittmar, 10½	2 2	...	...
PHYSIOLOGY (Inst. of Med.)	Dr. MacWilliam, 2	3 3	Dr. Rutherford, 11	4 4	Dr. James & Mr. J. Hunter, 11	3 5	Dr. McKendrick, 12	3 3	Dr. Barlow, 3	2 2	Dr. Christie, 5	2 2	...	...
GENERAL PATHOLOGY, &c.	Dr. Hamilton, 9	3 3	Dr. Greenfield, 3	4 4	Dr. Alex. Bruce, 9	3 5	3 o'clock	3 3	Dr. Newman, 10†	3 3	(In Infirmary)	...	...	...
MEDICINE	Dr. Smith-Shand, 3	3 3	Dr. Grainger Stewart, 9	4 4	Drs. Wyllie, Affleck, Bramwell, & Brown	3 5	Dr. Gairdner, 11	3 3	Dr. Anderson, 12	2 2	Dr. Gemmell, 5	2 2	Dr. McVail, 11	2 2 0
SURGERY	Dr. Alex. Ogston 10	3 3	Dr. Chiene, 10	4 4	Mr. Miller, Dr. MacGillivray, Mr. Cathcart, & Mr. F. M. Caird, 10	3 5	Dr. Macleod, 1	3 3	Dr. Macewen, 11 [*Public Health:* Dr. Glaister, in Summer]	2 2	Dr. Dunlop, 11	2 2	Mr. Knox, 12	2 2 0
MATERIA MEDICA, &c. ...	Dr. Davidson, 4	3 3	Dr. T. R. Fraser, 2	4 4	Drs. Crai. & Gibson, 2	3 5	Dr. Charteris, 12	3 3	Dr. Dougall, 1	2 2	Dr. Morton, 4	2 2	...	...
MIDWIFERY, &c.	Dr. Stephenson, 4	3 3	Dr. Simpson, 10 (Dis. Wom. & Child.)	4 4	Drs. Bell, Young, & Milne Murray, 11	3 5	Dr. Leishman, 2	3 3	Dr. Stirton, 3	2 2	Dr. A. Wallace, 1 (In Summer)	2 2	Dr. Reid, 12	2 2 0
MED. JURISPRUDENCE, &c.	Dr. Hay, 9 (In Summer)	3 3	Sir D. Maclagan, 11 (in Summer only)	4 4	Dr. Littlejohn, 2	3 5	Dr. Simpson,† 11	3 3	Dr. Glaister, 11 (in Summer)	2 2	Dr. A. Lindsay, 3 (In Summer)	2 2	...	...
NATURAL HISTORY	Dr. Nicholson, 2	3 3	Dr. Ewart, 2	4 4	Mr. J. A. Thomson	...	Dr. Young, 12	3 3	...	...	...	...	...	...
NATURAL PHILOSOPHY ...	...	...	Mr. Tait, 11	3 3	...	...	Sir Wm. Thomson	4 4	...	...	Prof. Blyth	...	...	...
HOSPITAL PRACTICE:	Aberdeen R. Inf.		Edin. Royal Inf.		Edin. Royal Inf.		Glasgow Roy. Inf and West Inf., 9		...	...	Glasgow Roy. Inf.		...	...
Physicians	Drs. Smith-Shand, Beveridge, and A. Fraser Daily	One year, £3 10s. Perpetual, £6.	...	Perpetual ticket, £12	Drs. Muirhead, Brakenridge, Wyllie, Affleck, & Halliday Croom, 12	1 year, £5 5s.	The Physicians and Surgeons of the Infirmaries (and in Summer)	1st year, £10 10s.; 2nd year & perpetual, £10 10s.	Dr. Robertson Dr. Perry Dr. Wood Smith Dr. W. Anderson	Perpetual, including Clin. Lectures, £21	Drs. J. W. Anderson Perry, Robertson, & A. Wood Smith, 9 *Out-patients:* Dr. Dougall	1st year, £10 10s.; 2nd, £10 10s.; afterwards free; 6 months, £6 6s.; 3 months, £4 4s.	The Physicians & Surgeons in the Western Infirmary.	
Surgeons	Drs. Ogston, Ogilvie, Will, & Garden. Williamson (*dental*) Daily		...		Mr. Duncan, 12		9 o'clock		Dr. Dunlop Dr. Macewen Mr. Clark Dr. Knox Dr. Fleming		Drs. Knox, Dunlop, Macewen, Clark, Lothian, & Fleming, 9 *Out-patients:* Drs. Barlow and Adams		...	...
Assistant-Surgeons ...	...	...	...	...	...	...	...		...	...	...	...	...	...
CLINICAL MEDICINE	Drs. Smith-Shand, Beveridge, and A. Fraser	3 3	Drs. G. Stewart, Fraser, & Greenfield, & Dr. Simpson (Dis. of Women), Tu. F. 12 to 2	4 4	Drs. Muirhead, Brakenridge, Wyllie, Affleck, & Halliday Croom Tu. F. 12 †	3 5	Drs. McCall Anderson & Gairdner, 9 (and in Summer)	...	The Physicians	...	The Physicians, 9	...	...	...
CLINICAL SURGERY	Drs. Ogston, Ogilvie, Will, and Garden	3 3	Dr. Annandale, M. Th. 12	4 4	Mr. Duncan, M. Th. 12 †	3 5	Drs. Buchanan & Macleod, 9 (and in Summer)	...	*Dent. Surg.:* Dr. Woodburn, 3	5 0	The Surgeons	...	The Surgeons, 9	...	...	...
SUMMER SESSION.														
PRAC. ANAT. & DEMONS. ...	Dr. Struthers, 9 to 4	2 2	Mr. Turner, 1, 4	3 3	Messrs. Symington & M. Brown, 9 to 4	2 2	Dr. Cleland and Demonstrators, 11	...	Mr. Clark, 12	1 11 6	Dr. Buchanan, 12½	1 11 6	Mr. J. T. Carter, 2	1 11 6
BOTANY	Dr. Trail, 8	3 3	Dr. Dickson, 8	4 4	Mr. A. N. McAlpine	...	Mr. Bower, 8	3 3	...	...	Mr. Wilson, 3	1 1	...	...
HISTOLOGY	Dr. Struthers and Dr. MacWilliam	...	...	2 2	Dr. James & Mr. James Hunter	...	Dr. McKendrick, 12	...	Dr. Barlow, 1	...	Dr. Christie, 1	2 2	...	...
COMPARATIVE ANATOMY...	. .	...	...	...	Dr. A. Wilson	...	Dr. Young, 9	3 3	...	...	...	...	...	...
PRACTICAL CHEMISTRY ...	Mr. Brazier, 10	3 3	Dr. Crum Brown, 10, 11	3 3	(As in Winter)	3 3	Mr. J. Ferguson, 10	...	Dr. Milne, 10½	2 2	Mr. Dittmar, 2½	2 2	...	...
DISEASES OF THE EAR ...	...	...	...	...	Dr. Duncanson & A. P. McBride	3 3	[*Pract. Mat. Med.:* Dr. Charteris, 12]	3 3	Dr. Macfie, 4	1 1	Dr. Barr, 3	Free	Mr. J. Walker Downie, S. 10	1 1 0
DISEASES OF THE EYE ...	Dr. A. D. Davidson	1 1	Dr. A. Robertson, 9	3 3	Robertson & Berry	...	Dr. T. Reid, 2	1 1	Mr. Clark, Tu. F. 4	...	Dr. Wolfe, 12	Free	...	...
DISEASES OF CHILDREN ...	...	...	Drs. Andrew & Carmichael	1 1	Underhill, Playfair	...	...	...	...	...	(With Midwifery)	...	...	...
NATURAL HISTORY	Dr. Nicholson, 2	3 3	Dr. Ewart, 2	4 4	Wilson & Thomson	3 5	...	...	...	...	...	...	...	...
MED. PSYCHOL. & INSANITY	Dr. Reid	1 1	Dr. Clouston,* M W F	3 3	Dr. J. Duke, 2	2 2	Dr. Yellowlees	2 2	Dr. Robertson, 12	1 1	(With Jurisprud.)	...	...	...
GYNÆCOLOGY	Dr. Stephenson, 11	2 2	Dr. Simpson, 11	4 4	...	...	Dr. Leishman	2 2	Dr. Stirton	...	(With Midwifery)	...	Dr. Reid, 12	2 2 0
MIDWIFERY, &c.	(In Winter)	...	[*Pr. M. Anat. & Path.* Dr. Greenfield, 11]	4 4	Drs. Croom, Macdonald, Bell, Young	3 5	...	...	Dr. Stirton, 3	2 2	Dr. A. Wallace, 1	2 2	...	...
OPERATIVE SURGERY... ...	Dr. Alex. Ogston, 10	2 2	Dr. Chiene, 8	3 3	... ‡	...	Dr. Macleod, 1	2 2	Dr. Macewen, 12	2 2	*Ph. H.:* Dr. Christie, 4 Dr. Dunlop, 11	Free 2 2	Mr. Knox, 12	2 2 0

* With Prac. Instruction at ap Agrigum (Mon. Wed. Fri.), £3 3s. † In Summer. ‡ Mr. A. G. Miller, Dr. MacGillivray, Mr. C. W. Cathcart, and Mr. F. M. Caird.

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TABULAR LIST OF THE CLASSES, LECTURERS ETC., AND FEES, AT THE MEDICAL SCHOOLS OF IRELAND, FOR THE SESSION 1886-87.

LECTURES, &c.	DUBLIN UNIVERSITY.	DUBLIN R. C. OF SURGEONS.		LEDWICH SCHOOL OF SURG. & MED.	DUBLIN, CARMICHAEL COLL.		DUBLIN, CATHOLIC UNIVERSITY.			BELFAST, QUEEN'S COLLEGE.			CORK, QUEEN'S COLLEGE.			GALWAY, QUEEN'S COLL.	
	LECTURERS.	LECTURERS. DAYS AND HOURS.	FEES.	LECTURERS.	LECTURERS. DAYS AND HOURS	FEES.	LECTURERS.	DAYS & HOURS.	FEES.	LECTURERS.	DAYS & HOURS.	FEES. First Course.	LECTURERS.	DAYS & HOURS.	FEES. First Course.	LECTURERS. DAYS AND HOURS.	FEES. First Course.
												£ s.			£ s.		£ s.
ANATOMY AND PHYSIOLOGY	Dr. Cunningham (*chirurgery*)	Dr. Mapother M. W. F. S. 3		Mr. T. Mason Mr. M. A. Ward	Dr. J. A. Scott* daily (ex. S.) 2		Dr. Nixon Dr Coppinger	Daily (ex.S.)12		Dr. P. Redfern	Daily (ex. S.) 2	3 0	Dr. J. J. Charles	Daily 1	3 0	Dr. Pye daily (ex.S.)3	3 0
ANATOMY, DESCRIPTIVE & SURGICAL	...	Profs. Stoker & Fraser		Dr. T. P. Mason and Mr. Ledwich	Dr. Heuston, daily, 1		Dr. R. Cryan Dr. Hayden	Daily (ex. S.) 1		Dr. P. Redfern	...	...	Dr. J. J. Charles	Daily (ex.S.)12	...	Dr. Pye daily (ex.S.) 1	...
PRACTICAL ANATOMY AND DISSECTIONS	Dr. Cunningham Dr. Little	...		...	Dr. Heuston, daily Drs. Doyle, McVittie, Bromfield, Lentaigne, Beatty, Gunn, McHugh, Falkiner, & Burgess		Dr. Redmond Dr. M'Cullagh Dr. M'Ardle Dr. Chance Dr. O'Carroll	7 to 7 daily		Dr. Sinclair	Daily (ex. S.) 12	3 0	Dr. Charles and Demonstrators	Daily, 12	3 0	Dr. Pye (and Demonstrators) Daily, 9 to 4	3 0
CHEMISTRY	Dr. Reynolds	Prof. Sir C. Cameron		Mr. E. Lapper	Dr. Tichborne Tu. Th. S. 3		Dr. Campbell	M. W. F., 11, 12		Dr. Letts	Daily (ex. S.) 3	2 0	Dr. Maxwell Simpson	M. W. F.	2 0	Dr. Rowney M. W. F. 12	2 0
PRACTICAL CHEMISTRY ...	Dr. Reynolds			Mr. E. Lapper	Dr. Falkiner† M. W. F. 12		†Dr. Campbell	M. T. W. F., 11, 1		Dr. Letts (*in Summer*)	Daily (ex.S.)12	3 0	Dr. Maxwell Simpson	M. W. F.	3 0	Dr. Rowney Tu. Th. S. 2	3 0
MATERIA MEDICA AND PHARMACY	Dr. W. G. Smith	Mr. Macnamara		Mr. R. D. Purefoy	Dr. Duffey† Tu. Th. S. 1.30		†Dr. Quinlan	M. Tu. W. Th. 1		Dr. J. S. Reid	M.Tu.W. Th. 4	2 0	Dr. C. Y. Pearson	Tu. Th. S. 12	2 0	Dr. Colahan M. W. F. 2	2 0
BOTANY AND ZOOLOGY ...	Dr. Wright Prof. Mackintosh	Dr. Minchin		Mr. Robinson	Dr. Costelloe† M. W. F. 11 [*Practical Histology:*		†Dr. Sigerson	Th. 2 F. S. 1		‡Dr. R. O. Cunningham	*Zoology* M T W F 1 (*Botany*) M. Tu. W Th. F. 11	2 0	Professor Hartop	M. W. 3 S. 12	2 0	Dr. W. King Tu. Th. S. 11	2 0
INSTITUTES OF MEDICINE AND PATHOLOGY	Dr. Purser	Dr. Foot		Mr. T. Mason	Dr. J. A. Scott†] Dr. Beatty (*in Sum.*)		Dr. Lyons	S. 3		...	...	...	...	...	...	Dr. Lynham *Exp. Physics:*	...
NATURAL PHILOSOPHY ...	Prof. Fitzgerald	...		Mr. Lapper			†Rev. G. Molloy	Tu. Th. 1 S. 2		Dr. J. Everett (*in Winter*)	M. T. W. T F 11 & 1	2 0	Mr. J. England	Tu. Th. 2	2 0	Prof. Larmor Tu. Th. 12	2 0
HOSPITAL PRACTICE	Sir P. Dun's or other Dublin Hospital.	City of Dublin Hospital. (Daily, 9)		Various Dublin Hospitals.	House of Industry, Adelaide, Meath Jervis-st., City of Dublin, Cork-street (Fever).		...	...		Belf. Roy., Ulstr., Un., and other Hospitals.	...	...	North and South Infirmaries.	...	...	Galway Infirmary & Town Hosp. Daily	Sess 4 4
CLINICAL LECTURES	...	Three times weekly		...	...		...	...		...	...	...	...	...	...	Drs. Browne, Pye, Colahan & Lynham T. F. 10	...
SURGERY	Dr. E. H. Bennett	Profs. Sir W. Stokes and Hamilton		Mr. Nixon Mr. Stoker	[*Ophthal. Surg.:* Dr. Fitzgerald, W. 1 Mr. Corley Tu. Th. S. 12		Mr. J. P. Hayes	M. W. F. 3		Vacant	M.Tu.W. Th. 1	2 0	Dr. S. O'Sullivan.	Tu. Th. S. 4	2 0	Dr. J. V. Browne M. W. F. 11	2 0
MIDWIFERY, &c.	Dr. Kirkpatrick	Dr. Roe Tu. Th. S. 3		Mr. S. R. Mason	Dr. Jennings Dr. Macan M. W. F. 3		Dr. Byrne	Tu. Th. S. 2		Dr. Dill	M. Tu. W. Th. 3	2 0	Dr. Corby	Tu. Th. S. 4	2 0	Dr. Kinkead M. W. F. 2	2 0
MEDICINE	Dr. Finny	Dr. Foot M. W. F. 11		Dr. Knight Mr. Redmond	Dr. Moore M. W. F. 12		Dr. R. D. Lyons	Tu. Th. S. 3		Dr. Cuming	M. Tu. W. Th. 4	2 0	Dr. D. C. O'Connor	M. W. 12 S. 12	2 0	Dr. Lynham Tu. Th. S. 2	2 0
MEDICAL JURISPRUDENCE	Dr. Travers	Dr. Davy		Mr. R. Travers	Mr. Auchinleck (*in Summer*) M. W. F. 1		†Dr. Macswiney	M. T. W. Th. 12		Dr. Hodges (*in Summer*)	M. Tu. W. Th. 2	2 0	Dr. C. Yelverton Pearson	M. W. S. 3	...	Dr. Rowney Dr. Kinkead Tu. Th. S. 4	2 0
COMPARATIVE ANATOMY...	Prof. Mackintosh	Dr. Mapother [*Hygiene:* Pr f. Sir C. Cameron]		...	...		...	...		...	...	...	...	...	2 0	[*Modern Languages:*	...
PRACTICAL PHARMACY ...	...			...	...		...	...		...	...	...	...	...	...	Dr. Geisler, £2]	...
LOGIC	The College Tutors	[*Ophth. and Aural Surg.:* Prof. Jacob]		...	...		...	...		...	...	...	Professor Stokes	...	1 0	Dr. T. W. Moffett M. W. F. 1	...

For each Course, £3 3s., in all Classes, ex. Descr. Anat. (£5 5s.), Prac. Chem. (£5 5s.), Oph. & Aur. Surg. & Hygiene, which are free.

£3 3s. each Course, except Dissections and Pract. Chem., which are £5 5s. each.

For each Course, £3 3s.; except Dissections, £5 5s.; Practical Chemistry and Practical Surgery, £5 5s.

* Prac. Phys. in Summer, † In Summer, ‡ Zoology in Winter; Botany in Summer.

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METROPOLITAN HOSPITALS AND MEDICAL SCHOOLS.

ST. BARTHOLOMEW'S HOSPITAL AND COLLEGE.—The clinical practice of the hospital comprises a service of 750 beds, of which 676 are in the hospital at Smithfield, and 75 are for convalescent patients at Swanley.

Four house-physicians, ten house-surgeons, and a midwifery assistant are appointed annually, each of them holding office for one year, and provided with rooms by the hospital authorities. The ophthalmic house-surgeon is appointed for six months, and is eligible for re-election for a second term of six months. The senior assistant chloroformist and junior assistant chloroformist are appointed annually, and are provided with rooms. Two qualified assistant electricians are appointed every three months. No fee is paid for any of these appointments, and each receives a salary of £25. The clinical clerks, the obstetric clerks, the clerks to the medical out-patients, the dressers to the surgical out-patients, and the dressers in the special departments are chosen from the diligent students. Forty ward-dresserships are given annually to the students who pass the best examination in the subjects of study of the first year. Other ward dresserships may be obtained by payment of the usual fees.

A college is attached to the hospital, in which students can reside, subject to the college regulations.

Foundation and other Prizes.—Open Scholarships in Science of the value of £130 each, tenable for one year, will be competed for in September. Candidates must not be more than twenty-five years of age for one, and twenty-one for the other, and must not have entered to the medical or surgical practice of any metropolitan medical school. The subjects of examination are Physics, Chemistry, Botany, Physiology (not more than four subjects to be taken), and Zoology.—Preliminary Scientific Exhibition (founded 1873). The subjects of examination are identical with those of the Open Scholarship in Science. This Exhibition, of the value of £50, is tenable for one year. The Examination is confined to students of the hospital of less than six months' standing, and will be held in October. The Jeaffreson Exhibition, of the value of £50, and tenable for two years, is awarded after examination in the subjects of General Education. It is now an Open Exhibition. A Senior Scholarship, £50, in Anatomy, Physiology, and Chemistry. Kirke's Scholarship, and Gold Medal in Clinical Medicine, value forty guineas. Lawrence Scholarship, and Gold Medal, of the value of forty guineas (founded in 1873 by the family of the late Sir William Lawrence). Two Brackenbury Scholarships in Medicine and Surgery, £30 each. Junior Scholarships in the subjects of study of the first year: 1st, £50; 2nd, £30; 3rd, £20.

During the last year a prize for Anatomy has been founded by the late Mr. Henry Skinner, in memory of his brother, and by Miss Shuter, in memory of her brother, formerly assistant surgeon to St. Bartholomew's Hospital.

CHARING-CROSS HOSPITAL AND COLLEGE.—Total fees, £94 10*s*., if paid in a single sum on entry, or £105 if paid in five instalments. General students pay proportionately lower fees, and are admitted without additional fee to the courses of Clinical Medicine and Surgery, to the new classes of systematic practical instruction in Medicine and Surgery, and to the practice of the Royal Westminster Ophthalmic Hospital. They alone are entitled to compete for the Scholarships, Gold Medal, and Pereira Prize.

Preliminary Science Instruction.—Arrangements have been made for students desirous of undergoing a course of instruction in science, such as that required for the Preliminary Scientific (M.B.) Examination of the University of London, to attend at the Normal School of Science, South Kensington.

Two Entrance Scholarships, of the value of £30 and £20 respectively, tenable for one year, are awarded annually in October, after a competitive examination in the following subjects:—*Compulsory*—English, Latin, Mechanics, and Mathematics; *Optional* (only one of which may be selected)—Chemistry, German or French, the subjects being those of the matriculation examination of the University of London. Candidates must give notice of their intention to compete on or before Monday, September 20th, 1886. Two scholarships are open for competition among general students: the Llewellyn Scholarship of £25, for students who have just completed their attendance on lectures; and the Golding Scholarship of £15 for students who have just completed their first year. The Pereira prize of £5 is open to all general students, and is awarded annually for the best clinical reports. The Governors' Gold Medal is given for excellence in clinical work. Silver or Bronze Medals are awarded to the most distinguished students in all classes; and special prizes in the classes of Dental Surgery, Practical Surgery, and Practical Histology.

ST. GEORGE'S HOSPITAL.—Perpetual pupils, by payment of £130 in three instalments, or £125 in one sum, are entitled to admission to the medical and surgical practice; to compete for prizes and exhibitions; to hold the appointment of house-physician and house-surgeon, assistant house-physician, assistant house-surgeon, ophthalmic assistant, registrar's assistant, and to become clinical clerks for two periods of three months each, and dressers for similar periods. Gentlemen are admitted to the hospital practice and lectures required by the College of Physicians and Surgeons and the Society of the Apothecaries on payment of £45 at the commencement of the first year of study, £45 at the commencement of the second year of study, £20 for the third, and £15 for each subsequent year of attendance. These payments entitle the pupil to hold the offices of clinical clerk and dresser for three months each, and to become a candidate for the offices of medical and surgical registrar and demonstrator of anatomy and curator of the museum. These are all salaried offices. The obstetric assistant is resident, with a salary of £100.

Entrance Scholarships.—£125, open to sons of medical men; two of £50 each, open to all students commencing their medical studies; £90, open to students who have passed the Cambridge First M.B.; £75, open to students who have passed the Oxford First M.B. or Cambridge Second M.B.

Prizes.—The William Brown Exhibition of £100 per annum, tenable for two years, open to any perpetual pupil of St. George's who is under twenty-five years of age, and who shall have obtained a diploma or licence entitling him to be registered as a practitioner of medicine or surgery in England, within two years previously to the period fixed for the examination (July). The examination is to test the proficiency of the candidate in Medicine, Midwifery, and Surgery, including Ophthalmic Surgery. The William Brown Exhibition of £40 per annum, tenable for three years, for general fitness for the exercise of the medical profession and for moral conduct, open to perpetual pupils in their fourth year of study. Sir Charles Clarke's Prize (interest of £200 consols) for good conduct; the Brackenbury Prize in Medicine, value nearly £40; the Brackenbury Prize in Surgery, value nearly £40; the Treasurer's Prize, £10 10*s*.; the Thompson Medal; the Bronze Prize for Clinical Surgery; the Acland Prize for Clinical Medicine; the Pollock Prize in Physiology; the Henry Charles Johnson Prize in Anatomy; and General Proficiency Prizes, value £10 10*s*. each, for students of each year.

GUY'S HOSPITAL.—House-physicians and house-surgeons, obstetric residents, dressers, clinical and other clerks, are selected from the students, according to merit, and without payment. The house-physicians, of whom there are three constantly on duty, one as junior and two as seniors, hold office for six months each, the first two months in the former capacity, the other four in the latter. The duty of the junior house-physician is to attend in the medical out-patient room three times a week, in a room adjoining that occupied by the assistant-physician for the day, and prescribe for those patients who are not seen by the assistant-physician. The senior house-physicians are chiefly occupied in the medical wards, and attend to all emergencies that may arise in the absence of the physicians. The house-surgeons, of whom there are also three on duty, hold offices for six months each. During the first two months the house-surgeon has the general superintendence of the Surgical Casualty Department; during the remainder of his time he lives in the hospital, being boarded free of expense. For two months, as second house-surgeon, he has charge of cases in special wards, and assists in the Out-patient Department; and subsequently, as senior house-surgeon, he has, in the absence of the surgeons and assistant-surgeons, the care of the patients in the surgical wards The dressers

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are selected from those gentlemen who have completed their third winter session, and who have been most diligent in the junior appointments. They hold office for six months each. Three are attached to each surgeon. During their week of special duty they reside in the hospital, and board with the house-surgeons. Two obstetric residents reside and are boarded in the hospital.

Scholarships, Prizes, &c. Open scholarships of the value of £131 5*s.* in Arts, Latin, Greek, Mathematics, and modern languages. Open Scholarship of £131 5*s.* in Science. Subjects: Inorganic Chemistry, Zoology, Botany, Physics (these will be competed for on Monday, September 27th), At the end of the summer session: first prize, £50; second prize, £25. Subjects: Anatomy, Physiology, Chemistry, Materia Medica and Botany, or Comparative Anatomy.—For students in their second year: First prize, £25; second prize, £10. Subjects: Anatomy, Physiology. The Sands Cox Scholarship of £15 per annum for three years. Subject: Physiology. The Michael Harris prize of £10 for Anatomy. For students in their third year: First prize, £25; second prize, £10. Subjects: Medical and Surgical Anatomy, Midwifery, and Therapeutics. Fourth year's students: First prize, £25; second prize, £10. Subjects: Medicine, Surgery, Midwifery, and Medical Jurisprudence. For senior students: The Treasurer's Gold Medal in Medicine; the Treasurer's Gold Medal in Surgery; The Gurney Hoare Prize of £25 for Clinical Medicine and Surgery; the Beaney Scholarship of 30 guineas for Pathology; the Mackenzie Bacon Prize of 10 guineas for Ophthalmoscopy; the Mackenzie Bacon Prize of £15 for Nervous Diseases. The Physical Society awards the following prizes: Two of £5 each to the members who send in the best essays on selected subjects; prizes of £10 and £5 for the best papers read before the Society; and one of £5 to the member who has most distinguished himself in the debates of the session.

KING'S COLLEGE.—The physicians' assistants, the physician-accoucheur's assistant, the ophthalmic clinical assistant, the clinical clerks, and the house-surgeons and dressers, are selected by examination from among those matriculated students of the college who are pupils of the hospital. Rooms are provided within the walls of the college for the residence of a limited number of matriculated students. Rooms and commons are provided at the hospital for the resident officers free of charge.

Scholarships.—Warneford Scholarships: Two of £25 per annum for three years for Literature. Science: One of £50 and one of £25 each for two years. Sambrooke: One of £60 and one of £40 for Science. Rabbeth Scholarship of £20 per year for Science. College Scholarships: One of £40 per annum for two years; one of £30 for one year; three of £20 for one year. The Daniell Scholarship, for Chemistry, of the annual value of £20. Sambrooke Registrarships, of the annual value of £50 each, and tenable for two years, are open to all matriculated students who have filled any one of the higher appointments of the hospital, or who have become Associates. The Leathes Prizes, value £7, and the Warneford Prizes, value £40, are given annually amongst the matriculated medical students. Two Medical Clinical Prizes, one of £3 for the winter session, and one of £2 for the summer session, and two Surgical Clinical Prizes, of £3 each, are given. The Todd Medical Clinical Prize consists of a bronze medal and books to the value of £4 4*s.* The Tanner Prize for Obstetric Medicine, value £10, and the Carter Gold Medal and Prize for Botany, value £15, are given annually in July. Class Prizes, value £3 3*s.* each, are awarded annually in every subject. A Warneford Scholarship of £25 per annum for two years for third-year subjects is awarded annually to resident students only.

LONDON HOSPITAL AND COLLEGE.—The Medical School of the London Hospital is under the direction of a college board, composed of six members of the hospital staff and six of the house committee. The executive authority is committed to a warden. The hospital, which is the largest in Great Britain, contains nearly 800 beds. Last year the number of in-patients was 8732, out-patients 67,942.

The following Scholarships and Prizes will be offered for competition during the ensuing winter and summer sessions:—Two Entrance Scholarships in Natural Science, of the value of £60 and £40 respectively, will be offered for competition on September 20th, 21st, and 22nd, 1886. The subjects are Physics, Botany, Zoology, and Inorganic Chemistry. The successful candidates must forthwith become full pupils of the hospital and school, if not already entered; and are not eligible to compete for the Buxton Scholarships: -The two Buxton Scholarships, value £30 and £20, will be offered for competition on September 27th, 28th, and 29th, 1886. The subjects are those appointed by the General Council of Medical Education and Registration as the subjects of the Preliminary Examination. A Scholarship, value £25, in Anatomy, Physiology, and Chemistry, will be competed for at the end of the winter session by first and second year students. A Scholarship, value £20, in Anatomy and Physiology for first-year students. (At the commencement of the summer session.) The Letheby Prize, value £30, for Proficiency in Chemistry. (At the end of the summer session.) Open to all full students who have completed their second summer session up to the termination of their fourth year from entrance. A Hospital Scholarship, value £20, for proficiency and zeal in Clinical Medicine. (At the end of the winter session.) A Hospital Scholarship, value £20 for proficiency and zeal in Clinical Surgery. (At the end of the winter session.) A Hospital Scholarship, value £20, for proficiency and zeal in Clinical Obstetrics. (At the end of June.) The Duckworth Nelson Prize, value £10, will be offered biennially for competition at the end of the winter session, and be open to all students on similar conditions to those of the Hospital Scholarships. The subjects of examination will be Practical Medicine and Surgery. The Hutchinson Prize, value £35, will be given triennially to the author of the best essay upon a subject in Clinical Surgery. Candidates must be full students of the hospital who have not been registered more than ten years. Out-patients' Dressers' Prizes. Six prizes, of the aggregate value of £60, will be offered for competition at the end of the winter session. Candidates must pass an examination in Minor Surgery, have dressed diligently for twelve months, and have passed the Primary Examination of the Royal College of Surgeons. Two Dissection Prizes, value £6 and £4. Special classes are held throughout the year for the Preliminary Scientific Intermediate M.B. Examinations of the University of London and for the Primary and Pass Examinations for the Fellowship of the Royal College of Surgeons. Special entries can also be made for Medical and Surgical Practice, the Operative Surgery classes, &c. The very extensive alterations that have been made to the school premises during the past year will afford complete provision for the teaching of all branches of medical science, the accommodation now afforded being more than double that which was provided in the old buildings.

ST. MARY'S HOSPITAL.—There are five resident medical officers, four of whom are appointed for twelve months, and one, the obstetric officer, for six months, who board free of expense in the hospital. These appointments are awarded after competition, without additional fee. Two Demonstrators of Anatomy are appointed annually, with a salary of £70 and £50 respectively; a Demonstrator of Physiology, at £100 a year; and a Demonstrator of Histology, at £50 a year. All these officers are eligible for re-election. There is also a Demonstratorship in Pathological Anatomy, of the value of £15, and tenable for six months; the holder of this scholarship will assist the pathologist in the discharge of his duties in the museum and dead-house. Two Prosectors of Anatomy and two Assistant Demonstrators of Physiology are appointed annually, and receive a certificate and £5 each for satisfactory service in their respective departments. All students are required to perform the duties of clinical clerk and dresser during the last two years of their curriculum. Students of the third year and of subsequent years are also appointed as clerks and dressers to assist the physicians and surgeons in charge of the out-patients. In addition to the instruction given in the wards daily, distinct Clinical Lectures are given on Fridays throughout the academical year at 3.30 P.M. The hospital contains 270 beds, 130 of which are devoted to medical and 140 to surgical cases. Two wards are appropriated to the Diseases of Children, and one to those of Women; beds are also provided for Ophthalmic, Aural, and Cutaneous cases.

Scholarships, Prizes, and Appointments: Scholarships offered for open competition previously to entering at the Medical School.—Entrance Scholarships: The following will be offered for competition on Sept. 30th and Oct. 1st:—One Scholarship in Natural Science, of the value of 100 guineas, open to any gentleman who has not completed a

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winter session of study at a medical school. Three Scholarships in Natural Science, each of the value of 50 guineas, under the same conditions. One Scholarship of the value of 100 guineas, open to students from Epsom College, being sons of medical men, and who have not completed a winter session of study at a medical school. Two Scholarships, each of 50 guineas, open to students from the Universities of Oxford, Cambridge, or other University, who have not entered at any London medical school.

In addition to the Open Entrance Scholarships, Class Prizes, and usual Appointments, Scholarships will be offered for competition at the end of each year, open to all pupils. These Scholarships are of the value of £20, £25, and £30, for the first, second, and third years respectively.

A residence for students, 33, Westbourne-terrace, W, in connexion with the hospital, is under the charge of a warden (Dr. Robert Maguire), and the dean is prepared to receive applications from students desiring to enter upon residence during the ensuing session. Terms: 90 guineas for the academical year, payable 30 guineas in advance, on Oct. 1st, Jan. 1st, and May 1st, to include special instruction by the demonstrators on four days a week.

MIDDLESEX HOSPITAL.—There is a special Cancer Department, affording accommodation for thirty-three in-patients, whose period of residence in the hospital is unlimited. Classes, open to all the students, are held for practical instruction in medicine, midwifery, in the microscopical examination of healthy and diseased tissues, and also in the application of bandages and other surgical apparatus. Students are allowed to take out to read at their own homes the books from the large and carefully selected medical library of the school. The museum has recently been rearranged, and a complete catalogue prepared of the various specimens. Two Entrance Scholarships, of the annual value of £50 and £30, and tenable for two years, are offered for competition at the commencement of the winter session. An Exhibition in Elementary Anatomy, Osteology, and Physiology, value £10 10s., is awarded to students at the end of their first year. The Lyell Medal is awarded annually for proficiency in Surgical Anatomy and Practical Surgery. The Hetley Prize is awarded annually for Clinical proficiency. Two Broderip Scholarships, of the annual value of £30 and £20, tenable for two years, are awarded to those students who pass the best examination at the bedside and the post-mortem room. The Murray Medal and Scholarship, founded in connexion with the University of Aberdeen, is awarded every third year to a student of this hospital; it will be next awarded in May, 1889. The Governors' Prize of 20 guineas is also awarded annually to the student after his third winter session who shall pass the best clinical examination in the out-patient departments. Valuable class prizes are also given, and fourteen resident clinical appointments are annually awarded, after competitive examination, to students who have completed their education and complied with the regulations of the school.

Arrangements have been made for students desirous of undergoing a course of instruction in Science, such as that required for the Preliminary Scientific (M.B.) Examination of the University of London, to attend such a course at the Normal School of Science, South Kensington. Fee for the whole course, £35. Students who enter for this course will be allowed a deduction of £20 on the fees for the medical curriculum.

ST. THOMAS'S HOSPITAL.—*Prizes and Appointments for the year 1886-87.*—For First-year's students: Two Entrance Scholarships in Natural Science of the value of £100 and £60 respectively, open to all first-year's students, will be awarded during the first week in October, after an examination in Physics, Chemistry, and either Botany or Zoology at the option of the candidate; the William Tite Scholarship, the proceeds of £1000 Consols (£30 per annum), is awarded each year; also prizes of £20 and £10; summer £15 and £10. For second-year's students: The Peacock Scholarship of 40 guineas, and the Musgrove Scholarship of 40 guineas, are awarded biennially to the students who shall take the highest place in the first-class list in the examinations at the end of the second winter session; they are tenable for two years, provided the holder obtains a place in the first class in the subsequent examinations; making the winter prizes £42, £20 and £10; summer, £15 and £10; with the dresserships and the clinical clerkships. For third-year's students (winter): Second Tenure of Scholarship £42, and prizes of £20, £15, and £10; summer, £15 and £10. Clinical clerks and dressers are selected according to merit. The Grainger Testimonial Prize of £15 is awarded annually to students, who shall be from three to six years' standing, for the best Anatomical or Physiological Essay, to be illustrated by preparations and dissections. The Cheselden Medal for Surgery and Surgical Anatomy, and the Mead Medal for Practical Medicine, are awarded annually to fourth-year's students. The Solly Medal, with a prize from 10 to 20 guineas, will be awarded biennially to a student of the third, fourth, fifth, or sixth year, for the best report of Surgical cases. The next award will be made in 1888. The Treasurer's Gold Medal, for general proficiency and good conduct, is awarded annually to a fourth-year's student.

Classes in Practical and Operative Surgery are held four times a week for six weeks prior to the final examinations of the Examining Board in January, April, and July. In connexion with these classes, Clinical Instruction is given in the wards by the resident assistant-surgeon, and a course of demonstrations on Museum Specimens is given by the curator, Mr. Shattock.

UNIVERSITY COLLEGE, LONDON.—*Composition Fees.*—1. For the entire medical education required by the Examining Board in England and the Society of Apothecaries, 125 guineas, if paid in one sum at the commencement of the course; 130 guineas, if paid by instalments, as follows—first year, 60 guineas; second year, 50 guineas; third year, 20 guineas. 2. For the classes required by the Examining Board to be attended at a medical school, 100 guineas, if paid in one sum; 105 guineas, if paid by instalments, as follows—first year, 50 guineas; second year, 35 guineas; third year, 20 guineas. 3. For the whole course of instruction for the Intermediate Examination in Medicine of the University of London, 50 guineas. 4. For the course of instruction for the Final M.B. Examination of the University of London, 70 guineas, if paid in one sum; 72 guineas, if paid by instalments, as follows—first year, 40 guineas; second year, 32 guineas. 5. Composition fee for Dental Students, 60 guineas.

Exhibitions, Prizes, &c.—Three Entrance Exhibitions, of the respective values of £100, £60, and £40 per annum, tenable for one year, are annually awarded, upon examination by printed papers, to gentlemen who are about to commence their first winter attendance in a medical school. The subjects of the examinations are—Chemistry, Physics, Botany, and Zoology. The next examination will take place at the College on September 29th and 30th. The Atkinson Morley Surgical Scholarship of £45, tenable for three years, is annually awarded to the student who, upon examination, is found to possess the greatest proficiency in the Theory and Practice of Surgery. The Sharpey Physiological Scholarship of about £105 per annum, tenable for three years, for proficiency in Biological Science. Filliter Exhibition: a prize of £30 is awarded annually, in July, to the most proficient student in the class of Pathological Anatomy. An Atchison Scholarship, value about £55 per annum, tenable for two years. The Erichsen Prize, a surgeon's operating case of the value of £10 10s., awarded yearly to the student of the class of Practical Surgery who shall most distinguish himself by manipulative skill. The Morris Bursary of £25 a year, tenable for two years. Besides the above, gold and silver medals, and other prizes, are awarded in each class.

WESTMINSTER HOSPITAL.—The hospital contains upwards of 200 beds. There are separate departments for Diseases of the Eye, Ear, Skin, Teeth, and Throat, and for Diseases of Women. The Anatomical Museum is constantly open to the students. There are also a Pathological Museum and a Materia Medica Museum.

A curator of the museum and pathologist, with a salary of 50 guineas, and a medical and surgical registrar, are appointed annually, each with a salary of £40. Two house-physicians, two house-surgeons, and a resident obstetric assistant are appointed for six months after examination, and are provided with rooms and commons. The Senior house-physician, who is also the chloroformist to the hospital, and the senior house-surgeon who performs special duties, receive in addition an honorarium of 20 guineas each. Clinical assistants to the physicians and surgeons, and to the officers in charge of special departments, are appointed from students of the fourth year.

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Scholarships and Prizes.—The Guthrie and Entrance Scholarship, on alternate years, each £40 a year, and one Entrance Scholarship value £40. Entrance Scholarship, summer session, value £40. The Treasurers' Prize, an exhibition in Anatomy, Physiology, and Chemistry, value £10 10*s.*, tenable for one year for first-year's men. The President's Prize, a Scholarship in Anatomy, Histology, and Physiology, value £21, given by his Grace the Duke of Westminster, President of the Hospital, to a student of the second year (to be styled Assistant Demonstrator). At the end of the fourth winter session, prizes of £5 each (books or instruments) in Clinical Medicine and Clinical Surgery. Frederick Bird Medal and Prize, value £15. Subjects of examination: Medicine, Midwifery, Diseases of Women and Children, and Pathology. Chadwick Prize for General Proficiency, £21 (books or instruments), to the most meritorious student or students of any year not exceeding the fifth. In most of the classes special prizes, value about 2 guineas each, are given by the lecturers.

GREAT NORTHERN CENTRAL HOSPITAL, Caledonian-road, Consulting Surgeon: Frederick Le Gros Clark. Physicians. Drs. Cholmeley, Cook, Burnet, Beale, and Beevor. Obstetric Physicians: Drs. Gustavus C. P. Murray and Fancourt Barnes. Surgeons: Messrs. W. Adams, W. Spencer Watson, J. Macready, C. B. Lockwood, and G. H. Makins. Ophthalmic Surgeon: Mr. Jonathan Hutchinson, jun. Aural Surgeon: Mr. A. E. Cumberbatch. Choloformist: Mr. George Eastes. Dental Surgeon: Mr. E. Keen. House-Surgeon: Mr. A. Frank Whitwell. House-Physician: Mr. Donald Gunn. Dispenser: Mr. J. F. Dunstan.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, Brompton.—Consulting Physicians: Dr. C. J. B. Williams, F.R.S., Dr. W. H. Walshe, Dr. R. Quain, F.R.S., Dr. J. E. Pollock. Consulting Surgeon: Professor John Marshall, F.R.S. Physicians: Drs. E. S. Thompson, C. T. Williams, R. D. Powell, J. Tatham, R. E. Thompson, and F. Roberts. Surgeon: Mr. R. J. Godlee, F.R.C.S. Assistant-Physicians: Drs. T. H. Green, J. M. Bruce, J. Fowler, P. Kidd, C. Y. Biss, and C. T. Acland. Pathologist: Dr. P. Kidd. Dental Surgeon: Mr. C. J. Noble. Resident Medical Officer: Dr. H. D. Waugh. Secretary: Mr. H. Dobbin. Four Clinical Assistants reside in the hospital for a period of six months. Pupils are admitted to the practice of the hospital: terms £3 3*s.* for three months; six months, £5 5*s.*; perpetual, £10 10*s.* Lectures and Clinical Demonstrations are given throughout the year by members of the medical staff. The medical practice of the hospital is recognised by the University of London, the Apothecaries' Company, and the Army and Navy and Indian Medical Boards. The hospital contains 321 beds in the two buildings.

ROYAL HOSPITAL FOR DISEASES OF THE CHEST, City-road.—Established 1814. Consulting Physician: Dr. Horace Dobell. Physicians: Drs. Hensley, Gilbart-Smith, Finlay, White, Pringle, and Oswald Browne. Assistant-Physicians: Drs. Arthur Davies, Herbert Habershon, and Edward Stewart. Consulting Surgeon: Mr. Jonathan Hutchinson. Surgeon: Mr. A. Pearce Gould. House-Physicians: Messrs. Harrold Simmons and Frank T. Wethered. In-patients (1885), 122; out-patients (1885) 23,030. This hospital has recently been enlarged by the addition of a very complete out-patients' department, and also by the erection of a new wing, which will provide accommodation for 80 in-patients.

NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC, Queen-square, Bloomsbury.—The new hospital, with the Finchley Branch, contains 180 beds and cots. The physicians attend every Monday, Tuesday, Wednesday, and Friday, at 2.30 P.M. In- and out-patients' practice and electrical room treatment at that hour. Physicians: Drs. Ramskill, Radcliffe, Hughlings Jackson, and Buzzard. Physcians for out-patients: Drs. H. Charlton Bastian, W. R. Gowers, and Ferrier. Assistant-Physicians: Drs. Ormerod and Beevor. Surgeons: W. Adams and Victor Horsley. Ophthalmic Surgeons: R. Brudenell Carter and Marcus Gunn. Aural Surgeon: A. E. Cumberbatch. House-Physicians: T. Wilson and F. Stedman. Medical practitioners and senior students may attend the practice after signing their names in the clerk's office.

ROYAL LONDON OPHTHALMIC HOSPITAL, Moorfields.—The hospital, founded in 1804, and considerably enlarged in 1876, now contains 100 beds for patients, which were occupied during last year by over 2000 persons. The out-patients are yearly over 20,000; attendances, 130,000. Operations are performed daily from half-past ten to one o'clock, and three surgeons attend on each day. Students are admitted to the practice. Fees for six months, £3 3*s.*; perpetual, £5 5*s.* Demonstrations and lectures are given during the winter. Students of the hospital are eligible for the office of house-surgeon, or may be appointed clinical assistants. The Secretary, Mr. Robert Newstead, will furnish further information, as may be desired.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL, King William-street, West Strand.—The hospital contains 50 beds; and the patients, who number 10,000 annually, are seen and operations performed daily at 2 o'clock. The following are the days of attendance of the surgeons: Mr. Power and Mr. Frost, Monday and Friday; Mr. Rouse and Mr. Hartridge, Tuesday and Saturday; Mr. Macnamara, Monday and Thursday; Mr. Cowell and Mr. Juler, Wednesday and Saturday. The practice of the hospital is open to students. Fees for six months, £3 3*s.*; perpetual, £5 5*s.* Students of the hospital are eligible for the post of house-surgeon. Special demonstrations and lectures will be given during the session. Secretary, Mr. T. Beattie-Campbell.

ROYAL ORTHOPÆDIC HOSPITAL, 297, Oxford-street.—Surgeons: Messrs. B. E. Brodhurst, H. A. Reeves, Charles Read, and William E. Balkwill. Assistant-Surgeon: Mr. H. F. Baker. House-Surgeon: Mr. W. B. Thomas. Secretary: Mr. Maskell. Operations on Mondays at 2 P.M. The hospital is open to all legally qualified practitioners. Pupils are admitted to witness the practice of the hospital on the following terms: six months, £3 3*s.*; twelve months, £5 5*s.*; perpetual, £10 10*s.*

DENTAL HOSPITAL OF LONDON MEDICAL SCHOOL, Leicester-square.—Lectures are delivered in winter on Mechanical Dentistry by Dr. J. Walker, on Wednesdays at 5 P.M. In summer, by Mr. Hutchinson, on Dental Surgery and Pathology, on Tuesdays and Fridays at 8 A.M., and by Mr. Arthur Underwood, on Dental Anatomy and Physiology (Human and Comparative), on Wednesdays and Saturdays, at 8 A.M. *Fees:* General fee for special lectures required by the curriculum, £15 15*s.*; fees for two years' hospital practice required by the curriculum, £15 15*s.*; total fees for lectures and practice, £31 10*s.* Hospital Surgeons: Messrs. Canton, Gregson, Hepburn, Storer Bennett, Underwood, and Woodhouse. Assistant-Surgeons: Messrs. Hern, Matheson, Parkinson, Read, Rogers, and Truman. Anæsthetists: Messrs. Braine, Bailey, Bird, and Mills. Assistant-Anæsthetists: Drs. Brunton and Hewitt. House-Surgeon: Mr. C. F. Rilot. Assistant House-Surgeons: Messrs. F. Colyer and R. W. Eouw. Medical Tutor: Mr. W. Paterson. The winter session will commence October 4th. All communications to be addressed to Mr. Morton Smale, Dean.

SEAMEN'S HOSPITAL (late *Dreadnought*), Greenwich, S.E. This institution is established for the relief of seamen of all nations. Casualties are received at all hours. Apartments are provided in the house of the Principal Medical Officer for students. Honorary Consulting Physicians: Dr. Robert Barnes, F.R.C.P., and Dr. Richard Quain, F.R.C.P. Visiting Physicians: Dr. John Curnow, F.R.C.P., and Dr. Herbert Tyrrell Griffiths, M.R.C.P. Honorary Consulting Surgeon: Vacant. Visiting Surgeon: Mr. G. Robertson Turner, F.R.C.S. Medical Officer, Well-street Dispensary: Mr. C. E. Cotes, F.R.C.S. Principal Medical Officer: Mr. W. Johnson Smith, F.R.C.S. House-Physician: Mr. E. H. Booth, M.B. House-Surgeon: Mr. C. Stuart Spong. Secretary: Mr. W. Thomas Evans.

HOSPITAL FOR SICK CHILDREN, Great Ormond-street, Queen-square, W.C., and Cromwell House, Highgate.—Physicians: Drs. W. B. Cheadle, Sturges, and Barlow. Assistant-Physicians: Drs. R. J. Lee, D. B. Lees, Montague Lubbuck, Abercrombie, and Angel Money. Surgeons: Mr. Howard Marsh, Mr. Edmund Owen, Mr. J. H. Morgan, Mr. Bernard Pitts, and Mr. Arbuthnot Lane. Ophthalmic Surgeon: Mr. R. Marcus Gunn. Surgeon-Dentist: Mr. A. Cartwright. Secretary: Mr. Adrian Hope. There are now 121 beds in the hospital, Great Ormond-street, and 52 beds at the country branch; total 173. In-patients last year, 1144; out-patients, 14,287. The practice at the hospital has recently been thrown open gratuitously to the pupils of the different hospitals and medical schools of London on conditions which may be ascertained of the Secretary.

QUEEN CHARLOTTE'S LYING-IN HOSPITAL, Marylebone-road, London, W.—This hospital has been recently enlarged, and is in full operation. It receives nearly 700

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patients annually, besides having a large out-patient maternity. The pupils are permitted to see the practice in both departments. Medical pupils are received at all times of the year. Pupils enjoy unusual opportunities of seeing obstetric complications and operative midwifery, on account of the very large number of primiparous cases—upwards of three-fourths of the total admissions. Clinical instruction is given on the more important cases that present themselves in both departments. Certificates of attendance at this hospital are received by all universities, colleges, and licensing bodies; and a diploma is granted in Midwifery. Monthly nurses and midwives are received for training. For further particulars, applications should be made to the Secretary, at the hospital.

ROYAL HOSPITAL FOR CHILDREN AND WOMEN, Waterloo-bridge-road. — Instituted 1816. Consulting Physicians: Dr. Wilks and Dr. John Williams. Physicians: Drs. W. A. Duncan, W. B. Haddon, W. Park, and W. R. Dakin. Surgeon: Mr. H. C. Jacobson. Assistant-Surgeon: Mr. E. Overman Day. Surgeon-Dentist: Mr. W. Whitehouse. Resident Medical Officer: E. H. Freeland. Secretary: Mr. R. G. Kestin. Advanced students in medicine, and such practitioners as may desire it, are permitted to attend the practice of this hospital gratis. If a certificate signifying such attendance be required, the sum of £5 5s. must be paid to the physicians and surgeons in ordinary conjointly.

HOSPITAL FOR WOMEN, Soho-square, W., Consulting Physician: Dr. Protheroe Smith. Physicians: Drs. Carter, Richard T. Smith, Holland, and Mansell-Moullin. Surgeon: Mr. H. A. Reeves. Assistant-Physicians: Drs. Bedford Fenwick and Oliver. Assistant-Surgeon: Mr. S. Osborne. Pathologist and Registrar: Dr. Norman Dalton. Anæsthetist: Dr. Dudley Buxton. In connexion with this institution there has for some years been a well-organised Clinical Department, which has lately been enlarged under the title of the London School of Gynæcology. To meet the want increasingly felt by medical men of an accurate knowledge of the ordinary diseases of women, ten gentlemen are appointed every three months to act as clinical assistants to the physicians and surgeons seeing out- and in-door patients. The appointments are nominally "open to qualified medical men and to students of medicine after their third year," but in the selection of candidates preference is naturally given to gentlemen already engaged in practice. The large numbers of out-patients afford quite unrivalled opportunities for practical instruction in the use of gynæcological instruments, and for the study of diseases peculiar to women. A course of lectures on the Anatomy and Physiology of the Female Pelvic Organs is given during each quarter by a member of the Staff. Clinical Lectures are given in the Operating Theatre on alternate Thursday afternoons at 3.30 P.M. throughout the winter and summer sessions. Valuable prizes are given, after examination, annually, open to past and present clinical assistants. Fee for the three months' course, £5 5s. Any further information can be obtained by letter, addressed to the Dean at the hospital.

VICTORIA HOSPITAL FOR CHILDREN, Chelsea, S.W., and Churchfields, Margate.—The hospital contains 60 beds and 12 at the home at Margate, and has a large out-patient department (over 500 weekly). Physicians: Dr. Julian Evans and Dr. Ridge Jones. Physicians to the out-patients: Drs. Albert Venn, T. Colcott Fox, F. D. Drewitt, and Henry Philpot. Surgeons: Messrs. Pick and Clutton. Surgeons to the Out-patients: Messrs. Churchill and Walter Pye. Dental Surgeon: Mr. Francis Fox. House-Surgeon: Philip D. Turner. Registrar: Paul F. Moline. Secretary: Captain W. C. Blount, R.N. Out-patients are seen daily as under:—Medical cases: Daily at 9 A.M.; also on Mondays and Thursdays at 1.30. Surgical cases: Daily, except Wednesday and Saturday, at 9.30 A.M. Dental cases: Saturdays at 9 A.M.

EAST LONDON HOSPITAL FOR CHILDREN AND DISPENSARY FOR WOMEN, Shadwell, E.—Consulting Physicians: Dr. Robert Barnes and Sir Andrew Clark, Bart., M.D. Consulting Surgeon: Mr. Buxton Shillitoe. Consulting Ophthalmic Surgeon: Mr. George Cowell. Physicians: Dr. Eustace Smith, Dr. Horatio B. Donkin, and Dr. H. Radcliffe Crocker. Surgeons: Mr. Arthur Cæsar, Mr. R. W. Parker, and Mr. L. A. Dunn. Assistant-Physicians: Dr. J. A. Coutts and Dr. Dawson Williams. Administrator of Anæsthetics: Mr. Thomas Bird. Medical Officer: Mr. J. Scott Battams. Secretary: Mr. Ashton Warner. Miss F. A. Davies, Lady Superintendent; Mrs. Fisher, Matron.

WEST LONDON HOSPITAL, Hammersmith-road, W.—This hospital has 100 beds. In 1885 there were 1269 in-patients and 14,933 out-patients under treatment. There are appointments for a House-Physician and two House-Surgeons, with board and residence, tenable for six months. Also appointments for a limited number of Clinical Assistants. Physicians: Drs. G. Goddard Rogers, D. W. C. Hood, and F. G. D. Drewitt. Physician for Diseases of Women: Dr. Albert Venn. Surgeons: Messrs. C. B. Keetley, F. Swinford Edwards, and W. Bruce Clarke. Surgeon for Diseases of the Eye: Mr. B. J. Vernon. Assistant-Physicians: Drs. W. P. Herringham, J. B. Ball, and Seymour Taylor. Assistant-Physician for Diseases of Women: Dr. J. A. Mansell Moullin. Assistant-Surgeons: Messrs. C. A. Ballance, H. F. Weiss, and B. Wainewright. Assistant-Surgeon for Diseases of the Eye: Mr. H. P. Dunn. Surgeon-Dentist: Mr. H. L. Albert. Pathologist: Mr. H. P. Dunn. Administrators of Anæsthetics: Messrs. T. Gunton Alderton and Rickard W. Lloyd. Secretary: Mr. R. J. Gilbert.

EVELINA HOSPITAL FOR SICK CHILDREN, Southwark-bridge-road, S.E.—Consulting Physician: Dr. W. S. Playfair. Consulting Surgeons: Sir Prescott G. Hewett, Bart., and Mr. W. Morrant Baker. Physicians: Drs. Fred. Taylor, James F. Goodhart, Nestor Tirard, and Fred Willcocks. Surgeons: Messrs. H. G. Howse, R. Clement Lucas, C. J. Symonds, and G. H. Makins. Ophthalmic Surgeon: Dr. W. A. Brailey. Dental Surgeon: Mr. R. Denison Pedley. House-Surgeon: Dr. Albert Martin. Hon. Secretary: Dr. I. Dobree Chepmell.

ALL SAINTS' CHILDREN'S HOSPITAL, 4, Margaret-street, and 59, Mortimer-street, W. Founded by the All Saints' Sisterhood in 1882 for Chronic Joint Diseases. Twelve beds for boys and eight for girls under the age of ten years. Surgeon, Mr. Noble Smith.

MR. THOMAS COOKE'S SCHOOL OF ANATOMY, PHYSIOLOGY, SURGERY, &c.—This school is intended to meet the requirements of three classes of students: 1. Qualified practitioners and advanced students—i.e., gentlemen wishing either to obtain some of the higher qualifications, or to compete for appointments in Her Majesty's Army, Navy, and Indian Medical Service. 2. Students preparing for the usual Primary and Pass Examinations of any of the licensing bodies. 3. Beginners entering upon their medical studies, either by a short term of apprenticeship, or under the new regulations of the Examining Board in England. Both rapid advanced classes, complete in three months or less, but still thoroughly practical, are provided; and also, as required, more elementary classes of six months' duration. The instruction is given on the dissected and undissected body, with normal and pathological specimens, microscopical preparations, chemical, physiological, and surgical apparatus, splints, &c. The operations of surgery are performed by the students on the dead body. Private address: 40, Brunswick-square.

SOUTH LONDON SCHOOL OF PHARMACY.—This school was established in 1868, and removed to the present premises in 1875. Owing to the expiration of the lease at the old premises, it has recently been joined by the analytical and general science teaching branches previously carried on at Kennington-cross, and the whole institution is now consolidated under one roof, so bringing every department under the continuous and direct control of the director, Dr. John Muter, M.A., F.C.S., F.I.C., who personally delivers the lectures on Chemistry, Physics, and Botany, and superintends the laboratory instruction. The department most valuable to medical students is the Medical and General Science Tutorial Department. The subjects taught are:—For Matriculation, &c.: Elementary Chemistry. For First B.Sc. and Preliminary Scientific: Inorganic and Practical Chemistry. For First M.B.: Organic Chemistry, Analysis, and Pharmaceutical Chemistry and Materia Medica. For Apothecaries' Hall and Royal Colleges of Physicians, London and Edinburgh: Chemistry, Botany, and Materia Medica. For Pass M.B. Lond: Practical Toxicology and Forensic Medicine. Students attend by special arrangement, and perpetual or time fees may be had from the Secretary, 325, Kennington-road, London, S.E.

SCHOOL OF PHARMACY OF THE PHARMACEUTICAL SOCIETY OF GREAT BRITAIN.—Lectures on Botany and Materia Medica by Professor Bentley, M.R.C.S. Eng., F.L.S.; Chemistry by Professor Dunstan, F.C.S.; Practical Chemistry, Professor John Attfield, Ph.D., F.R.S., F.I.C., F.C.S., Director of the Laboratories; F. W. Short, Demonstrator; T. J. Eastes, Assistant-Demonstrator; Practical Pharmacy: Joseph Ince, F.L.S. The session commences on Friday, October 1st, at 9 A.M. Medical students, or pupils intending

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to enter the medical profession, are admitted to the lectures and to a course of practical chemistry of any length in the laboratories. Application for admission to the School, or for further information, may be made to the professors or their assistants in the lecture theatre or laboratories, 17, Bloomsbury-square, London, W.C.

ENGLISH PROVINCIAL HOSPITALS AND MEDICAL SCHOOLS.

BATH ROYAL UNITED HOSPITAL.—120 beds. Honorary Consulting Physician; Dr. Coates. Honorary Physicians: Drs. Goodridge, Cole, and Fox. Honorary Surgeons: Messrs. Stockwell, Fowler, and Freeman. Honorary Medical Officers for Out-patients: Dr. Field, Messrs. Cowan and Craddock. Honorary Assistant-Surgeons: Messrs. Green, Scott, and Ransford. Dental Surgeon: Mr. Gaine. Pathological Registrar and Curator: Mr. H. Culliford-Hopkins. The hospital is recognised by the Royal College of Physicians, Surgeons, &c., and licensed for dissections. It contains a library and an excellent museum, in which are a large number of interesting specimens, both in Pathology and Comparative Anatomy. Fees for attendance—twelve months, £10 10*s.*; six months, £5 5*s.* Instruction in Practical Pharmacy, £5 5*s.* Number of patients admitted during the past year, 1054; out-patients 8256. Operations performed, 156. Anæsthetics recorded, 148. For further particulars, apply to the registrar and curator.

QUEEN'S COLLEGE, BIRMINGHAM.—The Sands Cox Prize, of the value of £20, is offered annually in the Medical Department. It is open to students who have completed their curriculum, and is awarded after examination in Medicine, Surgery, and Midwifery. The examination for this prize in 1886 will be held in the last week in March. Two Ingleby Scholarships will be offered annually after examination in Obstetric Medicine and Surgery, and Diseases of Women and Children. The Scholarships are open to students who have completed the first two years of their curriculum in this College. One or more Sydenham Scholarships will be offered annually, of the value of 30 guineas each. The orphan sons of former students of the Birmingham Medical School have priority of election. No Sydenham scholars are elected whose age exceeds twenty-three years on the day of election. The Scholarships are held for three years, subject to good behaviour. One or more Queen's Scholarships will be offered annually of the value of 30 guineas. They are held for three years, one-third being paid each year, subject to good behaviour. The Russell Memorial Prize is awarded annually after examination in Nervous Diseases. Students of Queen's College are qualified to compete for all scholarships, gold medals, and other prizes offered by the University of London, the Royal College of Surgeons, and the Apothecaries' Society.

GENERAL AND QUEEN'S HOSPITALS, BIRMINGHAM.—*General Hospital.*—Consulting Physician: Dr. Fletcher. Consulting Surgeons: Mr. Crompton and Mr. Baker. Physicians: Drs. Wade, Foster, Rickards, and Saundby. Surgeons: Messrs. Pemberton, Bartleet, Jolly, and Chavasse. Obstetric Officer: Dr. Malins. Assistant-Physicians: Drs. Simon and Foxwell. Assistant-Surgeons: Messrs. Haslam and Barling.—*Queen's Hospital.*—Consulting Obstetric Surgeon: Mr. Berry. Consulting Surgeon: Mr. S. Gamgee. Physicians: Drs. Sawyer, Carter, and Suckling. Surgeons: Messrs. Furneaux Jordan, Wilders, Bennett May, and Lloyd. Obstetric Surgeon: Mr. A. F. Hawkins. Ophthalmic Surgeon: Mr. Priestley Smith. Dental Surgeon: Mr. Charles Sims. Physician for Out-patients: Dr. Hogben. Casualty Surgeons: Messrs. Clay and Marsh.

MASON COLLEGE, BIRMINGHAM.—Founded 1875. Opened 1880. The session will commence on October 1st. Instruction is given in Arts and Science, and students are prepared for the various examinations of the University of London. Entrance and other Scholarships are offered for competition. This College is associated with Queen's College, Birmingham, for the purposes of medical education, all students of the latter College attending in the Physical, Chemical, Botanical, and Physiological Departments of Mason College. The Library contains upwards of 17,000 volumes. A syllabus containing full information as to the various courses of instruction, fees, &c., will be forwarded on application to the Secretary.

BRISTOL SCHOOL OF MEDICINE (affiliated to University College, Bristol).—Students can complete in Bristol the entire course of study required for the Medical and Surgical Degrees of the University of London, and for the Diplomas of the Royal College of Physicians of London, the Royal College of Surgeons of England, the Apothecaries' Society of London, and the Army and Navy Boards. The lectures and instructions given at University College, Bristol, are adapted to the various Preliminary Arts Examinations above referred to, and also to the Matriculation and Preliminary Scientific Examinations of the University of London; while the Medical School, the Royal Infirmary, and the General Hospital together provide for every detail of the professional curriculum required by the University of London and the above examining boards. All necessary information may be obtained from the dean of the Bristol Medical School, Dr. Markham Skerritt.

BRISTOL ROYAL INFIRMARY (instituted 1735).—264 beds. Physicians: Drs. Spencer, Shingleton Smith, Wald, and Shaw. Surgeons: Messrs. Board, Dowson, Prichard, Greig Smith, and Harsant. Ophthalmic Surgeon: Mr. Cross. Assistant-Physician: Dr. Prowse. Assistant-Surgeon: Mr. Paul Bush. House-Surgeon: Mr. Dacre. House-Physician: Dr. Swain. Assistant House-Surgeon: Mr. Thurston. Secretary: Lieut.-Colonel Graham.

Scholarships and Prizes: Two Entrance Scholarships, 35 guineas and 10 guineas, awarded annually in October, after examination in general subjects; Surgical and Medical Suple Gold Medals, 5 guineas each, with 7 guineas added in money; Clarke Prize, 15 guineas; Crosby Leonard Prize, 7 guineas; Tibbitt's Prize, 9 guineas; three Pathological Prizes, 3 guineas each.

Dressers reside in the house in weekly rotation, and have charge of all casualties under the supervision of the house-surgeon. Special instruction (including dresserships) for first-year students in the out-patient department. Class instruction in the wards by the physicians and surgeons on four days a week, in addition to the regular clinical lectures. Clinical Clerkships and Dresserships, 5 guineas for each six months. Special departments for Diseases of Women, the Eye, Ear, &c, with Clerkships and Dresserships attached. A Pathological Clerk is appointed every four months, who performs all post-mortem examinations. The large museum and well-stocked library are arranged and managed for the advantage of students.

Further information can be obtained from Dr. Spencer, Dean of the Faculty.

BRISTOL GENERAL HOSPITAL.—164 beds. Physicians: Drs. Markham Skerritt, Harrison, and Baron. Physician-Accoucheur: Dr. Lawrence. Surgeons: Messrs. Lansdown, Dobson, Keall, and Pickering. Dentist: Mr. Parson. House-Surgeon: Mr. Stephens. Physician's Assistant: Mr. Barker. Assistant House-Surgeon: Mr. Morton. Clinical Clerkship, six months, £5 5*s.* Dresser-ship, six months, £5 5*s.* Obstetric Clerkship, three months, £3 3*s.* Special clinical instruction is given in Diseases of the Skin, Eye, Ear, and Throat, also in Diseases of Women, and in Dental Surgery. Further information may be obtained of the secretary, at the hospital, or from Dr. Markham Skerritt, Dean of the Hospital Faculty.

ADDENBROOKE'S HOSPITAL, CAMBRIDGE.—Clinical lectures in Medicine and Surgery in connexion with the Cambridge Medical School are delivered at this hospital twice a week during the academical year; and practical instruction in Medicine and Surgery in the wards and out-patients' rooms is given by the physicians and surgeons daily, during the vacations as well as term time. Instruction is also given in all the special modes of medical and surgical investigation. Clinical Clerks and Dressers are selected from students according to merit, and without payment.

DEVON AND EXETER HOSPITAL, Exeter.—Medical and Surgical Staff: Consulting Physician: Dr. Drake. Physicians: Drs. Lewis Shapter and H. Davy. Consulting Surgeons: Messrs. A. Cumming and T. W. Caird. Surgeons: Messrs. Bankart, Harris, Domville, and Bell. House-Surgeon: Dr. Blomfield. The hospital contains 214 beds (including special children's wards). There is a good library, museum, dissecting and post-mortem rooms. Attendance on the practice of this hospital qualifies for all the examining boards. Arrangements can be made by which students can attend Midwifery. For further particulars as to fees, &c., apply to the house-surgeon.

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WEST OF ENGLAND EYE INFIRMARY, EXETER.—Surgical Staff: Messrs. Bankart and Tosswill. Registrar: Mr. Roper. The Infirmary contains fifty beds. Arrangements can be made for students of the Exeter Hospital to attend the practice of the Eye Infirmary.

UNIVERSITY OF DURHAM COLLEGE OF MEDICINE, Newcastle-upon-Tyne.—The following Scholarships and Prizes are awarded annually:—A University of Durham Scholarship, value £100, for Proficiency in Arts, awarded to full students in their first year. The Dickinson Scholarship, value £15, and a Gold Medal, for Medicine, Surgery, Midwifery, and Pathology. The Tulloch Scholarship, value £20, for Anatomy, Physiology, and Chemistry. The Charlton Scholarship, value about £35, for Medicine. The Gibb Scholarship, value £25, for Pathology. The Goyder Memorial Scholarship (at the Infirmary), value about £15, for Clinical Medicine and Clinical Surgery. At the end of each session a Silver Medal and Certificates of Honour are awarded in each of the regular classes. Assistant Demonstrators of Anatomy, receiving each an honorarium of £5, two Prosectors, and two Assistant Physiologists are elected yearly. Two Pathological Assistants, two Assistants to the Dental Surgeon, and one Assistant in the Eye Department, are also elected every three months. Medical and Surgical Assistants, Clinical Clerks, and Dressers are appointed every three months.

NEWCASTLE-ON-TYNE INFIRMARY.—Physicians: Drs. Philipson, Drummond, Oliver, and Limont. Surgeons: Drs. Arnison, L. Armstrong, Hume, and Mr. Page. Assistant-Surgeons: Mr. T. A. Dodd and Mr. Williamson. Pathologist: Dr. Drummond. Dental Surgeon: Mr. E. Fothergill. House-Physician: Mr. J. Waldy. House-Surgeon: Dr. G. W. Ridley. The infirmary contains 280 beds. There are special wards for the treatment of Children, and for Ophthalmic and Syphilitic Diseases. Clinical Lectures are delivered by the Physicians and Surgeons in rotation. Pathological Demonstrations are given as opportunity offers by the Pathologist. Practical Midwifery can be studied at the Newcastle Lying-in Hospital, where there is an out-door practice of about 300 cases annually. Lectures are given on Psychological Medicine at the Coxlodge Lunatic Asylum by Dr. R. H. B. Wickham, Medical Superintendent. A Special Course of Instruction is given in the Hospital for Infectious Diseases by the Superintendent and City Officer of Health, Dr. H. E. Armstrong.

GENERAL KENT AND CANTERBURY HOSPITAL.—Open for the reception of patients April 26th, 1793. 48,692 in-patients and 86,963 out-patients have been admitted since the hospital was open. The hospital contains 102 beds. Pupils of the staff are admitted to the practice of the hospital, and have the use of the library of the East Kent and Canterbury Medical Society, for £7 7s. Operation day, Thursday, 11 A.M. Consulting Physician: Dr. Alfred Lochee. Physician: Dr. Henry Alex. Gogarthy. Consulting Surgeon: Mr. James Reid. Surgeons: Messrs. Charles Holttum, Frank Wacher, T. Whitehead Reid, and John Greasley. Dentist: Mr. Martin L. Bell. House-Surgeon: Mr. Z. Prentice. Assistant House-Surgeon and Dispenser: Mr. William P. Barrett. Secretary: Mr. Charles H. Read. Over 700 in-patients, 3000 out-patients, and 1000 dental cases are attended in a year.

LEEDS GENERAL INFIRMARY AND MEDICAL DEPARTMENT OF THE YORKSHIRE COLLEGE.—The Leeds General Infirmary has accommodation for 320 in-patients, surgical and medical, and during the last year 4401 in-patients and 24,600 out-patients were treated; these numbers show a remarkable increase, if compared with statistics of ten years ago, when only 11,500 out-patients were seen. Clinical teaching takes place daily in the wards, and Clinical Lectures are given in the operating-room. There are Medical, Surgical, Ophthalmic, Aural, and Electrical Departments, in each of which special instruction is imparted to students. A Gynæcological and Extern Obstetric Department, together with Laryngeal and Skin Clinics, are being organised. The Public Dispensary, the Fever Hospital, and the West Riding Lunatic Asylum are other medical institutions which are made use of by the Leeds students.

The Leeds Medical School, now the Medical Department of the Yorkshire College, occupies a central position in the town, close to the General Infirmary, and a few minutes' walk from the new buildings of the Science and Art Departments situated in College-road. The present premises were built specially for the purposes of a medical school, and the teaching in purely medical subjects is there given. The teaching in Chemistry and Physics, Practical Chemistry, Practical Toxicology, Biology, and Botany is given in the College-road buildings, the lecture-rooms and laboratories of which are amongst the most commodious in the kingdom. The accommodation for teaching comprises all the conveniences necessary for the various branches of study. All the other courses required by examining boards are given by Professors and Lecturers. The Museums and Library offer special advantages. Several valuable prizes are given at the end of each session. The following appointments at the infirmary are annually open to students:—Resident medical officer, resident surgical officer, resident obstetric officer, appointed for twelve months and eligible for re-election. Two house-physicians, holding office for six months; four house-surgeons, for twelve months; twenty-four physicians' clerks, for three months; twenty-four surgeons' dressers, for six months; eight ophthalmic and aural surgeons' dressers, for three months; eight gynæcological ward clerks, for three months; eight gynæcological out-patient clerks, for three months; twenty-four assistant-physicians' clerks, for three months; twenty-four assistant-surgeons' dressers, for three months; forty-eight dressers in the casualty room, for three months; twelve post-mortem room clerks, for three months.

UNIVERSITY COLLEGE, LIVERPOOL, MEDICAL FACULTY: VICTORIA UNIVERSITY.—The Infirmary attached to the School contains 300 beds, with 40 special beds for the treatment of Diseases of Women. Lock, Lying-in, and Eye and Ear Hospitals are in the immediate vicinity, and their practice is open to the students of the Medical Faculty.

The composition fee for lectures and classes is 60 guineas, which may be paid in two equal instalments with an interval of twelve months; and for hospital practice 40 guineas, which may be paid in the same way.

Two house-physicians and three house-surgeons are appointed from the qualified pupils every six months, also clinical clerks, dressers, and post-mortem clerks.

Two Holt Tutorial Scholarships, each of the value of £100 are awarded annually by the Medical Faculty to senior students. Also an entrance Lyon Jones Scholarship of £21 for two years for students proceeding to the Victoria Degree, and another of the same value, open to all students who have completed their second year. The Derby Exhibition of £15 for Clinical Medicine and Surgery. The Torr and Bligh Gold Medals for Anatomy and Physiology, and the class prizes. During the past year the new Chemical Laboratories have been opened, and the old building added to the Physiological Department. The only changes on the staff are the appointment of Mr. Edgar Browne, as lecturer on ophthalmology, Dr. Hope as lecturer on Hygiene, and Dr. Ross as Demonstrator of Anatomy.

LIVERPOOL NORTHERN HOSPITAL.—150 beds. There is a special ward for the treatment of children. Clinical lectures are delivered by the physicians and surgeons during the summer and winter sessions. Clinical clerkships and dresserships are open to all students without additional fee.

LIVERPOOL ROYAL SOUTHERN HOSPITAL.—Physicians: Drs. Cameron, Carter, and Williams. Surgeons: Messrs. Hamilton, Little, and Paul. Senior House-Surgeon: Dr. F. H. Wigmore. Junior House-Surgeons: Mr J. R. L. Dixon and Mr. W. C. Helme. 200 beds. Clinical Lectures are given by the physicians and surgeons during the winter and summer sessions. Clinical clerkships and dresserships are open to all students. Special wards for accidents and diseases of children. Resident students received.

NORFOLK AND NORWICH HOSPITAL.—150 beds. One year's attendance recognised by examining boards. Fees: For the physicians' practice, 5 guineas for six months. For the surgeons' practice, including dresserships, £10 for three months; £15 for six months; £20 for one year; £30 for two years. Pupils resident and non-resident. Physicians: Sir Peter Eade, Dr. Bateman, and Dr. Taylor. Surgeons: Mr. Cadge, Mr. Crosse, and Mr. Williams. Assistant-Surgeons: Dr. Beverley and Mr. Robinson. House-Surgeon: Mr. H. Chester Nance.

NORTHAMPTON GENERAL INFIRMARY.—Established 1743; rebuilt 1793. In-patients, 1693; out-patients, 8223. Beds,

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144. Physicians: Dr. Buszard and Dr. Jones. Surgeons: Messrs. G. H. Percival and R. A. Milligan. House-Surgeon: Mr. W. E. Audland. Assistant House-Surgeon: Mr. St. John O. Rands. Out-pupils are received, and have every opportunity of acquiring a practical knowledge of their profession. Instruction is also given in Anatomy and Materia Medica, and Practical Pharmacy. Pupils' fee £25 per annum, or a perpetual fee of £50.

MEDICAL DEPARTMENT OF OWENS COLLEGE, VICTORIA UNIVERSITY.—This medical school is located in a large new building, which forms a part of Owens College. It is provided with a very large dissecting-room, physiological laboratory, private laboratories, and work-rooms, besides lecture-rooms, a museum, and a library. In order to give the fullest possible opportunities for teaching and investigation in the departments of Physiology, Pathology, and Materia Medica, a great extension of the school buildings has been made. The more strictly practical departments of medical study are taught partly in the Medical School and partly in the Royal Infirmary, to which are attached a fever hospital, a lunatic asylum, and a convalescent home. Medical and surgical clinical classes are conducted in the infirmary by the professors of medicine and surgery, and separate instruction is afforded in the elements of medical and surgical physical diagnosis, in obstetric medicine, ophthalmic surgery, and pathological anatomy by the different members of the staff of the medical school and infirmary. The following scholarships and prizes are open to students of the medical school:—1. A Dauntesey Scholarship of the value of about £100 is offered annually for competition at the beginning of October to persons who have not been students in any medical school in the United Kingdom, and whose age does not then exceed twenty-five years. The subjects of examination are—(*a*) General and Comparative Anatomy; (*b*) Physiological Botany; (*c*) Chemistry; (*d*) Mathematics or Latin. 2. A Scholarship and Prizes are awarded at the end of each academic year to students of the first, second, and third year. 3. A Platt Physiological Scholarship of £50 a year for two years is offered annually to the student who, having studied for one entire session in the physiological laboratory of Owens College, has prosecuted the best original investigation in Physiology, and has passed a satisfactory examination in Physiology. 4. Two Platt Exhibitions of the value of £15 each, to be competed for by first and second years' students in the class of Physiology. 5. A Dumville Surgical Prize of £20 is offered annually for proficiency in Clinical Surgery. 6. Medical and Surgical Clinical Prizes, each of the value of six guineas, are open to competition each year for the best reports (with comments) of cases which have occurred in the wards of the infirmary.

MANCHESTER ROYAL INFIRMARY.—Consulting Physicians: Drs. R. F. Ainsworth, Frank Renaud, H. Browne, and Sir Wm. Roberts. Consulting Surgeons: Mr. Geo. Bowring and Mr. Lund. Physicians: Drs. Henry Simpson, John E. Morgan, D. J. Leech, and J. Dreschfeld. Assistant-Physicians: Drs. James Ross and Graham Steell. Obstetric Physician: Dr. Lloyd Roberts. Surgeons: Messrs. F. A. Heath, Walter Whitehead, Thomas Jones, and James Hardie. Assistant-Surgeons: Messrs. Fred. A. Southam and G. A. Wright. Ophthalmic Surgeon: Dr. D. Little. Dental Surgeon: Mr. G. W. Smith. Resident Medical Officer: Dr. Malcolm Webb. Resident Surgical Officer: Mr. Joseph Collier. Medical Registrar: Dr. J. S. Bury. Surgical Registrar: Mr. W. Thorburn. Pathological Registrar: Dr. Thomas Harris. Assistant Medical Officers: Drs. S. Moritz and A. T. Wilkinson. General Superintendent and Secretary: Mr. W. L. Saunder.

MANCHESTER GENERAL HOSPITAL FOR SICK CHILDREN, Pendlebury and Gartside-street.—The hospital contains 140 beds, including 28 for scarlet fever. The medical staff visit the hospital daily at 10 A.M. Special classes are held for clinical instruction on Saturday afternoons during the winter months. Out-patients are seen daily at 9 A.M. at the dispensary, Gartside-street, Manchester. Physicians: Drs. Ashby and Hutton. Surgeon: Mr. G. A. Wright. During 1885 there were 1220 in-patients and 9649 out-patients under treatment at the dispensary.

RADCLIFFE INFIRMARY, OXFORD.—This infirmary is open to students for Medical and Surgical work in the wards and out-patients' departments. Clinical lectures are given by the Litchfield Clinical Lecturer in Medicine and Surgery. Also tutorial instruction and demonstrations are given in special Regional Anatomy (medical and surgical), methods of Medical Diagnosis and Surgical Manipulation. The whole course of study at the museum and infirmary combined is intended for students until they have passed the Second Conjoint Examination, or the 1st Oxford M.B.

SHEFFIELD SCHOOL OF MEDICINE.—The Infirmary contains 180 beds, a Museum of Pathology, Library, and Post-mortem Theatre, with microscopes and all the appliances for clinical research. Perpetual fee for attendance on all the lectures required by the Royal College of Surgeons and the Apothecaries' Hall, £45. A tutor's fee of £2 2*s.* is required from students entering for Anatomy and Physiology.

JESSOP HOSPITAL FOR WOMEN, Gell-street, Sheffield.—Hon. Acting Medical Officers: Dr. Keeling, Mr. F. Woolhouse, Mr. R. Favell, and Mr. A. H. Laver. The hospital is devoted to Diseases peculiar to Women. There is also an Obstetric Department for the admission of a small number of cases. A staff of midwives connected with the hospital attend lying-in women at their own homes, and in case of need are assisted by the members of the medical staff. Out-patients are attended daily. Students can attend the practice of the Hospital, and be supplied with cases of midwifery. House-Surgeon: J. M. Willey. Secretary, H. B. Warner, 39, George-street.

NORTH STAFFORDSHIRE INFIRMARY, Hartshill.—The New Infirmary, opened in 1869, is built on the pavilion plan, has accommodation for over 200 patients, including children's wards, and special ovarian wards. In-patients last year, 1660; out-patients, 9299. The attendance of pupils at this infirmary is duly recognised by all the examining boards; and there are unusual facilities for acquiring a practical knowledge of the profession. Physicians and Medical Officers: Drs. J. T. Arlidge and C. Orton, and Messrs. Ashwell and J. G. West. Surgeons: Messrs. W. H. Folker, J. Alcock, and W. D. Spanton. Dental Surgeon: Mr. A. W. Whittingham. Secretary: Mr. R. Hordley, Hartshill, Stoke-on-Trent, from whom particulars as to fees &c. may be obtained.

WOLVERHAMPTON AND STAFFORDSHIRE GENERAL HOSPITAL.—Founded 1848. Beds, 224. A preparatory school of Medicine and Surgery. The pupils have the advantage of seeing the whole of the practice of the physicians and surgeons, and are trained in clinical work by the medical and surgical staff. The attendance of pupils at this hospital is recognised by all the examining boards. Operations are performed every Thursday at 11 o'clock, and practitioners are welcomed.

YORK COUNTY HOSPITAL.—Established 1740; rebuilt 1851. 116 beds. In-patients, 948; Out-patients, 6383. Consulting Physician: Dr. W. Matterson. Physicians: R. Turner, M.B., and R. Petch, M.B. Consulting Surgeon: Mr. W. D. Husband. Surgeons: Messrs. R. Hewetson, W. H. Jalland, and F. Shann. Dental Surgeon: Mr. W. Glaisby. House-Surgeon: Mr. E. F. Morris. Assistant House-Surgeon: Mr. Thomas Burt. Secretary: Mr. R. Holtby.

SCOTTISH HOSPITALS AND MEDICAL SCHOOLS.

SCHOOL OF MEDICINE, EDINBURGH.—The lectures qualify for the University of Edinburgh and the other universities; the Royal Colleges of Physicians and Surgeons of Edinburgh, London and Dublin, and the other Medical and Public Boards. In accordance with the Statutes of the University of Edinburgh, any four of the medical classes required for graduation, or two complete *anni medici*, may be attended in this school, each of which *anni medici* may be constituted by attendance on two of the six months' courses, or on one of these and two three months' courses. The regulations require that the fee for any class, taken for graduation in Edinburgh, shall be the same as that for the corresponding class in the University. The whole education required for graduation at the University of London may be taken in this school.

Fees.—For a first course of lectures, £3 5*s.*; for a second, £2 4*s.*; perpetual, £5 5*s.* To those who have already attended a first course in Edinburgh the perpetual fee is £2 4*s.* Practical Anatomy (six months' course), £3 3*s.*; course of demonstrations, £2 2*s.*; perpetual, £4 4*s.* Practical Anatomy with course of demonstrations, £4 4*s.* Practical

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Chemistry, £3 3s. Analytical Chemistry, £2 a month, £5 for three months, or £10 for six months. Practical Materia Medica, including Practical Pharmacy, Diseases of the Ear, Diseases of the Skin, Diseases of Children, and Diseases of the Tropics and Climatology, each £2 2s. Vaccination, £1 1s. For summer courses of Clinical Surgery and Clinical Medicine, each £2 4s.; Practical Anatomy, including Anatomical Demonstrations, Operative Surgery, and Practical Medicine and Medical Diagnosis, each £2 2s. Insanity, £1 1s.

EDINBURGH SCHOOL OF MEDICINE AND PHARMACY, Marshall-street, Nicolson-square.—The classes of this school will be resumed for the winter session on Oct. 19th. Chemistry, Midwifery, Surgery, and Medicine. From the Dispensary attached to this institution, Pharmacy, Practical and Theoretical, Practical Midwifery. Out-door Practice, Medical and Surgical Diagnosis. Attendance at this institution qualifies for the University of Edinburgh and all other licensing boards. Tutorial classes in all the branches of the medical curriculum. Preliminary Medical Classes, 11 A.M. to 4 P.M., and in the evening; Theoretical Chemistry, 10 to 11 A.M.; Theoretical Midwifery, Dr. C. Bell, 11 to 12 A.M.; Theoretical Pharmacy, R. Urquhart, 3 to 4 P.M.; Class for Medical Diagnosis, 2 to 3 P.M.; Class for Surgical Diagnosis, 3 to 4 P.M. Practical Midwifery and Out-door Practice at the Edinburgh Provident Dispensary, 2 to 4 P.M., under the supervision of Drs. Bell, Robertson, Wylie, Matheson, Jamieson, and Price; Practical Pharmacy, 2 to 4 and 7 to 8 P.M.; Practical and Analytical Chemistry, 9 A.M. to 5 P.M. The Pharmaceutical Section of this School will open on Oct. 4th. Particulars of R. Urquhart, Secretary.

ROYAL INFIRMARY, EDINBURGH.—Beds are set apart for clinical instruction by the professors of the University of Edinburgh. Courses of Clinical Medicine and Surgery are also given by the ordinary physicians and surgeons. Special instruction is given in the medical department on Diseases of Women, Physical Diagnosis, and on Diseases of the Skin; and in the surgical department on Diseases of the Eye, the Ear, and Larynx. Separate wards are devoted to Venereal Diseases, Diseases of Women, Diseases of the Eye, also to cases of Incidental Delirium or Insanity. Post-mortem examinations are conducted in the anatomical theatre by the pathologists, who also give practical instruction in Pathological Anatomy and Histology. The fees for hospital attendance are as follows—viz.: Perpetual ticket, in one payment, £12; annual ticket, £6 6s.; six months, £4 4s.; three months, £2 2s.; monthly, £1 2s. Separate payments amounting to £12 12s. entitle the student to a perpetual ticket. No fees are paid for any medical or surgical appointment. The appointments are as follows:—1. Resident physicians and surgeons are appointed, and live in the house free of charge. The appointment is for six months, but may be renewed at the end of that period by special recommendation. 2. Special non-resident clerks are appointed for six months. The appointment may be renewed for a like period by special recommendation. 3. Clerks and dressers are appointed by the physicians and surgeons. These appointments are open to all students and junior practitioners holding hospital tickets. 4. Assistants in the pathological department are appointed by the pathologists.

ANDERSON'S COLLEGE, GLASGOW.—The following courses are given, which qualify for all the licensing boards:—In winter: Anatomy, Chemistry, Physiology, Surgery, Medicine, Materia Medica, &c. In summer: Midwifery, Medical Jurisprudence, Botany, Hygiene, &c. The Chemical Laboratory is open daily from 10 to 5. Students of the College are admitted to the practice of the Ophthalmic Institution on payment of a matriculation fee of 5s.

Fees.—Each course of lectures (except Anatomy), first session, £2 2s.; second session, £1 1s.; afterwards free. Anatomy (including dissecting-room), first session, £4 4s.; second session, £4 4s.; third session and perpetual, £1 1s.; summer (including Practical Anatomy), £1 11s. 6d. Practical Anatomy only, £1 1s.; Osteology, £1 1s. Students who have attended classes at other schools will be admitted to such classes as they may have attended elsewhere at reduced fees. Fees for all the Lectures and Hospital Practice required of candidates for the diplomas of Physician and Surgeon, £48.

GLASGOW ROYAL INFIRMARY SCHOOL OF MEDICINE.—The winter session will open on October 26th. Courses of lectures are given on all the subjects required by the licensing bodies for qualification, and lectures and demonstrations are also given on Public Health, Practical Physiology, Operative Surgery, Aural Surgery, Dental Surgery, Diseases of the Eye, and of the Throat and Nose. During summer lectures on Insanity are given by Dr. A. Robertson, in the City Asylum under his charge.

Class Fees.—For each course, first session, £2 2s.; second session, and perpetual, £1 1s. Anatomy: First winter session, £4 4s.; summer session, £1 11s. 6d.; second winter session, £4 4s.; afterwards the fee for lectures and practical anatomy is £1 11s. 6d. per session. Lectures on Diseases of the Ear, £1 1s.; with clinique to those not students of the hospital, £2 2s. Dental Dispensary free to students of the hospital; to others, £5; first year, perpetual, £10. Lectures on the Eye, £1 1s.; other special courses free.

GLASGOW ROYAL INFIRMARY.—Number of beds, 542. In addition to the ordinary medical and surgical wards, there are separate wards for the treatment of Venereal Diseases and the Diseases of Women, whilst Diseases of the Skin, Eye, Ear, Throat, and Teeth are specially treated at the Dispensary. Courses of Clinical Medicine and Surgery are given by the physicians and surgeons; instruction in Pathological Anatomy and Histology is given by the pathologist.

Appointments.—There are four physicians' and six surgeons' assistants. These appointments are free, and can be held for twelve months; they are open to students who have passed all their examinations except the last, or to gentlemen who have a qualification in medicine or surgery. Clinical assistants, dressers, dispensary clerks, and pathological assistants are selected from the students without additional fee.

Fees for Hospital Practice and Clinical Lectures.—First year, £10 10s.; second year, £10 10s.; afterwards free. For six months, £6 6s.; three months, £4 4s. Vaccination certificates, £1 1s.

GLASGOW HOSPITAL AND DISPENSARY FOR THE DISEASES OF THE EAR, 28, Elmbank-crescent.—The hospital, which contains twelve beds for in-door patients, is always open for urgent cases. Hours of surgeons' visits, 2 P.M. daily; clinical teaching daily. Out-patients are seen on Mondays, Tuesdays, Thursdays, and Fridays, at 2 P.M., by Dr. Barr and assistants; and operations and special demonstrations to students and practitioners take place on Thursdays from 3 to 4 P.M. Adam Sutherland, 75, West Nile-street, Secretary.

GLASGOW WESTERN MEDICAL SCHOOL, University-avenue, Hillhead.—The winter session will open on October 26th. The school is situated close to the Western Infirmary, where students obtain their Hospital Practice and Clinical Lectures. To accommodate the increasing number of students, the dissecting rooms (during the vacation) have been entirely rearranged and enlarged. The attention of students is directed to the unusual facilities presented for the study of Practical Anatomy and Operative Surgery, the supply of subjects being practically unlimited. The dissecting-rooms are open for work from the beginning of October till the end of July.

The lectures qualify for the University of Glasgow in accordance with the regulations, the Faculty of Physicians and Surgeons, Glasgow, and the other corporations.

Class Fees.—For each course of lectures, first session, £2 2s.; second session, £1 1s. Students who have attended a first course elsewhere pay £1 1s. Anatomy, including Practical Anatomy, £4 4s. Summer session, £1 11s. 6d.

GLASGOW WESTERN INFIRMARY.—This hospital adjoins the University of Glasgow. Number of beds upwards of 400. Special wards are set apart for Diseases of Women and for Cutaneous Affections. In the out-patient department there are special cliniques for Diseases of Women and for Diseases of the Throat, Ear, and Teeth. The Clinical Courses are given by the Physicians and Surgeons, each of whom conducts a separate class, and students may attend whichever they select at the beginning of the session. Special instruction is given to junior students by tutors or assistants, and clinical clerks and dressers are selected from the members of the class. All the courses of clinical instruction are recognised by the University of Glasgow and the other boards in the kingdom. In the Pathological Department a systematic course is given in the winter and a practical course in the summer; these are likewise recognised by the University for graduation. Eight resident assistants are appointed annually, without salary, from those who have completed their course. The fee for the hospital practice, including the various courses of clinical instruction, is 20 guineas in one payment, or in two equal instalments for the first and second years; for six months, 7 guineas; and for three months, 4 guineas. Secretary: Henry Johnston, 125, Buchanan-street, Glasgow.

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GLASGOW HOSPITAL FOR SICK CHILDREN, situated at Garnet-hill, was opened in December, 1882, and is now available to medical students for clinical instruction in the diseases peculiar to childhood. The hospital includes 57 beds for non-infectious cases only.

GLASGOW OPHTHALMIC INSTITUTION, 126, West Regent-street.—40 beds. Clinical and systematic course of lectures for students during the winter and summer sessions.

ABERDEEN ROYAL INFIRMARY.—Contains about 250 beds. Consulting Physician: Dr. A. Harvey. Physicians: Drs. J. W. F. Smith-Shand, R. Beveridge, and Angus Fraser. Surgeons: Messrs. A. Ogston, Ogilvie, J. O. Will, and R. J. Garden. Ophthalmic Surgeon: Dr. Alex D. Davidson. Dental Surgeon: Dr. Williamson. Resident Superintendent and Apothecary: Dr. T. Collins. Treasurer and Secretary: Mr. W. Carnie.

ABERDEEN ROYAL LUNATIC ASYLUM.—Contains about 580 beds. Consulting Physician: Dr. Robert Jamieson. Clinical instruction is given to students during three months in summer.

IRISH HOSPITALS AND MEDICAL SCHOOLS.

QUEEN'S COLLEGE SCHOOL OF MEDICINE, Belfast.—Eight Junior Scholarships have been founded in the Faculty of Medicine, of the annual value of £25 each. Two are tenable by Matriculated Students, commencing the first, second, third, and fourth year of their course respectively. The Examinations for Junior Scholarships of the second and third years in the Faculty of Medicine take place at the commencement of the second and third year of their medical course. Matriculated Students in Medicine intending to compete for Medical Scholarships of the second year must be of not more than one year's standing as Students of Medicine, and must have attended, in some of the Queen's Colleges or in a University capable of granting degrees in Medicine, two at least of the following courses—viz.: Chemistry, Botany and Zoology, Anatomy and Physiology, Materia Medica and Pharmacy, Practical Chemistry, Practical Anatomy. Matriculated Students in Medicine intending to compete for Medical Scholarships of the third year must be of two years' standing and not more, and must have attended, in some of the Queen's Colleges or in a University capable of granting degrees in Medicine, four at least of the following courses—viz: Chemistry, Botany and Zoology, Anatomy and Physiology, Materia Medica and Pharmacy, Practical Chemistry, Practical Anatomy. Matriculated Students in Medicine intending to compete for Medical Scholarships of the fourth year must be of three years' standing and not more, and must, in addition to the qualifications prescribed above, have attended, in their third year, two at least of the following courses—viz.: Theory and Practice of Medicine, Theory and Practice of Surgery, Midwifery, and Diseases of Women and Children.

QUEEN'S COLLEGE SCHOOL OF MEDICINE, Cork.—The building is provided with a very large, well-ventilated dissecting room, with physiological and toxicological laboratories, materia medica, anatomical and pathological museums, as well as a room for surgical and obstetrical instruments and appliances. There are well-appointed physical and chemical laboratories, and a large natural history museum in the adjoining building, and part of the College ground is laid out as a botanical garden. The plant houses are now completed and well filled with plants, and are open to the students in the class of Botany.

Fees.—For Practical Anatomy and for Practical Chemistry, £3 each course; for Anatomy and Physiology, £3 first course, and £2 for each subsequent course. Other medical classes, £2 first course, and £1 each subsequent course. Eight scholarships (value about £30 each), as well as several exhibitions and class prizes, are awarded every year.

SIR PATRICK DUN'S HOSPITAL, Dublin (in connexion with the School of Physic).—The payment of £3 3*s.* to the hospital entitles any student to attend the clinic of the hospital for twelve months, and to attend the lectures delivered by the University Lecturer in Operative Surgery. Students who have taken out the degrees of Bachelor in Medicine and Master in Surgery in Trinity College are entitled to attend the hospital as perpetual free pupils.

Clinical Lectures are delivered in the hospital theatre at 10 o'clock on Mondays and Tuesdays. In addition to the hospital fee, the payment of a fee of £9 9*s.* is required for the privilege of attending these lectures. Total fees for hospital and lectures for twelve months, £12 12*s.*

Sir Patrick Dun's Maternity.—Total fees for college students, £3 3*s.* Total fees for externs, £6 6*s.*

THE ADELAIDE MEDICAL AND SURGICAL HOSPITALS, Peter-street, Dublin.—Fee for nine months' hospital attendance £12 12*s.*; six months', £8 8*s.* Summer, three months', £5 5*s.*

Three resident pupils are selected half-yearly. At the termination of the session, prizes in Clinical Medicine and Surgery, in Obstetric Medicine, and in Ophthalmic Surgery, will be awarded.

Hudson Scholarship.—In addition to the junior prizes, the Hudson Scholarship, £30 and a gold medal, as well as a prize of £10, together with a silver medal, will be awarded at the end of the session for proficiency in Clinical Medicine and Medical Pathology, Clinical Surgery and Surgical Pathology, Pathological Histology, Surgical Appliances, including instruments and bandaging, Ophthalmology, and Gynæcology.

The certificates of attendance are recognised by all the universities and licensing bodies in the United Kingdom.

LEDWICH SCHOOL OF SURGERY AND MEDICINE, Peter-street, Dublin (formerly original School of Anatomy, Medicine, and Surgery).—There are endowments in favour of students, subject to conditions prescribed by the founder, in the following departments:—Two in Anatomy and Physiology; two in Minute Anatomy; two in Practical Anatomy; one in Surgery. Certificates of attendance on these lectures are received by the various examining boards; by the Apothecaries' Halls of Dublin and London; by the King and Queen's College of Physicians in Ireland; by the Royal Colleges of Physicians, London and Edinburgh; by the Royal University, the Universities of Dublin, London, and Glasgow; by the Glasgow Faculty of Physicians and Surgeons; and by the Queen's University in Ireland. The Senate of the Royal University having recognised the lectures of this school, arrangements have been made to educate students for its Medical and Surgical Degrees in accordance with its requirements. This school is in a central situation, and is replete with every convenience for study and successful instruction. By its teachers it is connected with nine hospitals, four of which are Medical and Surgical hospitals, one for Fever, one for Midwifery and Diseases of Women and Children, one for Diseases of the Eye and Ear, &c.

Returns for the session 1886-7 have not been received from this school.

CARMICHAEL COLLEGE, Aungier-street, Dublin.—The following scholarships, &c., are awarded to students entering for an *annus medicus* for the current year:—The Carmichael Scholarship, value £15; the Maine Scholarship, value £15; also Lecture Prizes, value £3 and £2 each, £97 being given annually in prizes.

DR. STEEVENS'S HOSPITAL.—This hospital, containing beds for 250 patients, is situated close to the Kingsbridge Terminus of the Great Southern and Western Railway, occupying a position in the centre of one of the busiest manufacturing districts of the city, otherwise unprovided with medical institutions. Immediately adjoining is St. Patrick's (Swift's) Asylum for the Insane. The hospital is easily accessible by two lines of tramways, and owing to its position affords exceptional advantages for clinical instruction. There is a ward entirely devoted to Syphilitic Disease, a detached building for Fever cases, and an extensive Out-patient Department, with separate Clinics for Diseases of the Skin, Throat, Teeth, and those peculiar to Women.

The hospital is visited daily at 8.30 A.M. by the resident surgeon, and at 9 A.M. by the physicians and surgeons. The surgical wards are also visited each evening. Clinical Lectures are given by the physicians and surgeons during the session. There is accommodation in the hospital for two medical and six surgical resident clinical assistants, who, in addition to their rooms and furniture, are provided with coals and gas.

Fees.—Hospital Practice: Nine months, £12 12*s.*; six months, £8 8*s.*; three months, £5 5*s.* Dressership: Winter, six months, £21; summer, do., £15 15*s.*

MATER MISERICORDIÆ HOSPITAL, Dublin.—This hospital contains 230 beds, 50 beds being specially reserved for patients suffering from fever and other contagious diseases. Two Clinical Lectures will be delivered in each week, in

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addition to the daily bedside instruction. A special course of lectures on Fever will be given. A certificate of attendance upon this course, to meet the requirements of the King and Queen's College of Physicians, may be obtained. A ward has been assigned for the treatment of Ophthalmic Diseases. Opportunities are afforded for the study of Diseases of Women in the ward under the care of the Obstetric Physician, and at the dispensary held on Wednesdays and Fridays during the session. Lectures on Clinical Gynæcology will be delivered on Wednesdays. "Leonard Prizes" (Clinical): Prizes of the value of £30 will be given at the end of the winter session, in accordance with the directions contained in the will of the late Mark Leonard, Esq. Certificates of attendance upon this hospital are recognised by the Royal University and all the licensing bodies in the United Kingdom.

Fees.—Nine months, £12 12*s.*; six winter months, £8 8*s.*; three summer months, £5 5*s.*

RICHMOND, WHITWORTH, AND HARDWICKE HOSPITALS, North Brunswick-street, Dublin.—These hospitals contain 312 beds—110 for Surgical cases, 82 for Medical cases, and 120 for Fever and other epidemic diseases.

There will be a distinct course of Lectures and Clinical Instruction in Fevers. Operations are performed on Monday and Wednesday mornings, except in cases of emergency. A course of Practical Instruction in Ophthalmic Surgery will be given. Fee for the certificate, £3 3*s.*

A Resident Surgeon is appointed every alternate year, receives a salary, and holds office for two years. Eight Resident Clinical Clerks are appointed each half-year, and provided with furnished apartments, fuel, &c. These appointments are open not only to advanced students, as formerly, but also to those who are qualified in Medicine or Surgery. Dressers are selected from among the best qualified of the pupils, without the payment of additional fee.

COOMBE LYING-IN HOSPITAL, AND GUINNESS DISPENSARY FOR THE TREATMENT OF DISEASES PECULIAR TO WOMEN.—The hospital contains 65 beds, and has also a large extern maternity attached. Nearly 3000 confinements are attended annually by the pupils of the hospital. A special dispensary for diseases peculiar to women is held daily, and clinical instruction given. The certificates of the hospital are recognised by all licensing bodies, and its diploma is accepted by the Local Government Board, &c. Further particulars can be learned from the master at the hospital.

ROTUNDA HOSPITAL, Rutland-square, Dublin.—This institution consists of two distinct hospitals—namely, the Lying-in Hospital and the Auxiliary Hospital, the latter for the reception of patients suffering from Uterine and Ovarian Diseases. There is also a large extern maternity in connexion with the hospital, and a dispensary for Diseases peculiar to Women, which is open daily. Clinical instruction is given daily (Saturdays excepted), in Midwifery and he Diseases peculiar to Women, special attention being directed to the application of antiseptics in midwifery, and lectures on these subjects are delivered regularly throughout the session. Accommodation is provided for a limited number of intern pupils.

MEDICAL TEACHERS.

Dr. ABBOTT attends daily from 11 A.M. to 2 P.M. for the treatment of Stammering, Stuttering, &c.—61, Margaret-street, Cavendish-square, W.

Dr. ALTSCHUL has made Stuttering, Lisping, Falsetto, recent or of long standing, due to Nervousness, &c., irrespective of age or sex (without any mechanical appliances), his special, life-long study. The voice developed and strengthened.—9, Old Bond-street, W.; and at Brighton and Hastings.

Messrs. BAILLY and COATES prepare candidates for Matriculation, Apothecaries' Hall, College of Preceptors, and all other English, Scotch, and Irish Medical Preliminary Examinations.—30-32, Ludgate-hill, E.C.

Mr. J. BECKTON, C.M., prepares candidates for the London Matriculation, Medical and Law Preliminary, University, Local, and other Examinations. Boarders received.—41, Torrington-square, W.C.

Messrs. BOSWORTH and STERN prepare for Preliminary Medical, First B.Sc.. &c.—Kenmore, Putney, S.W.

Mr. L. BRYAN, M.A. Cantab., continues for the thirteenth year his most successful preparation of resident and non-resident students for Matriculation and the Medical Preliminaries. Students entering at any of the hospitals are taken as boarders and receive careful supervision, every home comfort, and assistance in their professional studies.—140, Gower-street, W.C.

Mr. H. CRASSWELLER, B.A., prepares candidates for Medical and Law Preliminaries and Matriculation.—12, Aberdeen-park-road, Highbury, N.

Mr. A. H. DAWES, 1st B.A. Lond., gives lessons privately, in class or by post, in preparation for the London Matriculation and Medical Preliminary Examinations.—Adderstone, Vardens-road, New Wandsworth (close to Clapham Junction Station).

Dr. EBERLE (Thirsk, Yorks.), late Principal of the Easingwold Medical College, Author of "Students' Medicine," &c. &c.—Gentlemen prepared for the Preliminary Examination in Arts of the Universities, any of the Professions and Services, also for the Primary, Pass, and Competitive Examinations. Personal and special attention directed to the assistance of Practitioners, Assistants, and others, by letter.

Mr. S. ELLIOTT, B.A. Lond., prepares for Matriculation and Degree Examinations, Law, Medical, and other Preliminaries.—Emery Hill's Hospital, Rochester-row, S.W. (near Victoria Station).

Mr. J. GIBSON, M.A., prepares candidates for the London Matriculation, and Preliminary Medical and Legal Examinations.—Quernmore, Bromley, Kent.

Mr. THOMAS LYLE, M.A., F.R.Hist.S., of the London and Dublin Universities, prepares gentlemen, resident and non-resident, for the various Preliminary Arts Examinations and Matriculation at the London University.—Grove House, Shacklewell-lane, London, N.E.

Dr. MAYBURY prepares candidates for all Medical and Science Examinations.—19, Bloomsbury-square, W.C.

Mr. PIESSE prepares candidates in Materia Medica, Botany, Pharmacy, and Chemical Physics.—Savoy House, 115, Strand, W.C.

Mr. J. W. SAUNDERS, A.P.S., G.S.T., prepares gentlemen for Examination in Anatomy, Physiology, Botany, Chemistry, Materia Medica, Pharmacy, &c.—6, Rochester-square (late Camden-road), N.W.

Mr. H. SERGEANT, B.A. Lond., holds special classes for London University Matriculation, the Preliminary Medical Examinations, &c.—8, High-street, Camden-town, N.W.

Mr. BUTLER SMITH assists pupils in reading up for the London Matriculation, and Legal, Medical, and Pharmaceutical Examinations.—Polytechnic, Regent-street, W.

Mr. H. WAITE prepares pupils for Matriculation, Preliminary Scientific, and the Examinations for Medical Registration of all the licensing bodies.—342, Strand, W.C.

Mr. F. A. WHITE, B.A., prepares candidates for Matriculation and Medical and Legal Preliminary Examinations.—92, Richmond-road, Bayswater, W.

Mr. MAURICE WILLIAMS prepares candidates for Examination in Theoretical and Practical Chemistry, Materia Medica, &c.—The City School of Chemistry, 27, Chancery-lane, W.C.

Mr. J. WOODLAND, F.L.S., F.C.S., holds classes and demonstrations in Practical and Theoretical Chemistry, Chemical Physics, Materia Medica, and Pharmacy; in the Botanical classes specimens are supplied to each student, and all apparatus is found for the Practical Chemistry course. These classes are held for candidates for the Primary L.R.C.P., L.S.A., and the M.B. degree of the different Universities, at the Central School of Chemistry.—173, Marylebone-road, N.W.

A TABULAR VIEW OF THE DAYS AND HOURS OF THE INTRODUCTORY LECTURES

To be delivered at the different Medical Schools.

	Lecturers.		Days and Hours.	
St. Bartholomew's Hospital	(No Lecture)		——	
Charing-cross Hospital	(No Lecture)		——	
St. George's Hospital	Dr. Wadham	Oct.	1st	4
Guy's Hospital	(No Lecture)		——	
King's College	Dr. G. Johnson	,,	1st	4
London Hospital	(No Lecture)		——	
St. Mary's Hospital	Mr. Malcolm Morris	,,	1st	
Middlesex Hospital	Dr. C. Y. Biss	,,	4th	3
St. Thomas's Hospital	Dr. Bristowe	,,	1st	3
University College	Mr. Barker	,,	4th	4
Westminster Hospital	Mr. Black	,,	4th	3.30
University College, Bristol	(No Lecture)		——	
Anderson's College, Glasgow	Dr. Wolfe	,,	26th	

To Correspondents.

WE tender our best thanks to those gentlemen who have kindly supplied us with the returns and prospectuses upon which the information given in this Students' Number of THE LANCET relative to the various medical examining bodies, hospitals, and medical schools of the United Kingdom is based.

The present number being principally devoted to information especially interesting to students, we are necessarily compelled to defer the publication of communications on other important subjects.

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OF THE LATE

JAMES G. WAKLEY, M.D.

THE funeral of the late Editor of THE LANCET took place on Saturday afternoon last, the 4th inst., at the Cemetery of Chobham Parish Church. For the past quarter of a century the name of Dr. James G. Wakley has been intimately associated with this Journal, and now that the last tribute of affection and esteem has been paid him, and the grave has closed over his remains in the spot that he had himself selected for their last resting-place, we feel that an affectionate record of the event should find a place in these pages. The funeral was very numerously attended by his relatives, by representatives of his editorial staff, by members of the medical profession, and by friends and sympathisers. As one approached his residence the signs of a respectful observance of the occasion were plainly discernible in the country around; but it was not until the funeral *cortège* left the house, with the coffin covered by floral wreaths and designs, followed by a long line of carriages, that any adequate notion could be realised of the respect and esteem in which he was held. All the shops and cottages along the route manifested tokens of mourning, even the public-houses being closed. The churchyard was full of country people of all ages from the parishes in its vicinity. There were old men and women, maidens and children, poor enough for the most part, but not too poor to have provided themselves with something in the shape of mourning to mark their respect for the friend and neighbour they had lost. As soon as all had passed into the little church and a brief interval was allowed for quietude, the funeral service commenced. It was conducted by the Rev. T. Stirling Coles, M.A., assisted by the Vicar of Chobham, the Hon. and Rev. H. J. Acworth, who had kindly granted permission to Mr. Coles, an old and valued friend of the late Dr. Wakley, to perform the service.

This part of the ceremony over, the body was borne to the cemetery hard by. The attendance at the grave was very large, made up, as we have said, for the most part of the villagers, among whom the late Dr. Wakley had spent so many years of his life, and to whom he had evidently endeared himself by his numerous acts of unostentatious benevolence and charity. After the sublime sentences of that service with which it is the lot of few indeed not to be acquainted, a hymn was sung, in which all present joined. We feel sure that it was just as our friend would have desired. To die amongst those we love, to be buried in the midst of scenes that were once so familiar, and to be followed to the grave by the poor, the aged, and the village children, about the sincerity of whose regret there could be no suspicion—what could be better?

The following gentlemen, amongst others, were present at the funeral:—Mr. Wakley, Mr. H. Membury Wakley, Mr. T. Wakley, jun., Mr. S. Potter, Mr. H. Sandford, Mr. Tweedy, F.R.C.S., Dr. J. A. Marston, Dr. J. G. Glover, Mr. J. G. Barford, Mr. A. J. Pepper, F.R.C.S., Dr. A. Money, Dr. T. Graham Balfour, F.R.S., Mr. Henry Power, F.R.C.S., Sir William Dalby, Dr. John Williams, Dr. Coupland, Dr. C. H. Ralfe, Mr. Henry Smith, F.R.C.S., Mr. W. H. Battle, F.R.C.S., Mr. Shirley Murphy, Mr. Wellington Lake, Mr. W. Scott Thomson, Dr. Hope, Mr. T. Stone, Mr. Braybrooke, Mr. E. Marshall, Mr. Sharp, Mr. Ralph Atkinson, Mr. J. McKee, Mr. Stanley Alder; Mr. J. J. Croft and Mr. W. H. Strange representing respectively the publishing and advertising departments of THE LANCET, and Mr. Fitzsimmons and Mr. Trotter, Mr. Hermon, and Mr. Pennet, the printing, reading, and machining departments. Mr. R. A. Owthwaite also attended, at the wish of the Lord Mayor, to represent the Council of the Metropolitan Hospital Sunday Fund. Very many wrote expressing regret at their unavoidable absence.

On the evening of the 5th inst., the Rev. T. S. Coles, M.A., taking his text from Isaiah (chap. xxx., v. 18), after some preliminary words, made the following observations relating to Dr. Wakley:—

"And now it is time for me to make some remarks about him over whom the grave closed yesterday with solemnity and honour. In many senses our departed friend may be called a public character. He was a principal founder of the London Hospital Sunday; he was Editor of the leading medical journal, THE LANCET, and, aided by his staff, he called attention to and contributed to improve the sanitary condition of several of our large towns. It is not of these, however, we now speak, but as he is personally known throughout this parish by his familiar form and acts. He was a man of quick sensibility, and gifted with wide sympathies, especially in want and distress. I have had many occasions for naming those who stood in need of help, and I never knew an instance in which he withheld succour. His ear was attent, and he had a hand 'open as day for melting charity.' His liberality, great at all times, was markedly so at Christmas, in the munificent distribution of gifts amongst all his poorer neighbours. If tears are the distillation of the heart, these will flow plentifully from many eyes in the freshness of his memory. Yet he had a higher aim, the spiritual benefit of the surrounding poor, and of others at a distance. For this end he might be frequently found in the abodes of indigence and suffering, with an open Bible and on bended knees.

"And this, we believe, was the reflex of his own mental and spiritual state. Until failing health forbade, whoever else was absent from the evening service of this church, he never was. Evangelical worship accorded with his taste and his perception of what was acceptable to God. He reverenced Holy Scripture, and he carefully excluded from the columns of his Journal whatever appeared to militate against its authority and inspiration. He became an anxious inquirer after truth. He knew that he was attacked by a fatal disease, and as the shadows of the evening of his days lengthened, his active mind became concentrated upon the realities of the eternal world. His sense of sin, with abhorrence and confession of it, deepened. His faith was simple, his humility conspicuous; his patience and resignation to the will of God was enduring, and his thoughtfulness for others unmistakable. A threefold element of his character may be summed up in an Apostle's words: 'Not slothful in business, fervent in spirit, serving the Lord.'

> 'This spirit shall return to Him
> Who gave its heavenly spark,
> Yet think not, Sun, it shall be dim
> When thou thyself art dark.
>
> 'No! It shall live again and shine
> In bliss unknown to beams of thine,
> By Him recalled to breath,
> Who captive led captivity,
> Who robbed the grave of victory,
> And took the sting from death.'

Yet the best examples will fail if they are not made practical. Referring to our text, observe that waiting is a posture, not permanent, but temporary. We wait only until the desire is accomplished or final disappointment is decisive. God is the sanctuary of His people, and to watch His eye with steadfast gaze is the best mode of sustaining the spirit in the posture of waiting. And so a voice comes to us from the grave to-day. It tells of admonition, of warning, of encouragement. May the Holy Spirit make it effectual and seal souls in this congregation, as we trust He has done for our departed brother, unto the day of redemption! Amen."

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Clinical Remarks

ON

EXCISION OF THE CONDYLE OF THE LOWER JAW FOR THE RELIEF OF MECHANICAL TRISMUS.

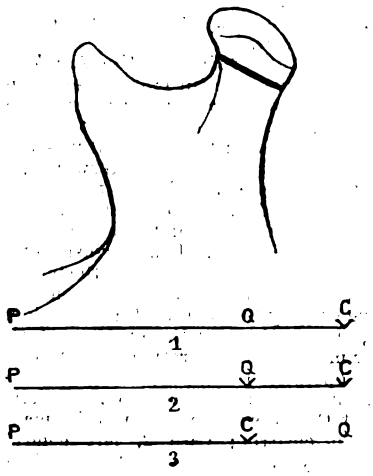
BY RICHARD DAVY, M.B., F.R.S.E.,
SURGEON TO THE WESTMINSTER HOSPITAL.

GENTLEMEN,—In 1878 I read a paper before the Association of Surgeons practising Dental Surgery on the subject of excision of the condyle of the lower jaw for trismus. I have now operated on three cases; so will relate briefly the three histories, and then point out why this operation has been performed, and with what results.

CASE 1.—Sarah C——, aged fifty, married, was admitted into Westminster Hospital on Oct. 23rd, 1878, suffering from inability to open her lower jaw by reason of fixity of the temporo-maxillary joint on the left side. In June, 1877, she was much exposed to cold, and for toothache had her left first molar extracted. In August an abscess formed, causing great deformity of her left cheek. In September the abscess burst into her mouth of its own accord, and nearly half a pint of fetid pus was discharged. The abscess cavity slowly healed, but she noticed an increasing difficulty in opening her mouth wide, some thickness of speech, and an occasional spasm of the left angle of the mouth. The trismus has steadily got worse. The patient has been married for twelve years without having been pregnant. She has been treated in St. Thomas's Hospital by a 21b. sandbag hung on to her lower jaw, but without any good result. On admission her speech was thick, and she could only pass a pin between her front teeth. The left temporo-maxillary joint was partially fixed; the right was more free. There was no facial deformity, no buccal scar, and no paralysis, but an occasional twitch of the left angle of the mouth. Sensibility was perfect; and she could forcibly contract both masseteric groups of muscles. She ate in a most inconvenient manner, being unable to masticate her food; she was compelled to push small morsels over the molar gums and then swallow them. There was no marked loss of flesh. No clear history of syphilis was given, but she has a small round tubercle by the parting of the frontal hair, and a diffused lump above the left olecranon. The diagnosis was fixity of the left temporo-maxillary joint by reason of condensed tissue around the pterygo-maxillary structures (left), and her twitch was explained by reflex action on the buccal branches of the fifth nerve. On Oct. 28th, 1878, having placed her under the influence of chloroform, by means of a screw and lever I failed to produce any increased motion of her lower jaw laterally or longitudinally. I therefore, on Nov. 6th, excised the left condyle of the lower jaw by an inch cut at right angles to the axis of its neck, nipped the neck across, and removed the condyle with the aid of a pointed lion forceps. Thus the inter-articular fibro-cartilage was left, and no injury done to the internal maxillary artery. There was trifling hæmorrhage; three of my fingers could be admitted simultaneously into the mouth, and she could protrude her tongue between her teeth on awakening. A small sponge was inserted into the wound; this was removed on the following day, and one silver stitch was applied as a compressing agent. She takes sop, and is much pleased at her regained power of eating with comfort. On Nov. 20th the wound had healed; she could speak plainly, and had masticated a quarter of a pound of mutton, after abstaining from solid flesh for eighteen months. On Dec. 8th she was busily assisting her fellow-patients to clear away the breakfast things, when suddenly blood flowed from her mouth and she dropped down dead. The post-mortem showed a large aortic and unsuspected aneurysm of the aorta, which had burst into the œsophagus. I have the skull and lower jaw on the table; and by the side of the lower jaw the condyle and neck removed by the operation I have described.

CASE 2.—Jane J——, aged nine, was admitted into Percy ward on Feb. 4th, 1879, for mechanical trismus, arising from asymmetrical development of the facial bones following scarlet fever. I removed the left condyle of her jaw on February 18th, with the immediate result of being able to open her mouth and insert my fingers. She continued to make good progress, the scar dwindling down to a slight straight line; and she was discharged from hospital on April 16th. She is growing up an interesting, though somewhat timid girl, with marked improvement in her power of speech and increasing facility of mastication.

CASE 3.—H. P——, aged forty-seven, clerk, was admitted into Mark Ward on May 9th, 1885, the subject of left trismus. About 1880 he suffered from toothache on the left side, and his teeth have never been very good. There was no history of syphilis. Fourteen months before admission his lower jaw became fixed; he could open his mouth wide enough to admit a silver fork, but no food on it. He applied for relief at Guy's Hospital and remained in for two months, but did not improve. He was recommended to come to Westminster Hospital by his employers. On admission his case was clearly one of unilateral trismus, and seemed to depend on some fixity below the zygoma and around the anterior aspect of the coronoid process of the lower jaw. Physical examination of the mouth was impossible. His breath was fetid, teeth numerous, and speech thick. He had lost flesh. As he had submitted to a most varied surgical discipline without any good result, I proposed excision of the condyle of the jaw on the left side. He readily consented, and as a preparatory measure I had his face shaved. Great was his surprise (for he had not been



shaven for sixteen years) to find immediately beneath his left malar bone a deep depressed cicatrix, of which previously he had no cognisance. On May 12th the operation was performed in the usual manner, and the condyle and part of the neck removed, also the attachment of the pterygoideus externus muscle. No difficulty was experienced, and there was no bleeding. The immediate result was that the mouth could be opened, and three fingers inserted. He was ordered as a gargle four drachms of chlorate of potash and three drachms of compound tincture of lavender, in a pint of water; and as a tonic, twenty minims of tincture of perchloride of iron, in water, three times a day. The man made an uninterrupted recovery, and left the hospital on May 30th, well able to eat and speak. The cicatrix is now being hidden by regrowth of his whiskers. On July 31st the patient was able to report good progress, the interval between the teeth being at the widest point three-quarters of an inch. On August 17th, 1886, I carefully examined him. When he opened his mouth there was found to be three-quarters of an inch between the incisors. He was free from annoyance. There was no fetor of breath, and no thickness of speech. The cicatrix was completely hidden by whiskers, and so also was the submalar one, about which we know nothing. He was able to eat half a pound of mutton for dinner, was gaining flesh, and had his old sense of well-being.

Why the operation has been performed.—A very few words will explain how miserable is the condition of a patient unable to eat or speak with comfort; how troublesome it is

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to suffer from oral and dental fetor; how alarming to watch the gradual loss of flesh and healthful vivacity. Patients will direct the surgeon as to which of the two hinges of the jaw is at fault, and in all cases make a careful and minute examination of the facial skin and buccal mucous membrane. By the aid of this diagram (see engraving, *ante*) you will notice the line marking the spot for the excision of the condyle and neck of the jaw, and also the three succeeding lines showing the varying conditions of jaw leverage. In each instance, for the act of opening the jaw, let C be the fulcrum, P the power, and Q the weight. No. 1, the position of power and weight in any normal jaw. No. 2 (lever of the second order), the position of two fulcra in these conditions of unilateral trismus. No. 3, the position of power and weight, after the operation of removal of the condyle; or, in other language, the conversion of a normal mechanism of the jaw (lever of the second order) into that of an operated case (lever of the first order). Compare Nos. 1 and 3. And now look at No 2, which, in my opinion, explains the secret of many of these unilateral trismus cases, and also at this rough model I have cut out of wood, showing the condyle of the jaw, the mouth, and the temporo-malar coronoid structures. From dental irritation, or an old abscess, or other accident, a local definite adhesion results between the coronoid process and zygomatic fossa; or between or around the plane of the pterygo-maxillary ligament, fixing the lower to the upper jaw at any point between the teeth anteriorly and the temporo-maxillary joint posteriorly. It is obvious that any attempt to depress the symphysis is negatived by the new material (disease) acting as a fulcrum (instead of a movable mass); and as the condyle naturally is the fulcrum, there are two fulcra, and until one is knocked away (the condyle) no opening of the mouth can take place.

With what results this operation has been attended.—Professor Humphry's case (in 1855) of excision of the right condyle of the lower jaw for chronic rheumatic arthritis was successful; and in a letter sent to me in November, 1878, the Professor says: "The patient was well and able to masticate comfortably some years afterwards; the operation answered the purpose well." My three cases have also mechanically succeeded. Two are alive and well; the first died of syphilitic aneurysm of the aorta immediately after enjoying a good breakfast. I show you also to-day a specimen of chronic rheumatic arthritis of the temporo-maxillary joint (left side). This specimen came from our class subject in operative surgery (session 1884); for accidentally one of my pupils, in operating for the excision of the condyle of the inferior maxilla (an operation then taught by me as a recognised operation) came across genuine disease, and secured this not common preparation. We have on the table specimens of Case 1, superior and inferior maxillæ, condyle, and resultant cicatrix; Case 2, left condyle removed; Case 3, left condyle removed; operative specimen of arthritis of the temporo-maxillary joint. Strangely enough, all my preparations are left side specimens.

One word on the *method of operating*. Take the tragus of the ear as your guide, and make a horizontal incision (not more than an inch) across and down to the neck of the jaw, so as to allow cutting strong forceps to embrace the neck; divide the neck and evulse the condyle. This act of turning out the head of the bone may be done by the bone nippers or pointed strong bone forceps. I am tempted, while on this point of turning out heads of bone, to draw your attention to a valuable plan of impacting a strong steel lever into the cylindrical substance of the bone itself; this impaction not only gives a useful leverage in turning out small pieces of bone in cramped corners, but also allows the free play of the knife around and close to the bone, without the blades of any bone forceps coming in the way of sight or blunting the edge of the knife on the blades of the forceps. The leaving of the inter-articular fibro-cartilage prevents any future bony union occurring. Coupling, then, these three cases of my own with Professor Humphry's case, I am inclined to recommend the operation of excision of the condyle of the jaw for mechanical trismus. Instead of misery and inanition, by recourse to an easy and not dangerous operation the surgeon restores freedom of speech and reopens the gateway of alimentation; no large scar results, and in adult males this scar is hidden by hair. This operation affords another example of the warrantable sacrifice of perfectly healthy parts in one locality so as to effect the well-being and happiness of the whole body.

THE PATHOLOGY OF PUERPERAL ALBUMINURIA.[1]

BY ROBERT MAGUIRE, M.D. LOND., M.R.C.P.,
PHYSICIAN TO OUT-PATIENTS, AND JOINT LECTURER ON PATHOLOGY, ST. MARY'S HOSPITAL.

THE cases of puerperal albuminuria complicated with retinitis are of great importance, as presenting a feature which links the affection, in one of its forms, more closely to albuminuria the result of organic kidney mischief; and I should be glad if the ophthalmologists could tell us whether the occurrence of retinitis in puerperal cases has any influence on the prognosis of the albuminuria. The common form of puerperal albuminuria is characterised by the fact that in the later stages of pregnancy a large quantity of albumen appears in the urine, which, after delivery, disappears in a marvellously short space of time, and the patient then resumes her usual health. Such is a common course. But sometimes the termination is more serious: uræmia in its various forms may appear during the pregnancy and labour, or after delivery the albumen may still continue to appear in the urine, and the case may lapse into one of chronic Bright's disease. It is evident, then, that in the more serious form we have to do with an organic kidney lesion. This lesion was for long considered to be a venous hyperæmia from pressure; but, as a matter of fact, this has seldom been found, and, moreover, the urine of these cases is not in all respects the same as that met with in venous hyperæmia. A lesion more commonly found is the very opposite to this—that is, anæmia of the kidney with fatty degeneration, believed to be due to reflex spasm of the renal arteries, although obviously for this view there is no sufficient basis. But knowing that such a lesion is found, let us consider the more favourable cases, and inquire, how can it be that an extensive fatty degeneration of the kidney, and, what is more, a *chronic* fatty degeneration, should clear up in so short a time after delivery and leave no trace behind? *A priori*, this seems hardly possible. Such a consideration, too, brings into one's mind those cases of functional or cyclic albuminuria which are now occupying so largely the attention of physicians, and one cannot help asking whether also, in the less grave form of puerperal albuminuria we have to deal with a merely functional derangement. In this connexion I may be permitted to refer to some observations upon which I am engaged, and which, although not yet completed, have already yielded curious results. I will not go into details, for I purpose publishing the results later on in a more complete form.[2]

The precipitate obtained by the action of nitric acid or heat upon an albuminous urine is not one simple albuminous body, but is composed of serum-albumen—possibly in several varieties, only distinguishable by their *physical* properties,—and, in addition, a substance *chemically* different from serum-albumen—that is, globulin. This may be separated from the serum-albumen by saturating the neutralised urine with sulphate of magnesium in the cold; the globulin is precipitated in a soluble (non-coagulated) form, and the serum-albumen remains in solution. I am engaged in trying to determine what is the proportion of globulin to serum-albumen in albuminous urines, and whether this ratio varies in the different varieties of kidney disease, and in the different stages and phases of the same disease. Such a research seemed likely to throw light on the intimate pathology of albuminuria, and I specially hoped to find by this means a chemical diagnosis between albumen due to organic kidney disease, and that occurring, usually in cyclic rhythm, without kidney disease. My observations are as yet too limited in number to permit me any generalisation, but their results are certainly suggestive.

In four observations upon the urine of a case which presents all the most characteristic phenomena of functional albuminuria, I have found that the precipitate with nitric acid or heat is composed entirely of globulin, not a trace, or only the very faintest trace, of serum-albumen being present. This determination may be contrasted with that of a case of

[1] Being the basis of remarks made during a discussion on a case of Albuminuric Retinitis occurring in Pregnancy at the Harveian Society of London.

[2] See also THE LANCET, June 5th.

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granular kidney, where, of the total amount of albumens, 70 per cent. was serum-albumen and 30 per cent. globulin; it may also be contrasted with that of a case of extreme general anæmia, and probably fatty degeneration of the kidney, in which, of the total amount of albumens, 30 per cent. was serum-albumen and 70 per cent. globulin. These figures are only approximations, but they will serve the present purpose equally well, with the decimals in which the determinations were worked out. In connexion with the latter case it may be mentioned that, if one may trust the clinical features, the disease was at first functional and afterwards became organic; and it will also be observed that, if the diagnosis be correct, there is here a kidney lesion, similar to that found, in one variety at least, of puerperal albuminuria.

Now, to come more directly to the point in discussion, I have examined the urine of one case of puerperal albuminuria in which the pregnancy and labour had terminated without mishap, and in which the urine, although still containing a large amount of albumen, was rapidly becoming normal. Here I found, as in the case of functional albuminuria already described, that there was an entire absence of serum-albumen and a precipitate with nitric acid and heat, which was composed entirely of globulin. Thus, if my observations be correct, and I of course admit that they must be multiplied before making any generalisation, this form, of puerperal albuminuria, which cures itself, is chemically allied to functional or cyclic albuminuria, and a strong suggestion arises that, as in the latter, so in the former, we have no organic kidney mischief. It is, from a practical point of view, highly desirable to diagnose during the progress of a pregnancy the one form associated with organic change, which will probably not recover, from the other form, in which, from what appears above, there is probably no organic change, and which will recover. Retinitis is a complication, which under other circumstances is generally found in connexion with organic change in the kidneys and serious symptoms. It is important, then, to ask if, when it occurs in puerperal albuminuria, it has the same grave significance; if the cases of puerperal albuminuria associated with retinitis invariably continue after delivery as cases of chronic Bright's disease; and if, finally, we may call this complication to our aid, possibly together with the chemical phenomena I have mentioned, in determining the prognosis of a given case. To summarise the above remarks, there is undoubtedly a form of puerperal albuminuria which is associated with an organic lesion of the kidney, and which we may call nephrogenic; but there is also another form, in which there is probably no such kidney lesion, which is probably due, as I believe, to the profound blood change of pregnancy, and which may hence be styled hæmatogenic.

Westbourne-terrace, W.

THE RATIONAL METHOD OF TREATING CATARACT PATIENTS, TO THE EXCLUSION OF COMPRESSES, BANDAGES, AND DARK ROOMS.

BY SIMEON SNELL,

OPHTHALMIC SURGEON TO THE SHEFFIELD GENERAL INFIRMARY AND TO THE INSTITUTION FOR THE BLIND; LECTURER ON OPHTHALMIC SURGERY AT THE SHEFFIELD SCHOOL OF MEDICINE.

THE title of this paper is similar to that of an article in the June number of the *American Journal of Ophthalmology* by Dr. Julian J. Chisolm, of Baltimore, and it is so expressive that I have adopted it.

The method proposed by Dr. Chisolm[1] is at variance with prevailing ideas, and marks, I believe, a revolution in our mode of treating cataract, and I would add many other cases. He asserts that all our efforts at extreme exclusion of light are both undesirable and unnecessary. The eyelid is the natural splint to the eye, and the globe covered with this allows about the same amount of light to pass into the eye as was the case before the cataract was extracted. He alludes, moreover, to the fact that while on the operating table, after removal of the opaque lens, and with a strong light on the face, there is no blinking or other evidence of suffering inconvenience from it. Further, he contends that the warm coverings over the eye and the great seclusion from light so often adopted are prime factors in the causation of the photophobia and lacrymation witnessed after cataract extraction, and in this way a means of prolonging convalescence. I have long felt this myself, and have therefore always been desirous of lessening the covering as speedily as possible. The method Dr. Chisolm advocates is to seal the eyelids with fine isinglass plaster in the manner to be mentioned presently. He records very excellent results in the sixteen cases of cataract extraction for which he had employed it; and he claims that there is less restriction for the patient with his method as to lying quiet on his back, the patient being allowed to sit up to his meals and to rise from bed when necessary, and that, as the eye is free from irritability, any covering is more quickly removed, convalescence is much more rapid, and the stay in hospital is shorter.

I am free to confess that I have seldom seen a paper that more directly appealed to me as to the justice and reasonableness of the conclusions set forth. The journal with the article in question reached me about the middle of July, and I immediately determined to adopt in practice the plan Chisolm advocated. I speak later on of the cases which have been so treated, but here I may say that the conclusion at which I have arrived from the results of those cases is such that I expect I shall be able to endorse Chisolm's words: "The revolution in the after-treatment of cataract and iridectomy patients in this hospital is complete. From this time hence, all bandages, compresses, and dark rooms will be among the things of the past, to be remembered only for the discomfort they occasioned." That is my present, and, I believe, will be my future, experience. The list of operations in which the method is applicable may, moreover, be extended, and it is useful in injuries of the conjunctiva, cornea, or sclerotic—in fact, in all wounds, operative or accidental, except those in which the discharge is likely to be free, and which would probably require a frequent change of plaster.

Passing to the operations in which I have employed it, I find a total of eighteen cases in hospital and private practice.[2] Twelve of these were operations on the crystalline lens, seven being extractions of senile cataracts, two traumatic cataracts, two removal of dislocated lenses, and one needling a soft cataract in a child. The extractions were as follow, and I take the first case as a typical one, and give it more in detail.

CASE 1.—Mrs. S——, aged sixty, a patient in the Sheffield General Infirmary, was operated upon on July 27th last. The cataract (left) was extracted by a shallow lower flap; a small iridectomy was performed, and there were no accidents attending the operation, which was done, as my practice is, in the ward, with the patient lying in her own bed. A 2 per cent. solution of cocaine, with salicylic acid, had previously been instilled. Both eyes were next sealed up with isinglass plaster in the manner to be presently referred to. The ward was not darkened, and a screen was placed round the bed more for the protection from currents of air than anything else. She made no complaint of the light. The next day everything was well; a very little secretion had exuded from the eyelids and become fixed in the plaster. She had been allowed more liberty as to moving about than is usually accorded to such patients. On the third day the eye looked well, and there was no complaint made. When the plaster was removed the patient immediately opened the eye, and bore light well; the wound had healed, and the eye was looking in every way satisfactory. The plaster was reapplied. On the fifth day the plaster was removed and a shade used over both eyes; the patient was allowed to get up. On the seventh day the patient was walking about the ward, and found no discomfort from the light. She was as well as most cases are between the second and third week. On the tenth day (August 6th) she left the infirmary, walking home unaided. In the other eye there was an incomplete cataract, and the sight was very indifferent.

CASE 2.—Male, aged sixty-one. Aug. 2nd: Extraction of old traumatic cataract.—6th: Shade used.—18th: Made out-patient.

CASE 3.—Female, aged seventy-three. Aug. 4th: Right

[1] Vide also THE LANCET, vol. ii. 1886, p. 296.

[2] Since the above was written, in ten additional cases my experience has been equally gratifying.

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eye operated on. 6th: Plaster reapplied. 9th: Shade used. 18th: Left the infirmary.

CASE 4.—Male, aged sixty-six. August 9th: Right eye operated on. 12th: Plaster renewed. 14th: Shade used. On this day he was found up and eating his dinner with the shade pushed up.

CASE 5.—Male, aged sixty-three. August 16th: Right eye operated on.

CASE 6.—Male, aged forty-eight. August 16th: Right eye operated on.

CASE 7.—Male, aged sixty-three. August 16th: Left eye operated on.

In each of the above cases a shallow flap was formed; in some an iridectomy was performed, and in others not.

CASE 8.—Male, aged fifty-seven. July 23rd: Lens dislocated forwards; extraction below; shallow corneal flap. This case did well.

CASE 9.—Male, aged sixty-five. July 26th: Lens dislocated forwards. 29th: Shade used. August 9th: Made an out-patient.

The traumatic cataract cases were the following:—

CASE 10.—Male, aged twenty-six. July 19th: Cataract extracted through a small corneal wound. 21st: Shade allowed. 22nd: Made out-patient.

CASE 11.—Male, aged twenty. Aug. 2nd: Operation same as last. 4th: Shade used. 5th: Left the infirmary.

CASE 12.—A child. Lens needled on Aug. 16th.

CASES 13, 14, and 15.—Iridectomies; two being marginal ones in cases of zonular cataract.

CASE 16.—An iridectomy in a case after cataract extraction, with closed pupil.

CASE 17.—Needling opaque capsule after cataract operation.

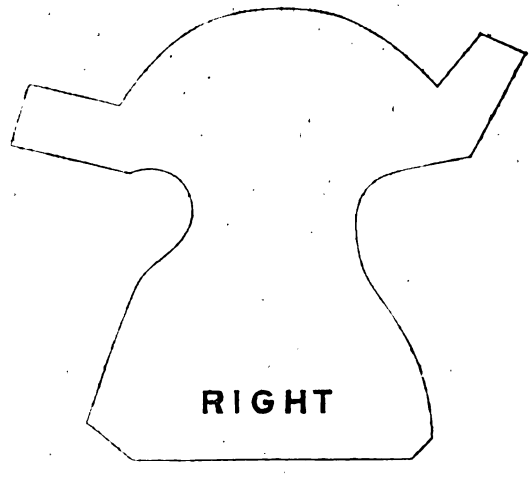
CASE 18.—Sclerotomy in a man aged about forty.

Chisolm gives the following directions as to applying the plaster. "The lid of each eye was kept closed by a piece of isinglass plaster, 2½ in. long by 1½ in. wide. The piece of plaster, made thoroughly pliant by being soaked in water, was spread over the lids from brow to cheek, and carefully adjusted by stroking it with the rubber spoon used for pressing out the lens. In a very few minutes this piece of diaphonous silk plaster was dry, and the patient was ready to walk from the operating table to his bed in the fourth storey of the hospital." He elsewhere speaks of the piece of plaster being large enough to extend from cheek to brow and from one canthus to the other.

At first I adhered to these directions, but I was led soon to vary somewhat the plan. Thus I found it undesirable, and indeed unnecessary, to place the plaster over the eyebrow, and the next step was to cut the upper edge of the plaster to the curve of the orbital margin; and the advantage suggested itself of leaving a portion on either side to project at each orbital angle. The piece on the inner side was thus obliquely upwards, and the outer one was horizontal, for fixing it to the malar bone. Then, instead of reaching from canthus to canthus, it soon appeared advisable to constrict the plaster at the point where it passed over the margins of the lids and to leave a small space at either side for drainage, and the one on the inner side for the instillation of atropine or eserine drops. The shape of the plaster may be cut for each eye, but I have had a form made in metal which indicates probably the one generally required. Any particular alteration an eye needs is easily made. The annexed woodcut indicates the shape of the plaster, the silk side being uppermost. I have had the forms cut in the metal solid, as the drawing represents, and also as a hole in a plate of metal corresponding to the shape given. This latter is perhaps more useful, as it keeps the plaster flat at the time the shape is marked out on it.

The kind of plaster is of great moment. I have experimented with several kinds of silk, muslin, cambric, gauze, &c., and the form now used is the best yet arrived at, and, indeed, answers our purpose admirably. It is silk salicylated isinglass plaster (Seabury and Johnson's). It is quite transparent; put on a book it is very easy to read printing through it. It quickly dries, readily adheres, is easily fixed in its situation, and does not tend to curl up, which is often a characteristic of such plasters. The plaster, before being applied, may with advantage be a little snipped at several places along its edge to enable it to fit more accurately, and whilst it is drying it is often advantageous to push the cheek upwards to prevent displacement by facial muscular movements. In cataract cases it is essential to seal up both eyes, and this is generally true of other cases, but occasionally I have only closed one eye and often allow the sound organ liberty before the other is permitted it. It would appear that formerly in some hands plaster was used for closing the eyes after cataract operations, but I believe in a much less complete manner than Chisolm has advocated, and the routine practice, with perhaps every operator, has long been the use of bandages and pads, which his plan numbers among the things of the past. Such a method would hardly have been feasible in the pre-cocaine days. My experience of the plan is particularly gratifying, and is, moreover, pleasing alike to my assistant and the nurses.

In conclusion, the advantages, particularly in cataract cases, of the plan Chisolm advocates over the routine method by bandages may be summed up under the following heads:—1. More comfortable to the patient, and less dread



of injury by movements. 2. Less discomfort to nurse and friends, or, in hospital, to other inmates of the ward, from less darkening of rooms. 3. Less liability to disturbance, and thus more freedom in movements permitted to patient. 4. More evenly and exactly fitting. 5. And thus allowing a more correct coaptation of wound, and, it is believed, experience will prove a more ready healing. 6. Inspection of eye is allowed without disturbance, for in this way swelling of lids or discharge are readily seen. 7. Affords a ready means of using eserine or atropine without disturbance of eye, and allows of drainage of tears, &c. 8. Absence of photophobia and lachrymation; when eye is opened, a ready examination in good light is allowed, patient being able to open eye fully. 9. Less confinement to bed, a quicker convalescence, and shorter stay in hospital.

Sheffield.

CLINICAL NOTES ON HÆMOPHILIA.

BY THOMAS OLIVER, M.D., M.R.C.P LOND.,
PHYSICIAN TO THE INFIRMARY, NEWCASTLE-UPON-TYNE; AND LECTURER ON PRACTICAL PHYSIOLOGY, UNIVERSITY OF DURHAM COLLEGE OF MEDICINE.

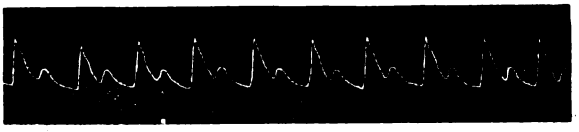
THE following cases of this interesting affection have lately come under my notice.

J. P——, aged thirty-three years, single, a groom, was admitted into the Newcastle Infirmary, complaining of bleeding from the mouth and of passing very dark-coloured urine. He told us that neither of his parents was a bleeder. An unmarried maternal uncle, however, used to bleed a great deal from the nose, and ultimately died after a vomiting of blood. A married sister of the patient has a tendency to bleed; and one of her sons, aged eight has frequently spontaneous hæmorrhages, which are with great difficulty controlled. The personal history of our patient is interesting. When but an infant in the cradle, a leech for some reason or other was applied to his side, and on that occasion, he has been told by his mother, the bleeding was with difficulty stopped. At the age of nine he was accidentally cut on the outer side of his right eye; this bled for several weeks. When he was fourteen he had a tooth extracted, and for a

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week he had the cavity plugged; as this failed to check the hæmorrhage, a cork was fitted into the cavity, and the upper teeth were kept firmly clenched upon it for two or three weeks. Two years later he was cut between the right thumb and index finger, and for a month the bleeding continued more or less. At the age of nineteen he was wounded on the head, and for fourteen days he attended as an out-patient at the infirmary before the bleeding was stopped. About this time, too, he received a small wound, not much larger than a scratch, on the right arm, which bled for several days each time the dressings were changed. He has frequently had epistaxis, and it has always been with difficulty that the bleeding has been arrested. When he was twenty he passed blood in his urine, and again at the age of thirty; also at the beginning of the present attack. Each bleeding from the kidneys lasted for about a week. There was no bleeding during the first or second dentition. He states that a sharp tap on the skin is frequently followed by ecchymosis; that a strong blow causes a large swelling, particularly if the arms, calves, outer side, and back of thighs are made the seat of it. His joints, when moved sharply and suddenly, have frequently swelled and been painful, especially the knees and elbows. The swelling will last for a fortnight, and the veins over it are seen to be distended. Beyond having had small-pox and gonorrhœa within the last few years, there is nothing calling for notice until the beginning of the present attack. Three weeks before his admission the patient had been treated for pain in his right side. The medicine taken made his gums sore and swollen. On Sunday, May 24th, he awoke at 5 A.M. with his mouth full of blood. The blood oozed from his gums. That evening he had hæmaturia, which lasted until May 28th, and on this point I would remark that within three days of the disappearance of blood from the urine that fluid failed to exhibit the least trace of albumen. On May 26th the urine was port-wine-coloured, muddy, had a dark brown deposit, was faintly acid, sp. gr. 1018, contained a large quantity of albumen, and, microscopically, a large number of free blood-cells; pulse 80. In spite of rest in bed, and medicinal treatment by iron, ergot, hamamelis, &c., blood still oozed from the gums, though in diminished quantity. The gums remained swollen, pale, and ragged at their junction with the teeth. Beyond a slight rounding of the features and pallor of face, the patient presented nothing remarkable. His heart and lungs seemed healthy. On June 16th, feeling quite well, but with a tendency for blood still to ooze now and again from the gums, he left the hospital, only to be readmitted a few weeks later for a painful swelling of the knee-joints and bleeding from the gums. Fluctuation in the joints was well marked; movement of them was painful. When the swelling subsided, he left the hospital, cautioned as to the extreme necessity of taking care of himself. Six or seven weeks after this he was in a public-house with some friends. Two of the men began to quarrel, and just as words were about to be replaced by blows, our patient, while acting the part of mediator, was thrown violently against the side of the door. He went almost immediately to the infirmary, on entering through the porch of which he made some jocular remark as to the injury he had received. He was examined by one of the house-surgeons, who, unfortunately not knowing anything of his antecedents, did not detain him. To this official he complained of pain in the right side of the chest at the seventh rib, increased on forced inspiration, and slightly, too, on pressure. There was tenderness over the right pectoral region. His face was pale, but the lips were well coloured. Respiration was short and rather hurried; pulse 64. No fractured rib was detected. Expansion of chest appeared equal on both sides. The chest was carefully examined by those present: no dulness was detected either in front or behind; breath sounds were normal over the whole chest, save over each base posteriorly, where friction was heard, and also slight crepitus at the end of inspiration. As nothing else was observed, the case was regarded as one of bruise of the thoracic walls caused by a fall. A flannel bandage was applied firmly to the chest, and the patient was sent home, being told to lie in bed for a day or two. On the following day the man died unexpectedly. By order of the coroner a post-mortem examination was made about twenty-four hours afterwards by our house-physician, Mr. Waldy, to whom I am indebted for the report: "Rigor mortis not present; skin and mucous membranes very blanched; no external bruises or marks of any kind. On the right side of the chest, over the manubrium sterni and the three upper costal cartilages, was a distinct bulging, in which no fluctuation could be felt. Reflecting the skin, the great pectoral muscle on the right side was found distended with dark fluid blood. On cutting through the costal cartilages the same dark fluid blood flowed out of the chest. The anterior mediastinum was filled with the same material. From these sources a large basinful of fluid was removed. The right pleural cavity contained about two pints of similar dark-coloured fluid, and in addition several large clots about the size of the closed hand. The left pleural cavity contained a small quantity of dark fluid and blood clot. Both pleuræ were here and there adherent to the chest wall. No ruptured vessel could be detected, and no evidence of disease was found. It is possible that some pleural adhesion may have been torn."

Scarcely had this patient passed out of sight than the following case was seen by me. J. S——, aged eighteen, an apprentice fitter in an iron foundry, a pale, sallow-looking lad, with rather a prominent brow and shape of head suggestive of previous hydrocephalus, went to the infirmary at midday complaining of toothache, and had the aching member extracted. It bled freely until 6 P.M., when he returned to the infirmary and was admitted. For forty-eight hours the bleeding continued, and that rather profusely. After that it ceased, but only temporarily, for every now and again hæmorrhage would start spontaneously from the socket. Strange, too, this bleeding generally came on at night. A few days after the extraction of the tooth the patient was so exhausted by the bleeding that he could scarcely stand. Five weeks after this he came to my out-patient department. He did not look even then as if he had recovered, nor for many weeks after. He told me that he never suffered from bleeding in his infancy. Ten years ago he was cut on the left thumb; this bled for a fortnight, and was followed by great exhaustion. With that exception he never had any severe bleeding until the extraction of the tooth. For six months prior to this, however, he had noticed that blood



in very small quantities oozed from his gums occasionally below the lower incisors. He has never spat or vomited blood, nor has he suffered from hæmaturia. The patient had two half-brothers, who bled to death; and he tells me that when they got a severe knock—and this applies also to himself—nothing would be noticed for a day or two, and then they would be laid up with "a swelling and colouring of the flesh." His joints have never swelled, nor have they been painful. So far as his chest is concerned, the respiratory murmur is healthy. The second sound of the heart is reduplicated over the apex and base, and the pulmonic is more accentuated, comparatively speaking, than the aortic. With these exceptions the sounds of the heart call for no remark. The pupils are dilated and respond to light. The pulse is 84, soft. A sphygmographic tracing shows low tension and large dicrotic wave, and bears a close resemblance to many tracings of ordinary anæmia. (See diagram.) When he had made a fair recovery he returned to work. He was only thus engaged a few weeks when he was struck on the right thigh by an iron wheel. The skin fortunately was not broken. The blow, though not severe, was followed by rapid swelling of the thigh, stiffness of the muscles, extreme pain on movement, and great discolouration of the skin. The effects of the injury were such that he was obliged to take to bed, and it was nearly a month before the swelling disappeared.

Hæmophilia is, as a rule, never detected until there is an injury. There is nothing which distinguishes the subjects of this affection from healthy people so far as outward appearances are concerned. It is true that in many a certain pallor of countenance, thinness of skin, light-blueness of eyes, and fairness of hair have been present; but these are far from being distinctive; besides the pallor is, in most of them, only noticed after a bleeding. In both of these cases the muscular system was well developed. One exhibited a marked tendency to swelling of the joints. Both suffered from ecchymosis and swelling of the skin after blows. I have not noticed in either of them a more diffused than normal impulse of the heart—a point to which Grandidier

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drew attention. In one of the cases the second sound of the heart was strongly reduplicated; and the pulse, judged of by the sphygmographic tracing, shows low arterial tension. The spontaneous hæmorrhages generally came on at night—always from mucous membranes, save in the first case, in which there was occasionally hæmaturia. Only in the first case could it be said that there existed prodromata, and when present the hæmorrhage which followed was severe, and frequently from the kidney. The blood seemed in every instance simply to ooze out of the gums, and while no bleeding points could be seen, the actual amount of blood lost in a few hours was considerable. Whatever was done, the blood kept trickling, becoming paler the longer it flowed, and exhibiting less and less a tendency to clot. I do not know whether my first patient had taken blue pill or not. The medicine supplied to him before his admission into the infirmary caused his gums to be sore. Dr. Wickham Legg states in his monograph, on the authority of Burnes, that the taking of blue pill has been followed in these subjects by profuse hæmorrhage from the gums and nose, and that these symptoms recurred again and again when the blue pill was repeated. The patient himself attributed the bleeding from the gums on this occasion to the medicine he had taken.

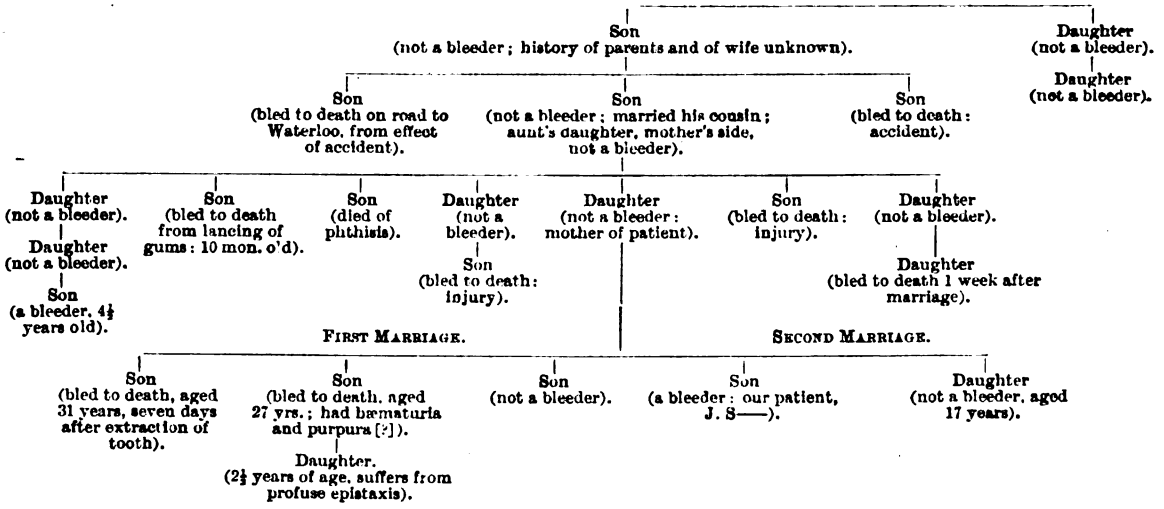
On looking over the family history of the second case, it will be noticed that one of the members died of phthisis. The association of the two diseases here is slight, but as the occurrence of phthisis in the family of bleeders has been noticed before, the relationship is interesting as lending some support to the views of Dr. Reginald Thompson, who regards the excessive bleeding met with in many cases of phthisis as an expression of the hæmorrhagic diathesis. The relationship of hæmophilia to hæmatocele and other internal bleedings naturally comes to be considered. One of the females in the history of the second case died suddenly from some internal hæmorrhage about a week after her marriage. She was well two hours before death. As there was no external hæmorrhage, ruptured hymen could not have been the cause; and in the absence of post-mortem evidence such causes as bleeding from a ruptured ovary or ulceration of mucous membrane with or without perforation can at the best only be but conjectural.

The hæmorrhagic diathesis is more the inheritance of males than females. Both of the cases here reported are males. When women suffer, they appear to do so less intensely, although by some, it is said, that in them menstruation is profuse, and that at the climacteric period there is excess of hæmorrhage. Where these conditions are present, I should regard them as in all probability dependent upon a local cause. The sister of J. S—— menstruates normally, and is strong and healthy-looking; and as for his mother, she has, neither at her menstruation, parturition, nor at the climacteric period, lost more blood than the average. (See genealogical schema.) One cannot scan the schema of the family history of S—— without being struck by the remarkable influence of heredity in the development of hæmophilia, and by the striking manner in which the disease has skipped the females, only to appear in the most marked form in the sons, and to lead in them to a fatal issue on the slightest provocation. The potency of transmission by the female—she herself exhibiting no symptom of the affection—is shown in a remarkable manner in the mother of S——, who has been twice married. Two of three sons by her first marriage have died from the effects of bleeding, and of the son and daughter by the second marriage, the son has already been the subject of dangerous bleeding. The resemblance in this to the hereditary transmission of gout receives support from my case. So far as any connexion with scrofula is concerned, I see no indication unless the prominent forehead, the somewhat hydrocephalic shape of the skull generally, and the pallor and fineness of the skin of S—— may be taken as pointing in that direction. It is believed that hæmophilia is much more frequently met with in Germany than elsewhere, and as close intermarriage with relatives is there so little discouraged, it has been thought by Rieken that the marriage of cousins has something to do with its development. Two generations back, and in the lineal descent of J. S——, we meet with the marriage of first cousins; but while neither of these was a bleeder, it will be observed that two of the brothers on the male side died from hæmorrhage. The marriage of first cousins in this instance, however, had nothing whatever to do with the development of the disease.

In my first case the only prodromon noticed was pain in the back, and this always preceded hæmaturia. Most hæmophiliacs, however, suffer from a general sense of plethora for some time before a spontaneous bleeding occurs. They become in many instances too stout, and the face and lips become so highly coloured that it seems as if they must bleed. The mother of S—— tells me that in the case of the two sons whom she has lost plethora always preceded a spontaneous bleeding, and that in them the blood always came from the gums. When once bleeding has begun in these cases, not only is it difficult to check it, but when checked it is apt to come from other sources. In the case of the eldest son of Mrs. S——, whose death was due to hæmorrhage after the extraction of a tooth, no sooner was the bleeding stopped in the mouth than the most profuse epistaxis occurred, death supervening in his case on the seventh day. Profound exhaustion follows each bleeding. The urine in each of my cases, excluding the period of hæmaturia in P——, was normal. In the case of S—— the urine, examined several weeks after the last hæmorrhage, showed a diminution in the amount of urea eliminated daily. There was on an average only 218·5 grains eliminated daily—less than half the normal. A similar diminution was noticed by Grandidier, and is alluded to by Wickham Legg.

The second patient complained that his vision was imperfect. I sent him to Mr. Williamson, ophthalmic surgeon to our infirmary, for examination, who favoured me with the following report:—"Refraction myopic; both discs slightly swollen with large veins, crescent commencing at edge of each; choroid thinned from stretching; yellow spot seen in right eye with unusual distinctness. These

GENEALOGICAL SCHEMA (FAMILY OF S——).



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appearances are all accounted for by the gradual stretching and straining of a myopic eye."

I am inclined to regard cases of uncontrollable hæmorrhage from the cord in newly born children as instances of hæmophilia. It is true that in most of these cases one may fail to obtain a history of heredity; but is heredity, after all, absolutely required to constitute the disease? In most cases it is present, and forms a valuable point in the diagnosis, but whether really essential is another thing. Take the following case, which happened in the practice of a medical friend a few months ago:—A child is born at full time; it is plump, healthy-looking, and cries lustily. The cord is carefully tied and separated, and the child is given to the nurse. Before leaving the room the doctor has his attention drawn to the fact that the child is bleeding at the umbilicus. The cord is carefully examined, but exhibits nothing unusual. An additional ligature is placed around it and firmly secured. A few hours after this the nurse examines the child, and, finding its under-garments soaked with blood, the doctor is again sent for. Additional ligatures and hæmostatics are applied, but they are as nothing. The child dies from bleeding by the cord, unable to be checked. If the disease here is not hæmophilia, it must be something closely akin to it.

So far as the pathology of the disease is concerned, I believe the state of the blood and bloodvessels and a defective control-action on the part of the vaso-motor centres are the important factors in its causation. When the bleeding first commences there is a slight attempt at clotting, but it is never complete, and the longer the blood trickles the paler and more watery it becomes. To the plausible theory of Resal, that the subjects of hæmophilia possess an increased power of making blood, and that in them hæmorrhages occur amongst those capillaries which are thinnest, I cannot subscribe. My experience is that while plethora precedes the spontaneous hæmorrhages, hæmophiliacs recover extremely slowly from them. Such people feel exhausted for weeks it may be, and their pallor is long maintained. It seems to me that they have best health when pale. That a blood condition acts in some way or another as a cause we must admit, judging from the effects produced in other diseases where the blood is altered. In purpura and scurvy hæmorrhages are frequent; in some forms of anæmia and in certain diseases of the spleen a tendency to bleed is frequently noticed. I have known internal hæmorrhage in leukæmia prove fatal, and in a case of mitral stenosis and regurgitation in an anæmic young lady I have seen the incision of a gumboil followed by an alarmingly persistent hæmorrhage; the oozing lasting for days, in spite of plugging and strapping the jaws. In these cases of uncontrollable hæmorrhage, in which there is no hereditary history of bleeding, I am inclined to think that we have the thin-walled condition of the bloodvessels and the watery state of the blood met with in hæmophilia, and that it only requires the other factor, an inactive vaso-motor centre, to complete it.[1] In favour of the blood condition as a cause I would submit this, since I have noticed it again and again: Once the blood has undergone the marked alterations met with in leukæmia, it will be found that injuries which had been received years before the illness began bled but normally, and were easily restrained; but that slighter injuries received during the illness are followed by hæmorrhages slightly excessive and difficult to check. The healthy stimulus to the vaso-motor centre is healthy blood: alter the blood, and you either have its function increased, as in Bright's disease, or lowered, as, I believe, in hæmophilia. Everybody regards hæmophilia as most distinctly hereditary, and what does that mean? I take it to mean that during intra-uterine life the development of the cardio-vascular system is in some way or other interfered with, owing to the transmission of some ancestral peculiarity, the result of which is that not only is the blood itself altered and the tubes which carry it, but the nerve centres, which in later days regulate the distribution of the blood (states of dilatation and contraction of the arteries, the movements of the heart, and which must be therefore all closely associated together in their development), never reach a state of perfection. Complete control over the arteries and capillaries is therefore never the function of the vaso-motor centre in hæmophilia, and that this is the case is shown by the sphygmographic tracings. There is low arterial tension. Hence, when bleeding occurs the arteries do not contract sufficiently upon their contents owing to a want of proper impulses from the vaso-motor centre. I know not why the gums are the most usual seat of hæmorrhage in these cases unless it depend upon the rich vascular supply of their mucous membrane and the scanty support to the walls of the vessels—membranes, too, which are exposed to variations of atmospheric pressure and to all kinds of injury received during mastication.

Newcastle-on-Tyne.

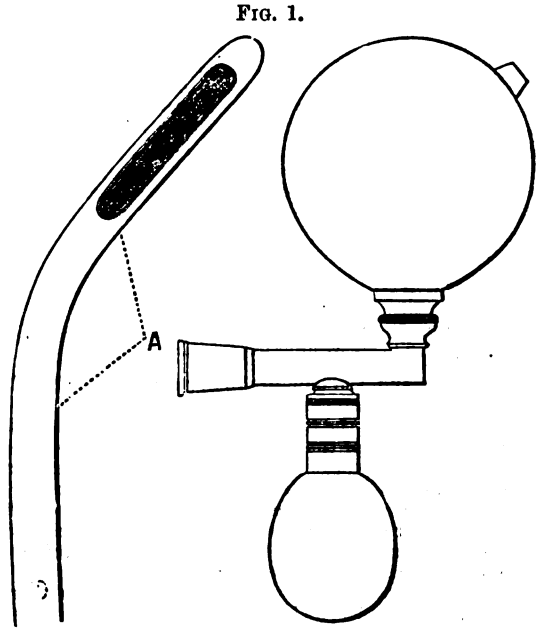
[1] On microscopical examination, I find the muscular fibres of the heart of P—— smaller than those of a man of his age, but healthy. The aorta was thinner than it should be, but on minute examination it is found to be quite healthy.

SUCTION OF THE MALE URETERS.

BY E. HURRY FENWICK, F.R.C.S.,
ASSISTANT-SURGEON TO THE LONDON HOSPITAL; SURGEON AND PATHOLOGIST TO ST. PETER'S HOSPITAL.

BEFORE we attempt to excise a kidney, it is obviously of the highest importance to ascertain the existence and the working capacity of its fellow gland. Upon the capacity of the latter to bear the double burden depends the advisability of the proposed nephrectomy. Now, the stress resistance of a kidney can only be accurately gauged by a rigid examination of its secretion; and further, that secretion must be obtained directly from the fountain head; it must not be contaminated by the admixture of urine flowing from its diseased companion. The problem of obtaining urine direct from either of the *male* ureters without such admixture—for Hegar, Grünfeld, Newman, Pawlik, and Warnots have shown how readily the *female* ureters may be isolated and catheterised—is as difficult as it is important. The labour expended upon the question is as yet unproductive, for the instruments, operations, and suggestions of Tuchmann, Silbermann, Ebermann, Weir, Sands, Glück, Harrison, and others are lacking—some in simplicity, some in safety, most in success. The instrument I would submit to the profession carries out, though perhaps indifferently, what I believe to be the only feasible method for engaging and tapping the male ureters. I have had it for two years, and have proved it to be simple, easy of application, but not infallible. The principle of its action is a slight suction force which is exerted upon the ureteral orifice by means of a catheter and a small indiarubber ball. This is, I believe, an exaggerated imitation of that aspiration which the normal bladder itself exerts upon the ureters.

FIG. 1.



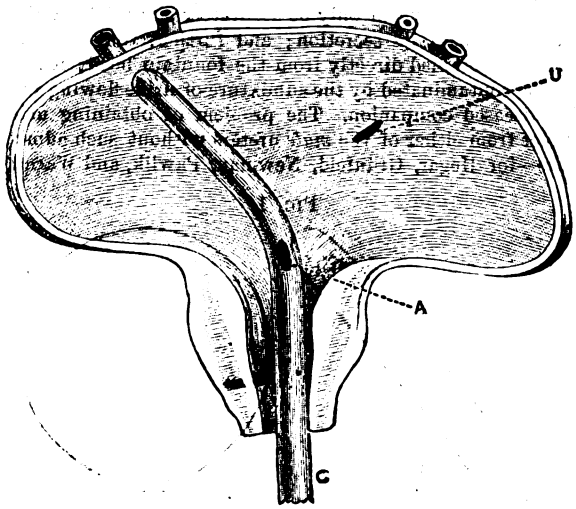
Right-sided aspirating catheter with lateral eye; end piece, to which elastic ball and glass bottle are affixed. A, the measured angle.

It will be found that the normal bladder, unless it be in

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cholera, never thoroughly contracts. Moreover, the smooth muscle wall sluggishly relaxes after its expulsive effort is over. This relaxation, at the same time that it produces a partial vacuum, diminishes the sphincteric contraction of the ureteral orifices, and any urine which may have collected in those passages is partially propelled by the *vis a tergo* of the circular muscle of the ureters and partially sucked by gravity and this negative pressure into the bladder. The aspirator consists of a small elastic ball and an oval glass bottle (see Fig. 1), which can be affixed to the end of a specially curved catheter, which latter is furnished with an elongated laterally placed eye. There are two catheters, one for each ureter. The bladder is first emptied and the catheter introduced. When it has fully entered, it is steadied and rotated over at the same time by the finger and the thumb, to the right or the left side according as the right or left ureter has to be engaged. The laterally placed eye will now be exactly over the ureteral orifice, for the angle A (Fig. 1) is the same as the normal angle which the outer side of the trigone builds with the long axis of the urethra. Fig. 2 shows the instrument in place. Pressure of the right hand upon the elastic ball empties it of its air, and its stem is then affixed to the end

FIG. 2.



C, Right-sided aspirator in position. U, Left ureteral orifice. A, Opening to receive urine from ureter.

of the catheter and the ball gradually released. The air in the catheter is correspondingly exhausted and the ureteral orifice is sucked into the eye, where it can be maintained by careful management of the ball, or by gentle counter-pressure of the finger in the rectum. In ten minutes sufficient urine will have collected in the catheter—for it rarely enters the glass bottle—to admit of an examination. I have lately had this catheter double channelled, so that the urine from the disengaged ureter may enter and drain off through the orifice A (Fig. 2) into a different receptacle.

I have said that it is not infallible. Sometimes there is but one ureteral orifice, as in a case I showed at the Pathological Society (1885-86). I found the ureters in another case (Path. Soc., 1886) much displaced by the action of circum-ureteral tubercular inflammation. Sometimes small bunches of villoid or other growth in the region of the ureters (three cases, Path. Soc., 1886) prevent close application of the eye and mislead by tinging the secretion with blood. A 20 per cent. solution of cocaine renders this slight operation painless. I have used the instrument in differential diagnosis of the site of symptomless hæmaturia, also in withdrawing scraps of growth from the trigone, and in performing an operation upon the kidney, the details of which I hope shortly to publish. The instrument can be obtained from Mayer and Meltzer, 71, Great Portland-street.

George-street, Hanover-square.

A CENTENARIAN.—On the 8th inst., at the meeting of the North Dublin guardians, Dr. Kenny, M.P., reported the death of an inmate of the workhouse at the age of 105 years. He was a sailor at the time of the Irish rebellion of 1798, and smoked tobacco up to the day of his death.

A NEW METHOD OF

REMOVAL OF THE ENTIRE TONGUE BY MEANS OF THE GALVANIC (OR SIMPLE WIRE) ECRASEUR AND SCISSORS.

BY FERDINAND ALBERT PURCELL, M.D., M.CH.,
SURGEON TO THE CANCER HOSPITAL.

IN my lecture given at the Cancer Hospital on Jan. 29th I demonstrated a new method for the removal of the entire tongue and floor of the mouth—applicable for removal of one-half of the organ if necessary—and presented a series of four cases operated on last year. I have christened it the "supra-hyo-glosso-epiglottidean method," which name anatomically describes the operation. The necessity for seeking for another mode for removal of part or the whole of the tongue is not that I have relinquished operating by the Whitehead or scissors method, combined with or without the preliminary tying of the linguals, or of performing first tracheotomy with the use of Trendelenburg's apparatus as used by Mr. Barker and Professor Kocher of Bern,—but that, in my experience, it may be in exceptional cases, in operating on the tongue, especially by the scissors or Whitehead method, bleeding has been the factor most difficult to combat, and its consequent result—namely, "surgical pneumonia." "Nothing is new under the sun," as the old saying goes; nor is it so in this, for Mr. Barwell so long ago as 1879[1] described his method, of which mine is the offspring; and recently I was much struck by a paper on a "Method of Controlling Bleeding during Complete or Partial Excision of Tongue" by Mr. Jordan Lloyd, of Queen's Hospital, Birmingham,[2] in which he applies steps of my method for the controlling of bleeding from the linguals.

With this factor the bleeding—it is of great importance that operations should be made easy for ordinary surgeons, and as bloodless as possible for patients whose powers have been weakened by pain, from deficient nutriment arising from difficulty of mastication and salivation, and anxiety, and who, after a severe operation, and having to submit to an absence of solid food, can be expected to bear well the loss of blood. My experience of my "supra-hyo-glosso-epiglottidean method" reduces our trouble from this source without any blood loss whatever, and by which is secured a very thorough removal of the tongue, together with the floor of the mouth and all structures down to the hyoid bone. I would recommend the surgeon, as Mr. Jordan Lloyd suggests, before attempting this procedure "to familiarise himself with the glosso-epiglottidean pouch, by palpation with an index finger introduced into its deepest part and another placed outside between the hyoid bone and the under surface of the angle and rami of the lower jaw; this anyone can try on himself; it is surprising how little tissue intervenes between the fingers, and how distinctly the various structures in relation to this space can be identified." It is necessary after removal of the tongue to have the cavity kept well drained by means of an indiarubber drain through the supra-hyoid opening, the parts dusted inside with iodoform, and the patient fed through an œsophageal tube.

The patient having been anæsthetised, first make an incision in the neck about a quarter of an inch long in the middle line from the hyoid bone forward, only skin deep; then pass a whipcord ligature through the raphé of the tongue an inch behind its tip, to hold the organ by; gag the mouth open; introduce the left index finger well to the bottom of the glosso-epiglottidean pouch, back of root of tongue. It may be necessary at this stage, so as to make room to get well round the base of the tongue, to snip with scissors the palato-glossi muscles—viz., the anterior pillars of the fauces, as also the stylo-glossi muscles of both sides; these may require pressure-forceps to be employed, as generally some small vessels may bleed; these can be taken off when wanted out of the way. Now take, say, Wood's hernia curved needle on handle, being stout, long, and well curved, threaded with medium-sized whipcord; or the needle in place of the thread may carry the platinum wire if the surgeon intends using the galvanic écraseur. Hold the needle in the right hand horizontally, its concavity turned

[1] THE LANCET, April 18th, 1879. [2] Ibid., Jan. 23rd, 1886.

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upwards and towards the neck, enter its point at the submental incision immediately above the hyoid bone, pass it through the raphé of the mylo-hyoid, the genio-hyoid, and the lower fibres of the genio-hyo-glossi muscles, and direct it to the right side, forming the sweep of a half circle; now feel for the point of the needle with the left finger as the needle is pushed through so as to enter the bottom of the side of the right glosso-epiglottidean pouch above the great cornu, hook up the loop of thread, or it may be the platinum wire, with the left finger, pull it well through and out of the mouth, and withdraw the needle; do the same on the opposite side, for which it will be necessary to change the position of the hands, holding the needle in the left and placing the right index finger in the left side; a loop will in this way be lodged in the pouch at either side; thread each loop with the platinum wire, making a hook of wire by bending its end on itself; draw on both sides, so that the ends of the wire are brought out at the supra-hyoid incision, make even and detach the loops; the centre of the wire now forms a loop and rests on the base of the tongue. Before proceeding further, remove the pressure-forceps from off the cut anterior pillars of the fauces; take the same curved needle (Wood's), unarmed this time, and enter it again at the supra-hyoid incision in a vertical manner, its concavity directed towards you; feel for the point of the needle with the left finger as it is pushed through the centre of the root of the tongue and in front of the epiglottis; guard the point by means of a piece of cork, here the needle remains to act as a guide for the wire to travel behind; lodge the wire behind the guide and draw it taut, complete its connexions, and work the écraseur—the tongue is severed through its root in a well-defined vertical plane; withdraw the guide-needle. Secondly, free with scissors the anterior and lateral attachments of the tongue and floor of the mouth, release the organ and withdraw it through the lips. No hæmorrhage, as a rule, occurs; but if the battery or the écraseur should be worked too quickly and bleeding does take place, a sponge on a stick pressed into the furrow and following the wire will be found sufficient to restrain it; the linguals are included and cut through by the wire, and if they should so happen to spurt, they can be secured by pressure-forceps on the stump and tied. The ordinary simple écraseur, either single wire or twisted whipcord, may be substituted in place of the galvanic. The entire tongue may be removed as described, or the one half if so desired, by scoring the dorsum of the tongue with a blunt-pointed scalpel exactly in the middle line, and dividing the tip freely down and through the middle line of the frænum; then take both threads (one having been previously passed through each tip), one in each hand, and, using the forefingers much in the same way that one would for tightening a ligature on a deep vessel, split the tongue in two halves, and free the diseased half with scissors.

CASE 1. John M——, aged sixty-two, from Hampstead Union, was admitted into the Cancer Hospital, Ellis ward, on July 29th, 1885, under my care. Three years ago he first noticed a small ulcer at the base of the tongue, which was very painful. Has been a slight smoker. Has no history of phthisis or of syphilis. State on admission: Situate at the base of the tongue, and on the right of the median line, is an irregular excavated surface with indurated edges, its base covered with a slough. The whole extent of the ulcer cannot be fully determined; it extends as far back as the root. He cannot endure the finger to be inserted in his mouth. No enlarged glands are to be felt. He suffers great tenderness on the affected side; is unable to eat; dribbles saliva; feels weak, and is feeble and broken down; has an old ulcer on his leg. The patient was placed on the operating table on Aug. 1st. The hyo-glosso-epiglottidean operation by means of the galvanic écraseur and scissors, as described, was performed; the tongue was severed at its base, behind the anterior pillars, in a well-defined vertical plane. The action of the heated wire at first was too rapid, for it had not worked very long before some blood welled up. A stick sponge was pressed in the furrow following the wire, which restrained all bleeding; this was afterwards found to have come from a small superficial vessel immediately under the mucous membrane; the linguals gave no trouble. The mouth presented a deep excavated cavity; entire floor removed. A drainage-tube of good size was passed up through the opening in the neck, and the parts were dusted with iodoform. After twenty-four hours he was fed by means of the œsophageal tube. By the end of the month he was quite healed.

CASE 2. James W——, aged sixty-five, from St. George's Workhouse, was admitted into the Wolrige ward of the Cancer Hospital on Aug. 7th, 1885, under the care of Mr. F. B. Jessett. After operation he was attended by myself, my colleague having gone on his holiday. No history of cancer or of phthisis. Has had no serious illness. Became totally blind eleven years back. About nine months ago a pimple the size of a pea appeared on the left side of the tongue; this increased slowly. On admission there was on the left side of the tongue an ulcerated spot which could be covered with a two-shilling piece. Although it was irregular in outline, the edges of the ulcer were hard and the base uneven, being covered by unhealthy granulations. Situate beneath the extreme angle of the ramus of the right jaw a gland was enlarged, and another beneath the jaw on the left. On Aug. 11th the operation for entire removal of the tongue by the method described by means of the galvanic écraseur and scissors was performed. The gland on the left side was removed by an incision, and the wound sutured and sealed with styptic collodium. The gland of the right side was fished out of the floor of the mouth by the finger. The linguals spurted, but were seized in pressure-forceps and tied. Little blood was lost. A drainage-tube was passed up through the opening in the neck. The patient made a good recovery.

CASE 3.—Joseph R——, aged sixty, married (from Caerphilly, Cardiff), was admitted into the Cancer Hospital, Ellis ward, on Aug. 22nd, 1885, under my care. There was no history of phthisis or of syphilis. He never suffered from any serious illness. Has been a heavy smoker. His father had epethelioma of the lip; his mother died of old age. About nine weeks ago he first noticed that his tongue was being irritated by the teeth, two of which he had removed. The tongue, however, got worse, and rapidly ulcerated. The pain was severe, and he was greatly worried by continual dribbling of saliva. On admission, the tongue was fixed at the left side; ulceration, with induration extending back to the root, engaging anterior pillar and neighbouring soft palate; glands to be felt below mastoid process; emaciation; unable to masticate any food; was suffering great pain. On Aug. 29th I performed the hyo-glosso-epiglottidean operation, using the wire écraseur (instead of the galvanic) and scissors. The patient breathed badly under the anæsthetic. When about one-third through the tongue, the forcible constriction apparently closed the rima glottidis and caused asphyxia. The écraseur was not worked while artificial respiration was being performed. The patient looked bad, but had a capital pulse at the time. I proceeded to perform tracheotomy, and had made the incision, when the patient took in an inspiration, and a second, on which I desisted. I again worked the écraseur, pressing it upwards in place of pulling on the instrument; this being completed, the wire guide was removed, the anterior and lateral attachments were cut with scissors, and the tongue, released, was withdrawn. The lingual on the left side, having spurted, was seized and tied. The specimen was examined; it was found that the disease was not all removed. Using Paquelin's cautery, the parts were freely burnt, including the surface of the jaw-bone, as also the anterior pillar of the fauces and neighbouring soft palate; this worked away the structures to a much lower level on the diseased side, and by removing a piece somewhat larger than a walnut a clear view into the pharynx was obtained. A drainage-tube was then passed through the opening in the neck, and the parts dusted with iodoform. The patient made a good recovery.

CASE 4.—Joseph S——, aged forty-seven, married (from St. Paul's-road, Bristol), a sailor, was admitted into the Cancer Hospital on Aug. 25th, 1885, under my care. The right side of the tongue was ulcerated; induration and fixation of the organ on the same side; remains of a recent incision; glands enlarged on left side. No history of cancer or phthisis; always enjoyed good health; is a heavy smoker; usual stimulant is rum. About seven months ago he first noticed a small warty growth at the base of the tongue; this shortly afterwards disappeared. Then a lump came on the right side of the neck, the tongue became painful at the right side, and a white streak appeared. He was at the time on the coast of Africa, and was advised by his doctor to go home. He returned to Bristol and was admitted into the Bristol General Hospital, when the small growth was removed from the side of the tongue on April 2nd, 1885. After operation he suffered great pain, and on Aug. 11th the gustatory nerve was cut. State on admission: A strong healthy man.

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Opposite the first molar tooth on the right side is a fissure extending as far as the median line; beneath surface ulcerated; organ bound down to floor of mouth; one or two glands enlarged below jaw. On Sept. 1st I performed this operation with the galvanic écraseur and scissors, severing the tongue close up to the epiglottis. One lingual spurted, and was tied. Where the tongue had been adherent on the right side, the parts were freely burnt with Paquelin's cautery, a drainage-tube passed up and the parts dusted with iodoform. He was fed during the night with nutrient enemata; next morning by means of the œsophageal tube. — Sept. 7th: Temperature 101°; some pneumonic râles; was delirious during the night.—22nd: Has passed through an attack of pneumonia; dulness still of the right side; inserted a hypodermic syringe needle into the right pleura, withdrew only a drop or two of pale fluid.—24th: Situate on the right side of the floor of the mouth there is a recurrent growth of the size of a hazel-nut.—Oct. 2nd: Had a copious discharge of purulent sputa; great fetor of breath; evidently an abscess of the lung has burst.—3rd: Had a rigor this morning; temperature 102·6°; right side of the chest fuller than the left. To inhale iodine vapour.

The patient eventually recovered. I had him again anæsthetised, and with Paquelin's cautery freely cauterised the floor of the mouth, destroying the recurrent growth. He afterwards made a good recovery, and left the hospital about Christmas. My patient replied to a query that appeared in *Tit Bits* as follows:—"Sir,—*Re* question 1926 of Nov. 21st, 1885, it may be interesting to your readers to know it is quite possible to talk without a tongue. The writer has not a particle of tongue remaining, as it was removed recently at this hospital on account of cancer. I may add I still retain a sense of taste and enjoy a capital appetite. I shall be pleased to answer any further questions on this matter, and if you think fit to publish this you are quite at liberty.—Yours, &c., Captain S——, Wolrige ward, Cancer Hospital, S.W."

PARALYSIS DEPENDING UPON IDEA.

BY C. W. SUCKLING, M.D. LOND., M.R.C.P.,
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IN the *Birmingham Medical Review* for June, 1885, I published an account of a boy who had suffered from paralysis of one leg for two years, and whom I was able to cure immediately after making the diagnosis of paralysis depending upon idea. Since then I have met with three other cases, two of which were men. In one case there was complete anæsthesia of the hand; in another hemi-analgesia with localised and severe headache. In the four cases I have now seen, an accident occasioning slight injury was the exciting cause in each. All four cases were rapidly cured. Dr. Russell Reynolds, I believe, first described paralysis depending upon imagination. There is no malingering in these cases, but the patients are firmly convinced that they are suffering from paralysis. If the confidence of the patient be gained, an immediate recovery follows when he is told that he will be well immediately, the idea being got rid of. In making the diagnosis it is important to bear in mind the two classes of people in whom functional nervous disorders are met with—the neurotic and the hysterical; the features of which have been so graphically described by Dr. Clifford Allbutt in the Gulstonian Lectures for 1884. It is the neurotic that is apt to be affected by these paralyses depending upon idea, and it is these cases that are instantly cured when the diagnosis is made. The hysterical patient is cured with difficulty and frequently relapses; the neurotic does not relapse. The neurotic individual is vivacious, good-tempered, unselfish, intelligent, active and industrious, anxious to be cured, and grateful for recovery. The hysterical individual is listless, apathetic, lazy, selfish, with characteristic expression, not usually anxious to get well or thankful for recovery. The following is the fourth of these cases of paralysis depending upon idea that I have met with during the last twelve months.

Sarah F——, a widow, aged forty-six, was sent to the Queen's Hospital, to be admitted under my care, by Dr. Middleton, of Harborne, on the 15th of March last, and was discharged well on March 28th. She has led a very industrious life, having supported her five children by needlework since her husband's death ten years ago. On Oct. 9th, 1885, she tumbled downstairs, falling down twenty-one steps on to her back. She was much hurt and "dazed" and very much frightened, thinking every bone in her body was broken. She walked about after the accident for a day or two, but suffered from pains in the back, down the legs, and round the body; these pains were intermittent, very severe, and lasted altogether three weeks. Two days after the accident she took to her bed, and a day or two later found that she was paralysed in both her legs and had lost all feeling in them. Since the accident she had suffered from constant headache and backache. Upon examining her I found that she had a little power over the legs, but very little. Slight ankle-clonus could be elicited on the left side. The plantar and abdominal reflexes were lost, but the knee-jerk was well-marked. There was complete analgesia and thermal anæsthesia in both legs up to the knees. She was unable to localise tactile sensations below the knees, the anæsthesia not being complete. When touched with a sharp-pointed instrument she said she felt as if she were being pushed. Muscular sense was unaffected. There was superficial tenderness over the lower dorsal spines, but no pain on firm pressure or on percussion, and no irregularity of the spine. The bladder and rectum were unaffected, and I was informed by Dr. Middleton that she never lost control over the bladder, nor had any sign of bedsore during her illness. There was no œdema of the legs, no alteration of temperature, and no change in the colour or aspect of the skin or nails. In fact, there were absolutely no trophic changes whatever. The response of the muscles to faradisation of their nerves was normal, but there was considerable electrical anæsthesia. In summing up the symptoms present, I of course observed their incongruity if we supposed the case to be one of myelitis, or, in fact, as due to any organic lesion. If the anæsthesia were due to actual lesion of the grey matter, how could the bladder and rectum escape? How was it that there was no sign of bedsore, no œdema, or other trophic change, such as muscular wasting? I diagnosed the case immediately as being purely functional, and, the woman being of the neurotic type, as paraplegia depending upon idea. I at once acted upon this diagnosis, and told the patient that I should give her the battery, which I said would at once remove the loss of sensation and enable her to move her legs as well as she ever did. She was delighted to hear this, and after a minute's faradisation sensation was completely restored, and she had full command over her legs. I then told her that on my next visit I should expect to see her walking about the ward, for I was sure that she would be able to do so. I instructed Mr. Whittendale, my house-physician, to see that she got up after I left, and to apply the faradaic current whenever she displayed any hesitancy. On my next visit, two days later, I found her up and able to walk and run about the ward perfectly well. She was quite delighted at her recovery, and had been most industrious with her needle since getting up. She expressed deep gratitude, and hoped to be able to repay our kindness. I may add that I saw my patient on the 14th of the present month (September), and she was remaining quite well.

How was the cure effected in this case? Undoubtedly, I think, it was by the mental state of faith or expectation, or both, on the patient's part. She fully believed what I told her, and thus I was able to remove the idea she had that she was paralysed. The essential thing, then, in these cases is to make a correct diagnosis, and then the patients can safely and with success be told that they will quickly recover. Now, had this been a hysterical woman, I should in all probability have failed to cure her, or, at any rate, the cure would have been more tedious. I recently had a woman under my care suffering from locomotor ataxy with hysterical anæsthesia. For two years I did all I could to cure the anæsthesia, and failed; but when she left the infirmary she applied leeches to her legs and returned with the anæsthesia gone. Isolation, so useful in hysterical cases, is not needed in these.

In the same ward with my case of ideal paralysis there was a young woman suffering from hysterical neuralgia, and the contrast between the two patients was very marked. The hysterical woman was listless and apathetic, did not manifest any desire to be cured, and would scarcely allow that she was any better than when admitted. When told that she was well enough to go back to her duties as a

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teacher, she seemed disappointed, and said that she did not intend to begin work again for some months. The neurotic woman, on the contrary, wanted to leave the hospital immediately she could walk. The hysterical woman was observed to be always sitting opposite the neurotic woman, contemplating her with her hands idly folded in her lap, watching the other busily working.

Such cases as these illustrate the enormous influence of the mind over the body. It is with these cases that the so-called faith-healers work pretended miracles. What an opportunity for a faith-healer my case would have afforded! Just as the mind has an enormous influence in causing disorders of sensation, of motion, and also of the organic functions, so also its influence can be used as a practical remedy in disease. As Dr. Wilks has well observed, "the practice of medicine is not only one of physic, but of psychology also."

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

LONDON HOSPITAL.

A CASE OF HÆMOPHILIA; PEDIGREE THROUGH FIVE GENERATIONS.

(Under the care of Mr. FREDERICK TREVES.)

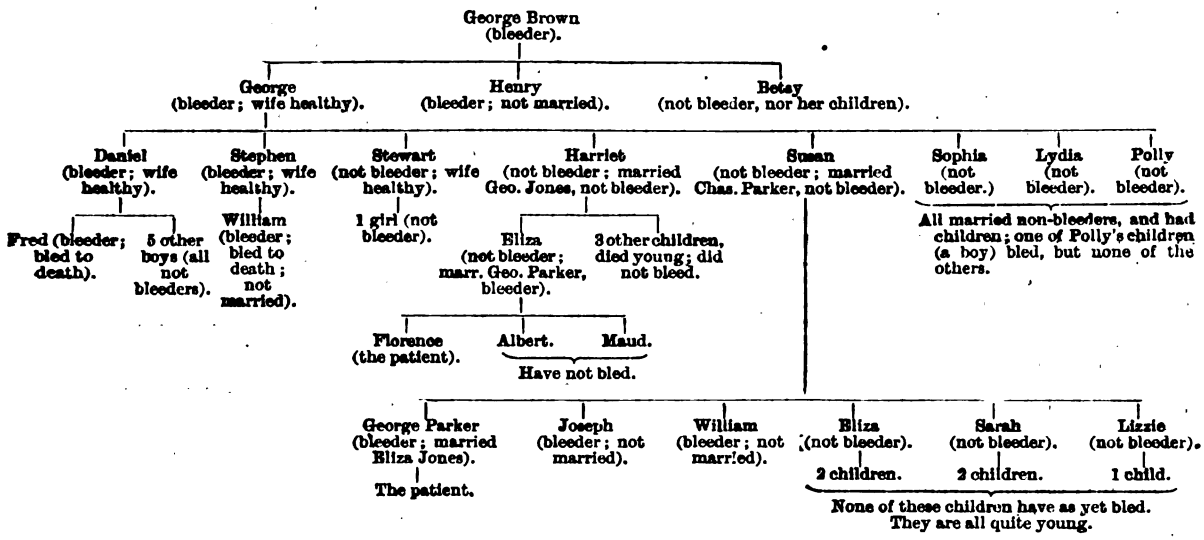
THIS case of hæmophilia is interesting, as Mr. Treves remarks, from the sex, and from the clear account of the pedigree of the patient which is appended, and which shows so well the transmission of the disease from parent to children. It is seldom that the most assiduous search can trace the family history of any case so far back, especially when the patient comes from the rank of life to which this girl belongs.

Florence P——, aged six, was admitted on January 26th, 1886, under the care of Mr. Treves, for obstinate bleeding from the mouth. On Jan. 24th the right second molar of the lower jaw had been extracted. Within an hour and a half after the operation the socket began to bleed; there was little or no bleeding at the time of the extraction. The socket was plugged and the hæmorrhage was checked for some twelve hours. It recurred, but ceased after a second plugging. There was no bleeding for the next twenty-four hours. It then reappeared, and all means adopted to check it failed. The hæmorrhage had been considerable; large clots of blood had formed in the mouth and had been removed from time to time. On admission the patient was perfectly blanched and in a dangerously exhausted condition, a little watery blood still oozing from the mouth. The child was well developed and of fair complexion, the eyes being blue and the hair very light; the skin was singularly smooth and delicate; the teeth were well formed. The child had always enjoyed good health. No enlarged glands had been felt in any part. The extremities had been always of normal temperature. The patient did not complain unduly of cold, and had never had chilblains. She had never bled before, nor had unusual ecchymoses followed casual contusions. She was not an excitable child, and appeared to be in perfect health when the bleeding commenced. The tooth was extracted entire and without difficulty. The father and mother were first cousins. They were natives of Essex, and in that county the family had resided for many generations. Both parents enjoyed good health. The father had suffered from three attacks of bleeding, and each time had nearly lost his life. On the first occasion there had been a cut on the thumb, on the second a cut of the index finger, and on the third a tooth had been extracted. The parents were members of a well-known "bleeder" family. There were two other children besides the present patient. They were infants, and had never bled.

The socket of the tooth was very carefully plugged with ferrated cotton-wool. Ergotine and gallic acid were administered. The child bled slightly on three occasions between Jan. 26th and Jan. 31st, the hæmorrhage each time being arrested by plugging with ferrated cotton-wool. The child left the hospital on Feb. 8th, no blood having been lost for eight days, and no plug having been used for that length of time. She was still very weak and anæmic, and was taking a preparation of iron.

Remarks by Mr. TREVES.—Three cases of hæmophilia have come under my care in the hospital during twelve months. The present example is the most noteworthy, inasmuch as the patient was a female, and a very complete history of her family was provided by her mother and grandmother. The researches of Grandidier, Wachsmuth, Wickham Legg, and others have served to display the remarkable heredity of this disease and the still more remarkable manner in which it is transmitted. It is known that the affection cumulates in certain families—the so-called bleeder families; and statistics show that there are nearly three bleeders to every family affected. The disease, moreover, is thirteen times more common in males than in females. It has been clearly proved that it is transmitted not so much by the bleeders themselves as by their non-bleeder brothers and sisters. The extraordinary fruitfulness of the latter has often been marked. Wachsmuth states that the average number of legitimate births in bleeder circles is nearly double the ordinary average. In the transmission of the disease the preponderance of the maternal

PEDIGREE OF THE FAMILY OF FLORENCE P——.



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influence is very conspicuous. It may be almost said that the females hand down the disease, while the males are the victims of it. Grandidier has formulated the following points in this connexion:—1. Males in bleeder families who are themselves bleeders do not as a rule beget bleeder children by women who belong to non-bleeder families; in fact, the children in this case are usually healthy. On the other hand, the children of women who are themselves bleeders are quite uniformly subjects of hæmophilia. 2. Males in bleeder families who are not bleeders almost never beget bleeder children by women from other families. On the other hand, among the children of women who belong to bleeder families without being themselves bleeders, there are almost always some who suffer from hæmophilia. The family history of the present patient affords an interesting comment upon these statements. (In the Table the actual Christian names have been preserved, while the surnames are fictitious.) It will be seen how the females of the family were free from the disease, while nearly all the males were subjects of it. So far as the pedigree extends no female had hæmophilia until two first cousins married. The present patient was their eldest child. It will be seen also that in several instances male bleeders who married healthy wives had children who were the subjects of this disease; while, on the other hand, by no means all the children of the females of the bleeder family exhibited the phenomena of hæmophilia. (See pedigree.)

ST. MARY'S HOSPITAL, MANCHESTER.

CASE OF ALBUMINURIA DURING PREGNANCY; INDUCTION OF PREMATURE LABOUR; RECOVERY.

(Under the care of Dr. C. J. CULLINGWORTH.)

For the notes of the following case we are indebted to Dr. Archibald Donald, house-surgeon and resident assistant obstetric surgeon.

E. M——, aged twenty-six, a cheerful, intelligent, well-nourished young woman, pregnant for the first time, was admitted into the hospital, March 5th, 1886, suffering from extensive anasarca. She had been married about ten months, and had last menstruated on Aug. 20th, 1885. The fundus uteri reached to an inch above the umbilicus; the fœtal heart sounds and uterine souffle were both audible. The first symptoms of swelling were noticed in the feet six weeks previous to her admission. Within a few days from that time the swelling had become very marked over the whole body, the face, hands, trunk, and legs being all implicated. It was not until a few days before her admission that she observed the urine to be scanty and high-coloured. She had not felt fœtal movements, and was, in fact, not aware that she was pregnant. Her health before this illness had been uninterruptedly good.

On admission, there was very considerable œdema of the whole surface of the body; the eyelids were greatly swollen, as well as the trunk, and all the extremities. There was also evidence of a considerable amount of ascites. The urine was brownish-red in colour, acid in reaction, of sp. gr. 1020, and became almost solid on the addition of nitric acid. In the sediment were found blood-corpuscles, tube-casts (hyaline and blood), and renal epithelium. A consultation was held, and it was decided, before adopting means to cut short the pregnancy, to try the effect of rest in bed and medicinal treatment. Accordingly, hydragogue cathartics were administered, and hot-air baths. Subsequently nitrate of pilocarpine, in doses of one-third of a grain, was injected subcutaneously once a day for three days. As this had no effect whatever, the liquid extract of jaborandi was given by the mouth, with an equally disappointing result. Indeed, of all the means that were tried, dry cupping over the loins and over the bases of the lungs, was the only one that was followed by even temporary benefit. The anasarca meanwhile increased, and œdema of the lungs set in, with great dyspnœa, and a most harassing and constant cough. The patient was unable to lie down night or day, and became so weak that the urine was from time to time expelled involuntarily. The skin was very dry. The temperature did not rise much above 100°.

On March 16th (eleven days after admission), matters had become so urgent that Dr. Cullingworth gave directions for premature labour to be induced without further delay. Accordingly, at 9.30 P.M., a gum-elastic bougie was passed to the extent of about six inches into the uterus. Pains commenced at 2 A.M. on the 17th; at 6 A.M. they had become severe; at 7 A.M. there was an attack of hæmorrhage, one or two large clots accompanying it; a few minutes later the membranes were ruptured spontaneously (the os uteri being nearly fully dilated); and at 7.40 A.M. a living fœtus of apparently between six and seven months was expelled naturally. The placenta not having come away in due time, expression was tried, but without success. The hand was accordingly introduced, and it was then found that the placenta was partially adherent to the posterior wall of the uterus, just above the internal os. After detaching and removing the placenta, the uterus was injected with hot carbolised water. The amount of hæmorrhage during the third stage of labour was considerable. In the evening the dyspnœa and cough were very troublesome, and the patient was very restless. This condition lasted for several days. During the two days following confinement 160 oz. of urine were drawn off. (The average daily quantity a few days before labour was 25 oz.) The anasarca now became speedily diminished. On March 23rd, the patient's general condition was much improved, the dyspnœa having quite disappeared and the cough being much better. The amount of albumen in the urine was now reduced to one-sixth; the daily quantity of urine was about 68 oz., and the specific gravity about 1010. The colour was light yellow; no casts were discoverable. From this time convalescence was established very rapidly. On April 10th the last trace of albumen had disappeared from the urine, and on the 17th the patient was discharged well. The child only survived its birth about thirty hours.

Remarks by Dr. CULLINGWORTH.—There are several points of interest in this case. 1. It affords a striking illustration of the fact, already well known, that very pronounced albuminuria may exist during pregnancy without eclampsia. The urine here was loaded with albumen, and the œdema was intense; yet not only were there no convulsions before labour, but (what is more important) none were excited by the manipulations necessary for inducing premature labour. How far we have to thank the exceptionally cheerful and placid disposition of the patient for this immunity I cannot say. It is quite possible that the absence of anything like extreme previous irritability was the one fortunate circumstance that saved the patient from convulsions. 2. It is to be noted how completely all palliative measures failed so long as the pregnancy continued. I was particularly struck with the utter uselessness of pilocarpine in this case. The beneficial results obtained from its administration in puerperal eclampsia by Horrocks[1] and Murphy[2] naturally encouraged the hope that equally satisfactory effects would follow its use in uncomplicated cases of the acute albuminuria of pregnancy. The case here recorded seemed to afford an excellent opportunity for teaching how far such a hope is likely to be realised. Three injections of a freshly-made solution, obtained specially for the purpose, were administered in doses of one-third of a grain at intervals of about twenty-four hours. No appreciable effect followed. The result seems also to show that further evidence is necessary before Dr. Horrocks's statement as to the ecbolic action of pilocarpine can be accepted. 3. The prompt recovery of the patient as soon as the uterus was relieved of its contents (notwithstanding the loss of blood occasioned by the faulty position and adhesion of the placenta) points to the induction of premature labour as the proper and hopeful treatment in severe cases, where other and less radical measures have been fairly tried and found useless.

[1] See THE LANCET, June 13th, 1885, and April 3rd, 1886.
[2] Ib., May 29th, 1886.

LIVERPOOL HOSPITAL SUNDAY FUND.—At the meeting of the committee of this fund held last week it was reported that the total amount for disposal was £9250, as against £8880 last year. It was unanimously resolved to hold over for further consideration a grant to the Hospital for Women in Shaw-street, but amongst the awards granted were the following:—Royal Infirmary, £2312 10s.; Royal Southern Hospital, £1387 10s.; Northern Hospital, £1202 10s.; The Dispensaries, £647 10s.; Infirmary for Children, £555; Stanley Hospital, £462 10s.; Eye and Ear Infirmary, £462 10s.; Hospital for Consumption, £277 10s.; St. Paul's Eye and Ear Hospital, £138 15s.; Hospital for Cancer and Skin Diseases, £92 10s.; Netherfield Institution for Infectious Diseases, £92 10s.; Dental Hospital, £23 2s. 6d.; St. George's Hospital for Skin Diseases, £23 2s. 6d.

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Reviews and Notices of Books.

On Cancer of the Mouth, Tongue, and Alimentary Tract: their Pathology, Symptoms, Diagnosis, and Treatment. By FREDERICK BOWREMAN JESSETT, F.R.C.S., Surgeon to the Cancer Hospital, Brompton. With numerous illustrations. London: J. and A. Churchill. 1886.

THE aim of this book has been to discuss our present knowledge and views of the treatment of cancer of the mouth, tongue, and alimentary canal. The author states that he knows "of no separate work or monograph which treats specially on this very important subject"; and he adduces this fact as the ground of his choice of a subject for his monograph. To many people it will appear to be a strong reason why such a book was not particularly called for. We can well conceive the value of a treatise on cancer in general in which the peculiar pathological and clinical features of this dread disease are discussed. We can also appreciate the advantage of monographs devoted to the affections of particular organs. But we know of no reason why a book should be devoted to the consideration of one particular disease as it affects such a series of organs as Mr. Jessett has chosen, especially when no attempt is made to show any leading pathological or clinical features common to the whole. But, after all, the book is before us, and we are more concerned with what Mr. Jessett has written than why he has written it. Some of the most important surgical diseases are embraced in the author's group, and any careful discussion of the diagnosis and treatment of cancer of the tongue and rectum or of the best modes of dealing with malignant stricture of the pylorus and œsophagus must be of interest to surgeons. We find a table of over fifty cases of cancer of the tongue submitted to operation, and another of sixty cases of gastrostomy for cancer of the œsophagus, which have been collected from various sources. These are good features of the book, as are the statistics culled from the note-books of the Cancer Hospital. But having said this, we are afraid we cannot add that Mr. Jessett has added materially to our knowledge of the diseases about which he has written. He leaves us a little uncertain as to his opinion on the much-discussed question of the local or constitutional nature of cancer. Thus on page 86 we read in respect to cancer of the tongue: "I, however, regard the disease as a local affection, so far as it does not, or very rarely, attack any other organ in the body; and I therefore consider, if the disease is removed early enough and thoroughly, there is little chance of its returning in the site of the cicatrix." And on page 90 we read: "I believe it to be a constitutional (I use the word in its widest sense) and not a purely local disease."

Some novel and important views in reference to tubercular ulceration of the tongue are advanced, first as to the mode of origin of this disease, and then as to its relation to epithelioma. Mr. Jessett states that a tubercular ulcer on the tongue is always secondary to deposits of tubercle in the lungs, and in this he is in accord with other observers. But he goes on to suggest that "the ulcer is originally a simple one, and becomes tubercular by being inoculated by the bacilli in the sputum which is continually being ejected from the lungs." And on the very same page we read: "The ulcer commences in the submucous tissue, usually as a smooth, hard nodule"—a statement directly opposed to the former view, and indicating that the ulcer is formed by the disintegration of a tubercular nodule.

Of more consequence is the assertion that "tubercular ulcers are very liable to take on a malignant character." This opinion is strongly expressed (p. 70), and upon it is founded the advice to excise obstinate tubercular ulcers. "I would therefore, in cases of tubercular ulcer, unless it speedily heals under treatment, strongly recommend its early removal." Mr. Jessett does not offer any evidence in support of this view, and he does not give his readers the facts which have led him to form his strong opinion. In the absence of such evidence he has taken upon himself a very grave responsibility in urging the excision of tubercular ulcers. Indeed, the reasonableness of this advice is hard to perceive, especially from the author's standpoint. For he insists, first of all, that such patients are always the subjects of pulmonary tubercle, and that the ulcers on the tongue begin as simple ulcers and are then infected. If so, the excision of a tubercular ulcer must leave behind a simple ulcer which is constantly exposed to infection from tubercular sputa. On all grounds, therefore, we hold that such a statement as this should not have been made without distinct and even strong evidence to support it.

Among the means of relieving the pain in cancer of the tongue, division of the gustatory nerve is of course mentioned, but we are surprised that Mr. Jessett does not refer to the ease with which the nerve can be found where it lies along the under side of the tongue; one great advantage that operation upon the nerve here has over Hilton's and Moore's methods is the fact that a considerable length of the nerve can be excised.

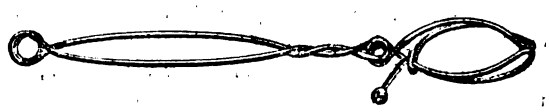
How to Foretell the Weather with the Pocket Spectroscope. By F. W. CORY, M.R.C.S., F.R. Met. Soc., &c. London: Chatto and Windus.

METEOROLOGICAL SCIENCE, which until a few years back had but few votaries, has recently given signs of vigorous life, and the daily weather forecasts are now probably as diligently scanned as the quotations of the money market. There is more satisfaction, however, in making weather observations for oneself, and Mr. Cory, in the *brochure* under notice, describes lucidly and minutely how such observations may be made with the hygro-spectroscope, an instrument the use of which, the author believes, will mark the commencement of "a fresh branch of meteorology that will eventually supply the missing link in forecasting, annihilate its difficulties, and bring to our knowledge facts about the upper regions of the atmosphere that were never dreamt of in our philosophy." The spectroscope, however, it must be stated, is not extolled as an infallible indicator of the kind of weather in the near future, but only as a valuable adjunct to other means of forecasting. In the rush of modern daily life, when arrangements for business or pleasure have to be made to fit in with seasons of routine work, the advantage of being able to anticipate with some degree of certainty the sort of weather approaching cannot be doubted, and this power the little work of Mr. Cory's will go far to put within the reach of those who will take the trouble to master its contents.

New Inventions.

NEW SPONGE-HOLDER AND DRESSING FORCEPS.

THIS simple instrument (which has been designed by Dr. J. Ward Cousins) will be found very useful in many surgical operations. It is made of twisted wire, and the grip of the blades is sufficient for holding securely sponges



of various sizes and pledgets of cotton-wool. By pressing the thumb on the spring the points are relaxed, so that the material can be charged with great facility. It is manufactured in several sizes by Messrs. Maw, Son, and Thompson.

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THE LANCET.

LONDON: SATURDAY, SEPTEMBER 18, 1886.

Two gentlemen are specially entitled to the thanks of the country for their speeches on the motion of Mr. ARTHUR O'CONNOR for withholding £16,500 of the grant of £445,956 for the Local Government Board. The £16,500 is the sum given to vaccination officers. In the estimation of this gentleman it is the mainstay of an immoral, stupid, and cruel system, inflicting immense physical suffering on great numbers of persons and the greatest amount of mental anguish on parents. The two gentlemen to whom the country is so much indebted are Mr. ARTHUR O'CONNOR himself on the one hand, and the President of the Local Government Board, Mr. RITCHIE, on the other. Mr. ARTHUR O'CONNOR, by his exaggeration of language, error of reasoning, absurd abuse of the medical profession, and utter want of sense of proportion in regard to human ills, was kind enough to do service to the cause of vaccination and common sense, albeit, as he tells us himself, he is the son of a physician, and has other relations with a profession whose greatest achievement he is so incapable of appreciating. Let us take one specimen of his statements and his reasoning:—"This vote makes it the interest of hundreds of thousands of educated and refined men to sanction and maintain, and almost to insist upon, the systematic prosecution, fine, imprisonment, &c., of parents, &c." What importance can attach to the words of a speaker who can condense so much error into a sentence as there is in this? Hundreds of thousands of educated and refined men demoralised by £16,000! Let us analyse this nonsense. Probably about one medical man in twenty is a vaccination officer. The nineteen are deprived by the system denounced by Mr. ARTHUR O'CONNOR of the chance of public payment for vaccination; more than this, they are deprived of cases of small-pox, which are far more lucrative to the medical profession than cases of vaccination. Then, to crown all, there are no hundreds of thousands in the profession, but only 25,000 in the three divisions of the United Kingdom. We beg to assure Mr. ARTHUR O'CONNOR that the medical profession is not so easily demoralised. It is only fair to say that several members of Mr. O'CONNOR'S own party in Parliament disclaimed his views. Mr. RITCHIE is as much to be thanked for showing the strength of the case for vaccination as Mr. O'CONNOR is for exhibiting the weakness of it and of those who oppose it. The former gentleman made an admirable statement. The demonstration that but for vaccination 12,000 more children would have died of small-pox in a given year than did die of it was crushing. The champions of vaccination can afford to allow an occasional death from faulty vaccination, though that is so rare an occurrence that men who have been nearly half a century in practice have not seen it. The system of rewards for vaccination has for its object the prevention of such accidents, and the encouragement of the most effective and perfect vaccination. The facts about the case of the great city of Philadelphia come opportunely to hand at this moment. There has not been a single case of small-pox in that city. The control of the disease is due to the use of what Mr. ARTHUR O'CONNOR is pleased to call the "filthy rite" of vaccination. It is stated, says *The Times*, quoting a Philadelphia paper, that if the "health officer of the city receives in his morning mail news of a suspected case of small-pox, he at once sends word to the vaccine physician of the district to visit the suspected house and neighbourhood, and vaccinate all who are not evidently well protected by this operation against the disease. The agents of the board are at once despatched to thoroughly disinfect the suspected premises, and to insist upon their being placed in proper sanitary condition. Later in the day the proper officer is sent to investigate the nature of the case reported. The result is that, whether the case be small-pox or not, vaccination and disinfection are secured." Mr. ARTHUR O'CONNOR, in spite of his exhaustive investigation of the subject, will perhaps be surprised to learn that the enlightened people of Leicester, whom he holds up to admiration, are protected in the same way as those of Philadelphia. The "filthy rite" saves the city. Any case of small-pox occurring in Leicester is immediately reported (see THE LANCET of June 5th), and all the powers of JENNER and vaccination are immediately brought to bear on all exposed persons. All the staff of officials—officers of health, nurses, and sanitary inspectors—surrounding the case are protected by the "filthy rite" doubly performed—that is, they are *revaccinated*. And but for this protection, "dispraised" by Mr. ARTHUR O'CONNOR—"no small praise,"—the plague would spread in Leicester as elsewhere. There is something almost mean in withholding these facts if they are known; and the gentleman who does not know them has no right to take up the time of the House of Commons in September, or any other month, in arguing for or against vaccination. To the credit of the House, Mr. O'CONNOR'S motion was negatived without a division. If any member of the House has still any doubt on the economy of the vote, let him consider the cost of an epidemic of small-pox to any town, the paupers that it makes, and the misery that it entails.

THE recent meeting at Birmingham of the British Association was, both in the scientific and social sense, a great success. The great midlands town spared no labour and no expense, and the inhabitants vied with one another in hospitality to the visitors. Many important papers, accompanied with an unusually small proportion of rubbish, were communicated to the sections, and discussed in a fairly satisfactory manner, considering the limits of time. All the presidential addresses were valuable, even those which were most speculative in their character. Modern inaugural addresses seem to divide themselves mainly into those which present summaries of recent progress, and those which sketch out promising lines for future work. The discussion of details, even details of the highest importance, belongs more properly to the work of the sections, or to the societies which deal with separate branches of science. The latter kind of address is probably the most useful "for the advancement of science," for abstracts of recent discovery can be

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compiled by anybody, whereas it takes a master to guide others forward.

We have said that all the presidential addresses were good, and several of them were highly speculative, but there was one, that of Mr. CROOKES, in the Chemical Section, which was more important and more interesting than all the others. It was, indeed, a contribution to science which can never be forgotten, and which is not improbably destined to stand permanently as a landmark in scientific history; for in it there was for the first time presented a well-based, intelligible, and coherent hypothesis to account for the genesis of chemical elements, and so for the existence of matter as we know matter. As hypothesis it was put forward and must remain until further discovery dethrones it or raises it to the rank of a theory. Listening to it was listening to the first chapter of Genesis, the dim record of a time "when the earth was without form and void." For it dealt with antiquity, compared with which the earliest geological records are modern history, and afforded scope for scientific thought in a region in which dreams only had before been possible. We came face to face with the primordial matter, the "protyle," to adopt Mr. CROOKES's happy coinage, from which the chemical elements have developed and are still elsewhere in space developing, and found ourselves furnished with a scheme of evolution which gives a rational though hypothetical explanation of many facts which had long tantalized us by being at once simple and incomprehensible. To say that we have solved the enigma of physical existence would of course be absurd. Given the ultimate particles of "protyle" from which elements are generated as compounds are from elements, and we are still no nearer to the infinitely small—are still, indeed, at an infinite distance from it. Infinite space, as infinite time, defies us, and each particle of Mr. CROOKES's "protyle" is perhaps a universe to particles still smaller. But it is much to find our empire of thought and study so greatly extended, and still more to find that rich mines of discovery seem to await us in the new territory.

It is all but impossible in the space allotted to us to give even an outline of the new apocalypse of chemistry which Mr. CROOKES's generalisations, based partly on the discoveries of others and partly on his own elaborate scientific work, present to us, and we can but hope that every man who loves science will study the address for himself. But a few remarks will not be out of place, and may serve to indicate the lines of research which seem opening to chemical science.

The conception of a single element—that is, of a simple matter analogous to the protoplasm of the physiologist—is by no means new to science. It is indeed difficult for the mind to rest satisfied with the idea of an apparently capricious number—say seventy—of elemental forms of matter, some being abundant and some exceedingly scarce which limit creation and are primordially different. But they had to be recognised as elements, and their combining weights, called for hypothetical reasons atomic weights, have been ascertained with greater or less accuracy by the expenditure of an almost incredible amount of human skill and labour. The atomic weights are very diverse, and at first appeared to have no relation to one another. The hypothesis of PROUT, in the early days of exact chemistry, suggested that they were all multiples in whole numbers of the atomic weight of hydrogen. This hypothesis has been a battle-field for chemists. STAS demolished it, but subsequent researches have thrown doubt even upon the position of STAS, that most laborious of chemists. Then it was perceived that numerical relationships, too close to be accidental, existed among the atomic weights; that, for example, the atomic weight of sodium was the mean of those of lithium and potassium—elements which resembled it closely. Other elements, such as nickel and cobalt, which were very similar in chemical character, were found to have almost exactly the same atomic weight; while sulphur, the compounds of which had many points of analogy with oxygen, had exactly twice its atomic weight. Then in 1863 came the important observation of NEWLANDS, which has since proved so pregnant with discovery, that the atomic weights, starting from lithium, formed octaves, or series of seven, in which the eighth resembled the first. This periodic law was extended by MENDELJEFF, whose name is often, but most unfairly, affixed to it; and it is from this law that CROOKES's generalisations started. Adopting but modifying a graphic table recently suggested by Professor EMERSON REYNOLDS, Mr. CROOKES showed that a vibratory or pendulum-like motion of the primordial matter, or protyle, with progressive fall of temperature, afforded a possible explanation of the genesis of elements. At a temperature higher than any known on earth, with a wide swing of the pendulum, hydrogen, or perhaps the helium supposed to exist in the sun, was first formed by condensation. Then followed lithium, glucinum, boron, and the rest, as the temperature fell; until at last, when uranium, with its enormous atomic weight, was generated, the temperature had fallen so low that the elements themselves began to combine into compounds, new elements being no longer produced. Keeping to the pendulum illustration, it will be seen to be possible that at similar points of the right- and left-handed swing similar elements might be developed with atomic weights increasing periodically as the temperature fell. In the diagram which accompanied the paper, which was no fancy sketch, but an accurate representation of the atomic periods on a pendulum the arc of which was diminishing uniformly, the elements are seen in places singularly in accord not only with their atomic weight, but also with their chemical characters, including their atomic combining value, electrical character, and magnetic power. The diagram is quite startling in point of completeness, and certainly shows facts which must be explained by some, if not by the present, hypothesis.

Omitting many other most interesting and important points, we must notice the remarkable evidence obtained by Mr. CROOKES from his own laborious work in regard to the possible variation in the weights of atoms of the same element. Do all the atoms of calcium, for instance, weigh exactly forty, or is forty the average atomic weight, some atoms being as light as thirty-nine and some as heavy as forty-one? By a careful and long-continued system of fractionation Mr. CROOKES appears, at least in one case, to have separated, or as it were sifted, the lighter from the heavier atoms, getting thereby different elements, or, as we might rather call them, different elementary modifications

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of the same element, quite as unlike one another as, say, nickel and cobalt. Whether this fractionation can be applied to other elements remains to be seen, but in the meantime it presents a working hypothesis, which may end by accounting for the almost though not quite identical atomic weights of some similar elements, and for many other peculiarities which at present are very puzzling. Whether confirmed or modified by subsequent researches, these observations and arguments certainly afford a splendid field for future work. The generalisations, put forward with the utmost scientific modesty, cannot be entirely untrue, although, of course, they may not give us an absolutely correct view of the whole truth as to elementary matter.

IT is impossible to read the published accounts of the last meeting of the Metropolitan Asylums Board without thinking of the lessons which Mr. JOHN MACDONALD teaches in an article he has contributed to the August number of the *Nineteenth Century*. Certainly it is true that "the life of the city, with all its variety of functions, should be like the life of the human organism, one and indivisible." The duties that have to be performed for the proper government of the community must differ widely from each other, but they all have as their object the promotion of the welfare of its inhabitants; and if the machinery which is used for this purpose is to produce the greatest amount of good, it must be guided by one mind which represents, and that directly, the will of the large majority of citizens. Just as one organ of the body has to perform one function and a different organ another, and health is only maintained when some controlling power is exercised which is in intimate communication with all, so, in the body politic, the various authorities which are created to minister to its well-being must be made to work in harmony by some central organisation which brings the work of each into common relation, and ensures that there shall be no friction and no waste of power in the efforts that are made.

Birmingham, we learn, was not many years ago governed by a number of parochial bodies, which all doubtless existed for the one purpose of bettering the condition of the inhabitants of the town; nevertheless, this end was not attained, for there was no bond which sufficiently united them. This want was at length supplied, and one body was created, elected directly from the people; and, as a result, a municipal spirit came into existence which has, in the course of comparatively few years, solved at any rate some of the most important problems of social life. Thousands of fever-haunted human piggeries, misnamed houses, have, we are told, been swept away. Birmingham has the control of her own police, her own gas, her own water, has built herself museums and free libraries; in short, with the exception of public education, the Corporation, representing in very thought the wishes of her citizens, has full power to deal with almost every subject that can reasonably be administered by a municipality. The local authority in consequence draws to itself men of the highest standing, all of whose actions are exposed to a public criticism that is the best safeguard of the public interests.

London is much in the position of Birmingham years ago. Divided into parishes, each with numerous boards having different functions, there is hardly one for which it can be said that it is an honour for the meanest of her citizens to belong. The actions of these bodies pass unobserved, unless some rare circumstance may for a while bring them under public notice. London has no control over police, gas, or water; even the boards whose jurisdiction extends over the whole metropolitan area can in no sense be said to represent the thoughts or wishes of the inhabitants. The Metropolitan Board of Works is but a vestry of vestrymen. The Metropolitan Asylums Board is but an enlarged board of guardians, with a sprinkling of members who are not even elected by the people whose money it is their duty to spend. The latter board cannot therefore altogether be held to represent the wishes of London, and every important step they take is the subject of objection by other bodies, who in their turn claim to represent local feeling and interests. Thus the recent determination of the Asylums Board to erect a permanent hospital at Darenth has been matter for protest by the various boards of guardians, and the Local Government Board have decided not to allow any but a temporary institution to be constructed. We can sympathise with this decision for the reason that it implies that the present method of small-pox hospital construction is not approved, and that no further hospitals of a permanent character will be erected in a manner similar to those which have been fully shown to be a cause of disease to the neighbourhoods in which they are placed; but this continual warfare between metropolitan local authorities is to be deplored. It is but too clear evidence of failure in metropolitan government.

London, it must be admitted, is not altogether comparable with Birmingham. Birmingham has but a tenth of the population of London, and the remedy that has been found successful for the smaller town might be less effectual if applied to the great city. Whether the difficulty is to be met by the constitution of one or of several municipal bodies, having control over the whole of London or of their respective smaller areas, is a matter for consideration.

IN a recent issue we drew attention to some of the legal aspects connected with the supply to a town of a water containing sufficient lead to produce definite symptoms of lead-poisoning amongst its consumers, and we now revert to the same subject in its general and chemical aspects, in connexion with a highly interesting report that was some time back issued by Dr. SINCLAIR WHITE, medical officer of health, on the action of the Sheffield water on lead communication pipes, and its effects on the health of the community.

During the summer of 1885, Dr. SINCLAIR WHITE'S attention was drawn to several cases of chronic lead-poisoning in the borough, and it was observed that they not only occurred amongst persons whose trades did not expose them to any such result, but that the drinking-water to the houses in question in each case contained sufficient lead to account for the mischief. The Sheffield water, it would appear, is derived from two sources—namely, first, from the hills about Redmires; and, secondly, from hills around Strines and Agden; the two services being stored in different reservoirs, and being so delivered to the community that it was at once shown that it was the Redmires water which was alone doing mischief. All the mains in the borough

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are of iron, and water drawn from these mains was found to be free from lead, whereas such Redmires water as had passed through the universally prevalent lead communication pipes was found to be contaminated; that which had stood in the pipes all night being most affected.

The gathering-grounds of the two services are in many respects similar, both being peaty, with shale containing iron pyrites and millstone grit beneath the surface. But the water from Redmires was found to be distinctly acid, the acidity varying in the several streamlets leading to the reservoir, but increasing very materially as the hill was ascended, and being at its greatest where the water was found to be lying in stagnant depressions on the surface of the peat. At Strines, however, the peat is less abundant, and is drier; fine sand frequently comes to the surface, and owing to the configuration of the gathering-ground, there is less tendency for the water to stagnate in pools.

The precise reasons why certain waters exercise a solvent power on lead, and this at times intermittently, are involved in some obscurity, and hence it is that special importance attaches to the record of the investigations made by Dr. WHITE to explain the occurrence in the case of the Sheffield water, and the special incidence of the mischief on the consumers of the Redmires water. In the first place, the source of the free acid is considered in connexion with the production in the atmosphere around Sheffield of sulphur dioxide by reason of the exceptional consumption of coal in the borough; but this is for various reasons set aside. One reason is that the reservoirs for the two services are practically adjacent, and yet only the water of one exhibited the acidity in question. Then, again, the oxidation of the iron pyrites in the gathering-ground would impart to the water free sulphuric acid. This view was, after consultation with eminent chemists, held by several authorities to be the actual cause; the iron pyrites, on exposure to moisture and oxygen, decomposing with the formation of free sulphuric acid. It is true that an insoluble sulphate of lead would be the result of the action of such a water on lead pipes; but, as is pointed out in the report, the insolubility of the lead sulphate is only relative, some waters taking it up in sufficient quantity to produce poisoning. Another view as to the source of the acidity is also entered into, and it is based on the fact that the decomposition of vegetable substances, such as wood, leaves, peat, and vegetable mould, gives rise to the formation of ulmic and humic acids. Now the Redmires gathering-ground is rich in organic matter, much of which is peat, and its configuration tends to the exposure of the water in pools to the influence of this peat; and not only so, but the Redmires gathering-ground differs from the Strines gathering-area precisely in those conditions which tend to favour the production of any such acids as those referred to. It must, however, be admitted that the collecting grounds at Strines are also more deficient in iron pyrites than those at Redmires, and that if the production of sulphuric acid from this substance is at the root of the mischief, the Redmires water would similarly suffer most. Unfortunately, the amount of free acid obtainable from the water was not sufficient to enable the borough analyst to determine its nature, or indeed to decide whether it was of organic or inorganic origin.

Whichever of the two latter views referred to in the report affords the correct interpretation of the occurrence, it should be remembered that summer weather, which was the period when the mischief first became obvious, would, by reason of the increased stagnation of water in pools during periods of drought, tend to increase the evil. It is quite possible that, since attention has now been definitely called to the occurrence, the existence of lead-poisoning by water in Sheffield may hereafter be found to account for symptoms which have hitherto been obscure in their origin, and that more attention will be given to the conditions favouring the process. But we trust that, even with waters collected from such a gathering-ground as that from which Sheffield draws its supply, nothing like a condition of permanency attaches to the water in this matter of lead solution, and that by careful investigation of the circumstances under which the facility for taking up lead increases or decreases we may come to learn something more as to the circumstances which enable such waters periodically to dissolve this substance. In the meantime Dr. WHITE has ascertained that the solvent action of the water upon lead is practically destroyed by keeping it in contact for a time with freshly broken surfaces of limestone, and that, even when the lead has been taken up many of the domestic filters in current use entirely remove it.

Annotations.

"Ne quid nimis."

THE BIRMINGHAM MEETING AND DIRECT REPRESENTATION.

THE number of candidates for the direct representation of the profession is growing day by day in a somewhat haphazard sort of way. It is clearly desirable that the profession should have a variety of candidates to choose from; but it is equally so that a candidate should come forward or be brought forward in a somewhat systematic manner. A committee should be organised for his election, and responsible officers should be named representing his committee. Less than this amount of trouble scarcely shows seriousness on the part of the candidate or a proper respect to the profession whose votes have to be secured. If the chances of success do not warrant this amount of trouble, it will be kind on the part of gentlemen not to complicate the difficulties of the profession by lengthening the list of candidates. The reasonableness of our suggestions will be more easily admitted if our readers will study the report we give elsewhere of what happened at a meeting in Birmingham. The promoters of that meeting were no doubt actuated by a laudable desire to assist the profession in choosing fit candidates. They were aware of a certain suspicion of cliquism, or caucusing, and took great pains to rise above all such charges and to make their meeting representative of the whole country. Dr. Carter said at the meeting that 343 responses had been received to 1167 invitations issued, representing 161 towns. But evidently 343 responses cannot represent 17,000 practitioners. And an actual meeting of only thirty-two is still more conclusive proof that the profession will have to show its mind in other ways. The supporters of any candidate will not be able to rely on any central or single meeting. Our profession is not organised for election purposes. Happily so! At the Birmingham meeting the first resolution seemed to commit the meeting to an immediate selection and requisition of three fit and proper persons. Nine or ten were nominated and a few were seconded. But by the time the

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nomination was finished the meeting had become still more attenuated, and it was finally resolved to send the names nominated to members of the General Committee on a post-card, and to adopt those having the largest number of votes as the candidates of the committee. This course was approved by a majority of 11 to 3. We can scarcely doubt that the promoters of this meeting will be ready to admit its failure, and will not seriously prosecute their well-intentioned labours. They might take this comfort to themselves—that if they have failed no one committee is likely to succeed. About a dozen names are now before the profession in England in a more or less formal way, and it cannot be denied that at least half of these would make excellent representatives. The candidates are—Dr. Taaffe, of Brighton; Mr. Bullock, of Isleworth; Mr. Wheelhouse, of Leeds; Dr. Glover, of London; Sir Walter Foster, of Birmingham; Dr. Richardson, of London; Dr. Dolan, of Bradford; Mr. Hart, of London; Dr. Bridgwater, of Harrow; Dr. Holman, of Reigate; Dr. Balding, of Reigate; and Dr. Morris, of Spalding. The friends of these gentlemen, on local committees, and with proper confidence in their cause, will do what any one committee cannot do any more than any one Association. The profession, for the first time, feels itself with a "free hand," and it seems determined to use its freedom and to rebuke the fears of those who said it would be led in an undignified way.

RECENT DIARRHŒA MORTALITY IN LARGE ENGLISH TOWNS.

THE mean temperature of the fortnight ending Sept. 4th showed a marked increase upon that which prevailed in the preceding six weeks, and it is not surprising to find a considerable increase in the mortality from diarrhœa recently recorded in the largest English towns. The fatal cases of diarrhœa registered in the twenty-eight large towns dealt with in the Registrar-General's weekly return, which had increased from 530 to 710 in the preceding four weeks, further rose last week to 995, and considerably exceeded the number returned in any previous week of this summer. It is worthy of note that the mean temperature of the two weeks ending September 4th was almost identical with that of the fortnight ending July 10th, but that these two periods of high temperature appear to have affected the mortality from diarrhœa in London and in the large provincial towns in a very different manner. In London the earlier hot period caused a rapid increase in the deaths from diarrhœa from 43 in the last week of June to 411 in the last week in July, after which the weekly recorded deaths from this cause steadily declined to 176 in the week ending the 4th inst., this decline being apparently uninfluenced by the marked increase and excess of temperature during the fortnight ending on that day. In the twenty-seven provincial towns, on the other hand, having an aggregate population differing but slightly from that of Registration London, the deaths from diarrhœa increased from 43 in the last week of June to 804 in last week, the increase due to the first hot period being very small compared with that due to the more recent hot period. In the week ending July 31st, when the maximum diarrhœa mortality was reached in London, the annual death-rate from this cause was equal to 5·2 per 1000 in the metropolis, whereas in the aggregate of the twenty-seven provincial towns the mean rate did not exceed 2·5. The rate from the same cause last week, however, did not exceed 2·4 in London, whereas it was equal to 8·4 in the aggregate of the twenty-seven provincial towns. Epidemic diarrhœa mortality usually occurs in London before it attacks the provincial towns, although why this should be the case has not been determined. Neither is it easy to explain why the recent fortnight of hot weather has caused no increase in the diarrhœa death-rate in London, although it has produced such fatal results in so many of the large provincial towns. That temperature is not the only, or even the most powerful, factor in the causation of infantile diarrhœa may be fairly inferred from the following figures. The annual death-rate last week from diarrhœa, according to the Registrar-General's weekly return, ranged from 1·2 in Bristol, 1·8 in Huddersfield, and 2·4 in London, to 11·3 in Birmingham, 12·0 in Leicester, 12·4 in Preston, 12·8 in Hull, and 15·3 in Norwich.

CLINICAL EXAMINATIONS AND DANGER TO PATIENTS.

CLINICAL EXAMINATIONS on actual patients in hospital wards are, of course, of the utmost value in testing a student's ability to recognise and treat disease; but when, from whatever cause, they are so conducted that the patients suffer seriously from the processes to which they have been subjected, there is no doubt that some abuse of a very excellent system must have been permitted. A case has occurred in Brussels in which a surgical examiner, forming one of the central examination jury, while testing the candidates' knowledge in the Hospital of St. John, owing doubtless to some misunderstanding as to the nature of a case, removed an antiseptic dressing which had been personally applied with more than usual care by the visiting surgeon after an operation for suppurative inflammation of the right knee, so that when the patient was visited next day his condition was greatly changed for the worse, and subsequently the leg had to be amputated in order to save his life. The surgeon naturally reported the circumstances to the "Conseil des Hospices," the authority by which the Hospital of St. John is managed, and the consequence was that a regulation was made, ordering that during clinical examinations one of the medical officers in charge of the ward shall in future always be present. This regulation, which is asserted on the one hand to mean merely that examiners shall be informed what patients may, without injury to themselves, be made use of for examination purposes, and on the other to imply a desire to exercise some sort of surveillance over the proceedings of the jury, so offended the examiners that they decided not to hold any more clinical examinations in any of the institutions under the management of the "Conseil des Hospices," and betook themselves to the Hospital of Molenbeek St. Jean, which is under a different authority, and where the jury is "treated with the consideration which is due to it." The whole affair has been discussed pretty freely in Brussels, letters on the subject being published even in the daily press, and several somewhat contradictory accounts having appeared. The above is, however, we believe, a substantially correct statement of the facts. Considerable tension has unfortunately existed amongst the medical teachers in Brussels for some time past, and the incidents above related may possibly be to some extent due to that cause, and have of course had the effect of intensifying it. Surely some *modus vivendi* might easily be found which would enable our excellent *confrères* to compose their differences.

MASTICATION.

A CURIOUS controversy is in progress as to the need or value of "biting one's food." Strangely, as it must appear, there are some, who should be authorities, ready to affirm that it is futile to take the trouble to use the teeth with which nature has provided man in common with most other animals apparently for the special purpose of cutting and grinding his food. Little, if any, weight is attached to the evidence of facts in this dispute. The existence of the dental apparatus counts for nothing. Nor does it go for much that movements of the jaw promote the insalivation of the food. In short, mouth digestion is treated as a myth or

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little better. What are we to understand by all this? Is it one of the early fruits of that attempt to popularise the science of physiology which has been so persistently and unselfishly made by the medical profession in the supposed interests of public health and the prevention of disease? We do not incline to mingle in the fray, just at present at least. Let the dispute go on and be fought out to the bitter end. Meanwhile, we counsel all who care for their comfort, and who do not desire to develop the worst form of dyspepsia, to continue the practice of mastication as before. As a matter of fact and experience, a liberal use of the teeth in feeding is one of the essentials of easy digestion, and though we are not prepared to assert that it is necessary to bite each morsel of meat precisely twenty-five times, it is better to err on the side of masticating too much than on that of not masticating enough: first, to divide the food and crush its fibres and particles generally, and secondly, to mix it so thoroughly with the secretion from the salivary glands that not only shall the act of deglutition be rendered easy, but that the food when it enters the stomach shall have been properly prepared for digestion in the gastric juice.

THE BACTERIOLOGY OF WATER AND AIR.

IT is well known that the atmosphere and water generally contain many forms of micro-organisms; but the conditions that are favourable to the growth of these low forms of life and the causes which lead to the development of toxic agents are a new field of investigation whose elucidation is a matter for future observation. Messrs. Crookes, Odling, and Tidy, in their official report on the persistence of bacterial life in water, have added to our store of facts so far as water is concerned. These observers have employed sterilised distilled water, in which a definite quantity (1 part in 150 of water) of peptone fluid, swarming with an active sporeless growth of the splenic fever bacillus, was introduced. After the lapse of two hours an artificial cultivation of the infected water resulted in an abundant and characteristic growth of the bacillus, from which fresh cultivations could be produced. The results after the expiration of three hours were uncertain, and when a longer time had elapsed no cultivation could be obtained. The water used by the experimenters was of greater nitrogenous contamination than Thames water, and therefore highly suitable for the growth of the bacillus; and yet after the expiration of six hours the bacillus appeared to have effaced itself. On the atmospheric side of bacteriology, we have the observations of M. Miquel made on the air around Montsouris. An increase in the number of bacteria in the air was observed to accompany a rise in the barometric pressure and an augmentation also occurs in the summer months, though a sustained high temperature tends to lessen the number of bacteria. A low hygrometric state of the atmosphere was found to accompany the maximum number of bacteria, and a maximum number was also associated with a calm or slowly-travelling wind. The greatest number of maxima occurred with a north-east wind, and the least with a south-west wind. The presence of a large amount of ozone in the atmosphere went side by side with a reduced number of microbes. The observations at Montsouris have been carried on for a period of five years, and it has been estimated that the average numbers of organisms in a cubic metre of air, during spring, summer, autumn, and winter respectively, are 495, 650, 380, and 260. February gave the lowest average, 165, and July the highest, 700. The atmosphere of Paris is altogether different, for the average number of organisms in a cubic metre of air taken from the Rue de Rivoli was 3480, but the minimum and maximum occurred in February and July respectively, as at Montsouris. The number of organisms was very much lower in the year 1884 than in 1881, and this fact was associated with a greater efficiency in scavenging in 1884, and also with a lower death-rate from zymotic diseases. Dr. Miquel has also made a few observations on the atmosphere of London: only 240 bacteria being found in a cubic metre of air during the month of June. This comparative poverty of bacteria is attributed to the nearness of London to the sea and to the moderate height of the houses not preventing the purifying influence of the wind. What a tremendous contrast the atmosphere of the ocean and mountain presents with that of the wards of the Hôpital de la Pitié in Paris; for the former never contains more than an average of one bacterium per cubic metre, whilst the latter has been known to hold in suspension as many as 97,000 organisms in a cubic metre of air!

CHOLERA ON THE NEAPOLITAN RIVIERA.

ON this subject our correspondent in Rome writes:—The outbreak at Torre Annunziata is now describing the descent of the parabola, and the panic that was causing a general stampede from that lovely seaboard has died away. The significance of the visitation lies in the utter want of preparation on the part of the Neapolitan municipality for the spread of the disease from its latest outpost not ten miles off. When fugitives from Castellamare and Torre Annunziata and the other townships along the bay came trooping into Naples, *en route*, if possible, to Rome and Tuscany, then only her sanitary authorities bestirred themselves, with the result of revealing to a scandalised public how little of the promised hygienic improvements had been effected. Two years ago, after the fearful explosion of cholera in the city, nothing was heard of but the immediate measures that were about to be taken for the clearing away of the rookeries, the amelioration of the drainage system, and the introduction of pure water. With the exception of this last, not one of these improvements, sanctioned by Parliament and expected by the country, has even been begun! The *Opinione* describes with bitter irony the feverish haste with which the Neapolitan sanitarians are turning out the court and cellar population into the street, often to contract other maladies than the expected one; flushing drains and whitewashing alleys, in the belief that the malady is as open to being scared as themselves! "To-day," it says, "all is activity, all is exaggeration; when the danger passes or diminishes there is the old relapse, with inertia, neglect, abuses." Doubtless, the plain-spoken journal, charged with salutary home truths, was duly delivered at the municipality, reeking of carbolic acid, although its point of departure was Rome, where well-timed precaution has long kept the enemy at bay!

"EXEAT BRUMMAGEM."

THAT scientists are fastidious and prone to hypercriticism is one of the fallacies of which little should be heard after the recent meeting of the British Association at Birmingham. Granting that the midland metropolis was at its best, that political differences were buried, and all the resources of the municipality and the people placed at the disposal of the learned visitors, these, irrespective of sex and section, were certainly in the most complimentary mood. The concluding meeting, held in the Town Hall, under the presidency of Sir William Dawson, was phenomenal, almost as much for thorough unanimity as for thronged attendance. The Mayor, Alderman Martineau—a lineal descendant of Martineau, the great Norwich surgeon,—with all his experience and tact, seemed positively embarrassed by the compliments showered upon him and his corporation by Professor Bonney and Capt. Douglas Galton. Sir Frederick Goldsmid and Dr.

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Gladstone, F.R.S., were loud in praise of the financial success which the thousands of local associates had rendered possible; but it was reserved for Mr. Pengelly to utter a Pickwickian grumble. He had just before been wittily discussing in the Geological Section on a Scrobicularia bed containing human bones at Newton Abbot, but could not repress a feeling of disappointment. He had travelled thither in the belief that where they stood he should find "Brummagem." But he had not met with the article at all. The town buildings, the manufacturing exhibits in Bingley Hall, the educational institutions—nay, even the coffee, were intrinsically good and artistically fine. The bare fact is that very few communities have advanced at such rapid strides as Birmingham has done during the last few decades; and everyone interested in human progress may gratefully and hopefully say "Floreat Birmingham."

EVIDENCE OF INSANITY.

A GOOD rule of practice in regard to stating the ground of an opinion is to "never give reasons." There is great need of something approximating to this reserve in respect to the evidences which lead to the formation of a judgment that any particular person is insane. We do not for a moment doubt the fact that the hawker arraigned, and, in the event, convicted, before the Autumn Circuit Court of Judiciary for Forfarshire, for certain diabolical offences, was of unsound mind; but it must be confessed that the evidence adduced in support of the opinions formed by two excellent and most competent medical authorities was not only wholly inadequate but singularly inconclusive. Setting aside such presumptive evidence as the facts that his mother's father had been mad and had been put in a straitwaistcoat, that his mother's brother was silly and one of her own children had epileptic fits, and that the prisoner himself had suffered much in early life—as when he had scarlatina with delirium followed by deafness, whooping-cough of long duration, and a fall from a height of twelve feet on the back of his head, followed by unconsciousness for two days—the chief proofs of insanity seem to have been that he had a very imperfect notion of how the simplest accounts ought to be kept, that he could not count above twenty-nine, and that when asked his age, he said "nineteen or going in twenty," which, it was contended, was two ways of stating the same thing! There was no delusion, and nothing except a good deal of insensibility in regard to his crimes, which might either arise from a deficiency in the recognition of right and wrong or from anything else. Obviously, it could not be expected that a court of justice would be satisfied with evidence of this sort, when the plea of insanity was raised—not very wisely as it appeared—to shield from punishment a scoundrel who was alleged to have committed two rapes and other abominable offences against the person. We venture to think it would be more discreet in cases of this class, where the medical judgment of insanity is based on general and not on special grounds, to affirm the opinion without particularising reasons, rather than to bring forward evidence which is clearly not of a nature to be tested by unskilled jurors. We do not for a moment question the entire accuracy of the opinion expressed by the medical witnesses in this case. These gentlemen are so highly qualified to form a judgment on the issue raised that no member of the profession can hesitate to accept and adopt their opinions, but this fact only makes it the more regrettable that no better evidence should have been forthcoming in support of their views. In truth, it must often happen that good presentable proofs of insanity are wanting in cases where no room for doubt exists. The perception of disease is a distinctly medical function, whether the malady be one of body or mind. No sensible layman would expect a physician to adduce such evidence of the existence of what is called physical disease as would be available for the formation of a non-medical judgment. Why should laymen expect to be furnished with evidence of a nature to convince a person having no special knowledge of mental disease that it exists in any particular instance? It would be more rational and dignified if medical witnesses simply stated their opinions without giving reasons when requested to do so, and simply avowed their inability to place the grounds of a diagnosis before a lay court. In the course of a recent trial this side of the Tweed, a learned judge said, in reference to the evidence of an expert in caligraphy, that when once the indications discovered by the expert were pointed out, the unskilled observer was as competent as the expert to determine their value. We accept this ruling, but the indications of disease, whether of body or brain, are not of a nature to be thus brought under the cognisance of the unskilled observer. The medical witness is rather the "sworn interpreter" than the "expert" when he construes the evidences of disease and gives the result in a language "understanded of the people." If this were more generally recognised, there would be fewer experiences, in courts of justice, which are not merely disappointing but humiliating, and which it is most undesirable, on many accounts, to multiply.

TRAUMATIC PLEURISY.

DR. SEVED RIBBING reports, in the Swedish *Eira*, amongst a number of instructive cases, the following one of traumatic pleurisy. A man, who had received a blow on the right side of the thorax in a drunken quarrel, was admitted into the Cimbrishamn's Hospital with the ordinary signs of pleurisy with effusion. The cavity was consequently aspirated, the puncture being made in the eighth intercostal space just below the angle of the scapula. The signs of fluid returning, it was decided to open up the cavity. This was done by an incision in the same situation as that in which the aspiration had been performed, and a quantity of thick fibrino-purulent matter evacuated, a large French œsophageal sound being used for drainage. Two days after the operation it was noticed that the integuments and superficial muscular layer around the shoulder-joint flapped like a curtain at each inspiration. As this pointed to the existence of an abscess cavity communicating with the chest, a sinus was searched for and discovered running upwards from near where the opening into the thoracic cavity had been made. This sinus was laid open, and, together with the chest, carefully drained and washed out with carbolised water. The quantity of fluid which came away diminished daily; the temperature, which had been high, sank; and in three months' time the man was discharged cured.

VACCINATION IN EAST AFRICA.

A CORRESPONDENT, writing in *The Times* of Wednesday, quotes from a letter recently written in East Africa as follows: "The small-pox is very severe now in the Bondei Country. The natives are offering three dollars apiece to be vaccinated; but, most unfortunately, our lymph supply was destroyed in the late fire at Maglia. One man offered twelve dollars—i.e., nearly £2 10s. of our money. They have such faith in it, for none of the people who were thoroughly vaccinated have suffered at all from small-pox, while members of the same family who were not vaccinated were seized with it." It is the old story over again. When small-pox is prevalent in an unvaccinated community, vaccination is valued, and no complaint is heard other than that which is caused by the scarcity of lymph; but when a community is more or less protected by vaccination from death by small-pox, then its value is forgotten, and the agitators of the time assert themselves very loudly. There is little doubt

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that if, instead of a compulsory law, difficulties had been put in the way of vaccination, the same individuals who now describe vaccination as a "huge and deplorable delusion," would have been loud in their demand for a removal of the restrictions. But these agitators must forgive our statesmen if they refuse to submit the country to a wholesale destruction of human life for the purpose of teaching them the lesson they need to learn.

DIAPHRAGMATIC HERNIA.

Il Bullettino della Reale Accademia Medica di Roma (May, 1886, p. 245) contains a description by Dr. Ferraresi of a diaphragmatic hernia revealed in the necropsy of a young man who had died with symptoms of intestinal strangulation. On surface inspection of the well-nourished body, it was noted that the abdomen was only slightly swollen; the left half of the thorax was broader and more prominent than the right, and the left intercostal spaces dilated. Percussion revealed an area of absolute dulness over the whole left chest, excepting the subclavicular triangle, which yielded tympanic resonance. On opening the abdominal cavity, the coils of small intestine, slightly reddened, presented patches of fine basal injection. Carefully opening the thorax, the left pleural cavity was found filled with a bloody liquid, on giving exit to which the lung, compressed and driven upwards, became visible, the heart being displaced to the right. Besides the liquid already referred to, the pleuritic cavity contained numerous coils of intestine enormously distended, of dull red colour; the serous membrane was opaque, rough, and studded with numerous hæmorrhagic spots. The stomach was displaced to the right, with the great curvature turned towards the abdominal wall. Holding aside the stomach and the small intestines, still retained in the abdomen, it was observed that the splenic angle of the colon and a good part of the jejunum passed into the pleural cavity through a hole in the left inferior half of the diaphragm at a point corresponding to the normal position of the heart's apex. The descending colon was much contracted. With great difficulty, and after repeated punctures, it became possible to reduce the coil of colon, a piece of omentum, and the displaced small intestine. The hole in the diaphragm was oval, rather more than an inch in diameter, surrounded by a strong, thick, fibrous ring. The gastro-colic omentum which followed the displaced coil was shortened, and adherent posteriorly to the margin of the fibrous ring.

THE INFLUENCE OF SMALL-POX HOSPITALS.

ON Saturday last Mr. Justice Stirling heard, in the High Court of Justice, an application on behalf of a dairyman living at New Windsor for an injunction to restrain the Mayor and Council of New Windsor and the guardians of Windsor from erecting hospital tents for small-pox patients on certain meadows in proximity to his dwelling. The case presented but little medical interest, the proceedings apparently being taken in anticipation of the extended use of a temporary hospital which had been erected on the site. The medical evidence for the plaintiff, it seems, did not go beyond placing before the Court the information contained in recent reports of the Medical Officer of the Local Government Board, which pointed out the effects of aggregation even of a small number of patients suffering from small-pox in its acute stage, and showing that the hospital was not constructed in the manner suggested by the Royal Commission, so as to ensure the destruction or purification of the air in the wards. The hospital subsequently did not receive more than seven cases, and the site not being found suited for hospital purposes, it was determined to abandon it and receive no more patients into the institution. Under these circumstances Mr. Justice Stirling refused the application. The case is instructive as showing that, if local authorities determine to erect hospitals for this purpose near inhabited houses, they will probably meet with opposition, unless they construct them in the manner indicated, or limit their use to a very small number of cases.

MANAGEMENT OF THE THIRD STAGE OF LABOUR.

DR. A. R. FISHER, assistant in the obstetric clinic of Professor Slavianski in Kharkoff, has made a large number of observations with the view of determining the relative advantages in the third stage of labour of Credé's system of gentle manipulation or massage of the uterus, and the method of forcible expression of the placenta by powerful compression of the uterus. His statistics point decidedly in favour of the former method. In 493 cases where Credé's method was employed post-partum hæmorrhage occurred twenty-five times, while in 183 cases where expression was resorted to it also occurred twenty-five times; that is to say, the hæmorrhage cases were 5 per cent. with Credé's method, and 13 per cent. with the expression method. Again, the retention of pieces of membrane occurred less frequently with the former than with the latter mode of treatment, the percentage of cases in which this occurred being 5·7 and 7·4 respectively. The relative proportions of the occurrence of pyrexia, by which was understood any rise above 38° C., the temperature being taken three times daily, were 38·3 per cent. and 46·4 per cent., and the cases in which puerperal complications supervened were also fewer after Credé's method than after the more violent procedure, being respectively 5 per cent. and 9 per cent. A diagram is given with the author's paper, which is published in the *Russkaya Meditsina* of August 10th, showing that the process of the involution of the uterus is perceptibly quicker, at all events during the first week, in cases where Credé's method has been used, than in those where the placenta has been expressed. Dr. Fisher concludes with a general eulogy of Credé's method, as being the most rational and successful plan of treating the third stage of labour, and withal so simple that every doctor, and indeed every properly instructed midwife, should practise it habitually.

LARYNGEAL PARALYSIS IN LOCOMOTOR ATAXY.

AN interesting case of locomotor ataxy was recently in the Birmingham General Hospital, under the care of Dr. Robert Saundby. The patient, in addition to the ordinary symptoms of the disease—e.g., ataxic gait, loss of patellar reflexes, inability to stand with his eyes shut, &c.,—complained that he could not lie down in bed on account of difficulty of breathing. When he was induced to assume a horizontal position, he was seized with an alarming suffocative spasm. His voice was a little hoarse, but otherwise normal. On laryngoscopic examination, both cords could be seen lying in the middle line in the position of phonation, no motion being perceptible on inspiration. The movements on phonation were normal. A few days later a very severe attack of dyspnœa almost proved fatal, and tracheotomy, which had previously been advised but declined, was performed at once. The man died a few hours afterwards in a fit of coughing, a large amount of pus welling up into the trachea. As permission could only be obtained for a partial necropsy, the head could not be opened. The spinal cord showed well-marked sclerosis of the posterior columns. Cases of this kind are rare, but examples have been recorded by Dreschfeld, Semon, and Charcot. Dr. Saundby remarked that such cases possibly occur more frequently than records

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of them might lead one to suppose, and that in all cases of bilateral paralysis of the abductors of the larynx other signs of locomotor ataxy should be sought for; conversely, all cases of the latter disease should be examined with the laryngoscope, as it is only when the paralysis is complete that urgent symptoms are present as they were in the case under notice.

LUNACY LAW REFORM.

THE objections taken to the vote for the Lunacy Commission in England were well grounded. The authority at Whitehall is not worth a tithe of the money devoted to its maintenance. The existence of a body bearing the name of a Commission is doubtless of some moral weight, and for this the public may be willing to pay a small sum. We will go further, and admit that as the labourer is worthy of his hire, without regard to the real value of his services, the gentlemen who hold office, whether as legal or medical commissioners, are entitled to their stipends; but for all the good actually done by the Commissioners in Lunacy, a couple of clerks at £500 a year, to register the certificates sent in if the forms be properly filled up, or to return them for correction if irregular, would be as fuliy effective as the whole staff maintained at a cost to the taxpayers of £15,000 yearly. The Government announces another Lunacy Bill. We do not at the moment remember how many Bills have been introduced during the last ten years, but the number must be considerable. Will the now promised measure be any better than its predecessors? We think not. The subject is so thoroughly in the hands of the red-tapists that there is absolutely no reasonable ground for hoping that a satisfactory measure will be introduced. Nothing short of a complete reconstruction of the law relating to the sequestration of lunatics, placing the treatment of insanity entirely on the footing of a medical care and cure of the insane, and safeguarding the liberty of the subject by taking the right of incarceration wholly out of the hands of private persons, can be satisfactory; and so large a measure of reform as these changes would involve we fear there is not the slightest reason to anticipate.

THE ELECTRIC LIGHT AND THE EYE.

PROFESSOR COHN, whose works on the Hygiene of the Eye are so well known, has lately delivered a lecture in Breslau upon the Action of the Electric Light upon the Eye. That this light sometimes induces inflammation both of the internal and external tunics, when incautiously used, is indubitable. Cases have occurred in which retinal inflammation and sclerotic congestion have followed protracted exposure to arc lights, and this arises in all probability from the great concentration of the light of such burners, the field of vision otherwise being dark, a condition that is very different from that of diffuse daylight, which we know to be free from danger, though the light is certainly as intense, whilst the field generally is much more perfectly illuminated. Professor Cohn remarks that artificial light should not be dazzling, that it should be supplied bountifully; it should not heat the eyes, and it should burn steadily. Arc lights, he thinks, in order to fulfil the first condition, should be surrounded by a globe of white or ground glass, which deprives it, however, of about 30 per cent. of its illuminating power. Even with this diminution its penetrating power is greater than gas of equal brightness, because the same quantity of light is concentrated in a smaller space. According to the investigations of Voit and Ranke, at Munich, the light from a glow lamp of Edison is seven times brighter than that of an Argand gas lamp, and twelve times brighter than that of a fan-shaped gas light. The glow light will therefore excite the retina from seven to twelve times more than a gas flame of equal brightness. If the electric light be used, care should be taken that it is not too weak, for in that case books or work must be held close to the eye, and there is abundant evidence to show that such approximation is a fertile source of short-sightedness. Professor Junge of Zurich informed Professor Cohn that the local reading society had given up the use of the glow-lamps because with the power supplied the illumination was too weak. To obtain a sufficient light in this instance a dynamo of double the existing power would have had to be erected, and the expense then would have been double that of the gas. The absence of heat is a great point in favour of electric lighting, for a hot flame in proximity with the eye dries up the moisture on the cornea, and, after producing a feeling of dryness, is almost certain to lead to congestion of the vessels which surround it, and to pain and headache. Professor Cohn himself demonstrated some time ago that the rise of temperature 8 in. from a gas flame is double that at the same distance from a glow lamp of equal brightness. Additional advantages which are possessed by the electric light are the absence of carbonic acid gas and other products of combustion. The examination of the air of theatres in which gas is burnt with that of theatres which are illuminated by electricity shows in the latter less carbonic acid and no smoke, and that the quantity of moisture added is much less, whilst the temperature is lower. The Professor points out the importance of the electric light being steady. When a flame flickers the intensity of the light is undergoing constant change—a condition to which the retina is very sensitive, as is shown by the disagreeable sensation felt in walking along an open wooden railing on the other side of which the sun is shining. On this ground the glow-lamp is superior to the arc light. In either case the strength of the current should be sufficient to make the light steady and strong.

CLINICAL TEACHING AT MELBOURNE.

WE learn from the *Melbourne Argus* that on July 22nd the Premier received a deputation of students of the Medical School, who had taken this unusual but legitimate course of urging on the Government to insist that out of the grant made to the Melbourne University the sum of £500 should be applied to the appointment of clinical lecturers. Mr. Gillies said that at the request of the students he had invited some members of the University council to attend, and they had forwarded him a resolution to the effect that it would not conduce to the discipline of the University for the council to meet their own undergraduates and argue with them in public on the course the council had thought it necessary to pursue. Mr. Gillies could not take any exception to this resolution; he would hear what the students had to say, and would afterwards communicate with the council. Mr. C. P. W. Dyring, B.A., read a statement prepared by the committee of the Medical Students' Society, which dealt with the importance of adequate clinical teaching and the necessity for it, every examining body requiring certificates of attendance on such lectures. The University authorities required this, and the rules of the Melbourne Hospital provided for the appointment of special clinical lecturers by the council of the University from among the members of the medical and surgical staff. In 1883 a deputation from the council applied for an increased endowment, specifying among the immediate requirements "two clinical lecturers, medicine and surgery, £500." Parliament voted an increase of the grant by £2000, and the University calendar of 1884-85 showed that the council recognised that the sum of £500 was voted specifically for the payment of clinical lecturers, who were appointed in 1884; but in the following year the council departed from this system. No clinical lecturers were appointed for the current year, and the

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chancellor had stated that neither the sum of £500 nor any other sum was expressly granted for the purpose. This relinquishment by the council of control over clinical teaching elicited a protest from the Faculty of Medicine, and left the students without systematic training, and only such instruction as they could gather during the ordinary visits of the medical staff at the Melbourne Hospital. It was felt that when this became known in Great Britain, the recognition hitherto accorded to their courses of instruction would be discontinued, and already evidence had been received of this from London and Edinburgh, where instances had occurred of the inability of students to obtain certificates of attendance on clinical lectures on surgery and medicine, although they had attended hospital practice &c. in the Melbourne School. While one-half the fees received by the University from students were paid to the Medical School, only one-ninth of the Government grant was devoted to the purposes of that school. Messrs. Goodall and Ick, M.A., and Prof. Pearson also advocated the claims of the students, and Mr. Gillies promised to communicate with the council, and had no doubt the difficulty would be easily overcome. By this time, we trust, the matter has been arranged. It is incredible that a University like that of Melbourne should be without professors of clinical medicine and surgery, not to speak of the hardship inflicted upon the students who, desiring to qualify in Great Britain, find that their course of study at Melbourne has been incomplete.

THE KASHMIR MISSION HOSPITAL.

SINCE the erection of the Mission Hospital in Kashmir in 1875, a large amount of medical and surgical work has been carried on there by the medical missionaries successively in charge of it—Drs. Maxwell, Downes, and Neve; indeed a good deal of what may be called original work and observation has been done, as the various papers which have appeared in our columns from time to time will show. The report for last year has just reached us, and testifies to much suffering relieved by highly scientific methods, Dr. Neve's aspirations being of a commendably high order, for "no surgeon," he says, "is doing his duty who aims at anything less than the best possible result for each individual case." Most of the in-patients, of whom there were 641, were surgical cases. Of 1010 operations that have been performed, 351 rank as major according to the Indian Government classification. The mortality from operations was certainly low, there being only five deaths in all—four from shock, one from tetanus. Dr. Neve considers the practice of antiseptic surgery emphatically economical, as well in diet as in trouble of dressing, to say nothing of its power of saving life and limb.

TRICOCEPHALUS DISPAR AND BERI-BERI.

DR. H. ERNI, of Batavia, writes (*Berlin Klin. Woch.*, No. 37) in support of a doctrine that beri-beri is a secondary anæmia due to the loss of blood produced by such intestinal parasites as ankylostomum duodenale, tricocephalus dispar, and a peculiar dipterous larva. Perhaps the chief interest of his communication is in reference to the tricocephalus, which was far more frequently found in the intestines of subjects of beri-beri than any other parasite; but one or other of the above was rarely present in more than fifty cases examined, whilst they were rarely found in other diseases. Of course, those who contend that beri-beri is an epidemic poly-neuritis, from the evidence of peripheral nerve degeneration, would be disinclined to attribute any share to the presence of such parasites; but similar degeneration to that of the nerves attacks the muscles and other tissues, and may well be ascribed to the chronic anæmia which is the leading symptom. The tricocephalus inhabits the cæcum, and may occur in large numbers. In the slighter cases there is localised inflammation of the cæcum and neighbouring parts of the colon; in others there are definite erosions and points of hæmorrhage which have been produced by the worm; whilst in others, again, the mucous membrane is even undermined by the parasite. Hence the cases are characterised more or less by intense symptoms of enteritis. The obvious criticism upon the thesis of Dr. Erni is that the tricocephalus is a very common parasite in Europe (in Paris it has been stated that one-half the population is infested by it), and that it has never been hitherto assigned so serious a *rôle* as that which he awards it; unlike the ankylostomum, which has been fully proved to be the cause of fatal anæmia as exhibited in the St. Gothard miners and in Egyptian chlorosis. It is hardly conceivable that a parasite which is harmless in Europe should be capable of producing such grave intestinal lesions in the East Indies; for although under the term "beri-beri" doubtless many varieties of purely secondary anæmia may be included—comprising, we are willing to believe, cases of "ankylostomiasis,"—yet more evidence must be forthcoming before the tricocephalus is accepted as a prime etiological agent in the affection.

PUBLIC HEALTH IN PENNSYLVANIA.

THE State Board of Health have submitted to the various cities and boroughs within their jurisdiction a model ordinance for the better preservation of public health, together with a recommendation that its provisions should be adopted with such modifications or additions as may be found needful in special localities. The plan adopted is much the same as that which has been followed by such excellent results from the issue by the Local Government Board in this country of its series of model bye-laws dealing with sixteen separate subjects. Whilst, however, our own codes are much more detailed and comprehensive than that issued in Pennsylvania, the latter deals with some subjects which in this country are dealt with by special statute. Thus, facilities being given for gratuitous vaccination, a section is inserted to the effect that "no pupil shall be allowed to attend the public schools ..... who has not been vaccinated successfully within seven years." In this, and in similar ways, vaccination, which is made directly compulsory in this country, becomes indirectly so in several of the American States.

CHOLERA INTELLIGENCE.

THE cholera intelligence for the fortnight ending Sept. 14th involves several points of importance. In the first place, whilst there has been no general increase in the amount of cholera in Italy, yet the disease has shown itself in several newly invaded places with considerable virulence. Thus, at San Marco in Lamis, there have been 109 more deaths, and at Torre del Annunciata 83 deaths have taken place; the outbreak in this latter place being the most prominent feature of the extension of the epidemic to the Bay of Naples, where Castelamare has also been fatally affected. Five cases have also occurred in Naples itself, but it is believed that these have all been immigrants from other affected localities. Putignano and Taranto are two other freshly invaded districts in Southern Italy, 68 and 8 deaths respectively having occurred in these places during the period in question. The disease also clings with considerable tenacity to several of the towns and provinces in the north-east of the kingdom. From Sept. 1st to the 14th there were 59 deaths in Ravenna, 26 at Padua, and 65 at Ferrara. In all, the records published for the fortnight give 528 fatal attacks in Italy, and this although, as regards several places, there are blanks in the returns which make them very incomplete.

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It has also been announced that cholera during the present year has attacked 45,000 persons in Italy, and that of these 14,000 have died. For several days there have been rumours of an increase of cholera in the neighbourhood of Trieste, and of the extension of the disease to Pesth, and it is now announced that on the 12th inst. twenty cases and eight deaths occurred from cholera in the latter city. The disease is also stated to be rapidly spreading in Croatia, where isolated cases have for some time past occurred. Perhaps the most important consideration involved in this news from the Austro-Hungarian Empire lies in the fact that cholera is invading entirely new territory. This must materially affect the prospects for next year. It had been hoped that the disease, especially as seen in North-eastern Italy, indicated the termination of the epidemic of 1884-86, but this fresh extension may perhaps come to be the first sign of a probable prolongation of the visitation into 1887. From this point of view cholera in Hungary has especial interest.

MECHANICAL REMOVAL OF CROUPOUS EXUDATION AFTER TRACHEOTOMY.

AFTER tracheotomy for croup, when it is found impossible to clear the trachea from membrane by forced expirations, suction, &c., Dr. Pievigzèk, writing in the *Przeglad Lekarski*, advises the use of Schrötter's forceps, which, he says, should be so introduced through the wound that the blades may open antero-posteriorly, and not laterally, for fear of taking up the angle at the bifurcation of the bronchi. Sometimes it is possible completely to clear the trachea by one or two introductions of the forceps. In cases where the obstruction is in one of the bronchi, the patient should be laid on the corresponding side and the forceps inclined accordingly. Information may also be obtained as to the situation of the obstruction by the aid of a mirror introduced into the wound, the patient's head being at the same time thrown well back. The instrument which the author finds most suitable for this purpose is Zanfal's nasal speculum. He remarks that children bear the operation without any special trouble.

AN UNOFFICIAL PHARMACOPŒIA.

AT the meeting of the British Pharmaceutical Conference held at Birmingham last week, the President, Mr. Thomas Greenish, in his inaugural address, referred at some length to the present unsatisfactory condition of the art of pharmacy. He stated that the British Pharmacopœia in no way represented the advance which had been made in their department of science in the long interval which had elapsed between its publication and the preceding issue. It was simply a collection of fragmentary papers, with an absence of the applied practical knowledge necessary for the proper elaboration of such a work. The result had been most unfortunate, and, excepting in some of the large centres and more important provincial towns, pharmacy had no existence for pharmacists, the whole of the work being absorbed by medical men, to the detriment of the interests of those whose legitimate calling it was supposed to be. Prescriptions were now so rare that, when one made its appearance once a fortnight or thereabouts, there was quite an excitement to see the curious interruption to their ordinary duties. There was a growing evil which might be called "wholesale prescribing for the medical profession." Proprietary preparations, for the most part "factory made," were thrust upon doctors and unblushingly advertised, sapping the foundations of pharmacy and depriving the pharmacist of the legitimate practice of his calling. Chemists were harassed by the demand for these proprietary medicines, which prescribers took up without thought, and without a second thought thrust aside. It should be the business of the Conference, as soon as unofficial preparations of a certain type attained favour with the profession, to construct formulæ fairly representing them, and issue them as unofficial formulæ, which might be prescribed by medical men with the addition of the letters "B.P.C.," or British Pharmaceutical Conference. At the conclusion of the address, it was resolved—"That in order to secure greater uniformity of composition and strength in non-official remedies, and also to enable the medical profession to prescribe them with definite knowledge of those qualities and without indicating any particular maker, the British Pharmaceutical Conference undertakes the preparation of a formulary of non-official remedies." With the view of giving the resolution effect, a committee was appointed with instructions to enter on its labours at once, a grant of money being placed at its disposal for expenses. The *Chemist and Druggist*, commenting on the President's address, points out that an article is not necessarily bad because it is "factory made," and that there is no special reason why proprietors of such articles should be expected to blush when they advertise them. True pharmacy is not a religion hedged about by dogmas never to be changed or challenged without calling forth a charge of impiety, but simply a business free to all with certain qualifications, and requiring vigour and intelligence for its successful prosecution. The doctors who first ordered small bottles of concentrated medicines—"ten drops to be taken in a wineglassful of water"—did a great deal towards sapping the foundations of the true pharmacy of fifty years ago, but chemists and druggists had to adapt themselves to the change.

HYDROPHOBIA.

OUR Paris correspondent writes:—"The following case of authenticated cure of hydrophobia addressed to Dr. de Pietra Santa, and which was published in the *Journal d'Hygiene*, may be of interest. A peasant of Saint Anastasia, near Naples, aged fifty-two, was bitten on the 10th of May last in the leg and in the forearm by a dog whose rabid condition was verified at the necropsy. On July 28th the man was suddenly seized with malaise, excitement, and oppressed breathing, accompanied with a sense of constriction in the throat. His wife offered him a glass of water, but the sight of this liquid immediately threw him into a fit of mania, which was followed by convulsions. He was taken to the Hospital for Incurables at Naples, where he was admitted into the ward of Dr. de Capua in a most deplorable condition. The patient complained of feeling cold; the sight of water and the slightest current of air provoked a great degree of excitement, convulsions, and delirium. Basing his faith on the eminently parasiticidal virtue of corrosive sublimate, Dr. de Capua immediately practised repeated injections of this salt subcutaneously, and combated at the same time the nervous paroxysms (culminating symptoms of rabies) with injections of atropine, which he alternated with those of the corrosive sublimate. The injections were renewed the following days. This treatment was crowned with full success. The rabic symptoms amended progressively, and after a few days the patient was able to swallow a glass of water without wincing. Soon after this he asked to eat and drink, and expressed a desire to leave the hospital. Dr. de Capua observes that the delirium in this case assumed three distinct forms, which followed one after the other. In the first place it was mournful and melancholic; the patient believed himself to be the object of all kinds of persecution. This was succeeded by a delirium bearing a relation to his profession: he imagined that he was occupied at his village with his usual agricultural pursuits.

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Then came the mystic form, manifesting itself by prayers and religious hymns from morning till night. Dr. Macario, of Nice, the author of this paper, concludes it with the recommendation that physicians and physiologists should undertake experiments, either to confirm or disprove the therapeutic value of corrosive sublimate and of atropine against rabies, adding that if clinical observation and experimental tests on animals confirm the efficacy of the medication proposed by the Neapolitan physician, we shall have at our disposal two powerful arms to combat the most terrible of maladies—the anti-rabic inoculations of Pasteur as a prophylactic means, and the subcutaneous injections of corrosive sublimate and atropine of Dr. de Capua as a curative measure. This will be one of the most marvellous conquests of modern medical science."

SCARLATINA.

THE *Birmingham Medical Review* contains a contribution to the pathological anatomy and histology of scarlatina by Dr. Crooke. It is remarkable that the mammilated appearance of the pyloric region of the stomach was very marked in a case that terminated fatally in twenty-six hours. Microscopical examination showed that this appearance was due to inflammatory hyperplasia of the adenoid tissue, which is normally present in the gastric mucous membrane of children and young adults, as Dr. Herbert Watney has demonstrated. At some places the hyperplasia is seen to be so considerable as to extend up to the surface of the mucous membrane, displacing in its extension the gastric tubules. Whilst able to corroborate the accuracy of the observations of Dr. S. Fenwick as to the presence of interstitial gastritis in scarlatina, Dr. Crooke does not regard the interstitial change as evidence of a past morbid process. He believes that simple catarrhal gastritis occurs in a more or less marked degree in most cases of scarlatina, fatal during the febrile stage; but that in cases characterised by the exceptional severity of the gastric disturbance, where the interstitial changes are so pronounced as in three cases examined by him, the condition is usually, if not invariably associated with a similar acute interstitial and follicular inflammation of the mucous membrane of the intestine, and is therefore to be regarded as part of an acute inflammatory attack, of which the chief stress falls on the adenoid tissue of the stomach and intestines.

THE ROYAL BELGIAN SOCIETY OF PUBLIC MEDICINE.

THE Belgian Society of Public Medicine has just held its annual meeting, which was attended by a large number of persons. M. H. Kuborn presided. The main question discussed was, "the removal of excrementitious matter from towns and thickly inhabited localities unprovided with sewers." In the report, which was adopted after a lengthened discussion, a strong condemnation is expressed of cesspits (*puits perdus*), and an opinion hazarded that they should be forbidden by law. The system of separating solid and liquid sewage is also condemned, as are all the known methods of disinfection, which, it is remarked, are expensive and frequently destructive of the fertilising properties of the sewage. Deodorisation processes are admitted to be valuable in certain cases only, as in camps, hospitals, and isolated barracks or houses. The system of cesspools and movable receptacles (*fosses mobiles*) may be permitted under strict surveillance, but a regular system of sewage acting by gravitation or worked by pumps is much better from a hygienic point of view than any other; this system should be water-tight, and should convey sewage of all kinds to one or more central reservoirs. The question, therefore, which the Society had to discuss seems to have been somewhat shirked, for the reply is virtually, "If there is no system of sewers in existence, the only thing to do is to construct one." It is to be hoped, too, that the omission of all mention of sewer ventilation in the report does not imply that that is considered an unnecessary precaution.

DISEASE OF THE NOSE CAUSING APHONIA AND DYSPNŒA.

DR. PREDBORSKI mentions in the Polish journal *Gazeta Lekarska* a case of aphonia and spasmodic dyspnœa, where the cause was found to be an affection of the nose. A young Jewess, subject from childhood to attacks of epistaxis, received a severe nervous shock, being, in fact, the subject of an attempted violation. After this she completely lost the power of speech and began to suffer from attacks of spasmodic dyspnœa; her catamenia also ceased. One of the attacks was so alarming that it was thought that tracheotomy would have to be performed, and preparations were made for the operation, but, on chloroform being given, her condition improved so much that she not only breathed more easily but began to scream, so that all thought of operative procedures was abandoned. In a few weeks' time the girl seemed much better, but subsequently the symptoms reappeared. The nose, on examination, showed that the lower and middle turbinated bones on the left side were red and tumefied. When they were touched pain was produced, accompanied by sneezing and discharge of mucus. The application of chromic acid quickly and completely restored the patient to her usual state of health.

THE MASSACRE OF THE INNOCENTS.

A CASE of poisoning which serves forcibly to illustrate the necessity for caution in the administration of opiates to children has recently occurred at Goole, and has been the subject of an investigation by Dr. Grabham, the coroner for the Honour of Pontefract. From the evidence of the mother, it appears that her child, aged nine weeks, having been cross all day, she sent the servant girl to the chemist for a pennyworth of Godfrey's cordial, giving her an old bottle labled "Poison" to fetch it in. She noticed a brown coating at the bottom, but did not take the trouble to wash it out. When the girl returned, she took the bottle off the sideboard and gave the baby a teaspoonful. She then found she had made a mistake, and shortly after the child died. The servant stated in evidence that she misunderstood her mistress and asked the chemist for a pennyworth of laudanum. When she came back she was sent out again directly, and put the bottle down on the sideboard, and that was how it happened. The chemist deposed that he did not recollect the last witness coming to his shop, as so many people came for laudanum, and he sold pints of it in the course of the week. The coroner, in summing up, said the cause of death was clear. The mother admitted that she had given the child a teaspoonful out of the bottle, whilst the servant told them that she had asked for laudanum instead of Godfrey's cordial. He did not blame her, for she was young and thoughtless, and had only been entrusted with a verbal message to get a pennyworth of the cordial, which she had translated into laudanum on her way to the shop. Even if she had not made the mistake, there was probably enough dried laudanum at the bottom of the bottle to have caused the child's death. He could not blame the chemist, for he was within the law in selling laudanum without asking what it was for, the Act of Parliament simply requiring that a poison label should be placed on the bottle. It was startling to be told by the witness that every week he sold pints of laudanum to his customers, for it could not be supposed

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that even a fraction of this was required for external application. The existing law regulating the sale of poisons was to blame, and he trusted the Government would soon take steps to remove this blot from the statute-book. Steps should be taken to protect both infant and adult life, for the number of people killed every year by opium, whether sold as such or in the form of quack nostrums, was frightful to contemplate. Opium in any form was a dangerous poison to young children, and should never be administered to them without the advice or under the superintendence of a medical man. The jury returned a verdict of "Death by misadventure." At an inquest held a few days ago at Kensal-green, Dr. Diplock, the coroner, told the jurymen that they "would be astonished if they knew the number of deaths through parents taking their children to chemists, and thus losing time in the proper treatment of disease." The necessity for legislation in the direction of the better protection of infant life is apparent.

INTESTINAL LESIONS DUE TO CORROSIVE SUBLIMATE.

THE use of the corrosive sublimate in general antiseptic surgery has led MM. Charrin and G. H. Roger to investigate the intestinal conditions said to be caused by the absorption of the salts of mercury. Although there can be no doubt of the capacity of mercurial salts absorbed into the blood to produce serious changes in the intestines, yet it has been questioned whether the solutions ordinarily employed are capable of causing the intestinal lesions which have been attributed to their action. It must always be remembered that in the cases in question the chance that the intestinal lesion may have been caused by the disease from which the patient is suffering always exists. The experimenters above mentioned have injected under the skin and into the veins of rabbits and guinea-pigs a solution of 1 in 1000 and 1 in 4000 of corrosive sublimate. Administration by the mouth has not been practised, because Prevost has shown that quantities ten times as large as those injected hypodermically would be required to produce the same effects. It has been found that a medium dose injected at a single time had more effect than a much larger dose administered over a longer period. Thus, to a guinea-pig weighing 500 grammes, two milligrammes injected at once under the skin may determine the formation of numerous ulcers, whilst five milligrammes given in eighteen days, or three in six days, produced no effect. The animals experimented upon have rarely shown special indications of intestinal lesions; emaciation and albuminuria frequently occurred, but rarely diarrhœa, and never intestinal hæmorrhage. Small doses only being administered, the animals have never died, but have been killed at different periods in order to follow the evolution of the intestinal changes. The lesions have always been confined to the large intestine, and chiefly to the ascending colon and cæcum. In some cases the ileo-cæcal valve was attacked, and occasionally the lower part of the ileum. The essential nature of the changes appears to be a hæmorrhage, which first of all takes the form of minute points; these gradually increase in size until areas of extravasated blood are formed, which may undergo a kind of sloughing, the varying degrees of extravasation being in direct proportion to the amount of the poisoning. Inflammation may take place around the extravasations, but perforation has never been observed. To transfer these facts to the domain of human pathology, it would appear that a single dose of ·24 gramme (or ·60 gramme spread over five days) would be required in order to produce the intestinal lesions always assuming, what we have but little right to do without actual observations to support the supposition, that the susceptibility of men to the poison is the same as that of the animals experimented upon. It is not impossible that the intestinal lesions in man may be induced by very small doses of the sublimate.

COLD BATHING.

THE use of cold water as a bath for ordinary health purposes—we are not speaking of its use for the strictly medical purpose of reducing the temperature of the body in certain states of disease—is purely reactionary. The cold bath is only useful, or even safe, when it produces a rapid return of the blood to the surface immediately after the first impression made, whether by immersion or affusion. The surface must quickly redden, and there must be a glow of heat. If these effects are not rapidly apparent, cold bathing is bad; and no such effects are likely to be produced unless the circulation be vigorous and both the heart and bloodvessels are healthy. Great mistakes are made, and serious risks are often incurred, by the unintelligent use of the cold bath by the weakly or unsound. Moreover, it is necessary to bear in mind that there is seldom too much energy to spare after middle age, and it is seldom expedient for persons much over forty to risk cold bathing. We would go so far as to say that no one above that age should use the tub quite cold unless under medical advice. It is possible to be apparently robust and, for all the average purposes of life, healthy, and yet to have such disabilities arising out of organic disease or weakness as to render the recourse to heroic measures, even in the matter of cold bathing, perilous.

THE SANITARY STATE OF WEST COWES.

BOTH those who assail and those who uphold the existing sanitary circumstances prevailing in West Cowes have taken the opportunity to make known their views in the public press. One side asserts that infectious disease prevails there in connexion with states of sewerage and water-supply that should not exist; and the other side, giving an estimate of their own as to the present population, try to prove a low mortality in the place, and also declare that the sewerage has been carried out according to the wishes of the Local Government Board. Most of the statements on both sides are thus far very general, and all we know for certain is that diphtheria has been prevalent in the place. When Mr. Spear's report is issued, the matters in default will probably be specifically referred to, and then they can more advantageously be discussed.

RESIDENCE IN FLATS.

IN connexion with the subject of house rents, the question of residence in flats is being a good deal discussed and its advantages are being advocated. There is one point to which we would advert as worthy of consideration in settling whether a flat is preferable to an entire house. Flats have generally the advantage of being of modern construction, and it may in many cases be inferred that some of the principal evils due to faulty and defective drainage in old houses are avoided in them. But, on the other hand, cases have come to our knowledge in which the drainage of first-class buildings laid out in flats has been found to be seriously defective, and then the tenants find themselves in considerable difficulty, since they are without the control which an ordinary householder has over the general sanitary arrangements of his house. The defect in question is not usually one affecting the drain connexions in the individual flat, but the whole premises suffer from the want of the passage of a constant current of air through the general house drain, such as is secured by the provision of an inlet and outlet pipe on the house side of an efficient trap before

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the drain reaches the sewer. Some tenants, after constantly suffering from indisposition from inhalation of drain air, have been compelled to give up their flats. It would be well if owners of flats were to secure a certificate from some expert in sanitary engineering, to the effect that the drainage arrangements affecting the entire establishment were carried out on proper principles.

A CONJOINT EXAMINING BOARD FOR IRELAND.

THE scheme for constituting an Examining Board in Ireland by the College of Physicians and the Royal College of Surgeons in Ireland, under the provisions of Section 19 of the Medical Act, 1858, is almost complete, and but slight modifications of the report presented by the committee appointed by each College may be expected. The Examining Board will consist of twenty-four members, twelve being appointed by each College, who will pay the examiners whom they may appoint. The subjects for examination will be chemistry, physics, materia medica, pharmacy, anatomy, physiology, and histology; medicine, surgery, midwifery, and diseases peculiar to women; therapeutics, forensic medicine, and hygiene; pathology; and the Council of the College of Surgeons propose to add ophthalmic and aural surgery. A committee of management will arrange the examinations and perform other duties; and this committee will consist of three representatives from each College, to be elected annually, and to be disqualified from holding the office of examiner. The committee annually elect a secretary, whose remuneration is to be shared equally by the Colleges. No person engaged in private tuition will be eligible for the post of examiner. There will be four examinations, one at the end of each year of professional study, the student being examined in anatomy in three several years; in physiology on two occasions; chemistry the same; and in surgery in the third and fourth year; while the College of Surgeons recommend at the end of the second year of study an examination in hospital practice—elementary, medical, and surgical; and the same body suggest that in the fourth year the subjects should include ophthalmic and aural surgery. There is very little difference in the number of lectures and the hospital attendance usually required up to this for the licence of either College, and the fees are fixed at the same amount—viz., £42, for which sum the licence of both Colleges can be obtained.

THE CLEARING OF DUSTBINS.

A WELL-KNOWN firm have complained in a contemporary of the nuisance caused to themselves and their customers by the collection of house-dust by the scavengers at two o'clock in the afternoon. Mr. John Braye, a member of the Kensington vestry, writes also to the same journal to say that after much inquiry he finds that "a well-organised early morning collection daily is not more expensive than the old and slovenly system of dustbins. The receptacles are provided by the corporation, they are placed outside the dwelling in the morning, and all the men have to do is to tip the contents into their vans." He cites the arrangements of Glasgow, where it is a common practice to have a daily collection of dust, and says that last year Glasgow sent 186,000 tons of dust to fourteen Scotch counties, and sold it to the farmers for manure, realising a profit of £13,700, after paying upwards of £10,000 for railway carriage. There is indeed not the least doubt that the scavenging of the metropolis could be effected in a far better manner than at present. Some slight difficulty would have to be surmounted in effecting an alteration of a method that has been in existence for years. But this is not the chief obstacle. The real hindrance to any improvement is to be found in the fact which Mr. Braye points out, that "to scavenge the high road from Tattersall's to Charing-cross it takes the divided exertions of no less than six vestries and district boards of works, each with a separate system."

THE DRESS OF FEMALE PAUPERS.

SOME good has probably been done by the City of London Board of Guardians in raising a discussion on the dress of female paupers. It is true the Board came to no actual decision, but they opened the question, and it is one which ought to benefit by investigation. While, in the opinion of some, the check fabrics of light material now in use might be discarded in favour of black stuff dresses, which are less suggestive of public charity, others oppose this change on the ground that black stuff will not wash, and must therefore tend to harbour vermin. The objection, we fear, is a valid one in regard to most kinds of black cloth which are available for this purpose. The composition of such goods—a mixture of wool and vegetable fibre,—apart from the too common instability of modern dyes, renders them unsuitable for washing. As a possible solution of the difficulty, we would suggest that a light material be used as heretofore, the dye being varied if desired, while care is taken that the underclothing (which ought to be woollen) is such as to allow of the same dress being worn at all seasons. A double advantage in comfort and improved appearance might thus be gained.

HÉNOCQUE'S HÆMATOSCOPIC METHOD.

M. HÉNOCQUE exhibited to the Medical Congress at Nancy last month his apparatus for investigating the blood by *hæmatoscopy*. The process consists in first determining the amount of oxyhæmoglobin in the blood by the hæmatoscope, and then estimating the time required for its reduction by observing its passage across the thumb-nail through a direct vision spectroscope. The activity of reduction varies independently of the quantity of oxyhæmoglobin, being generally increased in persons of sanguine habit and in patients with arthritic and rheumatic diseases, and diminished in those with anæmia, chlorosis, epilepsy, temporary bilious disturbances, menstrual troubles, and in certain stages of phthisis.

FACTORY INSPECTORS.

THE Secretary of State for the Home Department, in answer to Mr. Reed, intimated that he did not propose to increase the number of inspectors of factories. This will be a disappointment alike to the advocates of working-class interests and of sanitary reform. To mention only one detail, we have frequently demonstrated in these columns how inadequate is the inspection of the "sweaters' dens" that constitute a permanent scandal in the East-end of London. Mr. Lakeman has spent much energy and time in coping with the evil; but the work is altogether beyond the powers of any one inspector. We have further urged that a detective service should be instituted. No one is, perhaps, better known in the East-end of London than Mr. Lakeman. There is a regular signal by which his approach is notified to all the "sweaters." Thus they have ample time to put their houses in order, to conceal or send away the women and children working beyond the regulation hours, or the extra hands that overcrowd the workshop. No one who is in the least degree acquainted with the subject can doubt that for the proper enforcement of the Factory and Sanitary Acts a much larger number of inspectors is absolutely necessary; and these officials should also be able to employ, at least occasionally, a detective force. Mr. Matthews' answer is, consequently,

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very discouraging for those who anticipated that the present Government would forward those legislative and administrative measures which, though unsensational and unpretentious, very largely contribute to the real welfare of the people.

THE PERONEAL TYPE OF PROGRESSIVE MUSCULAR ATROPHY.

THE thesis prepared by Dr. Howard Tooth for the degree of M.D. in the University of Cambridge contains valuable information and an excellent bibliography. The author of the thesis contends that there is a form of progressive muscular atrophy which commences in the lower extremities, most often in the peroneal muscles, but sometimes in the tibialis anticus, extensor longus digitorum, or gastrocnemius; that the hand and forearm muscles are attacked at an early period; that the disease is one of childhood; that heredity is a marked feature; that the disease shows a slight preference for the male sex; that fibrillar or fascicular tremors are frequently, though not always, present; that degenerative electrical reactions are often an early phenomenon; and, lastly, that from a record of necropsies, as well as from the clinical symptoms, it may be inferred that the disease is one affecting the peripheral nerves.

THE SANITARY CONDITION OF WINDSOR.

ON the 14th inst. Mr. Ritchie, President of the Local Government Board, received a deputation from New Windsor, to protest against the charges made by THE LANCET in respect of the insanitary condition of Windsor, and to ask the Local Government Board to appoint an inspector to investigate the subject. Mr. Ritchie, in reply to this request, said that the matter was one of very great importance to Windsor, and that, looking to the exceptional circumstances of the case, he should feel inclined to grant their request. He assumed that the sanitary authority would remedy any defects that might be pointed out. As it was important that the matter should be attended to quickly, Mr. Ritchie intimated that the inquiry would be instituted in the course of a few days.

"SCOTODINIA."

THE term "scotodinia" is probably not often used by medical men nowadays, but it was mentioned recently in the course of consultation, and its precise meaning not being evident to all the members of the consultation, it may be as well to say that the term is used to signify the not unfrequent combination of symptoms of blindness with giddiness. It does not necessarily refer to Menière's disease, for scotodinia is a symptom of a great variety of pathological states, such as gastric disorders, anæmia, and various forms of toxæmia, whether associated with weakened action of the heart or not.

COCAINOMANIA.

ERLENMEYER, in the *Deutsche Medizinal Zeitung* (1886, No. 46), has studied the symptoms in a number of individuals who have used cocaine to excess, by subcutaneous injection or otherwise. The characteristic symptoms denote vaso-motor paralysis, the pulse is accelerated, the sweats profuse, and dyspnœa and syncope ensue. Failure of general nutrition is very notable, the eyes become sunken, and the skin of cadaveric hue. At a more advanced stage psychic troubles supervene, sometimes requiring personal restraint. Most of the persons so affected had previously been addicted to the abuse of morphia, and cocaine had been resorted to as a minor evil. It would therefore be unjust to lay too large a share of the troubles noted at the door of cocaine; still, enough evidence is at hand to prove that it may be productive of evil consequences, and should only be used as a powerful medicament with circumspection.

CLEANSING THE BLACKWATER.

WE have from time to time directed attention to the insanitary condition of the low-lying marshes between Aldershot and Wellington College Station, through which the stream known as the Blackwater, a tributary of the Thames, runs. This stream has been for years past clogged with mud and filth, partly derived from the marsh-lands, and much contaminated by sewage deposits, which in the past have been allowed to pollute the stream; it is satisfactory to find the several sanitary authorities having jurisdiction over the districts bounded by this stream, are about to act in concert, with a view to clean out the Blackwater, between Aldershot and Sandhurst. The cost of such a work must be considerable; and it appears reasonable that each district should bear its proportion of the cost. The Blackwater stream forms the boundary of several districts, and is the boundary also of the counties of Berks, Hants, and Surrey, where these counties meet in the valley of the Blackwater. Thus, there are not only several sanitary authorities interested in the subject, but the three counties also. This complicates somewhat the estimate of the proportion each district should bear. We hope this will not interfere with a thorough execution of this much-needed sanitary improvement.

THE SURGERY PROFESSORSHIP IN QUEEN'S COLLEGE, BELFAST.

IN addition to the candidates mentioned in THE LANCET of the 7th ult., it is announced that Dr. Thompson, Surgeon to the County Tyrone Infirmary, is in the field. It is expected that the appointment, which is a Government one, will be made shortly.

FOREIGN UNIVERSITY INTELLIGENCE.

Kharkoff.—Dr. N. Saleski, Extraordinary Professor, has been appointed Professor of Pharmacology.

Leipsig.—Dr. Friederich Albin Hoffman, Professor and Director of the Medical Clinic and Polyclinic in Dorpat, has been appointed Professor of Special Pathology and Therapeutics and Director of the Medical Polyclinic.

Prague (German University).—The Professorship of Midwifery and Gynæcology, vacated by Prof. Breisky, who has gone to Vienna, has been filled by the appointment of Dr. Ludwig Bandl, Extraordinary Professor in Vienna.

Odessa.—Dr. M. Rasumovski has been appointed to lecture on Medical Jurisprudence in the Legal Faculty.

WE regret to learn that Mr. T. M. Stone, so well known to the profession through his services during nearly half a century at the College of Surgeons, when returning from the funeral of the late Dr. Wakley, was seized with a fit or faint, and fell on his face. He was found by a passer-by, bleeding much from his face, and taken to a farmhouse, where he received attention and assistance. He was seen on the following Monday by Mr. Henry Smith, who found he had received a severe wound on his nose and contusion of the face. Mr. Stone, we are glad to say, is now so far well as to be able to drive out.

THE Cama Obstetric Hospital at Bombay, the foundation stone of which was laid in 1883 by H.R.H. the Duke of Connaught, was formally opened on July 30th by her Excellency Lady Reay, the lady president of the Western India Branch of the Association of India for the supply of Female Medical Aid.

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MR. WALKER of Newcastle, the public analyst for Carlisle, has announced, as the result of a microscopic examination of the ham forwarded to him by Dr. Henry Barnes, and which was suspected as the cause of the recent poisoning of a Carlisle wedding party, the discovery on several occasions of a bacillus which he is now cultivating in different media. This discovery, it is thought, may lead to a satisfactory elucidation of the mystery which so long surrounded the case. Dr. Page of the Local Government Board has been instructed to assist in the inquiry. Portions of the ham have also been sent to Mr. Watson Cheyne and to Professor Greenfield for examination. We hope to be able to give, probably next week, a detailed history of this interesting case.

SCARLET FEVER, which has existed for several months in the Cumberworth district of the Huddersfield Union, is reported to be greatly on the increase. The district includes the parishes of Cumberworth, Denby Dale, Shelley, and Skelmanthorpe. We are informed on good authority that one practitioner alone has had sixty-one cases brought under his notice.

THE address delivered by Mr. Erichsen in the Surgical Section of the British Medical Association at Brighton has been translated into Spanish by Dr. Ulecia of Madrid, and appears in the current number of the *Revista di Medicina y Cirurgia Practical*, and into Italian by Dr. Longhi of Milan, for the *Gazzetta degli Ospitali*.

THE managers of the Hudson River State Hospital, Poughkeepsie, N.Y., have established, in connexion with the institution under their charge, a training school for the instruction of those who wish to make a specialty of nursing the insane, either in private houses or public institutions.

DR. PEKELHARING, Professor of Medicine in the University of Utrecht, has been instructed by the Government at the Hague to proceed to Acheen to make special inquiry into the nature of the malady known as "beri-beri."

THE proposed special grant to the Belfast Royal Hospital is threatened with strong opposition by Mr. T. W. Russell, who has been promised the support of Mr. Labouchere and several other leading Radicals.

THE nineteenth annual meeting of the Canadian Medical Association was commenced at Quebec on the 18th ult.

THE PRIVY COUNCIL AND THE APPROACHING ELECTION OF DIRECT REPRESENTATIVES.

OUR readers will remember that the Medical Act of 1886 left the making of regulations for guiding the procedure of the Branch Councils in the matter of the election of direct representatives with the Lords of the Privy Council. The *London Gazette* of Sept. 3rd contains the orders and regulations of their lordships. A schedule contains the regulations, and an appendix gives certain forms. Form A is a notice of the election, to be published at least fourteen days before the election in at least two newspapers in the part of the kingdom in which the election is to be held. Form B is the precept of the returning officer, the President of the Medical Council requiring the Branch Council of each division to cause the election of the proper number of representatives. Form C is a form of Nomination paper. Form D is the form of Voting paper, to be prepared and forwarded in due time by the Branch Council of each division to each registered practitioner in that part of the United Kingdom. As the nomination of candidates is the act of the profession, and those nominating are required to keep as nearly as possible to the prescribed form, we append Form C. The other forms are for the guidance of the returning officer or the Branch Councils.

FORM C. (*Form of Nomination Paper.*)

We the undersigned, being registered medical practitioners resident in* , hereby nominate† of‡ a registered medical practitioner, as a proper person to be elected to the General Council of Medical Education and Registration of the United Kingdom by the registered medical practitioners resident in*

(Date) Signed§

* Here insert England, Scotland, or Ireland, as the case may be.
† Here insert name of person nominated, in full.
‡ Here insert address and registered qualification or qualifications of person nominated.
§ To be signed by not fewer than twelve registered medical practitioners, to the signature of each one of whom his address and registered qualification or qualifications must be appended.

The regulations themselves have interest chiefly for the Returning Officer and the Branch Council. But one or two points of interest may be noted. As to the time of the election, the exact date still rests with the returning officer. But their lordships "order and direct" that for the purposes of the next election of direct representatives the returning officer shall, in the course of the period of seven days ending with the 13th November next, *issue his precept to the Branch Council* in each part of the United Kingdom, as required by the eighth section of the Act. Now this said section requires the Branch Council to cause the representatives to be elected within twenty-one days after the receipt of the said precept. This would involve the selection taking place on or before the 4th of December. The last day for sending in the *nomination* papers is to be fixed by the returning officer, and at least fourteen days before the day so fixed the returning officer is to cause a notice of the election to be published specifying the number of persons to be elected, the place where the nomination papers are to be sent in, and the last day on which they are to be sent. This notice is to be published in at least two newspapers. But doubtless the returning officer will publish it in the medical papers for greater certainty of its being seen by nominators of candidates. As to the voting papers, they will be prepared and forwarded by the Branch Council. These papers will contain a list of the candidates, and the voter is to write his initials in the space against the name of the person or persons for whom he intends to vote. Those interested in the election of candidates will do well to supply themselves with a copy of the *London Gazette* of September 3rd.

THE NEW SYDENHAM SOCIETY.

THE twenty-eighth annual meeting of the New Sydenham Society was held in the Pavilion at Brighton, August 13th, Mr. S. W. Sibley in the chair.

The minutes of the last meeting were read and confirmed.

The Secretary read the draft of the report as prepared by the council, and the statement of the Society's income and expenditure; the balance-sheet for 1885 had been duly audited by Dr. Clapton and Mr. Corner, by which it was shown that the receipts amounted to £2092 5*s.* 4*d.* and the expenditure to £2174 2*s.* 2*d.* It was moved by Dr. Moore, of Dublin, and seconded by Mr. Jessop, of Leeds, "That the report and balance-sheet, as presented by the council, be adopted, and, as usual, printed for circulation." For the present, it is intended to restrict the Society's work chiefly to translations of modern books. The work adopted for translation during the year is a series of clinical lectures by Prof. Charcot, now in course of publication.

A ballot of the officers for the ensuing year was next taken, when Sir Spencer Wells was elected president, Dr. Sedgwick Saunders was re-elected treasurer, and Mr. Jonathan Hutchinson, hon. secretary.

The following resolution, moved by Dr. Chadwick, and seconded by Mr. Vincent Jackson, of Wolverhampton, "That the best thanks of the Society be given to the retiring officers for their services during the past year," was carried unanimously. It was moved by Mr. Jones Morris, of Portmadoc, seconded by Mr. Jessop, of Leeds, and carried unanimously, "That the best thanks of the Society be given to the honorary local secretaries, on whose exertions in the past so much of the success of the Society depended.' After a vote of thanks to the Chairman the meeting separated.

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THE LATE JAMES G. WAKLEY, M.D.

WE might fill several pages of our present number with grateful tributes to the work and character of the late Dr. Wakley, Editor of THE LANCET. It is very gratifying to those concerned in this Journal to receive such communications, and very painful to them to be unable to publish more than a few of them. Those whose communications do not appear will understand the extreme pressure on our space, and will believe that, even out of deference to him whose loss is so acutely felt, we must use it so as to advance the great ends of Medicine. The following lines are from one whose friendship Dr. Wakley valued much. Their authorship might have been guessed without the appended name, which many English readers will, however, be glad to see, as of one still bound by strong ties to this Journal.

IN MEMORIAM—J. G. W.

Non secus ac flerunt Palinurum Troes ademptum
Per freta nocturnam nave tenente viam,
Deflendus nobis raptus de puppe magister
Pervigil adversas tot superare vices:

Digne, mari rerum, qui molireris habenas
A patre donatas deficiente manu,
Direxti cursum, medica ducente Minerva,
Quo genus humanum cunque petebat opem.

Ergo perpetuus carum sopor urget amicum
Quem Pudor et lugent cum Probitate Fides?
Cui fuit in terris curae praestare salutem
Illum habet in caelis non peritura Salus.

J. P. STEELE, M.D.

IDEM ANGLICE REDDITUM.

As wept the Trojans wandering o'er the deep
Their missing Palinure's directing power,
We mourn our Palinurus, prompt to keep
Unerring watch through many a fateful hour:

Oh worthy, on life's waters, of the helm
Thy sire bequeath'd thee! In thy yearly course
Thou hail'dst each harbour of the healing realm
Whence Science still could perfect her resource.

Sound is thy slumber; yet, from o'er thy grave,
Unselfish Worth and Faith, in accents soft,
Say: He whose part below was life to save
Shall rise, redeem'd, to better life aloft. J. P. S.

From medical officers of the Royal Navy letters of condolence have been received, expressive of their sense of their "loss of a sturdy friend and advocate of the rights of their department—one who, during thirty years, never failed to render his aid on every just occasion, by bringing their wrongs and claims to the knowledge of the profession at large, by opening his columns to the communications sent to him by the trusted representatives of the corps."

"THE LANCET" AND THE LATE DR. WAKLEY.

To the Editor of THE LANCET.

SIR,—In one of his essays Bacon says that "they are happy men whose natures sort with their vocations." After reading the articles which have appeared concerning the late Dr. Wakley, I have come to the conclusion that his life was singularly happy. His nature seems to have sorted with his essentially responsible vocation of Editor of THE LANCET in a fashion that is seldom observed amid the feverish changefulness of these latter days. It was indeed fortunate that such was the case, more especially when one remembers and considers the great and, in my opinion, beneficent influence which THE LANCET possessed, and continues to possess, over the words and actions of the medical profession. Under the guidance of Dr. Wakley, it became something more and better than a merely Medical Journal. It has discovered to the profession, and continues to enforce the discovery upon the attention of medical practitioners, the fact that the science of medicine has a higher end before it than is to be found in the every-day work of patching up decrepit humanity. Beyond the usually understood routine of general medical practice there are many questions of moment, with the settlement of which the medical practitioner is concerned. I have always regarded the prevention of disease as the most important part of my duty as a medical practitioner, and I am glad to say that the education of the people in the first principles of sanitary science is becoming the fashion. The necessity for watchfulness in the education of children has frequently been insisted on by the late Editor of THE LANCET. The recognition of insanity in connexion with criminal outbreaks, and the consequently intelligent restriction of the insane criminal; the intimate, and, as I believe, inseparable connexion between physical and mental life; the improvement of the race by means of patient investigation into the wide and far-reaching subject of hereditary transmission of physical virtues and defects; the supply of rational and informing amusements to the multitudes whose thoughts are in their eyes and ears,—with all these, and other questions the medical practitioner is concerned, and it will not be the fault of THE LANCET—if a continuity of its excellent purpose be preserved—if he remain hard and fast in a narrow and thought-obliterating groove.

I have been impelled to write these words by a consideration of the manner in which Dr. Wakley discharged the onerous duties of Editor. For editors in general I have a profound and occasionally panic-stricken respect. They are, in the best and most real sense of the term, absolute monarchs. Dr. Wakley seems to have been a genial and kindly occupant of the editorial throne. For a long period of time, he conducted, with marked and increasing success, a Journal to the words of which, not only a profession singularly jealous of any infringement of its rights, but also the intelligent public, turn an interested ear. He seems to have possessed in full measure a store of that discerning and discriminating wit which, with keen vision, separates the gold from the dross of human life, and without which learning is an unfruitful field; and yet such men as he pass from the knowledge of their kind with little ceremony. A statesman, a soldier, a man of science, or a leader in literature must die in a rude gothic fashion, on the uncurtained stage of life; but the journalist—the interpreter of the world's incoherent babble—dies after the more decorous fashion of the great dramatist, out of the sight of men. The busy world is astonished for the moment when it learns that the editor of this or that important journal is dead. He had laboured with hearty devotion to the cause in which he was engaged, but his labour had been in secret, or known only to the few who had laboured by his side. The influence, however, that such a man exerts on the course of human life and the character of human action remains as an indefinite and immortal essence, and I am Positivist enough to believe that for the honest and conscientious journalist there is an impersonal immortality of the sweetest and most unselfish kind. I do not know if the breathless world will pause for a moment's reflection upon the worth of such a man as Dr. Wakley, or bewilder itself over the consideration of monument and memorial. To his friends, with whom there is not only the sadness of the recent sorrow, but also the satisfaction of reflecting upon his character and worth, the best monument will be the fragrant memory of his well-spent life.

I am, Sir, yours truly,

Glasgow, Sept. 5th, 1886. ROBERT MACPHERSON.

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ARMY MEDICAL DEPARTMENT.

IN the discussion which took place in the House of Commons, in Committee of Supply on the Army Estimates, the condition of the Medical Department, and the grievances, especially of the junior officers, were pretty fully discussed. Colonel Duncan, who spoke with a practical knowledge of the working of the service, appears to regret the substitution of the departmental for the regimental system, as he believed the men were better looked after under the latter, "and the medical officer was emphatically a friend among the other officers." But he admitted that the regimental system could not be worked on active service, and that it was necessary to have the same system in peace as in war. A study of the working of the department in our recent campaigns, compared with that of the later years of the regimental system, most fully confirms this opinion. Colonel Duncan bore valuable testimony to the good service done by the medical officers, and to the courage they had shown in the midst of epidemics and in the field. He brought forward, on their behalf, two distinct grievances: the first being the disproportionate amount of foreign to home service; and the second, the examination of surgeons-major previously to selection for promotion. The first of these has, no doubt, pressed hardly upon medical officers during the past few years, but it has been a result of unforeseen circumstances connected with active war, and from the statement of the Secretary of State for War it appears now to be gradually abating. The other point—that of the examination of surgeons-major—is one of great importance, and on it we cannot agree with the gallant Colonel. The evils of promotion to the administrative ranks by seniority, without reference to the special qualities required, were so clearly shown under the old system, that the Commission presided over by Lord Herbert urged promotion by selection as one of the imperative necessities towards the formation of an efficient service. But if a selection is to be made, it is surely necessary that the Director-General should have the means of ascertaining whether the officers to be selected have a competent knowledge of the details of the service which they are to be called upon to administer, and we cannot see how this can be ascertained satisfactorily in any other way than by examination. It was stated as a grievance by several members that medical officers were not afforded an opportunity of "attending London or other hospitals in order to qualify themselves to pass their examinations." But they appear to have overlooked the fact that the subjects of examination are all connected with the administrative duties of the army, and that neither in London nor elsewhere are any lectures delivered which could be of the slightest use for this purpose. It might be a question for the War Office to consider whether a special course of instruction could not be instituted at Netley—a sort of medical staff college; but we fear there would be great practical difficulties. If a surgeon-major cannot in the course of his service acquire a sufficient amount of knowledge of departmental organisation and duties to enable him to pass the requisite examination, we should be disposed to consider it evidence of his unfitness for selection to the higher grades. Colonel Duncan offered a practical suggestion which seems worthy of consideration—"that it would be better if at the large military stations a field hospital were kept constantly standing and fully organised, so that all those in charge of it may be fully trained." Such a course would merely be in accord with the acknowledged necessity for having the same system in peace as in war. We observe with much regret that Dr. Tanner did not follow the example of Colonel Duncan and sum up temperately what are considered the real grievances of the department, but made statements which might have been applicable to the service in former times, but are certainly not so now. He alleged that "the army only got medical officers who were more or less the ruck and scum of the schools, and consequently the soldiers did not get that care and attention to which they were entitled in time of peace; and in time of war the state of things was still more deplorable." When this statement was indignantly repudiated by the Secretary of State for War, it was modified by Dr. Tanner as being applicable to the past, but not actually to the present time. We regret that a member of our profession should have made so loose and inaccurate a statement reflecting discredit upon the medical officers of the army. Complaint was also made by him that the "army medical officers were being constantly sent about from one station to another without having adequate notice given them, which he contended was a great hardship to them, and detrimental to the efficiency of the service." And again he repeated his complaint "that junior medical officers were constantly being sent about the country and not allowed to remain in one district." We hardly suppose the honourable member means that they are sent about in this way for the amusement of the Director-General, or that they should be spared the hardship and the seniors be sent on such duty in their stead. We observe, with satisfaction, that Mr. W. H. Smith spoke in high terms of the "many excellent medical officers to whom the British soldier owed a deep debt of gratitude," and that he has promised to give consideration to the various points raised during the debate, and to improve the condition of the medical officer so far as possible consistently with the interests of the tax-payer.

In reliance upon the expressed intentions of the right hon. gentleman, we would bring to his notice two grievances which appear to us to call imperatively for redress, and which would involve little or no expense. The first regards the gazetting of "surgeons on probation" to commissions. It appears that the commissions of those for the Indian Medical Service are dated from the period of joining at Netley, while those for the Army Medical Department bear the date on which the course of instruction there closes. The practical result of this difference is, that the Indian medical officers become the seniors of the others by four months, and this seniority must continue throughout their career, at least till they reach the administrative ranks. This is so obviously unjust that we feel it should only be necessary to bring it to the notice of the Secretary of State for War to have it remedied. Unless this is done, the difference of treatment cannot fail to act most injuriously upon the supply of candidates for the Army Medical Department. Formerly the rule of dating from the period of joining at Netley applied to both services, but the change was effected by the Warrant of 1877, for reasons which have never been explained. The other grievance is that while honours are conferred upon medical officers for service in the field, no notice is taken of their professional services, often rendered under circumstances of great difficulty and more personal danger, in the treatment of severe epidemics. The duties of the medical officers in saving life by these measures which tend to prevent disease, and their care and exertions in the treatment of the sick, more especially during the ravages of epidemics, are at least as commendable and as valuable to the army as their surgical work in the field; but under the present routine they are systematically ignored. We recommend this subject to the serious consideration of the Secretary of State, in the hope that he may find means to remedy the grievance without affecting the interests of the taxpayer.

THE DIRECT REPRESENTATION ON THE GENERAL MEDICAL COUNCIL.

A MEETING of the General Committee, which has been formed to consider the selection of candidates for the representation on the General Medical Council of the profession according to the provisions of the Medical Amendment Act, was held at the Queen's Hotel, Birmingham, on Tuesday, the 14th inst.

Among those present were: Dr. Saundby (Birmingham), Dr. Waters (Chester), Dr. Roden (Droitwich), Dr. W. Armstrong (Manchester), Dr. Berry (Wigan), Dr. Danford Thomas (London), Dr. Crow (Worcester), Dr. Paul Chapman (Hereford), Dr. Strange (Worcester), Dr. Pike (Malvern), Dr. Lyle (Bromsgrove), Dr. Eyton Jones (Wrexham), Dr. Suckling (Birmingham). Dr. Farrar (Morecombe), Mr. R. H. Nicholson (Hull), Mr. Lawson Tait, Mr. D. Vinrace, Mr. Bennett May, Mr. Jordan Lloyd (Birmingham), Mr. Wheelhouse (Leeds), Mr. Granger (Chester), Mr. Taylor (Chester), Mr. Lowe (Burton), Mr. Barron (Southport), Mr. Vincent Jackson (Wolverhampton), Mr. S. Walker (Birkenhead),

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Dr. Bates (Nottingham), and Dr. Carter and Dr. Ker (honorary secretaries).

Dr. Strange having been appointed chairman, Dr. CARTER read letters of apology for non-attendance, some of which contained suggestions for the meeting, some nominated candidates, and others expressed the desire that certain gentlemen should be nominated.

The CHAIRMAN said that the meeting was of the committee of gentlemen who had signified their desire to act on a general committee for the purpose of hearing names of candidates for the three seats on the Medical Council and to deliberate on these names. To put the meeting in order the circular convening the assembly was then read, which stated that the object of the meeting was to "ascertain the wish of the medical profession as to the most suitable representatives to return to the Medical Council."

Dr. CARTER explained that invitations to the meeting had only been sent out to those gentlemen who had already expressed a desire to be members of the General Committee. That General Committee had been formed by invitations to the extent of 1167, which he and Dr. Ker as hon. secretaries had sent out.

The CHAIRMAN then formally opened the meeting. After a very long struggle, he said, on the part of the members of the Reform Committee of the British Medical Association, and particularly of the Committee's chairman, Dr. Waters, they had obtained the Amended Medical Act. That Act conferred on the profession privileges hitherto denied them. In the original draft of the Bill two representatives on the Medical Council were accorded to England and Wales, one to Scotland, and one to Ireland. By the efforts of Sir Walter Foster the English representation was increased to three. The selection of the first three representatives was decidedly an epoch in the history of the profession. Hitherto the professional representation had been confined to the universities and Royal Colleges, and the representatives on the Medical Council thus sent might be men of eminence and trusted representatives of the great bodies that sent them, still they were not representative of the general practitioners of the country, and they were not representative of the universality of the profession. Now, however, this universality of representation would be secured by the amended Act; and he hoped the general practitioners of the country would return to the Medical Council men who were in harmony with the general feeling of the practitioners throughout the country. They were assembled now to ascertain what would be the best means by which they should select these three representatives. In a vast body like the medical men of England and Wales, numbering over 20,000, it would be an extremely difficult matter to manage an election at all, and all the more difficult in that they had no organisation or settled plan by which they could decide as to the merits of the respective candidates. He thought they should endeavour to get representatives who from their position in the profession and for the work they had done would secure the confidence of all—men, too, who had leisure to do the duties thoroughly. He need not say anything about the origin of the present meeting. It was of no consequence what had been done in the past—what took place at Brighton,—because they had now done what was originally intended, they had applied to the whole profession. Something like 1000 or 1100 circulars had been sent out inviting gentlemen to take part in the General Committee, and over 200 representatives had answered the circular from upwards of 100 towns and villages. They could not therefore be accused of cliquism, and the present meeting was thoroughly representative of the profession. They might therefore proceed at once to consider the claims of certain persons who would be presented to them, and to put the proceedings in order he would call upon Dr. Eyton Jones to propose a resolution.

Dr. EYTON JONES then moved "That this meeting, fully impressed with the extreme importance of the present crisis in the history of the English medical profession occasioned by the right acquired in the recent Medical Act of electing three representatives of their body on the General Medical Council, deems it expedient to proceed at once to deliberate on the merits of the various candidates for such representation, and to solicit by requisition three fit and proper persons to undertake the office." As the British Medical Association was originally a provincial organisation, and as the General Medical Council had in the past been represented by men taken from the centres of learning—London, Edinburgh, and Dublin,—now the medical practitioners of the provinces should be represented by the three additional members they had to select as a balance, though a small one, against those that had hitherto been selected by the Universities and the Corporations, and nominated by the Government. They should show in so far as they could in their selection of these three candidates their desire to have a voice in the legislative body of the profession, and they should therefore select men who knew the conditions and the necessities of the general practitioner, and who would speak up for them manfully and openly on the General Medical Council. (Applause.) The Council had hitherto acted principally in the direction of the education of the future practitioners, and in consequence, the rights of the present practitioners had suffered. Many questions would crop up when they had popular representation on the Medical Council, and they should have representatives on it who would be able to take their part because they themselves had experienced their grievances.

Mr. LAWSON TAIT, in seconding the resolution, said he could not help feeling that it was but a scant reward for the trouble Dr. Ker and Dr. Carter had taken in sending out so many circulars to find that so few should have expressed their enthusiasm in the question by attending the meeting, and thus leaving in the hands of these few the responsible work of selecting the first three representatives to the General Medical Council. He for one had not great enthusiasm in that direction, because he thought their efforts might have been better directed towards the reconstruction of that General Council. It seemed to him a great waste of money and of time for people to be appointed on that Council, whose only duty appeared to be to meet together and make long speeches, people who had no connexion and no sympathy with the medical profession, and who know nothing about its wants or its abuses. (Hear, hear.) He accepted the political principle of having direct representation to a small extent on the General Council, and he trusted his fellow practitioners would exercise due discretion in the selection of the candidates they sent to represent them. He hoped they would not select representatives who were in the clouds of the medical profession, men who had little association with the feelings or the aspirations of the bulk of the practitioners in the country; also that they would not choose their representatives merely by their seniority. (Applause.) What they wanted was three men who would expose and try to reform a great many of the abuses in the General Medical Council. (Hear, hear.)

At the request of Dr. Danford Thomas, Dr. CARTER stated that the number of responses received to the circular to take part in the General Committee for the selection of the candidates was 343 up to that day, and that number represented 161 towns from all parts of England and Wales.

The CHAIRMAN, answering a second question of Dr. Danford Thomas as to whether the meeting intended to select right off three representatives, said that at the present the meeting was very small, but he hoped it would enlarge to enable them to take some decisive action. The resolution now proposed did not necessarily bind the meeting to select three representatives then.

Dr. DANFORD THOMAS.—We are not yet twenty-five.

Dr. KER.—I have counted thirty-two. (Laughter.)

The CHAIRMAN did not think they should hesitate about proceeding, because the business of the meeting was to discuss the merits of candidates to be nominated. He did not expect more than fifty to attend the meeting, and those that were present were thoroughly representative.

Mr. NICHOLSON said that the meeting might be adjourned considering the sparse attendance, and that its duties should be relegated to a small committee. Some present had travelled long distances, and did not like the idea of adjournment.

The resolution was then put to the meeting, and carried.

Dr. CARTER then proceeded to read the correspondence he had received containing suggestions and proposing candidates. There was a sort of honourable understanding, he said, that every name that had been before the profession, whether sent to Dr. Ker or himself as the secretaries of that committee, or mentioned in any of the medical journals, should be put before the meeting. One suggestion made was that all the representatives should be general practitioners only, another that the present meeting should be preliminary to another, which would make the final selection. (Hear, hear.) Dr. Taaffe of Brighton wrote saying he was a candidate for the representation, and asking to be

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brought forward as such. Dr. Stokes of Highbury, London, wrote, as chairman of a committee who were forwarding the candidature of Dr. Glover of London, asking how that gentleman's name could be brought before the present meeting, and a correspondence had taken place between him (Dr. Carter) and Mr. Stokes on the matter. He says "that Dr. Glover's name would be sure to be brought forward. Dr. Sympson of Lincoln and others had also written recommending Dr. Glover's candidature. Dr. Partridge and Dr. Shuttleworth of Lancaster and others had suggested Sir B. Walter Foster as a candidate. (Hear, hear.) A memorial had been sent up from Cambridge in favour of Dr. Bridger, and others recommended by letter were Mr. D. B. Balding of Royston, Dr. Dolan of Halifax (who was strongly recommended by Dr. Rabagliati of Bradford), Dr. B. W. Richardson, Mr. Wheelhouse of Leeds, Mr. Hart of London, Sir Andrew Clark, Mr. Holman of Reigate, Dr. Waters of Chester, Dr. Harrow, and Dr. Morris of Spalding.

In answer to Dr. Danford Thomas, the CHAIRMAN said they had no intimation from any of the candidates that they would stand if elected.

Mr. NICHOLSON suggested that the best way to proceed would be for the secretary of the committee to make out a list of all the nominations to be sent to every member of the General Committee, and each member to send back his list with the three names marked that he approved of. He thought this all the more desirable, seeing the small dimensions of the present meeting. For his own part, he believed Mr. Wheelhouse of Leeds would represent best the practitioners of the north of England. (Applause.) He was a thoroughly representative man, and, he believed, would be elected. He would put his suggestion into the form of a resolution.

On this intimation, Dr. WATERS said he would second it.

The CHAIRMAN asked Mr. Nicholson to abstain from bringing forward his resolution till after the nominations. So far, the thing had only taken the shape of suggestions. Besides, others were eligible for candidature besides those suggested by letters received. Anyone at that meeting could propose whomsoever he chose. By the resolution already passed, too, they had resolved to deliberate upon the names brought forward.

Mr. NICHOLSON consented to postpone his resolution till the nominations were completed.

Dr. BARRON then said he thought it would be highly desirable to divide the whole of England into three divisions, the north, the midlands, and the south. (Hear, hear.) A candidate that might suit the practitioners of the south of England would not necessarily suit the north, and *vice versâ*. He therefore advocated this division of the country with the object of each division securing a representative that would be thoroughly representative of its practitioners by his personal knowledge of their different necessities and grievances.

Mr. VINCENT JACKSON highly approved of Dr. Barron's suggestion. By such an arrangement the work of selection would be made very much easier; they would be likely to get representatives who would please everyone, and the selection would be greatly simplified.

Dr. WATERS said there was no advantage to be obtained in dividing the country into three divisions, for they could not divide the electorate with it. Each practitioner in each division would be able to vote for three candidates; they could not restrict him to vote for one for his division only.

Mr. LAWSON TAIT said the proposition appeared to him absurd and illogical. He could not imagine anything more likely to defeat the object they had in view than such a division of the country. He suggested that, without regard to location, they should select three of the most active, young, and discontented men in the profession, the more active and discontented the better. (Laughter and applause.) They wanted the General Medical Council reformed, and these were the sort of men to do it.

The CHAIRMAN said it was almost the first time in his life he had differed with Mr. Lawson Tait, but he differed with him on that point. It might be a little childish and somewhat illogical; but he believed it would enable them to secure the best men.

Mr. BARRON objected to the suggestion being characterised as either childish or illogical. He would not have proposed it if he had thought it either of these; but, on the contrary, he considered it very good sound sense.

The CHAIRMAN.—I will withdraw the word "childish" if Mr. Tait will withdraw the word "illogical."

Mr. TAIT.—I will withdraw it if you wish it, but the withdrawal does not alter my opinion.

After a deal of desultory discussion as to the procedure in the selection of the representatives, it was at length decided to proceed with the nomination of candidates.

Dr. EXTON JONES proposed Mr. Wheelhouse of Leeds, and after Dr. Berry had interposed with a question as to where the expenses for the election were to come from, Mr. Nicholson seconded the nomination, saying he felt sure Mr. Wheelhouse would be elected by the votes of the north of England practitioners.

Dr. DONOGHUE doubted whether Mr. Nicholson was quite correct in his estimate of the vote that would be given to Mr. Wheelhouse in the north of England.

Dr. Glover, of London, was next proposed by Mr. KER, and seconded by Dr. WHEELHOUSE, who said that if any man knew the requirements of the profession Dr. Glover did.

Mr. LAWSON TAIT thought that considering his connexion with THE LANCET, and the part that Journal had taken in bringing about the amendment of the Medical Act, Dr. Glover should certainly be one of the three chosen representatives. He was sure to be on the discontented side of the question.

Sir Walter Foster was the next nomination, the nominator being Mr. NICHOLSON, and the seconder Dr. BARRON. Dr. Barron said if it was only to show their gratitude for the increased representation they had got by Sir Walter Foster's exertions, they should elect him as a representative.

Mr. ARMSTRONG next nominated Dr. Dolan, of Halifax; and the others put forward were Mr. Hart, of London, by Dr. WATERS; Dr. B. W. Richardson, by Dr. DANFORD THOMAS; Dr. Bridgewater, of Harrow, by Mr. NICHOLSON; and Dr. Holman, of Reigate, by Dr. WATERS.

Cries of "Vote" were then raised, and as several gentlemen had left the meeting while the nominations were taking place, Mr. NICHOLSON said it would be absurd, under the circumstances, to take a vote. The other names suggested by letter for candidature, but not formally proposed, were then read over, and Dr. Balding of Reigate and Dr. Morris of Spalding found nominators, but no one put forward the name of Dr. Taaffe of Brighton.

Mr. NICHOLSON then proposed that the names thus nominated at the meeting be sent to all the members of the General Committee, and the vote on them be taken by post-card, the three that received the highest number of votes to be the adopted candidates of the committee for representation on the General Medical Council.

After some discussion as to this resolution clashing with the one already passed, it was decided to entertain it, and, on the vote being taken, it was carried by 11 votes to 3, many of those present at the earlier part of the meeting having left.

The meeting was then concluded with a vote of thanks to the chairman for presiding.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 5784 births and 3939 deaths were registered during the week ending Sept. 11th. The annual death-rate in these towns, which had steadily increased in the preceding four weeks from 18·9 to 20·8, further rose last week to 22·6. During the first ten weeks of the current quarter the death-rate in these towns averaged 20·1 per 1000, and was 1·5 below the mean rate in the corresponding periods of the ten years 1876-85. The lowest rates in these towns last week were 13·9 in Bristol, 16·5 in London, 19·1 in Plymouth, and 20·0 in Huddersfield. The rates in the other towns ranged upwards to 31·9 in Nottingham and in Bolton, 34·8 in Leicester, 35·1 in Norwich, and 38·1 in Preston. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had been 778 and 931 in the preceding two weeks, further rose last week to 1199; they included 995 from diarrhœa (exclusive of 21 attributed to simple cholera), 50 from whooping-cough, 49 from "fever" (principally enteric), 46 from scarlet fever, 38 from measles, 20 from diphtheria, and 1 from small-pox. The lowest death-rates from these zymotic diseases were recorded last week in Bristol, London, and Plymouth; and the highest in Nottingham, Hull, and Norwich. Diarrhœa caused the highest death-rates in Leicester, Preston, Hull, and Norwich; whooping-cough in Preston; scarlet

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fever in Salford and Huddersfield; "fever" in Norwich and Portsmouth; and measles in Nottingham. The 20 deaths from diphtheria included 9 in London, 2 in Portsmouth, 2 in Liverpool, and 2 in Salford. Small-pox caused 1 death in London and its outer ring, but not one in any of the twenty-seven large provincial towns. No small-pox patients were under treatment in the metropolitan asylum hospitals situated in and around London. The deaths referred to diseases of the respiratory organs in London, which had been 160 and 128 in the preceding two weeks, further fell last week to 110, which were 58 below the corrected average, and considerably fewer than those returned in any previous week of this year. The causes of 99, or 2·6 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Bradford, Sunderland, Portsmouth, and in four other smaller towns. The largest proportions of uncertified deaths were registered in Salford, Sheffield, and Oldham.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 17·7 and 19·4 per 1000 in the preceding two weeks, further rose to 20·6 in the week ending September 11th; this rate was 2·0 per 1000 below the mean rate during the same week in the twenty-eight English towns. The rates in the Scotch towns last week ranged from 13·1 and 15·7 in Perth and Dundee, to 24·3 in Paisley and 28·0 in Aberdeen. The 508 deaths in the eight towns last week showed an increase of 21 upon the number in the previous week, and included 57 which were referred to diarrhœa, 20 to whooping-cough, 7 to scarlet fever, 4 to "fever" (typhus, enteric, or simple), 4 to diphtheria, 1 to measles, and not one to small-pox; in all, 93 deaths resulted from these principal zymotic diseases, against numbers increasing from 63 to 86 in the preceding four weeks. These 93 deaths were equal to an annual rate of 3·8 per 1000, which was 3·1 below the mean rate from the same diseases in the twenty-eight English towns. The deaths referred to diarrhœa, which had been 23, 36, and 53 in the previous three weeks, further rose last week to 57, of which 20 occurred in Glasgow, 9 in Dundee, and 7 in Aberdeen. The annual death-rate from diarrhœa in the eight Scotch towns last week did not, however, average more than 2·3 per 1000, whereas the mean rate from the same cause in the twenty-eight English towns was 5·7. The fatal cases of whooping-cough, which had been 22, 19, and 10 in the preceding three weeks, rose again last week to 20, of which 15 occurred in Glasgow. The 7 deaths from scarlet fever, all of which were returned in Glasgow, showed a further decline from the numbers in the previous two weeks. The deaths referred to "fever" had also declined, and the fatal cases of diphtheria were also below the average. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 67 and 56 in the preceding two weeks, rose again last week to 72, and exceeded by 15 the number in the corresponding week of last year. The causes of 72, or more than 14 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been 18·2 and 26.2 per 1000 in the preceding two weeks, declined again to 25·9 in the week ending Sept. 11th. During the first ten weeks of the current quarter the death-rate in the city averaged 21·2; the mean rate during the same period was 19·3 in London and 18·2 in Edinburgh. The 175 deaths in Dublin last week showed a decline of 2 from the number in the previous week, and included 26 which were referred to diarrhœa, 7 to scarlet fever, 4 to "fever" (typhus, enteric, or simple), 1 to whooping-cough, and not one either to small-pox, measles, or diphtheria. Thus 38 deaths resulted from the principal zymotic diseases, against 18 and 22 in the preceding two weeks; they were equal to an annual rate of 5·6 per 1000, the rates from the same diseases last week being 3·4 in London and 2·0 in Edinburgh. The fatal cases of diarrhœa, which had been 9 and 14 in the preceding two weeks, further rose last week to 26, and exceeded the number in any previous week of this year. The 7 deaths from scarlet fever also showed an increase upon recent weekly numbers; whereas the 4 deaths from "fever" showed a decline of 4 from the number in the previous week. Three inquest cases and 4 deaths from violence were registered; and 29, or one-sixth of the deaths, were recorded in public institutions. The deaths of infants showed a further increase upon the numbers in recent weeks, while those of elderly persons had slightly declined. The causes of 39, or more than 22 per cent., of the deaths registered during the week were not certified.

Correspondence.

"Audi alteram partem."

CHOLERA AND THE WATER-SUPPLY OF MADRAS.

To the Editor of THE LANCET.

SIR,—At a time when cholera is such an interesting question in England, the following table, showing the decrease in mortality in an Oriental town from this pest since it has been favoured with a comparatively pure water-supply, may not be without interest. The Red Hills tank is a large sheet of water some ten or twelve miles from Madras. It is a rain-fed tank, and not cleaner than such tanks, undefiled, would be; but it has this advantage: it has no villages near it, it is away from any thoroughfare, and consequently undefiled by foot-passengers and pilgrims; it is, moreover, scrupulously conserved. The water is led into Madras, first, by a channel more or less well protected, and then the water is distributed over the town by pipes. Even the deaths which have occurred in Madras are found to have mostly taken place in outlying parts of the town, where the Red Hills water has not yet been laid on, except in one district, Triplicane. Here live a large number of Mussulmans, and their women, being Gosha—i.e., not allowed to be seen by any but their own family,—are obliged to draw their water from small wells in their back-yards, always perilously near the cesspits.

Return showing the deaths from Cholera in the Town of Madras from 1855 to 1884.

Year.	Deaths from cholera.	Remarks.
1855	1956	—
1856	805	—
1857	1378	—
1858	1965	—
1859	1082	—
1860	2580	—
1861	2776	—
1862	3635	—
1863	1684	—
1864	574	—
1865	944	—
1866	2984	—
1867	614	—
1868	13	—
1869	568	—
1870	861	—
1871	493	—
1872	5	Red Hills water-supply opened.
1873	6	—
1874	0	—
1875	879	Famine years.
1876	2035	Famine years.
1877	6246	Famine years.
1878	64	—
1879	34	—
1880	2	—
1881	123	A very severe epidemic throughout the Presidency.
1882	361	A very severe epidemic throughout the Presidency.
1883	168	A very severe epidemic throughout the Presidency.
1884	269	A very severe epidemic throughout the Presidency.

During 1881–84, the Madras Presidency was visited with one of the severest epidemics of cholera on record, and yet it will be seen that the mortality in Madras city itself was comparatively slight. Two or three times it reappeared in the town coincidentally with the return of pilgrims from

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some religious gathering, but it died out. During the four years, the European community were singularly free. I can remember only two cases, and, oddly enough, one of these was a teetotaler. The famine years are scarcely worth taking into consideration; during 1876 and 1877, the people from surrounding districts simply flocked in to die. Every case almost was called cholera; it was simple, and saved trouble.

Such a table as the above points, I think, very forcibly to the advantages which would accrue from having every town in India furnished with a pure water-supply; and this, with the authority of Government, might easily be carried out.

I am, Sir, yours truly,

Madras. M. C. FURNELL, M.D., Surg.-Gen.

"SPAYING," OR REMOVAL OF THE UTERINE APPENDAGES?

To the Editor of THE LANCET.

SIR,—The fact that you have devoted a leader to this question of nomenclature shows that you agree with me at least in its importance. I object to the term "spaying" because it is altogether a false term, and I think you will allow me to argue this view as briefly as I can.

First of all it is false, because in spaying animals the Fallopian tubes are not removed habitually; that is, some of those who operate on the animals do remove the tubes and others do not, a fact of which I have satisfied myself by actually seeing it done. The removal of the ovaries only of an infantile animal seems quite enough to prevent the changes of puberty. Removal of the ovaries alone in cases of myoma and chronic inflammatory disease of the appendages of adult women would not be enough to procure the desired results, and very often the ovaries may be left with distinct advantage if the tubes are thoroughly removed. I have published quite enough on this subject to satisfy any reasonable inquiry, and I have much more material nearly ready for publication, the conclusions from which are all in the same direction. The very pathological changes induced by the diseases for which the operations are performed, as proved by numerous specimens exhibited at many societies, establish anatomical differences enough to make us regard "spaying" as an operation quite different from "removal of the uterine appendages."

You say that an operation should be named not by reason of the motive with which, or the purpose for which, it is done, but according to its nature from an anatomical point of view. Will you permit me to say that I think you have hardly sufficiently considered the effect of such a conclusion, as you may come to an altogether different opinon if you apply your principle in other directions. Thus the harikari of the Japanese Daimio and the abdominal section of an approved operation are, *anatomically*, quite the same. Are we therefore to speak in a serious medical journal of them both as "belly-ripping?" Would you seriously undertake to publish a paper of mine with the title—"A Series of Five Hundred Consecutive Belly-rippings"?

The operation performed by the obstetric physician for the induction of premature labour and the illegal proceedings of the abortion-monger are, *anatomically*, exactly the same, yet is not the nomenclature *entirely* influenced by the "motive with which, or the purpose for which," these operations are undertaken? Would not a jury and a judge take motive and purpose very prominently into account as to the definition and means of each of these operations?

Again, you say that "spaying" does not consist in the removal of an ovary still functionally active, and this, being quite true, is the basis of my objection to the application of the word in human surgery. "Spaying" is the removal of both ovaries long before they are functionally active. "Removal of the uterine appendages" is an operation for the removal of either one or both ovaries or tubes long after they have become functionally active; and from these facts alone there is an immense anatomical difference between the two operations, which makes a common nomenclature alike impossible and improper.

You say that "spaying" is the removal of both ovaries; how is it possible, then, to class under such a word a case where one or both tubes are removed as chronic abscesses, the ovaries being left? How am I to class under it a case where I remove one tube for a ruptured tubal pregnancy and leave both ovaries? Or if we happen to remove both ovaries for large cystic tumours, are we still to call it a case of "spaying"? The advantage of the term I advocate is, clearly, that it is comprehensive, and admits of classification in a much more orderly fashion than can be done in any other way. And let me here say that I entirely agree with you that to speak of Battey's, or Tait's, or Hegar's operations is very foolish, and is productive of endless confusion. I have never ceased to protest against it so far as my own name is concerned, and for a very simple reason, which I have put on record very many times. Battey originally proposed the operation of removing the ovaries in cases where there was no actual disease of them for the purpose of indirectly influencing neurotic conditions. My first operation was removal of a small ovary, the subject of an abscess; my second, the removal of the appendages for uterine myoma; and to these and similar physical conditions I have, with a very small number of exceptions, confined my work. Hegar's proceeding was for myoma entirely. To speak, therefore, of all operations for removal of the appendages by any one of the three names is to commit an absurdity.

Of course every woman submitted to an operation should be made aware of what is really going to be done to her, not only in this instance but in every other; and not only every woman, but every man: that is, they should be made to understand it as fully as their intelligence admits of. This view really constitutes the greatest argument against the use of the word "spaying," for it is "understanded of the people" as having intentions and results so absolutely foreign to the intentions and results of "removal of the uterine appendages," that I am not at all surprised at the row in Liverpool, and the unusual results brought about by it, now that we have an admission from Dr. Grimsdale of what he has been doing and saying. When I heard him say in the witness box that "ovariotomy did not necessarily include removal of the ovary," I suspected he was living in an atmosphere of confusion; now I know he has created it, and, by his own confession, he is responsible for results deeply to be regretted, not only for abdominal surgery but for the credit of the whole profession. In his evidence, Dr. Grimsdale clearly threw blame on Dr. Imlach for performing operations without consultations. If Dr. Imlach did this, then Dr. Grimsdale was clearly to blame for it. As consulting officer to the hospital, he could have insisted on consultations being held, and if they had been refused his remedy lay in an appeal to the Committee of the Hospital by a complaint that an important law was broken and defied. Instead of this he appealed to outside authority in such fashion as led to most discreditable proceedings.

I am, Sir, yours truly,

Birmingham, Sept. 4th, 1886. LAWSON TAIT.

To the Editor of THE LANCET.

SIR,—Had not Dr. Imlach made indirect reference to the other members of the staff of the Liverpool Hospital for Women in your issue of Sept. 4th by saying that he was the only one of them who had performed the operation of castration for hæmatocele and hæmatosalpinx, I should not have intruded into this discussion. I am proud to say that Dr. Imlach's statement is perfectly correct as far as I am concerned, and I believe also as regards Dr. Lupton, who is suffering from a lingering illness and unable to answer for himself. I have never performed spaying operations for either hæmatocele or hæmatosalpinx. It is also a fact that I have never yet lost a patient from either of these diseases, nor had one that did not completely recover.

Being, however, surgeon to the same hospital, I must necessarily have had to treat the very same classes of cases as Dr. Imlach, and if in the space of three years he has had a considerable number of these cases, it follows almost as a matter of course that I have also treated a considerable number, unless it has happened that they all went to him, and consequently none to me. I do not believe this has been the case. The case stands thus, then: Dr. Imlach has treated a certain number of these cases by mutilation, with three deaths, and I, in common with large numbers of surgeons, have treated a number nearly as large, with not only no deaths and no mutilation, but with complete recovery and without abdominal section.

I will concede that the laparotomist has one advantage over the surgeon who treats his cases in less sensational ways: his diagnosis is more accurate; and this is so from the fact that the laparotomist makes his diagnosis by open-

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ing the abdomen. We have no evidence whatever that these cases were diagnosed before the abdomen was opened. Let us suppose for a moment that the abdomen had not been opened in these cases of Dr. Imlach's—the diagnosis would then have been incomplete; but the cases would have been none the less cases of hæmatocele and hæmatosalpinx, and by another surgeon would have been treated with complete success on ordinary lines. Great numbers of these cases are treated under their own or different names every year, and the patients are perhaps all the better for the doubt in the diagnosis. The surgeons who perform abdominal section in these cases do not do it *for* these diseases—i.e., knowingly,—but because the symptoms point to *something* being wrong in the pelvis. They do not know what the "something" is, but, opening the abdomen before the morbid condition has had time to right itself, they are equally surprised at the discovery they have made and proud of the achievement. The accuracy of diagnosis after opening the abdomen is, I grant, admirable; but, to my mind, this does not compensate for the inevitable loss of life that attends the making of it. I am, Sir, yours obediently,

J. E. BURTON,
Surgeon to the Hospital for Women, Liverpool.

Liverpool, Sept. 7th, 1886.

To the Editor of THE LANCET.

SIR,—In reply to Mr. Lawson Tait's letter which appears in THE LANCET of the 21st ult., wherein he states that the operation of spaying an animal and the removal of the uterine appendages from the human being have no conceivable resemblance, consequently to talk of spaying women "is to display great ignorance or to indulge in wilful misrepresentation for purposes of giving offence," I beg to say, with all due respect to that gentleman, that I differ from him. I have spayed some thousands of animals—both those that have not and those that have arrived at puberty. In the latter subjects the ovaries only are removed; in the former the uterine appendages are removed altogether, and it is an undoubted fact that after such an operation has been performed it rarely does destroy the sexual powers and desire, providing the operation has been performed properly; but if there is a small portion of the ovary, or "pride," which it is commonly called, unremoved "or not clean cut," then there will be an over-excess of desire left. If the ovaries only or the uterine appendages altogether are removed, the subject is really spayed or castrated; and the same term will apply to the human being as well as the brute.

I am, Sir, yours faithfully,
Cranham-road, Sept. 1886. C. E. ONSLOW, Vet. Surg.

"THE DIRECT REPRESENTATION OF THE PROFESSION."

To the Editor of THE LANCET.

SIR, May I be allowed to reply to your correspondent who asks why Birmingham was selected as the place of meeting of the committee formed at Brighton? It was simply because that town was thought to be the most centrally situated and generally accessible of all the large towns in the kingdom. Many places were mentioned, but none other seemed on the whole so convenient, and hence it was ultimately selected. The committee, which is now a very large one and comprises numerous representatives from no less than 124 towns and districts of England and Wales, has but a single aim, and that is to endeavour by consultation to ascertain what three medical men would be likely most efficiently to defend the interests of the great body of general practitioners in the General Medical Council. It shrinks from any attempt, and hopes that it may not be thought to have the slightest desire, to dictate. Its aim is consultative. It invites every registered medical practitioner to give it the benefit of his opinions and advice in this most important matter. There must be some kind of organisation unless votes are to be given aimlessly. Organisations already exist. This one, being absolutely unpledged, aims at ascertaining the wishes of the profession; when it has ascertained them, it hopes by concerted action to be able to give effect to them.

I am, Sir, yours faithfully,
Liverpool, Sept. 6th, 1886. WILLIAM CARTER.

*** We regret that, owing to the number being specially devoted to educational matter, we were unable to insert this letter last week.—ED. L.

THE HOSPITAL FOR WOMEN, LIVERPOOL.

To the Editor of THE LANCET.

SIR,—The first paragraph of Dr. Imlach's letter in your issue of September 4th is both incorrect and misleading. I did not at the Casey *v.* Imlach trial "state on oath that the mortality in cases where this operation—i.e., abdominal section had been performed at the Hospital for Women was 33 per cent.," as Dr. Imlach says I did. What I did say was, that the operation to which Mrs. Casey was subjected—i.e., the removal of the uterine appendages for hæmatocele and hæmatosalpinx, an operation to which abdominal section is but the necessary preliminary or exploratory incision—had been fatal in the Hospital for Women during the year 1885, as shown by the Annual Medical Report, in the ratio of 33 per cent. In support of this assertion, I do not intend to follow Dr. Imlach in his vain endeavours to mystify or evade the single point at issue, but will content myself with giving an exact copy from the Report itself of every case in which during the year 1885 Dr. Imlach removed the uterine appendages on one or both sides—i.e., partial or complete spaying—for pelvic hæmatocele or hæmatosalpinx. This Annual Medical Report of the Hospital for Women, Shaw-street, Liverpool, for 1885, was written entirely by, or under the immediate direction of, Dr. Imlach, and must therefore be held to be a sufficient authority for the statements taken directly from it.

Thus it will be seen from Dr. Imlach's own Report, given in a tabular form, that the whole number of cases of pelvic hæmatocele and hæmatosalpinx in which the uterine appendages were removed during the year 1885 amounted to 9, of which 3 died and 6 recovered—a mortality of 33·3 per cent.

I am, Sir, yours truly,
September 9th, 1886. THOMAS F. GRIMSDALE.

COPIED FROM TABLE III. TO ANNUAL MEDICAL REPORT FOR 1885, HOSPITAL FOR WOMEN, LIVERPOOL.

No. on register.	Date of operation.	Age.	Disease.	Operation.	Recovered. R.	Died. D.	Abdominal section. A.S.
462	Jan. 3rd	20	Prolapsed adherent ovaries (hæmatosalpinx)	Removal of uterine appendages	—	D	A.S.
114	May 14th	40	Pelvic hæmatocele	Removal of uterine appendages	R	—	,,
154	July 3rd	34	Hæmatosalpinx hæmatocele	Removal of uterine appendages	R	—	,,
168	July 24th	34	Pelvic hæmatocele	Removal of uterine appendages	R	—	,,
187	July 25th	35	Pelvic hæmatocele	Removal of uterine appendages	—	D	,,
195	Aug. 8th	27	Pelvic hæmatocele	Removal of uterine appendages	R	—	,,
231	Sept. 4th	39	Hæmatosalpinx	Removal of uterine appendages	—	D	,,
268	Oct. 26th	39	Pelvic hæmatocele	Removal of right uterine appendages	R	—	,,
336	Dec. 19th	31	Pelvic hæmatocele	Removal of left uterine appendages	R	—	,,
					6	3	9

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THE SURGICAL REPORT ON THE BELFAST RIOTS.

To the Editor of THE LANCET.

SIR,—Kindly allow me space for a personal explanation. Commenting on the summary of my Report, you state it is your "impression that Mr. Foy under-estimates the number of those injured in the riots." Nothing was more difficult to avoid than exaggeration in preparing my report, which I may incidentally remark was for your contemporary, the *Medical Press*. I was told of hundreds killed, of many bodies buried in back yards, of dozens of insurance agents requested not to ask for medical certificates, of congregations that counted their losses by scores, &c. Of the wounded, if I had believed what I was told, the Shankhill-road fight was more terrible than Plevna. But I was not going to print loose statements, and as I was actually in one of the riots in the Shankhill-road, and read the following day's Belfast papers, I saw that the reports did not minimise the incidents of the night. The cemetery returns, the doctors' lists, the statement of the rector and curate of one of the largest congregations (one which was said to have suffered dreadfully), and the personal introduction into the disturbed districts of the most trusted men of both sides, were all utilised to aid me in forming an approximation to the truth. As for the statement that many bodies were buried in back yards to avoid medical certificates—a statement which is freely made by artisans in Belfast, and appears to be credited by many,—I think it is unwarranted. With most diligent searching I could not find a single such grave. As for the wounded, I only counted such cases as required surgical care. Of the 322 police "more or less injured," I do not hesitate to say that the "less" form the enormous majority.

I am, Sir, yours faithfully,

Dublin, Sept. 4th, 1886. GEORGE FOY.

To the Editor of THE LANCET.

SIR,—Permit me to point out an error into which you, in common with several newspapers, have fallen in ascribing this Report to the initiation of the Loyal and Patriotic Association. In your issue of Sept. 4th you quote largely from this Report, prefacing the same with the remark that it is "just presented by Mr. Foy, F.R.C.S., the surgical commissioner sent down by the Irish Loyal and Patriotic Union to inquire into the nature of the injuries," &c. Mr. Foy went solely as our special commissioner, to report exclusively on behalf of the *Medical Press and Circular*, and was in no sense the commissioner for any political association; and his report appears in full in the above journal for Sept. 1st. The mistake probably arose from the fact of the Loyal and Patriotic Union having, with our permission, reprinted the Report in pamphlet form and circulated it throughout the country. This correction has now been made in the House of Lords, during debate, and in *The Times* and several leading newspapers, and in justice to the *Medical Press and Circular*, I trust you will kindly allow this to appear in your columns.

I am, Sir, your obedient servant,

Sept. 1886. A. A. TINDALL, General Manager.

INFANT FEEDING.

To the Editor of THE LANCET.

SIR,—Dr. Thurstan publishes a paper in your issue of Sept. 4th on the above-named subject, in which he advocates the early use of farinaceous food in the hand-rearing of young babies. Physiology and experience both, in my opinion, negative such a plan. It is not to express this opinion that I write, but to refer to certain points in the paper which lead me to think that Dr. Thurstan's failure with cow's milk is to be explained by his method of using it. In the case quoted he states that a child recently born was fed upon "milk-and-water, half and half of each." Those accustomed to hand-rearing of infants would easily predicate what he tells us in detail afterwards. No baby certainly can be expected to tolerate milk food of such a strength at that age. Nothing is said as to the *interval* between the meals, or the *quantity* given at each meal. These two factors are of equal importance to the selection of food, and should not be ignored. The *manner* of giving the meals is also not stated. In this paper we also find that lime-water "sometimes produces sickness." How soon after the meal? Upon the answer to this question may possibly hang the solution to what, I cannot help thinking, is an error in reasoning upon the part of the observer. In the numbered diets "cream-and-water" is mentioned, and subsequently negatived for use because of the absence of caseine. Dr. Thurstan probably does not know of the admirable mixture of whey-cream-and-water (Eustace Smith), and, for after-use, of Frankland's milk. This latter preparation should at first be used, I think, more diluted with whey than Frankland suggests. The "problem we have to solve" is scarcely "how to make curd digestible," but in what way we can reduce the caseine to digestible limits in each individual case. That this can be done by one of the two methods mentioned by me is certain. Increasing experience makes me more convinced that the larger proportion of failures in the use of cow's milk is due to want of appreciation of the general principles of hand-rearing and the erratic manner in which it is given. At least an equal interest in the subject to that claimed by the writer of the paper makes me hope that Dr. Thurstan's suggestions may not be adopted.—I am, Sir, yours obediently,

LEWIS W. MARSHALL, M.D.,

Nottingham, Sept. 5th, 1886. House-Surgeon, Children's Hospital.

THE INTRA-UTERINE GALVANO-CAUTERY.

To the Editor of THE LANCET.

SIR,—In an annotation in your issue of Sept. 4th you refer to the use of the galvano-cautery in the treatment of dysmenorrhœa. I have no doubt that galvano-cautery, if applied to the cervical canal, will relieve the affection, and I should think that it would not be necessary to cauterise the entire intra-uterine wall; but a much easier and more effectual method of using electricity for the relief of the complaint named is electrolysis. This, I should say, has proved more effectual than any other method hitherto adopted. I will not enter into the question as to whether or not stenosis is the cause of the painful menstruation, but a common mode of treating the affection, even by opponents of the obstructive theory, is to dilate the os uteri. In the treatment by galvano-cautery to which you alluded, the os was first dilated, and it might be said that the relief experienced was due to the dilatation, and not to the electricity. With electrolysis no previous dilatation is necessary, and therefore the operation can be performed much more easily and without the slightest pain. No doubt after the operation the cervical canal is larger from the chemical action which takes place around the electrode. Very possibly, for the cases in which M. Apostoli is mentioned as using the galvano-cautery, it may be the best method of employing electricity. Of this I have not as yet had sufficient experience, but I am sure that for dysmenorrhœa and several other affections of the uterus for which electricity can be employed electrolysis will be found the most effectual and best form of using it.

I am, Sir, yours faithfully,

Welbeck-street, W., Sept. 1886. W. E. STEAVENSON, M.D.

ON CLERGYMAN'S SORE-THROAT.

To the Editor of THE LANCET.

SIR,—The theory propounded by Dr. Whipham with regard to one of the causes of the so-called clergyman's sore-throat, and published in THE LANCET of September 4th, will, I am sure, be acquiesced in by many who have had some of these troublesome cases to deal with; but there is another matter not mentioned by Dr. Whipham, which has certainly in more than one case under my care declared itself by contributing to the obstinacy of the attack—that is, the wearing of the stiff band-like collar now so much in use by clergymen. This I have found, when the head is bent, presses unduly across the thyroid cartilage, and at times a sharp red line on the skin may be observed after the performance of a service, showing how severe the pressure has been.

In a case lately under my care, by discarding the use of this kind of collar and wearing one open in front, more after the fashion of those which prevail amongst barristers, remedies succeeded which had hitherto failed.

I am, Sir, yours truly,

Windsor, Sept. 1886. W. B. HOLDERNESS.

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INFECTIOUS PNEUMONIA IN THE VALLEY OF THE BLACKWATER.

To the Editor of THE LANCET.

SIR,—To illustrate the insanitary condition of the Blackwater valley between Farnborough and Sandhurst, I would mention the case of the family of the tenant of Ivy Cottage, Farnborough. This cottage is situated in the valley, on the estate of the Empress Eugénie, far away from any other habitation. The family were attacked with diphtheria last year. This year the mother got an ordinary cold, which rapidly developed into epidemic pneumonia, and, being weakened by a miscarriage, she died. The husband and *five* of the children have been dangerously ill with the same disease, which, so far as my experience goes, is one of very rare occurrence, never appearing except in malarious damp districts. I look upon these cases as further confirmation of the necessity for cleansing the Blackwater river at Farnborough and Sandhurst.

I am, Sir, yours obediently,

C. J. DENNY, M.D.,
Medical Officer of Health for the Adjacent District.

Milestone House, Blackwater, Farnboro' Station, March 2nd, 1886.

ARMY, NAVY, AND INDIAN MEDICAL SERVICES.

To the Editor of THE LANCET.

SIR,—At page 486 of your issue of Sept. 11th, in your notice of the Army, Navy, and Indian Medical Services, you state—"On its conclusion the surgeon on probation is gazetted to the Medical Staff or Indian Medical Service as Surgeon, with the relative rank of Captain; in the Navy the successful candidate is at once gazetted as a Surgeon." Surely you are aware that the surgeon who is a candidate for the Medical Staff is placed in a position junior and inferior to both the Navy and Indian, for in the Navy, as you say, men receive a commission at once, and in the Indian the commission bears date several months earlier than the commission of the men of the Medical Staff, so that the men who pass last in the competitive examination in London for the Navy and Indian Medical Services are senior in the Service, and remain so all their lives, to the man who passes first for the Medical Staff. If, Sir, you are not aware of this, I would refer you to the Army List; and if you are aware of it, would it not be advisable to correct the very wrong impression your notice must convey to the student who cannot understand "how these things can be." Possibly the appeal in Parliament to the Secretary of State for War to give up the cheeseparing policy as regards the Medical Staff may alter this before the next Students' Number appears.

I am, Sir, yours obediently,

September, 1886. NOUS VERRONS.

MANCHESTER.

(From our own Correspondent.)

THE SALFORD HOSPITAL.

THE extension of the Salford Hospital is rapidly approaching completion; the out-patient and accident rooms are very conveniently arranged, and exceedingly well adapted for their purposes. It is in contemplation eventually to have special departments in the institution for ophthalmic and obstetric work, &c., and accommodation is provided for the expected attendance of some of our students. Hitherto the number of beds has been below that required for recognition by the College of Surgeons, but with the extensive alterations now completing provision will be made for some 120 beds, and very probably in the near future it may become a formidable rival to the Royal Infirmary as a clinical hospital for the teaching of medical students. The whole of the additional buildings have been erected without appealing to the public for funds, these having been obtained by a bequest from the late Mr. J. Pendlebury.

THE VOLUNTEER MEDICAL STAFF CORPS.

This corps, which was inaugurated here some few months ago, has attained a fair measure of success. The first company is advancing towards completion, one squad being quite efficient, and furnished with uniform, &c. The public are asked to supply funds for the equipment of the whole of the company, in order that it may be handed over to the Government and share in the annual Government grant.

SUNDAY LECTURES.

The fifth course of "Sunday afternoon lectures" to the people was commenced last Sunday in Ancoats, one of the poorest and most crowded parts of Manchester, by Mr. A. H. Acland, M.P., who selected as his subject the "Love of Liberty." Hitherto these Sunday afternoons have been a great success, and this year's series promises to be still more successful. Many eminent and well-known names are amongst the future lecturers—the Dean of Manchester, Sir Henry Roscoe, M.P., several of the professors of Owens College, Mr. William Morris, the Hon. Auberon Herbert, Mr. Councillor Southern, Mrs. Fawcett, and many others. These attempts to bring some light and learning amongst the masses of our artisan and labouring poor deserve every encouragement and support.

COFFEE *versus* BEER.

At the recent City Brewster Sessions applications were made by several innkeepers in the neighbourhood of Shudehill Market for leave to open their houses at four o'clock in the morning. The Markets Committee have provided coffee stalls specially for the use of market people in the early morning, and the magistrates wisely refused all the applications, notwithstanding the arguments put forward "that hard-working men required something stronger in the morning than coffee." When will the lesson be learnt that alcoholic drinks afford neither strength nor nourishment.

Manchester, Sept. 7th.

NORTHERN COUNTIES NOTES.

(From our own Correspondent.)

THE HEALTH OF TYNESIDE.

THERE has been a marked deterioration in the state of public health here during the past few weeks. There were no fewer than fifty-seven cases of infectious disease during the fortnight ending August 28th, as appears from the reports of practitioners in the borough of Newcastle to the medical officer of health. Of this large number, thirty-eight were of scarlet fever. There was also one case of small-pox, and five persons were attacked with diphtheria. Diarrhœa also has been very prevalent and fatal in the cases of infants. In the sister borough of Gateshead there has been a very serious outbreak of the latter affection, mostly occurring amongst the children of the poor in the various towns on the Tyne. Dr. Monro, medical officer of health for South Shields, pointed out in reference to the prevalence of diarrhœa, that there had not been a single death of an infant fed by the breast. At Gateshead, at the last meeting of the Town Council, a common cause of diarrhœa and other intestinal affections was said to be the custom of fruiterers and grocers sweeping their damaged fruit into the streets, and leaving it there until the scavenger's cart came round; but in the meantime the refuse was picked up and eaten by the children.

A CURIOUS DEFENCE.

At a late sitting of the Middlesbrough County Court, Dr. M'Cuaig sued a man for one guinea for professional services. It was shown that some time since the defendant took laudanum, and the doctor was called in by defendant's housekeeper, who was also his niece. He was duly attended by Dr. M'Cuaig, and after having been walked about for five hours he recovered, but refused to pay the doctor his fee on the plea that he did not send for him. His Honour: "Did you wish to be left to die?" Defendant: "I did not want the doctor." His Honour: "You will have to pay or go to prison." Defendant: "I won't pay it at all." His Honour ordered defendant to pay 3*s.* per month, and the judgment does not certainly seem to be a severe one. A case like this is just the one to give a medical man a great deal of trouble. He goes at once, to the detriment of other practice, and perhaps is detained many hours in an endeavour to save life, and has to sue for his fee.

SUNDERLAND INFIRMARY.

The new wing which it is proposed to erect to the memory of the late Mr. James Hartley, I understand, is to be devoted to children, and for this purpose some arrangement, it

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is stated, will be made to effect a combination with the Sunderland Hospital for Sick Children, which has been established for many years in Lambton-street, and which has proved such a benefit to the sick poor of Sunderland and its district. The cost of the wing is estimated to be between £8000 and £9000.

A very serious epidemic of scarlet fever is reported as prevailing at Blackdean in Weardale.

Newcastle-on-Tyne, Sept. 13th.

ABERDEEN.

(From our own Correspondent.)

THE ABERDEEN ROYAL INFIRMARY.

THE quarterly Court of Managers of the Royal Infirmary met on Monday, the 13th inst., and the sitting was chiefly occupied with matters relating to the medical staff. For the office of assistant-physician, which fell to be filled up at this meeting, there were four candidates—viz., Drs. M'Kenzie Booth, MacGregor, Rodger, and Smith. Three votes were taken before an absolute majority was obtained for the successful candidate. As the result of the first vote, Dr. MacGregor's name was struck off the list, and the final vote lay between Dr. Rodger and Dr. Smith. The latter was elected by 113 votes, against 77 given for Dr. Rodger.

Dr. Struthers then brought forward his motion: "That all the members of the medical staff be appointed by the executive, and hold office during the pleasure of the executive; that the limit of service for the visiting medical officers be restricted to fifteen years, except in the case of professors in the University engaged in clinical and pathological teaching whose services the executive may deem it expedient to continue." An amendment, practically a direct negative, was carried by a majority.

THE PROPOSED NEW CHARTER.

The court approved of the constitution embodied in the draft of the proposed new Charter as revised by the managing committee, and remitted to the committee to take all necessary steps for carrying it into effect either by obtaining a new Charter or by private Act of Parliament. A new Charter costs £700, and the estimated cost of a new Bill is £400. This is a serious matter for an institution already beset with financial difficulties. A considerable sum has been spent on the alterations of the present buildings, for their report on the sanitary condition of which, it seems, Dr. Russell of Glasgow received £52 10*s*., and Dr. Simpson, then medical officer of health for the city, £21. Mr. Esslemont protested against so large a sum, £73 10*s*., being paid to those gentlemen out of the funds of a charitable institution.

EXTENSION OF THE HOSPITAL.

The Committee of Management are still deliberating upon the plans for the extension of the infirmary buildings, and the dissatisfaction felt at the delay found expression in the motion proposed by a manager, "that the Court enjoin on the Committee of Management the necessity of coming to a speedy resolution, and presenting their final report on the matter of the hospital buildings."

Aberdeen, September 11th.

IRELAND.

(From our own Correspondent.)

ROYAL UNIVERSITY OF IRELAND.

AN account of the expenditure of this University recently issued shows that for the year ending March last the salaries of the Fellows amounted to £7765, and the travelling expenses of examiners and superintendents to £1125 As contrasted with these figures, the sum awarded in scholarships amounted to only £776, and in studentships to £475. A sum of £750 was allocated for the travelling expenses of members of the Senate; and in reference to this item, the Comptroller-General of the Receipt and Issue of Her Majesty's Exchequer states that, in answer to a letter from his department asking under what authority such expenditure was incurred, the accounting officer replied that the Standing Committee of the Senate held that they had powers under the charter and statutes founded upon the provisions of the Act 42 and 43 Vic., c. 65, to incur such expenditure. The authorities referred to in the opinion of the Auditor-General of Public Accounts do not contemplate expenditure of this character. The item referred to (£750) was for the travelling expenses of members of the committee appointed by the Senate to obtain for the Royal University of Ireland a representative in Parliament.

QUEEN'S COLLEGE, GALWAY.

The President, in his report for the past session, regrets that year by year the number of students at his College has shown a decided decrease; last year they numbered only 94, of whom 34 attended the classes in the Faculty of Medicine. In the session 1881-82 the number was 201, and for a diminution so sudden and rapid he finds an adequate cause in the dissolution of the University organisation, of which the Queen's Colleges formed a part; for the Queen's Colleges and University, though apparently distinct institutions having separate charters from the Crown, really formed but one organised whole. The library and museums are in a satisfactory condition, and the apparatus for the illustration of the principles of natural philosophy, and the collections specially devoted to the pursuits of the medical profession, are worthy of special notice. Large additions have been made to the Natural History Museum, but a conservatory for the preservation of such plants as are requisite for properly illustrating the botanical lectures is still wanting. A new room, or an extension of the anatomical room, is urgently required for histological and microscopical researches; and the President trusts that the rapid development of medical science, especially in the biological department, and its immense practical importance, will justify the solicitation that this pressing need will receive immediate attention from the Board of Works.

ADDRESS AND PRESENTATION TO MR. C. NORMAN, F.R.C.S.I.

An address was last week presented to this gentleman, who has been recently promoted from Monaghan Lunatic Asylum to the important post of resident medical superintendent of the Richmond District Lunatic Asylum. The address was given by some of his friends in Monaghan, joined by the officials of the asylum, and, in addition to the address, he was presented with a magnificent centre-piece and a claret jug.

"WAKING" THE DEAD.

At the Dublin Police-court, last week, a most revolting case of this barbarous custom was detailed. A child had died, and over its body a "wake" had been held for ten successive nights. The body, which was far advanced in decomposition, was, according to the evidence, lying on the bare boards, while night after night a mob of persons assembled, drinking, fighting, and gambling. The magistrate made a compulsory order for burial, otherwise most probably the body would not have been interred for many days afterwards.

A CENTENARIAN.

A man named Holland died a few days since in the North Dublin Union Workhouse at the alleged age of 105 years. About three months previously to his death he was attacked with pneumonia of a serious character, but recovered. His death was due to a severe attack of choleraic diarrhœa. It may be mentioned that the deceased was an inveterate smoker and used the strongest tobacco.

Dr. J. O'Callaghan, medical officer of Johnston dispensary district, has been unanimously elected medical officer of Dunmanway Union Workhouse.

Mr. Werner has been appointed ophthalmic surgeon to the Mater Misericordiæ Hospital.

The late Mr. Archibald Gardiner has left, after the death of his wife, £500 to the Belfast Royal Hospital.

HARROGATE BATH HOSPITAL AND CONVALESCENT HOME.—The foundation-stone of the new building in connexion with this institution was laid on the 9th inst. The Bath Hospital will afford accommodation for seventy-five patients, and the Convalescent Home for fifty inmates. The estimated cost is £17,000, of which £15,300 has already been subscribed. Owing, however, to the sloping nature of the ground and the fact that the danger of interfering with the springs has necessitated extensions of the original designs, the estimated cost will probably be somewhat exceeded.

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THE SERVICES.

WAR OFFICE.—Army Medical Staff: Surgeon Edward Hawke Locker has resigned his commission.

INDIA OFFICE.—The Queen has approved of the following promotions among the officers of the Staff Corps and Indian Military Forces, made by the Governments in India:—Brigade Surgeon James Howard Thornton, C.B., of the Bengal Medical Establishment, to be Deputy Surgeon-General; Surgeons-Major Henri Jules Blanc, M.D., and William Dymock, of the Bombay Medical Establishment, to be Brigade Surgeons.

ADMIRALTY.—The following appointments have been made:—Surgeon James Clibborn, to the *Indus;* Surgeon Charles J ames, to the Plymouth Division Royal Marines; Surgeon William S. Lightfoot, to the *Téméraire;* Surgeon Bowen S. Thends, to the Haslar Hospital; Surgeon Horatio S. R. Sparrow, to the *Victor Emanuel;* Surgeon George F. Dean, to the *Polyphemus;* and Surgeon William W. Pryn, to the *Hotspur.*

ENGINEER VOLUNTEERS.—1st Newcastle-on-Tyne and Durham: Richard Knox Tait, Gent, to be Acting Surgeon.

RIFLE VOLUNTEERS.—1st Volunteer Battalion, the Royal Fusiliers (City of London Regiment): Henry Geo. Thompson, Gent., M.D., to be Acting Surgeon.—2nd Volunteer Battalion, the Worcestershire Regiment: Surgeon W. S. Batten, the resignation of whose commission has already been announced, is granted the honorary rank of Surgeon-Major, and is permitted to wear the uniform of the battalion on his retirement.

MEDICAL NOTES IN PARLIAMENT.

Honorary Surgeons in India.

IN the House of Commons on the 9th inst., Mr. Lawson asked the Under-Secretary of State for India whether he was aware that under a Government resolution, dated Bombay, Jan. 12th, 1881, it was ruled that no more medical subordinates would be promoted to honorary commissions unless they had obtained medical diplomas; that three warrant medical officers came to England under this rule, and, after much study and expense, obtained English medical diplomas, and that on their return to India the rule was abrogated by the decision that no further promotions would be made to the rank of honorary surgeon; and whether, considering the circumstances under which they acted, he would take steps to procure their promotion to the honorary commissioned rank under the rule of Jan. 1881.—Sir J. Gorst, in reply, stated that in 1884, on a reorganisation of the subordinate medical establishment, the selection of warrant officers for the post of honorary surgeons was put an end to on public grounds; but, instead, certain other privileges were conferred on the department to which the warrant officers belong. There was, in the opinion of the Secretary of State, no reason for making an exception in the case of the three officers referred to.

The Asylums Board.

In reply to Mr. Pickersgill, Mr. Ritchie stated, with regard to the representation of the Metropolitan Union on the Asylums Board, that an order had been issued increasing the number of elected managers by nine. Information as to the expenditure of the Asylums Board was already furnished by the managers to the guardians, and, prior to each half-yearly audit, the ledger accounts of the managers were open to the inspection of any ratepayer or owner of property in the metropolis.

Belfast Royal Hospital.

Mr. Sexton called attention to the claim of the Belfast Royal Hospital to a grant from the Treasury owing to the extraordinary demands made upon the institution as a result of the recent riots. The Chancellor of the Exchequer said that he would, in consultation with the Chief Secretary and the Attorney-General for Ireland, go carefully into the circumstances of the case; and if it were the opinion of the authorities in Ireland that a special grant should be made from the Treasury to this hospital on account of the expense it was put to in consequence of the riots, he, as Chancellor of the Exchequer, should throw no difficulty in the way of that being done.

On the 13th inst. Sir Michael Hicks-Beach, in reply to a further question from Mr. Sexton, stated that, as present advised, he did not think it would be right to recommend that Belfast and this hospital should be treated exceptionally by getting a Government grant for treating those injured in the riots. There might be a case for such a grant if the constabulary or military had been treated at the hospital, and he would inquire into this point.

The Pollution of the Thames.

In reply to Mr. Lawrence, who asked what steps the Metropolitan Board of Works were taking to remedy the nuisance arising from the pollution of the river Thames by the main drainage outfalls, Mr. Matthews stated that he could not, within the compass of an answer to a question, detail the scientific processes which were being carried out, and which would, it was confidently believed, be found sufficient to prevent the pollution of the river.

Proficiency Certificates in Vaccination.

On the 10th inst., Mr. Ritchie, in reply to Dr. Tanner, stated that the certificates of proficiency in vaccination required as part of the qualification for the appointment of public vaccinator in England could only be obtained at certain educational vaccination stations, which were subject to the inspection of the Local Government Board. Twenty public vaccinators in Great Britain had been authorised to grant such certificates; the stations being at London, Birmingham, Bristol, Exeter, Leeds, Liverpool, Manchester, Newcastle, Sheffield, Edinburgh, and Glasgow. The Board had in the present year been applied to to authorise the grant of such certificates at Dublin, and had expressed their willingness to do so upon certain arrangements being made in order to assimilate the practice with regard to the issue of certificates throughout the United Kingdom. Steps were now being taken for this purpose.

Later in the evening, during the consideration of the Civil Service Estimates, on the vote to complete a certain sum for the Local Government Board, Mr. A. O'Connor, after protesting against the practice of vaccination as inimical to the welfare of the community, proposed to move the reduction of the vote by the sum of £16,500, the amount appropriated in the vote to the payment of vaccination officers. After some remarks by Mr. Ritchie, Dr. Tanner, and others, the amendment was negatived without a division.

The Lunacy Laws.

On the 13th inst., in answer to Mr. Corbet, Mr. Matthews confirmed the previously announced intention of the Government to proceed with legislation on the subject of lunacy. It would be a matter for consideration whether this legislation should extend to Ireland and Scotland.

House-boats.

On Thursday, in reply to Mr. H. S. Wright Mr. Ritchie said the Thames Conservators were empowered under an Act of last year to make regulations for the prevention of the pollution of the river by steam launches or house-boats. They had prepared a bye-law which would render liable to a penalty any person who polluted the river by dropping into it offensive matter. This bye-law, with others, had received the approval of the Queen in Council. In answer to another question by Mr. Wright, the Chancellor of the Exchequer replied that house-boats on the river were not liable to Imperial taxation, and it was not proposed to impose any tax upon them, because the amount which would be collected would be insignificant. Under the bye-laws of the Thames Conservancy, however, it was intended to charge registration fees for house-boats.

SANITARY CONGRESS.—The annual Congress of the Sanitary Institute of Great Britain will be held this year at York under circumstances promising well for its success. The President of the Congress, which will open on the 21st inst., is Sir T. Spencer Wells, and the list of Vice-Presidents includes the names of Dr. Richardson, Dr. G. Buchanan, Sir J. Fayrer, Miss Nightingale, and Professor Humphry, of Cambridge. Sir T. Spencer Wells will give an address, and the sections, which are only three in number, will be—first, under Dr. De Chaumont, "Sanitary Science and Preventive Medicine"; second, under Mr. Baldwin Latham, assisted by Mr. E. C. Robins, "Engineering and Architecture"; and, third, under Mr. W. Whitaker, assisted by Mr. G. J. Symons, "Chemistry, Meteorology, and Geology."

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Obituary.

ROBERT FOWLER, M.D., M.R.C.P. ED., M.R.C.S. ENG., &c.

ON August 7th there passed away from the medical profession in London Dr. Robert Fowler, of Old Burlington-street, W., and of Bishopsgate-street, City. Born in Belvidere-road, Lambeth, in the year 1828, and educated first at Merchant Taylors' School and then at the Grammar School, Cardigan, under the present Archdeacon Griffiths of Llandaff, Dr. Fowler was, on leaving school, placed as an apprentice with the late W. M. Noot, Surgeon, of Cardigan. Completing his apprenticeship, he entered as a medical student at King's College Hospital. Here, after due course, he obtained the Associateship of the College, and qualified M.R.C.S. and L.S.A. He then proceeded to Edinburgh University, where in the year 1851 he graduated M.D. After leaving Edinburgh he accepted the post of house-surgeon at Loughborough Infirmary; but after honourably fulfilling the duties for a time he left the infirmary and came to London. Settling in Bishopsgate, City, in the year 1854, although he was then but twenty-six years of age, he soon acquired an extensive and lucrative practice. For many years he held the post of medical officer to the East London Union; but, on the amalgamation of the three Unions into the combined City of London Union, he retired on a pension. Elected soon after a guardian of this union, he held his seat on the board till his death. He always took great interest in Poor-law medical relief, and at one time wrote extensively on the whole subject of Poor-law medical reform. He gave extensive evidence before the Commons' Select Committee on Poor-law Relief, and by so doing he was very materially instrumental in the passing of Hardy's Act. In 1879 he was elected by the City of London Union one of their managers on the Metropolitan Asylums Board. Here he soon distinguished himself for useful work, and on the occasion of the recent scandals in the management of the Homerton Fever Hospital he was very active in promoting the inquiry. Eleven years ago he was elected an examiner of the Society of Apothecaries, and, with the exception of one year, was re-elected every year since. For some time he held the post of librarian to the Hunterian Society, and to him the Society are indebted for the catalogue of their library. In the year 1882 he was selected the Society's Orator, and the oration which he delivered was so able and interesting that, in deference to a widespread request, it was afterwards published in the form of a pamphlet. The title of the oration is, "The Attributes, Professional and Social, of the so-called 'Family Doctor,'" and the author of it was so highly esteemed by the members of the Society that the following year he was elected their president.

Dr. Fowler was so active and industrious, and so desirous of doing good, that during the whole of his career he never allowed any opportunity to pass of performing a public service. In 1870, by a long letter to *The Times*, he drew attention to the celebrated case of the Welsh Fasting Girl, and having made himself thoroughly acquainted with every detail, he published a comprehensive volume on the whole case. The full title of the work is, "A Complete History of the Welsh Fasting Girl, with comments thereon; and observations on Death from Starvation." The work is chiefly interesting to the practitioner of medicine on account of its scientific worth—that is to say, by reason of Dr. Fowler's discussion of the subject of starvation in general; but even to the ordinary reader his remarks are so clear and obvious, that few such persons taking up the work would omit to read his observations on death from starvation.

Dr. Fowler was the author of a Medical Vocabulary, a work which has already reached a second edition. The task, however, will be in due time taken up and completed by his son. In addition to his ordinary literary work, he at one time tried his hand at poetry; and the amusing poem headed "The Parish Leech," and published some years ago under the *nom de plume* of "A Parish Doctor," was really from his pen. His contributions to the medical journals were varied and numerous, and for a long series of years he was an occasional contributor to the columns of this journal. His last literary effort was an interesting illustrated article entitled "On the Discovery of one of the 'Seites' set apart in Whitechapel for a Pest-ground, *temp.* Edward III.," which was published in THE LANCET about a year ago, and afterwards republished in pamphlet form.

CHARLES CHADWICK, M.D., F.R.C.P. LOND.

DR. CHADWICK, whose death occurred somewhat suddenly at Buxton on the 30th ult., was born at Leeds in 1815. He received the major part of his medical education in Edinburgh, and in 1837 took the degree of Doctor of Medicine at the University of that city, becoming a Fellow of the Royal College of Physicians of Edinburgh in 1845, and a Fellow of the Royal College of Physicians of London in 1866. Settling down to practice in his native town, Dr. Chadwick soon attracted attention, and whilst comparatively young was elected physician to the Leeds General Infirmary, an office which he retained for nearly eight years. At the same time he held various lectureships in connexion with the Leeds School of Medicine, an institution in whose welfare and prosperity he took a lively and active interest. To Dr. Chadwick's exertions, too, Leeds is mainly indebted for the hospital which at the present time adorns the town. In the West Riding Medical Charitable Society Dr. Chadwick took a great interest, and of it he was for many years the chief director. He found no labour too great to bestow upon it, and he contributed largely to its funds in money, as well as in time and labour; and when, in consequence of failing health, he was compelled to retire from its active management, the members, in recognition of his services and as a token of their regard, presented him with a substantial gift of silver plate. Dr. Chadwick was president of the British Medical Association in 1869, when the annual meeting was held in Leeds, and afterwards became a vice-president of that body. He was a Justice of the Peace for both the borough of Leeds and for the West Riding of the county of York, and he was also one of the twenty-five patrons of the parish church of Leeds. Some twelve years ago, when removal from Leeds was necessitated by failing health, he took up his residence at Tunbridge Wells, and, although he was known to be suffering from diabetes, the news of his death came upon his friends as a surprise, as in a recent visit to the north of England he manifested a degree of robustness which encouraged the hope that his life might have been prolonged for some time.

Medical News.

SOCIETY OF APOTHECARIES.—The following gentlemen passed their examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received certificates to practise, on Thursday, the 2nd inst.:—

Gibbon, Ernest Henry, Marlborough House, Seaham.
Gillmon, John Charles, Oxonian-street, East Dulwich Grove.
Gregory, Seth, Birchanger-road, South Norwood.
Hughes, Hugh Lewis, Bridge-street, Llanbadarn, Aberystwyth.
Todd, Henry, Mile-end-road.

The following gentlemen also on the same day passed their Primary Professional Examination:—

Goodwin, William Henry Frederic, Westminster Hospital.
Lewington, John Joseph, London Hospital.
McGeagh, William Stewart, St. Thomas's Hospital.

The following gentlemen passed and received certificates to practise, on Thursday, the 9th inst.:—

Brooks, Richard Philip, Tollington-park.
Griffiths, William, St. John's Wood Terrace.
Marks, Robert John, Canyage-square, Clifton, Bristol.
Melland, Brian, Victoria-park, Manchester.
Rusher, John Golby, Pershore, Worcestershire.
Wright, Charles Franklin, Trafalgar-road, Great Yarmouth.

THE annual sermons on behalf of the local infirmary were preached at Bridgwater on the 12th inst.

THE Municipal Council of Milan has contributed the sum of £400 to the Pasteur International Institute.

THE Sanitary Committee of the Bolton Corporation have decided to invite the members of the Sanitary Institute to hold their annual congress at Bolton next year.

AT a meeting of the City Commission of Sewers on the 14th inst., Dr. Sedgwick Saunders, the medical officer of health, stated that the deplorable state of the river Thames near Purfleet arose through the experiments in deodorising sewage now being made by the Metropolitan Board of Works, which experiments, in his opinion, were worse than useless, and were only serving to lull the public into false security. Some eight million gallons of sewage out of the 160 millions daily discharged into the river are being experimented on at, it is reported, a cost of £3000 per week.

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THE MAYORALTY OF WOLVERHAMPTON for the ensuing jubilee year has been offered by resolution of the Borough Council to Mr. Vincent Jackson, F.R.C.S.E., surgeon to the Staffordshire General Hospital, who has written to the present Mayor accepting the nomination.

SHEFFIELD SCHOOL OF MEDICINE.—The Winter Session 1886-7 will commence on Friday, October 1st, at 5 P.M., when the introductory lecture will be delivered in Firth College by Dr. W. S. Porter, physician to the Public Hospital and Dispensary and lecturer on Physiology. The prospectus and all information may be obtained from Arthur Jackson, secretary.

A PARKES MUSEUM FOR PARIS.—The Paris Municipal Council have decided to open a Hygienic Museum, in which the microscopic effects of allowing water to stagnate, the skin to remain dirty, and bad air on the blood will be shown, as well as other causes of disease. Lectures on the laws of health will be delivered in connexion with the exhibition.

BUTTER SUBSTITUTES.—The Bill to amend the law relating to the trade in butter substitutes, brought into the House of Commons by Sir Joseph McKenna, imposes a maximum penalty of £20, or one month's imprisonment, on any person importing, manufacturing, or offering for sale, margarine or oleomargarine without due branding of the name on all packages. The penalty is increased to £50, or six months' imprisonment, for a second offence. Margarine or oleomargarine factories are to be registered and inspected.

PRESENTATION.—At the half-yearly meeting of the governors of the Wolverhampton and Staffordshire Hospital on the 14th inst., Dr. Millington, who until recently held the position of senior honorary physician, was presented with a life-size portrait of himself, painted in oil, a silver salver, and tea and coffee service, in testimony of the valuable services he had rendered to the institution for the long period of thirty-two years. It has been arranged that the portrait shall be hung in the board-room of the hospital.

THE DISPOSAL OF TOWN REFUSE.—On the 14th inst. the members of the Preston Town Council inspected a refuse destructor which has just been erected in that town at a cost of £6387 exclusive of the site, the purchase-money of which was £12,000. The destructor consists of eight furnaces, each of which will consume seven tons of refuse in twenty-four hours. The furnaces have been in operation a few days, and the inspection was considered to be perfectly satisfactory.

NORTH-WESTERN ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.—At the monthly meeting of the members of this Association on the 9th inst., Dr. Vacher, the medical officer of health for Birkenhead, read a paper entitled "When Infectiousness begins and when it ends in Scarlatina, Measles, Small-pox, Mumps, and Diphtheria." With regard to the first point, Dr. Vacher pointed out that there was danger from infection from the moment the patient became infected, and, as to the time when the infectiousness terminated, that this was determined by the time it took for the complete elimination of the morbid products thrown off by the patients.

PARKES MUSEUM.—During next month the following lectures and demonstrations will be delivered at Margaret-street, Regent-street:—October 4th: Introductory lecture on General History, Principles and Methods of Hygiene, by Dr. G. V. Poore. 6th: Water-supply, Drinking-water, and Pollution of Water, by Professor Corfield. 8th: Drainage-construction, by Professor H. Robinson. 11th: Sanitary Appliances, by Mr. Gordon Smith. 13th: Ventilation, Measurement of Cubic Space, &c, by Professor F. De Chaumont. 15th: Scavenging and Disposal of Refuse, by Mr. Percy Boulnois. 18th: Food (good and bad), Milk, Sale of Food and Drugs Act, by Mr. C. E. Cassal. 20th: Infectious Diseases and Methods of Disinfection, by Dr. R. Thorne Thorne. 22nd: General Powers and Duties of Inspectors of Nuisances (Method of Inspection), by Mr. J. F. J. Sykes. 25th: Nature of Nuisances, including Nuisances the abatement of which is difficult, by Mr. J. F. J. Sykes. 27th: Sanitary Law—General Enactments, Public Health Act, 1875, Model Bye-laws, by Dr. Charles Kelly. 29th: Metropolitan Acts, Bye-laws of Metropolitan Board of Works, by Mr. A. Wynter Blyth.

BRIDGE-END ASYLUM.—At the meeting of the Merthyr Board of Guardians on the 11th inst. attention was called to the fact that, although the majority of the 800 patients at the county asylum at Bridge-end were Welsh, and a number of these were unable to understand English, none of the medical officers understood Welsh. Owing to this circumstance, it was hinted that patients remained longer in the institution than was necessary, and it was unanimously resolved, in view of the erection of a new asylum building at a cost of £100,000, that it is desirable that officials conversant with both the English and Welsh languages be engaged.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

COTTERELL, EDWARD, M.R.C.S., L.R.C.P.Lond., has been appointed Medical Officer to the Stoke Lyne District of the Bicester Union.

EVANS, C. W., M.B.Lond., M.R.C.S., has been appointed Visiting Medical Officer to the Bakewell Union Workhouse, vice Chas. Evans, deceased; and Certifying Surgeon, under Factories and Workshops Act, for Bakewell District.

FERRIER, DAVID, M.D., F.R.S., Professor and Physician at King's College Hospital and the National Hospital for the Paralysed and Epileptic, has been appointed Physician to the British Home for Incurables, Clapham.

KINGDON, E. C., M.B., C.M.Edin., late Assistant Medical Officer to the Middlesex County Asylum at Colney Hatch, has been appointed Assistant House-Surgeon to the General Hospital, Nottingham.

LOWRY, J. H., L.R.C.P.Ed., L.R.C.S.Ed., Medical Officer, Imperial Maritime Customs, Pakhoi, China, has been appointed Medical Officer, Imperial Maritime Customs, Kiungchow, Hainan, China, vice Dr. E. A. Aldridge, transferred to Wuku.

PAGET, CHARLES E., M.R.C.S., L.R.C.P.Lond., has been reappointed Medical Officer of Health for the Westmoreland Combined Sanitary District, for a second term of three years.

PAYNE, WILLIAM ARTHUR, B.A.Oxon., M.R.C.S., L.S.A., has been elected House-Surgeon to the Richmond Hospital, Surrey, vice John Williamson, M.B., resigned.

SMITH, PATRICK BLAIKIE, M.D., C.M.Aber., has been appointed Assistant Physician to the Aberdeen Royal Infirmary.

SWANN, ALFRED, M.D., M.R.C.S., &c., has been appointed Certifying Factory Surgeon for the Batley District, vice Stockwell, deceased.

TROUTON, GARDINER, M.B., B.Ch.Univ.Dub., has been appointed House-Surgeon to the Cumberland Infirmary, vice G. Francis Smith, M.R.C.S., L.R.C.P., resigned.

WILLIAMS-FREEMAN, JOHN P., M.B.Dur., M.R.C.S., L.S.A., has been appointed House-Surgeon to the Royal Portsmouth, Portsea, and Gosport Hospital.

Births, Marriages, and Deaths.

BIRTHS.

BOSWELL.—At Saffron Walden, Essex, the wife of Henry St. George Boswell, M.B., C.M., of a daughter.

BROCK.—On July 7th, at Urlar, Rouxville, Orange Free State, the wife of George Sandison Brock, M.B.Ed., C.M., of a son.

CANE.—On the 7th inst., at The Gables, Belvedere, Kent, the wife of Howard Cane, M.D., L.R.C.P.Lond., of a son.

DONALD.—On the 28th ult., at Ambleside-avenue, Streatham, S.W., the wife of David Donald, M.D., C.M., of a daughter.

EDGAR.—On the 5th inst., at Settle, the wife of James W. Edgar, M.D. (prematurely), of a son.

FINLAY.—On the 3rd inst., at Lower Berkeley-street, Portman-square, W., the wife of David W. Finlay, M.D., F.R.C.P., of a daughter.

GALLOWAY.—On the 4th inst., at Epping, the wife of Arthur Wilton Galloway, M.R.C.S., L.R.C.P.Lond., of a son.

MURPHY.—On the 7th inst., at Holly House, Sunderland, the wife of Dr. Murphy, of a daughter.

NORRY.—On the 3rd inst., at Telford-park, Streatham-hill, S.W., the wife of William Augustus Norry, M.B., M.R.C.S., of a daughter.

OLIVER.—On the 8th inst., at Consett Hall, co. Durham, the wife of Thomas Oliver, M.D., of Eldon-square, Newcastle-upon-Tyne, of a son.

OWEN.—On the 11th inst., at Wattham's Dene, Twyford, Berks, the wife of Owen Owen, Brigade-Surgeon, retired, of a daughter.

POTTS.—On the 12th inst., at Vicarage-villas, Willesden, N.W., the wife of W. A. Beevor Potts, M.R.C.S., L.S.A., of a daughter.

SHANN.—On the 6th inst., at Micklegate, York, the wife of Henry Chas. Shann, M.R.C.S., of a son.

SHAPTER.—On the 7th inst., at Barnfield-crescent, Exeter, the wife of Lewis Shapter, M.D., of a son.

SPENCER.—On the 12th inst., at Albion-road, Stoke Newington, the wife of E. R. Spencer, M.R.C.S., L.R.C.P., of a son.

STOKES.—On the 8th inst., at Rose Park Lodge, Upper Tooting, S.W., the wife of F. A. Stokes, L.R.C.P., M.R.C.S., of twins (boys).

WALKER.—On the 10th inst., at Hurworth-on-Tees, the wife of Charles Edward Walker, M.B., M.R.C.S., of a son.

WORNUM.—On the 13th inst., at 6, College-terrace, Belsize-park, Hampstead, N.W., the wife of George Porter Wornum, M.R.C.S.Eng., of a daughter.

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MARRIAGES.

BULL—GARDE.—On the 7th inst., at St. Mary's, Shenley Mansel, by the Rev. John Wood, Vicar of Old Wolverton (Rural Dean), William H. Bull, F.R.C.S., of St. Oswald's House, Stony Stratford, second son of W. J. Bull, Solicitor, of Oswestry, to Emma B. Cherry Garde, youngest daughter of the late Edward Hoare Garde, Esq., of Balunascurra House, co. Cork, and sister of the Rev. J. H. Garde, Rector of Shenley Mansel, Bucks.

CAMPBELL—HIRST.—On the 9th inst., at St. Chad's, Saddleworth, Colin George Campbell, M.R.C.S., of Uppermill, Saddleworth, to Annie Ethel, only daughter of Ben Hirst, of Tamewater House, Saddleworth, Yorkshire.

COLLINS—COPELAND.—At St. Mary's Church, West Rainton, by the Ven. Archdeacon of Durham, assisted by the Rev. Hugh McNeile Minton-Senhouse, M.A., brother-in-law of the bride, Surgeon M. J. Collins, R.W.I.M.S., eldest son of the late M. J. Collins, Solicitor, of Cork, to Esther, fourth daughter of the Rev. G. D. Copeland, B.D., Rector of W. Rainton, Durham.

DAVISON—VIVANCO.—On July 24th, at St. John's Church, Buenos Ayres, by the Right Rev. the Bishop of the Falklands, assisted by the Rev. Austin West, M.A., Rector of St. John's, and by the Rev. Lennox Robertson, M.A., James Thomas Richard Davison, M.D., youngest son of the late Robert Davison, Esq., of Monte Video, to Ernestine, fourth daughter of Hilarion Vivanco, Esq., of Tigre.

GREENSILL—BRETTELL.—On the 9th inst., at the Parish Church, Dudley, James Heynes Greensill, M.R.C.S., L.S.A., of Parkstone, Dorset, to Ellen Blanche Brettell, eldest daughter of Thomas Brettell, of Dudley.

HALLIBURTON—DAWE.—On the 2nd inst., at All Saints, Gordon-square, W.C., by the Rev. E. G. Hall, W. D. Halliburton, M.D., to Annie, daughter of James Dawe, of Antony, Cornwall. No cards.

JOHNSON—WELCH.—On the 31st ult., at St. George's, Kidderminster, Thomas Johnson, M.R.C.S., L.R.C.P., to Beatrice, youngest daughter of John Welch, of Kidderminster.

JOSHUA—MURRAY.—On the 9th inst., at St. James' Episcopal Church, Dollar, by the Rev. H. E. Maskew, the incumbent, Francis William Joshua, L.R.C.P., L.R.C.S.I., of Great Malvern, son of William Joshua, F.L.S., of Cirencester, to Elizabeth Agnes Murray, of Dallarbeg, Dollar, eldest daughter of the late John Edwards Murray, sometime of Quartertown-park, Mallow and Rock Lodge, Youghal, co. Cork.

KELLIE—DUNLOP.—At Southfield, Dunbar, by the Rev. R. Buchanan, Geo. Jerome Kellie, Surgeon, 4th Regiment of Cavalry, Hyderabad Contingent, to Eliza Catherine, third daughter of the late Dr. Jas. Dunlop, of Abbey Lands, Dunbar.

MORRIS—NUTT.—On the 4th inst., at Emmanuel Church, West Dulwich, Clarke Kelly Morris, M.R.C.S.E., L.S.A., of Blackheath, son of Edwin Morris, M.D., F.R.C.S., of Spalding, to Mabel Josephine, daughter of the late D. Nutt, of 270, Strand, and stepdaughter of the late D. W. Logie, of Rosendale Hall, West Dulwich.

NOAKES—ASHMORE.—On the 8th inst., at All Saints, Margaret-street, by the Rev. A. J. Noakes, brother of the bridegroom, S. S. Ashmore Noakes, L.R.C.P., M.R.C.S., of Nice, and St. Winifred's, Windsor, to Harriette Paley, eldest daughter of the late Major Ashmore, 16th Regiment, of Bath.

TURNER—MCDOUGALL.—On the 7th inst., at St. Mary Abbot's, Kensington, Francis Charlewood Turner, M.D., to Mary Colenso McDougall.

WALKER—BRIDGE.—On the 2nd inst., at the Parish Church of St. John, Clapham-rise, Charles Rotherham Walker, M.D., to Lillia Gertrude Mary, third daughter of the late Alexander Bridge, M.D., F.R.C.S., of Argyll-place, W.

WALLACE—VACHELL.—On the 9th inst., at St. Andrew's Church, Bath, Samuel Wallace, L.R.C.P.Ed., L.R.C.S.Ed., of Cardiff, to Emily Harriett, youngest daughter of the late Dr. Vachell, of Cardiff.

WELLER—SEVERNE.—On the 2nd inst., at Dringhouses, York, Charles Joseph Weller, M.R.C.S., L.R.C.P.Lond., to Ellen Frances Louisa, daughter of Captain Severne, late of Dringhouses.

DEATHS.

BAIN.—On the 31st ult., at Brighton, Alexander Gordon Bain, R.N., Surgeon (retired), aged 49.

GRANGER.—On the 11th inst., at his residence, Alveston Lodge, Durdham Down, Bristol, Frederic Granger, M.R.C.S., L.S.A., in his 89th year.

HOLL.—On the 11th inst., at his residence, Derby-villas, Cheltenham, Harvey Buchanan Holl, M.D., M.R.C.S., aged 65.

JELLY.—On the 14th inst., at Buxton (suddenly), Fred. A. Jelly, M.B., C.M., the beloved son of Wm. Jelly, M.D., F.R.C.P.Lond., late of Valencia, Spain, aged 29.

LEWIS.—On the 13th inst., at Loughton, Essex, William Thomas Lewis, M.R.C.S.Eng., L.S.A., in his 58th year.

MILLER.—On the 31st ult., at Beaumont-villas, Spring-grove, Isleworth, George Miller, M.D., formerly of Emsworth, Hants, and Sidmouth, Devon, in the 76th year of his age.

MOINET.—On the 6th inst., at Edinburgh, Francis Walter Moinet, M.D., F.R.C.P.E.

STEPHEN.—On the 11th inst., at Carlsbad (of cholerina), William H. G. Stephen, M.B., C.M.Edin., L.R.C.P.Lond., youngest son of the late William Stephen, of Inchbroom, Morayshire, aged 24.

THORNTON.—On the 7th inst., at Hinxton Grange, Saffron Walden, Eleanor Philippa, the beloved wife of J. Knowsley Thornton, M.B., C.M., of 22, Portman-street, London, W.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, September 16th, 1886.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Sept. 10	29·71	S.W.	68	63	83	69	63	·01	Cloudy
,, 11	30·02	W.	57	53	110	70	49	·52	Fine
,, 12	30·00	W.	63	58	102	69	55	...	Cloudy
,, 13	30·11	S.W.	67	62	113	77	63	...	Cloudy
,, 14	30·08	W.	66	62	105	80	60	...	Hazy
,, 15	30·37	E.	60	57	98	66	56	...	Cloudy
,, 16	30·48	E.	57	50	89	62	49	...	Cloudy

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

We cannot undertake to return MSS. not used.

THE HOSPITAL FOR WOMEN AT LIVERPOOL AND THE NEWSPAPERS.

OUR opinion is asked as to the propriety of medical men carrying on controversies on medical matters in the daily papers. As a rule, the practice is one to be deprecated most strongly. In this particular case, however, it must be admitted that there is some excuse for a departure from the rule. The questions involved have been made public; they have been tried in a court of law. The interest of the hospital, too, and its management are involved by the publicity given to statements in the course of the trial. Any attempt to suppress newspaper discussion would be misconstrued, and would operate adversely on the hospital. Undoubtedly, the sooner medical men withdraw from the newspaper discussions of these topics the better, provided the public is assured that sound rules of professional conduct are laid down, and security has been taken for their being well observed. Voluntary hospitals would collapse without such precautions.

W. V., L.R.C.P.E.—Our correspondent cannot now register without obtaining a diploma. The last day for registration on the ground of "being in practice before the passing of the Act" expired on July 31st, 1879. There is one exception to this rule—viz., if a person was apprenticed to a dental practitioner and paid a premium prior to the passing of the Act he is still permitted to register as a dentist.

Mr. Robert Hamilton.—Dr. Diver's book, "A Young Doctor's Future," published by Smith, Elder and Co., might be of service.

Rodney should apply to some such firm as Moore and Co., 125, Houndsditch.

"TREATMENT OF STOMATITIS."

To the Editor of THE LANCET.

SIR,—In response to your correspondent, "M.B.," regarding the treatment of stomatitis, I should suggest the following, which I have never found to fail with cases that have come under my notice. First have recourse to mel boracis, to which add a little pot. chlor., and paint the affected parts with a camel-hair pencil three or four times a day. Should the above not suffice, after a fair trial use the sulphurous acid together with the above, which may also be applied with a camel-hair pencil. However, I think the better plan is to use the acid with a spray, because the affected parts are more easily reached in that manner. Be most particular about the diet, and give some mild tonic, to which add pot. chlor. I have every reason to believe that if the above is carried out, the result will be found most satisfactory.

I am, Sir, yours truly,

Aug. 30th, 1886. M.D.

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TOUTING FOR PRACTICE IN NORTH LONDON.

M.B.Edin. sends us two bad specimens of touting. One in the form of a visiting card left at the house of a patient of our correspondent, and having on it, "Dr. T——, Surgeon and Accoucheur, Willoughby House, Willoughby-road," and said to have been left at the other houses in the road. The other a handbill announcing the opening of a practice at Andover House, Devonshire-road, Holloway, by a registered physician, surgeon, and accoucheur; fees charged strictly moderate for cash, &c. Really, this is too bad. What are our corporations about to allow such practices by their licentiates? Our correspondent should forward the documents he sends us to the bodies from which these parties obtained their diplomas.

M.A. & D.D. will see by our answer to other correspondents that we have resolved not to continue at present the discussion on the recognition of foreign degrees. That some such degrees must be recognised is clear; but whether "useful work among the poor," any more than among the rich, will be done by men with low degrees we very much doubt.

Mr. M. R. Edwards.—We have no knowledge of any such society as that mentioned.

Mr. Bedford Fenwick.—The paper is marked for insertion.

Dr. Arthur H. N. Lewers.—Yes.

"UNQUALIFIED ASSISTANTS."

To the Editor of THE LANCET.

SIR,—I have read with interest a letter in your issue of the 4th inst. in reference to the employment of unqualified persons as assistants and locum tenens. A great deal has been written on the subject, without, I regret to say, so far, making any apparent change in such a decided abuse. That the system of employing unqualified assistants is extensively carried on not alone in the Midland counties, but throughout England, I have had ample and varied opportunities of knowing. I am at present engaged, and have been from time to time for nearly three years in different parts of England, as locum tenens, and have also held two or three assistantships. I am therefore in a position to give some information as regards the abuse complained of. One or two instances of my experience may perhaps be of interest.

Shortly after I qualified I sought an engagement as assistant, and was engaged to take charge of a branch practice in London. At this branch was an unqualified person, who had had the management of the practice for four or five years, with only an occasional visit from the principal. When I entered on my engagement it was arranged that this unqualified man and I were to live together. I was led to expect that he would attend to such duties as dispensing, &c.—duties fitted for an unqualified person. I soon learned, however, that I was only nominally in charge of the practice; that this ignoramus was really the person invested with the management of it, and that I was, so to speak, his assistant. His salary was double that which I received; he was looked upon by the patients and general public as the owner of the practice, and was usually addressed as "Dr. ——." Of course, I was looked down on as nobody, and on one or two occasions he even consulted with a qualified practitioner, this gentleman being under the impression that he was consulting with Dr. ——. Having for a time submitted to this state of things, I gave this unqualified person to understand that I would not submit any longer. This elicited some hot words, with the result that I had an interview with the principal, in which I informed him that either his reliable unqualified deputy or I should leave. The principal having evinced an unwillingness to part with this distinguished representative of unqualified practitioners, I accordingly decided to leave, and left in a few days without the usual month's notice. I know of many other cases in which unqualified assistants are employed, and entrusted with the lives of hundreds of people, the principal only putting in an occasional appearance—once a week, or perhaps not so often. The generality of unqualified assistants have never been inside a hospital, can scarcely tell the heart from the liver, and have not even passed a preliminary examination. On the other hand, there are a few unqualified assistants (they are, indeed, "few and far between") who have taken out all their lectures and hospital practice, and have been really hard-working students, but are through pecuniary difficulties unable to qualify.

I am, Sir, your obedient servant,

Bath, Sept. 6th, 1886. JAMES J. O'BRYEN, M.D.

MECHANICS AT THE PRELIMINARY EXAMINATION.—A CORRECTION.

IN the answer addressed to "Student" in our issue of the 4th inst., p. 477, the date of the regulation of the General Medical Council respecting the above should have been given as Oct. 1st, *1885*, not 1886.

P. Q. Y.—Certainly so. No qualification is required to enforce a midwifery charge. Even a midwife is worthy of her hire—much more a member of the English College of Surgeons.

Mr. A. De St. Dalmas.—It would be premature to express an opinion of the merits of the invention until some experience has been gained of its utility.

A. P. S.—The question has been repeatedly answered in our columns—e.g., THE LANCET, March 13th, 1875, and July 14th, 1883.

Meg.—Yes, shortly.

A PRESCRIPTION BOOK OF THE ELEVENTH CENTURY.

MEDICINE has her archæology like every other learned vocation, and hardly a year passes without adding to her treasure-trove. In one of the precious MSS. contained in the Capitular archives of Ivrea, in Piedmont, Prof. Piero Giacosa has found a book of receipts which remounts to the eleventh century. The professor discourses learnedly on this book, pointing out, amid the scarcity of medical writings at that remote date, the importance of a document which adds to the proofs—authentic, if rare—that the ancient Græco-Latin tradition of medicine was still preserved, and that it may have given origin, without the intervention of Arabian medicine, to the famous school of Salerno. The MS. in which the book is inserted belonged to Warmund, Bishop of Ivrea, famous even in the first years of the stormy eleventh century for his love of science and literature. Before the prescriptions comes a group of receipts for writing with gold, for making gold ink, and for illuminating parchment. Then follows a catalogue of maladies, thirty-two in number, more than half of them relating to the eyes, while the remainder have reference to the head, the ears, the throat, the kidneys, and so forth. Each malady has its remedy—one or more,—the majority belonging to the vegetable kingdom, though the animal world supplies not a few. Among the latter we have fat of eels, raw flesh, the gall of a great variety of animals, such as the eagle, the cock, the hyæna, the hare; then goat's dung, hartshorn, serpents' skins, worms, &c. The vegetable remedies include aloes, camphor, cassia, lettuce, honey, opium, sundry aromatic herbs, rue, linseed, mustard, and so on. Finally come a few chemical and inorganic remedies: orpiment, lime, nitre, sulphur, French soap, &c. According to Prof. Giacosa the medicines are mostly derived from Dioscorides and Pliny. He also finds a correspondence, in the matter of arrangement, between the prescription book of Ivrea and the work of Lucius Apulelus Platonicus on the virtues of herbs—a work of which the compiler of the prescription book availed himself as a guide, and of which the Chapter of Ivrea doubtless possessed a copy now lost. The original part of the prescription book betrays a scientific turn of mind in advance of the age as to the conception of disease and the *modus operandi* of remedies. The author signs himself "Petrus Magrus"—probably a fictitious name, it having been the frequent habit of early mediæval writers on medicine to assume the surname "magrus" (lean), an epithet, according to Prof. Giacosa, which implies a not very lucrative practice. The importance of the professor's discovery, as we have said, lies in its demonstration that in Italy the Græco-Latin tradition in medicine was never lost. In fact, in the Ivrea MS. there is mention of but one remedy due to the Arabs—to wit, camphor. This drug, isolated among the others, proves that while in the eleventh century the Arabian pharmacopœia was not unknown, it had not yet, as a whole, taken root in Italy.

M.B.Lond.—The subject being newly introduced into the examination its scope is not sufficiently defined to warrant the giving of precise advice as to reading. Carpenter's "Mental Physiology" and Maudsley's "Physiology of the Mind" are works of considerable reputation, and would probably be useful.

E. C.—We do not give medical advice.

CHOREA AND ITS TREATMENT.

To the Editor of THE LANCET.

SIR,—I am looking anxiously for some comment, by someone better able than myself to judge, upon the treatment of the case of acute chorea in St. Vincent's Hospital, Dublin, reported in your issue of Sept. 4th. A child of ten years of age was given sulphate of zinc for fourteen days, in doses which gradually increased to thirty grains four times daily, together with a nightly draught of ten grains of chloral and thirty grains of bromide of potassium. On the ninth day considerable epistaxis and paralysis of the sphincters of the bladder and anus occurred. The circulation gradually failed through the succeeding days, and death took place on the fifteenth day.

I am, Sir, yours obediently,

September, 1886. A GENERAL PRACTITIONER.

DISPUTE AT TREHERBERT.

WE cannot undertake to give any opinion on such a serious and complicated dispute as this on the strength of an entirely one-sided statement. Our correspondent would do well to seek the judgment of a third party on the spot, before whom all facts could be laid.

Sigma.—It is not usual for a house-surgeon to be allowed beer money. In most cases he is provided with sufficient alcoholic beverages, and where this is not done he has to provide himself with them at his own cost. In one hospital, we believe, there is an allowance of a shilling a day, but this is exceptional. The question suggests too much the idea of bargaining with servants as to their "allowance."

A Constant Reader.—The question is a legal one, and we cannot speak positively; but we think our correspondent has a claim on the guardians or the relieving officer.

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THE RECOGNITION OF FOREIGN DEGREES.

M.D., Nemo, M.D. New York, &c.—We must believe that the Medical Council will be careful in the degrees which it recognises. Our correspondent "M.D." does not say what university it is that requires seven years' study of medicine. The profession must make due representations to the Medical Council when it enters on the grave duty of recognising foreign degrees. Such letters as that of "Nemo" will be more useful later on, especially if shorter. The discussion on the recognition of American degrees and their value must for the present close.

H. J. W.—We cannot at the moment indicate a book which would quite fulfil the requirements of our correspondent; but Cassell's Domestic Medicine might answer the purpose.

Mr. J. W. Orr should consult Mr. Henry C. Burdett's book on Cottage Hospitals.

"THE MEDICAL REGISTER."

To the Editor of THE LANCET.

SIR,—With reference to the complaint of Dr. Britton *re* the Medical Register, surely it is time the profession refused to submit longer to the scandalous manner in which names are removed from the Register. Being about to travel, I sent a notification of the fact to the registrar, enclosing a stamped envelope for acknowledgment (as I was aware that the funds of the Medical Council did not admit of the expense incurred in acknowledging a communication from a registered practitioner). I received an acknowledgment, saying my (then) present address would be retained on the Register. I happened by chance to be in England when the circular referred to by Dr. Britton reached me, and I was able to reply to it. Now, Sir, if I had left England one week earlier, I conclude my name would have been removed from the Register, as, owing to my somewhat erratic movements, it would have been quite a chance whether the communication from the registrar had ever reached me, and I should have been absent from England probably twelve months. A qualified practitioner pays an exorbitant fee for the privilege of being registered, and receives the following benefits:—He helps to pay the Medical Council enormous fees for the time they waste in framing new rules and regulations for the profession at one meeting which they usually annul at the next. The names of registered practitioners are removed from the Register whenever, in accordance with the most arbitrary and ridiculous rule of the Council, the registrar can do so, whilst no steps whatever are taken to expose and stop the practice of numerous unregistered and unqualified persons who style themselves doctors, who impose on the public and bring great discredit on the profession. I am, Sir, your obedient servant,

Sept. 7th, 1886. REGISTERED.

Mr. H. Bedwell.—There is no evidence that we are aware of in favour of the belief.

IRON IN ENTERIC FEVER.

To the Editor of THE LANCET.

SIR,—On May 16th, 1884, you inserted a letter in your columns which referred to the value of iron in septicæmia. In the closing sentence of that communication I mentioned the use of that drug in the treatment of enteric fever. I have recently used the perchloride in five-drop doses in two cases of that disease, and have been much pleased with the result. The temperature fell to the normal in from eight to twelve days. The iron, sweetened with glycerine, was given every two hours. The diet was strictly a milk one. I am, Sir, yours truly,

Clayton-le-Moors, Aug. 26th, 1886. C. R. ILLINGWORTH, M.D.

M.B.—Has our correspondent considered that there are already two London candidates well to the front?

Mr. J. H. Bell.—THE LANCET, Nov. 3rd, 1883.

"THE USE OF COCAINE IN CIRCUMCISION."

To the Editor of THE LANCET.

SIR,—Dr. Hett's last letter reduces the controversy between us practically to two issues:—1. If there be no phimosis, is a redundant prepuce in the slightest degree prejudicial, either to the child or to the adult? 2. Is the compulsory cleanliness procured by its excision any sufficient warranty for the performance of circumcision? My own impressions lead me to answer both questions in the negative. Dr. Hett, of course, takes an opposite view; it is for others to judge which is right. It is sufficient for me to have pointed out that congenital phimosis can be easily remedied by a much simpler and safer procedure than the one now almost universally in vogue.—I am, Sir, yours faithfully,

Norfolk-terrace, W., Sept. 7th, 1886. HERBERT SNOW.

THE CONTAGIOUS DISEASES ACTS.

To the Editor of THE LANCET.

SIR,—May I be allowed to draw attention to the following words, spoken last week in the House of Commons by Lord C. Beresford:—"The large increase in the sick-list in the Navy was due to the abrogation of the Contagious Diseases Acts and to the campaign recently undertaken." It is quite refreshing to read such words coming from a man like Lord C. Beresford, and protesting as they do against the short-sighted legislation which removed the protection of these lists from our garrison towns and seaports.—I am, Sir, your obedient servant,

Charlotte-street, W., Sept. 13th, 1886. H. DE MÉRIC.

"SEPARATE" QUALIFICATIONS.

THE following circular, obviously for wide distribution, sets the subject of separate qualifications in a new light:—

"122, Southwark Park-road, S.E., August, 1886.

"Dr. Rugg presents his compliments to the inhabitants of this neighbourhood, and begs to inform them that he has commenced practice at the above address. Dr. Rugg holds *separate* diplomas in every branch of his profession—i.e., as a physician, surgeon, apothecary, and accoucheur. He has had a large experience of surgical cases, gained during the Franco-Prussian War, and later as medical officer in the Australian mercantile marine. He therefore hopes that by careful and conscientious attention to the duties of his profession, and by combining his mature experience with the most moderate charges, he may be enabled to gain the confidence and patronage of his neighbours. Dr. Rugg would further state that having received an extra degree in diseases peculiar to women and children, offers them special attention."

Then follows a tariff.

Enquirer.—Our advertising columns contain all the information we have upon the subject.

Dr. H. Snow's paper will appear shortly.

"A NEW AND IMPROVED CLAMP FOR HÆMORRHOIDS."

To the Editor of THE LANCET.

SIR,—Returning from a happy little holiday, I regret to find I have given pain to Mr. Benham; He should bear in mind that when we offer anything to the profession, as both he and I have done with our clamps, we must be prepared to accept criticism, even though it be adverse. In my own practice I have had every reason to be satisfied with the instrument which I devised for myself in preference to his, and even Mr. Allingham's. Practically my instrument proves perfectly efficient and reliable. Mr. Benham's experiment at the maker's was made with an imperfect and rejected clamp—rejected for the reason that it permitted play between the collar and shaft. A perfect instrument was shown by me when I read a paper at the recent meeting of the British Medical Association here, and it met with a reception quite satisfactory to

Yours faithfully,

Brighton, September, 1886. CHARLES J. SMITH.

Scalpel.—Our last week's issue contains the information required.

Mr C. H. Eyles.—Soon.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Mr. Simeon Snell, Sheffield; Sir James Sawyer, Birmingham; Sir William Smart; Mr. W. J. Baker, Kashmir; Mr. Leeming, Kendal; Dr. F. E. Pearse, Frome; Mr. A. de St. Dalmas; Dr. Whitla, Belfast; Mr. Holderness, Windsor; Mr. De Méric, London; Mr. Foulerton; Dr. Hingston Fox, London; Mr. W. Fraser, Ashburton; Mr. R. Browne, King's Lynn; Mr. Greenhalgh, Huddersfield; Dr. Schneer, Alassio; Mr. R. Macpherson, Glasgow; Dr. Suckling, Birmingham; Dr. De Havilland Hall, London; Mr. Sanderson, Loftus; Dr. Caddy, London; Dr. Ker, Halesowen; Dr. Handford, Nottingham; Dr. Ranking, Meean Meer; Mr. W. Tallack; Mr. G. Foy; Messrs. Baillière, Tindall, and Cox, London; Dr. Herman, London; Dr. Cheadle, London; Mr. T. S. Ellis; Dr. Allen, Seoul; Dr. Major, London; Mr. Hawkins-Ambler, Kirkburton; Mr. Burton, Liverpool; Mr. Snow, London; Mr. Bullock, Islesworth; Mr. Jackson, Wolverhampton; Mr. Bedwell, Leominster; Dr. Roche, Kingston; Dr. Steavenson, London; Mr. Adams, Maidstone; Mr. Davis, London; Dr. Grimsdale, Liverpool; Mr. Laffan, Cashel; Mr. Marcus, London; Mr. Edwards, London; Dr. Bernays, St. Louis, Mo.; Dr. Collins, London; Mr. Denham, London; Mr. May, Buffalo; Mr. Oldfield, London; Mr. Pulman, Dorking; Dr. Makuna, Treherbert; Mr. Wark, Glasgow; Mr. Fraser, Romford; Mr. Craig, Llandudno; Dr. Carter, Liverpool; Mr. Dunn, London; Mr. Ellis, Gloucester; Mr. Hambleton, Birmingham; Dr. Cullingworth, Manchester; Mr. Allwright, London; Dr. Black, Glasgow; Mr. Maylard, Glasgow; Dr. Marshall, Nottingham; Dr. O'Bryen, Bath; Mr. Tait, Birmingham; Mr. Callahan, Dublin; Mr. Cole, Exeter; Mr. Davies, Treherbert; Mr. Westgarth, London; Mr. Bicket, London; Mr. Bower, Sandy; Dr. Curran, London; Mr. Blackburn, London; Mr. McVeagh, Coventry; Dr. Imlach, Liverpool; Mr. Smith, Brighton; Mr. Hayes, Dublin; Dr. Johnstone, Ilkley; Dr. Lewers, London; Mr. Carrington, London; Mr. Michelli, London; Dr. Coleman, London; Mr. Eyles, New Hampton; Mr. Onslow, Liverpool; Messrs. W. and A. K. Johnston, Edinburgh; Mr. Nedwill, Christchurch, N.Z.; Messrs. Hasun and Son, Dublin; Mr. Harries, Shrewsbury; Mr. Hamilton, Stonehouse; M. Dufour, Montreux; Mr. Clarkson, Leeds; Messrs. Armbrecht and Co., London; Mr. Crawford, Harrogate; Mr. Scott; Messrs. Ware and Son, York; Mr. Hastings, London; Mr. Torrance; Messrs. Morgan and Scott, London; Mr. Whitaker, Edinburgh; Messrs. Street and Co., London; Mr. Lomas, Montreux; Mr. Durant, Paris; Mr. Chetti, Edinburgh; Mr. Townson, Chester; Dr. Bell, Bradford; Mr. Bluett, Shrewsbury; Mr. Birchall, Liverpool; Dr. Hammond, Cranleigh;

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Dr. Heelas, Bonchurch; Mrs. Chreiman, Kensington; Mr. Robinson, Sunderland; Mr. Oliver, Weymouth; Mr. Price, Brighton; Dr. Sawyer, Birmingham; Mr. Parrott, Bournemouth; Mr. Faulkner; Mr. R. Davy, London; Mr. Wills, London; Mr. Goodwin, Maidstone; Mr. A. Jackson, Sheffield; Mr. Livingstone, Edinburgh; Messrs. Kew and Donald, Perth; Mr. Blore, Leeds; Mr. Yourrell; Messrs. Eaves and Sons, London; Mr. Stilliard, Birmingham; Messrs. Welford and Sons, London; Mr. Hume, Edinburgh; Mr. Cornish; Dr. H. Barnes, Carlisle; Mr. Laban, West Bromwich; Messrs. Essex and Co., London; A Shareholder; A Bombayite; The Director-General of the Navy Medical Department; A.P.S.; A Student; P.Q.Y.; An M.D. of New York; Rodney; W. V.; Registered; A Constant Reader; Novus Homo; H.J.W.; M.D.; M.B.; Scrutator; Scalpel; Meg; A General Practitioner; Hygeia; Enquirer; T. G.; Matron, London; D. M., London; Theta; F. M. O., Bayswater; O. K.; M. P.; C. H. H., Bishop Waltham; Gordon; Alicia; Surgeon, Bally Connell.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Donald, Streatham; Mr. Beaman, Newton-le-Willows; Messrs. Whitehead and Co., Manchester; Mr. Jones, Birmingham; Messrs. Evans and Wormull, London; Mr. Watt, London; Mr. Willey, St. Leonards-on-Sea; Col. Burnand, Worthing; Mr. Hoyland, Ipswich; Dr. Hawkes, Northampton; Mr. Daunt, Lindfield; Mr. Eminson; Mr. Phillips, Bolton; Mr. Allen, Douglas; Mr. Leslie, Aberdeen; Mr. Hayward, Grantham; Mr. Peat, Tralee; Dr. Brock, Herschel; Mr. Williams, Oswestry; Dr. Lovegrove, Hythe; Mrs. Davies, Gardd; Mr. Smith, Holloway; Rev. Dr. Lucas, Bridgnorth; Messrs. Bennett Bros., Salisbury; Mr. Highmoor, Thirsk; Mr. Alleday, Leeds; Mr. Roberts, Attercliffe; Mr. Armstrong, Harpurhey; Mr. Johnston, Sheffield; Dr. Murphy, Sunderland; Mr. D. Graham, Manchester; Mr. Jones, Llanfachreth; Mr. Herbert, Uttoxeter; Mr. Hearder, Newton-le-Willows; Mr. Lane, Doncaster; Mr. Dickson, Bootle; Messrs. Clare and Hunt, Hull; Miss Clark, Burton-on-Trent; Messrs. Hartell and Co., Willenhall; Mr. Stenhouse, Glasgow; Mr. Lonsley, Hampstead Norreys; Mr. Rideal, London; Dr. Eberle, Thirsk; Mr. Achison, New Ross; Mr. Jones, Ruthin; Mr. Morris, Beddington; Mr. Mountain, London; Mr. Oldham, Liverpool; Mr. Symonds, Oxford; Dr. Taaffe, Brighton; Mr. Ozzard, Southsea; Mr. Heath, Dollar; Dr. Hollings, Wakefield; Mr. Room, Guildford; Mr. Hicks, Hendon; Mr. Smith, Sittingbourne; Mr. Cooper, Newark-on-Trent; Messrs. Keith and Co., Edinburgh; Dr. Reynolds, Colchester; Mr. Parrott, Bournemouth; Miss Harris, Leeds; Mr. Edwards, Chelsea; Mrs. Bingham, Grimsby; Mrs. Bliss, London; Mr. Evans, Oswestry; Dr. Kirwan, Carraroe; Mr. Heywood, Manchester; Dr. Greatrex; Miss Griffiths, Southport; Mr. Flower, Melksham; Dr. Oliver, Dublin; Mr. Pierce, Liverpool; Miss Thonger, Torquay; Mr. Laing, Burton; M.B. Medicus; M. O. H.; B. C., Teddington; G. H. S., Bushey; Omicron; Dr. L., Manchester; Cocaine; F. H.; Surgeon; G., Darwent; Alpha, Wood Green; A. B., Brighton; Medicus, Leeds; Medicus, Tiverton; X., Glasgow; A. X.; Medicus, Barnsley; R. F. G., Whitby; Dr. L. B., Barnet; Locum, Bermondsey; Assistant, Newport; Medicus, Stoke Newington; A. L. S., Isleworth; P., Newport; L. T.; Physician, Edinburgh; A. B. C., St. Helens; C. B.; E. L; A. M. D.; H. H.; L., Wigan; Medicus, Wolverhampton; M.D., Luton; Matron, Hereford Infirmary; X. Y.; W. H. Y.; Matron, Gravesend; M.B., Notting Hill; Probationer; Spring, Rushden; A., Stamford; F. G.; B. B., Sandown; X. Y. Z., Manchester; C. D.; G., Inkley; P., Birmingham; Medical Officer, Lincoln; A. L. S., Isleworth; Shields, Exeter; Locum, Birmingham; J. A. D., Bridgnorth; G., Whitby; D. B., London.

Liverpool Courier, Dundee Courier, Kentish Independent, New York Mail, Somerset and Wilts Journal, New York Daily Graphic, Gainsborough Mercury, Aberdeen Journal, East Anglian Daily Times, Dundee Advertiser, Essex Telegraph, &c., have been received.

Medical Diary for the ensuing Week.

Monday, September 20

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.

ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesdays, same hour.

CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2 P.M.

HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.

Tuesday, September 21.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.

CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

Wednesday, September 22.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesdays and Thursdays, 1.30 P.M.

ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department, Tuesdays and Fridays, 9.30 A.M.

ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.

LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.

GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.

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Lectures
ON
DISEASES OF THE LACRYMAL APPARATUS.

Delivered at the Royal College of Surgeons.

BY HENRY POWER, F.R.C.S.

LECTURE II.—PART I.

GENTLEMEN,—Having already in former lectures given a full description of the canaliculi and lacrymo-nasal duct, and an account of the various explanations that have been given of their action in conducting away the tears, it is unnecessary that I should enter into any details in regard to their anatomy and physiology, and I proceed at once to to the consideration of the causes that lead to Epiphora, Mucocele, and Dacryoblennorrhœa, apart from disease of the Bones, which I propose to consider in the next lecture.

Epiphora signifies an overflow of tears; and a distinction was formerly drawn between epiphora, which was held to be an overflow of tears from excessive secretion of the lacrymal gland, and stillicidium lacrymarum, which was considered to result from some obstruction to the flow of tears through the natural passages into the nose. The distinction has, however, in course of time been lost, and the signification confounded; and in most reports of cases the term "epiphora" is now applied to an overflow of tears from any cause whatever. The symptoms presented in an ordinary case are well known. The eye or eyes, for it is sometimes double, gradually fill with water, which collects and trembles at the inner canthus or lacus lacrymalis, and at length falls over the cheek or is wiped away with a characteristic action of pressure by the patient. No pain is felt, but the greater angle of the eye, including the caruncle and border of the lids and the conjunctiva, is more vascular than normal, and is tender to the touch. Close examination will sometimes show a little clear mucus or puriform mucus exuding from the orifices of the puncta, and the quantity of this may be increased by pressure on the sac. In this state it may remain for years without leading to further mischief, being regarded only as a troublesome and unpleasant affection, interfering to some extent with vision, since the tear before it overflows extends along the edge of the lower lid and produces deformed images by unequal refraction. Even in this mild form recovery is a rare event. It has a tendency to perpetuate itself. The overflow of tears inflames the lids and produces the same kind of eczematous eruption that is seen after the protracted application of water dressing; and this, again, thickens the lids and everts or inverts the puncta, whilst it tends to occlude their lumen. In more serious cases, and in cases that have lasted long, the lacrymal sac becomes distended with fluid, which sometimes can and sometimes cannot be made to empty itself by pressure, the former condition constituting blennorrhœa of the sac, the latter mucocele.

The causes of epiphora are very various, and it is of importance to recognise them: because, in the first place, an accurate knowledge of the cause may often enable us, by effecting its removal, to cure the patient; and, secondly, because, if neglected, it may easily pass into inflammation of the sac and duct, and so produce a lacrymal abscess and fistula. The causes of epiphora may be divided into three groups—those which promote increased secretion of the lacrymal gland, those which prevent the entrance of the tears into the ducts, and those which prevent their passage through the ducts, the obstruction in the latter case being either at the puncta in the course of the canaliculi, lacrymal sac, or nasal duct; each of these requires consideration.

There are certain conditions in which epiphora may almost be regarded as normal. It must have been observed, for example, by everyone on sudden exposure to cold air, since the stimulus to the branches of the fifth pair distributed to the conjunctiva causes so large an increase in the secretion by reflex action that the minute conduits are unable to take it up and convey it away, even with all the assistance that can be given of partially closing the lids to diminish the surface exposed, and of frequently winking to aid the descent of the tears into the duct. Again, when the eyes are suddenly exposed to bright light after being long kept in darkness, a similarly increased secretion is observed by reflex action through the optic nerve. And still again, the changes in the lids that are concomitant with the advance of age lead, it may almost be said naturally, to epiphora. The flabby skin of the lower lid, with its feeble circulation, easily becomes œdematous, and by its mere weight falls away from the eyeball; the puncta are no longer immersed in the layer of fluid passing over the conjunctiva, and a tear collects at the inner angle, which, together with the contracted pupil, give the aspect of dreaminess and dulness to the face characteristic of age. The eyes no longer (as Milton expresses it) "sparkling blaze." Nor did this change escape the notice of Shakspeare, when he makes the Chief Justice, in rating Falstaff, say, "Do you call yourself young that are writ down with all the characters of age? Have you not a dry hand, a moist eye?"—in addition to those other unmistakable signs of an increasing belly and a decreasing leg. An abundant overflow of tears is always produced in health by the entrance of any foreign body between the lids and its contact with their edges or with the conjunctiva. Such a discharge is, in fact, the natural mode by which such bodies are washed away. Lastly, amongst the natural conditions which lead to epiphora we may mention mental emotions, of which pain and grief occupy the foremost place.

A cause of epiphora that was long overlooked, but is now universally recognised, is error of refraction in the eye. The most common defects which in this way lead to epiphora are undoubtedly hypermetropia and astigmatism, and the explanation is sufficiently clear. The hypermetropic eye is fitted for country or out-door pursuits. The Arab or the Peruvian has little need for the exercise of his accommodation. For him long or far sight is essential to enable him to follow his occupation as a hunter, and to recognise friend or foe on the distant horizon; but when such eyes are compelled by the exigencies of civilisation to work upon near objects, some exertion of the ciliary muscle is required. The necessary work is followed by exhaustion, and the conjunctival and ciliary vessels become surcharged with blood; their tone is impaired, and increased secretion takes place not only from the main gland, but from its accessory portion and from the glands of the lids, and epiphora results.

Another cause of epiphora that is very common in practice, and constitutes the link between those which merely produce increased secretion of tears and those which prevent the escape of the tears by the canaliculi, is infarction of the Meibomian glands. This condition is very common in gouty subjects. In these the eyelids are seen to be rosy and full of blood, and on examining the mucous membrane the colour is found to be much deeper than natural, whilst here and there particular follicles of the Meibomian glands may be observed to be full and prominent; sometimes they are covered with the epithelium, but occasionally they may be found jutting out like grains of sand, and then produce intense discomfort and epiphora. In such cases they may be picked out with a needle, and resemble little fragments of coral. When there are one or two of these, many other enlarged gland follicles may be seen, the contents of which gradually and only very slowly work their way out. Not only do the asperities of these bodies induce increased secretion of tears, probably of altered quality, but by thickening and inflammation of the lid the puncta and canalicula become occluded, and the drainage of the tears is seriously interfered with.

Eversion of the eyelids is a common cause of epiphora, and acts by causing the puncta to separate from the globe, so that the puncta are no longer immersed in the fluid collected in the lacus lacrymalis. The numerous causes therefore which lead to ectropion lead also to epiphora—such, for example, as ciliary blepharitis, the cicatrisation consequent upon wounds and burns; tumours of the eye or orbit; hypertrophy of the connective tissue near the canaliculi, which has been noticed by Desmarres; swelling of the caruncles; papilloma, epithelioma, and syphilitic and rodent ulcers about the inner canthus.

Inversion of the lids is not less influential than ectropion, though it acts in a precisely opposite manner, the deviation in position of the border of the lids causing the puncta to be so closely applied to the globe that the tears, the secretion

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of which is greatly increased by the irritation occasioned by the cilia, can no longer make their way into the ducts. This condition may be sometimes artificially induced by the application of bandages for many consecutive days in cases where there is slight separation of the lips of the wound after cataract operations. The whole lid in such cases becomes swollen, the compressive bandage keeps the margins turned in, and the cilia rub against and irritate the already congested and inflamed conjunctiva. MM. Galezowski and Naudier have described a peculiar kind of conjunctivitis, termed by them "lacrymal conjunctivitis," which they recognise as the consequence of the prolonged retention of the tears in the sac, and which calls to mind the opinion held by Boerhaave and many of the older writers of an increased acrimony of the humours. There can be no doubt that such conjunctival inflammation has a tendency to perpetuate itself and induce epiphora, since it is accompanied by the secretion of much mucus, which may be seen sticking about the orifices of the puncta, towards which it gravitates, and must seriously interfere with the passage of fluid into the ducts through the puncta. The same conditions may lead to partial ectropion, as well as to entropion.

Many cases of epiphora arise from injury near the inner canthus, involving the puncta, canaliculi, or sac. When such injuries have occurred, the greatest possible care should be taken in readjusting the edges of the lids with accuracy, so that the canaliculi should remain pervious. I remember seeing a child who had received an injury with the ferrule of an umbrella, which had been thrust at him in play. The surgeon who had been called in had applied a suture bringing the parts together with accuracy enough for all ordinary purposes; but lacrymation followed the accident, and on examination I found that the laceration had divided the canaliculus just on the inner side of the punctum. I reopened the partially closed wound, passed a fine probe through the punctum and distal part of the canaliculus, and with a little trouble found and passed the probe into the proximal segment. The edges of the lids were then accurately adapted, and perfect recovery resulted.

Epiphora occasionally results from congenital absence or atresia of the puncta. Swan Burnett[1] gives an instance, and states that only three cases are on record in the periodicals devoted to ophthalmology.[2] Mooren (Fünf Lustra) only noted one case in 108,416 patients. Zehender has described two cases, and Hugo Magnus two more. In Burnett's case all the puncta were impermeable. Except that of the right upper lid, which possessed a small channel, there was no watering of this eye, a sufficient proof that the upper puncta and canaliculi discharge an active function. In Zehender's case the left upper punctum was alone pervious. In Magnus's cases both lower puncta were absent, and there were no papillæ. In treating his case, Swan Burnett thought it better to search for the canaliculus than to attempt to open the punctum. He therefore made a vertical incision with scissors through the margin of the lid about two millimetres to the inner side of the papilla. He then searched, by means of a No. 2 Bowman's probe, for the canaliculus, and had no difficulty in finding it. The canaliculus was then slit up, and the epiphora promptly disappeared. Obliteration of the puncta has been occasionally observed as a consequence of the cicatrisation of a small-pox pustule. Thus Pellier de Quengsy relates a case in which he was called to see a girl at Perpignan who had suffered for some time from severe epiphora consequent on small-pox, which had been neglected on the supposition and anticipation that it would recover naturally as soon as the catamenia appeared.

Epiphora is sometimes caused by the entrance of a cilium into the punctum. I have had two cases under my care quite recently. In each the hair was one of the small colourless cilia, and it had entered root foremost, so that only the fine transparent apex protruded. Care should be taken, in removing it, that it is not broken, and it may be stated that the resistance it offers to extraction is more considerable than might be expected, perhaps owing to the ridges on the surface of the hair, and perhaps in part to contraction of the muscular tissue around the canaliculus. The displacement of one or more hairs is a frequent cause of lacrymation. I recently saw a woman aged forty who had experienced lacrymation for a twelvemonth, and in whom a mucocele had developed in the course of three weeks on the right side. On examination two hairs were found to have become inverted at the inner canthus, which irritated the conjunctiva, and caused a circumscribed redness of it. The lacrymal gland was enlarged, and presented a conspicuous swelling beneath the mucous membrane when the upper eyelid was raised. The enlargement appeared to me to be the result of reflex irritation. This led to constant hypersecretion of tears, which led again to constant distension and consequent atony of the walls of the lacrymal sac. Great improvement resulted from removal of the hairs. Monoyer[3] gives a case in which a woman, aged twenty-five, whilst throwing an ear of barley into the air, felt something sharp enter the eye. She herself removed a portion of the awn, but continued to feel discomfort. M. Monoyer, on attentive examination, saw a small point projecting from the superior punctum. On seizing it with a pair of cilium forceps, he withdrew a fragment of the awn, 6 mm. long. Only one other case of this is on record—namely, one by Kneschke, who in 1836 observed a fragment of wheat in the inferior canaliculus. It has probably occurred frequently, but has not been deemed of sufficient importance to deserve record, and it is probable that the foreign body is pressed into the canaliculus by the finger of the patient in the endeavour to remove it by rubbing, and may occasionally be the foundation of other trouble.

[1] Knapp's Archiv, vol. xiii., 1884, p. 53.

[2] These are by Fox (Treatise on the Diseases of the Eye, London, 1808, p. 549, Pl. 7, f. 7), Walther (Lehrb. v. der Augenkrankheiten, 1849, [illegible]) and Desmarres (Traité théorique et Pratique des Maladies des Yeux, Paris, 1854, t. i., pp. 280, 281.

[3] Annales d'Oculistiques, t. lxvi., 1871, p. 279.

ABSTRACT OF THE

Inaugural Address

DELIVERED BEFORE THE

SANITARY CONGRESS,

Held at York, September 21st to 25th,

BY SIR T. SPENCER WELLS, BART., F.R.C.S.,
PRESIDENT OF THE CONGRESS.

I HESITATED for several days before complying with the flattering proposal of the Council of the Sanitary Institute to fill the honourable position of President of this year's Congress, and to address you this evening. Although a worker in collateral science and art, I could not presume to appear before a meeting of sanitary experts as an instructor, and I must beg you, while listening to me, to consider that we are all engaged in making a joint effort to draw general attention to questions of vital importance to the public health, to diffuse information, to get the people to take an intelligent interest in sanitary matters, and to bring the governing powers into a disposition to give more effectual help in carrying out such reforms as are proved to be necessary by scientific investigators. With the feeling that this is our mutual relation I may proceed; and if I trouble you with the reiteration of some truisms and the citation of facts already well known to many of you, I trust you will be patient with me, in the hope that some of the seed which may be sown broadcast to-night may fall upon fruitful soil, and, if good, may so multiply that it may be sown again and again by others, and in good time influence the multitude.

Any great sanitary improvement of the community must be the result of elaborate co-operation. We must have the combined action of the three great classes of investigators, legislators, and administrators before we can effect any good result. And if we regard sanitary reform in these three aspects, we find that a great deal of the work of investigation has been done, and that the work of legislation is lamentably deficient; while the work of administration cannot advance beyond the limits of legislation. As regards the work of investigation, we may safely assert that it has hitherto been for the most part personal, and that the waste of labour has been enormous. It is only of late that this Institute has come in aid. Three-fourths of the fifty years that Southwood Smith, Chadwick, Farr, and Trevelyan were at work, they were well-nigh single-handed. Perhaps the

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foundation of such a body as the Sanitary Institute may be enough for them to be proud of; but more must follow, and it is to be hoped that before long we shall have, for the sake of life and health, an organisation as powerful as that which protects our property and our liberties. The Institute must develop into something grander and more powerful. The Colleges of Physicians and Surgeons have done and are doing much useful work; but the work is done more for the individual than the collective good. Without interfering with them—rather aiding them,—why should we not have a "College of Health"—a college which would show our appreciation of the gift of life and our reverence for the Giver?

When we speak of the prolongation of life, we think chiefly of the advantage to individuals, their better health, and their augmented power of enjoyment. This is a great deal. But it means more for the State. It may sound well to declaim against the money view of the subject as low and sordid; but it is not to be overlooked when we are apportioning merit for work done. A donation to the community of two or three millions would be looked upon as an extravagance. But what is the fact? During the forty-nine years that registration has been in force, and sanitary reforms have advanced with its annually increased information, about eight millions of people have been added to the population of the United Kingdom. We may fairly credit our reforms with a large proportion of this increase in numbers, and consequently of their money value. The result on human happiness is not a matter of calculation, but a future industrial census will show in a very definite shape the effect of sanitation in raising the economic value of the population. We cannot be far wrong if we put the average duration of human life in Great Britain half a century ago at about thirty years; now, according to the healthy life table, it is forty-nine years. The population in less than fifty years increased, as I have said, by some eight millions. Each individual of these millions was worth to the State, as is calculated, about £150. Say that only two millions out of the eight millions of increased numbers were the fruit of sanitary and medical work, their economical value was at least £300,000,000, and that a clear gain. To this we must add that the productive powers of the population depend on labour, and that labour depends upon health. Let sickness come, men are disabled, their labour ceases, and the produce of labour is lost. Formerly it was calculated that a twenty-third part of the population was constantly sick, and the products of all that labour for the time necessarily withdrawn. A great deal of this sickness has been altogether prevented, and the duration of that which comes in spite of sanitation is lessened. Happily did Richardson give form and expression to the proberb, "National health is national wealth!" and well may Froude follow with his paraphrase, "The *Commonwealth* is the *common health*, the common wellness," and add, "No nation can prosper long which attaches to its *wealth* any other meaning."

Since the formation of the Sanitary Institute, although the progress of sanitary science has not been as rapid as we desire, yet its advances have been more readily measured. The annual meetings, the presidential and sectional addresses, and the papers read in the sections, have brought important movements under notice; and as the Congress migrates yearly to new places, its information becomes more varied and trustworthy. We gather assurance of the generally improved moral and physical condition of the people. We find that infant mortality is lower; that education becomes more satisfactory as the principles upon which it should be conducted are better understood; that those who work are better paid, get wholesomer food, and dwelling-places more fit for human habitation. With all this encouragement we may look hopefully to the future and consider what are the most pressing subjects of inquiry, and which is the way of conducting our investigations that gives the greatest promise of success. The field is vast, but, as we have seen, it is not impenetrable; and obstacles are sure to yield to steady and well-directed attack. "What we want is a central power," as Lord Brabazon wrote last month in *The Times* (Aug. 30th), "which shall regulate and control local action, so that no town or locality shall be able to neglect the public health, or, in endeavouring to purify itself, shall poison its neighbour. We want a power which shall take a bird's-eye view of the whole question, and work not for the good of one locality only, but for the good of all." This is what we want, and what we must have some day. But, while we are waiting, an interim organisation of deliberative and administrative agency should be set up, as if a Ministry of Health were in power. The Local Government Board, too, with all its official completeness, like ourselves, may recomend, but cannot command. There seems to be a link missing between the knowledge of what is right and the power to apply it. This link is a Minister of Health. This Institute, united with the Parkes Museum, is bound, in my opinion, to induce all the others to make not only common cause, but joint action; or failing in this effort, it may, by increased activity, in a short time cover the ground which they now occupy. This would at once make plain the folly and waste of division. The process of amalgamation has already begun by the union of the Parkes Museum with our Institute. The National Health Society, the Ladies Sanitary Association, the Cremation Society, the Smoke Abatement Institution, and others of a like kind must follow; while such societies as that of the "Medical Men qualified in Sanitary Science" and the "Society of Medical Officers of Health" would find themselves more fitly placed and more usefully employed as sections of one united body than they now are. The active working of such a large group of philanthropic societies shows how constantly the interest in all sorts of sanitary measures has been increasing during the last twenty years, and how much it has been in the power of such feebly-supported societies to do. Our great effort at present ought to be the concentration of working power and its economical direction. With this object attained, it will not be difficult to explain the motives for special contributions, and to collect them from a public which seldom turns a deaf ear when appealed to rationally. There are many investigations which require much time, which cannot be conducted by individuals, and which are costly. The Institute, with adequate funds, could form its commissions, send outits health challengers, have its own laboratories, museums, deliberative councils, exponents, and consultants—and all this not interfering with, but rather in aid of, recognised privileges or established authorities.

In studying the various subjects to which the Institute has given attention, and the investigation of which it is still prosecuting, they may be conveniently arranged into five groups: 1, those which relate to the training and health of the population; 2, to their social comfort and well-being; 3, to the prevention of disease; 4, to the care of the sick; and, lastly, those relating to the disposal of human refuse and remains. Impossible as it is even to recall all these subjects to your minds, there are a few points upon which I cannot refrain from a word or two of comment.

1. So far as concerns the mental and physical training of children, and giving women the option of other occupations than those of domestic life, I see no great cause for alarm. It is an age in which education—at any rate for the middle classes—must be pushed far beyond the limits which our fathers thought wide enough for us. Mere rule-of-thumb work is almost out of date, and there are so many industries in which scientific knowledge and exactness are requisite, that the want of early education cuts off a young man's chances of advancement. To engage in most of the recent applications of steam power, electricity, magnetism, and chemistry—to be available in carrying out the complexities of engineering science—a workman must be something more than a mere machine. He must have head as well as hands—brain as well as muscle; and as uneducated brains are not worth more in the labour market than untrained muscle, we must be content to make some sacrifice in the culture. While we pity the few who fall in the struggle, we must remember that there is no chance for those who stand still. As for the outcry about the dangers from women taking up men's work, it is breath wasted. A great many failures will outweigh a few successes and bring the balance right. For my own part, I think women capable of a great deal more than they have been accustomed to do in times past. "To suckle fools and chronicle small beer" surely cannot be the chief end of woman. If overwork sometimes leads to disease, it is more morally wholesome to work into it than to lounge into it. And if some medical practitioners have occasionally observed cases where mental overstrain has led to disease of mind or body, I cannot deny that I also have at long intervals seen some such cases. But for every such example I feel quite sure that I have seen at least twenty where evils equally to be deplored are caused in young women by want of mental occupation, by deficient exercise, too luxurious living, and too much amusement or excitement. Again, we have heard much of late about over-pressure

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from work in schools. This is one of the novelties of our time. No doubt it exists, and I think it may in part be traced to some of our sanitary success. We have reduced the mortality of early infancy. Many children who would formerly have died offhand are now saved, and find their way into the schools. They are the survivals of the least fitted. They live, but they are not strong—not so strong as the average. They have to submit to the same routine, and to be forced up, if possible, to the same standard as the rest. But the effort is too much for them. Their frames are not hardy enough to resist the mental strain. They show all sorts of nerve symptoms, disappoint the teachers, and are the types brought forward as victims of the system. The vice of the system is that it is indiscriminate. There is no revision of the recruits, and the tasks are not apportioned to the feeble powers of sanitary survivors. This is an evil which will remedy itself in time by the growing up of a larger proportion of strong children, and the present difficulty may be got over by a little patience and moderation—a little more regard to sanitary logic. The children must have training before education, and must be put upon something even less than a half-time system.

2. Of the many things which affect our comfort and well-being, some are national, some local, some residential. One of the most potent means of influencing the sanitary condition of a country is the judicious regulation of its forests. In Great Britain the Government all but ignores the subject of Forestry. There is no school for teaching the science. Every proprietor is obliged to shift for himself, or to seek foreign help. And yet by looking at the state of things in Upper India, Palestine, and Russia, we may see what mismanagement leads to. Almost everywhere, man's ignorance and recklessness has worked evil by destruction of the forests. He has deteriorated the condition of the climate, taken away the productiveness of the soil, brought on famine and pestilence.

3. In preventive medicine the great event of the year has been the publication of Pasteur's views on hydrophobia, and his treatment of it by inoculation. I must not anticipate the reports of commissions still sitting; but, in connexion with what I have previously said, it is worth bearing in mind that, astonishing as Pasteur's own personal work has been, he has all the way through been adequately seconded. He has found means and material forthcoming, suitable accommodation has been provided for his investigations, he has been buoyed up by judicious encouragement, and he has never been obstructed by legislative impediments. He has been a benefactor to his country and to the world in many ways, and his services have met with a just recognition. But we must not be too sanguine, form unreasonable expectations, and jump to irrational conclusions. As he himself wisely says, in speaking of his attempts to neutralise the poison of hydrophobia, we must wait and see the results of what has been done before we can test the value of the practice. I accept the principle upon which he acts, and believe that those who are following his lead may outrival him in the good they confer upon mankind.

4. Yet even if we were to realise the most enthusiastic visions of one of my most imaginative predecessors, and could cycle through the greater part of our century of life soundly and pleasantly, accidents must overtake some of us, and decay and infirmity must come sooner or later. This is a theme which gives play enough for intelligent thought. The rich, when sick, can afford the luxury of skilled attendance, and can hold out inducements enough for men of capacity to devote themselves to the study of medicine and surgery. But what are the poor to do? They can never alone, or without some aid or combination, afford adequate remuneration. Medical relief, as in legal phraseology it is called, is the first step to pauperism. Self-help in this matter is one of the first steps to independence. Provident dispensaries, giving members the right to attendance from medical men of their own choice at their own homes, the opening up of easy access by small money payments to the coveted advice of hospital staffs, and the foundation of clubs and cottage hospitals on sound principles, are among the best means of meeting the requirements of the sick poor. Our great establishments will always be needed for accidents and severe diseases, which there is no possibility of treating successfully in cramped and ill-supplied homes. But hospitals do not necessarily pauperise. The very poor can well accept the care in them as a gracious gift, while those who have something to spare always can, and sometimes do, make a thank-offering. On behalf of those who have had disease, who have been rescued from its immediate dangers and are in a state of convalescence, with appetite, strength, and spirits coming back slowly, and creating a craving for fresh air and a longing for the few idle days so necessary to perfect recovery, I wish to impress upon all who hear me the importance of convalescent homes. They are springing up in numbers, but more are wanted to complete the work of our City hospitals. Many patients come to them from the country and return well to the country. But what is a poor town cripple now to do when he is relieved, and hospital atmosphere bars his recovery of health? And now that the urban population is yearly augmenting in such a rapid manner, this necessity for providing for country convalescence is more and more urgent. The philanthropic sanitarian has something more to do than to fit up wards for the sick man to lie down in; he must see that in due time he may get the strength to 'take up his bed and walk.' If we cannot do miracles, we may complete our charity.

5. Even the best-regulated communities are encumbered with things which they must get rid of—human refuse, human remains. The one can be dealt with as best suits public convenience, but the other must be treated with reverence as well as security. As regards the question of the disposal of the dead, I may refer you to a lecture of mine, which has been placed in your hands, with remarks upon it by Sir Lyon Playfair, Dr. Cameron, Sir Joseph Fayrer, and Mr. Seymour Haden, with two of the last letters written by the best of the Shaftesburys. Public opinion has been veering round since the publication of the Charge of Sir James Stephen. A custom known to be not illegal will be adopted by many who have hitherto been deterred by the fear of illegality; and the Society which alone in England gives facility for it is ready to perfect its accommodation or to give place to any administrative body upon a wider basis.

When we come to speak of the question of Legislation, we, as sanitarians, find ourselves in the same plight as the rest of the world loaded with good intentions. The waste of time and energy in Parliament in party struggles has banished all possible home legislation. We must bide our time, assured that, when this crisis of angry discussion of political complications has passed, the turn will come for practical measures. We shall then settle down to a calm consideration of what is really wanted, shall have our chance of being heard, and probably get a good deal of what we ask for. Our demands will appear so reasonable, our work so useful, and our plans so feasible, that no committee will have the heart to suppress them, no Parliament the churlishness to refuse them. Only let us be prepared for the occasion, have our subjects chosen, our evidence forthcoming, our arguments marshalled, and our advocates ready. We shall have ourselves to blame if we do not make sanitary legislation the popular legislation of some sessions near at hand.

I have taken up a great deal of your time, and I must not presume much longer on your kind indulgence. But there is one matter which I must speak of before concluding, and that is the importance of our having the unsectarian assistance of all religious teachers. Sitting as we do here under the shadow of the hallowed Minster which is the crowning and significant glory of the ancient city of York, one cannot but recall to mind how for successive ages its ministers have been the benefactors of all who came within the sphere of their action. In times of ignorance, they spread light around them. In times of distress, they gave succour to the needy and shelter to the homeless. In times of sickness and pestilence, they were ever ready, at their own risk and peril, to visit either castle or cottage, with consolation for the troubled mind and remedies for the tortured body. And now, in these later days they, and others allied with them in the same holy work, come among us laymen, trained up by them in the spirit of Christian charity, to second our attempts to work the good of the people, to instruct themselves in the principles of our science, and to add the benefit of their wisdom and experience to our efforts, with as much zeal and devotion as were ever displayed by any of the bygone generations of their revered predecessors.

With such objects in view, actuated by the same spirit of good-will to mankind, and impelled forward by an equal energy, we may promise ourselves the attainment in due time of our desired end—that of contributing to the real and stable greatness of our country, by giving to it a healthy and long-lived population; for we may rest assured that, in the

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words of Froude, "A sound nation is a nation that is composed of sound human beings, healthy in body, strong of limb, true in word and deed—brave, sober, temperate, chaste—to whom morals are of more importance than wealth or knowledge—where duty is first, and the rights of man are second—where, in short, men grow up and live and work, having in them what our ancestors called 'the fear of God!'"

THE ETIOLOGY OF TYPHUS FEVER,

ILLUSTRATED BY A SERIES OF RECENT OUTBREAKS IN DUNDEE AND NEIGHBOURHOOD.[1]

By ROBERT SINCLAIR, M.D.,
PHYSICIAN TO THE DUNDEE ROYAL INFIRMARY.

ON February 20th, 1884, the last two cases of the typhus outbreak of 1883-84 were removed to the Dundee Royal Infirmary, and for the next seven months Dundee was free from typhus fever.

Outbreak No. 1.—About the middle of September, 1884, a Glasgow tramp arrived in a very poor and densely populated district known as the Bog of Lochee, about two miles[2] from the centre of Dundee. The houses in the bog are one-storeyed; the population is about 200. This man was laid up for about a fortnight with a feverish attack. He was seen only once by Dr. Watt, who found him feverish, with a dusky aspect, but no rash. The case was not reported, but Dr. Watt now thinks the man had typhus. There were three other adult occupants of the house of one room and a closet, and they remained well; but on October 2nd a boy who lived two doors off in the same row was seen by Dr. Watt, who found him complaining of sickness, vomiting, and general pains. On the following day, the sixth of the illness, a typhus rash was seen. Two days later he was found to have pneumonia, and on the eleventh day he died. His brother soon after had pneumonia, but not typhus. A woman in the same row of houses had typhus within a fortnight after the boy who died. Dr. Watt heard of three other cases of febrile illness in the same district and about the same time, but they did not seem to be sufficiently severe to require medical attendance.

Outbreak No. 2.—Mrs. M——, aged thirty-two, resided with her husband and three children in a single room in Miller's Pend, one of the most densely populated parts of the West Central District, and about a mile and a half from the scene of the preceding outbreak. She sickened of a febrile disease about the middle of December, 1884, two months after the last authenticated case of the Lochee outbreak. She did not fully recover for over five weeks. The disease was not recognised as typhus, and she remained at home. Her husband took ill on Jan. 10th, 1885, was sent to the infirmary under my care on the 22nd, and went through an attack of typhus. About the same time his youngest child, ten months old, sickened of a fever and remained at home. A week after the admission of the head of this household to the infirmary the family removed to 11, Milne's East Wynd, a little further west in the same district. About the middle of February the two remaining children, and one who, though he lived with his grandmother in Littlejohn-street (Central), frequently visited his father's house, sickened, and on the 25th of the same month they were all admitted with typhus. On the same day a girl who lived in the same close was admitted with typhus. Two days previously two girls who lived in the same district a few hundred yards off, but who were in the habit of spending their evenings in the infected tenement, and doubtless caught the infection there, were admitted. On April 7th a man and a girl, and on May 21st a boy, who lived in the same close, were sent to the infirmary with well-marked attacks of typhus. T. B——, aged thirty-one, 7, Parker-street (Central), half a mile distant from this centre, sickened on April 10th, and was admitted with typhus on the 17th. There was no fever in the neighbourhood of his house, but he had been collecting rents at 11, Milne's East Wynd, where he doubtless caught the infection.

Outbreak No. 3.—The disease next appeared in Peebles-lane, Lochee, about 250 yards from the Bog, but fully three months after the last case occurred there. Mrs. F——, aged fifty-five, was seen in Peebles-lane, Lochee, by Dr. Alexander, who wrote to me: "The woman was neither fed nor clad, and all her surroundings were quite calculated to invite an attack of typhus. How she contracted the disease I am not so clear, but I am quite certain she had *typhus gravior*, and that it and nothing else disestablished her." No connexion could be traced between her illness and the cases in the Bog or in Dundee. She lived a very solitary life, in very bad sanitary conditions.

Outbreak No. 4.—On Jan. 28th, P. M'L——, aged twelve, one of five occupants of a single room in Well-road, Butterburn, on the extreme northern boundary of Dundee, and at least a mile distant from the previous outbreaks, was reported. She was removed to the infirmary next day, and went through a typical attack of typhus. She had not been visiting any house in which there had been illness. After her removal to the infirmary a female friend went to occupy her place in her mother's room. She sickened on Feb. 19th, was removed on the 25th, and had an equally typical attack.

Outbreak No. 5.—On Feb. 7th, Mrs. D——, aged thirty-four, was reported to have typhus, and next day she was removed from her house at 44, Lilybank-road (East), fully a mile distant from the previous cases. It was subsequently ascertained that in a neighbour's house in the same close, which she had frequently visited, the father and a child had been ill of supposed influenza. The mother of the head of this house also visited them frequently. She took typhus and died. On Feb. 10th Mrs. S——, the neighbour at whose house Mrs. D—— visited, and from which she caught the infection, was admitted with a well marked attack of typhus. The S—— family of three occupied an attic room, and no one of them had been visiting any house in which there was illness of any kind whatever. Indeed, these were the first febrile illnesses in the vicinity for a long time.

Outbreak No. 6.—Mary McD——, aged sixteen, 2, Lyon's-close (West Central), a mile distant from Lilybank-road, one of six occupants of two rooms, took ill on Feb. 23rd, was removed on the 27th, and went through a well-marked attack of typhus. After a very exhaustive inquiry, I failed to find the slightest connexion between this and any case of typhus or illness of any kind.

Outbreak No. 7.—Mrs. F——, aged forty-two, resided with her husband and seven children in a small low-roofed room, with a closet opening off it, in Ramsay's Pend (West Central), a few hundred yards from Lyon's-close. In March, 1885, she was in bed for three weeks. The case was not reported, but it was very probably typhus, overlooked. She had not been in contact with any fever patient so far as she knew; and, indeed, she was not likely to be, for she rarely left her own house. Subsequently sixteen persons belonging to five families residing in the same close were attacked. All of them were infected directly or indirectly by her. Although all the houses were not equally overcrowded, there can be no doubt that the smaller offenders suffered by their juxtaposition to the more serious transgressors of the laws of health. The cases were all removed between April 6th and 18th, and no fresh outbreak has occurred, although the district is one of the worst in Dundee in respect of personal cleanliness, house sanitation, and overcrowding. Nurse H——, Fever Wards, Dundee Royal Infirmary, sickened on May 16th of typhus contracted while nursing this batch of patients.

Outbreak No. 8.—R. L——, aged nineteen, resided with a married brother and his wife in an attic house of two apartments, at 3, Mitchell-street, half a mile distant from Ramsay's Pend (North-west). He sickened on March 24th, and, while feeling very ill, he removed to 6, Littlejohn-street (Central) on the 27th. On the 31st he was sent to the infirmary, and went through a well-marked attack of typhus. There was no fever of any kind in Mitchell-street, and this patient had not been, to the best of his knowledge, in contact with any fever patient; but he had certainly been insufficiently fed for some time before his illness began. C. P——, aged thirty-six, the only occupant of a single commodious room immediately above the house in which the preceding patient lived for four days, at 6, Littlejohn-street, sickened on April 14th, and was admitted on the 20th. This woman had had ample food, had been subjected to no depressing conditions, and had not to her knowledge been exposed to infection. She assured me that she had not been in any house but her own for months previously; but exactly fourteen days before her illness began the preceding patient had been removed to the infirmary. He lived in a

[1] Read before the Forfarshire Medical Association.

[2] This distance, and the distances which follow, were supplied to me by an official in the Burgh Surveyor's office.

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house on the ground floor of a tenement entering directly from the close. C. P——, therefore, and every person who entered or left any house in the tenement, were obliged to pass this door; and it is very likely that this woman got infected there. No other cases were traced to this source; but in the middle of July—i.e., four months later—a man who lived in the same close as R. L——, in Mitchell-street, but on the first floor, sickened of enteric fever, was admitted on Aug. 3rd, and went through a four weeks' attack. L——'s was the first and last case of typhus, and this man M——'s was the first one of enteric fever in this neighbourhood during the year 1885. But it was speedily followed by four other cases in Polepark-road, which immediately adjoins Mitchell-street. I make no attempt to revive the obsolete doctrine of the identity of typhus and enteric fever; but I would venture to bring under notice the interesting fact of the outbreak of these two specific fevers in the same close without any ascertainable connexion with previous cases, but in the midst of conditions which cannot be described as anything like sanitarily perfect.

Outbreak No. 9.—John S——, aged eleven, resided at the New Mill of Gray, near Invergowrie, about three miles and a half from Dundee. A family of eleven persons live in an isolated, clean, dry, comfortable, and, as I can personally testify from an unexpected visit, well-ventilated house of six apartments. The boy slept with a brother in an ordinary sized, airy bedroom. The house is thirty feet distant from the steading, in which, by the way, I could see no objectionable feature. According to Dr. Stewart of Liff, who sent the boy in as a case of enteric fever, there had been no fever in the family or the neighbourhood for some time, except one case of enteric fever at Whitelawston, three quarters of a mile off. With this place, however, there had been no communication. The boy was admitted on June 20th, 1885, and was placed in one of the medical wards. On the third day after admission and the twelfth of the illness, I became satisfied that a rash, which had been present more or less since admission, was a typhus one, and he was removed to a previously cleaned and disinfected typhus ward, of which he became the sole occupant. The occurrence of this case in an isolated farmhouse; the long duration of the fever, twenty-six days, without complications; the early abdominal pain; the diarrhœa, set agoing by a dose of castor oil, and lasting four days; the tenderness in the right iliac fossa,—strongly suggested that Dr. Stewart's diagnosis was correct. But, on the other hand, the temperature during the seventeen days the fever lasted after admission was persistently of the typhus type, except, indeed, on the last day, when the morning temperature was normal and that of the evening 102·4°; the aspect, odour, and rash were as clearly typhus as they could be, and the convalescence was of the usual speedy uninterrupted character. But if there was any room to doubt the inference drawn from the clinical history, it was speedily removed by the illness of Nurse S——, one of the infirmary nurses, who attended the preceding patient during the three nights immediately succeeding his admission, while he remained in a medical ward; and eleven days later, while he was the sole occupant of a typhus ward, she looked after him for a few hours during the absence of the fever nurse. On the latter occasion she opened the door and looked to see that he was all right a few times, and once she went to his bed to put on his blankets, which he had thrown off during sleep. She had never seen a typhus patient in her life; there was no other case in the house at the time; and generation *de novo* is here quite out of the question, as all the nurses in the infirmary are well housed, well fed, and get ample time for out-door exercise, which they are obliged to take. She sickened on July 11th, exactly twenty-one days after her first exposure to the infection, and ten days after the second; the mottling was obvious on the fifth day; the rash was well out on the sixth; on the tenth day of her illness it was noted—"Rash copious for last three days over body, legs, arms, and hands; petechial on some parts." On the thirteenth day the evening temperature was 102·4°. Next day (the fourteenth) the morning temperature was 99·4°; in the evening 99 8°. On the fifteenth day it became normal, and remained so. In fact, it was a typical case of fourteen days' typhus.

The diagnosis of typhus in both these cases being unassailable, and the belief that the nurse was infected by the boy being equally so, how did he contract the disease? One thing is certain: it was not manufactured in his clean and comfortable home. Did he get it from an infected person or dwelling? When I mention that he sometimes delivered milk in Dundee for his father, it will no doubt be suggested that he may have got it in the course of his errands. But let us remember that the boy sickened on June 12th, and that all the known cases of typhus were in the infirmary fifty-three days earlier, with the single exception of J. S——, who was not removed from Milne's East Wynd until May 21st, twenty-two days earlier. But the boy's district for delivering milk was in Perth-road and Hawkhill; he never went beyond the middle of the streets going north from the latter—i.e., he was never within 570 yards of the only case of typhus known in Dundee fully three weeks before he sickened. There is another possible explanation, but it is one which may not be very readily accepted. The farmhouse is on the low ground, fully half a mile below the Dundee Royal Asylum, the sewage of which passes into a cesspool between the two houses. Of the construction of this cesspool I know nothing. But whether the whole or only part of the contents were meant to overflow, overflow it did, and carried large quantities of putrid sewage into a small stream that passes close by the farmhouse, and converted it into a foul ditch, whose thick, black, offensive contents sometimes stagnated, sometimes flowed lazily along. The boy had occasion to pass along the banks of this open sewer on his way to the asylum with milk every day, and he stated that on two or three occasions towards the end of May—i.e., between two and three weeks from the beginning of his illness—he drank from some of the less muddy parts of this uninviting stream. If there is anything in the doctrine that typhus can be generated from human filth, it might well be generated under these circumstances. Doubtless the cutaneous and pulmonary exhalations are the usual vehicles of the poison, and doubtless the human beings and their noxious excreta were not under one roof, as is usually found in typhus. Both, however, were in existence. The poisonous sewage of the hundreds of human beings in the asylum did no harm there, but it was carried outside and worked its mischief elsewhere. Two facts may be mentioned in support of my contention that the stream was poisonous, although they may not prove that it contained the specific virus of typhus fever. The fishes with which it abounded sickened and died about the same time; and the farmer's seventeen cows, which had remained perfectly well all winter and spring, were no sooner put to graze in a field adjoining the burn, from which they no doubt drank, than they all sickened, and only eleven recovered. Mr. Black, the veterinary surgeon who attended the animals, tells me they had rigors, dulness, loss of appetite, irregular rumination; pulse at first frequent and full, later on feeble and thready, in the fatal cases; temperature 102·5° to 105·3°; abdominal pain from beginning; constipation at first in all; diarrhœa in one case without, in the others only after, linseed oil; evacuations dirty, yellow, and offensive. Acutely ill from five to seven days.

(To be concluded.)

THE TREATMENT OF LUPUS BY LOCAL APPLICATIONS.

BY DR. P. G. UNNA, HAMBURG.

THE treatment of lupus by local applications is, theoretically and practically, perhaps the most important of all the more recent advances in the therapeutics of skin diseases. Even were we in a position to detect, by means of highly developed physical methods, the masses of lupus tissue in the healthy skin whilst they were still microscopically small, and then to destroy them without injuring the surrounding structures, the question would nevertheless constantly arise as to whether we could not obtain the same good results by the elective destructive action of some chemical agent on the new growth without so much wearisome and laborious surgical work. A further inducement to the study of this question would be the great desirability of a better knowledge of the chemical reactions which take place between the parasites and the various remedies which are used to cope with them—a problem which would presumably be better solved when the process takes place under our eyes, as in the case of the skin, than it could be by simply observing the results obtained by the treatment of internal organs. No one doubts, for example, that the

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curing of an old obstinate patch of eczema by means of a rightly-devised chemical agent is a better process than its destruction by the thermo-cautery. Just in the same way, the treatment of lupus by medical applications is more attractive and more instructive than is a purely mechanical treatment. And the latter, with the exception perhaps of the total excision of quite small patches, is never sufficient to ward off recurrences, however thoroughly and carefully it may have been carried out. Not only, therefore, are attempts to transform the treatment of lupus into one of medical applications justifiable, but we are compelled, both in the interests of our patients and for the widening of our knowledge, to pursue this study further.

Using a strong salicylic acid plastermull[1] in order to remove the cuticle and prepare the lupoid tissue for other more destructive agents, I observed that the salicylic acid preparations alone exercised a most beneficial influence on the new growth, and that if the quantity of the acid contained in the plastermull was sufficiently large, not only was the horny layer separated from the whole patch of skin, sound and unsound, but that the tubercles themselves were destroyed and removed, the only trace of them left being some punched-out looking holes. An elective action of that sort has been well known since the days of arsenic pastes, and has clearly been explained by Binz and Schulz (*Monatshefte für prakt. Dermatologie*, Bd. i., Heft 1). I had personally obtained like results by the use of plastermulls containing arsenic and mercury, sublimate and ichthyol, and occasionally simple mercury; but in no case was the action so quick, strong, finely shaded, easily and surely regulated; nor were the little pits so clearly and sharply cut out, the healthy interstices left so entirely untouched, and the skinning over after throwing off of the affected portion so straightforward as after the employment of salicylic acid.

The next step was evidently to try the effect of salicylic acid alone on a long series of lupus cases, without assistance from any of the other remedies ordinarily used, especially arsenic, mercury, pyrogallol, and ichthyol. The one difficulty which was here encountered was the unavoidable *pain* caused by the acid; for whilst its application to thickened horny masses is almost entirely free from any painful sensations, when applied to thin epidermis, and still more to raw surfaces, the pain is really very considerable, and always lasts as long as the plaster remains on. It increases, unfortunately, in direct ratio with the quantity of the acid contained in the plaster. Thus a plastermull containing 50·0 grammes of salicylic acid is distinctly more efficacious than one containing 40·0 grammes per metre; but the pain which is produced is also proportionately greater. This, with the fact that the pain is a lasting one, constitutes a serious drawback to the use of this drug, and one which an attempt must be made to overcome if this treatment is to compete practically with other methods.

In the various cases of lupus which have come under my treatment during the last year, I have attempted to effect this in different ways, and after many failures have at length arrived at a satisfactory result. The agents which I applied successively in combination with the salicylic acid, and in each case to several patients, in order to lessen the pain, were: mercury, iodoform, cocaine, opium, extract of cannabis, chloral-hydrate, and creasote. Of these, I found opium (pure and extract of opium), extract of cannabis, and creasote alone useful. Even cocaine, on which I set the greatest hopes, proved to be entirely useless in the form of plastermulls to overcome the lasting pain produced by salicylic acid. Opium and cannabis upheld their old reputation, since the patients without exception allowed that there was a lasting diminution of pain. Still, they left much to be desired, for the plasters burnt as strongly as the simple plasters for one or even two hours before the anodyne effect developed. When it once began, the relief was certainly considerable, and lasted as long as the plaster was applied; but even with equal quantities of the acid and the anodyne painlessness could not be attained, and still greater quantities would manifestly be required to produce it.

[1] "Plastermulls" (*Pflastermulle*) consist of a very thin sheet of gutta-percha, coated on the right side with an adhesive substance (alumin. oleinic.) containing one or more medicinal substances and backed on the other side with mull (undressed muslin). "Salvemulls" (*Salbenmulle*), which are more soothing preparations, consist of ointments having a base of benzoated suet and lard, spread upon mull. They are all manufactured at my suggestion by Mr. Beiersdorf, 40, Wohlers Allée, Altona (near Hamburg).

Comparing these two narcotics on corresponding regions (e.g., the cheeks) of the same patients, I found that there was no striking advantage in either of the substances. The plasters both caused considerable pain for some time, which certainly diminished greatly, but never completely disappeared. I was therefore compelled to decide between these narcotics on external grounds, and here I found that the cannabis indica undoubtedly possessed advantages over the opium. It is, in the first place, particularly adapted to the plaster form, the cannabis plasters having a dry varnished surface of excellent adhesive power, and keeping well. The hemp extract also works up better than that of opium, and takes up large quantities of salicylic acid, which is technically rather difficult to manage.

The high price of plastermulls containing such large quantities of alkaloids (e.g., 10·0 or 20·0 grammes of extract per metre) induced me to make further experiments with cheaper materials, which could be prescribed without stint. With this object I tried creasote, mainly on account of the experience of the dentists, who have made use of it for many years for its anæsthetising properties. My expectations of it were so far exceeded that since my acquaintance with its power in this respect I have ceased to seek for any other correctant of the pain caused by the salicylic acid in cases of lupus. The first experiment with a plastermull containing 10·0 grammes of salicylic acid and 10·0 grammes of creasote (true, pure, beech-tar creasote is alone serviceable) sufficed to show me that we had in it an excellent, probably the best, anodyne for dermatological purposes. In this case, too, a period of sharp burning pain preceded a stage in which the pain was greatly diminished, but the first lasted only ten minutes, and the anæsthesia which followed was very marked, as was the case with the alkaloids. A still better result was obtained, when the creasote was doubled in amount (salicylic acid 10·0 grm., creasote 20·0 grm.). The two periods still existed, but during the first, which lasted only five or ten minutes, there was a manifest diminution of the pain, and the second period was completely painless. The same observation was made with plastermulls containing a larger quantity of salicylic acid and double the weight of creasote (e.g., 20·0 grm. of salicylic acid and 40·0 grm. of creasote). Here, too, is a short painful stage, which lasts, according to the susceptibility of the individual, between five and fifteen minutes, but during which the effect of the caustic gradually decreases, and then follows a period of painlessness, which continues uninterruptedly as long as the plaster remains on, and corresponds to the continued paralysis of the nerves of the skin by the creasote. Plastermulls containing 10·0 grammes of the acid per metre suffice for ordinary cases of lupus of the cheeks and nose; the thinner the epidermis and the better supplied with capillaries a tissue is, the less salicylic acid is required. But other conditions are presented where small lupoid nodules are deeply embedded in old sclerosed scars, produced by a long treatment with caustics and galvano-cautery, as well as in the case of that warty form of lupus (papillomatous, Aubert; verrucosus, Riehl) which occurs on the hands and feet, and which I showed some years ago to be clinically and histologically identical with the so-called anatomical tubercle (verruca necrogenica, Leichentuberkel) of anatomists and butchers—a conclusion which was doubted at that time, but which has since been proved to be correct through the discovery of the tubercle bacillus in it by several observers. Here a plastermull, containing 30 and even 50 grammes of salicylic acid per metre, is necessary on account of the abnormally increased thickness of the epidermis.

Mr. Beiersdorf (40, Wohlers Allée, Altona,) has, upon my suggestion, composed the following five plastermulls for the cure of lupus. Each roll (length 1 metre, breadth 20 centimetres, equal to ½ sq. metre) contains—

Salicylic acid.		Creasote.
10·0	grm.	20·0 grm.
20·0	„	40·0 „
30·0	„	50·0 „
40·0	„	40·0 „
50·0	„	50·0 „

Anyone wishing to avoid, from the first change of the plastermull, the painful first period after its application, and in this way to institute a completely painless treatment for lupus, may paint the raw surface with a 4 per cent. aqueous solution of cocaine ten minutes before applying the second plaster. For this short anæsthesia cocaine is as

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efficient as it was found useless in attempting to produce a lasting diminution of the pain, in addition to the salicylic acid. But creasote is, to my mind, not only the morphine of the skin; it has another special value in the treatment of lupus—its antiseptic power. It is not only a correctant of the salicylic acid, but also the best adjuvant we could find. At least, excepting cod-liver oil, I know of no anti-tuberculous remedy in which I have so much confidence as in good beech tar creasote.[2] In any case of this phthisis of the skin, with which we are now concerned, it is a remedy which, applied in the concentration and in the manner indicated, deserves every consideration. This supposition has, moreover, been proved in practice to be correct. The salicylic creasote plastermull is a remedy which brings about a cure of lupus without any extraneous aid. The strongest plaster necessary for the ease should always be employed at the commencement, since at first a relatively normal skin-surface has to be attacked; under these the lupus tubercles can be seen to soften and break down. The action can be accelerated, as is the case with all plastermulls, by covering them with hot poultices. The dressing should be changed once, or at the most twice, daily, with or without the application of cocaine, and the parts cleaned, according as the susceptibility of the patient will allow it, with linimentum calcis, oil, lard, or even with soft-soap and hot water. As soon as it is found that with this simple treatment the excavations are getting shallower, and that no new ones are appearing, we may assume that the whole of the lupus nodules have fallen out. It is then advisable to have recourse to weaker salicylic-creasote plastermulls, and finally, when the lupus seems to be totally destroyed, but the process of skinning over is sluggish and a quicker completion is wished for, to still weaker means, such as mercurial-carbolic or zinc-salicylic plastermulls, or to a simple healing remedy like iodoform, ichthyol, &c. Smaller and more isolated nodules are generally completely cured under the salicylic-creasote plastermulls, even those which are richest in salicylic acid. In general, I consider it better to let the strong plastermull lie somewhat longer than is apparently necessary, so as to give a chance to even the deepest-lying nodules to shell out, and for the same reason the plaster should overlap the edge of the lupus patch by at least half an inch.

This is the simplest possible form of the treatment of lupus, but it can of course be further developed and enriched by combining it with other methods according to the individual case. These various modifications, which cannot all be mentioned here, do not alter the original idea, which consists in keeping up a continual but never excessive exfoliation of the affected portions by means of a highly elective substance (salicylic acid) which destroys the weaker tissue of the new growth, whilst a second substance (creasote) renders the process painless and at the same time exercises a directly destructive action on the bacilli.

A by no means slight advantage of this process of treatment is the cosmetic improvement which it effects, for in this concentration the salicylic acid assists powerfully in removing old stringy and lumpy scars, and after every removal of the scabs which it produces the surface is found to be in a distinctly smoother condition. On the other hand, it leaves sometimes a longer-lasting redness, which probably results from a paresis of the capillaries or from the destruction of the stratum granulosum, the layer which causes the white tint of the skin. This is best met by using an icthyolic ointment or by painting on a zinc-icthyol-gelatine preparation afterwards.

[2] I have seen the best results in cases of chronic phthisis from its persistent use for months and years in the form of keratinised pills (Dünndarmpillen) and inhalations.

BEQUESTS.—By the will of the late Mr. Little, of Fremont, West Derby, £5000 is distributed among the charitable institutions of Liverpool, the chief recipients being as follows:—Royal Infirmary, £500; Northern Hospital, £500; Royal Southern Hospital, £500; Infirmary for Children, £300; Home for Incurables, £200; Woolton Convalescent Hospital, £100; Eye and Ear Infirmary, £100; Dental Hospital, £100; Hospital for Consumption, £100; Hospital for Cancer and Skin Diseases, £100; North Dispensary, £100; and South Dispensary £100. All the legacies are to be paid free of duty. The late Mr. John Holdship, of London, has, subject to a life interest, bequeathed a sum of £10,000 to such hospitals in Middlesex and Surrey as his executors shall in their discretion select.

THE HISTOLOGY OF AINHUM.

BY C. H. EYLES, L.R.C.P. & S. EDIN.,
ASSISTANT-SURGEON, GOLD COAST COLONY.

THE affection known as "ainhum"[1] may be described as an attempt at spontaneous amputation of the toe; the little toe is the one usually affected, but in fifty of Silva Lima's cases the condition was met with five times in the fourth toe;[2] and in a specimen shown me by a friend it is a finger that is affected. The disease is usually described as one of negroes; but Crombie[3] and Crawford[4] have met with it among Hindus. It begins as a furrow at or near the digito-plantar fold of the little toe; and as this furrow gains in depth it extends laterally, its extremities ultimately meeting on the dorsal aspect. In the meanwhile the toe becomes swollen, and ovoid or globular; till, when the constricting furrow is completed, it resembles a marble attached to the foot by a short, narrow, fibrous pedicle, which may be severed by a snip of the scissors. In about one-half of the cases the furrow sooner or later becomes the seat of painful ulceration, which hastens the process. Some idea of the length of time required for the completion of the furrow may be formed from the fact that in one case, eighteen months after the extremities of the furrow had appeared on the dorsal aspect, they were still apart by a distance equivalent to about one-half the breadth of the toe. As a rule the Fanti does not apply for treatment except for the ulceration; the removal of the toe he manages for himself; hence, though the condition is common, material for examination is scarce. My remarks are based on the examination of two toes: in one, for which I am indebted to my colleague Mr. F. W. Sullivan, the furrow was complete, but the seat of ulceration and the pedicle was still bony; the other was an advanced case, the toe being attached by a narrow fibrous pedicle, and here also the sides and bottom of the furrow had ulcerated.

Method.—Both specimens were preserved whole; the first in methylated spirit for five months, and the second, after being first hardened in Müller's fluid, was transferred to methylated spirit, in which it remained for three months. For the examination of soft structures strips of tissue about one-sixth of an inch thick were cut down to bone, stained *en masse* in picro-carmine or eosine, and ribbons of sections were cut from this out of paraffin. When it was advisable to use logwood, unstained sections were cut, fixed to the slide by Threlfall's method,[5] and stained in logwood and eosine. In the whole of the first, and in the distal parts of the second, of these toes there was bone, which was first decalcified in Kleinenberg's picric acid solution, and then treated as in the case of soft structures.

The histological changes occurring in ainhum may be described as a hyperplasia so far as the epidermis is concerned; for the remainder they are mainly inflammatory. Judging from the two specimens I have been able to examine, the changes would seem to advance from the constriction to the tip; accordingly, for descriptive purposes, I shall divide the toe into three parts: *anterior*, where the changes are beginning; *middle*, where they are more or less in operation; and *posterior*, where they have been completed. These are, of course, purely artificial divisions; and while, generally speaking, certain changes occur in each, it is not unusual to find patches in the anterior part as advanced as those in the middle, and *vice versâ*.

Epidermal changes.—As a whole, the terms of the description of the epidermal changes occurring in lupus given by MM. Cornil and Ranvier[6] may be transcribed to represent what is seen in ainhum:—"Sur les coupes examinées au microscope et colorées, soit au picro-carminate, soit á la safranine, on peut s'assurer d'abord que les couches épidermiques sont plus épaisses qu'a l'état normal. Le reseau papillaire est généralement très développé, de telle sort que les papilles, saillantes, plus ou moins allongées et irrégulières,

[1] Said to be derived from a negro word meaning "to cut." Hirsch: Handbuch der Historisch-geographischen Pathologie, Bd. III., S. 504.
[2] Hirsch, loc. cit.
[3] Trans. Path. Soc., vol. xxxii., p. 302.
[4] Edinburgh Medical Journal, vol. xxxi., p. 1120.
[5] Foster and Balfour: Elements of Embryology, 2nd edit., Appendix, Note B.
[6] Manuel d'Histologie pathologique, 2me ed., tome II., pp. 846-7-8. The description is repeated *verbatim* in Cornil and Babes' "Les Bactéries," 1st ed., p. 624; and so is the figure.

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sont séparées les unes des autres par des prolongements ou colonnes interpapillaires du corps muqueux qui pénétrent profondement. Le derme est infiltré de petites cellules ainsi que les papilles. ..... Lorsqu'on examine le détail des coupes du lupus avec de forts grossissements, en passant successivement de la superficie á la profondeur, on voit d'abord que l'épiderme est le plus souvent épais; dans la couche cornée on constate des stries colorées en rouge par le carmine. Le stratum lucidum, la couche granuleuse sont épaissis ainsi que le corps muqueux. ..... Dans les prolongements interpapillaires du corps muqueux, il existe quelquefois des globules de cellules cornées. Les papilles irrégulières, quelquefois très allongées et pointues, le plus souvent hypertrophiées dans tous les sens, présentent beaucoup de cellules migratices et des cellules fixes tuméfiées."

All these changes are readily found in ainhum, and this hypertrophy of the epidermis may be demonstrated to the naked eye by staining a strip of tissue in logwood, when, the dermis and subdermal structures staining deeply and the epidermis either faintly or not at all, the latter is thrown into relief; and measurement shows that while at the tip of the toe it is barely one millimetre thick, it gradually increases in depth till near the constriction it may measure as much as five millimetres. And further, on viewing a mounted and stained section with the aid of a hand lens (an eye-piece, inverted, serves as well), though in the anterior and middle parts especially there is hypertrophy of the interpapillary processes, the great bulk of the thickening is found to consist of the horny layers of the epidermis.

Microscopically, one finds that the deepest cells of the *stratum corneum* in the anterior and middle parts stain deeply with logwood and picro-carmine, in the latter instance taking on the carmine stain. This staining layer is not of uniform thickness, but consists rather of aggregations of staining cells corresponding to positions of marked hypertrophy of the subjacent interpapillary processes, these aggregations being joined together by a staining band three or four cells deep. Beyond this there is nothing particular to note in connexion with this layer. The *stratum lucidum* is uniformly thickened, and in the posterior part, where the superposed stained layer ceases, it becomes indistinguishable from the layers above and beneath. In parts its continuity is broken in upon by oval or colloid masses, which are also to be found in the stratum corneum. In parts the stratum lucidum loses its character as a layer "in which the outlines of the cells, which are two or three deep, are indistinct, so that on section they appear to form a clear almost homogeneous layer";[7] the cells become distinctly marked, in which case they may be counted, and the layer may be as much as twelve or fifteen cells deep. In the anterior and middle parts the *stratum granulosum* is well marked but thickened; near the constriction it cannot be made out.

The most interesting epidermal changes, however, occur in the *stratum Malpighii*. In the anterior division the interpapillary processes are increased in all dimensions, but between adjacent processes one not unfrequently meets with slender processes, consisting of double columns of closely apposed pigmented (germinal) epithelium, which pass down, splitting the papillæ; these new processes appear to be formed by an involution of the germinal layer clothing the summit of the papillæ; at first there is a mere bud, which lengthens out; and as in process of time these double columns are separated by cells of new formation, new interpapillary processes are formed; as, however, the middle part is neared before the stage of separation is reached, these processes throw off shoots, which coalesce with similar shoots from adjacent processes, so that a network is formed, the trabeculæ of which consist of double layers of pigmented cells, while the meshes are filled with papillary material; and as these double layers are separated by newly-formed cells, an appearance is produced which may stand for a section made transversely through the papillæ—that is, there is a sheet of more or less typical prickle cells, which is perforated by round or oval islets of papillary material, each islet being surrounded by a single layer of pigmented epithelium. This appearance is best marked in the middle part, though here also distinct interpapillary processes are now and then seen, in which case there is usually a "core" formed of horny cells, which runs up into and is continuous with the stratum lucidum, and which, when taken in transverse section, presents the appearance of a "cell nest." These are not the only "nests" met with, for now and then in the sheet of prickle cells one sees a circular area consisting of cells which have lost their prickles and granular appearance, and the nuclei of which have become vacuolated. From the examination of "ribbons" of sections, I conclude that this appearance is brought about by the pressure of an advancing branched papilla, for in consecutive sections this nest is replaced by papillary material. When the posterior part of the toe is reached the entire thickness of the epidermis appears to consist of a stratum corneum; the only representative of any other layer is a layer of pigmented cells, which may take the form of diminutive processes or form a small network.

Dermal and subdermal changes. — The changes in the remaining tissues may be considered together; they consist of a hyperplasia of fibrous tissue, brought about mainly by a chronic inflammatory process. Wherever fibrous tissue normally occurs, it is found to be much increased in ainhum; further, pre-existing tissues such as bone are replaced by fibrous tissue, and scattered throughout are more or less extensive fibrinous exudations.

Vascular changes.—In the larger arteries there is one constant feature observable—viz., an increase in the thickness of the adventitia; the muscular coat is more or less normal, though in some instances there is an increase in its thickness, brought about apparently by proliferation of the connective tissue elements. It is, however, in the intima that the most marked alteration is observed; while in some vessels there is no such change, in by far the larger number the lumen is encroached upon, even to obliteration of the smaller vessels, by the much-thickened intima; there is, in short, endarteritis obliterans. As the vessels become smaller and capillary, they are surrounded by either fibrous tissue, full grown or developing, or by a copious small-celled infiltration—circumstances which to a large extent determine the characters of the different parts of the section; thus the dermis and papillæ in the anterior part of the toe are chiefly cellular, but proceeding backwards they become more and more fibrous, till near the constriction they appear to be made up of dense fibrous tissue. These conditions also modify the appearances seen; thus in the more fibrous parts a small vessel in longitudinal section would be represented by adjacent strands of fibrous tissue lined by a single layer of swollen endothelial plates, while in the cellular portions one may meet with a nodule, in the centre of which is a minute vessel, perhaps obliterated, surrounded by a delicate fibrous reticulum having a circular disposition, in the meshes of which there is an abundance of small-celled infiltration, an appearance not wanting in suggestions of incipient tubercle. In the middle part of the toe, especially, the capillary loops of the papillæ appear to undergo a hyaline change; the endothelial plates become fused together, so that the vessel appears as a tube formed of continuous translucent material; and in transverse section the capillary appears as a ring of stained material, on the inner aspect of which a swollen endothelial nucleus may project. In the veins the chief alteration is the increase in the thickness of the adventitia, together with which the endothelium is swollen.

Glandular changes.—The alterations in the sweat glands are by no means constant; in some instances the only perceptible change is in the increase in the thickness of the membrana propria by the addition of white fibrous tissue; in others the alterations are more decided. In the distal division of some of the coils there is distinct evidence of proliferation of the glandular epithelium—that is, the single layer of cells has given place to epithelium three or four cells deep. These cells may be distinct, the more internal ones undergoing fatty degeneration, in which case the lumen is filled with detritus; or the cells may be fused together, forming a granular protoplasmic mass, in which are scattered nuclei three or four deep; and, further, this mass may be broken up into irregularly triangular fragments. On viewing transverse sections of the proximal division of the coil in picro-carmine or eosine sections with a low power, one finds that some of them are divisible by their staining properties into two parts—an internal part immediately surrounding the lumen, which stains deeply, and is sharply cut off from the external part, which stains more lightly; and even with a high power the homogeneous, glistening, translucent appearance of the internal part gives the impression that it is an enormous development of the internal limiting membrane. When, however, thin sections are stained in logwood, this internal part takes on a bluish

[7] Quain's Anatomy, 9th edition, vol. ii., p. 237,

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tint, and, focussing carefully, one sees in it at tolerably regular intervals a single layer of four or five nuclei; and on examining a number of sections, indications of division of this circular band into areas, each containing a nucleus, are met with; in short, this band consists of the internal layer of cells which have become fused together and transformed into a homogeneous glistening material, which is certainly not waxy, for it does not give any specific reaction with methylaniline violet; it is probably hyaline or fibrinous in nature. In such cases, where only the internal part is so converted, the outer layer of cells presents nothing beyond a certain amount of proliferation; frequently the entire thickness of the proximal division is so affected; but in all cases the internal limiting membrane is involved, and the transformation appears to be accompanied by a swelling of the tissues concerned, for the lumen is much encroached upon, being often a mere slit, and sometimes is so much reduced that only on careful focussing it shines through as a fine "leech-bite" opening. This hyaline or fibrinous transformation is met with not only in the major part of the proximal division and duct, but extends also into the distal part, in which case the material is broken up into fragments having rounded contours.

Osseous changes.—In one of the specimens I have been able to examine, the joints and bones were sufficiently preserved to enable one to judge of the seat of amputation, and in this instance I find that the plane of constriction passed through the middle of the first phalanx. In the other instance the joints were effaced, and the only part in which the knife came down upon bone was in the distal part of the toe. The histological changes occurring in the bone are those described as *rarefying ostitis*. On the whole, the process advances with tolerable regularity from the periosteal side; but towards the centre the destruction of bone occurs not only irregularly but very rapidly, so that the greater part of the interior is excavated; and as there is but little attempt at new bone formation, the cavities formed are filled with a reticulum of delicate fibrous tissue supporting capillary vessels and a few oil-globules; new capillaries appear to be formed in this medulla, which becomes infiltrated with a small-celled exudation, giving way ultimately to fibrous tissue. What one sees on transverse section, then, is a rim of bone surrounding a cavity filled with "medulla," such as that just described, into which long, irregular, jagged processes of bone are projected from the rim. This method of replacing bone by fibrous tissue does not seem to be the only one at work, for sometimes, situated in the midst of fibrous tissue, small fragments of bone with one or two perfect Haversian systems may be seen, in which case the animal basis of the bone is found to run into and be continuous with the surrounding strands of fibrous tissue.

Regarding the lymphatics and nerves, I have taken no special steps to study the changes occuring in them, and my observations are too few and imperfect to admit of being put into any shape.

Causation.—"We have not been able to obtain any clue to the primary cause of the disease," says Crombie,[8] "but it seems to be essentially manifested in hypertrophy of the skin of the little toe near the digito-plantar fold, and of the tissues surrounding its middle and distal phalanges, with an attempt at spontaneous amputation at or near the first inter-phalangeal articulation, and in most advanced cases in conversion of the bony structures of the phalanges into fibrous tissue."

The process we have seen is essentially chronic, months, even perhaps years, elapsing before the furrow is sufficiently advanced to result in amputation; and at the end of this time the changes are such that with certain modifications the terms of the description would apply equally to lupus, in which there is dermal and subdermal inflammation, with epidermal hypertrophy, and which is placed by Ziegler[9] among the "inflammations of the skin." Of these conditions—viz., inflammation and hypertrophy—which occurs first in point of time in ainhum? and in what relationship do they stand to one another? Clinically the epidermal hypertrophy and furrow formation are first observed; and I believe that these bear a causal relation to the other changes; that is, the inflammatory and trophic phenomena are due to changes which follow pressure, mainly perhaps on the vaso-motor nerves; so that the question is resolved into one of the method of production of the furrow. In epidermal hypertrophies expressing themselves chiefly in hyperplasia of the horny layer, there is an *outgrowth* constituting the various callosities met with. When, however, the hyperplasia is more rapid there will be increase in the dimensions of the interpapillary processes. If the hyperplasia be yet more rapid, or be due to some direct stimulus, not only will these occur, but there will be a tendency to invade the corium by *ingrowths* of epithelium, and there will be "clusters or rolls and strings of epithelial cells altogether diverse from any normal mode of grouping; and the same may be observed in skin wounds which are in process of repair by epidermic growth and multiplication."[10] These epidermal changes we find occur in ainhum; but they also occur in epithelioma, and in Fig. 62 of Ziegler's Pathological Anatomy we find that while the proliferation of epithelium brings about a general increase in height, *in situations where there is a direct "ingrowth from the epidermis" there is a corresponding depression of the surface.* In a section of epithelioma in my possession this depression amounts to a furrow readily visible to the naked eye, and the microscopic appearance is very instructive. Neither in the sides of the furrow nor in its immediate vicinity is there any epithelial hyperplasia, but at its deepest part the rete Malpighii suddenly enlarges, throwing out long finger-like processes, which invade the corium.

It is in this manner that I seek to account for the furrow formation; as to the epidermal hypertrophy on which it depends, I believe the cause is to be found in external and accidental circumstances. From its position the little toe is particularly liable to injury; further, the digito-plantar fold of this toe is deep, and favours the retention of foreign bodies, as sand, grit, &c.; and the presence of a crack, fissure, or wound in the fold, assisted by the irritation of foreign bodies, if continued for any length of time, would supply the necessary factors for hyperplasia; and the fold itself not only is favourable to furrow formation, but decides the direction of the furrow. In the first instance there would be simple hypertrophy, then active hyperplasia, by which the papillæ would be pushed down and strangled; the epithelial cells, being thus "removed" from the blood-supply, undergo horny change. In the meanwhile pressure on the subjacent nervi vasorum sets up vascular changes, which bring about epithelial changes in more distal areas, and thus the process advances anteriorly—i.e., in the direction of the arteries.

New Hampton.

[8] Quoted by Crawford, loc. cit. So also Hirsch (loc. cit.) says, "Ueber die Ursache des Ainhum herrscht ein vollständiges Dunkel," and quotes from Silva Lima to the effect that "les causes qui le déterminent sont absolument inconnues."

[9] Text-book of Pathological Anatomy (Macalister), sect. 392.

[10] Ibid., sect. 170.

SOME SUICIDAL OR OTHER CEPHALIC INJURIES I HAVE SEEN.

BY BRIGADE-SURGEON W. CURRAN,
ARMY MEDICAL DEPARTMENT, RETIRED.

WITHOUT pretending to say that I have personally seen all the cases recorded below, yet I have been brought one way or another into such close contact with the individuals they include as justifies a reference on my part to them, and whatever concerns the vitality of the brain or of its coverings deserves consideration at the hands of the surgeon. No organ of the body is at times more susceptible of or indifferent to the effects of accident or injury, and a blow or a fall that would prove innocuous in one instance, or under certain circumstances, is instantaneously fatal or permanently injurious in another. Thus one falls, from a blow or otherwise, on an iron rail or on the kerb-stone, and never speaks again. A second falls from a side-car or a donkey-cart, and "receives such injuries as"—to use the euphemism of the press—"terminated fatally in a few minutes." A fourth rolls over the fire-irons or the door-mat, and is taken up in a dying state; and I have just heard of an instance in which a snowball was said to have produced the fatal effect. Reticence or reserve is, therefore, more becoming on the part of the medical man, in presence of this kind of injury, than dogmatism or self-assertion, and the instances that occur at police-courts and elsewhere in which a fracture of the skull is overlooked at the time, while paralysis is sometimes mistaken for drunken-

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ness, "ought to inspire reserve as to our diagnosis, and caution as to all our other dealings with this delicate, but withal long-suffering organ."

The subject deserves attention also on other grounds. It is surrounded with the popular prejudices or prepossessions of ages. By some any grave injury to the head that does not prove immediately fatal is regarded with incredulity or amazement. It is held up as a "miraculous escape" to the admiration or wonder of the public; travellers gloat over it, while "specials" exaggerate it, *more suo;* and, finally, escape from it is sometimes ascribed to a particular interposition of Divine Providence. At times, also, it proves a blessing rather than a curse to the subject of it, and the latter has been occasionally relieved by it from a life-long infirmity or otherwise incurable disease. So the wonder grows by what it feeds on—*l'appétit croit en mangeant*, and the popular fallacy or illusion is turned into an article of faith. But these views are propounded in one form or another in all our leading text-books, so that I need not dwell upon them in a medical periodical, and for the rest I have dealt with this phase of the question at greater length elsewhere.[1]

In discussing this subject, I will first give brief abstracts of the cases in point that came under my own cognisance, and I will then deal with them in such fashion as their individual features may suggest or their more striking peculiarities may require. I will then add such post-mortem results as transpired through them either in my own hands or in those of other competent witnesses, and the military surgeon has opportunities of this kind by virtue of his office which are generally denied to the civil practitioner. It is in this sense that the series is now submitted for publication, and it is in this sense only that they can claim a hearing from my brethren.

CASE 1.—A young officer was returning to his bungalow late one night after dinner in a station in the north-west, when, the weather being at the time close and sultry, he bethought himself of the propriety of bathing. Happening to pass at the time by the station bath, it occurred to him that a dip in its cooling waters might cool his fevered brow. He was, I believe, just then "feverish," and whether he was otherwise flushed or excited I am now unable to say. He undressed accordingly and mounted the platform from which "headers" were usually taken, but unfortunately the water had been let out some hours previously for renewal, while the time for its reflow or readmission had not yet arrived, and meanwhile he had either forgotten or entirely overlooked this arrangement. Plunging therefore confidently, from a height of, say, twelve feet or more, into the now empty basin, his head was dashed with all the force and all the momentum of such a fall and such a weight against its concrete bottom, and was reduced to an indistinguishable pulp on the spot. A gentleman, who saw the remains a few hours afterwards, assured me that the features were hardly recognisable, so great was the discolouration of the parts. Another said that the body was so doubled up in the bath as to resemble a sleeping hedgehog or a mass of meat in a butcher's shop, and the bones of the cranium and face were literally smashed to pieces.

CASE 2.—J. S——, aged twenty-one, was brought to the hospital in a helpless state, caused by jumping head foremost from a height into a pond of water that was only two feet deep. He was perfectly sensible, but complained of pain in the top of his head, and there was great tenderness on pressure or after movement of any kind over the sixth cervical vertebra. No displacement could, however, be discovered in this quarter, but there was loss of motion and sensation over the greater part of the trunk. The penis was erect and the pulse slow and full. He slept well during the night, but became suddenly unconscious soon after vomiting on the following morning, and other symptoms of nerve paralysis or irritation supervened shortly afterwards. The breathing became stertorous, the pupils were contracted, and the conjunctivæ were somewhat injected. The temperature ran up to 109° the previous night, while the sphincters became relaxed at the same time, and, growing weaker, he died about 10 A.M. the same day, or within sixteen hours of the time the accident occurred. After removing the brain the blood flowed freely for several minutes from openings in the superior petrosal sinus, and blood was also found extravasated into the sheaths and interstices of the cranial muscles. The atlas was fractured perpendicularly on its left side near its process. The cord itself exhibited some softening over a patch that corresponded with this, and a further search brought to light a further transverse fracture through the body of the fifth cervical vertebra.[2]

CASE 3.—F. R——, aged thirty, a robust and muscular man, was brought to the hospital about 8 P.M. in a state verging on insensibility, the result of a fall on his head and neck, which he had just sustained in the regimental gymnasium. He was trying to "circle" the longitudinal bar of a portion of the apparatus, when, his hands being moist through perspiration &c., he fell as above, and had to be carried to the hospital. He was sensible enough to give a collective account of the accident an hour and a half afterwards, and he could also move his arms at this time. But there was an absence of sensation in the left forearm, and the trunk was quite paralysed. On turning him over on his left side, the back of his neck was found to be very tender and somewhat swollen, but he made no complaint of any other illness or uneasiness, and he felt easy when lying quietly in the recumbent position. The respiration was, however, in part diaphragmatic and 40 per minute, while the pulse was 80, and he was somewhat relieved by a purgative enema.

A diagnosis of concussion of the spine was arrived at, and the priapism that supervened during the night enhanced this impression. The lethargy that subsequently appeared added considerably to the gravity of our prognosis. He, however, progressed fairly during the forenoon, and remained *in statu quo* till about 4 P.M., when his condition changed materially for the worse. The breathing became hurried and gasping, the upper part of the body was convulsed, and he lost his speech and consciousness. He was, in short, dying, and he expired quietly about 5 P.M. On section, fourteen hours afterwards, it was found that a dislocation had occurred between the fifth and sixth cervical vertebræ looked at from behind. The upper vertebra was displaced to the left and thrown slightly forward; but there was no fracture of either, or, indeed, of any kind, and the ligaments appeared to be stretched rather than torn. There was no laceration of the cord or serous effusion into its sheath, and if we except a few red spots here and there on its surface, there was no evidence of any acute or active inflammation anywhere.

As soldiers, to whom these remarks particularly apply, generally commit suicide by shooting themselves through the head, we may easily surmise the condition of that structure after it has been penetrated by a bullet that is fired point blank from a Martini-Henry rifle "at an initial velocity of 1443 feet per second of time." As a matter of fact the destruction of its component parts is very considerable, but yet not quite so bad as one might expect under the circumstances. The old Brown Bess bullet did much greater injury, and often left behind what is called "a shocking sight." Not so, however, with our present weapons; for such is their lightning speed and terrific force with which the missile is propelled by them that it crashes through the tissues without leaving so much as "a wrack" behind, and the aperture that is left by it in the chest[3] or abdomen has little that is striking or even suggestive about it. The attitude of the victim, which is generally standing or reclining backwards either on a cot or against some door or wall, may have something to do with this. So also may the seat of entrance, which is generally through

[1] THE LANCET for December 17th and 24th, 1881. I may be here permitted to adopt as my motto for this paper, the saying of Dr. West, to the effect that "I have always regarded mere compilation, uncontrolled by large experience, as more apt to perpetuate error than to diffuse truth."

[2] I learn from a friend who witnessed the occurrence on the spot that an acquaintance of his fell on a similar occasion to that mentioned within, at Naples, head foremost on a broken bottle, the edges of which penetrated the skull, and could not be extracted during life. He died shortly after being taken out of the water.

[3] In a case of self-inflicted chest-wound of this kind I saw many years ago at Shahjehanpore, we had to stretch the skin of the part ere we could make out the aperture of entrance of the bullet. Similarly in the case of a native who was shot through the perineum by the side of the sphincter ani as he presented that part in mockery to the foe during the Huzara campaign, we had to put the neighbouring structures on the stretch to enable us to find out the opening through which the bullet or slug had entered his body. And as regards that life-long misery which is alluded to elsewhere, and which was so common in the days of Brown Bess, the Duke of Buckingham tells a story in his "Memoirs of the Court of George the Fourth," vol. ii, p. 223, of the Hon. Col. James Hamilton Stanhope, which is so pertinent to our argument that I do not hesitate to reproduce it here. It runs to the effect that "under the influence of nervous depression, resulting from an unhealed gunshot wound received at the siege of St. Sebastian, he went into a retired part of the estate and suspended himself from the bough of a tree"; and many cases occurred under similar irritation or instigation in those days.

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the mouth or under the jaw, these two parts being selected in consequence, as I assume, of their affording a rest or resistance against the foot, or rather its big toe, from below. However that may be, life must be extinguished instantaneously under either contingency, and that seems to be the only redeeming feature of this horrible procedure.

CASE 4.—C. McD——, aged twenty-six, a man of fairly temperate habits, who has had only one attack of ague within the last six months, and who was so well the night before his death that he played at backgammon with a comrade, asked this same comrade for some ammunition the following morning. This request excited no suspicions in his friend's mind, as they were both engaged at the time in rifle-drill, and having secured this he soon afterwards retired into an empty room, and there shot himself through the mouth. He was thrown back by the force of the explosion on an empty bed, and on examination three hours afterwards, the whole of the upper portion of his face, as well as the front of the head, were completely blown away. The upper lip was split in two, and the nose, the eyes, the forehead, and a large portion of the brain were carried away by the bullet.

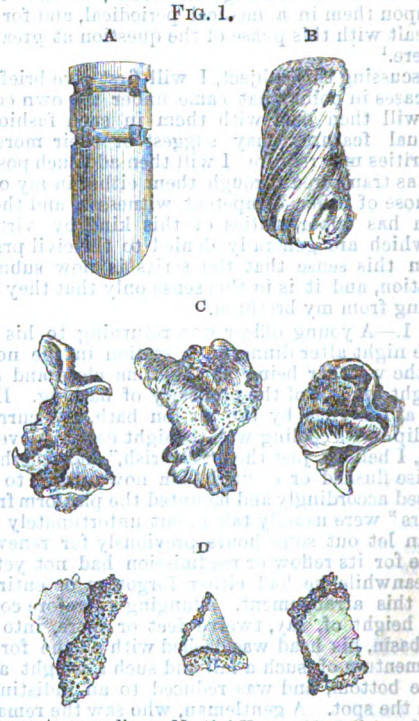
CASE 5.—A. S——, aged twenty-one, a person of strictly sober habits, was in his usual health and spirits on the night preceding his death. Having been "warned" as he was going to bed by a non-commissioned officer for second-class drill the next day, he expressed some surprise at this intimation, and got up in a sulky mood the following morning. He had been previously reprimanded or punished for dirtiness or inattention on parade, and he resented this, *more suo*, by "sulking" at meals and keeping aloof from his comrades. As they were sitting down after the morning exercises of their corps to breakfast in one verandah of their barrack-room, they heard a shot in the opposite one, and on running towards this, they found A. S—— dead in it, with his rifle lying between his feet. He had, in short, just shot himself, and on examining the body four hours afterwards, the whole of the upper portion of the head above the eyes was blown away. The brain, or such part of it as was enclosed in this cavity, went with it, and the scalp, being severed in a straight line, presented just such an appearance as is produced by a skilled dissection for a pathological purpose. So eager was he, withal, to shuffle off the mortal coil that he did not take the trouble of removing his right shoe. He enclosed it instead in the loop with which he drew the trigger, and with which he thus summarily ended all his earthly troubles.

CASE 6.—P. Q——, aged twenty-three, came to the hospital with an earache about 8.30 A.M. on May 7th, and had his ear syringed for what was considered a suppuration of the external meatus. He had previously suffered from pain in this same ear, and he intimated on this occasion that the former pain had returned to it with such severity that he had several times waked up during the night in agony. Some ordinary treatment was enforced, but he was not even detained for the day, and he did not apparently derive much benefit from his visit. On returning to his quarters he walked deliberately into one of the verandahs of his barracks with a loaded carbine, which he had surreptitiously removed from one of the racks, and literally blew his own brains out; that is, the cerebral mass was expelled through a hole in his cranium, and projected to a distance of several yards from where he lay. On inspection, four hours after death, the face was found to be fearfully disfigured, being quite cleft asunder, while its bones were broken up into small fragments. The roof of the skull was burst open, and its contents were extruded. The lower jaw was also broken in three places. Brain tissue protruded through both the eye-sockets, and so great, in a word, was the destruction of these parts that the ear lesion could not be traced. The aperture of entrance of the bullet was surrounded by a dark ring, the result of the adhesion of the ignited powder, and the sight was altogether a sickening one.

CASE 7.—J. K——, aged thirty-four, had been in a desponding state of mind for the two or three days that preceded his death—through, it was said, jealousy. Going early on the morning of the 16th of June into the sergeants' mess of his corps, he placed his firelock under his chin and discharged the contents of it into his head. The result was that the left side of his head and face was literally smashed to pieces, the temporal as well as the parietal bones being fractured and forced outward; and there was a perpendicular fracture of the frontal bone, which extended from its outward orbital plate to its upper border. The left lobe of the cerebellum was a mere pulp, whilst the middle lobe of the right hemisphere was lacerated and some of the fragments figured below were found in this cavity. (See Fig. 1.)

My view of these fragments is this. The bullet whose force we may well suppose was somewhat diminished by its impact with the lower jaw, which, it must be remembered, it had broken into several pieces, then struck the lower edge of the superior maxilla, and was by this broken up as shown below. The larger portion flew away, while the others, penetrating with their necessary bone-fragments the head, through the palate, left behind them such an opening into the interior of the skull as admitted the slightly forcible insertion of my right hand. The torn appearance of the facial muscles and the direction of this rent confirm this view; so do the weight and shape of the fragments shown in the figure. They scarcely amount to half the size and weight of an ordinary artillery rifle-bullet, and they were

FIG. 1.



A represents an ordinary Martini-Henry rifle-bullet; B, a bullet that has passed through the head as well as through the ceiling, and then fallen on the floor. C represents the larger fragments of one bullet; while D represents a finer subdivision of the elements of another; and both were found mixed with the brain tissues of two different suicides.

found as above scattered over the sulcus that separates the hemispheres.

CASE 8.—In this instance a cavalry trooper shot himself through the mouth, and the result shows that no hard-and-fast line can be drawn as to the behaviour of lead in presence of bone. A good deal will doubtless depend on the velocity and composition of the missile itself, as well as on the quality of the powder by which it is propelled, and no two craniæ are, as all pathologists know, precisely alike. Then, again, the resistance it meets or the distance at which it is discharged, however small that may be, modifies its course, and so we find very different appearances in subjects of this class. In one we find a whole side of the face shattered to pieces, while the room in which the deed is done is strewed with fragments of bone, brain, and flesh; in others there is no very appreciable displacement or deformity of any kind, and yet the result is necessarily the same in all. In this instance the bullet entered the skull through the mouth, and escaped from it at the junction of the two parietal and occipital bones. It took away with it about two inches of each of these, and also severed in its passage the superior maxillary bones. The explosion of the powder completely destroyed the soft parts within the mouth. Finally, passing almost unchanged as in Fig. 1 (B) through the ceiling overhead, it dropt spent on the floor below,

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and produced very little impression on either of these structures.

CASE 9.—A young man who had shot himself through the head in a railway carriage was handed over to the police on his arrival at Warrington, on his own confession, that he had attempted his life. Declining the use of a cab, he walked to the local infirmary, a distance of a quarter of a mile, and was quite conscious and collected on his arrival at that institution. On being examined, a small circular wound was found about an inch and a half above the right external angular process of the frontal bone, just behind the temporal ridge. With the exception of some nausea and vomiting, there was no evidence of brain lesion present, but a small punctured fracture could be discovered in the skull, and on exposing this, the brain could be seen to be wounded, "the track of the bullet extending to an unknown depth." He survived till the 30th of the month—i.e., nearly six days,—having had a good deal of twitching and vomiting in the meanwhile, and his last night was distinguished with almost continuous convulsions. He had been more or less conscious towards the end.

On section a fragment of the inner table was found lying flat between the dura mater and the arachnoid. The surface of the latter, where it covered the right hemisphere, was inflamed and covered with pus, and on slicing the former the bullet was found to have entered the brain in the line of the fracture, and to have taken a direction downwards, inwards, and slightly backwards through the genu of the corpus callosum to lodge in the anterior part of the corpus striatum. A somewhat truncated "remainder" (I can scarcely call it a fragment) of the bullet was found at this spot, and it, as well as its sounder fellow of the same batch are well represented in Fig. 2.

FIG. 2.



Revolver bullet and its truncated remnant.

Commenting on this case in the *British Medical Journal* of April 16th, 1881, Mr. Richmond, under whose (subordinate) care it occurred, truly observes that its history is somewhat phenomenal. The patient not only walked firmly from the railway station to the hospital, but he retained consciousness for sixty hours afterwards, and, comparatively speaking, fair health up to within the last twenty-four hours of his life. Even then the gravest symptoms appeared to be attributable to the changes that were produced on the surface rather than to those that took place in the interior of the brain. Readers of works on military surgery must be so well acquainted with instances in which bullets or other articles become encysted within the brain for considerable periods that I need not enter into any details respecting them here.

(To be concluded.)

SUCCESSFUL CATARACT EXTRACTION FROM AN INSANE LEPER.

BY BEAVEN RAKE, M.D.LOND.,
MEDICAL SUPERINTENDENT OF THE TRINIDAD LEPER ASYLUM.

IN THE LANCET of Feb. 20th, 1886, Mr. Bickerton relates a case of successful cataract extraction from a lunatic. I have therefore thought that a short note of a similar operation, performed on a patient who was suffering simultaneously from leprosy and insanity, might perhaps be of interest.

G——, aged thirty, a Hindu immigrant, was admitted to the Trinidad Leper Asylum on Sept. 10th, 1883, with a history of anæsthetic leprosy of thirteen years' duration. There was characteristic deformity of the hands. On Jan. 8th, 1885, it was noticed that he talked incessantly, and was often very noisy, causing much annoyance to the other patients. He had been more or less demented since his admission, but had become much worse lately. He was not dangerous to himself or others. On Feb. 20th the left wrist was found to be much swollen. There was effusion of fluid, and the hand was flexed towards the radial side. Grating was felt in the joint, and the carpus could be dislocated forward on to the anterior surface of the radius, reminding one of a case of Charcot's disease. There was no pain on manipulation. The carpal bones appeared thickened, and the fingers were shrivelled and contracted. There was no history of injury, and no other joints were similarly affected. He said this condition of the wrist had come on soon after the onset of the leprosy.

On May 7th he was found to have double cataract. He could see a very little with the right eye, but not at all with the left. He appeared to have lost the sight of the left eye for a long time, but only recently to have noticed the impairment of sight in the right eye. As the conjunctiva appeared to be totally anæsthetic, the left cataract was extracted without chloroform by the modified linear operation. He made no complaint of pain. On opening the capsule a little soft whitish material escaped, but the greater part of the cataract was yellowish and very hard. The extraction was completed with the help of the scoop. As soon as the pupil was cleared he was able to see a little. The eye was treated in the usual way with atropine solution and cold water dressings. Fragments of the cataract were stained with magenta, but no leprous bacilli could be found. Soon after the operation he took off the bandage himself, but it was at once replaced, and he did not take it off again.—9th: Pupil clear. Not much injection. Sees a little. Atropine repeated and bandage replaced.—12th: Pupil clear. Wound has gaped a little, and there is slight prolapse of iris. Atropine repeated.—14th: Conjunctiva very injected. Prolapse almost the same. No complaint of pain.—19th: Iris has settled down flat. Conjunctiva still injected. Sees hand when held up, and touches it when told to do so.—23rd: Injection gone. Iris settled.—June 2nd: Firm cicatrix. No prolapse. Pupil clear. He walks with a jerky movement, lifting his feet high from the ground.—9th: The right cataract was extracted in a similar way, but was found to be softer than the left, and there was some difficulty in getting it to present well. Escape of vitreous was noticed after the operation. Atropine was used, and both eyes at once bandaged.—16th: Suppuration going on. Protruding vitreous opaque. Pain and œdema of lids. Left eye unaffected.—23rd: Right eye settling down. Pain and inflammation gone, but eye contracted and blind. The left eye was quite unaffected, so the bandage was discontinued.—March 15th, 1886: Counts fingers with left eye at 10 ft. Cicatrix firm. Small pterygium growing on each side of cornea. He is still demented, but quieter than he was, and will generally answer questions rationally.

This case seems interesting as illustrating the fact that cataract extraction may be successful under such adverse conditions as the restlessness of a lunatic and the presumably impaired nutrition of a leper, though this latter point I am prepared to doubt. I am collecting statistics, which I hope to publish at some future date, to show that operations on lepers are more successful than is commonly supposed. The complete local anæsthesia due to the leprosy served well in place of a local anæsthetic. I had hoped for success in both cataracts, but perhaps I was in rather too great a hurry to extract the second. Had I waited a few months longer till it became more mature, there would probably have been less difficulty in extraction, and the escape of vitreous might have been prevented. Fortunately there was no sign of sympathetic ophthalmia. Though bearing but remotely on the subject, I may, perhaps, be allowed to refer very briefly to the interesting concurrence of the effusion in the wrist with the jerky gait. Have we here a case of tabes with Charcot's disease independent of the leprosy? or are these leprous changes in the cord and nerves causing arthritis? or is the affection merely an exaggerated form of the joint disease, so common in leprosy, and the jerky gait due simply to anæsthesia? Some day perhaps, a necropsy may give me an opportunity of attempting to answer these questions, or at any rate of referring the specimens to a London Society.

AT some villages in Croatia, chiefly inhabited by immigrants from Herzegovina, cholera has been present for some time, but its existence has been kept secret by the inhabitants. Physicians have been assaulted both in Croatia and Istria, the populace mistaking them for poisoners.

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A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Procemium.

ST. THOMAS'S HOSPITAL.

A CASE OF SUPRA-PUBIC LITHOTOMY IN A BOY; RECOVERY; REMARKS.

(Under the care of Sir WILLIAM MAC CORMAC.)

THE following is important as a contribution to the list of cases of supra-pubic cystotomy in boys where the wound has healed by first intention. Within a week after the operation the wound was firmly healed and the patient practically well, there being thus considerable saving in time as regards the healing of the wound compared with that occupied in perineal cystotomy, and much less discomfort during the process of healing. With regard to the emasculation of the patient which occasionally follows perineal cystotomy, Dr. Haemstadt, quoted by Dr. Tremaine, in a letter on the subject,[1] says, "Only one of eighteen whom I cut as boys, grown to manhood and married, has had issue, so far as I could learn," thus giving confirmation to the view expressed in the remarks. During the last session of the Clinical Society[2] the question of lithotrity in boys was introduced, and its more general employment advocated. This operation has met with much favour in some parts of India, and its performance has been followed by excellent results. Both methods of operating are under consideration, and additional facts will doubtless be brought forward during the next few months.

R. R——, a male, aged seven years and a half, was admitted on July 20th, 1886. The patient was said to have complained of pain in passing urine for the last eight months, the pain being referred to the end of the penis. He has had frequent micturition, but at no time has blood been noticed in his urine, nor sudden stoppage of the stream observed.

On July 23rd, under chloroform, the bladder was sounded by Sir William Mac Cormac, when a small, hard stone was detected. On the 31st, Mr. Tyrrell having placed the patient under chloroform, Sir Wiliam drew off the urine through a No. 2 catheter, afterwards washing out the bladder carefully with a 5 per cent. boracic acid solution. He then with the solution distended the bladder until the dulness reached about half-way to the umbilicus. The catheter was then plugged and allowed to remain. To raise the bladder still further out of the pelvis, a small Barnes's bag was placed in the rectum and distended. This lifted the bladder to within one inch from the umbilicus. An incision two and a quarter inches in length was made in the middle line, terminating just above the pubes. The linea alba was divided and the recti retracted outwards; the anterior surface of the bladder then came to view. No peritoneum was seen. Two stout silk sutures were passed through the muscular coats of the bladder on either side, and held up. The end of the catheter being pointed between these sutures, an incision was made upon it into the bladder large enough to admit a finger. Lithotomy forceps were introduced, and a small mulberry calculus extracted without difficulty. The whole was then carefully cleansed. Three catgut sutures drew the edges of the bladder wound into close apposition. Catgut sutures similarly brought together the separated recti muscles, and catgut was used to close the superficial wound, with the exception of the upper part, where a drainage-tube was placed. The wound was dressed with iodoform, and iodoform gauze with salicylic wool was employed to cover all. No catheter was left in the bladder. Six hours after the operation, the patient had vomited at intervals. As no urine had been passed, a catheter was introduced, and an ounce of blood-stained urine drawn off. Temperature 98·8°.

[1] THE LANCET, vol. i., 1886, p. 714. [2] Ibid., p. 740.

Aug. 1st.—At 4 A.M. two ounces of blood-stained urine were passed naturally. Throughout the day he has passed urine five times, in all ten ounces. There is no blood in the urine. Vomiting ceased. Temperature, 8 A.M., 97·8°; 12 P.M., 95·2°.

2nd.—Still passing his urine naturally; no blood in urine. 3 P.M.: Dressed under the carbolic spray. The wound had united by first intention, without any pus being formed; the tube was therefore removed and the wound re-dressed. Temperature, 8 A.M., 99·4° (the highest temperature recorded).

4th.—Wound again dressed; sutures removed. It is perfectly healed; patient, as previously, passing urine without difficulty, eight ounces in the twenty-four hours.

7th.—The child is now well, sitting up and playing about as if no operation had been performed. The temperature is normal.

The patient was kept in the hospital under observation until the 18th, but was then discharged, as there had been no symptoms, and the cicatrix continued firm and painless.

Remarks by Sir WILLIAM MAC CORMAC.—I think few surgeons perform the lateral operation for the removal of a stone from the male bladder without feeling some anxiety. In children, although very successful, there are some special risks attending the operation, and one certainly is that the bladder may not be reached at all. The parts are very small, easily torn, and may readily enough yield before the finger when the latter is being pushed into the bladder after incision of its neck. Another liability in the male child is the emasculation of the subject of operation. I well recollect how very strongly Langenbeck insisted on this being by no means an unfrequent result of the lateral method in the child. Indeed, he always performed the high operation in children, and his teaching was very generally adopted in Germany. It appears to me that the restriction of the high operation to the removal of very large stones is likely to be shortly modified in favour of a wider extension of this method. In no case would it seem more applicable than to those of children, in whom the bladder is naturally high and easy to reach, the urine fairly normal and unirritating. The case above narrated proves that immediate union may follow, with absolute absence of general disturbance, pain, or distress of any kind. The wound was soundly cicatrised within a week, and the boy in perfect health. I advisedly abstained from employing the catheter, which is an evil in itself. The urine required to be only once drawn off after the operation. The case, in short, is a parallel one to that of Mr. Parker's, reported in THE LANCET of July 3rd. But he is not quite correct in believing his to be a unique case, for three similar ones of primary union after supra-pubic lithotomy were lately reported in the *Deutsche Centralblatt für Chirurgie*. A result such as the foregoing is well worth recording, and is certainly as nearly perfect as any surgical proceeding can well be. As experience of this rehabilitation operation grows, its value and scope will become more and more strictly defined; yet even now it would seem a desirable plan to follow in the case of young children.

BOROUGH HOSPITAL, BIRKENHEAD.

CASE OF POISONING BY PHOSPHORUS PASTE; DEATH ON THE FIFTEENTH DAY: NECROPSY.

(Under the care of Dr. HARRIS.)

THE report of this case is furnished by Dr. H. E. Richardson.

William S——, aged thirty-two, ship's steward, a well-built, muscular man, about 5 ft. 10 in. in height, was brought to the surgery, at 9.45 P.M., on June 12th, 1886, by a police-constable, who stated that the patient had handed him in the street a pot of phosphorus paste (Roth and Ringeisen's), and said that he had taken it with the intention of committing suicide. A threepenny pot was produced, which would hold about half an ounce of paste. A great quantity of this appeared to have been taken out with the finger. The patient stated that it was not more than half an hour since he had swallowed the poison, and that he took it on account of some family trouble. He seemed in great distress. The stomach-pump was at once used and the stomach washed out with five or six basinfuls of warm water. Lastly, three grains of sulphate of copper were mixed in a pint of warm water and given to him to drink. It was immediately vomited.

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On admission he was ordered a hot bath, and placed in a private room in custody of a police-officer; to have a diet of milk, and the following mixture every four hours: carbonate of magnesia, ten grains; sulphate of magnesia, one drachm; peppermint-water to one ounce. His pulse was normal, and he said he felt comfortable. The pailful of fluid which had passed in and out of the stomach was then examined. It had a strong smell of phosphorus, and was luminous in the dark.

June 13th.—11 A.M.: Temperature 98·6°; pulse 80 per minute. Slept all night. Bowels open once freely. Complains of a curious sensation down his throat.—11 P.M.: Temperature 97°; pulse 66. Vomited three times to-day—on the first two occasions bile-stained fluid, then curdled milk. Bowels open again freely; motions loose, and of a dark-brown colour. The mixture discontinued. Ice given to suck. Patient seems low-spirited, but does not show any symptoms from the effects of the phosphorus.

14th.—11 A.M.: Temperature 98·7°; pulse 50. Did not sleep so well last night. Bowels open again this morning.—11 P.M.: Temperature 98·8°; pulse remarkably slow, only 46 per minute. Vomited three or four times to-day after taking milk. Had one dose of the magnesia mixture this evening. No pain or tenderness in abdomen. Lies comfortably in bed. Bowels were open this evening; motions loose, of a dark-brown colour, and very offensive.

15th.—11 A.M.: Temperature 99·2°. Slept at short intervals during the night. Vomited twice some watery fluid mixed with mucus and slightly tinged with blood. Ordered an ounce of castor oil.—11 P.M.: Pulse 66. Bowels open three times after the oil. Has vomited some of the milk he has been taking. A hypodermic injection of morphia (a quarter of a grain) given.

16th.—11 A.M.: Temperature 97·6°. Did not sleep after the morphia injection last night. Vomits the milk he takes, which is curdled. Bowels open once last night. Slight jaundice noticed to-day in the conjunctiva. Ordered two drachms of tincture of opium in eight ounces of water every six hours. The urine is of a dark red-brown colour, due to bile-pigment; acid; sp. gr. 1020; no albumen.—11 P.M.: Temperature 101·2°. Pulse 68 per minute. Vomiting continues; perspires profusely. Did not sleep all night. Complained of pain in the abdomen, but felt relieved after each action of the bowels, which were opened three times, motions being light-coloured.

17th.—11 A.M.: Temperature 98°. Pulse 96. Jaundice more marked to-day, especially on face and chest; face also looks flushed. The tongue is more or less furred. Liver dulness normal, but there is some tenderness over it. Lies with legs drawn up. Complains of a burning sensation all over, especially of face and head. Throws off bed-clothes. Vomits frequently curdled milk and a watery fluid; no bile in it. Has been very restless all night. Ordered tincture of rhubarb, six drachms; carbonate of ammonia, half a drachm; bicarbonate of soda, two drachms; water to eight ounces: an ounce to be taken every six hours.—11 P.M.: Temperature 100·1°. Pulse 70. Passed forty ounces of urine, of a brownish-black hue, in the twenty-four hours. Took one pint of arrowroot, half a pint of beef-tea, and two pints of iced milk to-day. Vomited the arrowroot only. One-third of a grain of morphia given hypodermically.

18th.—11 A.M.: Temperature 98·6°. Slept four hours last night. Bowels open once freely; motions very foul, and like chalk-and-water. Took two pints of iced milk during the night; vomited three times. Any movement after taking the nourishment seems to excite the vomiting. Urine is of a reddish-brown colour; sp. gr. 1026; no albumen; no sugar. 11 P.M.: Took arrowroot, beef-tea, and iced milk to-day. Vomited twice only some half-digested food; no bile. Temperature 99·6°; pulse 80; respiration 28 per minute. Bowels open once; of a light clay appearance. One-third of a grain of morphia given hypodermically.

19th.—11 A.M.: Temperature 99·2°. Slept for four hours after the morphia injection. Bowels opened once freely; motions foul, like chalk-and-water. Took two pints of iced milk; no vomiting. Intensity of jaundice increased, and is assuming a brownish tint; tenderness over liver on percussion.—11 P.M.: Temperature 100·4°. Took two pints of iced milk and some tea and toast to-day; no vomiting; has a slight cough. A hypodermic injection of morphia, one-third of a grain, given.

20th.—11 A.M.: Temperature 99·2°. Slept well last night; awoke only twice, and had some iced milk. Bowels open once; light coloured motions. No vomiting.—11 P.M.: Temperature 100·2°; pulse 80; respiration 20. Took two pints of iced milk, half a pint of beef-tea, and half a pint of arrowroot to-day; no vomiting. A ten-grain mercury pill given to-night. The mixture to be continued as before.

21st.—11 A.M.—Temperature 98°; pulse 84; respiration 24. Slept at short intervals last night; slightly delirious towards morning, attempting to get out of bed. Bowels opened twice, white as before. Has had iced milk. There is an inclination to vomit, though he has not done so. No pain, but he seems depressed. Is intensely jaundiced; eyes look sunk, and there is a dark rim around each orbit.—11 P.M.: Temperature 98·8°; pulse 76; respiration 24 per minute. Has had three pints of iced milk and a pint of beef-tea to-day. No vomiting; bowels opened three or four times, and had the appearance of chalk-and-water.

22nd.—11 A.M.: Pulse 88; respiration 20 per minute. Very restless during the night; dozed at times; was delirious and attempted to get out of bed; is in the same state this morning. Refuses nourishment, and is with difficulty made to take it. No vomiting. Bowels not opened. Catheter had to be passed and urine drawn off. Medicine discontinued, and a hypodermic injection of a quarter of a grain of morphia given.—2.30 P.M.: Vomited twice after some beef-tea, given with a spoon with difficulty, the only nourishment since morning. A round worm (Ascaris lumbricoides) six inches long was found in the vomited matter. Brand's essence of beef ordered in small quantities.—6 P.M.: Vomiting continues. One grain of opium pill given, dissolved in a teaspoonful of water. Linseed-meal poultices to the abdomen.—11 P.M.: Pulse 84; respiration 12 per minute (Cheyne-Stokes'). The beef essence retained since pill was administered. Catheter passed, and urine drawn off. A quarter of a grain of morphia injected hypodermically.

23rd—11 A.M.: Pulse 80. Respiration 6 per minute (Cheyne-Stokes'). Dozed at short intervals after the morphia injection; quiet all night. Took two pints of iced milk, together with the Brand's essence of beef in small quantities. Vomited four times; passed urine once. The morphia injection was repeated and the following mixture was ordered: one drachm of pepsine (B.P.); one drachm of dilute hydrochloric acid; four drachms of syrup; eight ounces of cascarilla infusion: one ounce every four hours.—11 P.M.: Pulse 88. Respiration 8 per minute (Cheyne-Stokes'). Urine drawn off with a catheter. It was very dark, bile stained. Perspires profusely. Has taken Brand's essence of beef and iced milk in small quantities during the day. No vomiting. Bowels not opened for two days. Ordered an oil enema, but it was immediately returned without having effect. Patient is quite prostrate and takes very little notice.

24th.—10 A.M.: Temperature 99°; pulse 94; respiration 8 per minute (Cheyne-Stokes'). Slept at intervals. Nourishment given in small quantities with a spoon. Complete prostration and stupor. Perspires profusely. Catheter passed and urine drawn off. Another oil enema given, which acted.—12 noon: Temperature 99·7°.—8 P.M.: Temperature 100·6°; pulse 120; respiration 26 per minute. The pulse and respiration have gradually increased since the morning. Brand's essence of beef and iced milk given in small quantities during the day.

25th.—9 A.M.: Temperature 102·2°; pulse 124, full, bounding; respiration 28 per minute, stertorous. The stupor is passing into coma. Sweats excessively. Motions and urine passed involuntarily. No vomiting.—12 noon: Temperature 102°.—3 P.M.: Temperature 102·4°.—8 P.M.: Temperature 102·6°; pulse 132; respiration 32, stertorous.—11 P.M.: Temperature 103·8°; pulse 132; respiration 44, stertorous. Is in a state of profound coma.

26th.—1.30 A.M.: Temperature 105°; pulse 150; and respiration 54. Has been fed with small quantities of Brand's essence of beef.—2 A.M.: Temperature 105·2°. The circulation is enormously quickened; the pulse cannot be counted. He remained in this state of coma until death.—3 A.M.: Temperature 106°.—3.30 A.M.: Temperature 106·4°.—4 A.M.: Temperature 107°; respiration 60 per minute, stertorous.—4.30 A.M.: Temperature 107·4°.—5 A.M.: Temperature 107·8°; respiration 42 per minute, stertorous.—6 A.M.: Temperature 108·2°.—6·30 A.M.: Temperature 108·6° five minutes after death.

The necropsy was performed by Dr. Richardson, on June 27th, thirty hours after death, and the condition was as follows: Well-nourished, muscular man. Skin deeply jaundiced (a brownish-yellow colour). The lungs on section had a black tarry appearance, and, on pressure, thick, dark, frothy

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blood mixed with minute oil-globules, oozed out. The heart weighed 13½ oz., and was very soft and flabby; its outer surface had a pale reddish-yellow appearance. The endocardium and the inner coats of the large arteries were of a mahogany colour, deeper staining being noticed here and there. The liver was much diminished in size, weighing only 42¾ oz., of a drab mottled appearance, very soft and flabby, with thin edges, so that it could almost be rolled up. It was greasy-looking. On section, it was found to be of a uniform brownish-yellow colour, bloodless, with abundance of free oil-globules. The gall-bladder contained a little thin greenish fluid. The kidneys (right weighed 8 oz. and the left 7¾ oz.) were very soft, and their capsules were loosely attached, so that they were easily peeled off, and on section had a pale and oily appearance. The spleen weighed 5¾ oz., and its substance was soft and of a tarry and oily appearance, like the lung. The stomach contained some fluid nourishment mixed with mucus; its coats had the general yellowish altered appearance, but no erosion or congestion could be observed. The brain was not examined. A microscopical examination was made of the organs, and they were all found to have undergone fatty degeneration. The most marked of all was the liver; its cells had disappeared more or less completely, and in their places were observed separate globules of oil, studded all over. The muscular fibres of the heart had lost its striated appearance, and were covered with minute molecules of oil. Extensive fatty change was noticed in the granular epithelium of the kidneys. All these sections for the microscope showed the deep brownish-yellow bile staining markedly.

Reviews and Notices of Books.

Paralyses—Cerebral, Bulbar, and Spinal: a Manual of Diagnosis for Students and Practitioners. By H. CHARLTON BASTIAN, F.R.S. London: H. K. Lewis. 1886.

IT may at first sight seem peculiar that "paralyses" should form the subject of a work on diseases of the nervous system designed to teach the student and practitioner the art of making a diagnosis. But a little reflection will show how it is possible to collect under one heading so much information as Dr. Bastian has been legitimately able to do in this his latest and not least important work. Yet it must not be supposed that the volume before us is an exhaustive one on diseases of the nervous system, though we are bound to confess that the department with which the author deals is by far the most interesting, as it is the most difficult, field of investigation.

There are two chief ways of writing a book of the kind under consideration—the analytical and the synthetical. Dr. Bastian adopts a fairly judicious mixture of the two. He does not everywhere give chapter and verse for the inferences at which he arrives, but he does this wherever matter of a specially controversial character is under discussion. To the earnest student there is much advantage in this arrangement, but to the busy practitioner a general or synthetical statement would probably be more acceptable. To a man of Dr. Bastian's position and learning in neurological matters, to say that the book contains nothing that is unorthodox might be irrelevant, were it not for the fact that even in its alphabet neurology is not a settled science. On the important subject of myelitis Dr. Bastian writes, "that he is far from denying that a primary inflammation may involve areas of the cord and entail softening of its substance," though he rather suspects that most inflammations are of a secondary nature and due to some tangible irritation. We think there is a little over-cautiousness in these views. We have no doubt of the occurrence of primary myelitis. Whether softening of the substance of the cord occurs or not should be regarded as of the nature of an accident, hardly calculated to throw light on the pathology of the morbid process. But it may be asked whether there is any essential difference between primary and secondary myelitis. A primary myelitis must have a cause which may be regarded as an irritant. Many cases of infantile palsy are due to the occurrence of a primary myelitis, the causation of which is of the most obscure kind.

It is a feature of the author's mind—and this book bears admirable testimony to the fact—that anything of a mysterious nature finds no favour in his eyes. Dr. Bastian is gifted with a far-seeing and penetrating intellect, and he accepts new facts slowly, not from a want of capacity to understand the bearings of fresh matter, but because novelty to his mind is no recommendation. No one can discern in this book traces of Dr. Bastian's well-known former hostility to the value of the state of the so-called "deep" reflexes. His acceptance and appreciation of their value in anatomical diagnosis of the morbid conditions in the spinal cord is at once complete and just, for he expects neither too much nor too little from their aid. The arrangement of the book must be acceptable alike to the diligent and to the busy; it is systematic without being arid, and helpful to the student without being inaccurate, as so many attempts with a view to assistance in acquisition are liable to be. With the aid of heterogeneous letterpress the author has done what he could to separate the less important from the principal matter.

A valuable chapter (though what many students will probably find hard reading) is devoted to a consideration of the physiology of speaking, reading, writing, and thinking; being some account of the nature and order of the cerebral processes involved in these acts. The article on the sense of movement, or kinæsthesis, will be read with profit by the advanced student and physiologist; the views expressed therein are practically identical with those given by the same author in "The Brain as an Organ of Mind"—a repository which we venture to think far more suitable for their expression than a work professedly concerned with teaching the student the art of practical diagnosis. Many readers may be of opinion that there are too many digressions from the main drift of the book of the like nature to that which has called forth our comments; whatever of justice there may be in such criticism, it must be owned that without some appreciation of the high physiology of the central nervous system anything like a full understanding of its bearings on the diagnosis of obscure cerebral conditions is not likely to be attained. We can strongly recommend Dr. Bastian's work to the student and practitioner as a monument of learning, exceedingly well put together.

The Management of Labour and of the Lying-in Period. A Guide for the Young Practitioner. By HENRY G. LANDIS, A.M., M.D., &c. Philadelphia: Lea Brothers and Co. 1885.

THIS book aims at giving practical instruction to the young medical man embarking in practice; it does not profess to be addressed to students. It is, however, one of those books the production of which does not seem to us to have been required in the interests of anyone. A student forming himself on the instructions here given would certainly be rejected at any good examining board, not only on account of imperfect information, but also on account of the errors which would be imparted to him; but to the practitioner who followed its advice the consequences might be more serious, both to himself and the patient. It is only fair, having said thus much, to give some reason for our opinion.

We will begin at the beginning. On page 14 we are told that "very little pain attends the contractions unless disease of some sort has interfered with the proper action of the parts concerned. There should be no pain at all during the first stage." About what country is our author speaking? About America? Is it true that American women have this immunity? Does it apply to immigrants, or only to those who have descended from naturalised parents?

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But the second sentence in our quotation shows that this may not be our author's meaning, but merely that pain in labour is pathological. Experience tells strongly against this view; indeed, the language of all nations applied to the pains of labour speaks the contrary with no uncertain voice. This idea is continued on the next page, where we read that, "if a woman has a markedly painful labour, it is because personal or inherited violation of hygienic law has caused her to be afflicted with inflammation or mechanical disabilities in the organs of parturition, and not because it is natural for women to suffer in childbirth." Again, we read on page 17 that six hours is the "maximum limit of normal labour." All these statements are not only entirely without foundation, but contrary to known facts. "It is painful to admit that, notwithstanding the teachings and practice of the best obstetricians, and the near approach of obstetrics to a science, there is a widespread tendency to non-interference." We are compelled in the interests of truth to point out that this statement betrays want of acquaintance with the history of midwifery, which has shown a steady progress in the other direction, and has exemplified the words of the Prophet that, in the vast majority of cases, "our strength is to sit still." Our author is quite honest in his opinion, and the words, "the strong delusion ..... that meddlesome midwifery is bad," set it forth even more plainly than we have done (page 19). On page 47 we read: "When once the head begins to press upon and stretch the perineum, the tonicity of the perineum is directly impaired by every degree of continuance of the labour. The longer the time taken to distend it, the more its circulation is impeded and its powers of cohesion diminished." This is not correct; nature provides gradual dilatation as the best safeguard, and the good practitioner endeavours to compass the same end.

We now come to a different category of statements—namely, those concerning the estimation of the conjugate. On page 94 we are told that after measuring the external conjugate "we then guess how thick the sacrum and dorsal tissues are, and how thick the symphysis must be, and deducting these measurements we can guess how long the conjugate diameter is, which might have been done without so much trouble in measuring. ... ... When we succeed in touching the promontory we note exactly where the anterior vulvar commissure touches the skin of the hand. From this point to the finger tip we measure, and this will give us the diagonal conjugate (Fig. 8). Since the inner face of the symphysis is perpendicular, we have the hypothenuse of a right-angled triangle." Exception may well be taken to this passage, not only on the ground of its inaccuracy but the style of its composition.

In a book dealing with midwifery no part is more important than that concerning the department of hæmorrhage. On this subject much that is valuable may be read in any old treatise on midwifery, while late years have added much to our knowledge both of its pathology and treatment. Of the digestion of knowledge, ancient or modern, we here find no trace. Hot milk is said to be the best drink after hæmorrhage, "because it is a near approach to blood" (page 165). We are surprised that our author does not plainly recommend black puddings if this is the reason. In the same place we read that a woman never dies of post-partum hæmorrhage except from neglect, "so certain is our control in these matters." Our author has been, perhaps, fortunate, but he has not apparently read of cases in which hæmorrhage has been absolutely uncontrollable in spite of the most careful treatment. Such cases are indeed very rare, but are none the less undeniable. Dr. Landis seems to think (page 167) that by the hypodermic injection of whisky the volume of blood lost can be restored. "It is possible that enough fluid can be thus injected," &c.

Rupture of the uterus is treated in half-a-dozen pages, and in a most inefficient manner. The chapter on septicæmia is not only inadequate, but positively dangerous, since ridicule is thrown on the idea that septic poison can be introduced from without.

We have now ended our irksome task. To praise is both pleasanter and easier than to find fault; but a reviewer has the serious responsibility of helping others to "eschew the evil" as well as to "choose the good"; and "butter and honey" may enable him to do one, but cannot help him to do the other.

A Short Manual of Chemistry. Vol. I.—Inorganic Chemistry. By A. DUPRÉ, Ph. D., F.R.S., F.C.S., &c., and H. WILSON HAKE, Ph.D., F.C.S., F.I.C., &c. London: Charles Griffin and Co. 1886.

THE authors tell us in their preface that they believe "that the very multiplicity of text-books already published tends to show a want felt, but not yet satisfied." We cannot entirely agree with this; for elementary text-books are multiplied for several reasons, among which the most important is that no two teachers have exactly the same ideas as to the best mode, and each wants a book which harmonises with the arrangement of his own lectures. There are, in truth, at the present time many—perhaps too many—excellent elementary manuals, and the teacher finds it difficult to choose between them. Among these excellent books we shall in future reckon that of Drs. Dupré and Hake; for though there is but little attempt at originality in it, it is lucid and simple, and gives a good account of modern chemical theory and fact. The physical considerations which have affected chemistry so profoundly are explained with somewhat unusual fulness and in clear language, and the accounts of the elements and chief compounds are succinct without being too meagre. The chief point in which the book differs from other recent ones is that the authors have followed the lines adopted by Graham in his now antiquated, but in its time inestimable, treatise. They hold that the broad principles of the science should be studied first, with as little reference to details as possible. Teachers differ much in regard to this question, many preferring to plunge at once into the facts of chemistry and bring out the theories little by little afterwards. Personally we prefer the system used by Graham, believing that students who follow it acquire a broader view of chemistry as a whole, and approach the more practical part of their studies with greater intelligence than those whose theoretical training has been more fragmentary. It must be remembered that in a science like chemistry it is more important to understand general truths than to remember individual facts. It is a common complaint among students who have passed through a stiff examination, that they begin to forget the facts as soon as the examination is over, and they infer that therefore their training has been useless. This is a very obvious mistake. If the training in general principles has been sound, the mere forgetting of details does not destroy it. None of us can remember a thousandth part of the facts we have learnt, but if we have been well trained we can take down a book and understand it, and so find, perhaps, in a few minutes the facts we may require.

Returning for a moment to the text-book before us, we may remark that it is on the whole accurate, and has evidently been carefully prepared. But of course there are some slips. Of these the most important is in the table of elements given on pages 64-5. The column headed "molecular symbol" is most misleading. In the first place, the correct phrase is, of course, "molecular formula"; but, what is of far more importance, many formulæ are given in the column for which there is absolutely no evidence whatever. How, for instance, can we possibly tell that the molecular formula for chromium is Cr_2, and its molecular weight 104·8?

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Vital Statistics: a Memorial Volume of Selections from the Reports and Writings of William Farr, M.D., D.C.L., C.B., F.R.S. Edited for the Sanitary Institute of Great Britain by NOEL A. HUMPHREYS, of the Registrar-General's Office, Member of the Council of the Statistical Society of London. London: Edward Stanford.

IT is difficult in a notice of the volume before us to refrain from discussing the works of Dr. Farr himself, for probably no writer of the present century has done more to make records of mortality a means of preventing that mortality, or to confer benefits upon mankind by enabling proper provision to be made against the accidents to which all human life is exposed. Dr. Farr's studies have contributed in an untold degree to our knowledge of etiology of disease. He has enabled life assurance to be placed on an equitable basis, and may indeed be said to be responsible for our Post-office insurance. A strong believer in the teachings of figures when properly handled, Dr. Farr made the utmost practical use of the facts which they indicated. No better evidence of this can be given than will be found in his report upon the mortality from cholera in England in 1848-49, and his subsequent reports upon the epidemics in 1853-54 and 1865-66, when he showed, at any rate to the satisfaction of English observers, the part played by pollution of drinking-water in the dissemination of this disease. But perhaps the works with which his name will be best associated in the future are his Life Tables published in the Registrar-General's annual reports. Most of his writings necessarily appear in the official records of this department, but others of great value occur elsewhere, particularly in the Transactions of the Statistical Society.

The Sanitary Institute has done public service in making Dr. Farr's work more available for general use, and especially in entrusting the important duty of selecting and editing his writings to his friend and colleague Mr. N. A. Humphreys, whose own distinguished position as a statistician, and whose long association with Dr. Farr will enhance the value of the volume in the opinion of its possessors. Mr. Humphreys has divided the book into six parts, and has grouped Dr. Farr's chief writings under the headings Population, Marriages, Births, Deaths, Life Tables, and Miscellaneous, and has himself written a few introductory pages to each part. Each introduction is followed by an exceedingly well arranged series of extracts from Dr. Farr's writings, and at the end of the volume will be found a copious index, which adds much to the usefulness of the book for purposes of reference. To the student of public health and social problems, "Vital Statistics" will be a welcome visitor and a useful friend, while it is in every sense a suitable memorial to Dr. Farr. Perhaps no higher praise can be accorded to it than to state that, in its arrangement and compilation, it is worthy of the editor to whom this duty has been entrusted.

Analytical Records.

CASSELL'S CEYLON TEA.

THE tea plantations of Ceylon have been a great success, and have added in an important degree to the material resources of the island. The sample now before us is very satisfactory. There is no facing or other mineral matter. The leaves are small and clean, and give a strong decoction of delicate flavour. Such tea may well replace the product of China.

SELLERS' NAPHTHOL SOAP.

(J. H. SELLERS, FARRINGDON-ROAD, LONDON.)

Naphthol is a crystalline, sparingly soluble compound, which bears to naphthalene the same relation as phenol (carbolic acid) does to benzene. Its use in eczema and other skin diseases has lately been advocated; and as it is not unpleasant in smell and possesses some antiseptic power, it deserves careful trial. In the present preparation the naphthol is incorporated with a clear and easily soluble potash soap, which is pleasant to use. The naphthol can easily be detected by acidulation and distillation with water. It comes over and condenses in needles.

MARSHALL'S CORN PREPARATIONS.

(J. & T. MARSHALL, GLASGOW.)

Messrs. Marshall have already several excellent preparations in the market, and here are several useful variations. *Farola* is a beautifully clear and very finely divided semolina. It breaks readily into cells with water, and the microscope shows that it is pure wheat. *Granola* is similar to the last, but contains the finer husk of the wheat, and is therefore a kind of whole-meal semolina. It is quite free from adulteration, and is a very useful and nutritious food, especially to those who suffer from constipation. The *Oat Flour* is correctly described by its name. It is a fine cream-coloured flour, containing all the gluten and oil of the grain, and no husk.

CALVERT'S TWENTY PER CENT. CARBOLIC MEDICAL SOAP.

This well-known and valuable article is now made up in small sheets, of which a packet takes almost no room in the pocket. They will be very valuable to the physician and for occasional household use.

BROOKE'S SOAP.

This soap, which is specially recommended by the proprietors for cleaning and polishing metallic vessels in ordinary domestic use, we have found very useful in the cleaning of surgical instruments. It does not answer satisfactorily in the case of knives, as the gritty material in its composition spoils the edge, but for forceps and other instruments not of a cutting character it answers admirably. In cleaning these, it is better to depart from the plan proposed in the directions given, and use the soap dry, scraping some of it on to a "buff-stick"—that is, a piece of wood shaped like a razor-strop, to which a strip of buff leather has been fixed down one side, and then rub the instrument on this. It is very effectual in removing dirt and recent stains, at the same time giving a good polish.

ST. MARY'S HOSPITAL.

WE are gratified to learn that the Residential College for Students, connected with St. Mary's Hospital, which was instituted only twelve months since, has been a great success. Already the School Committee have found it necessary to double the accommodation originally provided. "The College is under the supervision of a warden, who, with a lady superintendent, resides in the building." In this way medical students, fresh from hearth and home, receive such care as is conducive to their health, comfort, and happiness. There is discipline, but it is not harsh. There are supervision and direction, but the reins of guidance are gently handled. From a prospectus recently issued by the governors of St. Mary's, we learn that the medical school buildings, which were enlarged at heavy outlay three years ago, are inadequate to the present call upon them. A new wing is in course of erection. This will add to the space already allotted to various departments, and, in addition, will provide a spacious laboratory for bacteriological and special pathological research. The drainage and sanitary fittings of the hospital are undergoing complete reconstruction. This high-spirited policy deserves success, and doubtless will command it.

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THE LANCET.

LONDON: SATURDAY, SEPTEMBER 25, 1886.

IT seems desirable that the attention of the Secretary of State for War should be specially called to a serious defect which exists in the administration of the Army Medical Department. We allude to the want of any recognition of the services of the officers, however valuable these may be, unless they are rendered in the field with troops. We are far from underrating the value of the latter, either from the life-saving point of view, or from the equally important moral influence upon the men arising from the knowledge that skilled aid is at hand if they are wounded; but we attach at least as much importance to the professional work involved in the treatment of widespread epidemics, and to the mental labour required to devise and carry into effect those sanitary measures which are necessary to promote the health and efficiency of the soldier in peace as well as in war, and to prevent outbreaks of disease which are far more fatal in their effects than the artillery or rifles of an enemy. Yet in the distribution of rewards and honours such services, when rendered by army medical officers, are systematically ignored. This treatment is not extended to other departments of the army, for if we examine the lists of the Order of the Bath, we find among the Civil Companions officials of all grades, from general officers to War Office clerks, but not a single army medical officer. Among these names are many well known in the scientific world, nor would we for a moment imply that the others have not also earned the coveted distinction by valuable and honest service; but we protest against the omission of medical officers who have claims, scientific and professional, equal at least to those of a large number of the decorated. We know not to what their exclusion from a share in such honours may be attributed, but it certainly is not to any lack of officers who have clearly earned a title to them; nor is it due to neglect on the part of the head of the department to bring such services under notice, for it is within our knowledge that directors-general have recommended officers for this distinction on such grounds, and that their recommendations were not carried into effect. The army reports and the report of Lord HERBERT'S Commission furnish us with some remarkable evidence as to the value of the sanitary services rendered by the army medical officers. For instance, among the troops serving at home the death-rate on the average of the ten years 1837-47 was, among the cavalry 13·5, foot guards 20·4, and infantry of the line 17·8 per 1000 of the strength, while on the average of the ten years 1874-83 the ratios were 4·45, 5·37, and 4·76 per 1000. On foreign stations the reduction has been still more striking; in the West Indies the ratio has fallen from above 80 to under 16, and in India from over 60 to about 17½ per 1000 on the average of ten years. We leave it to the War Office actuary to determine the saving of life and of money resulting from these great reductions. We do not say that this has been effected by sanitary measures alone, but there can be no doubt that they have been a most potent agent. We have been unable, after careful inquiry, to find that any one of the officers by whose skill and labour these important results have been achieved has ever received any reward or had any honour conferred on him in recognition of them. That such treatment should be possible is far from creditable to our War Department, and we trust Mr. W. H. SMITH will take early measures to remove and, for the future, to prevent it. It appears to us that under the present system the selection of medical officers for honorary distinctions rests with the military authorities, who are not competent to judge of the value of professional services, while the head of the department, who is in every way qualified to do so, is ignored, and, if he ventures to make a recommendation on such grounds, has the mortification to find it disregarded. It surely is not too much to expect that the recommendation of the Director-General to reward valuable professional services in an adequate manner should meet with more consideration than in the past, and that rewards should be conferred for services other than those in the field. From a public point of view, it is most desirable that the army medical officer should never forget the importance of the duty of maintaining the health and efficiency of the men entrusted to his care; but it is almost too much to expect of him, when he finds his services in that direction ignored, and his labours, however valuable, overlooked in the distribution of rewards. A serious evil resulting from this system is that the administrative medical officer is disposed to look upon these important duties as mere matters of course, and, as in an instance quoted by "A Surgeon, Medical Staff," in *The Times*, instead of giving credit to an officer for long and zealous professional service rendered under circumstances of difficulty, to content himself with the congratulatory remark, "It is lucky you did not get ill yourself." It redounds to the honour of the medical officers that, with a full knowledge of the neglect with which they would be treated, they have persevered in a course which has proved so beneficial to the soldier, and has assisted in a very important degree to promote sanitary science and its practical application to public health.

THE appearance of Sir SPENCER WELLS as President of the Sanitary Institute of Great Britain during its recent congress at York was altogether congruous and satisfactory. Only superficial persons would think sanitation a subject of little interest to surgeons; in truth, their interest in it is almost terrible, and their splendid contributions to it of late years—notably those of SIMPSON, LISTER, WELLS, and TEALE—have been most valuable and significant. The difference between modern surgery and old surgery is chiefly one of sanitation. The worst accidents and calamities of old surgery were not due to the coarseness of its instruments or the unskilfulness of its operators, but to subtle impurities of air and water, to impalpable and invisible germs, whose influence has now been well-nigh checked and counteracted, thanks to the care and the methods of modern surgery. Sir SPENCER WELLS kept this particular aspect of the question of sanitation in abeyance at York, but there is no reason why we should treat it with such modesty; on the contrary, we

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magnify the merit of our great surgeons in this branch of hygiene, and see in their labours and their successes the most triumphant demonstration of the virtues of pure air against all champions of traditional filth and carelessness.

Sir SPENCER WELLS, with much good taste, took a broad survey of his subject, regarding it rather from a public point of view than from his high professional position. His main contention, indeed, was this, that in respect of sanitation the scientific and professional work has been largely done; at any rate, that the cause of public health suffers now more from want of the help of proper legislation and effective administration than from want of scientific data to go upon. He does not fail to notice the present impotence of Parliament. "The waste of time and energy in Parliament in party struggles has banished all possible home legislation." These are wise and grave words from one above all party considerations, and, as the whole spirit of his address shows, with a generous and charitable feeling to all classes of workers, from workers with the hand to legislators and ministers of the Gospel. It is well that our legislators should know how their work, or rather their want of work, is regarded by a man of action, and of evidently broad political feeling. He sees national work to be done that is not being done. Everything has a special Minister but the health of the people, and this is sacrificed to considerations of economy. It is not sensational enough. It does not affect "party struggles." That a man should have a vote, and that he should be able to vote by ballot are evidently prime desiderata; so it is that he should have plenty of cheap bread, especially as a rival set of politicians are interested in its being dear. But that he should have pure water and plenty of it, that his house should be decent and his work harmless, that the air he breathes should be uncontaminated, that his life should be protected from the onslaughts of insidious and impalpable germs in his milk, or his clothes, or his pork—these are points out of which the most astute party leader can extract no enthusiasm. And so the cause of health languishes, and many diseases flourish.

Sir SPENCER WELLS is not a complainer; he is cheerful even under the depressing circumstances of a Government very indifferent to health questions as compared with party questions. He anticipates a good time coming; when the crisis of angry discussions and political complications has passed, the turn will come for practical measures. What a fine faith there is in a sentence like this! His estimate of progress, too, is a generous one. Human life has been lengthened twenty years by the labour of sanitarians, chiefly medical men, in the last half-century; the people are more thrifty, and when they are ill they are better looked after under provident medical arrangements; drunkenness and crime have diminished. There is a broad statesmanlike tone in Sir SPENCER'S treatment of such questions as school-pressure and the mental and physical training of women. He thinks women capable of a great deal more than they have been accustomed to do in times past. As regards school-pressure, he does not deny it, but cleverly connects it with the very success of sanitarians. Such children as exemplify it in less perfect times would have been effectually killed before the school age by bad sanitary conditions; now "they are survivals of the least fitted." They must be trained more and taught less. The specific points urged by Sir SPENCER WELLS on his audience were all good, though somewhat miscellaneous, having reference to the education of children, the cultivation of forests by governments, the prevention of disease, and the support of hospitals and convalescent homes. On one favourite topic he repressed himself—that of cremation; but his whole address was eminently worthy of one who has added greatly to the health and happiness of human life.

MATTERS connected with the physiology and pathology of the larynx are in an unsettled state. We are in a position to make several positive assertions on the subject, but how to completely reconcile all the statements it is not easy to discover. The propositions that may be made are as follows: 1. Stimulation of the recurrent laryngeal nerve by a strong faradaic current gives rise to adduction of the vocal cords, provided that the animal (dog or monkey) be not too deeply narcotised. The same adduction of the vocal cords is observed if the stimulation be applied to the recurrent nerve of the recently excised larynx. 2. Stimulation of the recurrent nerve with weak currents, however, usually causes abduction of the vocal bands. 3. It is maintained (SEMON'S theory so called) that the abductors of the larynx are weaker than the adductors, or rather that in all cases of acute or chronic organic disease or injury of the nuclei or trunks of the motor laryngeal nerves (spinal accessory, pneumogastric, recurrent laryngeal) the abductor muscle or muscles first succumb, whilst, on the other hand, in cases of functional disorder the adductors usually suffer alone. 4. Experimental injury to the whole trunk of the recurrent nerve is followed after a few days by histological changes of a fatty order in the fibres of the abductor muscles, the adductor fibres not apparently suffering.[1] 5. GRÜTZNER and SIMANOWSKY declare that there are histological differences between the adductors, which belong to the group of "white" muscles, and the abductors, which are members of the group of "red" muscles. 6. The abductor muscles "die" sooner than any of the adductors; they lose their electrical irritability earlier than their antagonistics; and yet the abductor posterior crico-arytenoids are absolutely the most bulky muscles of the larynx. 7. The larynx contains muscles of organic life that subserve respiration—the abductors; and muscles specially related to conscious existence—the phonators, used in articulation, the adductors and tensors of the vocal cords. 8. Anæsthesia caused by the inhalation of ether, chloroform, &c., first abolishes the functions of conscious life; hence we should expect that, under moderately deep narcosis, stimulation of the recurrent nerve would give rise to abduction of the cords, seeing that the abductors are not affected by the anæsthetic.

More than a year ago Dr. HOOPER, of Boston, made a curious observation, the full meaning of which he did not apparently grasp. Accordingly Dr. SEMON, with the experimental assistance of Mr. VICTOR HORSLEY, has reinvestigated the matter, and the result of their work is an elaborate but lucid paper, read before the section of Therapeutics and Pharmacology at the annual meeting of the British Medical Association. Dr. HOOPER argued that,

[1] H. Krause: Experiment. Untersuchungen und Studien über Contracturen der Stimmbandmuskeln. Virchow's Archiv, vol. xcviii., 1884.

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as the constrictors of the larynx were muscles whose action would be impaired by the inhalation of anæsthetics, they being essentially voluntary muscles, stimulation of the motor nerves of the larynx whilst the animal was under the influence of ether should cause dilatation of the glottis. This was actually found to be the case, provided the anæsthesia was sufficiently profound. The experiment determining this fact is remarkable and well worth further examination. A dog tracheotomised for the purpose of administration of ether, and with its recurrent laryngeal nerves exposed, is prepared for experiment. When the dog has been narcotised profoundly with ether, it is found that stimulation (with a strong current of the faradaic kind) of the motor nerve gives rise to dilatation of the glottis; if the stimulation be repeated at intervals whilst the animal is recovering from the effects of the ether, the abduction is noticed to become less and less marked, until a stage is reached in which stimulation merely causes a vibratory movement of the vocal band—a condition of neutrality, caused doubtless by a nearly equal contraction of the antagonist muscles. Continuing the experiment, the effect becomes gradually reversed, until, when the influence of the anæsthetic has practically passed off, stimulation of the nerve causes the familiar powerful constriction of the larynx. All this is very interesting; but there is another point that struck the attention of Dr. SEMON, and that was that the abduction effect of stimulation of the motor nerve was observed when, the animal being completely narcotised, the nerve had been "cut." The cause for the surprise manifested by SEMON and HORSLEY lies in this single fact—the excitation of the nerve was effected on the distal cut end of the motor nerve. Now, it has usually been asserted that the action of anæsthetics is on the central portions of the nervous system, beginning with the highest and gradually descending, consequently paralysing the functions, first, of the cerebral cortex. The recurrent laryngeal nerve is, with the exception of the branches to the crico-thyroid muscle, derived from the superior laryngeal nerve and the pharyngeal plexus, the only source of motor innervation of the larynx. 'If, therefore, in an animal very deeply narcotised abduction of the vocal cord occurs when the peripheral end of the cut recurrent laryngeal nerve supplying the muscles of that cord is stimulated, it is perfectly obvious that the effect of the narcotic is in no wise due to the central nervous system. We should be driven, therefore, to conclude that ether must act specifically either on the nerve fibres, their endings in the adductor muscles, or on the muscular substance itself, supposing that there is no peripheral ganglionic apparatus subserving the function of movement in the larynx, of which we have at present no evidence." The absolute novelty of the fact that ether has a discriminating influence on the peripheral nerves of the larynx is insisted upon by SEMON and HORSLEY — a topical influence not due to the local action of the anæsthetic on the nerves ending in the larynx, for in the majority of the experiments the ether was administered by the trachea, and must have reached the periphery of the recurrent laryngeal nerve through the circulation. The fact of histological and nutritive differences between the abductors and adductors of the larynx, above alluded to, served no doubt to pave the way for the recognition of the remarkable phenomenon of a peripheral discriminating influence of ether on the neuro-muscular apparatus of the larynx. The question naturally arises whether this influence is one confined to the muscles of the larynx, or whether it is not also likely to hold good for other peripheral neuro-muscular apparatus also. For instance, under the influence of ether, in certain degrees the knee-jerk is increased in force; this means of course that the extensor triceps contracts with greater force. Various explanations of this have been offered, and it is also worth entertaining whether the ether may not have had something of the peripheral action on the antagonistic flexor muscles of the knee-joint, thereby allowing a mechanical stimulation of the extensor muscle to have an unusually powerful effect. It should ever be remembered that the extensors and abductors of the body "die" sooner than the flexors and adductors—that is, lose their electrical excitability sooner after somatic death.

What we have already advanced will show how very complicated the physiology of the larynx has become, and we cannot but commend the authors of the paper above referred to for their freedom from dogmatic assertion, and for their ready allowance that differences in results may be brought about as the outcome of individual and generic differences in the kind of animals experimented upon. The age and accidental fallacies resulting from the influence of complications caused by damage to the nerves from prolonged exposure, as well as certain inherent difficulties of observation regarding the exact position of the vocal cords, may introduce fallacies.

ON Saturday last a discussion was raised in the House of Commons on the manner in which the duties of the medical staff of the General Post Office are discharged. It was based upon the case of an official in the telegraph department who, after an absence of a fortnight on sick leave, had attended, by order of the Post Office, to be seen by the medical officer, and who died of typhoid fever a fortnight afterwards. From the explanation given by Mr. RAIKES we are led to believe that there was no blame attachable to the acting medical officer for the course he adopted, nor was any harshness shown to the gentleman in question. But Mr. PICKERSGILL, by whom the case was brought forward, alleged that the conduct of the medical staff was oppressive to the *employés* and injurious to the public interests, and he was backed by Mr. ISAACSON, who assured the House that "a spirit of dissatisfaction existed among the people with regard to the manner in which the medical department of the Post Office was conducted." We do not know the regulations which are laid down for the guidance of the medical officers attached to the Post Office, but it appears to us that they must involve two important duties — first, that of preventing malingering, or shirking duty on pretence of sickness; and, secondly, of protecting the *employés*, when really ill, from being called upon to perform their work, or being punished for supposed neglect of it. We presume that the rule which holds in other public offices applies to the Post Office, that when a clerk is prevented from attending by illness he must forward a medical certificate. This would be a protection of the interests of the public if it were not possible to obtain such a docu-

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ment on very insufficient grounds; but we know that, unfortunately, such certificates are occasionally—we trust not very often—given on inadequate data, sometimes through carelessly accepting the patient's statement of his unfitness for duty without any examination of the case, and at others from a dread of giving offence by a refusal. It is obvious that there should be some means of preventing such irregularities, and this can be done in two ways, either by ordering the attendance of the person at the office for examination by the medical staff, if he is able to go about, or having him visited at his home on forwarding an intimation of his inability to attend. It will doubtless be asserted that this is showing a distrust in the individual, and that the medical certificate should be accepted without hesitation; but we have known of instances in which a visit to the residence of the "sick man" proved that, while unable to attend his office, he was not quite so ill as to find it necessary to remain at home. We believe that a check of the nature above indicated has been found to be required by some large employers of labour, and has been attended with satisfactory results. We have no doubt, however, that this would be unpalatable in cases where the excuse is unsatisfactory, or when the inability to attend to duty is the result of personal misconduct. Mr. PICKERSGILL objected to a vote of £100 a year to pay substitutes for the medical officers when absent on leave. The duty appears at present to be fully as much as the staff can undertake, and it would be alike cruel and unjust to work the medical officers through the whole year without any period of relaxation. We would suggest therefore to Mr. RAIKES that the best way to meet such an objection would be to include an additional medical officer in next year's estimates. This would not only provide for a fair amount of leave to the staff, but would also place at his disposal an officer available for duty in case of illness of any of the others, or of the necessity arising for any special inquiry into sanitary questions connected with the service. He would also be available for visits to, and examinations of, any *employés* respecting whom the authorities might consider it necessary to obtain more detailed information.

Annotations.

"Ne quid nimis."

THE PROGRESS OF CHOLERA IN EUROPE.

DURING the week ending the 21st inst., there has been a decided diminution both in the number of places in Italy from which cholera records have been issued, and also in the amount of the mortality registered. The diminution has taken place in the north-east, in the Bay of Naples, and in the extreme south of the kingdom. In the north-east, Ravenna is the only place in which any very serious cholera mortality is now occurring, and in the Bay of Naples the disease is rapidly diminishing at Torre dell Annunziata, and it has failed to make any noteworthy progress at Castellamare. But whilst this is the case as regards Italy, the disease has exhibited further extension in Austria-Hungary. Fresh batches of cases and deaths are taking place at Trieste, Fiume, and Pola, a large number of small villages in Croatia are infected, and the appearance of the disease in Pesth has been followed by the announcement that it also exists at Raab about midway between Vienna and Pesth on the Danube. In the Trieste district there have been 576 cases and 368 deaths since the month of June, and during the same period the fatal attacks in the neighbouring provinces have exceeded 350. In the greater part of Hungary the weather is getting cold and unfavourable to the rapid diffusion of cholera; but whether cities like Pesth or the smaller towns and villages are concerned, it must be remembered that the prevailing sanitary circumstances, and especially those relating to the disposal of human excreta, are precisely such as are usually associated with the wide prevalence of cholera. On the 17th inst., there had been 53 cases and 11 deaths at Raab, and between the 12th and 18th inst. there have been 61 cases and 19 deaths in Pesth. The latest news is to the effect that 33 cases and 4 deaths have also occurred in Austria proper.

J. SAMPSON GAMGEE.

THE intimation of the death of Sampson Gamgee, is one of the most unwelcome pieces of news which we have received for some time. The accident which he had met with and his latent renal infirmity were known to us, but he was reported to be doing well, and his letters were in his most vigorous style, when lo! the intelligence comes of his decease. He was a rare man. That he had faults we may concede to those who love truisms. But what virtues he had, what grace of speech, what kindness of heart, what cultivation of mind. How complete were the principles of his surgical art—original yet conservative. How he loved the working men of Birmingham, and urged them to love its hospitals and to help them; and yet how keen was his sympathy with intellect in its purest forms. How he reverenced all that was classical and traditional in the profession, and yet what sympathy he had with its rank and file and the men who bear the burden and heat of the day. His own day was, we fear, not without heat and burden, and for years past he has had the look of impaired health, but he was always ready to lend a helping hand or speak a gracious word; and as a practical surgeon he has left in his book on the Treatment of Fractures and Wounds a legacy which will mark and foster the fame of surgery as a tender and conservative art. We cannot forget his old connexion with this journal, and his faithfulness to it even to the last. He was one of the few writers who had served both the founder of this journal and the son whose loss we now deplore. We can ill spare such men, and his loss happens unfortunately just now, when the profession needs men whose love of the past does not blind them to the needs of the present.

PROPHYLAXIS OF PHTHISIS.

AT the recent meeting of the British Association, Mr. G. W. Hambleton read a paper entitled "The Scientific Prevention of Consumption," based upon his views—to which we have lately alluded—as to the etiology of the disease, which are embraced in the sentence, "Those conditions that reduce the breathing surface of the lungs below a certain point in proportion to the rest of the body." The conditions in question are, as may be expected, very numerous, comprising sedentary occupations, overcrowding, want of exercise, defective seats, clothing, &c., leading to habitual disease of the lungs or the undue compression of the chest. In fact, consumption is, on Mr. Hambleton's doctrine, invariably "acquired." Its prophylaxis, then, requires a free country life, well-ventilated rooms, suitable chairs, and clothing free from constriction and not too heavy. The physical training, commenced in the nursery, should aim at the full development of the thorax, and all out-door occupations and amusements should be encouraged in youth to this end.

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Unless the breathing capacity, as shown by measurement, is up to the normal, the individual should not engage in any trade or occupation such as would compress the chest or injure the lungs by inhalation of dust; whilst those who have to follow such pursuits should by exercise of the lungs endeavour to counteract their evil effects. All of which advice, without being novel, is sound and forcible; whilst if it could be followed as widely as Dr. Hambleton would wish, it would doubtless do even more for the public health than reduce the mortality from consumption.

COMPULSORY ATTENTION TO CHILDREN'S TEETH.

THE prevalence of caries of the teeth amongst so large a majority of the units that comprise civilised communities, and the consequent pain and inconvenience entailed, and, perhaps unconsciously, the absence of those pleasures attending a good digestion which makes up so large a part of individual happiness, have induced the public to interest itself in the pathology and treatment, especially prophylactic, of these organs. Now, if we wish to get at the root of the evil we must commence our treatment with the deciduous teeth. Many patients—nay, even medical practitioners—ask, what is the use of preserving teeth which have only to serve their purpose for a time and which nature will replace? If a surgeon were asked what is the use of provisional callus in a case of fracture his answer would be readily formulated, and just such an answer is applicable to the teeth. We will run over just a few of the points that may result from disease and its neglect. First, with regard to the child's health. With decayed teeth, and often, in addition, chronic gumboils, the little sufferer is kept awake at night and his digestion affected by inability to masticate his food, and more so by swallowing the fetid discharge from the abscesses. As a consequence the child becomes weak and puny, and so the already developing permanent teeth suffer from the constitutional disturbance. Supposing each tooth as it becomes the seat of pain is extracted, then the masticatory power is greatly enfeebled, and, moreover, it has been shown that where many deciduous teeth have been removed, especially in the case of the canines, the jaw does not develop as rapidly as it should do, and consequently, when the permanent teeth erupt, some take their position inside and some outside the arch, which irregularity is a potent predisposing cause of caries, apart from its unsightliness. Again, take for instance a very common case, that of a second temporary molar extensively decayed. The first permanent molar assumes its due position posterior, and the first bicuspid anterior, to it. Both these permanent teeth are frequently found affected on the side corresponding with the deciduous tooth, and the disease is undoubtedly due to the infection from decomposing food harboured by it. Although much more might be said upon this subject, we think that enough has been advanced to show the importance of first teeth with reference to the welfare of their successors, which should, but so often do not, do duty for a lifetime. We believe that nothing short of the periodical examination every six months, and treatment if necessary, of the teeth of children can effectually cope with this evil. At the recent meeting of the British Dental Association, Mr. Fisher, of Dundee, read a very able paper, in which he strongly advocated that dental surgeons should be appointed, with sufficient salaries to ensure the possibility of conservative treatment, and not, as heretofore, only extraction, to all public schools, reformatories, industrial and endowed schools, training-ships, &c. He has examined the teeth of a large number of children attending schools, and found that on an average over 75 per cent. required dental treatment; he also mentions the startling fact that the principal manufacturers in London supply 10,000,000 artificial teeth per annum, showing the enormous loss of natural teeth amongst the community. There is already a move in the direction of Mr. Fisher's suggestion; as we noticed some time ago, the North Surrey District Schools have appointed a dental surgeon at £60 per annum, and since then the District School of Upper Norwood has a dental officer. The Metropolitan and City Police Orphanage has had for some years a dental surgeon.

"THE FALL OF THE LEAF."

THE slight frosts which have occurred an hour or two before dawn in the past fortnight have already had their effect on our trees, changing the varied green to the exquisite and variable red and russet tints of autumn. This will soon be followed by the "fall of the leaf." Many an exquisite shady spot in summer will now become damp and chilling, and a musty odour of decaying vegetation will take the place of the fresh and invigorating shade of summer. Sensitive natures are very susceptible to this alteration, and feel that health necessitates a change of abode during the later autumnal months. Nor is the deleterious influence of decaying vegetation confined to sensitive natures alone. Stronger natures are alive to the influence of the "falling leaf." The ground becomes bestrewed with vegetable decay, and the atmosphere impregnated with the products of decomposition. The air becomes musty, and lowly forms of vegetable and animal life are about. The fungus takes the place of the sweet-scented herb, and damp moss that of the green sward. The honey-fed bee keeps nearer the hive, and is replaced in the garden and shrubbery by the gnat, the midge, and carrion-fly. Modern science teaches that all active organic decomposition and autumnal vegetable changes are inimical to higher animal life. Even insects are not free from this risk; they pass into a state of torpidity in autumn, and "should any particular moisture accidentally accumulate on them, it affords a seed plot for certain minute fungi to come up and grow in." So wrote Kirby and Spence more than fifty years ago. What is true of insect life has been proved to be equally true of higher forms of animals and man, with only such modifications as their different natures imply.

"THE PROTEAN MAN."

SOME wonder is being excited in the provinces of France by the exhibition of an individual who dubs himself "L'Homme-Protée." The number of shapes and attitudes that the man is able to assume is said to be so great that the title of "Protean" may well be allowed if the individual manifests only half the powers attributed to him. Now, whatever he can do, it is obvious that his faculties are the same in kind as those possessed by the rest of mankind, though the degree in which the faculties are developed may vary vastly; so that we cannot agree with the writer who asserts that the contortionist transforms himself, thanks to his *peculiar* system of muscles. Doubtless his frame is wonderfully mobile, and every part of his nerve and muscle apparatus has been trained to the utmost. It is possible, also, that M. Aiguier is gifted with the power of influencing the action of muscles over which man usually exercises no voluntary control, though with practice many may acquire the capacity if they set themselves about the task in the proper fashion. The Protean man, it is said, can assume the rigidity of a statue, so that, the body sharply struck, the blows fall as on a block of stone. This probably means that the man has the capacity to develop

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at will the cataleptic condition. By varying the activity of different muscles of the abdomen he is alleged to be able to give his trunk a great variety of shapes and sizes, from that of the proverbial alderman to that of the lean and haggard student. He is even accredited with the possession of the power to appear as lean as a skeleton; but this must surely require an effort of the imagination, as well as a still greater effort on the part of the muscular and vascular apparatus of the contortionist. What most astonished M. de Quatrefages, who examined him, was the ability to stop the flow of blood, now on the left, now on the right side of the body; this was ascribed to the influence of unilateral muscular contraction.

HOSPITALS AND MEDICAL EDUCATION.

A PAMPHLET entitled "The Relation of Hospitals to Medical Education," by Dr. C. F. Withington, of Boston, will interest many on account of the care and judgment with which it treats an important subject, which is not quite a simple one. In the first part of the paper the duty of hospital governors to make use of their unrivalled opportunities of instruction is insisted on. It is the proper part of such institutions, as the author sensibly observes, not only to aim at the cure of patients within their walls at a given time, but, moreover, to gather from observation of all such, and to share with others, experience which will work for the health of many in time to come. The personal rights of patients are considered at length. As regards this point—a delicate one in some cases—a good deal of tact and fellow-feeling blended with perception of practical necessity appears in the advocacy of carefully conducted clinical and pathological investigations. There is much truth in the author's contention that resident posts as well as higher hospital appointments ought to be assigned on the ground of merit alone. We cannot quite agree with him, however, that competitive examinations are to be regarded as a good test of merit in such cases. A plea for the training of male nurses, and for the diffusion of some knowledge of nursing among the public generally, is noteworthy. Another suggestion in this paper is that workshops for the construction of surgical apparatus might be established within the hospitals. Surgeons would then supervise the making of their own appliances, and students might arrive at some practical acquaintance with mechanics as applied in surgery.

ANOTHER FORK IN THE STOMACH.

M. POLAILLON reported, at a recent session of the Paris Academy of Medicine, an interesting case, which was then under his care, but which terminated fatally, of a man who had swallowed a table-fork. The patient explained very exactly, as was afterwards found, the position of the fork, its handle being in the right hypochondrium, and the prongs directed obliquely upwards, backwards, and to the left. Scarcely anything, however, could be felt by external palpation, although the man was of spare habit, and M. Polaillon at first had some doubts as to the existence of the foreign body, especially as an œsophageal sound gave no indication of anything hard when passed into the stomach. An instrument was then constructed on the principle of the galvanic bullet-probe, and a slight indication was obtained with it. A delicate magnetic needle was, however, distinctly affected when the man's epigastrium was brought near it; and a powerful electro-magnet, placed a few millimetres from the abdominal wall, produced, on closing the circuit, an arching of the skin, as if a body within the abdomen were being attracted towards the poles. A suspended electro-magnet also oscillated towards the abdomen whenever the current was passed through it. There being, therefore, no longer any doubt as to the existence of the fork in the stomach, M. Polaillon made an incision, commencing at the ninth left rib, one centimetre within the border of the costal cartilages, and carrying it for seven centimetres in the direction of the xiphoid cartilage, as recommended by M. Léon Labbé, as the best position for reaching the stomach with certainty. In this case the stomach wall, which was very thick, was seized without difficulty, temporarily secured and opened, the fork easily removed, and the gastric wound accurately sutured with catgut and then returned. The abdominal wound was afterwards brought together with silver sutures and dressed antiseptically. The operator remarked that he had departed from the method hitherto employed of causing the stomach to adhere permanently to the abdominal wall and setting up a fistula; the result would show whether his plan succeeded as well as the *suture perdue* does in intestinal wounds. A discussion took place subsequently on the possibility of succeeding by means of an electro-magnet in extracting a fork from the stomach through the œsophagus. This M. Leroy de Méricourt thought could never be done because of the small size of the cardia; but MM. Polaillon and Goubaux suggested that sufficient dilatation might, perhaps, be caused by the induction of vomiting.

CHRIST'S HOSPITAL.

THE parents of boys at the Hertford Branch of Christ's Hospital have been informed that pupils may return to the school. The summer holidays have been extended, owing to an epidemic of sore-throat at Hertford; but this has now subsided, and the continued absence of the boys is no longer necessary. Dr. George Turner, the medical officer of health of Hertford, reported on Sept. 9th to the local sanitary authority that "the disease was generally of a very slight nature, and under ordinary circumstances would not have given rise to any alarm, but taking into consideration the very general prevalence of throat disease in the country, an importance which perhaps the gravity of the majority of the cases would not suggest has been attached to them. No notices of outbreaks of zymotic diseases have been received by me for some time, and, generally speaking, the town is in its usual healthy condition." The school authorities have undoubtedly acted wisely in awaiting the termination of this prevalence of throat disease before reopening the school, and the desire they have shown to guard their charges from ill-health should deserve the thanks of the boys' parents.

ACCIDENTS TO SLEEP-WALKERS.

IT seems strange, on the first blush of the matter, that so very few accidents befall sleep-walkers. The proportion of instances in which any injury is sustained by the subjects of this remarkable state of semi-sleep is very small. The explanation of the immunity is doubtless to be found in the fact that it *is* a state of semi-sleep in which the sleep-walker makes his excursion. He is sleeping only so far as *part* of his cerebrum is concerned. The rest of his brain is awake, and therefore it is really not a strange feat to walk carefully and escape injury, doing all the necessary acts of avoidance while carrying out some dream purpose, just as a walking purpose is fulfilled. This hypothesis obviously requires a very full explanation of such an accident as that by which a sleep-walker recently came by her death—namely, falling out of an open window. It is not likely to have been part of the dream to get out of a window. There must have been some error in the carrying out of the process; such, for example, as turning to the right instead of the left on leaving a room, and thus walking through a low window instead of through a doorway. As a rule the senses are sufficiently on the

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alert to enable the sleep-walker to take all precautions for safety, and when he comes face to face with a difficulty involving more than automatic or subconscious self-control, he wakes. We should like to know more of the case which has just ended fatally from some competent medical observer who has studied the development of this interesting disorder in this particular instance. Surely a practitioner was consulted. No case of sleep-walking should ever be left without medical scrutiny and counsel. In sleep-walking there is the making of madness, and in its inception this disorderly sleeplessness ought to be stayed.

"CLERGYMAN'S SORE-THROAT."

IT may not be generally known that both at Oxford and Cambridge facilities are afforded to young men about to enter the Church or any other profession in which the voice may be subjected to over-exertion, to undergo a systematic course of instruction in the "management of the voice." In his earnestness to be impressive, it is very common to see a clergyman bend forward in the pulpit, protruding the body and still more the head from the proper vertical line, and in this way subjecting his voice to a much greater strain than is necessary. The huskiness which ensues often lessens the impressiveness of his discourse, and he himself becomes exhausted in the effort. The course of instruction now afforded at the Universities enables a clergyman to manage his voice so as to make the most of his vocal powers and diminish the risk of lessened tone. With the shoulders well in position and the chest expanded thereby, the head being kept upright and the under chin in a horizontal line, it is surprising how much more distinct the voice becomes, and how much further it is carried. A course of instruction in the management of the voice would do much to lessen the inconvenience of clergyman's sore-throat, and to those not yet suffering it might prove a valuable preventive. One of our present bishops, when at Oxford, encouraged the large number of young men under his following to undergo a course of vocal gymnastics. Numbers of clergymen, and some of our own profession engaged in teaching, have benefited by such a course.

"MAN-CULTURE."

THIS was the expressive and apposite term which Sir George Campbell, in his opening address to the Anthropological Section of the British Association, commended for general use in the same category as oyster culture, bee culture, and the like. The term is a good one, and it will be well if its adoption should bring the idea embodied in such high-flown phrases as "elevation of the race," "civilisation," and "education" in its broadest sense, down from the region of sentiment and emotional enterprise to the plain matter-of-fact business of daily life and policy. In truth, man-culture is a practical duty imposed by Nature on humanity, and in respect to which every one of us has a share of responsibility commensurate with the intelligence he may possess, or to which he lays claim. It is impossible for a sane and rational being to avoid the consequences of neglect in reference to this duty. They must come down on the individual or upon those to whom he stands in the relation of a trustee or progenitor. Parents towards their children, and every member of the *genus homo* towards those with whom they are brought into contact—whether mentally, physically, socially, or in whatsoever other way influence may be exerted or withheld for the good of others—are benefactors or malefactors in respect to their kind. Fetish and the idea of destiny are unquestionably inimical to the fullest development of this idea, because it begins with the propagation of life in the species, and dominates the whole of existence. Precisely as the animals below man are cultivated by foresight in reference to breed and nurture by food, exercise, and surroundings, so must man, and thus most assuredly will he, sooner or later, be cultured. The science of anthropology is the master science; and yet, while its scope is of the widest and its subject thought as far-reaching as the duration of man himself, it is necessarily a mere episode in the history of knowledge. "All about man" can never, in the nature of things, be even seen, much less can it be studied, from a single standpoint. All the sciences are tributary to the knowledge of self by humanity, and yet no man, or class or school of men, can do more than take a cursory view of the whole while essaying the special study of some one branch of knowledge in particular. Nevertheless, it is well there should be for the nonce a so-called "science of anthropology," and it will serve a useful purpose just so far as it is perceived to be only a cursory general view of what must be examined more closely in detail. If the anthropologist, as such, should make the mistake of supposing that he can ever come to close quarters, so to say, with his manifold subject, he will inevitably become mischievous, instead of being useful. Anthropology, properly estimated, is the logic of natural science; but it is not, and never can be, natural science itself. The Anthropological Society has missed its aim and impaired its usefulness by forgetfulness of the fact that in respect to no single branch of the science of man can it be more than amateurist and *dilettante*. There is reason to fear that the new branch of the British Association may fall into the same error. The only policy that can rescue it from this untoward end is that which we hope we are right in recognising as the idea running through Sir George Campbell's address—namely, that anthropology, to be useful, must take the practical and applied form of man-culture; and the instant this endeavour to realise the ideal is commenced, *anthropology*, in its scholastic conception, will be found to have fallen to pieces—an exploded idea.

CHOLERA RESEARCH.

Dr. E. O. SHAKESPEARE, who was sent by the United States Government to India with a view to investigate cholera, has returned home, and the publication of his report may be shortly expected. He is stated to have arrived at conclusions confirmatory of those of the German Cholera Commission, and therefore different from those arrived at by the English Commission. We recently drew attention to the fact that Dr. D. D. Cunningham's (a member of the English Commission) later investigations had also led him to materially modify his previous conclusions respecting the pathogenic importance of the comma bacillus.

SAFETY LAMPS IN MINES.

THE public will be pleased to notice that the lighting of mines has become of late a somewhat prominent question. This is doubtless the result of the investigation conducted by the Royal Commission. Among other conclusions arrived at by that body, the fact that safety lamps rather than naked lights should be used in all workings which were dusty or liable to invasion by gas was particularly emphasised. Fire-damp, it was shown, is not the only source of explosions. A quantity of this gas, quite insufficient in itself to account for such an accident, if brought in contact with a cloud of fine coal-dust, may easily, on the ignition of the latter, lead to a disaster. Another point brought out was, that one result of ventilation had been to cause through currents of considerable velocity in the air of mines. Consequently, when impure air thus driven along is brought in contact with the unprotected lights, or even with some forms of lamp, an explosion is not unlikely to occur. These

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statements will sufficiently explain why in one mine the use of naked lights has been condemned in spite of established custom; while in other instances an effort has been made to induce proprietors to use, instead of the older kinds of lamp, a modern and improved form which is more capable of resisting currents of high velocity.

METROPOLITAN WATER COMPANIES.

MR. F. M. CORNER, medical officer of health of Poplar, has made in his annual report a pointed reference to the evils which result from the action of the metropolitan water companies in cutting off the water-supply from tenement houses on account of neglect of payment of the landlord, depriving the inmates, who are themselves innocent of any negligence, of one of the first necessaries of life. He gives a graphic description of the effect of this conduct, the choking of drains, the opening up of ground and drains, the removal of filth accumulation, and all the injury to health which follows. Specific instances are quoted where numbers of houses, each occupied by several families, were deprived of their water-supply, some for twenty-six days, others for seventeen, while a third group, which had a population of seventy-four persons, were without water for a space of fourteen days. Mr. Corner has done well in giving publicity to these facts; they cannot be too strongly brought before the public. It is a matter for profound regret that the hope of legislation last year ended in disappointment. No one wishes water companies to lose the returns which are due to them, but there will be no difficulty in giving them all the necessary powers for the protection of their own interest without resorting to a method which produces the scandalous conditions of which Mr. Corner gives account. The reply of Lord Randolph Churchill, for the President of the Local Government Board, on Monday, to a question in the House of Commons relating to metropolitan water-supply has given rise to the expectation that London will be soon protected against the water companies, who appear to put their own interest altogether before the public welfare.

INQUESTS WITHOUT NECROPSIES.

AN inquest was recently held by Mr. William Carter, coroner for North-East Surrey, at the Windmill Tavern, High-street, Lambeth, touching the death of Mr. Everard Woods, L.K.Q.C.P.I., aged twenty-six. From the evidence it transpired that deceased was assistant to a medical man in Whitechapel, and that by reason of ill-health he had quite recently resigned his situation for the purpose of taking a trip to New Zealand. He was in easy circumstances, and more than one witness deposed that there was nothing in his habits or demeanour to suggest the likelihood of his committing suicide; in fact, there was absence of any known motive to such an act. The facts, as related to the jury, seem to us far more consistent with the theory of murder. Mr. Woods, on the evening of his death, had visited a friend, and had expressed himself as feeling better. A short time after this two strange men accosted a waterman, who was standing on the Lambeth Pier, and asked if he had a boat, adding that a man had jumped from the Albert Embankment. Having given this information they disappeared, and nothing further was seen of them. They neither offered to assist the waterman to recover the body nor gave notice to the police of the tragic occurrence. On the body of deceased some silver and copper coins were found, but his gold watch and pocket-case were missing. It is not probable that he had pledged them, for he had left seven or eight sovereigns at his lodgings. No medical evidence was taken at the inquest, and, if report is true, the coroner took the statement of his officer as to the absence of bruises. The jury returned an open verdict of "Found drowned." If ever there was a case where it was important to ascertain the exact cause of death it was this. From a scientific—that is a reliable—standpoint, there was nothing tendered in evidence to show that death was not occasioned by violence, and the corpse thrown into the water. The mere *ipse dixit* of a coroner's officer on a subject requiring skilled expert inquiry is worse than worthless. It serves to beguile a jury, and it seems to satisfy the judicial mind of a coroner, but it fails to help the investigation as to when, where, and by what means a certain person came by his death. The mysteries of the Thames are not likely to diminish in number so long as they are intentionally left as "open questions." We maintain that it is the function and the duty of a coroner's court to leave no stone unturned in order to satisfy the public mind and the demands of justice, in the question of the equivocal nature of a person's death. It is high time the attention of the Home Secretary was directed to the fact that many inquests are frequently of worse than negative value.

A CORFIOTE LAZZARETTO.

SANITARY prejudice dies hard. Quarantine, in spite of wounds that ought to have been mortal, survives in full force along the Mediterranean seaboard, and, if it ever receive the *coup de grâce*, it will be from the conviction that as a preventive it is worse than the disease. Opinion, in this sense, is rapidly developing, and even finding voice. A correspondent writes from Corfu: "For five days I have been in the lazzaretto here, and I feel it my duty to send you a line for the benefit of such persons as may be contemplating a voyage to Greece. The eleven days required by the regulation to be spent here will be found far worse than in any prison. Not only is the building itself in a dangerously tumble-down condition, but the rain, the rats, the lizards, and every variety of insect have the run of the rooms, while the food is bad and the cooking worse. In the lazzaretto we have no physician. Once a day it is whispered that the doctor has been and has returned to Corfu; but few see him, and I am among the majority who find him conspicuous by his absence. One official only, the director, M. Milziade Capozzari, is courtesy itself; but pleasant manners and soothing words do nothing to make this lazzaretto life endurable, where every requisite for comfort and even health is wanting." Similar testimony as to the horrors of Mediterranean lazzarettos has already come from Italy and Spain.

THE UTILISATION OF TOWN REFUSE.

A CORRESPONDENT, writing in *The Times* of Tuesday last, comments on the difficulties with which Londoners have to contend on account of the want of system in cleansing London streets and removal of house refuse. He gives a detailed account of the Glasgow method, by which house ashes are placed upon the street in buckets, pails, boxes, or other receptacles, between the hours of 8 P.M. and 9 A.M. The whole of this matter is removed every night, and in case of the houseowner having omitted to give the dustman this opportunity, a second collection is made in the morning. Men accompanying the cart are instructed to sweep up any dust that is spilt, and during the night the streets are carefully swept, and the refuse removed in the morning round. This refuse, he states, is then deposited without the town, whence it is subsequently removed for manuring the land. It has, indeed, sufficient monetary value to warrant farmers purchasing it at rates which not only pay the cost of carriage, but make a considerable return for the cost of collection. It is a question whether the agricultural districts surrounding London would be sufficient in extent

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to utilise the immense quantity of refuse which the metropolis daily produces; probably some means would have to be provided by which its destruction can be effected, especially at those seasons of the year when farmers would have no need for it. The longer distances it would have to be carried would add largely to the expense, and probably the adoption of the Glasgow method would not solve the problem in a financial sense. Nevertheless, the gain to London health of a daily collection of house dust would warrant a considerable sacrifice if this could be ensured; but it is too much to hope it will be seriously attempted until some reconstruction of sanitary administration has placed the metropolis upon a level with other towns.

THE WATER-SUPPLY TO EAST LONDON.

THE East London Waterworks Company are certainly unfortunate. Past events have not won for them any great reputation for carefulness, and now we learn that the local board of West Ham are engaged in trying to trace the cause of several severe cases of illness in the district which are stated to have been caused by tainted water. Dead eels, it appears, have been found in the pipes in High-street, Carpenter's-road, and other districts of Canning Town, and thus the inhabitants must have been drinking water tainted with putrid matter from these decaying animals. It is important to learn how, with any proper filtration worth the name, eels can pass into the supply-pipes to houses. Doubtless this will be inquired into by the directors of the company, but the conclusion is certainly suggested that sufficient care is not taken to protect drinking water from impurities. If eels can thus make their appearance in the mains, there is too much reason for fearing that matter of smaller size, but more injurious in its effects upon health, can follow the same course; and it will be interesting to note what account is given by the official examiner of the analysis of the water of this company during this period.

THE SANITARY STATE OF BATLEY.

THIS Yorkshire cloth-manufacturing town has been visited by Dr. Barry in connexion with the general survey which the Local Government have inaugurated as regards places that were suspected of containing conditions favourable to the development and spread of imported cholera. Although an excellent water-service is available, this district has progressed but little in other matters; and it is especially noteworthy that although the authority's attention has for some ten years past been prominently called to the evils connected with their neglected system of midden-privies, those structures are still found in a state which must be a cause of grave nuisance and risk to health. Dr. Barry's strong comments on the subject met with a reception that gives some hope that the subject will soon be energetically dealt with.

CHEAP MORTAR.

MUCH attention has recently been devoted to the materials used in the construction of dwelling-houses, but it will be a new fact to many that mortar is made from sediment taken from London sewers. The bye-laws of the Metropolitan Board of Works do not distinctly specify the materials of which mortar shall consist; hence it is no easy matter for district surveyors to control, even if they desire to do so, the actions of builders in this respect. The Bermondsey vestry were informed at the last meeting that certain houses in the course of construction in Long-lane were being built with mortar composed of sediment taken from the sewers and which, curiously enough, had been sold to the builder by the contractor of the Metropolitan Board of Works. The sewer deposit is washed by firms who carry on a trade by extracting from it valuable products. Probably much difficulty will be encountered in preventing the use of this material, and doubtless good will result if the Metropolitan Board are compelled to alter their bye-law for this purpose. The excellent mortar which the Manchester corporation obtain from the destruction of house refuse is sufficient proof that London could provide herself with equally good material if she would adopt the same system of destruction and assist at the same time in the solution of the vexed question of the disposal of this matter. Corporation mortar in Manchester and other towns has, to a large extent, superseded that obtained from other sources.

THE MELBOURNE HOSPITAL.

IT is high time that the authorities at Melbourne took steps to supply the city with a new hospital. The latest advices inform us that the present building, always unsuitable, has become so unhealthy that cases of erysipelas and pyæmia are alarmingly frequent; and that, in spite of the full adoption of antiseptic surgery, one of the surgeons (Mr. Fitzgerald) has declined, except in cases of urgent need, to operate any more in this building, and lately sent a patient back to Sydney rather than allow him to risk his life by submitting to an operation in Melbourne. It would seem that the erection of a new hospital is delayed mainly in consequence of the difficulties attending the selection of a site. The University Council refuse to have one erected—where, indeed, one would think it would be most advantageous—in the vicinity of the medical school of the University. But such a refusal is of a piece with the action reported by us last week, and seems to show that the Melbourne University authorities hardly comprehend the importance of a good clinical education. But whether on University ground or not, a site must be speedily found. It is a reproach to a city of upwards of 300,000 inhabitants, which boasts of the magnificence of its public buildings, that it should be provided with a hospital in which a surgeon dare not operate lest his patient should die of blood-poisoning.

"HIGH" FOOD.

THERE are "high" and "high" in the matter of the ripeness or fitness of flesh foods. We are not disposed to follow the speculative theorists who hypothecate ptomaines and "bacilli of living germs"—whatever that phrase may mean—as the effective causes of gastric and general irritation following the eating of "high game or old cheese." These speculations may be justifiable, but it is easier to suppose that something very similar to the disturbing effect of ferments or fermenting material in the case of new or *sick* wines may be produced by meat which is undergoing special varieties of decomposition. It is certain, as a matter of observation, that sometimes—under conditions not easily defined—the flesh of game will "go wrong" in the process of becoming "high"; and, without presenting any special characteristic discoverable by the aid of the microscope, irritate the stomach and produce even formidable disturbances. It would appear that the occurrence of this error in the maturing process is rather due to the influence of particular states of the atmosphere acting upon the tissues undergoing metamorphic processes, and more closely related to the condition of hydration than to that of oxygenation. We do not sufficiently appreciate the part which hydration, or dehydration, plays in the chemico-vital processes of tissue change. Water is a more important agent than simple oxygen in the changes which take place in organised matter, whether living or dead, as it is the more important factor in metabolism generally.

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THE FRENCH ACADEMY OF MEDICINE PRIZES FOR 1887.

THE arrangements for the prizes offered by the French Academy of Medicine for competition during 1887 are as follows:—The Academy Prize (1000 francs): "Vaginal Hysterectomy, the Indications and Operative Procedures." The Argenteuil Prize (10,000 francs; this prize, which is sexennial, will be awarded to the author of the most notable improvement in measures for the cure of urethral strictures or to the author of the best work on the treatment of other diseases of the urinary passages. The Barbier Prize (2000 francs) will be given to the discoverer of the most efficient means of curing diseases considered incurable, such as rabies, cancer, cholera, &c. "Encouragements" may be accorded to those who come nearest to attaining the object without actually accomplishing it. The Henri Buignet Prize (1500 francs) is for the best written or printed work on the applications of physics or chemistry to medicine. Foreigners are not allowed to compete for this prize. The Capuron Prize (1000 francs): "Post-partum Involution, the Changes and Pathological States which result." The Civrieux Prize (1000 francs): "Vesical Neuralgias." The Daudet Prize (1000 francs): "Actinomycocis." Authors must present original observations made in France. The Desportes Prize (1200 francs), for the best work on Practical Medical Therapeutics. The Ernest Godard Prize (1000 francs), for the best work on External Pathology. The Hygiene of Infancy Prize (1000 francs): "A Clinical Study of Athrepsia." The Laval Prize (1000 francs), for the most meritorious medical student. The Lefèvre Prize (2000 francs): "On Melancholia." The Auguste Monbinne Prize (1500 francs) is a fund to be expended for scientific missions, &c. The Portal Prize (600 francs): "On Primary Renal Tuberculosis." The Saint-Lager Prize (1500 francs), for experiments to produce goitre in animals by administering substances extracted from the water or earth of goitrous regions. The prize will not be awarded unless the experiments have been successfully repeated by the Academy's commission. The Vernois Prize (800 francs), for the best work on hygiene. Competing essays for all these prizes must be sent to the Academy before May 1st, 1887, written in French or Latin, accompanied by a sealed envelope and a device to identify the author. The condition of concealment of the author's name does not apply to competitors for the Argenteuil, Barbier, Buignet, Desportes, Godard, Monbinne, and Vernois prizes.

NEW MEASURES AFFECTING HOUSE-BOATS.

THE campaign we opened against the pollution of the Thames by house-boats and steam launches has already led to a practical result. A bye-law has been drawn up empowering the exaction of a penalty for defiling the Thames, and is only waiting to receive the approval of Her Majesty in Council. Armed with this new enactment the Thames Conservators will be able to prevent the draining of house-boats or launches directly into the water. This is a decided step forward, but it does not suffice to make a new regulation; proper means for its enforcement must at once be organised. Every existing house-boat or launch should be inspected, and structural alterations made which will prevent the draining into the Thames. Then, again, on special occasions, such as the Henley Regatta, a scavenger boat should be provided. On the other hand, as all these new services will occasion some cost and may involve an increase in the number of persons in the employ of the authorities concerned, we cannot agree with Lord Randolph Churchill in considering it inexpedient to impose a special tax on these boats. There are taxes for men-servants, for armorial bearings, &c. &c. Such taxes commend themselves to the general approbation, as only touching those who can well afford to pay. A house-boat is equally an object of luxury, and if these pleasure contrivances involve extra outlay on the part of the community, it is only fair they should bear this expense. Feeling that good sanitation must necessitate some financial sacrifice, it is in the name of sanitation we regret extra means have not been found to defray the cost of extra work. Nevertheless, it is satisfactory to note that our protests have been well received, and are likely to bring about, and without further delay, at least a partial amelioration.

A SPANIARD ON THE BRIGHTON MEETING.

IN some letters to the leading Spanish medical journal, *El Siglo Médico*, Dr. S. Buisen gives an account of the gathering of the British Medical Association at Brighton, more from the social than from the scientific point of view. He compares the Dome to the theatre in the Alhambra, though, as he says, the former is much the larger. The Pavilion also pleased him, though, like other people, he could not help criticising its extraordinary style or styles of architecture. However, both buildings were splendid (*grandiosos*), but "it is well known how the English do these things." The excursions and the hospitality, too, were not thrown away on our Spanish *confrère*, who appears thoroughly to have enjoyed himself. What seems to have struck him especially was that such a gathering of from 450 to 500 medical men should have been assembled, arranged for, and entertained, many of them with their families, without any hitch having occurred. He is quite aware that such bodies as the British Medical Association are not formed in a day, and that, much as he would like to see such an assembly of his brethren in "dear old Spain," it can hardly be expected on such a scale for a good many years to come. There can be no reason, however, why scientific practitioners in Spain—of whom, by the way, there is a greater number than most people are aware of—should not from the starting-point of some of the existing societies form a similar association.

THE POPE'S MODEL CHOLERA HOSPITAL IN ROME.

A CORRESPONDENT of the *Globe* gives an interesting account of the "model cholera hospital" which the Pope has caused to be erected in Rome for the accommodation of cholera patients in case of an epidemic. Contact with the outer world is carefully guarded against by grated windows, telephones, and by a revolving barrel with half its circumference open, by which provisions are taken into the hospital. The water-supply is drawn from a well, and is quite separate from the city supply. The drain is formed of an iron tube sixteen inches in diameter, the joints being hermetically sealed with lead. There is a disinfecting boiler in which corrosive sublimate is placed. There is a room called the "chamber of observation," which has a staircase leading up to the first floor. In this room dead bodies are placed for a given time, as it is well known that cholera patients often show signs of being quite dead when really only apparently so. The room is, by means of an electric apparatus, in communication with the director's office. The body being laid on a bed, both hands are put into a sort of copper muff; between the hands is put an instrument so sensitive that, should there be the slightest movement of the hands or any other part of the body, this instrument would instantly close the electric circuit, and the bell in the director's office would be set ringing; at the same moment another instrument registers the number corresponding to the bed upon which the body is lying. The chamber is warmed by steam so as to facilitate resuscitation. The laboratory is provided with a gasometer for the storage of oxygen, which is taken to

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the wards for administration in gas bags. On the ground floor are four wards for doubtful cases; should they get worse they are sent up in the lift to the cholera wards above, their clothes and bed-linen being immediately burned. Another room is set apart for women in childbirth, and there are two more for undressing patients, so that the infected clothes may be destroyed, the Pope furnishing new clothing for all recovered cases. The cubic space allowed for each bed is thirty-six cubic metres. The ventilation is carried on by means of funnels with gas jets below. The chapel is in communication with the sacristy of St. Peter's, so as to form an easy access for the Pope should he wish to visit the hospital; but before returning into the sacristy his Holiness and suite would have to go into a room near it for disinfection. In the event of there being more cases than the hospital can hold, provision has been made for building large sheds in the garden. This hospital was begun in October, 1884, and finished in April, 1885. When the cholera was raging with such violence in Naples, Leo XIII. determined upon making preparations should the scourge visit Rome. It has never been necessary to use it, but it is always ready in the event of an outbreak, and should prove of much use in extirpating it.

THE DOCTOR'S FEE IN CASES OF SUICIDE.

THE case of a would-be suicide refusing to pay the doctor who has saved his life, which was mentioned in our "Northern Counties Notes" of last week, is matched by an incident which occurred in Berlin, and which is just now going the round of the German medical journals, concerning a man who went into a beershop and poisoned himself there. The landlord despatched his daughter for a doctor, who did what he could for the man and sent him to the hospital. When he recovered he refused to pay the doctor on the ground that he had not desired his services. The police, too, declined to settle the account, as also did the landlord, though it amounted only to the modest sum of four shillings. The Berlin Medical Defence Society then took the matter up and sued the landlord, who, in turn, was defended by the Publicans' Society, and though the matter has now been in litigation for more than four years, the doctor, instead of getting his four shillings, has had to pay the costs, which to us, considering the circumstances, appear little enough, being only £2 7*s.* 3*d.*, yet nevertheless too much good money to throw after bad.

STATISTICS OF CEREBRAL TUMOURS.

AN instructive piece of statistical work has been contributed to the current number of Guy's Hospital Reports by Dr. Hale White, on the cause, operative treatment, mode of death, and general symptoms of 100 cases of cerebral tumour collected from the post-mortem records of Guy's Hospital. Ninety-nine of the cases occurred during the years 1872-84, both inclusive; the total number of necropsies was 5850, or about 450 a year, which gives 1 tumour of the brain for every 59 that come into the post-mortem theatre. Of the 100 cases, the growth was tubercular in 45, gliomatous in 24, sarcomatous in 10, carcinomatous in 5, gliosarcomatous in 2, cystic in 4, gummatous in 5, lymphomatous in 1, myxomatous in 1, and of doubtful nature in 3; 34 of the tubercular cases occurred in the male sex. There is much useful information in the paper, but the chief drift of the investigation was to ascertain, as far as possible, how many cases could have been treated surgically after the fashion of recent times. The conclusion was arrived at that only 3 of the tuberculous cases could have been benefited by operation, that at the outside 6, and probably only 4, of the gliomata, 1 only of the sarcomata, none either of the carcinomata or of the gliosarcomata, perhaps 2 of the cysts, the myxoma, but not the lymphoma, and 2 of the doubtful cases. Therefore, of the whole number of cases 10 might certainly have been operated upon, and probably 14. It will not be forgotten that before this number could have been treated surgically it would have been necessary to diagnose the seat of the tumour, even so late in the case as shortly before the death of the patient would suffice, whilst, of course, earlier in their histories many others might have been operated on with good prospect of success.

THE HEALTH OF VICTORIA.

ACCORDING to the last report of the Central Board of Health of Victoria, that colony has to face an evil which it has cost this country many millions to overcome, even to the limited extent to which it has been dealt with. We refer to the pollution of streams. Complaint is made in the report that there is no sufficient power to deal with the steadily increasing pollution of streams by animals and by trade refuse. In the same paragraph dealing with this subject, the question of the filtration of potable waters is discussed, and there seems a tendency to put greater trust in filters than is justified in the present state of our knowledge of the relation of organisms to disease in the human subject. Whilst filtration has its value, it should never be relied on as capable of removing the specific poison of such a disease as enteric fever from a potable water. Enteric fever is practically endemic in Melbourne, and with the first quarter of the year an outbreak may generally be looked for. It is most probably connected to an important extent at least—with the contamination of water-supplies that are used for human consumption.

PROFESSIONAL THIEVES AND DOCTORS' HOUSES.

IT is well known that the houses of medical men offer too many facilities for the operations of professional beggars and thieves. It is not so well known how much trouble it gives them to bring the law to bear on such characters. *The Times* reported a few days ago the case of William Thomas, aged eighty, who had called at the house of Dr. Bateman, Longridge-road, Earl's-court, under the pretence of being a friend of a sister in India. He was admitted, and at one stage left in the room alone, from which he took a hypodermic syringe. Thomas and his methods have long been well known to the Society for repressing Mendicity. But he has been only three times convicted in well-nigh forty years. On this occasion Dr. Bateman had to attend in court on four or five successive days before the case was heard. It may now be hoped that Thomas's active criminal career is over. But the moral of such cases is to be more chary of leaving strangers alone in doctors' houses.

HOW TO EXTINGUISH COMMON PARAFFIN LAMPS.

WE say extinguishing *common* paraffin lamps advisedly, because all the better sorts are provided with a special apparatus for covering up the flame. It is wrong, perhaps dangerous, to blow down the chimney, and it is possibly little, if at all, less dangerous to turn the wick down suddenly. The best plan is to blow not down the chimney, but across the flame at the base of the chimney through the perforated wick chamber, and, of course, always in the direction of the slit through which the wick rises. A very little puff will suffice, and there is no danger in the act, because the flame is not driven down into the oil chamber but simply blown off the wick horizontally. Care must always be taken to blow in the direction of the slit, or a great deal of breath may be wasted in vain.

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A BIRMINGHAM CORONER ON HOSPITALS.

SOME words are reported by the *Birmingham Daily Gazette* as used by the coroner in reference to hospitals which require explanation. At an inquest on an illegitimate child, which had been taken to a hospital, and not to a doctor, the coroner said, "these hospitals are curses instead of being a blessing, and I wonder people subscribe to them." Surely our contemporary has unintentionally misreported the coroner, or the coroner has spoken in haste. In this particular case it is probable that a doctor should have been consulted; but if a coroner allowed his disapproval of conduct in a particular case to lead him to such a deliverance on hospitals, he owes it to himself and to them to correct his hasty judgment by one more in accordance with the general sense of mankind.

FOREIGN PROFESSORIAL APPOINTMENTS.

Lille (Faculté Mixte). — M. Baudry, Agrégé of the Medical Faculties, has been appointed Professor of External Pathology.

Lyons (Faculté Mixte).—M. Fouchier has been appointed Professor of Clinical Obstetrics.

Montpellier (Faculté de Médecine).—M. Chalot, Agrégé of the Medical Faculties, has been appointed Professor of External Pathology. M. Sarda has been appointed Chief of the Medical Clinic, M. Diffre Chief of the Clinic for Diseases of Old Age, and M. Breton Chief of the Children's Clinic.

Strasburg.—Dr. Götte of Rostock has been nominated to the Professorship of Zoology.

Havana.—The chair of Pharmacy has become vacant by the death of Dr. Don Manuel Vargus Machuca.

THE Islington Board of Guardians have addressed a letter to the Local Government Board calling attention to the very inadequate accommodation provided by the Metropolitan Asylums Board for lunatic children, and at the next meeting of the Asylums Board an endeavour is to be made to induce the managers to utilise the Winchmore-hill Hospital for the purpose. This hospital was erected at an enormous cost, but has been disused for some time, and is accounted a very suitable place for the accommodation of imbecile cases, until the new wings now in course of erection at the asylum at Darenth have been completed.

THE *London Gazette* of the 21st inst. contains the texts of orders issued by the Privy Council relating to anthrax and rabies. The orders, which are applicable to England and Wales and Scotland, take effect on the 1st prox., and contain regulations respecting the duties of the police on receiving notice of the existence of either of the diseases, the public warning of such existence, the regulations of the local authority as to movement of the diseased animals and as to cleansing and disinfection, the obligations on owners, the destruction of the infected animals, and the disposal of the carcases.

WE much regret to record the death of Dr. Samuel Woodman, the trusted adviser of the late Sir Moses Montefiore, and a local physician of considerable reputation. About a month ago, the deceased proceeded to the Continent with the intention of visiting Switzerland, but at Nuremburg he contracted typhoid fever and returned at once to Ramsgate to die.

THE literature of medicine has just been enriched by the publication, under the Padre Checcucci's editorship, of the "Letters, Scientific and Familiar, of Francesco Puccinotti," whose great "History of Medicine" is a classic among his countrymen, and whose work in medical jurisprudence and in the etiology of epidemics is of European reputation.

THE great Congress of the Pharmacists of Italy, which but for the cholera would have been held two years ago, will now meet at Turin on the 4th of October next. Among the subjects on the discussion list are the new code of public health, the modifications to be effected in the university curriculum so as to admit of all pharmacists having an academic qualification, the prevention of abuses, and other means of elevating the standard of the profession. The directing committee has spared no pains for the accommodation of visitors, native and foreign.

AT a meeting of the Perthshire Medical Association on September 10th, specially called for the purpose of considering the representation of the profession in Scotland in the Medical Council, it was unanimously agreed to recommend the candidature of Dr. Sinclair, of Dundee, to the members of the Association.

MR. CROOKSHANK'S Practical Bacteriology has been published in French by M. Carré of Paris. It represents the English edition, revised, and augmented by an appendix of thirty pages upon Photomicrography, illustrated with four photomicrographs, reproduced by autotype in special colours, and woodcuts.

THE Governor of the Isle of Man has, it is reported, informed the members of the medical profession who reside under his jurisdiction that the fee of £1 1*s*. for a post-mortem examination by order of the coroner will in future be reduced to 10*s*.

DR. SYMES THOMPSON has chosen as his subject of the Gresham Lectures this year the Infectious Diseases of Childhood. The course will extend from Oct. 5th to the 8th inclusive.

THE Duke of Westminster, K. G., has consented to accept the office of president of the London Temperance Hospital, in the room of the late Mr. Samuel Morley.

THE Russian Consul in Kashgar reports that the epidemic which has broken out there is typhus, and not cholera, as at first believed.

THE Harveian Oration will be delivered by Dr. Pavy at the Royal College of Physicians on Monday, October 18th, at 4 P.M.

THE SANITARY CONGRESS AT YORK.

THE proceedings in connexion with the ninth annual Congress of the Sanitary Institute of Great Britain and Ireland were opened on the 21st inst., at York. The members of the institute attended service at the Minster in the morning after which a formal reception by the Lord Mayor followed by a luncheon, was held. In the afternoon the Lord Mayor opened a Health Exhibition in connexion with the Congress. The exhibits are divided into five sections—(1) building materials, construction, and machinery; (2) water-supply and sewerage; (3) heating, lighting, and ventilation; (4) personal hygiene, foods, and disinfectants; and (5) miscellaneous. The Exhibition will remain open until the 16th prox.

In the evening the inaugural meeting of the Congress was held in the grand saloon of the Yorkshire Institute, where there was a large attendance to hear Sir T. Spencer Wells deliver his presidential address, an abstract of which we publish in another column.

On the 22nd inst., Professor F. de Chaumont, the chairman of the section of Sanitary Science and Preventive Medicine, gave an address, in which he treated of the germ theory of disease. A paper on the Economy of Cremation

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was then read by Mr. W. Eassie, and Mr. W. Robinson followed with a paper on Beauty and Health *versus* Horror and Decay in our Cemeteries. Sir T. Spencer Wells opened the discussion, and expressed his approval of cremation. Several other members having spoken, Mr. Eassie replied, and the Conference adjourned.

In the afternoon, the Congress was resolved into a conference of medical officers of health. The following papers were read:—The Tenure of Office and Appointment of Medical Officers of Health, by Dr. R. Bruce Low; the Notification of Infectious Diseases, by Dr. Edward Seaton; Organisation and Administration for the Control of Infectious Diseases, by Mr. F. J. Sykes; and Hospitals for Infectious Cases—should they be Free or a Charge made for Maintenance? by Mr. Francis Vacher. A brief discussion followed the reading of these papers.

In connexion with the Health Exhibition, of which mention has previously been made, medals were awarded, amongst other exhibitors, to the following: to Dr. Jaeger's Sanitary Woollen System, London, for sanitary clothing; to Messrs. Ward and Co., Bradford, for sanitary clothing; and to the Doeker Hospitals and Huts Factory, London, for portable hospital. Certificates of exhibits for which medals had been previously given were awarded to F. C. Calvert and Co., Manchester, for disinfecting carbolic acid; W. Lyon, London, for steam disinfector; Morrell's Sanitary Appliance Company, Manchester, for portable cinder-shifting ash-closet; and Moule's Earth-closet Company, London, for earth-closet.

SANITARY IMPROVEMENTS IN NEWCASTLE-ON-TYNE.

TWELVE years have elapsed since THE LANCET Sanitary Commissioners paid their visit to Newcastle-on-Tyne, when collecting materials for their Report on the "Health of Operatives engaged in Chemical Manufactories." At the time our Commissioners were conducting their inquiries in the town and neighbourhood, Newcastle was passing through a severe crisis. The death-rate had risen to an unprecedented height, caused chiefly by an extremely fatal epidemic of scarlet fever, but also by the prevalence of other diseases, such as erysipelas, low forms of pneumonia, &c., attributable to defective sanitation. So deplorable was the state of things that the Local Government Board had sent down an inspector to make a special report on the condition of the town, and it will be remembered that Dr. Gwynne Harries, who was the gentleman appointed to conduct the inquiry, succumbed to scarlet fever, contracted shortly after his arrival at Newcastle. Under such circumstances it was natural that our Commissioners should interest themselves in the sanitary condition of the town, though the original inquiry was limited to the influence of certain occupations upon the health of the operatives engaged. Under the guidance, therefore, of Mr. H. Armstrong, the then recently appointed officer of health, they made themselves acquainted with the chief features of the case and most of the existing evils, and truly these were most discouraging, and sufficient to dishearten those who were then setting to work to remedy past neglect and to construct plans for permanent sanitary improvement. During the past fourteen years, however, the sanitary progress has been very great, and the old town of Newcastle may be spoken of as almost a new city. Over £220,000 have been expended by the Corporation in effecting the necessary improvements. Of this, £69,000 have been spent in dealing with insanitary dwellings under the Local Improvement Acts, and £20,000 for the erection of a new hospital for infectious diseases, exclusive of the cost for land. Baths and washhouses have cost £45,000, whilst no less than £85,000 have been expended on parks and open spaces. In addition to this, the town is now abundantly supplied with water, which is much above the quality of the old supply, and it is now proposed to deliver this water by tap on each landing of every tenement dwelling in the city. In 1884 a house-to-house visitation resulted in the issue of upwards of 12,000 notices for defects of various kinds, nearly all of which were remedied satisfactorily. Owing, no doubt, to the improvement of the tenement property, there is very little overcrowding of rooms; thus, out of 13,329 tenements in the city, there were only 362 instances in which the cubic space per person was less than 300 cubic feet each. The system of refuse removal has been much improved, the old privy middens are being abolished in favour of waterclosets, and the ordinary day refuse and ashes are now for the most part removed twice a week in tubs—a system which might well be tried in London. But, above all, the Corporation of Newcastle deserve the greatest credit for their energy in providing in the most complete manner, accommodation for coping with infectious diseases. In 1882 they obtained the power for the notification of such diseases, and the operation of this has been highly advantageous, since many outbreaks have been dealt with at their inception. At the present time ninety beds afford accommodation for small-pox and fever cases, and this, when the new hospital which was in course of erection is completed, will be brought up to 132 beds. In addition to this, the Port Sanitary Authority will shortly have a floating hospital for the isolation of infectious cases brought to the town by the river. The success that has been obtained at Newcastle in the sanitary campaign is, no doubt, in great measure due to the untiring zeal and energy of the health officer, Mr. H. Armstrong, but his efforts would have been of little avail—as we have had sad examples elsewhere—but for the hearty co-operation of the people of Newcastle and their representatives in the Corporation. Much money has been expended, no doubt, but it has been well spent, not frittered away; and Newcastle, with its new water-supply, good tenements, magnificent baths and washhouses, and its extensive and beautiful parks, can show an example to any town in the kingdom.

PRIZES AND SCHOLARSHIPS IN THE METROPOLITAN MEDICAL SCHOOLS.

THE following is a list of the Scholarships and Principal Prizes gained at the various Metropolitan Schools of Medicine during the session 1885-86:—

ST. BARTHOLOMEW'S HOSPITAL.—Lawrence Scholarship and Gold Medal: H. Davidson. Brackenbury Medical Scholarship: H. J. Tylden. Brackenbury Surgical Scholarship: A. Lyndon. Senior Scholarship in Anatomy, Physiology, and Chemistry: G. Heaton. Open Scholarships in Science: H. R. Jones, J. Kerr, and C. R. Stevens. Preliminary Scientific Exhibition: E. J. P. Olive. Jeaffreson Exhibition: J. Williamson. Kirkes Gold Medal: W. N. Hamer. Hichens Prize: F. S. Locke and F. S. J. Lulham. Wix Prize: Magnus Olaf Manson. Harvey Prize: B. Pierce. Junior Practical Anatomy (Treasurer's Prize): G. L. Rolleston. Senior Practical Anatomy (Foster Prize): B. Pierce. Junior Scholarships: G. L. Rolleston, W. M. A. Eccles, and W. F. Oakshott.

CHARING-CROSS HOSPITAL.—Llewellyn Scholarship, Certificate, and £25, J. G. Victor Sapp. Golding Scholarship, Certificate, and £15: P. J. Duncan. Governor's Clinical Gold Medal: Ernest A. Snape. The Pereira Prize, Certificate, and £5: G. O. Richards and Ernest A. Snape (equal). Senior Anatomy—Silver Medal: A. E. Baker. Junior Anatomy—Bronze Medal: Charles Gibbs. Senior Physiology—Silver Medal: P. J. Duncan. Physiology—Silver Medal: J. F. Colyer. Practical Physiology—Silver Medal: B. F. Jackson. Chemistry—Silver Medal: Charles Gibbs. Practical Chemistry—Silver Medal: Charles Gibbs. Medicine—Silver Medal: J. G. Victor Sapp. Practical Medicine—Silver Medal: J. G. Victor Sapp. Surgery—Silver Medal: J. G. Victor Sapp. Practical Surgery (Prize, a Minor Surgery Operating Case): G. O. Richards; Silver Medal: J. G. Victor Sapp. Botany—Silver Medal: P. J. Duncan. Materia Medica—Silver Medal: P. J. Duncan. Midwifery—Silver Medal: J. S. W. Chitty. Forensic Medicine—Silver Medal: J. S. W. Chitty. Pathology—Silver Medal: J. G. H. Carter. Dental Surgery—First Prize, Certificate, and £6 6*s.*: F. M. Ludbrook; Second Prize, Certificate, and £4 4*s.*: J. F. Colyer.

ST. GEORGE'S HOSPITAL.—Scholarship, value £125, open to sons of medical men: James McEnery. William Brown Exhibition, £100 per annum, tenable for two years: Arthur Heygate Vernon. Brackenbury Prize in Medicine: William Lee Dickinson. Brackenbury Prize in Surgery: Henry Goodale. Treasurer's Prize: William Lee Dickinson. Thompson Medal: Humphrey Wheeler. Sir Benjamin Brodie's Prize in Clinical Surgery: Henry Goodale. Acland Prize in Clinical Medicine: William Lee Dickinson. Henry Charles Johnson Memorial Prize in Anatomy: Cyril Ogle.

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Pollock Prize in Physiology: Cyril Ogle. Sir Charles Clarke's Prize for Good Conduct: Hugh Lawson. First-year Proficiency Prize: Lionel William Seymour. Second-year Proficiency Prize: William Marshall Davidson. Third-year Proficiency Prize: Ernest Le Cronier Lancaster.

GUY'S HOSPITAL.—Treasurer's Gold Medal for Clinical Medicine: John Wychenford Washbourn. Treasurer's Gold Medal for Clinical Surgery: Frédéric François Burghard. Gurney-Hoare Prize for Clinical Study: Richard Moody Ward. Beaney Prize for Pathology: John Wychenford Washbourn. Mackenzie Bacon Prize for Ophthalmoscopy: Sidney Wacher. Mackenzie Bacon Prize for Nervous Diseases: Edward Wilberforce Goodall. Burdett Prize for Hygiene: William Henry Bowes. Sands Cox Scholarship: Alfred Parkin. Michael Harris Prize for Anatomy: Alfred Parkin and Robert Devereux Mothersole (equal). Fourth-year Students: Frédéric François Burghard, first prize; Francis Stanhope Hawkins, second prize. Third-year Students: Arthur Edward Poolman, first prize; Ernest Henry Starling, second prize. Second-year Students: Alfred Parkin, first prize; Robert Devereux Mothersole, second prize. First-year Students: Frederick William Hall, prize (£50).

KING'S COLLEGE.—Winter Session.—Anatomy: Thomas Boswell Beach. Physiology: Peyton Todd Bowman Beales. Chemistry: Herbert Stanley Ballance. Comparative Anatomy: John Henry Leonard. Surgical Clinical (Professor Wood): Charles Drinkwater. Surgical Clinical (Professor Lister): Arthur E. Hensley. Medicine: Philip Henry Hensley and Jeremiah Penney (equal). Surgery: Charles Drinkwater. Clinical Medicine: Francis William Jollye. Summer Session.—Practical Physiology: James John N. Merris. Practical Biology: Hamilton Ashley Ballance. Botany: Arthur Robert Savell. Forsenic Medicine: Robert James Carter. Obstetric Medicine: Robert James Carter. Materia Medica: Richard Tanner Hewlett.

LONDON HOSPITAL.—Entrance Science Scholarships for proficiency in the subjects required for the Preliminary Scientific M.B. Examination at the University of London. £60 Scholarship: D. Brown. £40 Scholarship: J. N. Collins. Buxton Scholarships for proficiency in the subjects required for the preliminary examinations—£30 Scholarship: T. Jones. £20 Scholarship: Y. H. Mills. Clinical Medicine—£20 Scholarship: G. C. W. Wright. Clinical Surgery—£20 Scholarship: H. G. Lys. Clinical Obstetrics—£20 Scholarship: L. C. E. Calthrop. Letheby Prize for proficiency in Chemistry—£30: J. S. Hicks. Anatomy and Physiology—£20 Scholarship: D. Brown. Dressers' Prizes for zeal, efficiency, and knowledge of minor surgery—£15 Prize: O. M. Jones. £5 Prize: W. H. Coates.

ST. MARY'S HOSPITAL.—Scholarships in Natural Science of £60 each: G. A. Simmons and G. Watson. Scholarships in Natural Science of £50 each: C. E. Lansdowne, H. A. Caley, and W. Low. Scholarship of 50 guineas for students from Epsom College: J. J. Knox. Exhibitions in Natural Science, of £30 each: A. R. Chater and H. F. Mantell. Scholarship in Pathology: J. J. Clarke, W. Williams, and S. A. Tidey. Summer Session, 1885, second year—Midwifery: J. T. Bays. Medical Jurisprudence: J. T. Bays. First year—Materia Medica: F. W. Lewitt. Botany: F. W. Lewitt. Practical Chemistry: F. W. Lewitt, A. Hickley, P. J. Kingston, and W. S. Sharpe (all four equal). Winter Session, 1885-86, third year—Medicine: H. C. Barr and H. S. Collier (equal). Surgery: H. S. Collier. Practical Surgery: H. S. Collier. Pathology: H. F. Collier. Third and fourth years—Clinical Medicine: E. Callender and H. C. Phillips (equal). Clinical Surgery: H. C. Barr and G. Spear (equal). Ophthalmology: E. Evans and J. J. Clarke. Second year—Anatomy: A. Lewers. Physiology: F. W. Lewitt. First year—Anatomy: A. E. Shaw, first prize; G. Watson, second prize. Physiology: H. A. Caley, first prize; A. E. Shaw, second prize. Chemistry: G. A. Simmons. Special prizes for first-year students for proficiency in Anatomy, Histology, Materia Medica, and Chemistry: F. W. Lewitt. For second-year students for proficiency in Anatomy, Physiology, Midwifery, and Medical Jurisprudence: J. T. Bays. For third-year students for proficiency in Medicine, Surgery, Pathology, and Operative Surgery: W. Holloway.

MIDDLESEX HOSPITAL.—Broderip Scholarships for the best examination at the bedside and in the post-mortem room: First, W. G. Nash; second, W. B. Cockill. Governor's Prize: E. E. Lewis. Hetley Prize: W. B. Cockill. Murray Medal and Scholarship: W. G. Nash. Exhibition in Anatomy: First year: J. K. Clarke; Lyell Medal, E. T. Larkham. Class Prizes—Medicine, W. G. Nash. Surgery: Kershaw. Practical Medicine: W. G. Nash. Practical Surgery: H. Baldwin. Anatomy: J. A. Hutton. Dissections: C. E. Bennett. Physiology: J. K. Couch and T. H. Clarke. Chemistry: C. H. Fazan. Midwifery: E. E. Lewis. Forensic Medicine: J. E. Hancock. Pathological Anatomy: W. H. Vickery. Materia Medica: H. A. Daniel. Practical Chemistry: H. A. Daniel and C. H. Fazan (equal). Botany: C. H. Fazan. Practical Physiology: H. A. Daniel. Comparative Anatomy: Mr. Strong. Entrance Scholarships: First, R. A. Earle; second, F. A. Wagstaff. Summer Entrance Scholarship: F. Harsant.

ST. THOMAS'S HOSPITAL.—Summer Session, 1885.—First-year Students: F. C. Abbott, College Prize, £15, and Certificate; T. P. Cowen, College Prize, £10, and Certificate. Second-year Students: Charles Henry Eccles, College Prize, £15, and Certificate; E. Webster and E. H. Wright (equal), College Prize, £10, and Certificate. Third-year Students: S. W. Wheaton, College Prize, £15, and Certificate; and H. J. Macevoy, College Prize, £10, and Certificates (equal). Winter Session, 1885-86.—Entrance Science Scholarships: A. F. Stabb, Scholarship, £100, and Certificate; S. G. Toller, Scholarship, £60, and Certificate. First-year Students: A. F. Stabb, the William Tite Scholarship, £30, and Certificate; A. C. Lankester, College Prize, £20, and Certificate; C. B. Box, College Prize, £10, and Certificate. Second-year Students: F. C. Abbott, the Peacock Scholarship, 40 guineas, and Certificate; T. P. Cowen, College Prize, £20, and Certificate; H. G. Turney, College Prize, £10, and Certificate. Third-year Students: C. H. Eccles, College Prize, £20, and Certificate; E. Hobhouse, College Prize, £15, and Certificate: F. Fawssett, second tenure of the Musgrave Scholarship of 40 guineas, with College Prize, £10, and Certificate. The Solly Medal and Prize of £25: E. Solly. Practical Medicine: S. W. Wheaton, the Mead Medal; H. J. Macevoy, a Bronze Medal. Surgery and Surgical Anatomy: J. H. Tonking. Cheselden Medal: L. A. Bidwell. For general proficiency and good conduct, H. J. Smith, the Treasurer's Gold Medal.

UNIVERSITY COLLEGE.—Entrance Exhibitions: £100, T. L. Pennell; £60, S. B. Mitra; £40, J. J. Macnamara. Atchison Scholarship (£45 per annum for two years): H. H. Brown and S. E. Holder (equal). Atkinson-Morley Scholarship (£45 per annum for three years): R. Johnson. Bruce Medal: H. H. Brown. Winter Session—Surgery: Gold Medal, H. H. Brown; Silver Medals (equal), E. R. St. Corbin and S. E. Hodder. Physiology: Senior Class, Gold Medals (equal), H. M. Fernando and J. L. Firth; Junior Class, Silver Medal, C. A. Kent. Anatomy: Gold Medal, G. B. M. White; First Silver, H. M. Evans; Second Silver, W. W. H. Tate. Junior Class, Silver Medal, L. E. Hill. Medicine: Gold Medal, G. E. Rennie; Silver Medals (equal), K. N. Bahadhurji and W. P. May. Practical Surgery: Erichsen Prize, E. R. St. C. Corbin. Practical Chemistry: Gold Medal, H. A. Eccles; First Silver, H. Tilley; Second Silver, A. Vaughan. Pathological Anatomy: Practical course, Tuke Medal, S. E. Holder. Clinical Medicine: Senior Class, Fellowes Gold Medals, Sydney E. Holder; Silver, J. J. Lister and F. S. Toogood (equal); Junior Class, Fellowes Silver Medal, C. W. Jecks. Clinical Dental Surgery: Prize, E. R. St. C. Corbin. Summer Session—Medical Jurisprudence—Gold Medal, E. R. St. Clair Corbin. Chemistry: Gold Medal, M. L. Dutta; First Silver, S. H. Collins; Second Silver, M. L. Agarwala. Practical Chemistry: Senior Class, Gold Medal, H. M. Fernando; Silver Medal, J. P. Parkinson. Organic Chemistry: Silver Medal, O. K. Williamson. Zoology and Comparative Anatomy: Gold Medal, H. Tilley; First Silver, A. C. Stevenson; Second Silver, Florence C. Longbottom. Materia Medica: Gold Medal, E. O. Turner; Silver Medals, R. W. Boyce and H. M. Fernando (equal). Midwifery: Senior Class, Gold Medal, S. E. Holder; Silver Medal, K. N. Bahadhurji. Junior Class, Silver Medal, H. P. Dean. Pathological Anatomy: Filliter Exhibition of £30, G. Rennie; Silver Medal, H. P. Dean. Physiology: Histology and Practical Histology—Gold Medal, S. H. Snell; Silver Medal, D. Brown. Ophthalmic Medicine and Surgery: Silver Medal, G. E. Rennie. Hygiene: Silver Medal and Prize, T. S. Short. Clinical Medicine: Fellowes Gold Medal, W. H. Blake; Fellowes Silver Medal, K. N. Bahadhurji. Junior Class: Fellowes Silver Medal, Harold Dane.

WESTMINSTER HOSPITAL.—Entrance Exhibitions, £80: F. B. Grove and S. P. Matthews (equal). £40 (summer): Alfred T. Coleman. Treasurer's Prize for Winter subjects: L. Lewis. President's Prize for Second-year subjects: J. R. Plant. Class Prizes, Winter Session—Anatomy: J. R. Plant. Physiology: J. R. Plant. Histology: J. R. Plant. Chemistry:

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L. Lewis and E. J. Pritchard (equal). Medicine: H. B. Brackenbury. Surgery: C. Burt. Summer session—Forensic Medicine and Toxicology: C. S. Vines. Midwifery: C. Burt. Pathology: J. R. Plant. Practical Chemistry: A. T. Coleman. Botany: A. T. Coleman. Histology: P. Templeton. Materia Medica: E. J. Pritchard.

DENTAL HOSPITAL OF LONDON.—Saunders Scholarship: H. Williams. Winter Session—Mechanical Dentistry: First Prize, H. J. Moore; Second Prize, H. Williams. Metallurgy: First Prize, H. Williams; Second Prize, F. M. Ludbrook. Operating Prize: J. F. Colyer. Summer Session—Dental Anatomy: First Prize, H. Williams; Second Prize, J. Moore. Dental Surgery: First Prize, A. E. Baker; Second Prize, F. M. Ludbrook. Ash's Prize: A. T. Croucher. Students' Society's Prize: C. A. Barstow.

NATIONAL DENTAL HOSPITAL COLLEGE.—Rymer Medal: Albert Jones. Dental Anatomy: Albert Jones. Dental Mechanics: E. C. Fisk. Dental Surgery: R. J. Lovitt. Operative Dental Surgery: E. C. Fisk. Dental Materia Medica: J. Lankester. Mechanical Work: C. B. Phillips. Students' Society Prize: C. A. Pattinson.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Birmingham Urban District.—The quarterly report for the period ending July 3rd last shows that the sanitary work of the health department continues to be vigorously prosecuted. Dr. Alfred Hill reports that over five thousand notices for the abatement of nuisances were issued, and that 1126 infected articles were dealt with at the disinfecting station. One small-pox patient and 98 cases of scarlet fever were isolated in one or other of the borough infectious hospitals.

Nottingham Urban District.—After paying a well-merited tribute to Dr. Seaton, his predecessor in the office of health officer, Dr. Whitelegge gives the population of the borough during 1885 as 211,424, with a birth-rate of 34·5 and a death-rate of 18·2 per 1000 living, the death-rate being the lowest on record. The death-rate from the so-called seven principal zymotic diseases was 2·2 per 1000, the average for the preceding seven years having been 3·4. Pointing to a reduction which has been steadily taking place in the scarlet-fever mortality, Dr. Whitelegge reminds his authority that one of the results of this reduction is that the number of protected survivors is becoming less and less. Epidemics of this disease are certain to recur, and the next one in Nottingham will find a much larger number of susceptible persons than during the past few years, the available material in which the epidemic will work being added to year by year by births. Hence it is that during the intermissions sanitary authorities should prepare in advance the means of staving off epidemics. Referring to the compulsory notification of infectious diseases, it is stated that this principle has now been adopted by thirty-nine English communities. In Nottingham it is shown that one principal result attained has been a reduction in the ratio of deaths to known cases, and this is significantly shown in a tabular form. The decline in the deaths commences with the commencement of compulsory notification; the decline is continuous, and it has reached a point considerably below the usual level of non-epidemic years. As regards scarlet fever, the diminution is greater than that which has obtained throughout the country generally, and it has been markedly constant in the notified diseases, whilst it has not taken place as regards other infectious diseases. And this result, it is contended, has been brought about by means of the improved sanitary administration and control of infection which has become possible by reason of it; and amongst other things it is pointed out that notification has led to disinfection being now a reality. It is also stated that the system has caused no disturbance of the relations between medical men and their patients, nor has it led to concealment of disease and the employment of unqualified practitioners, as was anticipated by some. An important improvement is reported as regards the hospital for infectious diseases, a large site having been obtained for the erection of an entirely new permanent set of buildings. The pail-system of excrement removal has reached an important position in Nottingham; 1100 new ones were provided in 1885, raising the total number of these substitutes for the old midden-privy to no less than 32,786. This form of closet is said only to fail where the habits of the people are utterly degraded.

Sheffield Urban District.—In common with a majority of the towns and districts of England, Sheffield had an exceptionally low death-rate last year—namely, one of 20·6 per 1000; and it is pointed out that, had the rate for the previous ten years remained in operation, no less than 887 more lives would have been sacrificed. But Dr. Sinclair White very properly warns his authority against claiming that the reduction is entirely due to sanitary reforms effected in the condition of the borough. The population in 1885 is estimated at 305,870, the birth-rate being 35·1 per 1000, and the deaths under one year of age amounting to 163·8 per 1000 registered births. One of the most interesting parts of the report relates to the mortality amongst those occupied in the various local trades, the idea of placing this on permanent record being evidently taken from Dr. Ogle's report to the Registrar-General. As yet, of course, the record is limited to one year, but when the tables have been prepared for a series of years they will certainly furnish valuable data on this subject. The summary amount of action taken to stay the spread of infectious diseases shows that there has been considerable activity in this matter, and Sheffield may be congratulated on having at least a very valuable instalment of permanent hospital provision, and in carrying out with energy the work of disinfection. The canal boats, slaughter-houses, common lodging-houses, offensive trades, dairies, &c., are kept under supervision, and an account is given of the work undertaken in the departments dealing with the adulteration of food and drugs, and with smoke abatement. Adverting to a special report on lead-poisoning by water, which we noticed last week, and to the fact that the danger of such poisoning was done away with by allowing the water to pass over broken lime-stone, Dr. White refers to the desirability of maintaining some such action as will diminish the scarcity of lime-salts in the water, such scarcity favouring the rickety deformities which are numerous in the town.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 5775 births and 3942 deaths were registered during the week ending Sept. 18th. The annual death-rate in these towns, which had steadily increased in the preceding five weeks from 18·9 to 22·6, was again 22·6 last week. During the first eleven weeks of the current quarter the death-rate in these towns averaged 20·3 per 1000, and was 1·1 below the mean rate in the corresponding periods of the ten years 1876-85. The lowest rates in these towns last week were 14·9 in Bristol, 15·3 in Derby, 17·1 in Huddersfield, and 17·6 in London. The rates in the other towns ranged upwards to 33·8 in Salford, 36·0 in Portsmouth, 39·6 in Preston, and 40·8 in Norwich. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had increased in the previous five weeks from 717 to 1199, were last week 1132; they included 925 from diarrhœa (exclusive of 26 attributed to simple cholera), 58 from "fever" (principally enteric), 49 from whooping-cough, 43 from scarlet fever, 82 from measles, 25 from diphtheria, and not one from small-pox. The lowest death-rates from these zymotic diseases were recorded last week in Bristol, London, and Derby; and the highest in Hull, Portsmouth, and Norwich. Diarrhœa caused the highest death-rates in Bolton, Portsmouth, Sunderland, Hull, and Norwich; "fever" in Cardiff and Portsmouth; scarlet fever in Birkenhead; Salford, and Blackburn; whooping-cough in Oldham; and measles in Nottingham. The 25 deaths from diphtheria included 13 in London, 3 in Birmingham, 3 in Liverpool, and 2 in Manchester. Small-pox caused no death in London and its outer ring, or in the twenty-seven large provincial towns. Only one small-pox patient was under treatment in the metropolitan asylum hospitals situated in and around London on Saturday last. The deaths referred to diseases of the respiratory organs in London, which had been 160, 128, and 110 in the preceding three weeks, rose last week to 168, but were 14 below the corrected average. The causes of 63, or 1·6 per cent., of the deaths in the twenty-eight towns last week were not certified either

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by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Leeds, Portsmouth, Brighton, Preston, and in four smaller towns. The largest proportions of uncertified deaths were registered in Oldham and Liverpool.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 17·7, 19·4, and 20·6 per 1000 in the preceding three weeks, declined again to 18·8 during the week ending September 18th; this rate was 3·8 below the mean rate during the same week in the twenty-eight English towns. The rates in the Scotch towns last week ranged from 11·8 and 13·9 in Greenock and Edinburgh, to 20·8 in Paisley and 24·1 in Glasgow. The 465 deaths in the eight towns last week showed a decrease of 43 from the number in the previous week, and included 45 which were referred to diarrhœa, 11 to whooping-cough, 7 to scarlet fever, 6 to "fever" (typhus, enteric, or simple), 3 to diphtheria, 1 to measles, and not one to small-pox; in all, 73 deaths resulted from these principal zymotic diseases, against numbers increasing from 63 to 93 in the preceding five weeks. These 93 deaths were equal to an annual rate of 3·0 per 1000, which was 3·5 below the mean rate from the same diseases in the twenty-eight English towns. The deaths referred to diarrhœa, which had risen in the previous four weeks from 23 to 57, declined again last week to 45, of which 19 occurred in Glasgow, 8 in Dundee, and 5 in Paisley. The annual death-rate from diarrhœa in the eight Scotch towns last week did not average more than 1·8 per 1000, whereas the mean rate from the same cause in the twenty-eight English towns was 5·3. The fatal cases of whooping-cough, which had been 19, 10, and 20 in the preceding three weeks, declined again last week to 11, and included 6 in Glasgow and 2 in Edinburgh. The 7 deaths from scarlet fever corresponded with the number in the previous week, 6 being returned in Glasgow. The deaths referred to "fever," which had been 7 and 4 in the previous two weeks, were 6 last week, of which 3 occurred in Paisley and 2 in Glasgow. Two of the three fatal cases of diphtheria, and the fatal case of measles, were returned in Glasgow. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 56 and 72 in the previous two weeks, declined again last week to 65, and exceeded by but one the number in the corresponding week of last year. The causes of 60, or 13 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been 18·2, 26·2, and 25·9 per 1000 in the preceding three weeks, further rose to 27·5 in the week ending Sept. 18th. During the first eleven weeks of the current quarter the death-rate in the city averaged 21·7; the mean rate during the same period was 19·1 in London and 17·8 in Edinburgh. The 186 deaths in Dublin last week showed an increase of 11 upon the number in the previous week, and included 29 which were referred to diarrhœa, 5 to "fever" (typhus, enteric, or simple), 2 to scarlet fever, 2 to diphtheria, 1 to whooping-cough, and not one either to small-pox or measles. Thus 39 deaths resulted from the principal zymotic diseases, against 18, 22, and 38 in the preceding three weeks; they were equal to an annual rate of 5·8 per 1000, the rates from the same diseases last week being 3·1 in London and 1·4 in Edinburgh. The fatal cases of diarrhœa, which had been 9, 14, and 26 in the previous three weeks, further rose last week to 29, and exceeded the number in any previous week of this year. The 2 deaths from scarlet fever showed a decline of 5 from the number in the previous week, while the 5 from "fever" exceeded the number in the previous week by 1. Three inquest cases and 4 deaths from violence were registered; and 39, or more than one-fifth of the deaths, were recorded in public institutions. The deaths of infants showed a further considerable increase upon recent weekly numbers, while those of elderly persons had further declined. The causes of 33, or nearly 18 per cent., of the deaths registered during the week were not certified.

A HOMŒOPATH SUED BY A PHARMACIST.—A pharmacist has successfully sued a homœopathic doctor in Játiva, for illegally trenching upon his province by preparing and supplying medicines in the form of globules to his patients.

THE SERVICES.

INDIA OFFICE.—The Queen has approved of the retirement from the Service of the undermentioned officers of the Staff Corps and Indian Military Forces:—Brigade Surgeon James Browne, M.D., of the Bengal Medical Establishment, and Surgeon-Major Charles Robert George Parker, of the Madras Medical Establishment. The undermentioned officers have been granted a step of honorary rank on retirement:—Surgeon-Major Charles Robert Parker, of the Madras Medical Establishment, and Surgeon-Major Theophilus Bolton Wright Plunkett Johnston, of the Bombay Medical Establishment, to be Brigade Surgeons.

ADMIRALTY.—The following appointments have been made:—Staff Surgeon Wm. H. Colahan, to the *Canada;* Staff Surgeon Joseph Wood, to the *Assistance;* Staff Surgeon Anthony Gorham, to the *Shannon;* and Surgeon Patrick B. Handyside, to the *Canada.*

YEOMANRY CAVALRY.—Westmoreland and Cumberland: Surgeon and Honorary Surgeon-Major Joseph Wickham, M.D., the resignation of whose commission has already been announced, is permitted to retain his rank, and to wear the uniform of the regiment on his retirement.

Correspondence.

"Audi alteram partem."

DIRECT REPRESENTATION OF THE PROFESSION ON THE GENERAL MEDICAL COUNCIL.

To the Editor of THE LANCET.

SIR,—The great majority of our profession will agree with the opinion, given in the annotation in THE LANCET of Sept. 18th, that 343 responses cannot represent 17,000 practitioners, and that the meeting at Birmingham was a failure; and will also agree with the hope, expressed in that article, that the promoters will not seriously prosecute their well-intentioned labours.

Let me call attention to what took place at Birmingham. A meeting was called of a committee (self-constituted, and not in the least representative). Of the 343 members of that committee only thirty-two attended, and towards the end of the meeting only a few remained. It was then agreed to send the names of a number of the candidates to the whole committee, for each one to select three names, the three having the largest number of recommendations to be adopted by the committee. Now, Sir, in what way is that plan to recommend itself to the whole profession, each member of which is just as capable of forming a correct judgment on the merits of each candidate as is any one of the 343 who are not the elected representatives of the profession with power to select candidates? Looking at the matter from every point of view, is it not substituting a body of 343, self-constituted as a committee, for the whole 17,000 members of the profession? For my own part, I think the system of committees a wrong one. The profession now, for the first time, is given a direct representation on the Medical Council, and the Council will send out the names of all the candidates to the 17,000 electors, for them to return three of those candidates to represent them. The members of the medical profession for the first time form an electoral body, unequalled in education and intelligence by any other in the kingdom, and recourse to anything like the ordinary electioneering tactics will be simply an insult to the understanding of those composing that electorate. I ask is it seriously thought to be necessary for any committee to inform the 17,000 electors of the merits of the majority, if not the whole, of the candidates? Are they not thoroughly competent to decide each one for himself? The representation is intended to be direct. I ask, will it be direct if any committee, however influential or well-intentioned, should interfere between the candidates and the electorate?

I am, Sir, yours obediently,

Brighton, Sept. 18th, 1886. R. P. B. TAAFFE.

To the Editor of THE LANCET.

SIR,—After reading in THE LANCET an account of the meeting at Birmingham attended by only thirty-two members of the profession, I feel convinced that any choice of

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candidates made by that meeting, or emanating from it, will be disregarded by the large body of electors upon whom will devolve the great and important duty of sending representatives to the General Medical Council. The Birmingham meeting was evidently a distinct failure; let us hope, however, that it will have the effect of impressing the minds of the electors with the solemn responsibility devolving upon each of them individually to select the best men out of those who offer themselves as candidates. I should think there can be no difference of opinion as to the importance of voting for general practitioners exclusively as our representatives at the forthcoming election. We do not want consulting practitioners—they already form a majority in the Council. We have before us the names of three good candidates (general practitioners): Dr. Morris of Spalding, Dr. Glover of London, and Dr. Dolan of Halifax. Can we do better than return them as our representatives?

I am, Sir, yours faithfully,

Dover, Sept. 20th, 1886. JOHN MARSHALL, L.R.C.P. Lond.

THE HOSPITAL FOR WOMEN, LIVERPOOL.

To the Editor of THE LANCET.

SIR,—I have diligently compared the various reports, and I find all agree with *The Times* (August 9th) that counsel's query to Dr. Grimsdale was, "What is the mortality of these operations at the hospital?" There was no reference to the year 1885, and no reason for such limitation. The operation in every case he approved of abdominal section, and that all four died in consequence of their operations—three within twenty-four hours, and one after eight days. Dr. Grimsdale, therefore, must rank among "the disciples of modern abdominal surgery," with a death-rate in 1885 of 100 per cent.

Dr. Grimsdale treats the inquiry committee as if it were the pliant eject of his own consciousness, bound to agree with his views. But I think it will not ignore the series of cases I have sent in, nor the large number of specimens of diseased ovaries and tubes which I have forwarded. It is by pathology, and not by committee, that the question will have to be solved. I have already shown between thirty and forty specimens at the Medical Institution. Numerous others I have exhibited at branch meetings in Chester, Southport, Ashton-under-Lyne, and North Wales. I think I have demonstrated the pathology of all the uterine appendages I have removed for inflammatory disease, except perhaps a dozen, before some public meeting of the medical profession. Dr. Grimsdale says that the operation of removal of the uterine appendages is a valuable addition to surgery, but liable to abuse. He considers, in fact, that my selection of suitable cases is imperfect. I am willing to learn. He has several times recommended it in consultation, and the excision has been performed in our hospital. I am willing to assume that his cases have been suitable, and only ask that he will forward his specimens to the inquiry committee as a standard for comparison. If he refuse to do this, I will not pretend to believe that his objections to my practice are wholly scientific.—I am, Sir, yours fathfully,

No. on register.	Date of operation.	Age.	Disease.	Operation.	Recovered.	Died.	Abdominal section.
166	July 9th	39	Myoma: left hæmatosalpinx, right hydrocystic ovary	Removal of uterine appendages	R	—	A.S.
179	July 20th	30	Pelvic hæmatocele; peritonitis	Drainage	R	—	A.S.

was performed on the plaintiff, Mrs. Casey, in 1884, and she was the sixth case of pelvic hæmatocele I had treated by abdominal section. Dr. Grimsdale has not replied to my question why he excludes these six cases and a successful case of removal of uterine appendages for hæmatosalpinx in 1884 from his calculations. I have published five of them in detail. He saw the second on my list in consultation, and was present at the operation. The Annual Report for 1884 is in his possession. His reply is that I mystify, but I will not retort.

I regret to be obliged to correct the report of cases of pelvic hæmatocele and of hæmatosalpinx treated by abdominal section in 1885, which Dr. Grimsdale has forwarded to you. He has omitted the two cases given in the above table.

I have already said that cases of hæmatosalpinx ought not to be classed with cases of intraperitoneal hæmorrhages, for they are entirely different; but if he quotes two he ought to quote all. In the second case I removed several pints of putrid blood from the peritoneal cavity of a woman who was carried into hospital apparently in a dying condition and with a temperature of 104°. Because there was no need to remove her ovaries and tubes, Dr. Grimsdale refuses to include it among my cases. But his objection is against abdominal section, and he has informed our hospital committee that these cases are invariably cured by rest. As regards the single death registered in 1885, I can only repeat that it was from morbus cordis, and in no way due to the operation, from which she had completely recovered; and in confirmation of this statement I refer with confidence to Dr. A. Samuels, physician to the Hospital for Consumption, who attended her during my absence at Cardiff and signed the certificate of death.

Dr. Burton has had only one case of pelvic hæmatocele under his care, and I notice that he treated it by a method which is universally condemned by recent authorities. He says he cannot diagnose them. I reply that among all classes of pelvic disease there is none that can be more surely diagnosed, but the indications can only be learned by experience.

Dr. Grimsdale says in his letter of August 28th that, so far as he knows, there were only four "real" consultations in 1885. I have, however, shown our committee that many more were held. But it is a fact that Dr. Grimsdale was called in consultation four times by a colleague. It is also a fact that

Liverpool, Sept. 21st, 1886. FRANCIS IMLACH.

To the Editor of THE LANCET.

SIR,—Dr. Burton is neither entitled to speak for me, nor to say that I am unable to answer for myself. Though I have not yet, since my illness, returned to active practice, I am quite capable of following the discussion in your columns, and I desire, from my personal experience, to express my approval of Dr. Imlach's method of treatment of pelvic hæmatocele. I am, Sir, yours faithfully,

R. J. LUPTON,
Acting Medical Officer, Hospital for Women.

Liverpool, Sept. 20th, 1886.

"SPAYING," OR REMOVAL OF THE UTERINE APPENDAGES?

To the Editor of THE LANCET.

SIR,—Mr. Lawson Tait's letter in your issue of Sept. 18th is chiefly occupied with his reply to your leader of Sept. 4th on the use of the term "spaying." His last paragraph he devotes to me, and in that portion of it in which he specially refers to my letter he gravely declares his opinion that it is just because the people understand this term "spaying" so well, and know what are its intentions and results on animals, that therefore no argument can be stronger against its use as a name for the corresponding operation in women—a *non sequitur* which is to me simply amazing. This popular knowledge of the word is, I consider, the convincing argument in its favour. I would ask, why should Mr. Tait write, as regards me, as he does in his letter of Sept. 18th, where he says, "I am not at all surprised at the row in Liverpool, and the unusual results brought about by it, now that we have an admission from Dr. Grimsdale of what he has been doing and saying." What the expression of my preference for the term "spaying" over Mr. Tait's phrase, with its unsound physiology, has to do with the row in Liverpool passes my comprehension. My arguments in favour of that term, it is true, may be, and probably are, weak as water in the esti-

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mation of Mr. Tait, but at least they satisfy me and many leaders in the profession. And why should Mr. Tait think a row in Liverpool a necessary consequence of this? Mr. Tait continues: "When I heard him say in the witness-box that 'ovariotomy did not necessarily include removal of the ovary,' I suspected he was living in an atmosphere of confusion; now I know he has created it." Mr. Tait will probably begin to suspect that it was he who at that particular time was living in an atmosphere of confusion, and clearly of his own creation, when I tell him I did not, either in the witness-box or elsewhere, say that "ovariotomy did not necessarily include removal of the ovary." I was not asked by counsel on either side any question relating to ovariotomy. Mr. Tait further says: "In his evidence, Dr. Grimsdale clearly threw blame on Dr. Imlach for performing operations without consultations." This I deny. I answered the questions of counsel as to consultations truthfully, as I presume Mr. Tait will admit I was bound to do; but while in the witness-box I threw no blame on Dr. Imlach. Mr. Tait goes on to say: "If Dr. Imlach did this (i.e., perform operations without consultations), then Dr. Grimsdale was clearly to blame for it. As consulting officer to the hospital, he could have insisted on consultations being held, and if they had been refused, his remedy lay in an appeal to the committee of the hospital by a complaint that an important law was broken and defied." Mr. Tait will be glad to learn that I anticipated his valuable suggestions, and that the admirable course of action laid down by him is precisely that which I adopted so long ago as the beginning of February in this year. The only difficulty is that up to this time the committee have not made up their minds how to act to enforce the law so broken and defied. Finally, Mr. Tait says: "Instead of this, he appealed to outside authority in such fashion as led to most discreditable proceedings." This is exactly what I did not do.

Truly, Mr. Tait's knowledge of Liverpool medical affairs is at present not altogether accurate. He had better change his correspondent.—I am, Sir, yours obediently,

Liverpool, Sept. 18th, 1886. THOMAS F. GRIMSDALE.

*** The correspondence on the above subject must now cease.—ED. L.

SUBPERITONEAL HÆMATOCELE.

To the Editor of THE LANCET.

SIR,—In common evidently with many other members of the profession, I was very much surprised at the statement of Mr. Lawson Tait, in giving evidence in a recent case, that "95 per cent. of cases of subperitoneal hæmatocele are fatal without operation," the operation indicated being removal of the "uterine apendages." My attention was attracted to the statement by the following circumstances:—A few weeks ago I requested Dr. Stirton, of this city, to see a case with which I was unwilling for certain reasons to be professionally associated. A tumour in the right iliac region was diagnosed, and there was some uncertainty as to its nature. With the view of elucidating matters, Dr. Stirton inserted a fine trocar and cannula of Dieulafoy's aspirator. A small quantity of blood oozed through the trocar, but it had all the characters of effused blood, and a subperitoneal hæmatocele was at once pronounced to exist. Aspiration was immediately proceeded with, and about twenty ounces of dark fetid blood were removed without difficulty. Rest being enforced, the patient passed about ten days in bed without a bad symptom. After that time she got up, and very soon resumed her household duties, to which she has been attending since without the slightest symptom of ill-health. Is it in such cases as this that Mr. Lawson Tait, and those who think with him, would proceed to the performance of so grave an operation as that of removal of the "uterine appendages"?

On referring to an admirable book which I have beside me ("Traité pratique des Maladies de l'Uterus et de ses Annexes,") by Nonat, I find the following opinions on this subject. "Peri-uterine hæmatocele terminates rarely in death." In referring to the terminations of hæmatocele, this authority points out how at the menstrual period the symptoms are aggravated; and a second cause of recrudescence is noted as arising from the process of absorption, which Dupuytren has compared to that of digestion. Left to itself, three methods of termination are noted: first, by absorption of the effused blood; second, by evacuation by either the rectum or the vagina; and thirdly, by effusion into the peritoneal cavity if the hæmatocele be subperitoneal. Fatal results rarely take place when by the second method the tumour is incompletely evacuated, and inflammatory phenomena and septicæmia ensue. The termination by effusion into the peritoneal cavity, while grave, is also maintained to be very rare. Hæmatocele may cause death, but according to Nonat that result is rare. In fifteen cases of undoubted hæmatocele which came under his observation but one resulted in death, and this was associated with tubal pregnancy. In suitable cases, Nonat is in favour of the treatment of hæmatocele by puncture. Now, if simple puncture (aspiration) of a hæmatocele gives such favourable results, surely the exigencies demanding the formidable operation of removal of the uterine appendages must be rare indeed. I am one of those who believe that a highly culpable amount of surgical interference with the uterus and its appendages obtains in these days, that many lives are sacrificed in this manner at the shrine of "brilliant surgery," and that the recent reprobation of such interference is justly merited. Of course all this is quite apart from sympathy for Dr. Imlach, as it must not be forgotten that it is a very simple matter for the most careful, the most skilful, and the most conscientious to become entangled in the meshes of the law.

I am, Sir, faithfully yours,

Glasgow, Sept. 4th, 1886. D. CAMPBELL BLACK.

NATURE AND TREATMENT OF FLAT-FOOT.

To the Editor of THE LANCET.

SIR,—Mr. Mayo Collier contends that because a movement forwards of the astragalus on the os calcis is impossible when the sole is resting on a horizontal surface, therefore the flattening of the foot is primarily due to an alteration in the position of the latter bone caused by raising the heel above the level of the sole, as is done by the conventional boot. While fully agreeing that the deformity is not due to laxity of the ligaments, I would point out some objections to his view of the cause and to the treatment, based on that view, which he proposes.

The astragalus does not in flat-foot move forwards so much as downwards and inwards. Prof. Humphry has described in THE LANCET of March 20th, 1886, a dissected specimen then before him. Moreover, take an ordinary case of incipient valgus, of weak ankles, as it is called—always to be easily found where children are,—and let the subject stand barefooted on a level surface, with the full weight of the body on one foot: then raise the anterior part by placing the hand beneath, or by any imitation of the sole which Mr. Collier describes; it will be seen that the deformity is not diminished. Now let the child spring on tiptoe; it will be seen that the arch is distinctly improved. Why? Because the heel is raised, and the body supported in that position, not only, as commonly stated, by the muscles acting on the heel, but also by the tibialis posticus, the long flexors, and the peronei. The tendons of these muscles can be felt as they start out behind either malleolus, and they are, in relation to the arch, as bow-strings to a bow: the ligaments are thus relieved of the heavy strain which the weight of the body would otherwise throw on them. It is by this agency that the arch of the foot is maintained in good walking.[1] By this agency, indeed, the arch, which hardly exists in infancy, is formed, and by it, and by it alone, can the structure in a satisfactory and permanent manner be restored.

I say, then, that as much vigorous but well-directed exercise as can be properly borne, and not "as much rest as possible," is the right treatment. The patient should when sitting, or better when lying, be directed to forcibly invert the foot, and flex the toes as much and as often as can be done; the surgeon or nurse should occasionally see how much resistance can be overcome in doing this. He (or, as is more likely, she) should learn as soon as possible to spring up on tiptoe, sustaining the position awhile and then gradually sinking on the heel, and should learn, if he must stand, to stand on the toes. To raise a weight by means of a cord running over pulleys is, for the purpose in view, of all exercises the best; the object is that the weight

[1] I discussed at length the Physiology of the Feet in an article in THE LANCET of June 28th, 1884.

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shall partly support the body as the latter rises to extreme tiptoe; then the toes *must* grip the ground for the downward pull. The inspiration, I may add, should go with the upward, the expiration with the downward, movement. The act of turning a wheel fixed so high that the handle can only be reached with difficulty when at the highest point of the circle is a similar exercise, and may be used with the same object. The patient should learn, as soon as may be, to walk with a springy gait, and then do it freely, avoiding fatigue. The toes should come to the ground the moment before the heel reaches it—this can only be done properly in boots without heels; the heel should then be vigorously raised with the onward movement, the toes firmly gripping the ground. Thus the very act of walking is made a means of cure. This, in my judgment, is the way to treat flat-foot, but to raise the anterior part by "a sole quite an inch thick, fining off to a line or two at the heel" would be to place the foot in a most unnatural position, and, by preventing the necessary bending at the metatarso-phalangeal joints, would be fatal alike to good walking and to the restoration of a lost plantar arch.

High heels to boots, bad as they are, and that for many reasons, do not necessarily tend to cause flat-foot, and only do so when the bowstring action of the flexors is arrested by the fixed position of the toes, as in pointed boots, or when the weight of the body is rested on the high heel. A French woman's idea of a high heel is not to use it. The observant Max O'Rell says that an English lady in walking bears on the heel, a French lady on the point of the toes;[2] and I have seen it gravely stated that French ladies practise walking with an indiarubber ball fitted with a squeak, and fixed, one under each heel, the object being to avoid making the sound which pressure on the ball would cause. They who habitually stand and walk on tiptoe will never be flat-footed. This, as Sir James Paget has told me in support of my views, was the dictum of a dancing master at Windsor he had known many years ago. I am sure that it is true.

As a protest against an operation described by Professor Ogston, I published in THE LANCET of Feb. 9th, 1884, an account of two extremely bad cases cured by muscular action which had then stood the test of ten years of active life, the condition being now still maintained. Of one, the result of direct violence, I am myself the subject; the other, an ordinary but very severe case caused by prolonged standing and supporting a heavy weight, could, and still may, be identified in London.

I do not say that Mr. Collier's own "novel departure in the treatment of flat-foot" is one of those inventions of which the fascination of novelty and not necessity is the mother (to still use his own words), but I do claim that a very stern necessity prompted my investigations. I had, after an accident in 1867, been for six years a cripple condemned to go about in constant discomfort, often in severe pain, compelled, excepting at short intervals, to wear a cumbrous apparatus, and found myself little, if any, better off at the end of the sixth than at the end of the first year, in spite of the best surgical advice and the best mechanical assistance. In despair at having again to go through the misery of bringing into something like comfort a renewed mechanical "boot," I boldly threw aside all apparatus, put in practice the principles which, as I had decided, ought to be sound, and in six months brought my foot into a condition never again to give serious trouble, soon becoming, and always remaining, practically as good as ever. This being so, I may, I think, be excused for once again insisting that the principles I have indicated are true, and the practice thereon founded important.

I am, Sir, yours faithfully,

Gloucester, September, 1886. T. S. ELLIS.

[2] "L'Anglaise marche les bras pendants, en appuyant sur les talons; la Française marche les bras pliés, en appuyant sur la pointe des pieds: c'est plus gracieux, mais moins commode."—*Les Filles de John Bull.*

THE EZRA HOSPITAL.—Sir Rivers Thompson last month laid the foundation-stone of a new hospital in Calcutta, to be called the Ezra Hospital, on a site near the present Medical College. The new institution is the gift of the widow of the late Mr. Ezra to the Jewish community, and is amply endowed with invested capital. It is specially intended for the reception of Jewish patients, and will, when completed, be under the control of the Principal of the Medical College.

THE REPORT OF THE PRESIDENT OF QUEEN'S COLLEGE, BELFAST.

(From our own Correspondent.)

THE annual report of the President of Queen's College, Belfast, for the session 1885-86 has just been printed. From it we learn that 131 students entered the College during the session, while the total number of students enrolled in each faculty was as follows: Arts, 205; Law, 12; Medicine, 244; School of Engineering, 16. Making allowance for 17 who attended in more than one department, the aggregate total of individual students was 460. It will be seen that the number of students in the Medical Faculty outnumbers the whole of those attending the other departments. Eight lady students attended classes in the Arts division, and the President expresses the hope that such changes may be made in the statutes as will open to students of either sex all scholarships, exhibitions, &c., in the Faculty of Arts, as is the law in the Royal University. The President urges very strongly the need of enlarged buildings and laboratories. The professors of chemistry, physics, natural history, anatomy, and physiology still complain of want of sufficient accommodation. Last year a small addition was made to the chemical laboratory; but even now there is not room for one-half the students in attendance; as a consequence the class has to be divided, and the professor has to repeat his lectures and demonstrations not unfrequently two or three times in the day. The progress of students is also seriously interfered with, for the laboratory should be open to them for practical work at all hours. In the departments of practical physiology and histology the laboratories, as the President reports, are much too small, and he hopes that an urgent application made to the Board of Works by Professor Redfern for some alterations which would secure additional space may be successful, and that before the commencement of next session the alterations he asks for may be made. Dr. Cunningham (the Professor of Natural History) has found it necessary to open a class in practical biology, but there is no room in the present building for a laboratory. Two rooms connected with the materia medica class-room were used, but they were unsuitable and much too small. A temporary arrangement has now been made by which the anatomical dissecting-room can be utilised for the purpose, as the class in practical biology does not open till after the close of the regular medical session. The total amount required for all these improvements is small, the estimate of the architect of the Board of Works, who prepared plans, being under £8000. It is to be hoped that the Government will see their way to grant this small sum. The great bulk of the students have entered the Royal University of Ireland, but it seems a hardship that it is necessary for from 300 to 400 young men to travel year after year to Dublin, thus entailing large additional expense, owing to the fact that the higher and all the honour examinations take place in Dublin; but, notwithstanding the difficulties with which they have to contend, the success of Queen's College students of Belfast at University examinations during the past year has been unprecedented. The President refers to the fact that at the opening of the summer session a Volunteer ambulance corps was organised by the medical students, and the College Council cordially approved of the movement and voted £50 towards the purchase of ambulance tents and stretchers. About 120 were enrolled, and they have for more than two months been regularly trained by a military instructor. Further, through the kindness of the military authorities, the corps accompanied the troops and practised ambulance work on field days.

NORTHERN COUNTIES NOTES.

(From our own Correspondent.)

NEWCASTLE JUBILEE EXHIBITION.

IT may not be known to some of your readers that we are about to have an exhibition of mining engineering and of the various industries in Newcastle. It will be on a very extensive scale, and it is proposed to have the opening on May 24th, 1887—it is to be hoped, under Royal auspices. Some idea of its extent may be gained from the statement

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that already 30,000 superficial feet of floor-space have been applied for. The contract for the building has also been let to an eminent contractor, and it is to be proceeded with at once. Under the head of "sanitary appliances," our active city medical officer of health, Mr. H. E. Armstrong, reported that the committee for this department had been divided into nine subsections to carry out the different plans; and that, so far as they had gone, they had done their work well. Models of hospitals will be a feature of this section, and the Tyne Port Sanitary Authority and the Newcastle Corporation had given Mr. Armstrong authority to provide models of the hospitals recently built by them; and it was fully expected that models of other hospitals in various parts of the country would be sent in, so that altogether the sanitary exhibits promise to be a leading feature.

AN ALTAR TO ÆSCULAPIUS AT SOUTH SHIELDS.

Mr. Gowans of South Shields, in his late address to the Northern Branch of the British Medical Association, refers to the interesting discovery of a Roman altar at South Shields, which is now to be seen in the public Library Museum there. It is believed to be older than any of the inscribed stones which have yet been discovered in South Shields, and bears the following inscription:—"D. ESCVLAP. P. VIBOLEIVS. SECVNDVS. ARAM. D.D.," which may be translated—"To the God Æsculapius, Publius Viboleius Secundus gave [this] altar as a gift." Mr. Gowans, in his address, very effectively turns this discovery to good account for South Shields—which is proverbially healthy, and owing to the public spirit of its inhabitants is growing in deserved repute as a health-resort—by remarking as to health visitors, "Already large numbers arrive, induced by the excellence and safety of the beach for bathing and the cheapness of living, &c. So history repeats itself, for as two thousand years ago pilgrims repaired hither to seek health at a shrine dedicated to Æsculapius, in a like manner they are arriving at the present day seeking similar benefits."

DEATH OF MR. T. J. TURNBULL, SURGEON, J.P., NORTH SHIELDS.

I regret to announce the death, on the 16th inst., of Mr. T. J. Turnbull, M.R.C.S., who was well known as an active practitioner in North Shields. Mr. Turnbull was a pupil of the late Sir John Fife, and was in his fifty-sixth year. Mr. Turnbull had a severe illness about two years ago, from which it was hoped he had fully recovered, but he never fully regained his former condition. In politics Mr. Turnbull was a Liberal, but he took little part in public affairs except as a member of the School Board. Mr. Turnbull's father was the proprietor, and I believe the originator, of the well-known "Turnbull's Shipping Register." His funeral took place on Saturday last, and his remains were followed to the grave by a large number of professional friends and mourning patients. He has left a widow and one child.

TESTIMONIAL TO MR. GAMMAGE OF SUNDERLAND.

Mr. Gammage, a highly esteemed general practitioner at Sunderland, having been compelled to relinquish practice in consequence of ill-health and increasing infirmity, it has been decided to present him with a testimonial of esteem. Influential committees of practitioners have been formed to further the object in Sunderland and Newcastle, and I hope to be able at a future time to record their success.

Newcastle-on-Tyne, Sept. 20th.

EDINBURGH.

(From our own Correspondent.)

DIRECT REPRESENTATION ON THE MEDICAL COUNCIL.

THE near approach of the election of a Direct Representative of the Profession in Scotland to the General Medical Council has awakened a good deal of interest in different localities throughout the country, and a number of candidates for the post are now in the field. This interest, chiefly manifested as it is in the foci of thickest population and of most obvious medical activity, illustrates two of the special characteristics of this country, true also to a great extent of England, and in both countries interfering seriously with an easy solution of the important question who the direct representative shall be. The first point is the entirely unorganised condition of the medical profession, making it well-nigh impossible for it to realise and to profit by its enfranchisement; the second is an outcome of the restricted intercommunication between different parts of the country that till lately obtained, and that has given rise to a system of isolated interests which cannot but make its influence felt here, as in so many other relations where the idea of clanship is still a most potent factor. Thus one finds, on looking at the list of Scottish candidates, the north, the east, and the west each represented by an able champion, any one of whom might well represent the medical interests of the whole country. Dr. Bruce of Dingwall, an Aberdeen graduate, and widely known and respected throughout the north, will doubtless secure numerous suffrages in the region of which Aberdeen is the medical metropolis. Coming south to Dundee, one finds Dr. Robert Sinclair in the field, the energetic secretary of the Forfarshire Medical Association, and, in the mind of that part of the profession which occupies the eastern provinces, pre-eminently the best man for the post. Passing westward to Glasgow, one comes to another still more numerous constituency, no less isolated in its views than the two preceding, and here enthusiastic efforts are in progress for the election of Dr. James Morton, well known for his contributions to operative and conservative surgery. If my view be correct, votes will be cast largely in reference to latitude and longitude. As yet no additional candidate has publicly entered into the contest, so that Edinburgh interests have not yet been specifically touched upon. It has, however, been mooted that Sir Douglas Maclagan might appear as a candidate who would prove acceptable to a very wide constituency, but as yet no such step has been taken. Nor is it likely that it will be, since a contested election can scarcely prove an attraction to one so long engaged in arduous effort, and so laden already with the weight of universal admiration and well-merited honours. But apart from this, the particular interests which Sir Douglas Maclagan could not but represent, were he chosen for the post, are provided with special means of representation under the clauses of the new Medical Act.

Edinburgh, Sept. 21st.

IRELAND.

(From our own Correspondent.)

DIRECT REPRESENTATION IN IRELAND.

THERE is little to chronicle in respect to the contest which will take place next November for a member to represent the medical practitioners of Ireland in the General Medical Council. There are some five candidates named as likely to come forward. It has been pointed out that it would be advisable that Dr. Jacob should intimate his intention of resigning the secretaryship of the Council of the Royal College of Surgeons if he be successful, but this he has refused to do, although it is very improbable that the Council would permit him to hold the two offices simultaneously. So far no committee, to my knowledge, has been appointed, as in the sister countries, to promote the election of the various candidates, nor is it at all probable that one will be constituted.

THE EPIDEMIC OF FEVER AT HARE ISLAND.

A second death has occurred—that of a nursing sister, who contracted typhus fever while in the discharge of her duties, and was admitted to Skibbereen Fever Hospital, where she died. The water-supply of the island, as was expected, is not all that can be desired, and last week, at a meeting of the Skibbereen guardians, a communication was received from an analyst in Cork, stating that two samples of water from Hare Island were found to be polluted and thoroughly unfit for use.

THE LATE SURGEON G. O'GRADY, A.M.D.

Last week the remains of Surgeon Goodwin O'Grady, Army Medical Department, were interred with full military honours in the military cemetery, Cork. The deceased officer was thirty-two years of age, and was the son of the late rector of Magourney. The firing party was comprised of 100 men of the Argyleshire Highlanders, General Stevenson commanding the Cork district; the principal members of the head-quarters' staff and other officers stationed in the garrison forming a portion of the funeral *cortège*.

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ATTACK ON DR. BUTLER, OF LIMERICK WORKHOUSE.

An attempt was made recently to stab Dr. Butler, one of the resident physicians attached to this workhouse, and last week his assailant was sentenced to two months' imprisonment.

An address has been presented to Dr. Jameson Dwyer, late resident physician of the Mullingar Asylum, on his promotion to the post of resident medical superintendent of the Cork District Lunatic Asylum.

Dublin, Sept. 21st.

MEDICAL NOTES IN PARLIAMENT.

Richmond Lunatic Asylum (Ireland).

In the House of Commons on the 16th inst., in answer to Mr. Corbet, Sir M. Hicks-Beach stated that there are in the Richmond Lunatic Asylum 1094 patients, of whom 907 are Catholics. There are five medical officers, one of whom is a Catholic, but the only appointment for which the Government is directly responsible is that of the resident medical superintendent.

The Medical Staff of the Post Office.

On the 18th inst. Mr. Pickersgill, in a lengthy speech, called attention to the conduct of the medical staff of the Post Office, which he alleged to be oppressive so far as the *employés* were concerned, and injurious to the public interests. Mr. Isaacson supported Mr. Pickersgill, and said that a spirit of dissatisfaction existed with regard to the manner in which the department in question is conducted. Mr. Raikes replied, and completely exonerated the officials from the charges of neglect which had been brought against them.

The Troops in Egypt.

On the 20th inst. Mr. W. H. Smith, replying to Mr. Buxton, stated that there was at the present time no abnormal sickness among the troops at Assouan. The number of troops in Egypt had, however, recently been considerably reduced, and it was hoped that it would be possible to effect a still further reduction very shortly.

Water Companies and the Public.

On the 23rd inst., in reply to Mr. Pickersgill, Mr. Ritchie stated that the report for the past year of Mr. F. M. Corner, medical officer to the Poplar Board of Works, respecting the stoppage of the water-supply to houses for non-payment of the rate, calls attention to a condition of affairs that urgently demanded a remedy. The Government had no power over the water companies, but he earnestly hoped that they would take care that the powers which they possessed by law were not exercised in such a manner as would be detrimental to the community and extremely hard upon the tenant. In his opinion, it was absolutely necessary that the law relating to the cutting off of water should be amended.

Metropolitan Asylums Board.

In reply to Mr. Rowlands, Mr. Ritchie stated that the Local Government Board had recently increased the number of elected members of the Metropolitan Asylums Board by nine. The change had been made in consequence of the great alterations which had occurred in the population and ratable value of the unions and parishes in the metropolis since the number of members was fixed in 1871, and the large additional duties which the managers had now to undertake as compared with those which devolved on them at that time. The present number of elected managers was 54, and of nominated managers 15.

The Belfast Hospital.

In reply to Mr. Sexton, Sir M. Hicks-Beach said that a deputation had waited upon the Lord Chancellor to urge the claim of the Belfast Hospital to a grant in consequence of the great access of patients during the late riots, but they did not give him information upon the precise points which he required. He could not at present recommend a grant for the ordinary service of the hospital, and although the number of patients treated on this particular occasion was numerous, it formed a very small proportion of the number of patients treated during the year. He fancied there was some arrangement under which payment was already made in regard to members of the constabulary and soldiers treated, but he would undertake to look into the matter from that point of view, and if there should be sufficient ground he certainly should recommend a grant for the services rendered.

Obituary.

JOSEPH SAMPSON GAMGEE, F.R.S. ED.

We regret to announce the death of this well-known surgeon, which took place at his residence in Birmingham on Saturday, the 18th inst. Five years ago Mr. Gamgee was laid by for some weeks with a serious attack of hæmaturia, which evidently left its mark upon his kidneys and his general health. He regained, however, a fair amount of strength, and was enabled to follow his ordinary avocations with apparently his usual vigour. Three weeks ago, while walking quickly along one of the streets at Dartmouth he slipped, and, falling, injured his hip. Though suffering acute pain, he was unwilling to admit that there was any grave damage, and under the careful superintendence of his two sons, he was brought home in a litter and placed in bed. Here for a fortnight he saw his patients and dictated his correspondence, at times even getting from his bed into an easy chair. At the end of this time, not being satisfied with his condition, he consented to have ether administered, and a more thorough examination made of his injury, the conclusion arrived at being that there was a fracture of the upper end of the right femur. Three days afterwards he became sick; the next day he vomited blood and had abdominal distension, and on the following day suppression of urine, death ensuing in the evening, with his intelligence unimpaired to almost the last moment.

Mr. Gamgee was born at Florence in 1828, and was consequently in his fifty-ninth year. The son of an eminent veterinary surgeon (still living in Edinburgh), at first he was destined for the same calling, but subsequently he became a student at University College and entered the medical profession, studying afterwards at Paris, Pavia, and Florence. During this course of education he gained that mastery of languages which in after-life adorned his career, and made him a facile exponent both of the writings and teachings of continental authors, especially French and Italian. This art also led to his appointment as corresponding member of several foreign learned societies, and gave him the opportunity of supplying abundant contributions to the literature of his profession from many sources. Exhibiting in his student days the promise of an exceptional and brilliant career, he became surgeon to the Queen's Hospital, Birmingham, in 1857, a post which he held until his illness in 1881, when he was appointed consulting surgeon.

Into the conduct of his duties at the Queen's Hospital he threw himself with intense zeal and activity, and in both the professional and administrative work laboured unceasingly to promote the reputation and welfare of the institution. The extension of the hospital and the origin of the Hospital Saturday collections were mainly owing to his influence and exertions, and in the details of these movements he gave valuable assistance and incessant labour. While president of the Medical Institute, by his unwearying devotion, he added largely to the library and the fund connected with it; and as president of the Birmingham Branch and Midland Medical Society he worked ardently in their respective interests. He lately pleaded eloquently for the members of the College of Surgeons in their efforts to obtain direct representation on the Council of the College, and always sought to impress the right of direct representation of the profession in various ways. As an author, his works on the Treatment of Fractures and on the Treatment of Wounds illustrate the clearness and precision of his writing. Various monographs—"Harvey and Cæsalpinus," "Vivisection and Human Surgery," "The Hospital Saturday Movement," &c.—testify to his literary power and ability. As a strenuous advocate of treating wounds by dry and infrequent dressing, rest and immobility, his teaching was expressed in a form which exhibits a wide knowledge of surgical literature and his complete mastery of fine and graceful writing. In addition to his being a prolific writer on surgical and professional subjects, Mr. Gamgee was an exceptionally eloquent and facile speaker. His presence at meetings and medical societies always commanded interest and received attention. Fluent and profuse in his command of language, dramatic in his manner of expression, he elaborated argument and poured forth criticism in a manner which carried his audience with him

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and evoked admiration. Enthusiastic to a degree in all he undertook, he championed his cause with a fervour which was refreshing and invigorating, while his power of observation and comprehensiveness gave him a grasp of his subject which almost compelled conviction.

Mr. Gamgee, though actuated always by a high public spirit, and in friendly relations with every leading man of the town, never took any active part in public affairs outside his profession, but was content to give his advice and counsel freely in all matters having a professional bearing. His intimate acquaintance with the working of the medical charities rendered his opinion valuable and sought after.

As a man of varied talents and extensive literary knowledge, as an eminent writer on surgical and allied topics, as a loyal citizen and generous friend, his absence will be conspicuous and difficult to fill. Mr. Gamgee leaves a widow and four children to mourn their loss.

We publish the following from a correspondent:—

Late on Saturday night, 18th inst., died J. Sampson Gamgee, passing away calmly, peacefully, and painlessly, after a very short illness. Let others who are qualified to do so speak of his professional career and attainments; I, who knew him rather intimately, ask a small space in your paper to speak of him as I knew him, at home and as a friend. He was, in every sense of the word a model, and most devoted husband and father; but here the child was only the father of the man, as our departed friend was a most devoted son to his parents. Where he made friendships they were deep and sincere attachments, and his repeated kind actions, not only in great but in little matters, will ever be held in grateful memory by those who enjoyed the rare privilege of his intimate acquaintance. No trouble was too great for him when he wanted to do a kind action. His wonderful gifts of language, feminine delicacy of touch, and perfect tact were such as fall to the lot of few men to possess. He was a man of deep and true religious feeling, which was intensified during and since the serious illness under which he suffered some five years ago. Among his favourite pieces of sacred poetry may be especially mentioned Psalm xxiii., and "Lead, kindly light, amid the encircling gloom." His genuine religion found expression in such acts of kindness and self-denial as could have no other source. His premature decease, in the ripe autumn-time of his splendid talents and matured experience, leaves a void in his circle of relatives and friends which will be bitterly felt and never again filled. It is more than probable that his disease may have been hastened considerably by the immense amount of brain and body work which he crowded into his useful life. He was always an enthusiastic student of his profession, and could not do either his lay or professional work by halves, on account of his innate earnestness of purpose. In conclusion, a very correct summing-up of his nature may be found in the words of one of his favourite authors: "Take him for all in all, we ne'er shall look upon his like again."

Medical News.

SOCIETY OF APOTHECARIES.—The following gentlemen passed their examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received certificates to practise, on Thursday, the 16th inst.:—

Doyle, Henry Martin, Melbourne, Victoria, Australia.
Moxon, Alban Henry, King-street, Great Yarmouth.
Walker, Fredk. Wm., Aldborough, near Darlington, Yorkshire.
White, Cresswell Fitzhert, Chippenham, Wiltshire.

The following gentlemen passed the Preliminary Examination in Arts on the 10th and 11th inst.:—

FIRST CLASS.—H. E. Cooper, C. B. Dale, A. C. Gask, W. F. E. Milton.

SECOND CLASS.—J. C. Bowden, B. H. Carpenter, L. V. Cooper, C. A. Coventon, T. S. Davies, F. Deas, J. M. Duncan, H. F. Haland, E. Flint, B. B. Ghose, S. F. St. D. Green, W. R. Grove, A. A. Hewer, W. C. Hinde, P. S. Kesteven, H. Meyrick-Jones, J. J. Mooney, F. H. O'Donel, F. E. Oram, W. C. Orme, A. W. Perry, E. W. Prentice, R. H. Reynolds, H. Sisson, L. G. E. Snead, S. L. J. Steggall, S. W. Sweetnam, J. G. Turner, R. S. Whitford, F. E. Withers, W. E. Wyborn.

ELEMENTARY MECHANICS ALONE.—C. W. Allen, L. S. Baines, W. Birkett, F. L. Charters, A. T. Collett, C. W. Crasweller, F. J. A. Dalton, C. T. W. Hirsch, H. A. Jullus, F. W. Kerkey, A. King, F. C. Lewis, H. W. Lyle, D. T. Maddock, N. Marder, M. C. O'Brien, F. O'Byrne, G. E. Page, H. L. Powys, G. F. C. Prance, H. Reeks, J. J. D. Richardson, F. C. Rundle, G. J. Rutherford, F. Scorer, J. H. B. Simons, M. K. Thomas, G. M. Y. Whittingham, C. H. Willis, J. J. Winn, E. Yonge.

A CONGRESS of Russian alienists will meet in October.

THE Winter Session of the Charterhouse Science and Art Schools will commence on Oct. 2nd.

A CONFERENCE of those interested in the care of idiots has just been held in Frankfort-on-the-Maine.

THE GERMAN MILITARY MEDICAL JOURNAL.—Staff Surgeon Dr. Lenhartz has been appointed editor of this Journal in place of Dr. Bruberger, recently deceased.

AT the Hammersmith Police-court, on the 21st inst., a Fulham butcher was fined £40 for exposing for sale joints of meat which were unfit for human food.

ON the 18th inst. a very successful demonstration was held in Plaistow on behalf of the proposed hospital for West Ham.

A HOSPITAL SUNDAY was inaugurated at Henley on the 11th inst., the proceeds of the collections being devoted to the Royal Berks Hospital.

THE GROCERS' COMPANY SCHOLARSHIPS.—Dr. G. Sims Woodhead, of Edinburgh, has been awarded one of the Research Scholarships offered by the Grocers' Company.

ALEXANDER KRAPOTKIN, a Russian biologist, physicist and astronomer, who was banished to Siberia in 1874, has recently shot himself in Tomsk.

THE students attending the Newcastle-on-Tyne Throat and Ear Hospital, the medical staff, and other friends have presented the Senior Surgeon, Richard Ellis, Esq., F.R.C.S. Edin., with a handsome silver claret-jug and salver, as a token of their esteem.

ENTERIC FEVER AT HINCKLY.—A serious outbreak of enteric fever is reported to have broken out at Hinckly, in Leicestershire, where a large number of people are suffering from the disease, and some have died. No fewer than sixty cases have been attended by one medical gentleman.

THE POLICE AND AMBULANCE WORK.—Arrangements have been made for the instruction of the Singapore Police Force by the local centre of the St. John Ambulance Association, the Government undertaking to defray two-thirds of the cost, and the centre the remaining third. Many Chinese are life or annual subscribers to this centre.

A WOMAN who recently applied for admission to the Richmond Workhouse, on being asked as usual to enter the bath, refused to do so, stating that she had not washed her body for nine years. On being informed that the rule could not be relaxed, the applicant decided to leave the house rather than submit.

SEASIDE CONVALESCENT HOME FOR WORKING-MEN.—At a meeting of the committee and friends of this institution on the 18th inst., it was stated that the Home has, since its establishment three years ago, afforded rest and shelter to over 1000 convalescents. For some months past it has been impossible to find room for the number of applicants, and the hope was expressed that at an early date it may be possible to considerably increase the accommodation afforded.

WOLVERHAMPTON AND STAFFORDSHIRE GENERAL HOSPITAL.—At the half-yearly meeting of the Governors of the Wolverhampton and Staffordshire General Hospital, held in the Medical Institute, Cleveland-road, on Tuesday, September 14th, the chairman, after the conclusion of the formal business of the meeting, on behalf of the subscribers, presented to Dr. Millington his portrait, and to Mrs. Millington a silver salver and a silver tea and coffee service. Dr. Millington, who is now one of the consulting physicians, had been honorary physician for thirty-two years, and his portrait will be placed in the board-room of the hospital.

PROPOSED IMPERIAL INSTITUTE.—In a letter to the Lord Mayor, the Prince of Wales has suggested, as a commemoration of the jubilee of Her Majesty's reign, the establishment of an institute which will represent the Arts, Manufactures, and Commerce of the Queen's Colonial and Indian Empire. The Lord Mayor has expressed his approval of the scheme, and a fund is to be opened at the Mansion House in furtherance of the project. It is anticipated that arrangements may be made whereby the more important collections now being exhibited at the Indian and Colonial Exhibition will be placed at the disposal of the proposed institution.

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Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

ADAMSON, JAMES, M.D.Glas., L.R.C.S.Ed., has been appointed Medical Officer for the Hetton-le-Hole District of the Houghton-le-Spring Union.

ALLNUTT, JOHN, L.R.C.P.Ed., M.R.C.S., has been appointed Medical Officer for the Seventh District of the Blything Union.

BERRY, EDMUND, L.K.Q.C.P.I., L.F.P.S.Glas., has been appointed Medical Officer for the Leyland District of the Chorley Union.

COTTERELL, EDWARD, L.R.C.P.Lond., M.R.C.S., has been appointed Medical Officer for the Stoke Lyne District of the Bicester Union.

CROSSE, WILLIAM HENRY, M.R.C.S., L.F.P.S.G., L.S.A., has been appointed Surgeon to the National African Company.

DIXON, GEORGE F., L.R.C.P.Ed., M.R.C.S., has been appointed Medical Officer for the Tyldesley District of the Leigh Union.

DIXON, WALTER, M.B., C.M.Ed., has been appointed Medical Officer for the Second Division of the Houghton District of the Dover Union.

DUNDAS, MORDAUNT G., M.R.C.S., L.S.A., has been appointed Medical Officer for the Fransham District of the Mitford and Launditch Union.

FOWLER, CHARLES O., L.R.C.P.Lond., M.R.C.S., has been appointed Medical Officer for the Second District of the Croydon Union.

WARWICK, F. J., M.B.Camb., M.R.C.S., has been appointed Medical Officer for the Shepperton District of the Staines Union.

WARWICK, PERCY, L.R.C.P.Lond., M.R.C.S., has been appointed Medical Officer for the Workhouse of the Blything Union.

Births, Marriages, and Deaths.

BIRTHS.

BARNES.—On the 19th ult., at St. George's, Bermuda, the wife of Surgeon H. J. Barnes, Army Medical Staff, of a son.

KIRKPATRICK.—On the 15th inst., at The Shrubbery, Canterbury, the wife of Hugh Cunningham Kirkpatrick, M.D., Surgeon Medical Staff, of a son.

LAWRIE.—On the 19th inst., at Greenhill, Weymouth, the wife of Macpherson Lawrie, M.D., of a daughter.

MARRIAGES.

CARTER—KELLY.—On the 15th inst., at the Parish Church, Rawdon, by the Rev. Reginald R. Kirby, Vicar of St. Matthew's, Chapel-Allerton, assisted by the Rev. T. Kelly, Vicar of Mapleton, Hull, uncle of the bride, and the Rev. Arthur Kelly, Curate of Wensley, brother of the bride, D'Arcy Bainbridge Carter, M.R.C.S., of Shipley, son of J. B. Carter, M.R.C.S., of Elm House, Chapel-Allerton, to Amy Georgiana, fourth daughter of the late Rev. W. Kelly, Vicar of Shipley.

DUNLOP—BEGBIE.—On the 8th July, at Loudoun, Dalby, Queensland, by the Rev. Dr. Nelson, grand-uncle of the bride, William Watson Dunlop, second son of John Dunlop, M.D., Glasgow, to Francis Dunlop, eldest daughter of Hugh Begbie, late of Edinburgh and Glasgow.

JAMES—DAVIS.—On the 15th inst., at the Parish Church, Killeagh, co. Cork, Charles Edward James, M.B., to Rebecca, eldest daughter of the late William Davis, Esq., of Killeagh House, Killeagh, co. Cork.

KENDALL—GATLEY.—On the 22nd inst., at St. Michael's, Folkestone, by the Rev. E. Husband, George Kendall, M.R.C.S., L.R.C.P.Lond., of Battle, to Ada Gatley, third daughter of the late James Clark Gatley, of Truro, Cornwall.

ORR—IHLER.—On the 16th inst., at St. James's Church, Belfast, Andrew Aylmer Orr, M.A., M.B.Oxon, to Matilda Amelia, youngest daughter of the late George James Ihler, of Rockfield, Gateacre, Liverpool.

SCOUGAL—HIRST.—On the 16th inst., at the Parish Church, New Mill, Yorks., by the Rev. H. J. Holmes, M.A., Vicar, Edward Fowler Scougal, M.B., C.M., Huddersfield, to Clara, younger daughter of the late Charles Hirst, of Birdsedge.

STEELL—DUNLOP.—On the 22nd inst., at St. Paul's, Withington, Manchester, by the Rev. Canon Lloyd, M.A., Vicar of Leesfield, Graham Steell, M.D., youngest son of Sir John Steell, Edinburgh, to Agnes Dunlop, eldest daughter of the late Rev. Thomas M'Kie Erskine, Renfrewshire.

DEATHS.

CLARKE.—On the 9th inst., at Bank House, Morley, near Leeds, Grace Marion, wife of J. C. Clarke, M.R.C.S., aged 46.

GAMGEE.—On the 18th inst., at his residence, Broad-street, Birmingham, after a short illness, Joseph Sampson Gamgee, M.R.C.S., F.R.S.B., in his 59th year.

HAYLE.—On the 17th inst., at The Crescent, Rochdale, Thomas Hayle, M.D., in his 78th year.

STEPHEN.—On the 11th inst., at Carlsbad, of cholehæmia, William H. G. Stephen, M.B., C.M.Ed., M.R.C.S.Lond., youngest son of the late William Stephen, Inchbroom, Morayshire, aged 24.

WHISH.—On the 12th inst., at Boulogne-sur-Mer, France, Martin Samuel Whish, M.R.C.S., L.S.A., aged 27.

WOODMAN.—On the 15th inst., at Ramsgate, Samuel Woodman, J.P., M.D., F.R.C.S., aged 45.

WOODS.—On the 15th inst., Everard Woods, L.K.Q.C.P. and L.M.I., of the Great House, Leyton, Essex, aged 26.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, September 23rd, 1886.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Sept. 17	30·29	E.	57	52	105	70	49	...	Hazy
,, 18	30·16	E.	57	53	106	71	48	...	Hazy
,, 19	29·99	E.	58	55	92	69	50	...	Overcast
,, 20	29·98	E.	55	52	96	64	52	...	Cloudy
,, 21	29·67	N.E.	58	56	92	67	54	...	Overcast
,, 22	29·76	E.	56	51	96	64	50	...	Cloudy
,, 23	30·06	N.E.	49	47	98	58	46	...	Hazy

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

We cannot undertake to return MSS. not used.

PRISON SURGEONS.

IN reply to correspondents who ask for information as to the mode in which appointments are obtained to the surgeoncy of prisons, we may say that application should be made to the Directors or Commissioners of Prisons, and the appointments are in the hands of the chairman, Sir Edmund Du Cane.

Belvedere Ivy.—The ordinary medical attendant should be consulted on the matter. We do not prescribe.

MEDICAL CLUBS AND FRIENDLY SOCIETIES.

To the Editor of THE LANCET.

SIR,—Industrial assurance companies and friendly societies are finding it a difficult matter to keep their business together now-a-days, and they have hit on a new expedient for securing and retaining members. Two companies to my knowledge are at present trying the experiment, which is as follows:—They are forming medical clubs in connexion with the insurance business, and offering the appointment of medical officer to the medical gentlemen who have a large club connexion in the several districts. The name of an insurance company sounds profitable, and in many cases the appointment is accepted—with what result? The doctor finds many of his private patients enticed into the new club (every member of which must, as a *sine qua non*, also become a member of the insurance company), and many of his club members transferred on the same conditions to the new club, and perhaps lost. In fact, the doctor is made an unconscious lever with which to raise insurance business.

I hope medical men will accept this warning.

I am, Sir, yours faithfully,

September, 1886. NOVUS HOMO.

"MASSACRE OF THE INNOCENTS."

To the Editor of THE LANCET.

SIR,—With reference to an annotation in your last issue (p. 547), headed as above, the only wonder to me is that more massacres are not brought to light, considering how easily the public obtain poison. At the commencement of the present month a mother brought one out of six of her children, all suffering from ringworm, to me. On my inquiry as to what she had done for it, she said she had painted it night and morning with a solution of corrosive sublimate, six grains to the ounce, which a chemist she knew had supplied her with without signing her name. This is only one of several cases that have been under my notice recently where deadly poisons had been used, where there is little doubt much simpler remedies would have availed.

I am, Sir, yours obediently,

Sept. 21st, 1886. PHYSICIAN.

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AMBIGUOUS CHARITY.

THE other day a grand ball was given at the Hôtel Schweizerhof at Lucerne in aid of the sufferers from cholera in Italy. Several thousand francs, the proceeds of the entertainment, were handed over to the Italian Relief Committee, more, it is said, to the advantage of Switzerland than of Italy. In the words of an "Indignant Italian," the "impression is thus made general throughout Europe that Italy is sore stricken with cholera, and travellers are afraid to cross the Swiss frontier, to the serious detriment of Italian hotel-keepers and tradesmen, and to the corresponding gain of the astute Switzers, while the subalpine lakes from Lago Maggiore to Lago di Garda were never healthier or more attractive."

Nous Verrons.—While there is undoubtedly some hardship involved in the regulation to which our correspondent refers, it is very doubtful whether that could be obviated without inflicting a much greater injustice. The conditions of service of the two classes referred to are so essentially different as to vitiate any comparison of the regulations applicable to them.

Mr. H. M. Morgan (Lichfield) is thanked.

TONSILLITIS AND ITS RELATION TO SCARLATINA AND DIPHTHERIA.

To the Editor of THE LANCET.

SIR,—Allow me to thank Dr. F. P. Atkinson for his comments upon my article on the above subject in your issue of July 31st. It is a subject in which, as is well known, he has taken especial interest.

Without attempting to discuss the questions involved, may I be allowed to add a few words by way of removing some misconceptions of my position? I do not assert anything as to the causes or nature of inflammations of the tonsils in general. There may be, and are, many different forms. I have merely singled out and described certain common forms of tonsillitis which have, as I think, a relation to scarlatina and diphtheria. Far from saying, then, that "tonsillitis is always the result of some scarlatinal or diphtheritic poison," my suggestion is that the forms in question are caused by a poison of the same class as those of scarlatina and diphtheria, but differing by its inability to infect the system. It is a question of terms whether you call such a poison "specific" or not. I should not, in strictness, call it so. A specific poison is that which produces a "species" of disease; and this dignity I would reserve to a disease which infects the system, running a definite course, and being communicable to a fresh subject. Some infectious sore-throats ("false diphtheria") are, indeed, communicable under some conditions, but they seem soon to lose this power: they correspond to a "specialised" disease, as the term was used by Mr. Hutchinson in his recent Lettsomian Lectures. That the tonsils, like other lymphatic organs, are liable to chronic enlargement in strumous constitutions is a fact of common observation, but it is in no way incompatible with the theory stated. Peyer's patches are often found enlarged at the autopsies of weakly children, but the inflammation of those glands which occurs in enteric fever is surely none the less due to a specific poison. That in their general pathology the tonsils are to be associated with the other lymphatic glands I fully believe. But it is a very remarkable circumstance that certain of these glands should be planted on the free surface of the alimentary canal, the tonsils above, Peyer's and the solitary glands below, and that it is these glands, thus apparently exposed to infection, which are the seat of the specific lesions of scarlatina, diphtheria, and enteric fever.

I am, Sir, yours truly,

Finsbury-circus, Sept. 13th, 1886. R. HINGSTON FOX.

VACCINATION IN WEST AFRICA.

To the Editor of THE LANCET.

SIR,—Your remarks about the faith of the natives of East Africa in vaccination are equally applicable to West Africa—at least, so far as the Gold Coast is concerned. On examining some 150 men of the Hausa constabulary, with a view to vaccinating them, I found that at least one-third of them had been vaccinated "in our country," which comprises a large tract, including Sokoto, Dagomba, Salaga, and other places but little known to Europeans. On one occasion one of these native vaccinators brought me three of his children to vaccinate, and intended taking them immediately into the interior as "sources of lymph." He, however, declined my offer of a few tubes, on the ground that the people in the interior would deem it "white man's fetish." Along the coast, however, where the native comes into immediate contact with the white man, this prejudice does not exist.

I am, Sir, yours faithfully

C. H. EYLES,
Assistant Surgeon, Gold Coast Colony.

New Hampton, Sept. 18th, 1886.

A DISCLAIMER.

To the Editor of THE LANCET.

SIR,—In your last issue there is reference to a *Dr.* Rugg, as issuing circulars of a highly objectionable nature. As the name is uncommon, therefore the more noticeable, allow me to say that neither I nor my son—a registered practitioner—has so far lost our self-respect as thus to dishonour the profession, and to bring our name into disrepute.

I am, Sir, your obedient servant,

Clapham-road, S.W., Sept. 20th, 1886. GEORGE PHILIP RUGG, M.D.

TERATOLOGY.

J. W. C. (Cork).—A more striking and, from the psychological point of view, more interesting monstrosity than the "two-headed nightingale," as the poor girl was called when exhibited in these islands some ten or twelve years ago, is described in the "Historia Rerum Scoticarum" of George Buchanan. In the reign of King James III. of Scotland there was born in that country, about the year 1466, a creature having the lower part of its body like that of a human being of the male sex, but from the umbilicus upwards having a double trunk, double head, double arms, each limb and organ in duplicate, and all quite normally developed. King James was much interested in this phenomenon, the more so as it showed much aptitude for education. He accordingly put it under suitable masters until, among other acquisitions, it became quite a proficient in music, for which it had all the taste of a born artist. It also learned to speak several languages, and as it had two wills or faculties of volition it would sometimes have a quarrel with itself, and argue the point in dispute *pro* and *con*. At other times, when both itselves were in agreement, it would discuss what was best for the common interest. There was this notable circumstance about it, moreover, that when the loins or the lower limbs—any part below the umbilicus, in fact—were hurt, both upper bodies were sensible of the pain. But if either body above the umbilicus were pinched or otherwise made to suffer one body only felt the lesion. The difference between the two was even more marked when death overtook one of the bodies. The survivor lived after the decease of its neighbour until decomposition began to show itself in the latter, and then it also gradually dwindled away. This took place in the administration of the Regent John, in the nonage of King James IV., about the year 1490, the monster having lived rather more than twenty-eight years. "Hac de re scribimus eo confidentius," says Buchanan, "quod adhuc supersunt homines honesti complures qui haec viderint." (On this phenomenon we write the more confidently as there are still alive a great many respectable individuals who actually saw what I have been describing.) Buchanan himself was born in 1506, and acted as tutor to King James VI. from 1565 till within a few months of his death in 1582. It was during the latter years of his life that he composed his great History of Scotland, in Latinity which was the envy of the Sorbonne.

Medicus.—The bromides seldom cause such symptoms; but the diseases for which they are prescribed are attended not unfrequently with vaso-motor symptoms.

F.R.C.S.—No special morbid appearances have been observed hitherto.

THE CLIMATE OF VENTNOR.

To the Editor of THE LANCET.

SIR,—Having read your able article in THE LANCET of August 28th relative to the climatic treatment of disease, I am anxious to remark on a passage in which you say: "Ventnor and Torquay are the mildest of the English resorts, but prove somewhat too relaxing for some constitutions." Now, although Ventnor and Torquay are almost identical as regards temperature, there is a vast difference in their relaxing influence, in consequence of the difference in the humidity of the atmosphere. I well remember an observation made many years ago by a physician who had resided at Torquay some years and then came to Ventnor, where he remained two years. In the course of conversation relative to the climatic influence of the two places he made the following striking observation—"that he existed at Torquay, while he lived at Ventnor." Ventnor as a place of residence on the south coast of England is far from relaxing, as the Undercliff, from its configuration, stands literally out at sea, the land trending sharply to the north at Bonchurch on the east, and the same at Blackgang on the west; and while it is comparatively warm in the winter, it is equally cool in the summer, from the constant influence of the sea-breeze.

My apology for addressing you is that I have taken interest in the meteorological observations of the Undercliff, and have continued the daily record first instituted by my brother, the late Dr. Martin, from 1839 to the present date, without the break of a single day, which can be said of very few places. The observations of the first forty years of the period were published by my nephew, Dr. Whitehead, on the occasion of the visit of the British Medical Association in 1881, of which I enclose a copy.

I have the honour to be, Sir, your obedient servant,

Ventnor, Aug. 30th, 1886. J. B. MARTIN, M.R.C.S.

"COCAINE IN GYNÆCOLOGICAL PRACTICE."

To the Editor of THE LANCET.

SIR,—Seeing an annotation in THE LANCET of Aug. 28th, p. 411, headed as above, could you spare me space to mention that I have seen cocaine used to painful vascular growths at the meatus with advantage by Dr. Oliver of Newcastle, and, I believe, others, with a certain amount of benefit, as a local anæsthetic. So that I believe Prof. Amann is by no means the first who has applied its use to gynæcology.

I am, Sir, yours truly,

Maidstone, Sept. 4th, 1886. PERCY T. ADAMS.

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THE PROPOSED NATIONAL HOME FOR INVALIDS IN THE SOUTH.

To the Editor of THE LANCET.

SIR,—Two years ago, when I paid a visit to England for the purpose of visiting the hospitals there, my attention was in particular drawn to the Brompton Hospital for Consumption. Those who are suffering from that terrible disease and are excluded from other hospitals receive in this noble institution (supported chiefly by voluntary contributions) all the attention which skill and kindness can suggest. I next became acquainted with the hospital for consumptive patients at Ventnor (the originator of which, Dr. Arthur Hill Hassall, many have cause to bless), and here the good work for which it was erected is most successfully carried on. Whilst dwelling on what I had seen I was led to reflect how much greater good might be done if a similar institution could be established in a more suitable climate for patients of small means, or of none, suffering from consumption and other pulmonary diseases. I gave expression to my desire in a letter, inserted in *The Times* (Sept. 18th, 1884) and other English newspapers. The responses to this, containing promises of assistance and of subscriptions if the idea could be realised, were so encouraging that I have ever since been endeavouring to mature the plan by looking out for a suitable place for the erection of such a hospital.

As a physician with twelve years' practice on the Riviera, I have had under my care a very large number of patients suffering from consumption; and my experience has proved how very beneficial is the change of air, combined with proper diet, at the commencement of the disease. I therefore feel, as I am not aware that a like proposal has been previously made, that the time has arrived for me to appeal to the various Governments, clinical schools, benevolent societies, and all true philanthropists to aid me in rescuing from the terrible scourge of consumption the thousands who will otherwise, as hitherto, fall victims to it.

With regard to the following clauses—viz., (1) as to the necessity for such a home, (2) as to where it should be erected, (3) as to how it should be organised, (4) as to what sum should be collected before it can be started—a further pamphlet will shortly be published, a copy of which I will gladly send, free of cost, to all who may be interested in the undertaking. Any suggestions on the points mentioned will be heartily welcomed by

Yours obediently,

JOSEPH SCHNEER, M.D.

Alassio, Riviera di Ponente, Italy, September, 1886.

Justitia.—The Canadian qualifications are entitled to respect. But we do not consider that they fulfil the undertaking of the gentleman in this particular case. At present they are not registrable qualifications, and can only become so by the action of the Medical Council; and this is in the future.

HEREDITY IN THE LOWER ANIMALS.

To the Editor of THE LANCET.

SIR,—Possibly the following may be of sufficient interest to find a place in your columns.

A small, rough-coated cur bitch of mine had been taught to beg by turning round once or twice. At about fifteen months old she had a litter of six pups, and the only two of them which we know anything of turned round when begging before they were two months old. They did it when not served as soon as they wished, and it appeared quite spontaneously at first and indescribably curious, like a half-forgotten trick. I may say the mother was sent away from them too early to have taught them the trick—as soon, in fact, as they were fit to be left.

I am, Sir, yours obediently,

Kirkburton, Sept. 9th, 1886. GEORGE A. HAWKINS-AMBLER.

M.R.C.S., L.S.A.—In THE LANCET of April 8th, 1876, Dr. Ferrier recommended for the affection mentioned the use of a snuff composed as follows: Hydrochlorate of morphia, two grains; acacia powder, two drachms; trisnitrate of bismuth, six drachms; one quarter to a half to be used in the twenty-four hours. In a subsequent number Mr. Snagg, L.R.C.P., spoke highly of a combination of opium powder with compound tragacanth powder, in the proportion of one of the former to two of the latter, also to be employed as snuff.

"THE USE OF COCAINE IN CIRCUMCISION."

To the Editor of THE LANCET.

SIR,—I should think that every member of the profession is familiar with the fact that in the vast majority of cases of congenital phimosis the prepuce can be rendered retractable by dilatation; and a letter written for the purpose of pointing this out scarcely appears necessary. Amongst those who have been charged with the medical care of large numbers of young children there will probably be no doubt that a redundant prepuce, even if it can be retracted, is frequently a source of injury to its possessor.—I am, Sir, your obedient servant,

Inverness-terrace, Sept. 18th, 1886. GEOFFREY HETT.

Major St. H. de Entragues.—1. No.—2. We have no special knowledge of the place.—3. The book named is, so far as we are aware, the only one published on the subject.

M.B.—The waters are most valuable in scrofulous diseases.

PROF. CHARCOT "AT HOME."

DR. KRAUS, editor of the *Allgemeine Wiener Med. Zeitung*, writes to that journal (Sept. 14th), from Paris, a letter, in the course of which he describes a visit paid to Prof. Charcot:—

"My esteemed patron, Charcot, whose personal friendship I enjoy, had just returned from a holiday tour in Spain when I called upon him. Anyone entering the Palais Charcot, in the Boulevard St. Germain, fancies himself in an imperial residence; and, indeed, many a royal personage does not boast of such a palace as this. Charcot is admittedly not only the oracle of French physicians, but an authority upon medicine of the highest rank. We have so often touched upon the biography of this eminent scientist in our journal, and have told our readers so much of his insurpassable researches, that I need not now devote further words *ad majorem gloriam* of this eminent physician. Who is there among the ranks of medical practitioners who does not know Charcot and his imperishable work in the domain of cerebral disease, metallotherapy, &c.? I will not therefore to-day delineate him as the man of science, but as the Paris physician to whose tapestry-covered salon troops of patients make pilgrimage, and lay an obolus on the table, which groans under the weight of gold—from three to five to ten napoleons a consultation. How did I know all this if it were not that the pleasing testimony of this *aurea francogallica* practice lay piled up on the consultation table. To be sure, this modest, amiable, and highly humane French physician does not make a vain show of these offerings of esteem which his practice brings him; he simply has not time to place them under lock and ward, so rapidly does one patient press in after another. The consulting-room contains a magnificent library, which would be the envy of many a medical, Universität-Bibliothek; scarcely any important work of old and new medicine, home or foreign, is wanting. Charcot, the Nestor of French scientists, reads and speaks German, and my son and myself were delightedly surprised to see lying on the consultation table the *Allgemeine Wiener Med. Zeitung*, whilst on our entering he laughingly asked whether we knew that journal. Charcot gave us so much of his valuable time that we felt embarrassed, because we had seen what a crowd of patients still awaited his advice in the fairy-like salon. We were proud to secure a written souvenir from him, and a promise to send a paper to our journal. He asked after all his Vienna colleagues—Leidesdorf, Meynert, Benedikt, and proved how exceptionally conversant he is with Austrian and German medical literature."

Dr. Martin Oxley's note will appear in an early number.

AMBULANCE CLASS TEACHERS WANTED.

To the Editor of THE LANCET.

SIR,—I know of no class or profession more ready to do good than those whose work it is to cure or diminish the sufferings of mankind. I am sure, then, that the appeal I am about to make will meet with a generous response. Two years ago, at the annual gathering of the members of workmen's clubs affiliated to the Club and Institute Union, Lady Brassey earnestly invited them to form ambulance classes. In many of these clubs there is every disposition to follow this good advice, and I need not say what excellent results might be expected. The work in question would be doubly blessed—blessing those who learned to heal and the objects of their care. But the practical difficulty which has stood in the way is the necessary expense which attends all such undertakings. It is, of course, essential that the students should qualify themselves for certificates by passing the examinations organised by the St. John Ambulance Society. The small fee charged by that excellent Society for examinations many a club would be able to meet, and the Club Union will provide apparatus, books, &c. But very few of these institutions are able to provide the expense of a lecturer's fees; and this leads me to the object of my appeal. May I, then, ask any young medical practitioner not yet burdened by practice, or qualified medical student, willing to conduct one course of the required lectures at a workman's club in London to be so kind as to send his name and address to the Club Union Office. We desire to have a list of such generous friends, so that we may at any time provide any club which desires such services. Travelling expenses will, of course, be gladly paid by the club receiving this benefit. May I add, from a long experience, that those on whose behalf I write are always heartily grateful for any help of an educational kind. The lecturers will find intelligent and genial students; and I am quite sure that pleasant relations will be the result of such meetings between teachers and taught.

Any gentleman seeing this letter, and willing to act upon the suggestion which I have made, is requested to address: "Secretary, Workman's Club and Institute Union, 31, Southampton-street, Strand, London."

I am, Sir, yours faithfully,

September, 1886. HODGSON PRATT, President.

A CORRECTION.

To the Editor of THE LANCET.

SIR,—In my letter on "THE LANCET and the late Dr. Wakley" the word "great," before "dramatist," should have been *Greek*. I intended to refer to the fact that in the majority of Greek plays the deaths of the characters take place out of the sight of the audience. Unlike Mr. Augustus Harris—I hope Mr. Harris will not consider the comparison invidious—the Greek playwright had great faith in the imagination of mankind.

I am, Sir, yours truly,

Glasgow, Sept. 18th, 1886. ROBERT MACPHERSON.

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Medical Diary for the ensuing Week.

Monday, September 27.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.

ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesdays, same hour.

CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2 P.M.

HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.

Tuesday, September 28.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.

CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

Wednesday, September 29.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesdays and Thursdays, 1.30 P.M.

ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department, Tuesdays and Fridays, 9.30 A.M.

ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.

LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.

GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.

KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; and on Friday, 2 P.M.; and Saturday, 1 P.M.

Thursday, September 30.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M

Friday, October 1.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Saturday, October 2.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. A. M. Brown, London; Mr. F. C. Brett, Bridlington; Messrs. Christy and Co., London; Dr. Imlach, Liverpool; Dr. Logan, Ecclefechan; Mr. J. Loftus, Galway; Dott. G. Ricci, Rome; Mr. Jas. Oliver; Dr. John Clay, Birmingham; Mr. C. J. Smith, Brighton; Dr. Gramshaw, Gravesend; Mr. J. Thomas, Llanberis; Dr. H. Barnes, Carlisle; Dr. Taaffe, Brighton; Dr. Harkin, Belfast; Mr. C. H. Eyles, New Hampton; Mr. G. Tyrrell, Torquay; Dr. Patrick, Bolton; Dr. C. S. Taylor, London; Dr. Lupton, Liverpool; Dr. White, Wigton; Mr. J. Marshall, Dover; Mr. Butler-Smythe, London; Dr. Grimsdale, Liverpool; Brigade-Surgeon Curran; Mr. Thistle, Torquay; Dr. Squance, Sunderland; Mr. A. F. Clay, Birmingham; Dr. A. E. Gresham, Ontario, California; Mr. F. Benham, London; Mr. R. Grieve, Georgetown; Mr. McGill, Leeds; Dr. Stalker, Dundee; Mr. R. G. Style, London; Mr. Sherard, Paris; Dr. Macpherson, Glasgow; Dr. Martin Oxley, Liverpool; Dr. Boone, Shanghai; Dr. Porter Smith, Shepton Mallet; Mr. Gurney, Uppingham; Mr. Wills, London; Mr. Hodgson Pratt; Mr. Murphy, Sunderland; Dr. Morris, Spalding; Messrs. Brady and Martin, Newcastle-on-Tyne; Mr. Hodgson, London; Mr. Pentland, Liverpool; Mr. Easterbrook, London; Mr. Tidman; Messrs. Morgan and Scott, London; Mr. Hewlett, Glasgow; Dr. Hayes; Mr. Fuge, Taunton; Mr. Carter, Glasgow; Mr. Vinrace, London; Messrs. Street Bros., London; Dr. Barr, Glasgow; Messrs. Barnes and Co., New York; Mr. Brown, Highbury; Mr. Procter, Shifnal; Mr. Harrison, Liverpool; Mr. Barnasconi, Plymouth; Dr. Cambridge, Illinois; Mr. Gravatt, London; Mr. Moore, Uxbridge; Mr. Richardson, Burton-on-Trent; Mr. Mason, London; Mr. White, Bayswater; Mr. Norcot, Bordeaux; Mr. Knightley, London; Mr. D'Orsey; Messrs. Milne and Son, Edinburgh; Dr. Scougal, Edinburgh; Messrs. Burgoyne and Co., London; Mr. Birchall, Liverpool; Messrs. Smith, Elder, and Co.; Mr. Tunmer, Harrogate; Mr. Dawber, Llanfair; Mr. Thomas, Llanelly; Mr. Watson, London; Dr. Reid, Stafford; Mr. Norton, London; Vigilans; Fremdling; Nurse Hunt, Newcastle-on-Tyne Beta; Physician; Ignoramus; X. P.; Justitia; Cinque Ports; Nous Verrons; M.D., London; M.R.C.S.E., London; G. F.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Beale, London; Dr. McClure, Cromer; Dr. Taylor, Sutton; Messrs. Keith and Co., Edinburgh; Mr. Wood, York; Dr. Eberle, Thirsk; Mr. Dean, Northleach; Dr. Newell, Macclesfield; Mr. Bird, Penarth; Mr. J. Carter, London; Mrs. Bedingfeld, London; Miss Grace, Barrow-in-Furness; Mr. Welbeck, London; Dr. Soilly, Wanganui; Miss Jones, Newark; Mr. Rideal, London; Mr. Griffiths, Lincoln; Mr. Marshall, Huddersfield; Mrs. Muggeridge, Lewisham; Mr. Truman; Dr. Taylor, Notts; Mr. Crawford, Harrogate; Mr. Lomas, Territer; Mr. Hume, Edinburgh; Col. Burnand, Worthing; Mrs. Carter, Leeds; Mr. Abbs, Huddersfield; Mr. Finlay, Walsall; Mr. Niven, Oldham; Dr. Waller, Peterboro'; Mr. Edwards, Buntingford; Mrs. Smith, Gt. Yarmouth; Mr. Furneaux, Shanklyn; Mr. Squary, Liverpool; Messrs. Twiss and Son, Ilfracombe; Mrs. Taylor, Barnsbury; Mrs. Woodberry; Bishop of Peterborough; Mr. Morgan, Islington; Messrs. Sandall and Co., London; Mr. Nadin, Sheffield; Messrs. Cassell and Co., London; Mr. Wheeler, Manchester; Mr. Clarke, Morley; Mr. Jeffries, Chesterfield; Mr. Brennan, Lubbercurry; Linum; M. N. O.; Spes; X. Y. Z. Matron, London; Phalanx, Manchester; W. O. M.; Medicus, Stoke Newington; M.D., Bonchurch; Box, Uttoxeter; Zeta; Matron, Bedford; Alpha, Lambeth; Sanitas, Manchester; Surgeon, Cavan; X., Bury; M.R.C.S., Wimbledon; M.B., St. Helens; Hants; T. B., North Curry; H. S.; F. W., Hammersmith; Midlands; F.R.C.S., Shepherd's Bush; L. M.; Perdix; A. B.; X., Shepherd's Bush; M.D., Upper Tooting; T. H. Northleach; Sigma, Upper Tooting; M.B., Wood Green; E. L.; W. T. H., Tottenham; J. G. R.; Bona Fide, Liverpool.

Liverpool Courier, Georgetown Daily Chronicle, Isle of Man Times, Brewers' Guardian, West Cumberland Times, &c., have been received.

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Lectures
ON
DISEASES OF THE LACRYMAL APPARATUS.

Delivered at the Royal College of Surgeons.

BY HENRY POWER, F.R.C.S.

LECTURE II.—PART II.

THE canaliculi are occasionally obstructed by small olive-shaped concretions, which are termed "dacryoliths." They used to be regarded as calcareous masses, but have now been shown to be in great part composed of a fungus, and the history of the discovery is interesting. According to Goldzieher, Hirschler and Grube[1] first pointed out the occurrence of fungi in the concretions found in the canaliculi; but in the year 1855 A. v. Graefe[2] first described minutely some small concretions that he had observed in the canaliculi, and found that they consisted of closely interwoven filaments of a fungus which he then regarded as the mycelium of favus. In 1869 Prof. R. Foerster[3] reported a case in which the lower canaliculus was filled and dilated with a friable greasy-feeling mass, which had for years been the cause of persistent conjunctival inflammation of the eye. In this mass Waldeyer found the elements of fungi, which he considered to be identical with the leptothrix buccalis described by Robin and Lebert in the mouth, and which Leber and Rollenstein considered to be the principal agent in the production of caries of the teeth. Waldeyer noticed that the leptothrix filaments were surrounded by small round micrococcus and moving bacteria. Foerster had seen two analogous cases previously, but they had not been microscopically examined.[4] Immediately after the publication of Foerster's case, A. v. Graefe described seven more cases of such concrements in the lower canaliculi, in which Cohnheim and Leber also demonstrated the presence of, as they thought, leptothrix filaments similar to those of the mouth. The concrements were from 1·5 mm. to 3 mm. long, and about 1 mm. in diameter. These were sometimes like cheese, sometimes more sandy and friable; their colour yellowish white, though in Foerster's case the concretion was blackish externally.

On April 15th, 1874, Foerster removed a concretion, which he placed in the hands of Cohn. This mass was whitish, of tallowy consistence, easily broken down, and consisted essentially of delicate, colourless, parallel or closely interwoven filaments, which were either straight or arcuate, or here and there formed loops, or were closely and spirally wound in corkscrew fashion. These parts reminded Cohn of the corkscrew filaments of spirulina or spirochæta, from which, however, they were distinguished by their much greater irregularity. The filaments broke up into segments of various size, which were sometimes 50 mm. long or more. They did not dissolve in ammonia. These filaments were embedded and closely surrounded by finely granular micrococcus masses, which filled the spaces between the filaments. When a portion of the mass still under the cover-glass was submitted to the action of a gentle current of water, the filaments could be in great measure freed from the micrococcus, and it then became apparent that the filaments were extremely fine, that they were of equal thickness, that they ran for an uncertain distance straight and then formed irregular curves and spirals, and that they were also, though sparingly, branched. All these peculiarities, however, distinguish the filaments in the concretions of the canaliculi from those of the leptothrix buccalis, which are thicker, stiff, straight, distinctly segmented, and never branched, so that Cohn could not regard them as identical, and in none of the other instances was he able to recognise the characteristic parallel bristle-like filaments of leptothrix buccalis in the white masses of the canaliculi. He therefore arrived at the conclusion that it was a separate species, to which he gave the name of Streptothrix Foersteri. Cohn's culture experiments with it have given no results as to the exact relations of this organism; for whilst the external form of the filaments resembles certainly that of leptothrix, which is normally or pathologically present in other organs in man, their disposition to branch reminds one of the ordinary fungi. Cohn pointed out that some similarity exists between these concretions and the tartar of the teeth, which also consists largely of micrococcus with leptothrix filaments; and it was even suggested that the fungus might proceed from the transplantation of fungi from the mouth to the eye, rendered probable enough by the common practice of the poor to clean the eyelids of their children with saliva. Besides the filaments and the micrococcus, the lacrymal concrements contain actively moving bacteria, bacterium termo, as well as monads, which move in a springy way with the aid of a long flagellum. Cohn also observed small yeast-like cells and oidium-like gonidial chains, which perhaps were those described by Graefe as favus elements; even some fungate spores with long germ tubes were seen, but all these he was inclined to regard as secondary and subsequent formations. A somewhat different account, illustrated by figures, has been given recently by Cornil and Babes.[5] They recommend that the concretions should be teased out under water and stained with methyl violet. The filaments are then seen to be very fine, closely interlaced, undulating in their course like spiruli or spirochæta from which they only differ in being less regular. Sometimes they are segmented and micrococci found mingled with them. Goldzieher[6] has discovered cilia in the middle of the masses, and he believes that these parasites develop around a cilium which has entered the canaliculus. Babes found the thickness of the filaments to be constantly 0·2 mm. to 0·3 mm. throughout their whole length; the finest, however, appeared to have pointed extremities. Their substance is sometimes homogeneous, sometimes formed of rods, which colour strongly with many reagents, and are united by a less strongly colourable substance. The filaments may attain a length of 40 mm.; the smaller appear to result from the fracture of the longer ones. They are sinuous, or even run in corkscrew-like fashion, and appear to branch in a forked manner.[7] The symptoms produced by these little calculi are redness of the ocular conjunctiva, epiphora owing to occlusion of the duct, the presence of a small swelling in the course of the canaliculus, and dilatation of the punctum, from which a little mucus exudes. As a rule they cause but little irritation or pain, and do not attain a larger size than that of a lentil. The occurrence of these concretions seems to be more common than was at first supposed. Mooren saw no instance in upwards of 100,000 cases; but Mr. Higgens[8] has described a case occurring in the upper canaliculus, Haase[9] one in the lower; and Dr. Cornwell[10] has given the analysis by Mr. Curtis of what was probably a similar case, presenting the peculiarity of there being four calculi disposed like a necklace in the dilated canaliculus; one of these was found to consist of 28·3 parts of organic matter and 71·7 parts of calcium phosphate.

There can be little doubt that a certain proportion of cases of lacrymal obstruction is attributable to syphilis. The effects of that disease in causing tumefaction of the oral and nasal mucous membrane, its tendency to produce nodes, acute periostitis, and caries of the bones of the nose, thereby changing the direction, constricting or completely occluding the nasal duct, are circumstances that appear sufficiently likely to lead it to be generally mentioned in the etiology of the disease with the consideration of which we are now engaged. It is remarkable, however, that it is often omitted in the writings of modern authors, and one cause of this is probably to be looked for in the better treatment now adopted in the various forms of chancre, and to lend some colour to the opinions of those who attributed the frightful ulcers and diseases of the bones described, and often illustrated by our not very remote predecessors, to the indiscreet employment of mercury, and to the injudicious regimen to which patients were subjected when the subjects of syphilis. I have carefully examined the skulls of those affected with syphilis in the

[1] Szemészet (an Hungarian ophthalmological journal), 1874.
[2] A. f. O., Bd. i., p. 284; and Bd. ii., p. 1224.
[3] Ibid., Bd. xv., H. i., p. 318; Taf. iii., Fig. I. [4] Ibid., Bd. xv., p. 324.
[5] Les Bactéries, 1885. [6] Obl. f. Prakt., Augenheil., Feb. 1884.
[7] See also v. Ilenss, Wien. Med. Presse, Feb. 17th, 1884.
[8] British Medical Journal, Oct. 18th, 1879.
[9] Arch. f. Augenh., Bd. viii., p. 219.
[10] Amer. Journ. Med. Sci., July, 1882.

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museum of this College, but there are too few on which to found any statements. It can only be said that these parts do not appear to be specially liable to syphilitic disease, since they are quite free from disease in instances where the bones of the head are seriously affected. Excellent papers on this point have been published, in 1857 by Lagneau,[11] and in 1880 by M. Larebière.[12] This author found that obstruction of the lacrymal passages from syphilis occurred about seventeen times in 240 cases of lacrymal obstruction occurring in M. Galezowski's clinique in Paris, and he proceeds to consider the form of lacrymal disturbance that occurs in the primary, secondary, and later periods of the disease. To the first little attention has been paid, but since a chancre affecting any part of the margin of the lids causes much swelling and almost always more or less malposition of the puncta, it is clear that if it affect the region of the puncta it will occasion lacrymation by occluding the orifice of one or both, or by compressing the canaliculi. This condition will, of course, last only so long as the swelling lasts, and, as a rule, with the subsidence of this the canal again becomes pervious, but in some cases Larebière has observed that in the process of cicatrisation the punctum has become obliterated. It is hardly necessary to add that in such cases the canaliculus must be found and slit up, or some other proceeding for its restoration adopted. As regards the second period, the mucous membrane of the sac may either be primarily attacked, or it may be affected by contiguity and extension of disease from neighbouring parts. M. Larebière refers to the observations of various French authorities—as, for example, to M. Lancereaux—to show that "the affections which result from a modification of the mucous membrane of the sac and lacrymal passages usually make their appearance in the exanthematous period of the disease coincidently with erythema of the nasal and ocular mucous membranes, though they may also occur in the tertiary period." But it is extremely difficult to prove the existence of tumefaction in any given case. It might always be objected, in the absence of any ocular examination of the part, that a gumma was actually present in the sac, constituting the real cause of the obstruction. The point may, no doubt, be to a certain extent determined by the success or failure of efforts to pass a probe. If successful, the presence of a gumma is rendered more than doubtful; whilst failure, though possibly due to swelling of the membrane, might in the hands of an expert be attributed to the occlusion of the canal by some growth. In many instances, again, the mucous membrane of the lacrymal sac becomes affected by extension of disease of both the conjunctival and nasal mucous membranes. Here there is no difficulty in tracing the progress of the disease, and cases of lacrymal obstruction are not rare in infants presenting the usual manifestations of secondary syphilitic disease on the mucous membrane of the mouth and fauces. In regard to the tertiary period of syphilis many authors have drawn attention to the lacrymal affections which are then apt to occur, and we are indebted to M. Larebière for pointing out that, besides the periostitis and osseous tumours which have been commonly noted, gummata may occasionally be seen. These may occupy either the sac or the nasal duct, the symptoms being somewhat different in the two cases owing to the different anatomical disposition of the two parts. If the gumma develop in the sac, the progress of the disease is much slower than when it is situated in the nasal duct, for the yielding nature of the antero-external parietes of the sac permits considerable extension to take place without material interference to the flow of tears; whilst if the gumma develop in the nasal duct, the small lumen is quickly occluded, and the supervention of mucocele and of abscess is likely to be much more sudden than in the former case.

Polypus of the sac or duct is an occasional cause of obstruction. In April of the present year, a girl presented herself at St. Bartholomew's Hospital, and was admitted as an in-patient with epiphora and a tumour which was diagnosed as a mucocele. No fluid could be expressed either onwards in the normal direction, or backwards in a refluent direction, through the canaliculi. On firm pressure, a rounded body could be felt in the sac, which was supposed might be a polypus. The canaliculus was slit up, and without much difficulty a large probe was passed down the duct. A style was left in for two or three days. Notwithstanding the passage was tolerably clear, epiphora continued. After the lapse of a month, no improvement taking place, it was determined to make a more thorough examination of the parts. An incision was accordingly made through the skin in the direction of the fibres of the orbicularis, the centre of which was opposite the upper orifice of the bony canal of the nasal duct. The sac immediately came into view, and with a little dissection was clearly exposed. The antero-external wall was divided longitudinally, when a little puriform mucus escaped. It then appeared that a mushroom-shaped tumour occupied almost the entire cavity of the sac. It was attached by a narrow pedicle to the inner wall of the sac, and on this being divided came away entire. It was examined by Mr. Linden, who gives the following account:—A few days afterwards the swelling was as large as ever, and on pressure puro-mucus and sanguinolent fluid issued by the side of the style, which was then removed. The swelling gradually subsided, and on May 14th had entirely disappeared. The tears no longer flowed over the cheek, very little scar was left, and the case might be regarded as having been perfectly cured.

In an analogous case recorded by Paul[13] the canaliculus was slit up and the polypus torn out, after which a sound could be introduced into the nose. In the course of a few weeks the polypus reappeared, when it was again torn away, and the whole internal surface of the canaliculus was cauterised by means of a sound dipped in melted nitrate of silver. Severe conjunctivitis followed, and a sound could not be passed. The patient no longer suffered from lacrymation, though the operator thought that this might occur if the superior canaliculus proved ineffective in conducting away the tears, when, as he remarks, a fresh operation would be required. At the time of writing, however, the result was good.

Obstruction of the canaliculi may thus arise from various causes, and the treatment must be intelligently directed to the removal of the special cause acting in each case. Eversion of the lids from age or from paralysis of the orbicularis is difficult to cure; but if accompanied by redness of the inner surface of the lids, the application of sulphate of copper or the mitigated nitrate of silver after instillation of cocaine, will sometimes prove serviceable. Entropion may in slight cases be relieved by the application of collodion or of iodine to the skin of the lid, or in severe cases an oval piece may be removed, or several needles threaded with silk may be passed through the skin at right angles to the lid, the silk being tied over the skin. Obliteration of the puncta may sometimes be overcome by the introduction of a fine probe. Foreign bodies—as cilia, spikes of barley, and dacryoliths—must be removed.

There seems no reason to doubt that epiphora may be relieved by injections into the canaliculi, and sometimes perhaps cured. Pellier de Quengsy[14] gives a case in point. "A rich merchant," he says, "somewhat advanced in years, living in Marseilles, was troubled with so much lacrymation in both eyes that he could neither read nor write. Many internal and external remedies had been applied." M. de Quengsy, after an examination of his eyes, recommended injections, and used first Baréges water and then a solution of sulphate of copper. At the expiration of a month his patient was well. He recommends that the injections should be made for four or five days consecutively every morning and evening, the sac being gently compressed with the finger after it has been filled with the injection, in order that the fluid may be forced into the nose, otherwise by distending the sac they may work more harm than good.

If any circumstances point to the presence of syphilis—as the previous occurrence of chancre, ulcers on the mucous membrane of the throat and fauces, nodes, nocturnal pains in the bones, iritis, or cutaneous affection—it need hardly be said that the local treatment merges into the general, and that the administration of mercury, or (as it is generally in the tertiary period that lacrymal troubles occur) of iodide of potassium would be commenced by every intelligent practitioner. If successful, the disease will soon disappear; if unsuccessful, the antecedent medical treatment will in no way interfere with the adoption of any surgical method that may be thought to be appropriate. More than one instance is on record where perfect recovery took place under alterative treatment without any operative proceeding whatever. M. Larebière gives one case that was communi-

[11] Arch. Gen. de Méd., 1857, p. 536.

[12] Thèse de Paris, 1880.

[13] Galezowski, Journal d'Ophthalmologie, Jan. 1872. Ann. d'Ocul., 1872, p. 115.

[14] Précis on Cours d'Opérations sur la Chirurgie des Yeux, 1790, t. ii., p. 176.

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cated to him by M. Galezowski, in which a lady of the mature age of seventy-five—a period of life from which better things might have been expected, and at which heredity could have played only a subordinate and feeble *rôle*—complained to him of lacrymal obstruction; injections, and subsequently catheterism, were practised without benefit, and complete obstruction gradually ensued. Incredulous in regard to her denials, M. Galezowski placed her upon a potassium iodide treatment, and recovery promptly ensued, though not before the daily administration of ninety-three grains had been reached. Many cases are cited by M. Larebière[15] from his own experience and from that of others, in which the iodide of potassium produced rapid amelioration of all the symptoms. In all cases of this nature attention should be paid to the presence of other symptoms of syphilis, and careful examination made of the mucous membrane of the tongue and throat and of the periosteum of the tibia and radius. In cases where a fistula has formed after the bursting of an abscess, the condition of the margin is worthy of particular observation; and cases are on record in which, after ordinary treatment, as the introduction of probes had proved ineffective, though long and systematically employed, relief was immediately obtained and a cure speedily effected by the administration of potassium iodide. In such cases the cutaneous surface of the fistula was more or less ulcerated.

Chronic inflammation of the lacrymal sac, or, as it is sometimes called, chronic catarrh of the sac, is tolerably frequent. By Desmarres, who regarded the symptoms alone, three kinds of tumour were distinguished. In the first, there is only some slight obstruction to the passage of the tears for on pressure, the contents of the sac can be expelled, partly through the duct into the nose, and partly into the conjunctival sac through the canaliculi. This form is of common occurrence. In the second form, the sac is distended, but the contents cannot be expelled from it by pressure, even when made with considerable force. This form occurs less frequently. In the third form, there is a blind internal fistula—that is, the sac is ruptured and the contents have escaped beneath the skin.

The symptoms of chronic catarrh of the lacrymal sac are well known. In the healthy and normal condition the lining membrane of the sac secretes only a little thin mucus, but when irritated the quantity of the fluid secreted becomes increased and its quality changed; the sac becomes distended, and, on pressure, a clear and then a thicker fluid can be made to exude in many instances through the canaliculi. According to some, pus is never seen unless there is some ulceration of the membrane; it may, however, often be seen when there are few or no symptoms of inflammation. Gradually the sac becomes more and more distended till it forms a considerable swelling—in one case as large as a pigeon's egg (Boisson)—at the inner canthus of the eye, often presenting a horizontal depression when the sac is crossed by the tendon of the orbicularis muscle. Several observers have remarked that in the early stages of the affection the swelling is scarcely observable in the morning after sleep, whilst it becomes prominent during the day. The skin over the swelling is not discoloured. The patient complains of no pain, and usually presents himself merely on account of the swelling and the epiphora. Occasionally, though not always, the nostril on the corresponding side is said to be dry.

The causes which lead to chronic dacryocystitis are also those which lead to acute dacryocystitis or lacrymal abscess. Chronic inflammation of the lacrymal sac generally, but not always, precedes acute inflammation of the sac. It is a sort of half-way house, at which the trouble often remains stationary for years or for life, but from which it may easily start forward and march to a disastrous termination. As I shall have to give these causes at some length in my next lecture I shall not dwell upon them here, but rather proceed to consider the more important methods of treatment that have been suggested and practised. It may, however, be remarked that, as a rule, there has been some chronic inflammation of the lower part of the nasal duct in most cases of chronic catarrh of the lacrymal sac. This has led to constriction or absolute closure of the inferior orifice, and this condition it is which the treatment must in general be directed to remove.

How can the removal of such a constriction be best accomplished? At the present moment the method of Arlt, and of many other surgeons, up to Sir William Bowman, is most commonly employed, with the addition lately that the patient is first rendered insensitive to pain by a drop or two of cocaine. One of Sir William Bowman's probes is then introduced into the lower punctum, and made to traverse the canaliculus till it touches the inner wall of the sac. An attempt, generally unsuccessful, is made to pass the probe down the duct. The patient complains of pain, and a little blood appears, because the mucous membrane has been perforated and a false passage made. A week elapses, and either the same performance is repeated, or the inferior canaliculus is slit up, and a Weber's probe is passed down the duct, sometimes with ease, often with great difficulty and the employment of much force. By some practitioners a very large probe is at once passed, and the patient is sent away, it is supposed, cured, though sad experience, I fear, points in too many instances the other way. No doubt in some cases the improvement is immediate and great; but I cannot help regretting that a commission cannot be held, before whom all cases so treated should be cited a year after the operation. In a hundred, would there be fifty, would there be twenty, would there be be even ten, free from trouble?

But there is still another cause, which is worth consideration in regard to the constriction of the nasal duct. May it not sometimes proceed from dental trouble? Careful examination of the superior maxillary bone shows that the alveoli of the canine teeth are in very close relation with the lacrymal passages. Osteitis or periostitis of these alveoli, inducing caries, might easily extend by contiguity to the mucous membrane lining the nasal duct, and the thickening of the membrane might then readily induce first obstruction and then entire occlusion of the lumen. These views, which led me to examine carefully the teeth in all instances that fell under my notice, I find were urged fifteen years ago by M. Abadie.[17]

[15] Obs. xx. and xxi.

ON BASIC TUBERCULOUS PHTHISIS.

BY PERCY KIDD, M.D., F.R.C.P.,
ASSISTANT-PHYSICIAN AND PATHOLOGIST AT THE BROMPTON HOSPITAL.

SINCE the time of Louis, the special proclivity of the apex of the lung to become the seat of phthisis has been generally recognised. Various observers have tabulated the results of their experience, and have agreed as to the rarity of this disease commencing at the base of the lung. At the same time, the proportion of cases of basic phthisis to the ordinary apex form has been somewhat differently stated. Louis[1] found a basic origin in 2 cases out of 123, which he carefully investigated. Dr. Walshe gives the proportion as not more than 1 in 60 or 80. Cotton stated it as 2 in 1000. Dr. Pollock[2] says, "I have found 64 cases in a total of 4530 with the physical signs most marked from the commencement of the base." Fagge[3] believes "that it never happens that the tuberculous process spreads upwards from the base of the lung into and through the upper lobe"; and "what has sometimes been called 'basal phthisis' is a distinct affection which has been described above under the name of 'chronic pneumonia.'" This last statement is certainly too absolute as it stands, but from preceding passages it is clear that the distinguished author recognises the existence of true basic phthisis in exceptional cases.

The objects of the present communication are, first, to describe two cases of this rare form of the disease; and, secondly, to examine the statements of authors as to the frequency of basic phthisis and compare them with the results of my own experience. It is important at this point to distinguish clearly between disease of the base and disease affecting the apex of the lower lobe—i.e., that portion of the lung which corresponds to the infraspinous fossa and lower interscapular space. The latter region is very prone to disease, as is well known, and may be occasionally attacked before the apex of the upper lobe. Cases of this sort are not included in the present communi-

[17] Ann. d'Ocul., 1872, p. 310.
[1] Recherches sur la Phthisie, 3rd ed., p. 2.
[2] Elements of Prognosis in Consumption, p. 135.
[3] Principles and Practice of Medicine, vol. i., p. 947.

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cation. I shall now give a brief account of two cases of basic tuberculous phthisis, in which the diagnosis was confirmed by examination after death.

CASE 1. *Symmetrical Basic Phthisis.*—J. W——, aged fifty, a carpenter, was admitted on March 7th, 1884. No family history of phthisis; previous health good. Five months previously the patient caught cold, had shivers, and was confined to bed for thirteen weeks with pains in the back and side, cough, expectoration, and loss of flesh. On admission the patient was emaciated, his respiration was very rapid, and his temperature was 103°. The chest was hyperresonant. At both posterior bases slight dulness and subcrepitant râles existed. At the right base the breath sounds were weak, the expiration was prolonged, and vocal fremitus diminished. At the left base there were tubular breathing and increased vocal resonance. The sputum was examined, and found to contain tubercle bacilli in fair numbers. On March 22nd, at both apices, slight dulness with weak breath sounds and scanty subcrepitant râles were present. At the right posterior base, tubular breathing and bronchophony. At the left base, breath sounds weak. Abundant subcrepitant râles were heard on both sides, and dry rub in both axillæ. From this time the patient began to fail, physical signs appeared in the upper parts, cavities developed at both bases, and the patient sank on July 8th.

Necropsy.—Firm general pleuritic adhesions on both sides. Right lung: Middle and lower lobes completely riddled with thick-walled trabeculated cavities; at the base the cavities were bounded by a rim of extremely dense fibroid tissue. The upper lobe contained a small cavity at the apex, but was elsewhere spongy, though studded with a few tuberculous nodules. The left lung at its upper lobe was spongy throughout, and only contained a few small nodules. The posterior part of the lower lobe was occupied by a large trabeculated cavity, with dense fibroid walls at the base; anterior parts spongy. Spleen amyloid. Tubercular ulceration of the intestine. Mesenteric glands caseous.

This was an extremely interesting and uncommon example of tuberculosis attacking both bases simultaneously and spreading into the upper lobes subsequently.

CASE 2. *Phthisis: physical signs most marked at the left base.*—G. P——, aged twenty-one, a clerk, was admitted in July, 1885, and was spitting blood at the time. The hæmoptysis persisted for two or three days. Three months previously he caught cold, and since then had had cough; six weeks before admission he had an attack of "pleurisy and inflammation of the lung. On examination, there was diffused crepitation over the whole left lung in front. Posteriorly, there was dulness from the apex to the base, more marked below, with loose crepitation throughout. There were marked cavernous signs in the lower interscapular space extending down to the base close to the spine. On the right side there were scattered subcrepitant râles over the front and at the posterior base. Tubercle bacilli were present in the sputum in abundance. The patient spat up a small quantity of blood on two occasions in September. After that time there was no return of hæmorrhage until the end of November, when he had a fatal attack of hæmoptysis.

Necropsy.—Firm pleuritic adhesions throughout over the left lung; loose adhesions over the right lung. The left lung at its lower lobe contained numerous large cavities, surrounded by extensive caseous tracts and nodules. Two of the cavities at the base contained a small aneurysm of the pulmonary artery, one of which had ruptured and caused the fatal hæmorrhage. At the base, close to the vertebral border, there was a group of cavities of sinuous outline, with tough fibroid walls. The upper lobe showed similar but less extensive disease; the caseous masses were less abundant, and the cavities smaller and fewer in number. None of the cavities in this lobe had such an old appearance as the group of cavities at the base before alluded to. The right lung was spongy, and studded with some tuberculous nodules. The intestine showed tubercular ulceration. The oldest disease seemed to be situated at the base of the left lung.

Dr. Pollock believes that basic cases, as a rule, are of a chronic type. The duration of those just described was approximately nine months and seven months respectively. These are the only cases of true basic tuberculous phthisis that I have met with in 412 cases of phthisis in which I made the post-mortem examination myself. The first case was an undoubted instance of primary basic tuberculosis. In the second there was more disease of the upper part of the lung than in the first, but the disease was more extensive and of older date at the left base than elsewhere, and therefore I think we may fairly consider that here also the phthisis was primarily basic. The proportion of basic cases, therefore, among those that I have examined after death would be 1 in 206. I think it very likely, however, that a larger number of post-mortem examinations would still further reduce this proportion, and probably 1 in 500 would not be far wide of the mark. If so, then the proportions given by Louis, Walshe, and Pollock are too high, although, no great value is to be attached to attempts to state the proportion in exact figures. I believe that Cotton and Fagge are nearer the truth than those who give it as 1 in 60 or 80, and I think it is worth while to endeavour to account for the comparatively high proportion just quoted. The fact that Louis found 2 cases of basic origin in a total of 123 is not sufficient to warrant any generalisation. His numbers are far too small for this purpose. Dr. Pollock's statement cited above shows that he rests his conclusions on the preponderance of the physical signs at the base of the lung. I think, however, it can be shown that reliance on the clinical method in attempting to settle this point is liable to certain fallacies which may be considered under two heads: (1) the difficulty in certain cases of diagnosing the nature of disease of the base of the lung; (2) the latency, as far as physical signs are concerned, of comparatively old apex disease in some instances where there are marked signs at the base. In other words, cases of non-tuberculous basic disease may occasionally be included in the list owing to the difficulties of diagnosis, and, as I believe more often happens, physical signs may be at first confined to the base, or be most marked there, although all the time there is older disease of the apex which gives little or no evidence of its presence.

I shall now give abstracts of cases that illustrate these points:—

Cases of Uncomplicated Non-tuberculous Basic Disease.

1. J. W——, aged thirty-two, a plasterer, seen as an out-patient. His history was that seven years ago he had an acute chest attack, beginning with rigors, vomiting, headache, and cough, which laid him up for nine weeks. He attended subsequently as an out-patient under Dr. F. T. Roberts, and made a good recovery. The cough and expectoration, which had quite disappeared, returned again two years ago, and during the last nine months he had wasted enormously. He had "pleurisy" four months ago, and since that time the expectoration has been very offensive. The patient was anæmic and cachectic-looking; breath and expectoration extremely fetid; fingers clubbed; chest well formed. On the left side, posteriorly, there was marked dulness over the lower half, with weak tubular breathing, bronchophony, and increased vocal fremitus, most marked just below the angle of the scapula. Very scanty moist râles on coughing were heard over the same area. There were no other abnormal signs on either side. Diagnosis: cirrhosis and bronchiectasis of left base. The patient did not improve under antiseptic and tonic treatment. Marked cavernous signs, with gurgling râles, appeared at the left base behind, and the patient was admitted into the hospital three months later. The sputum was then examined, and no tubercle bacilli could be found. Shortly after admission he became much worse; the temperature rose and assumed a hectic type, signs of pleurisy on the right (i.e., the sound) side developed, and he sank in a few days with septic symptoms.

Necropsy.—General pleuritic adhesions on the left side, very dense over the lower lobe. Lungs: The left lower lobe was converted into a system of trabeculated cavities of bronchiectatic appearance, surrounded by indurated fibroid tissue. In the upper lobe there was slight but uniform cylindrical bronchiectasis; on the right side fibrino-purulent pleurisy. There was slight thickening of the interlobular septa of the upper lobe, which microscopically proved to be of a fibrinous character (? lymphangitis), and was associated with commencing dilatation of the smaller bronchi. The contents of the cavities were examined for tubercle bacilli, with a negative result. No tuberculosis in any part of the body.

The following is another case in some respects resembling the last:—

2. D. S.——, aged thirty-seven, a stout young woman, came as an out-patient in March 1884, with the following history. Had coughed off and on for ten years which was

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worse during the last two winters. For the last twelve months she had been getting very stout, although she had not taken cod-liver oil for five or six years. The cough had been more severe the last six months, and the expectoration had been profuse and yellow, but not fetid. Over the left apex there was slight dulness and weak breath sounds, with prolonged expiratory murmur and scanty bubbling râles. At the base, posteriorly, there was marked dulness from the midscapular region downwards, with intense cavernous breathing, pectoriloquy, increased vocal fremitus, and gurgling râles. These signs were most marked just below the angle of the scapula. At times a few subcrepitant râles were heard in the right interscapular space, but otherwise the physical signs hardly varied at all. The patient gradually improved under tonic treatment with antiseptic remedies (namely, tar and creasote). The sputum was examined several times, but no tubercle bacilli were ever found. The patient has continued to attend off and on from the first, and when last seen, in March, 1886, her general condition had decidedly improved, and the expectoration was less profuse, but the physical signs showed little or no change. She had one or two slight attacks of hæmoptysis from time to time, but had not lost flesh. The diagnosis was—cirrhosis of the left base, with small cavities, probably bronchiectatic in origin, and an early stage of the same disease in the upper lobe.

The absence of wasting from the first might be thought almost to exclude phthisis, but I have seen at least one case in which the patient, also a young woman, remained for some months extremely stout, although suffering from true tuberculous phthisis. The course of the present case has so far justified the view that was taken of it. But when I first saw D. S—— it was important for diagnostic and prognostic purposes to convince oneself of the absence of tuberculosis. Repeated examination of the sputum seemed to warrant this conclusion, and enabled me to give a comparatively favourable prognosis. I do not venture to assert that the foregoing two cases would be generally included under the head of "tuberculous," and I only give them as good illustrations of non-tuberculous basic disease, and as bearing on the next group.

Cases of Non-tuberculous Basic Disease complicated by subsequent Tuberculosis.

1. R. O——, aged forty-nine, a labourer, came as an out-patient in 1882. He stated that for the last two years he had suffered from cough, especially in winter, and from profuse expectoration. Eighteen months ago he had congestion of the lungs, and was laid up for five weeks. Six months later he had profuse hæmoptysis, lasting for seven or eight days. The expectoration had been offensive for the last four months only. The patient was a muscular man, but very anæmic, and his breath and expectoration were intolerably offensive. At the right posterior base there was dulness with marked cavernous breathing, pectoriloquy, and moist râles, more especially at the angle of the scapula. There was slight dulness in the left interscapular region, with scanty subcrepitant râles, slightly increased vocal resonance, and prolonged expiration. The patient gradually got worse. The râles at the right base became more gurgling and the breathing more intensely cavernous. He was admitted into the hospital shortly afterwards. The sputum was examined, but no tubercle bacilli were found. The diagnosis was uncertain, and seemed to lie between a small empyema freely communicating with the lung and fibroid lung with bronchiectasis. An abscess developed in the abdominal walls, phlegmonous erysipelas followed, and he sank a month after admission.

Necropsy.—Marked cirrhosis of the right lower lobe, with small irregular cavities around the entrance of the main bronchus. There were also a few pigmented nodules, like miliary tubercles, in the upper lobe. The left lung contained one small cavity at its apex, with some few tuberculous nodules immediately around it, but elsewhere was healthy. There was also commencing tubercular ulceration of the intestine.

The disease here was evidently a chronic pneumonia with subsequent tuberculosis. The sputum was examined only once, I believe, and just after admission. Possibly more frequent examinations would have revealed the existence of tubercle bacilli, which would have still further added to the difficulties of diagnosis.

2. J. S——, a labourer, was admitted in a moribund condition in March, 1886. The patient was too ill to examine carefully or question much, and died a day or two after admission.

Necropsy.—The left lung was firmly adherent to the chest walls throughout, and extensively excavated in its upper portions, the lower parts being studded with tuberculous nodules. The right lung was adherent throughout, but less firmly. The upper and middle lobes were enormously distended and spongy, containing a few nodules only. The lower lobe was extremely contracted, and hardly as big as one's fist. This lobe had a bright scarlet colour, like the lung of an infant, contrasting strangely with the pigmented condition of the rest of the lung. The lower lobe was riddled with cylindrical bronchiectases, which were filled with muco-purulent secretion. The intervening tissue was imperfectly spongy, but contained no tuberculous lesions.

From the atrophied state of the lobe and its bright-red colour it is probable that there had been more or less collapse in early childhood, with secondary bronchiectasis. This disease was evidently antecedent to the tuberculosis. If this patient had been seen before tuberculosis developed, the right base would certainly have given some abnormal physical signs which might have suggested the diagnosis of basic phthisis. Still more, if the patient had been under observation when the phthisis was actually developing, the idea of a basic origin would have been strongly supported.

3. J. H——, aged forty-two, a steward, admitted in March, 1884, with this history:—Six months ago he caught cold and had pleurisy at Naples. Since that time he had had a cough, and six weeks ago his expectoration became blood-stained. Physical examination of the chest disclosed dulness on the right side behind over the lower half, with weak bronchial breathing and subcrepitant râles. At the left apex behind there were a few similar râles. The liver could just be felt below the ribs' margin, and was tender. The liver dulness reached the fifth rib in front. The patient suffered much from diarrhœa off and on, and the sputum was usually blood-stained, and of a brick-dust colour. The diagnosis was very uncertain, and lay between malignant disease and phthisis. There is no statement in the notes as to examination of the sputum, but my impression is that tubercle bacilli were found on one occasion. The patient died a month after admission.

Necropsy.—There was a large abscess of the right lobe of the liver, which had perforated the diaphragm and communicated with a large abscess cavity in the lower lobe of the right lung. There was some scattered miliary tubercle in the upper parts of this lung, and the left lung at its apex contained a small cavity, and miliary tubercle was scattered through its substance. No caseous masses. The colon showed old ulceration, with great thickening, probably of dysenteric origin. Microscopical examination revealed extreme fibroid thickening of the walls of the colon, and there was no trace of tuberculosis.

4. E. J. W——, aged thirty-three, a nursery governess, admitted in November, 1882, with a very marked family history of phthisis. She had suffered from congestion of the lungs in 1877, 1881, and in May, 1882. Since the last attack she had been troubled with cough, expectoration, and shortness of breath. At the left posterior base, there was dulness, deficient breath sounds, and spongy friction. Physical signs of disease gradually spread to the other parts of the lung, and she sank in April, 1883.

Necropsy.—The left lung contained numerous large cavities in its upper lobe, with marked nodular caseous consolidation. The lower lobe contained radiating fibroid bands, and the bronchi were dilated. In several places towards the base the bronchi presented saccular expansions. There were some scattered miliary tubercles and caseous nodules. The right apex contained a large cavity, and the lower parts showed nodular lesions. The basic disease here was a cirrhotic non-tuberculous one in the first instance, and clinically gave the signs of pleurisy. Tuberculosis developed subsequently.

(To be concluded.)

MR. GEORGE BARRY, a trustee of the joint parishes of St. Luke, St. Giles, Cripplegate, and St. Botolph, has, in a report of a recent visit to parish properties, called attention to an insanitary spot in the neighbourhood of Piccadilly, where kitchens with only pavement gratings to admit light and ventilation are let out to families at 1*s.* 6*d.* per week. And this within sight of the windows of noblemen's mansions!

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ADENOID GROWTHS IN THE PHARYNX.

BY SIR WM. B. DALBY, F.R.C.S., M.B. CANTAB.,
AURAL SURGEON TO ST. GEORGE'S HOSPITAL.

IN order to estimate the position which adenoid vegetations in the vault of the pharynx, in regard both to their diagnosis and removal, occupies in the domain of surgery at the present time, it must be borne in mind that, with the exception of two or three solitary observations, up to the year 1868 the existence and gravity of the disorder were not recognised It was in this year that Dr. Meyer of Copenhagen published his first account of the subject, and in the following year brought the matter before the Royal Medical and Chirurgical Society. At the International Medical Congress of 1881 several papers on adenoid vegetations were read, and the various methods in use for their removal were most fully discussed. Thus it will be seen that the intermediate twelve years had served to render familiar in 1881 what was practically unknown in 1868. Taking into consideration these papers and their discussion, as well as the number of surgeons who now habitually treat this affection, the extreme facility with which the growths can be recognised by an examination with the forefinger gently introduced behind the soft palate may be said to be acknowledged; and should anyone question this proposition, it is open to him to verify it in any case which presents the usual characteristics of the affection by first examining a patient in whom the vault of the pharynx is healthy, and immediately afterwards the adenoid case. The difference of the two is too striking to escape even the observation of one who does this for the first time. Indeed, it was by an examination of this sort that Dr. Meyer discovered the growths in his first case. A rhinoscopic examination may be regarded therefore as supplementary to this, and in many cases, even in the most skilful hands, as impracticable—as, for example, in the case of young children. As a complete account of the methods adopted by various surgeons to effect the removal of adenoid growths between the two periods which I have named—viz., 1868 and 1881—may be found in Mackenzie's Manual, in the following brief remarks the history of the subject and the practice of others may be taken as read.

If one thing more than another stands out in relation to what is written, said, and done in connexion with this matter, it is the necessity of tolerance for other methods whilst advocating our own, and for the following reason: that it is characteristic of the complaint that if the growths are removed in any way, so long as they are completely removed, the patients get well both as to nasal breathing and hearing. To illustrate what I mean, I may be permitted to refer to a point which interested me very much in 1883. At the Congress, Dr. Guye of Amsterdam had strongly recommended a plan of scraping away adenoid vegetations from the pharynx by the nail of the right forefinger, and he had not limited himself in this to any class of cases. I knew also that my friend Mr. Cresswell Baber of Brighton habitually practised this plan without any selection of cases. It had appeared to me that if this were possible, nothing could be more satisfactory than to have in their removal the guidance of the sensitive finger which had detected the presence and the position of the growths; and I could readily understand how in the case of young children, when the growths were soft and friable and not in very large quantities, this could be done. When, however, as often happens, these growths are very numerous, of great size, and extreme toughness, I could not understand how the finger-nail of anyone could so embed itself in the tissue as to cut it clean away. I therefore had made for me a species of mechanical finger-nail constructed of steel, on a principle similar to Capart's spoon, but unlike it in action and construction (to which I shall refer presently), and with the help of this I could remove these growths with great completeness and with the most happy results. (See Fig 1.) On the date mentioned—viz., Oct. 1st, 1883—I met Mr. Baber, and in discussing this question of common interest no doubt was left in my mind as to the fact that some finger-nails (notably Mr. Baber's) can be found sufficiently strong, and of such formation, to effect in the matter of operation all that is required without having resort to any other method. What, however, can be done with the finger-nail only in individual instances ("individual" as applied to the operator) may be done by anyone if the steel nail is employed.

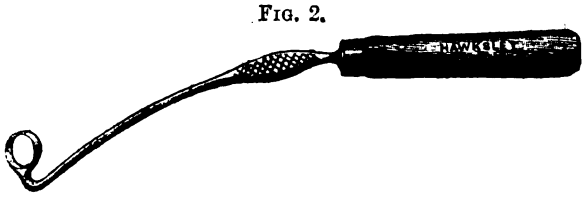
There are several considerations which have commended themselves to me in this method of removing adenoid vegetations from the pharynx. In the first place, when the mouth is held open with a Mason's gag, the pharynx can be most completely explored with the forefinger, and the amount of vegetations, their size and position, can be most satisfactorily estimated. The instant after this is done the steel nail can be fixed to the finger, and they can be scraped away at leisure. When I say "scraped away," I mean that the steel nail can be embedded in them and made to cut them away. The head being bent forward at the time by the left hand placed on the vertex, the blood, which flows very freely, escapes by the nostrils. It will be observed that the instrument is so made that the tip of the finger is exposed, and this is most useful in estimating by touch what is being done. Although the whole proceeding does not occupy long, inasmuch as it is most unpleasant and in some degree painful, it is convenient and desirable in many cases, especially

FIG. 1.



in young and timid children, that ether should be given. The position in which the head is held prevents the possibility of blood passing into the larynx during an inspiration. Although at one time I was inclined to repeated rather than to immediate operation, I am bound to say that latterly I have found not one of the least of the advantages of the steel nails is that the pharynx is frequently cleared at one sitting—in the case of young children, cleared so completely that a fortnight after the operation, when the swelling which follows it has subsided, the mouth can be kept closed both waking and sleeping; the "deadness" of speech, so indicative of the affection, disappears; the passage through the posterior nares is restored; the Eustachian obstruction, with its accompanying deafness and the liability to it, is gone. In short, the results of this method have recently proved so satisfactory that in five cases of children in which I employed it (Mr. Braine giving ether in each) during one week no further removal is now necessary. In older patients, where the growths are tougher and very abundant, more than one sitting is generally required. The plucking away in pieces by Löwenberg's forceps will no

FIG. 2.



doubt succeed in getting rid of the vegetations, but this entails several sittings, and some patients and their friends are apt to shirk what is very disagreeable before the completion of the treatment. It is therefore better to avoid this when possible. Moreover, it is undoubtedly a great advantage to be able to feel with the finger the vegetations as they are being scraped off. This cannot be done with Löwenberg's forceps (or with Woakes' modification, which has the advantage of increasing the cutting surface), or with what is otherwise a most useful instrument—viz., a curved ring knife, which Mr. Hawksley constructed for me before the steel nail. (See Fig. 2.) With this knife, the ring being passed up into the pharynx behind the soft palate, the growths can be by a sweeping movement cut away. This knife is made on the same principle as Gottstein's, and although I have found it more easily moved about in the pharynx, I have seen cases where, in other hands than mine, the whole pharynx has been cleared at one sitting of abundant tough adenoid growths by Gottstein's knife. Notwithstanding the varieties in methods that are now in use, Dr. Meyer still, I believe, adheres (and with excellent

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results) to the plan which he described in what may be most truthfully said to be his classical paper on this affection in the Medical and Chirurgical Transactions—viz., his flexible ring knife passed through the nares into the pharynx, guided throughout its movements by the forefinger of the left hand; but as the unpleasantness of having the ring knife passed through the nares can be avoided by operating through the mouth in one of the many methods now adopted, his mode of attack, so to speak, is, from what I can learn, not followed out by others.

Looking back to a period when this affection was unknown, and the precise cause of the characteristic intonation in these patients was unsuspected, it is curious to notice how absolutely familiar Dickens was with the peculiarities of voice which marks the subjects of adenoid vegetations. He must have come in contact with some of them when he so accurately reproduces the voice in one of the characters in "Oliver Twist." There he makes the boy Barney (one of Fagin's gang) say "stradegers id the next roob," and "ah! ad rub 'uds too, from the cuttry, but subthig in your way, or I'b bistaked." From the context we may fairly suppose he believed this intonation was indicative of race, and he introduces it by way of emphasising the generally disagreeable peculiarities of the characters he so graphically depicts; but in this particular he certainly does Barney an injustice, for adenoid vegetations are to be met with in "all sorts and conditions of men," living under the most favourable or unfavourable circumstances, and in many latitudes. That they are frequently present in several of the same family cannot fail to be noticed (I have seen four in one family), and from the recollection of parents as to their own breathing and hearing in childhood, the tendency to abnormal adenoid development would seem to be inherited; but as the parents have arrived at the time of life when this enlargement has disappeared, it is not easy to establish this point. Besides the departure of three symptoms—viz., the tendency to Eustachian obstruction, the consequent deafness (which generally directs attention to the trouble), and the nasal obstruction—which follows the removal of adenoid vegetations, there are other advantages to be reckoned, such as the better prospects of recovery in case of diphtheria or scarlet fever occurring, with an empty rather than a blocked pharynx, as well as the better chances of the middle ear escaping destruction during these diseases. The improvements also of the general health, with free nasal breathing, as well as the diminished tendency to bronchial affections, require only mention to be appreciated.

Savile-row, W.

THE ETIOLOGY OF TYPHUS FEVER,

ILLUSTRATED BY A SERIES OF RECENT OUTBREAKS IN DUNDEE AND NEIGHBOURHOOD.

BY ROBERT SINCLAIR, M.D.,
PHYSICIAN TO THE DUNDEE ROYAL INFIRMARY.

(*Concluded from p. 574.*)

Outbreak No. 10.—Mrs. M——, aged fifty-three, resided at 2, John-street (Central). She and her son occupied two small attic rooms, which, according to Dr. Stalker, were very close and ill-ventilated, owing to the windows not opening, and the only air that could reach them entering by the door after doing duty in the stairs and flats below. She had not been near any house in which there was illness for months, but she confessed to insufficient feeding. She sickened of typhus on July 3rd, was admitted on the 13th, and recovered. Dismissed Aug. 25th. Her son was admitted on Aug. 18th, the sixth day of the fever. Was the son infected directly from the mother? I think not. To accept this explanation would necessitate belief in a thirty days' incubation-period, of which we have no collateral evidence. Was he infected by her indirectly through fomites? Or was his a case of generation of the poison *de novo?* After the mother's removal, the house, bed, personal clothing, and furniture were subjected to the usual cleansing and germicidal measures by the sanitary department. If my friend, Dr. Anderson, is prepared to certify that no infective material remained in the house after these measures, we shall be free to accept the theory which, in my opinion, is the only tenable one for the origin of the mother's attack—namely, a new development of the poison; and there is this to be said for the latter view, that although the house was cleaned the son continued to live in precisely the same insanitary conditions which preceded his mother's illness.

Outbreak No. 11.—Mrs. S——, aged fifty, 23, Edward-street (West Central), half a mile from the last outbreak, was admitted on July 11th, the fifth day of her illness, as a medical case. On the day after her admission she had a well-marked typhus rash. The attack was sharp and left patient very weak, although it terminated on the ninth day. The only illness for a long time in the acquaintance or neighbourhood of this patient happened to be in the next house, where she frequently visited. In it there were two rooms occupied by seven inmates. The head of this house had been out of work for some time, and the family had therefore been rather poorly fed, and two of his children had had febrile illnesses, which lasted respectively (including convalescence) four and seven weeks. These cases were not recognised as typhus, but there can be little doubt that they were so. While the children were ill Mrs. S—— visited them very frequently, and helped their mother to nurse them. But a full and exhaustive investigation failed to connect this outbreak with any preceding case.

Outbreak No. 12.—A. T——, aged thirty-three, a Swedish sailor, arrived in Dundee on August 27th, having left Quebec in a sailing vessel forty-eight days previously. He sickened on August 19th, and was seen by Dr. Gibb on the 27th in the dark forecastle occupied by himself and four others. This place was very dark, had no portholes or windows, and emitted a stench so powerful as to render breathing in it very unpleasant. No other case of illness had occurred on the voyage. He was immediately removed to the infirmary. I saw him on the day after admission, and noted a dusky aspect, a typhus odour from the breath and body, an enlarged spleen, and a typhus rash over the abdomen and back. The morning remissions of temperature in this case in the second week were much more pronounced than we usually find them in typhus. On the eleventh day the morning temperature was 101°, the evening 104·4°; twelfth day, morning 100°, evening 101·2°; thirteenth day, morning 99°, evening 102·6°; fourteenth day, morning 100·4°, evening 102·8°; fifteenth day, morning 99·8°, evening 103·8°; sixteenth day, morning 98·6°, evening 102·4°; seventeenth day, morning 98·4°, evening 101·4; eighteenth day, morning 98·4°, evening 100°. On the twenty-first day the temperature both morning and evening was normal. On the fifteenth day of the fever I dictated the following note which will sufficiently show the doubts which then existed in my mind:—"Skin perspiring; copious eruption of sudamina on abdomen. Rash still obvious on back, but nowhere petechial. A few spots still somewhat papular, but rather less so than when first observed. No mottling from the first. Tongue coated with a dirty yellow fur, and inclined to dry in centre. Aspect still rather dusky. Has taken milk better for the last twenty-four hours. Bowels not moved since three days ago, when he had one rather loose stool, green in colour, certainly not pea-soupy, and without medicine. One small-formed stool, pale yellow, two days ago." Now sudamina are well known to be much rarer in typhus than in enteric fever, although less rare under than over forty years of age. The temperature remained above the normal standard until the evening of the twenty-first day; it was not only more decidedly remittent than we are accustomed to in typhus, but on the last five days it was truly intermittent; in all these three respects resembling enteric fever in its later stages rather than typhus. I do not raise the question whether there may have been in this case and in the case of S—— a double infection of typhus and enteric. Where did this man get his typhus? The time that elapsed between the departure of his ship from Quebec and the onset of his illness—forty days—puts infection from Canada out of the question. Was it due to fomites? It may have been; but if so, why did the poison lie dormant so long in this pestilential hole? Was it not more likely to have been generated in those conditions which Dr. Gibb describes, and which remind one of Howard's description of our prisons a century ago? Several months since, I asked the medical officer of health for Quebec if any typhus existed in that port during the sojourn of the ship there, but I have received no reply. I traced the ship for three weeks after she left Dundee, and no fresh cases had occurred on board during that time.

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Outbreak No. 13.—J. A——, aged forty, an umbrella-mender, who resided with his wife and six children in two small ill-ventilated rooms, at 3, Castle-court (Central). He rarely left his house (sometimes not for a week), in which he did all his work; he had not been in any house but his own for months, and there was no fever in the neighbourhood. He was sent in by Dr. Stalker on Oct. 13th, the eighth day of the fever, with a typhus aspect and rash, which had been preceded by rigors and headache. Here, I think, we are shut up to one of two explanations—either that the poison was manufactured in his overcrowded dwelling, or that it was introduced by one of the numerous umbrellas brought to him for repair. But typhus centres are not places where such avoidable luxuries are in much demand; and the man assured me that his customers belong chiefly to the well-to-do classes.

Conclusion.—My narrative is ended. It affords ample evidence of the contagiousness of typhus, of its intimate association with human misery, and its amenability to prompt sanitary action. These are the truisms of its natural history. The question that will be asked, and that ought to be asked, is—Does all this dry detail, this tracking of cases, this inspection of houses, bring us one whit nearer a solution of the problem of the origin of the disease? Which of the two conflicting doctrines are we to accept? Is typhus always the result of specific infection from an antecedent case? Or can it be generated *de novo* from the concentrated and putrid exhalations of human beings? No one, I presume, will deny that the clinical history of the disease warrants us in concluding that there is a specific typhus poison. But some of us may be disposed to hesitate before assenting to the creed of Dr. Davies, who "would as soon believe in the spontaneous generation of human beings as in the spontaneous generation of typhus."[1] At the same time I freely allow the difficulties of the doctrine which is associated with the great name of Murchison, that the poison can be developed by these squalid conditions, in which typhus is most commonly seen. The difficulty of proving a negative we all know; and it would be idle to deny the strength of the position of those who hold that we are not hastily to assume an independent origin of typhus simply because it has not been possible to trace a connexion between every new case and an antecedent one. I set to work to seek out the story of these outbreaks simply in a spirit of inquiry, and with a determination to probe every detail to the bottom. I confess to having long inclined to the new generation side of the controversy. A man who has been seeing typhus pretty steadily for fourteen years could hardly avoid having an opinion on the subject. But I have not allowed personal bias to suppress or gloss over a single fact which has come under my notice. So far from this, follower of Murchison as I am, patient inquiry has in many cases established a contagious origin where at first a new generation of the poison seemed the only possible explanation. Not till long after I had begun my investigation did I hear from Dr. Watt his interesting account of the importation of typhus by the Glasgow tramp. It tells I confess, very strongly, against me. But we have no evidence of its spread to more than two persons in the dense and dirty population of the Bog.

What are the broad facts of these outbreaks? From Feb. 20th, 1884, when the last cases of the previous epidemic were safely lodged in the infirmary, Dundee was free from typhus till the end of September of the same year, when Dr. Watt tells us the disease was introduced by a Glasgow tramp. That a tramp from Glasgow might easily have typhus is undeniable; because Dr. Russell, the medical officer of health for that city, wrote some months ago—"You may take it that typhus never is extinct in Glasgow. There has not been a day during my official connexion with Glasgow (twenty years now) when we had not cases in our wards." Only two undoubted cases can be traced to the tramp. Two months after the Lochee boy's death typhus appeared in Miller's Pend, fully a mile and a half distant from Lochee. The removal of an infected family speedily transferred it to Milne's East Wynd close by. In January we had outbreaks in Lochee, Butterburn, and Lilybank-road—the extreme north-west, northern, and eastern districts of Dundee. It appeared in the centre of the town (Ramsay's Pend) and in the north-west (Mitchell-street) in March; in Dudhope-crescent (the centre again) in April. Then we had the Invergowrie case in June. In July we had two cases from Dudhope-crescent after it had been absent from there for two months and a half. In the same month it cropped up in Edward-street. Then we had the Swedish sailor—clearly an imported case—in August; and, finally, the umbrella-mender, who rarely left his house, sickened on Oct. 5th, at a time when, with the exception of the sailor, who was conveyed straight from his ship to the infirmary, typhus had been absent from Dundee for three months.

The nomadic habits of some of those who suffer from typhus must not be forgotten, and due weight must be allowed for the action of fomites; but if this unfortunate tramp was the cause of all the typhus we have had for fully twelve months in Dundee, why, let me ask, did the outbreaks not show some reasonable relation in time to his attack, and why did they not follow the ordinary streams of human intercourse, instead of cropping up at intervals of time and space which seem to preclude any possibility of connexion with him and with one another—a connexion which a very exhaustive inquiry utterly failed to establish? The case of the boy from New Mill of Gray seems to me to be one of the most striking instances possible of a fresh and unusual generation of the poison. His surroundings were most comfortable. The only case of typhus in Dundee of which we have any knowledge when he sickened, and for twenty-two days before, was at 11, Milne's East Wynd, and he was never within 570 yards of it. Now, there is no case on record of the disease spreading through the open air. "It never spread from the London Fever Hospital," says Murchison, "to neighbouring houses, even when the hospital was one of a row of houses in Gray's-inn-lane." And when the hospital occupied its second site at King's-cross, on the same plot of ground as the Small-pox Hospital and within a few yards of it, Dr. Tweedie states that, notwithstanding the certainty with which its own officials contracted typhus, there had been no instance of this fever among the officials of the Small-pox Hospital during eight years."[2] If overcrowding, defective ventilation, and filth are only predisposing causes, we must assume the omnipresence of the specific virus, ready to swoop down at any moment and take root in favourable soil. But the facts point quite the other way. We know that the poison is very easily weakened and destroyed by fresh air and a sanitary environment. The disease never shows itself first except in the midst of insanitary conditions, and if it only appears in such conditions "it seems fair," as Murchison says, "to assume that the appreciable conditions, and not an omnipresent and indestructible poison, constitute the primary cause of typhus."[3] But, even granting that analogy warrants the conclusion that the virus of typhus contains a specific micro-organism, the doctrine of generation of the disease *de novo* is by no means overthrown, because the microbe may only be capable of activity under those insanitary conditions in which the disease always first manifests itself, and in the midst of which it unquestionably shows its greatest virulence. I am not aware if this observation has been made before; if so, I have never heard of it. But during this inquiry I was positively struck with the frequency with which the first cases of outbreaks that the utmost care failed to connect with previous cases occurred in attic rooms. These rooms, being the coldest in the house, are not likely to have their windows opened too often; and being at the summit of the building, and often at the summit of very badly ventilated staircases, are obviously exposed to greater risk of being filled with vitiated air than the apartments lower down. The bearing of this observation on the causation of typhus is perfectly obvious if we allow the possibility of generating the poison. But having said all this in favour of the doctrine to which I give my own adherence, I am bound in all fairness to acknowledge a remark that was constantly on my lips while conducting this investigation—that the marvel to me was, not that typhus sometimes originates in the fever dens of Dundee, but that it is ever absent. On the other hand, it must be said that the precise amount of overcrowding, defective ventilation, and filth, and the state of the atmosphere and temperature, which presumably are necessary for the generation of the poison, are yet known to us, and are probably not always present. And if anyone asks, Why do these same or similar conditions not develop the virus of typhus everywhere; why, for example, should typhus bear the character of an endemic malady in Ireland and Russia, when it has found difficulty in gaining a footing in Asia, and has not occurred

[1] Med. Times and Gazette, Oct. 1867, p. 429.

[2] Continued Fevers, third edition, p. 89.

[3] Ibid, p. 116.

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in the greater part of the African continent; why did typhus not appear in the United States and Canada till its introduction by the Irish immigrants? why in America does it chiefly affect the eastern seaboard and spread mainly among the Irish who have landed there?—my answer is that each family of the human race and each climate has its own proper specific diseases. And if I am further asked, Why has typhus never gained a footing in Australia, Polynesia, and New Zealand?—I cannot refrain from replying that the lands whose indigenous quadrupeds are stunted, and whose evergreen forests are the marvel of the traveller, may, for aught we know, be inimical to the generation and spread of the poison; moreover, these countries are in the European sense new countries, and, if we only give them time, the habits of the Celtic Irish may yet succeed in developing typhus there as they have developed it at home.

Whatever may be thought of the views I have ventured to submit, I believe that there will be agreement on two points: first, that the doctrine of the independent origin of typhus will, wherever accepted, exert a more quickening effect on local authorities than its opponent; and secondly, that the history of these thirteen outbreaks, occurring for the chief part in the most densely populated districts of Dundee, and affecting only fifty-four persons in all, demonstrates, beyond the shadow of a doubt, the ability and success with which our public health work is conducted by Dr. Anderson, Mr. Kinnear, and the other officials of the sanitary department. But for their efforts, the labouring classes of Dundee might now be suffering from a typhus epidemic of overwhelming magnitude and mortality.

ON A CASE OF ACUTE TONSILLITIS IN A SUBJECT OF TERTIARY SYPHILIS OF THE PHARYNX.

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CASES in which the soft palate forms adhesions to the posterior wall of the pharynx are not very rarely seen among patients who have been the subjects of syphilitic ulceration in these parts. The appearance which such a case presents on examination of the fauces is not a little bewildering to the uninitiated. Once seen and understood, however, it will afterwards be easily recognised. There is no palatine arch, and probably no uvula. The roof of the mouth and pillars of the fauces, hardly to be recognised as such, are quite continuous with the posterior wall of the pharynx. The naso-pharynx is seldom quite shut off from the rest of the pharyngeal cavity. Behind the edge of the hard palate there may be a perforation of the soft palate, or it may be that one of the posterior pillars has not become completely adherent, thus leaving in either case a small round opening sufficient for the passage of air. The adhesion probably begins from below. If there is a perforation already formed in the soft palate, then, as Schech has pointed out, the adhesion will in all probability become complete. In this case the movements of the soft palate are much impaired, and to a certain extent unnecessary, on account of the permanent communication between the two cavities. Thus the soft palate is allowed to remain in contact with the pharyngeal wall. In the absence of perforation the continued passage of air will probably prevent complete adhesion taking place. The process must be a very gradual and nearly a painless one, otherwise it is difficult to explain why such patients have allowed it to go on without applying for treatment. Although such a case as this is unmistakable, it may, when complicated, lead to difficulty of diagnosis. If an attack of acute tonsillitis, an œdematous pharyngitis, a gummatous infiltration, or a malignant growth should occur, the appearance will then be very puzzling, and diagnosis probably impossible, until the case has been watched for some time. To Dr. Semon I am indebted for kindly allowing me to publish a case in point which lately presented itself at his clinique in the department for diseases of the throat, St. Thomas's Hospital.

E. O'D——, a married woman, aged forty-four, applied at the throat department complaining of pain in her throat and difficulty of swallowing, which had come on a few days previously. She also suffered from general *malaise*. It was with difficulty that she could open her mouth sufficiently to allow even an imperfect view of the fauces. The appearance then revealed was somewhat extraordinary. The whole of the left and the greater part of the right side of the isthmus faucium were occupied by a swelling, which so displaced the surrounding parts that it was with difficulty they could be made out. The swelling was continuous on the left with what looked like the left anterior pillar, and above with the soft palate. The root of the tongue was pushed down on the left side by the swelling. On the right side a small opening remained for the passage of food and air, but the posterior wall of the pharynx could not be seen. At the upper part of the swelling, and pushed over to the right of the middle line, was a small œdematous body, identified by its situation as the uvula. It consisted of a round mass about the size of a pea, suspended by a short thread-like pedicle from the upper part of the swelling. The swelling did not fluctuate, and was not very sensitive to touch. No enlargement of glands was to be detected in the neck. While from the symptoms one had expected to find on examination the appearances of an ordinary tonsillitis, what was seen was very different. The swelling, whatever it was, seemed to be one not confined to the tonsil, but involving also the soft palate and probably the posterior wall of the pharynx; the appearance, in fact, was that of a malignant growth or an infiltrating gummatous deposit.

The history of the patient was that she had suffered from sore-throat off and on for twenty-five years. She had been married nineteen years, and had had five children and two miscarriages. The children were said to be healthy. It appeared that she had applied at the throat department five months previously, but had only come once. On reference to the former notes of the case, it was found that the appearance at that time had been almost precisely the same. Dr. Semon then had left the diagnosis *in suspenso*, and had put down "acute tonsillitis (?); malignant disease (?); syphilis (?)." As to what had been the condition in the interval we were left completely in the dark. We had only the patient's word for it that she had been comparatively well in the meantime. I may add that there were no signs of choroiditis on ophthalmoscopic examination. The diagnosis was left once more doubtful.

The patient was ordered to take ten grains of iodide of potassium, along with a saline aperient, thrice a day, and two grains of guaiacum, in the form of a lozenge, every two hours. She was strictly enjoined to return in a week. She did return, and happily the mystery was solved. The swelling had greatly subsided and a good view could be obtained. It was at once seen that the case was one of syphilitic pharyngeal stenosis, which had been complicated with an acute tonsillitis. The soft palate had formed adhesions to the posterior wall of the pharynx everywhere, except a little to the right of the middle line, where there was a small opening leading to the naso-pharynx and admitting the passage of a small probe. The swelling evidently was seated in the left tonsil, which, in consequence of the adhesions, was so abnormally situated as to appear to spring from the posterior wall of the pharynx, as well as to be continuous with the left anterior pillar of the fauces. The remains of the uvula presented the same appearance as on the previous attendance, except that the œdema had subsided. The character of the attack, its rapid course, and its tendency to recur left no doubt that it had been acute tonsillitis. The patient remained under observation a few weeks, and then ceased attending. It was elicited by cross-examination that twenty-five years ago she had had what was probably secondary syphilis, having been in hospital at Tralee with a general eruption over the body, and having then been treated with medicine which made the gums sore. The case was thus a very interesting one, and from its rarity and temporary obscurity is worth recording.

A GENEROUS and ungrudging manner of conducting insurance business deserves to be noticed. The Law Fire Insurance Society has, we learn, just awarded a gratuity of £300 in alleviation of a loss by fire sustained by a medical man who practises on the Continent, and who had omitted to keep up the payment of the premium on his insurance for £500, in respect of some stored furniture, which was destroyed by fire eight months after the last payment.

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SOME SUICIDAL OR OTHER CEPHALIC INJURIES I HAVE SEEN.

BY BRIGADE-SURGEON W. CURRAN,
ARMY MEDICAL DEPARTMENT, RETIRED.

(*Concluded from page 581.*)

WHAT strikes one on reading the foregoing list is, first, the trivial or inconsequential character of the cause or provocation that led to some of these catastrophes; and, secondly, the absence of all reasonable motive for, as well as of any adequate allurement to, the perpetration of this crime. But then we are told that "of the direct inheritance of morbid qualities ..... suicide yields the most decided examples," and "it is both striking and startling to observe how strong the suicidal bent is apt to lie in those who have inherited it." Moreover, it is but fair to conclude that one or more of these men were the victims of involuntary impulse, and it is also fair to conclude that the reason of one of them gave way under the pressure of intolerable pain. We may be unable to recommend his example to the imitation of other like sufferers, or accept it, under similar circumstances ourselves. We can, however, do more. We can tell our pupils or subordinates that a few leeches seasonably applied in front of the tragus or behind the meatus externus will certainly relieve pain, and we may add that such an application might in this instance have saved a valuable life for the service of the State. "Human felicity," says Franklin, "is produced not so much by great pieces of good fortune that seldom happen, as by little advantages that occur every day," and the inculcation of lessons of this kind would be more profitable for the soldier and his surgeon than recondite dissertations about the course or the composition of bullets or secondhand rehearsals of the conjectural neology of German garrets.

Another reflection that suggests itself here has reference to that causeless or purposeless throwing away of health, and even of life, that so often characterises the conduct of the young soldier. But this fact or feature of his case is so common or so well known to his superiors as to cause them no particular alarm or surprise, and I have heard of one instance at least in which this suicidal tendency became endemic, through the force of example or imitation, in one well-ordered cavalry corps in the East. In this instance—to reproduce the *ipsissima verba* of my informant—"a troop sergeant-major who had contracted some debts which he could not repay blew out his brains in his own bungalow; another lay down on his cot just after talking quite rationally to a comrade, and immediately executed a similar movement; a third followed suit soon afterwards, and two others at more distant intervals, without making any sign of discomposure or premeditation. I have no reason," adds my friend, "to suppose that either of these men was insane," and I have myself elsewhere shown that the belief that all suicides are insane is, *au fond*, nothing better than an unreasoning superstition, or at best a popular fallacy.[1]

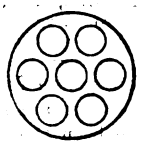
The bones of the skull were so shattered—smashed rather—in four of these cases as to be almost unreplaceable, but there was little or no disfigurement in the fifth, and this immunity my informant ascribed to the fact that the bullet had, in his case, certainly undergone fusion. It was diverted by its impact with the mastoid process into the brain, which it had mashed up in an extraordinary manner, and in which it was subsequently found in fragments. These cases are, I think, otherwise calculated to shed some light on that obscure question, the behaviour of lead in presence of bone. They also tend to shed some light on the lightning speed, as well as on the crushing powers, of this weapon or its contents; and I dwell upon them thus minutely—too minutely, perhaps—because they came under my own personal cognisance, or under the cognisance of persons on whose judgment and veracity I could entirely rely.

Another reflection that suggests itself here has reference to that relationship, as regards life and limb, which necessarily exists between shot and bullets in actual conflict. This question was raised some time since in another place, in connexion with the repressive measures of the late Mr. Forster in Ireland, and the weaker party—with whose national and other aspirations I am proud to say I heartily agree—*victrix causa Diis placint, sed victa Catoni*—strenuously maintained that the bullet was the speedier or more effectual medium of "interchange" of the two, and that it ought therefore be preferred. This conflict of opinion invests the question with a larger or more dramatic interest than it might otherwise command, and as the matter is still or in some measure *sub judice*, I introduce a somewhat diagrammatic sketch in elucidation of the point I wish to enforce. (Fig. 3.)

Now, if the candid reader will only compare these dots and the lacerations they produce with that little, almost undiscernible slit which he can make for himself on a corpse or on a carcase, he will at once see that, though the crash or the flash of the one may be much greater, the opening made by the other is and must be, *sua Natura*, as well as at close quarters, far more destructive and dangerous. Fired point-blank, shot will probably act as or like a bullet, and destroy life as effectually, but the result will be slower or more painful in the one instance than it is likely to be in the other; and if the victim of the former survives the shock or the hæmorrhage of the encounter, he will probably succumb after much pain and suffering to erysipelas or pyæmia. The question was, as I take it, one between slow death, with the probable mutilation of innocent spectators or casual outsiders thrown in, and the "happy despatch" of a speedy or painless death to one or more of the actual ringleaders of the riot, and there was an end of the matter.

The substitution, therefore, of buckshot for bullets, instead of being, as it was, I assume, considered by its advocates to be, a mitigation of punishment, was rather an enhancement and aggravation of it; and a description of an agrarian conflict of this kind that appeared in *The Times* of April 7th, 1882-83, confirms this. Detailing

FIG. 3.



Diagrammatic sketch of the appearance that is or might be produced by a charge of buckshot delivered at close quarters.

the incidents of this conflict, the writer says that "one of the men that was killed at Ballaghaderesn was shot in the arm, abdomen, leg, and heart. ..... One girl had her arm terribly lacerated, and fifteen others (i.e., it may be, casual lookers-on or outsiders) were wounded," and these were, I think, substantially the grounds on which objection was made to this substitution in and out of Parliament. Moreover, "a vessel which might possibly escape by yielding to the pressure of a bullet, has," as a well-known specialist points out, "scarcely any chance of avoiding division or destructive contusion when it is rained upon, as it were, by a small shower of shot from a fowling-piece," or from a policeman's rifle; and as to the other cavities or viscera of the body, their chances of escape from a bullet are much greater than they are where buckshot traverses the one or lodges in the other. It was, indeed, found, as a matter of fact, that when the Ashantees, or the Maories, or the Soudanese "managed to creep by stealth through the bush so as to be able to discharge their muskets at very close range, the wounds inflicted were sometimes of the severest kind, and in particular cases fatal." So speaks an expert whose authority on the point ought to admit of no question, and I should, I fancy, be only diminishing the weight and cogency of his arguments by any or such criticism or endorsement of my own as I might here offer or employ.[2]

Touching the lesions that result from accidents in the hunting-field or on race-courses, they have not, I think, received the attention their nature or numbers would seem to deserve or suggest. Nor do I pretend to be able to throw any very special light upon them. I have, however, seen two or more such casualties myself, and I have been brought into such close relationship with two or more others that I

[1] The Indian Medical Gazette, Nov. 1st, 1876.

[2] The experience obtained in this connexion, or since this was written, at Belfast, as that was reproduced by Mr. Foy in the Medical Press of Sept. 1st, appears to me to bear out and confirm these views.

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may, I think, include them in this category or under this heading. I have also myself a depression of this kind in my vertex, which will, I know, accompany me to my grave, but from which, all the same, I have never suffered the slightest inconvenience, and I merely allude to it here to enable me to say that it is not your big falls that kill in these cases, but your "trivial rounds, your common tasks," when riders are returning home from the race or the chase, as the case may be, and their steeds are either jaded or off their guard. The former are either discussing the events of the day, or it may be the affairs of the nation, or they are communing far away with their own thoughts; the latter are possibly dozing or thinking of their stables, and—a slip or a stumble will do the rest.[3]

This is not, we all know, the common impression. On the contrary, most people couple casualties of this kind with a broken neck or other such terrible injury as can only be produced by a racing pace or a fall off a runaway horse; but some of our worse accidents have happened under situations of an entirely opposite character, and anyhow a mishap that has proved fatal to a great king[4] as well as to a great statesman, and also later still to a very distinguished and successful bishop, deserves some more attention at our hands than it has hitherto received. Post-mortems are notoriously the exception in such cases, and county coroners are more anxious to save the rates than solve nice points of diagnosis or pathology. These considerations induce me to take up the subject in this place or in this connexion, and the difficulties I have had to encounter in my search for authentic particulars in point must be my excuse for the incompleteness or other imperfections of the record subjoined below.

Many years ago—so many, indeed, are they that I am almost afraid to count them,—as I was travelling by one of the Bian's jingles[5] towards the capital of my native county in the south of Ireland, a wedding party approached us from a farmhouse on the right. Observing that they were in a somewhat hilarious, if it was not an actually aggressive, mood, our careful driver put on "a bit of a spurt," as he called it, in order to pass them; but they were not to be shaken off in that way, and urging on their steeds, in their turn, they emerged just in front of us on "the 'ard 'igh road." They then ranged themselves into line three-a-breast, and started off in a kind of racing gallop before us. One of them—an elderly man, who evidently carried more liquor on board than was good for him, and who, to show his youthful agility, stood up like a post in his stirrups—was soon seen to sway uneasily in his seat from side to side. He next bent forward on his horse's neck for a moment or two, and then toppled over head foremost on his unprotected cranium. I knew nothing of surgery or of any other science or art in those days, but I knew enough to feel that his hours on this earth were numbered (for we could all hear the thud or see the doubling up), and feeling that we could be of no use to him while we were rather behindtime than otherwise, we resumed our route and soon lost sight of him and his party.

This case made a great impression on me at the time, and this impression was enhanced by the occurrence several years subsequently of a somewhat similar catastrophe within the area of my own family. The subject of it, an elderly man, who had indulged one day more freely, as well as *more suo*, at a race meeting, than propriety would commend, was returning in the evening to his own house when the horse that drew his gig stopped suddenly before his gate, and threw him out on his head over the splash-board. He was taken up insensible and carried into his house, and my late brother (Dr. James Curran of Youghal) was sent for. Some two or three hours must have elapsed ere he appeared on the scene, and meanwhile our patient's appearance was so natural—nay, so life-like—that his friends and family thought he would soon "come round." This was not to be, however, for he had actually expired at the time of the fall, and my brother more than once assured me that his cervical vertebra had undergone no change of any kind. What the precise lesion was could not be ascertained, as the family objected to any disturbance of the remains, and I have often since thought that death resulted in his case from nervous shock, and consequent paralysis or suspension of the heart's action.

The third case that came under my cognizance occurred on the Killarney racecourse, and the body was subsequently conveyed for inquest purposes to the workhouse in which I then resided. I saw and examined it there the same evening and satisfied myself that the spinal column had given way in the neck. I asked the master of the house, who accompanied me, for permission to cut down upon and ascertain the extent or precise nature of this injury. I might as well have asked him for permission to burn down the house itself and all its inmates. His consternation bordered on collapse. He stared at me in such a state of wild amaze or bewilderment as seemed to imply that he had either lost the power of speech himself or that I had suddenly become insane; and yet he was by no means a discourteous or unintelligent man; on the contrary, he was superior to his position; but his bread was at stake, and he well knew that his guardians and neighbours regarded such a procedure with horror and disgust. He assured me afterwards that compliance with my request would probably involve the loss of his place, and it was here that I heard for the first time the curious distinction which my poorer countrymen draw between the phrase "kilt" and "kilt entirely." Anyhow we—self and a local *confrère*—were asked a score of times at least as we returned from the scene of the disaster to the grand stand, if the victim of it was "kilt." On being gravely assured that he was, we were then asked. "Eh! then, is he kilt entirely, sir?" and when our response was again in the affirmative, there was a deep sigh from the heart as well as a deeper expression of gloom and sympathy on the faces of our interrogators.

As I hunted as a boy with the hounds of that famous hunter and thorough sportsman, the late—but one, I think—Marquis of Waterford, I may, I presume, include his name in this series. I was, however, abroad at the time, and, having omitted to take any note of the occurrence, was obliged to trust to others for the few items respecting it I am now about to give. Dr. Martin of Portlaw's name is, however, so well known as to be itself a sufficient warranty for the accuracy of any or such account of it as he may give, and it is to him that I and my readers are indebted for the following narrative. "The Marquis was," says Dr. Martin, "going down a small ditch with a drain at the bottom of it, the edge of which gave way under its feet, and the horse going out on its nose, he (the rider) fell forward on its neck. When the horse raised its hinder feet, to extricate itself, the Marquis went out on the top of his head, and did not speak or move again. As his weight at the time was sixteen stone, "the atlas was most probably dislocated; but there was no post-mortem examination, and the medical man who saw him five minutes after the fall pronounced him dead."[6]

As was the appearance of the face of my relative so was it also with that of the noble Marquis. Though six hours had passed before the body was seen by Dr. Martin, yet did "the blood remain so fluid as to give rise to such a blush over his face as actually simulated life," and I am quite unable to explain these appearances. He even admits that it required some cautious manipulation as well as deliberation on his part ere he could finally pronounce him dead, and I cannot accept mere flexibility of the neck as distinctive of a dislocation. The neck in man is, and must necessarily be, possessed of much flexibility; this flexibility would be increased under the conditions here indicated,

[3] I made the following note of an occurrence of this kind that took place when I served in Pembrokeshire from '58 to '61 or so. It speaks for itself, and runs as follows:—"A Captain Philips of Haverfordwest was, while riding unconcernedly over a low fence one afternoon, as he returned from a day's sport with the local hounds, thrown, through a slip on the part of his horse, on his head, and sustained a dislocation of one of his cervical vertebræ. He died soon afterwards." And the curious thing about this painful accident is this: he was actually cautioning his companion against the very mishap that proved fatal to himself at the very time the accident happened. *Sic transit gloria mundi.*

[4] William was not killed by the fall itself, as is so often erroneously thought; he simply succumbed to the effects of it afterwards. Describing the destruction of Mantes, and the king's delight at the sight of the burning city, Mr. Freeman says (Norman Conquest, vol. iv., p. 703) that "at that moment his horse stumbled, and.....the body of the bulky king was thrown forward against the tallíron of his saddle. He kept his seat, but the pain of the blow was such that his eagerness was quenched, and he ordered a retreat to be sounded. He survived this 'death wound' several weeks, but *consulti medici inspectione urinæ certam mortem prædixere*, and there was probably a rupture of the bladder with its usual consequences or complications—extravasation of urine, peritonitis, &c."

[5] Bian is simply an abridgment of Bianconi, the founder, as everyone knows, of these "jingles," or outside cars, in the south of Ireland. The peasantry invariably speak of him thus.

[6] "Old James Cusack told me at the time," says my courteous correspondent, Dr. Martin, "that he had seen two such cases as the Marquis's, and that he had made post-mortem examinations in both. He found that the odontoid process of the axis was dislocated in both these subjects, while the ring of the second vertebra was fractured in one of them at least; and it is much to be regretted that no similar search was made in the case of the Marquis."

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and the common belief that the neck is in such cases *always* broken or dislocated is nothing more nor less, in my humble opinion, than a popular fallacy or an ignorant assumption.

Having thus disposed of what I may, I think, venture, with a very pardonable stretch of imagination, to call my own personal share of this experience, I will now turn to another phase of the question and endeavour to show that that, too, tells the same, or at least a very similar, story. This story is not, however, conclusive, for so infrequent are skilled examinations instituted in these cases, or so anxious are coroners and juries to ascribe them to "accident," that nothing tangible transpires from such inquiries, and lay writers are only too apt to follow suit. They invariably then ascribe such deaths to a broken neck, or they give such descriptions of them as are irreconcilable one with the other, or as may admit of any interpretation the casual reader may wish to put upon them.

Thus, to go no further, describing the then recent deaths of two huntsmen of his acquaintance, a writer in *Baily's Magazine* for June, 1876, says that "when one of these (Jem Morgan) retired his son took his place, and old Jem continued to hunt with the pack occasionally. One day on a frosty morning, as he was trotting to cover, on the side of the road his horse slipped up and gave him a very severe fall. However, he rode on to the meet and actually turned the hounds to his son, but feeling very bad (*sic*) he rode to a farmhouse, got off, laid down on a sofa, and died immediately, *his neck being broken*." Had this been so, he could not, I opine, have survived his fall so long or acted otherwise as he did, and I merely italicise this opinion to enable me to point out its inherent improbability, and point out also, at the same time, the inadequacy of the grounds on which these casualties are so frequently classified.

The story is told somewhat differently by another leading organ of the sporting fraternity, whose decease this same fraternity has had recently to deplore. Speaking of it at the time in somewhat similar terms to those employed above, this journal says that "it—Jem Morgan's death—was occasioned by his horse slipping up and seriously injuring him. It was thought," continues our correspondent, "that he must have got kicked in the back, and though able to ride for an hour after, he gradually became quite feeble, and died soon after at a friend's house on the sofa without a struggle. He was between seventy and eighty years of age," and a verdict of "Accidental death" was, the writer adds, returned, on the evidence of the medical man who inspected the remains. This statement entirely confirms, I think, the impression I have so long entertained of these casualties. It further goes to show the unreliability of the ephemeral descriptions we are so accustomed to of a morning in our papers. I believe that nothing more than a slight effusion into the ventricles of the brain or into the membranes of the cord, would have met the eye of the anatomist who examined these remains. For the effects of shock are not always obvious to the senses, and as to that capillary stasis or nervous relaxation that so often characterises the end of life—they sometimes elude the ken of even the keenest microscopist.

When, as in a recent instance, the horse falls, "throwing his rider on the back of his head and crushing his body by rolling on him," there can, of course, be no doubt as to the diagnosis or the prognosis either, but this kind of crushing is not common, and we more frequently find that the "stunning" that is produced—to give it its popular designation—by horse and other falls of this kind is either momentary or so fugitive as to leave no serious trace of injury behind it. There can, on the other hand, be no doubt that, as the law of the strongest so forcibly enjoins, the neck must be either broken or dislocated under several of the contingencies here contemplated, and this is, too, I think, the experience of hospital and other consulting surgeons.

Thus, courteously answering a question on the point I put to him, Mr. Reginald Harrison assures me that he has seen two such cases, and he classifies the lesions found on these as follows:—"The death of one of them resulted from a fracture which involved the four upper cervical vertebræ; the death of the other resulted from a rupture of the transverse ligament of the atlas, coupled with which was a displacement between this bone and the axis"; and he thinks that "the deaths that occur a few hours after the accident are generally traceable to fractures of the base of the skull." That is so, doubtless, in many of these cases, but it is certainly not so in all, or even in a majority of them, and I have long been of opinion that this particular fracture is just as big a bogey in this connexion, as well as at coroners' inquests and in medical parlance generally, as is its bigger brother the "break-neck" theory or assumption of the penny-a-liner of the period, or of his equally credulous or unreasoning audience, the outside public.

Finally, and as regards some of the fatal accidents that have occurred in connexion with the "Grand National" or other race at Aintree—where I have myself often been,—I am enabled to give, on the authority of an old jockey and weigher of that institution, the few following authentic particulars: This now famous "meet" was instituted in 1827, and several riders have since then paid the penalty of their daring with the forfeit of their lives. Among these were Doyle, Edwards, McDonald, Stevens, and Wyn, and how many others were maimed or injured there I am unable to say. "Two of the above (Doyle and Stevens) died at the gorse fence in front of the big water-jump of broken necks. Edwards died of concussion of the brain three days after his fall at the 'bushes'; and McDonald's death, which took place, I think, over the 'flat,' and which was the latest—let us hope it may be the last—of the series, resulted from a crushing as well as a kicking he sustained on the ground through a 'cannon' which took place while they were racing at full speed between his own and another rider's 'mount.'"

As to the last-named jockey, young Wyn, a son of the well-known Irish steeple-chase rider, Denny Wyn, I find from my own notes that he was killed at the brook there in 1862. His horse, named O'Connell, cannoned against another while they were both in the air, or rather, as they were both alighting from their spring into that unstable element, and fell on him. This fall produced a fracture of the sternum, and such an amount of shock—possibly also of hæmorrhage—as led to immediate unconsciousness and speedy death; and though I have by me notes of several other cases of this kind, they happened so far away, or are otherwise so ill-described, as to be unsuited for reproduction here. I therefore bring this little essay to a close, with the hope that, though I may not have succeeded in shedding any very new light on the matters it discusses, I may have contributed, in however small a degree, to dissipate some of the obscurities that surround them. Should this prove to be so—should, in other words, the outcome of my own and of some other more competent observer's personal or professional gleanings be such as to lessen prejudices, and remove misrepresentation or illusion—the object I had in view in undertaking it will be more than realised.

Bibliography.—As the length of this paper precludes any detailed corroborations of its facts or statements by means of foot-notes, while the readers of it may wish to know something of the authorities on which these are based, I subjoin a list, in alphabetical order, of the writers—periodical or otherwise—to whom more or less reference has been made in it:—H. C. Bastian, M.D.: "The Brain as an Organ of Mind," p. 29. *Baily's Magazine* for June 1876, p. 38. *Bell's Life* for Feb. 2nd, 1862. *British Medical Journal* for Oct. 23rd, 1880, p. 655; see also, in the same direction, *ibid.* for April 16th, pp. 593-6. Drinkwater: "A History of the Siege of Gibraltar," p. 73. Fox: "A Journal or Historical Account of the Life of George Fox," London, 1694, vol. ii., pp. 151-2. Franklin: "Autobiography," p. 121. *Fraser's Magazine* for Feb. 1874, pp. 311-12. THE LANCET for Dec. 17th and 24th, 1881—Prof. Longmore: "Gunshot Injuries," pp. 72, 89, 104, 135, &c. H. Maudsley, M.D.: *Fortnightly Review* for 1886, p. 654. *Cork Herald, Morning Post, Standard, Times, Vanity Fair, Warrington Guardian*, &c. S. W. Rowley, M.D.: "Schola Medica," p. 9. Shakespear: "Wild Sports in India." Wilson: "The Abode of Snow," in *Macmillan's Magazine* for Nov. 6th, 1874, pp. 564-9. "The Supplementary Despatches of Wellington," vol. i., p. 162. Stanley: "The Dark Continent," vol. ii., p. 115.

THE PREVENTION OF HYDROPHOBIA.—A society has just been formed with the title of "The Society for the Prevention of Hydrophobia and the Reform of the Dog Laws." The objects of the society are to extend the regulations relating to the muzzling of dogs all over the United Kingdom, and to make them more stringent as occasion requires, to advocate a graduated dog-tax, and to promote efforts to obtain a more speedy legal redress for dog nuisances than at present exists.

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TWO SUCCESSFUL CASES OF GASTROSTOMY;

ONE COMPLICATED BY TRACHEOTOMY.

BY C. STONHAM, F.R.C.S. ENG.,
SENIOR ASSISTANT-SURGEON AND PATHOLOGIST TO THE CANCER HOSPITAL, BROMPTON.

CASE 1.—Richard A——, aged thirty-seven, applied for relief on Jan. 15th, 1885, with the following history. Twelve months before he had "a cold in the head and sore-throat," and the doctor told him the throat was ulcerated, and "burnt it" on three or four occasions, with temporary benefit. Four months later the throat became worse, and he was admitted into St. George's Hospital and treated as an in-patient for fourteen days; nothing was done locally, but he says he had medicine containing "iodide of potassium," which did him no good. The throat troubles gradually increased, and three months ago he noticed that speech became thick and difficult, and there was slight dysphagia. Fourteen years ago he had a chancre, followed by a rash but no sore-throat. He thinks the disease may be due to smoking.

Present State.—Jan. 15th: There is an extensively ulcerated epitheliomatous mass involving the right posterior part of the tongue and floor of the mouth, the right tonsil and pillars of the fauces, with the right half of the pharynx, and extending downwards as far as the epiglottis. The glands in the neck are a good deal enlarged. The growth is extremely sensitive, and the patient cannot bear it to be even lightly touched, the examination with the finger causing excruciating pain.

On Feb. 5th the growth was rapidly extending in all directions, and only liquid food could be taken on account of the great severity of the pain when anything passed over the ulcerated surface. In the hope of alleviating this the lower molars were extracted. From this time he very rapidly grew weaker, and, the growth extending, became very anxious to have something done to relieve him and to enable him to take sufficient food. Accordingly, I proposed gastrostomy to him, explaining the nature and risks of the operation. He decided to have it performed, and on Feb. 17th the first stage was completed under strict antiseptic precautions. An incision was made parallel with the margins of the seventh, eighth, and ninth ribs, and a finger's breadth internal to them. The structures in the abdominal wall were successively divided, and the great curvature of the stomach immediately presented in the wound, and was united to the peritoneum and skin by fourteen silk sutures, which only passed through the muscular and peritoneal coats of the organ. The great omentum was the only other structure seen. There was no sickness during or after the operation.

Feb. 18th: Patient passed a comfortable night, and has been free from pain. The tongue is very dry, but is moistened with glycerine and water in equal parts. The temperature and pulse are normal. He has a nutrient enema every two hours, consisting of two ounces of strong beef-tea, ten grains of pepsine, and twenty grains of pancreatine. These have all been retained.—20th: Feels quite well, and the nutrient enemata satisfy him. They now contain yelk of egg, and are all pancreatised.—22nd: The temperature and pulse have been quite normal since the operation, and the bowels have acted properly. He has only experienced inconvenience from the great dryness of the tongue. To-day he feels a little hungry. The dressing was removed, and the stomach was seen to be coated with a thick layer of vascularised lymph. There is no tenderness round the wound, but a little redness at the points of suture. A small hole was made in the stomach with a small scalpel, and through this a piece of indiarubber tubing about the size of a No. 10 English catheter was inserted. There was no escape of fluid from the stomach, nor did any of the warm milk, which was poured in, return. The abdomen round the wound was well oiled and powdered with chalk, and the tube (clamped) was retained in its place by a strip of plaster and thread.—23rd: The enemata have been discontinued, and all food has been given by the stomach. The rubber tube has been replaced by a vulcanite self-retaining female catheter. Altogether he has taken about three pints of beef-tea and milk, and has rinsed his mouth out with milk on account of the dryness of the tongue. The pain in the throat is very much better since the operation, and he expresses himself as being very pleased with the result.—25th: All the sutures were removed.—27th: Got up to-day for the first time. Minced meat and biscuit powder have been added to the diet.—March 3rd: There is a very marked improvement in the general condition of the patient; he looks more cheerful, and is now almost free from pain, and the growth has certainly not spread with anything like its former rapidity, and its surface looks less sloughy and red. The diet consists of milk, eggs, minced meat, biscuit-powder, arrowroot, and beef-tea, and he also takes three ounces of port wine by the mouth without experiencing any pain. He is quite able to feed himself, and smokes two or three pipes a day; this he had not been able to do for a long time before on account of the pain it caused. The skin round the fistula is quite healthy, and there has been no excoriation, owing to the free use of powdered chalk.—24th: Has gained a pound and a quarter in weight since the last note.

This man left the hospital in April and went into the country, and I did not have an opportunity of seeing him again, but I heard that he died in the infirmary on June 20th from exhaustion consequent on the disease, but that he was quite comfortable until the last. The doctor of the infirmary did not make any post-mortem examination, and as I did not hear of the death until a week after I could not do so.

CASE 2.—Mary D——, aged forty-seven, was admitted under my care on Nov. 20th, 1885, with the following history. Two and a half years ago she had a severe cold in the head, which "completely destroyed taste and smell, and these have never quite returned." This was followed by a swelling on the left side of the neck, just below and behind the ear, which gradually grew until it attained the size of a hen's egg, but never gave any pain. Some months later there was a discharge of blood and matter into the throat, accompanied by a diminution in the size of the swelling. This occurred about each fortnight. Two months ago a swelling appeared in the submaxillary region, and has gradually grown. For five years she has suffered from pharyngeal and laryngeal catarrh. There is a good family history, and no suspicion of cancer.

On admission, there was a large, slightly movable tumour on the left side of the neck, extending downwards from the mastoid process about 2 in.; behind, it reached the posterior edge of the sterno-mastoid. Below and behind this many small glands could be felt. In the submaxillary region there was a hard immovable swelling, separated from the posterior one by a sulcus. The tumour was of large size, and had pushed the hyoid bone and larynx a little to the right. The submaxillary glands on the right side were enlarged. In the mouth (which could only be opened half an inch, although lateral movement was very little impaired) an indurated swelling, extensively ulcerated on the surface, could be felt, implicating the posterior third of the left half of the tongue and extending to the anterior pillar of the fauces, the tonsil, and down the left side of the pharynx. The growth extended across the middle line, and on examination under chloroform it was found to be impossible to reach the lower border with the finger. The passage from the mouth to the pharynx was only just large enough to admit the forefinger. Deglutition of solids was impossible, but liquids could be swallowed in small quantities. Respiration was somewhat laboured, and the patient was suffering severely from inanition, being very much emaciated. She was very anxious to have something done to relieve her, and, after consulting with her friends, decided to have gastrostomy performed.

On Nov. 24th the first stage was performed, with the same precautions as in the previous case. The edge of the liver presented in the wound, and had to be pulled to one side. Fourteen silk sutures were used to attach the stomach to the wall, the parietal peritoneum having previously been sewn to the skin by a continuous catgut suture. At an early stage of the operation it was found necessary to perform tracheotomy, owing to the dyspnœa and inability to open the mouth.

Nov. 25th: Passed a comfortable night, although the trachea tube caused some irritation. The temperature is normal, and she feels well. Nutrient enemata have been used, as in the other cases.—26th: The tube in the trachea was removed in the night at the patient's request, but had to be replaced in two hours.—27th: The greater part of the enemata given to-day were returned. She has had six hours' sleep after a hypodermic injection of a quarter of a grain of morphia, and feels much better for it. The enemata have been retained. The dressing was removed at

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8 P.M., and the wound was found quite healthy, the stomach being covered with a thick layer of lymph. The viscus was opened, as in the former case, and a tube inserted, and about an ounce and a half of warm milk injected.—Dec. 1st: The patient has been quite well since the operation, and has had plenty of food by the stomach. The trachea tube is still retained, as she is very much more comfortable with it in. All the sutures were removed to-day, and the patient has had meat for the first time.—4th: Got up to-day for a little while. Is feeling very much better than she did before the operation was performed.—7th: The tracheotomy tube has been left out to-day at the patient's own request, although there is marked dyspnœa without it. She is much stronger than before the operation and has visibly gained flesh. She expresses herself as very pleased with the result, as it has given her so much relief.

This patient died on Dec. 30th, but did not suffer much, a little dyspnœa being the only difficulty. For the following notes of the post-mortem examination, which was made on Dec. 31st, I am indebted to Mr. Elam, the surgical registrar:—Rigor mortis passing off. Body greatly emaciated. The left side of the base of the tongue and left side of the fauces infiltrated with new growth, which is indurated and ulcerating. The whole of the anterior and part of the lateral walls of the pharynx are studded over with indurated projections, pale in colour, and varying in size up to that of a haricot bean; these were not ulcerated, and ceased suddenly near the œsophageal opening. In an upward direction there was a hard growth on the left side extending to and adherent to the bones of the base of the skull. The growth is hard and pale grey in colour. Growing beneath the angle of the jaw into the submaxillary region, and apparently connected with the preceding, was another hard mass, rounded and well-circumscribed, about the size of an orange. The glands behind the sterno-mastoid were enlarged, and many of them broken down in the interior. The larynx was slightly œdematous. There was no new growth in the lungs, but the left one was adherent to the diaphragm. On opening the abdominal cavity there was very little fat to be seen in the wall or in the great omentum. The stomach was contracted to about half the normal size, and contained a little dark fluid. The fistulous opening was at the great curvature. The liver was enlarged and soft, and on the upper surface of the left lobe, opposite the gastrostomy wound, it was covered with lymph, the result of local peritonitis. The other organs were healthy.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

CASE OF SPINA BIFIDA SUCCESSFULLY TREATED BY OPERATION.

BY JOHN KELLOCK BARTON, F.R.C.S.I.,
SENIOR SURGEON TO THE ADELAIDE HOSPITAL, DUBLIN.

INASMUCH as the treatment of spina bifida is still unsettled, any case in which a successful operation has been performed is worthy of record. So, very briefly, I will state the particulars of the following case which has been lately under my care in the Adelaide Hospital.

On July 9th, Susan H——, an infant two weeks old, was brought to the hospital by her mother, who had been attended in her confinement by Mr. Hamilton, a pupil of the Adelaide. He had noticed at the time of birth a tumour in the lumbar region, about the size of a small walnut, of a dark purple-red colour. This tumour steadily increased in size, and at the time I made my first examination was the size of a small egg, or might more accurately be likened to the half of a small orange, the convex part projecting, the flat or cut surface of the orange attached to the lumbar spine. The surface of this tumour was occupied by a greyish sloughy ulceration, while the sides were of a deep purplish-red colour. Fluctuation was very obscure, but pressure certainly diminished the bulk of the tumour, which regained its original size quickly when the pressure was removed. The nature of the tumour, so far as that it was a spina bifida, was pretty clear; but to make this more certain I thrust a fine hypodermic needle into it, and drew out a few drops of a perfectly colourless serum. The question of its being a spina bifida was now established, but the further and more difficult one of whether the spinal cord formed any portion of its contents remained doubtful. The fact that no paralysis existed, either of the sphincters or lower limbs, induced me to believe that this was a meningocele, and not a myelocele; but the facts of its low position and of its purple and ulcerated surface are held by authors[1] as leading to an opposite conclusion, and the result proves that the freedom from paralysis is of more diagnostic value in deciding this important point than is either the situation or the character of the tumour.

Next day, I performed the following operation, the infant being under the influence of chloroform. I cut an elliptic piece out of the centre of the tumour, thus removing all the sloughy central portion; the wall was thick, internally smooth and white, and with numerous small nerves passing into the portion removed, which were of course cut across. Very little time was lost in stopping all bleeding, which was insignificant, and then drawing together the thick purple flaps left on either side by a double row of sutures. Careful antiseptic precautions were observed, and the dressing consisted, first of all, of a dusting with iodoform, then a covering of corrosive gauze (1 in 400), secured well at its edges and round the body with an antiseptic gauze bandage. There was no elevation of temperature, and union was complete and firm in a week. No signs of any disturbance of the nervous system followed.

In ten days the infant was discharged cured. I questioned the mother as to any loss of power in the limbs, of which the child has free use. The situation of the tumour is now occupied by a puckered purple oblong swelling, about one-sixth of the size of the tumour which I operated upon, and I have no doubt further contraction will go steadily on for some time.

P.S.—Since this report was written I have received information of the death of the child in a fit of convulsions. No doubt the union of the operation-wound was complete, but the convulsive attack came on too soon after the operation for us to dissociate the one from the other.

Dublin.

ON A CASE OF ABDOMINAL PREGNANCY.

TERMINATION BY ULCERATION INTO RECTUM; RECOVERY.

BY RALPH BROWNE, L.R.C.P., M.R.C.S.

E. J ——, aged forty. Has had ten children, the youngest being five years old. Has not had any miscarriages, and gives no history of previous disorders in the organs of gestation. She had last menstruated in November, 1884 (seventeen months previously). She believes herself to have been in her usual good health, and does not remember to have had any fright about that time. In the course of a month or so she began to suffer from metrorrhagia, which continued, and led her to seek advice.

On examination, a tumour was found upon the left side of the abdomen. From its position and feeling, it was diagnosed as ovarian, and it was also suggested to the patient that she was pregnant. The metrorrhagia continued more or less, until in September, 1885, or at what would be about the full period of pregnancy, a pseudo-labour took place, and an effort at lactation appeared in the breasts. About this time the patient began to notice that the tumour seemed smaller, but complained of loss of appetite, general ill-health, and pain and irregularity in the action of the bowels. This state of things continued until April last, or seven months after the pseudo-labour, when she was taken with violent forcing pains in the body and lower bowel, and offensive diarrhœa, in the course of which some fœtal bones were passed. Examination of the rectum disclosed the presence of the remainder of the fœtus. A hand was introduced into the bowel, the fœtal head crushed as far as possible with the fingers, and its fragments and other bones removed. The diarrhœa, and the occasional passage of a remaining bone, continued for a few days, gradually became less offensive, and then ceased. Within a fortnight the patient was able to leave her bed, and has since made an uninterrupted recovery.

From the frontal bones removed entire, each measuring an inch and a half by an inch and three-quarters, and from the

[1] Dictionary of Practical Surgery, vol. ii., p. 470.

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other cranial bones fitted together, the bi-parietal diameter was computed to be three inches. All the bones had the normal amount of ossification of a full-time fœtus.

Points of interest in this case are: 1. The difficulty of diagnosis, though, looking back now, nothing can be clearer than the sequence of events. 2. The maturity and perfect formation at which the fœtus arrived. 3. The means taken by Nature to remedy her error, and which resulted in perfect recovery.

King's Lynn.

A SUGGESTED ALTERATION IN THE COMPOUND LIQUORICE POWDER.

By MARTIN OXLEY, M.D.

HAVING found that the above preparation produced very severe griping in many instances where I had ordered it, the griping being particularly severe in some of my younger patients, I have ordered the following formula for some time past, in which anise fruit is substituted instead of the fennel and one-fourth part of ginger is added. The altered formula runs thus—senna and liquorice-root, of each 2 parts; anise fruit and sulphur, of each 1 part; sugar, 5½ parts; ginger, ¼ part. This altered preparation is quite as satisfactory in its laxative properties, is less liable to gripe, and is as pleasant to take as the official powder, and I would suggest its trial in cases where the powder as now prepared produces the disagreeable effects to which I have referred.

Liverpool.

DOUBLE FRACTURE OF THE UPPER LIMB BY INDIRECT VIOLENCE.

By ALEX. FOULERTON, M.R.C.S., L.R.C.P.,
RESIDENT MEDICAL OFFICER, ROYAL ISLE OF WIGHT INFIRMARY.

THE following is noteworthy as a somewhat curious result of indirect violence applied to the upper extremity.

A child, aged nineteen months, was being led along the street by his mother, who was holding his right hand. The child stumbled, fell with a jerk, and was dragged up again—roughly, probably—by his mother, who, however, never left go of his hand. She then noticed that the boy's arm was quite powerless, and hung loosely by his side. Shortly afterwards the child was brought to the infirmary, where it was found that two fractures had occurred, one through the upper epiphysial line of the right radius, the other at the junction of the middle with the acromial third of the right clavicle. One would certainly have expected dislocation rather than fracture as the result of such an accident occurring in so young a child, and I must confess I am unable to offer any exact explanation as to the mechanics of the lesion.

Isle of Wight.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum allorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

LONDON HOSPITAL.

A CASE OF PRIMARY CANCER OF THE VAGINA, LEADING TO RETENTION OF URINE; NECROPSY; REMARKS.

(Under the care of Dr. HERMAN.)

IT is not usual for epithelioma (for such the disease in this case probably was) of the vagina to produce retention of urine; in the majority of instances the ulcerative process extends, and by the establishment of a fistulous communication with the bladder, causes incontinence. The difficulty met with by the surgeon in alleviating the effects of this may occasion him much anxiety, whilst it is a serious addition to the suffering caused by the disease. There is, however, a great difference between such opening and that produced and controlled by the surgeon; the opening in this case appears to have relieved the retention, and also the pain, which was produced both by the passage of a catheter and the flow of urine over the ulcerated surface.

M. S——, aged forty-one, married, was admitted into Victor ward on Oct. 10th, 1883. She began to menstruate at the age of eleven, and after the age of twelve was always regular except during pregnancy, the flow lasting four or five days, being moderate in quantity and without pain. She was married at the age of sixteen, and in the first fourteen years of married life gave birth to eleven children, two of the pregnancies being with twins. She also had two miscarriages. Of the children only two are now living. Thirteen years ago, during one of her pregnancies, she had some kind of fit. With this exception she has always had good health. For the last ten years she has been employed as a monthly nurse. The patient thought herself well until seven months ago; then, while exerting herself more than usual, she suddenly felt a sharp pain in the lower part of the abdomen, like a sprain, and on subsequently sitting down she felt a "bearing-down" pain. This has continued ever since. A little later in the day she had a "flooding," losing, she considered, a pint or two of blood. This made her feel extremely faint. Hæmorrhage continued for about three days, and then was replaced by a white vaginal discharge. A discharge has been present ever since, but about six weeks before admission it became yellow and offensive. For the last six weeks she has suffered from scalding pain during and after micturition. For the same time the glands in the left groin have been enlarged and hard, but she has not had any pain in them. A day or two before admission she discovered similar enlargements in the right groin. Throughout the past seven months she has been progresively losing flesh. The day before admission she found herself for the first time unable to pass urine. This inability continuing, she came to the hospital, where the urine was drawn off and the patient admitted.

Condition on admission.—The patient is much wasted. The glands in both groins are indurated and enlarged, the left being the larger and fixed. On vaginal examination the anterior wall of the vagina is much thickened, very hard, uneven, and ulcerated. The thickening is especially marked at the lower part, where the induration involves the meatus urinarius. There is an isolated hard lump in the left labium. The cervix uteri is healthy but there is a hard lump to the right of it. The urine is acid; sp. gr. 1010; no albumen, pus, or phosphatic deposit. No physical signs of disease elsewhere.

Oct. 26th.—The patient has passed urine naturally since admission, but is now again unable to do so. Dr. A. J. Richardson (resident accoucheur) tried to pass a catheter, but found the urethra so surrounded and blocked with new growth that he was unable to get the catheter through it. The patient was then put into a hot bath, and twenty minims of tincture of opium given. These measures had no effect, and therefore the bladder was aspirated through the vagina.

27th.—Under anæsthesia a catheter was passed, and left in the urethra for the next three days. It was then removed, and the patient was able to pass urine naturally.

Nov. 13th.—The patient again had retention of urine, which has been relieved by the catheter. The glands in the left groin have ulcerated, and the left labium is œdematous.

16th.—The patient continues unable to pass urine. The catheter can be passed, but its use causes extreme suffering to the patient. The bladder was therefore opened by an incision from the vagina, and a winged indiarubber tube put into the opening to keep it patent. After this had been done the patient was in comparative comfort. There is now slight œdema of the right thigh.

28th.—Delirious. The whole of the right leg is œdematous.

On Dec. 11th death occurred. The necropsy showed cancer of inguinal glands on both sides, those on the left ulcerated. Bladder contracted, capable of holding an ounce and a half of fluid. Cancer of anterior vaginal wall and urethra, extending along posterior wall of bladder. Kidneys sacculated, especially the right, which only weighed two ounces, left three ounces. Right ureter distended with urine. Right ovary cancerous, and the size of a walnut. Uterus not diseased. Secondary deposit in liver.

Remarks by Dr. HERMAN.—The case is an interesting example of a rare form of disease, and of a rare event in the history of that disease. Cancer of the uterus often extends

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to the vagina, but primary cancer of the vagina is rare. When it occurs the posterior wall of the vagina is its usual seat—not the anterior, as in this case. It is also rare for cancerous growth to so block the urethra as to cause retention of urine; in the case now reported this complication occurred. There was mechanical obstruction to the flow of urine and the entry of the catheter, and the passage of the instrument caused such extreme suffering that the establishment of an artificial vesico-vaginal fistula proved an alternative preferable to repeated catheterisation.

BRISTOL GENERAL HOSPITAL.

EXCISION OF THE ELBOW-JOINT, WITH SUTURE OF THE OLECRANON TO THE SAWN END OF THE ULNA; REMARKS.

(Under the care of Mr. C. F. PICKERING.)

A. F——, aged fifteen, a strumous girl, had suffered from disease of the elbow-joint since June, 1885. In February, 1886, she was admitted into the hospital, and erasion of the joint was performed. The joint was at that time found to be in an advanced state of pulpy degeneration, but the cartilages were healthy. This operation was only partially successful in stopping the progress of the disease, and in the following July, as the arm was becoming stiff, it was thought advisable to excise the joint. This was done on July 8th, in the following manner. A longitudinal incision about three inches in length was made over the back of the joint, exposing the olecranon. The tip of this was then divided with a sharp chisel, and the joint was thus opened. The cartilages were found to have completely disappeared by ulceration, and the articulating surfaces of the bone were bare and in a carious state. The olecranon, with the triceps attached, was now turned up out of the way and the operation proceeded with in the usual manner. After the diseased ends of the bones had been removed, the tip of the olecranon was united by a strong wire suture to the sawn surface of the ulna. Drainage-tubes were inserted, and the wound sewn up. The operation was done under strict antiseptic precautions. The patient made a good recovery, the temperature remaining normal throughout.

Remarks by MR. PICKERING.—I hoped, by the union of the olecranon to the ulna, to greatly improve the movement of extension in the false joint, as the triceps in this way would be acting to greater advantage than in the usual mode of performing the operation, in which the principal attachment is cut away and the power of extension only depends on the muscular fibres inserted into the fibrous aponeurosis of the forearm. This case has so far been successful, as, though the time has not yet come for the arm to acquire perfect movement, the power of extension is good, and better than that of flexion; the latter has been delayed by the greatly wasted condition of the biceps. The tip of the olecranon has firmly united to the ulna below, and the wire has not been removed, as it is causing no irritation. Only the tip of the olecranon should be cut off, and it should be united subsequently to the ulna by very strong and thick wire, so as to hold it firmly.

CHESTER GENERAL INFIRMARY.

CASE OF HIP-JOINT DISEASE; RESECTION; AMPUTATION AT THE HIP-JOINT; RECOVERY.

(Under the care of Mr. J. TAYLOR.)

THE following notes are by Mr. W. Lees, house-surgeon.

Mary B——, aged eighteen, residing at Acrefair, Ruabon, was admitted on May 20th, 1885. The patient had never been strong, was of strumous appearance, and had suffered from repeated attacks of hæmoptysis. One sister died at nineteen years of age from hip-joint disease, and another sister suffers from chronic abscesses in the neck; the rest of the family are healthy. Her present illness began in February, 1885, when there was acute pain in the right knee, which was swollen and very tender to the touch. For this the joint was painted with tincture of iodine. In March following she was in bed for three weeks under medical treatment at home. In May, being much worse, she came to the Chester Infirmary.

On admission the knee and foot were considerably swollen; temperature 101°; pulse 100. The limb was put up on a back splint for four weeks. The patient now for the first time complained of pain in the right hip-joint, and for this an extension apparatus was applied. She had a severe cough, and also attacks of hæmoptysis and epistaxis; she had not been unwell since February, 1885. In July an abscess was noticed to be forming on the outer side of the hip. This remained stationary in size till January, 1886, when it increased rapidly. She was also getting weaker, and the temperature was of a very hectic character. On Jan. 19th the abscess was opened, under strict antiseptic precautions, by an incision three inches long, to the inner edge of the tensor vaginæ femoris: no diseased bone was felt; a drainage-tube was inserted, but was never shortened. She was very sick after the chloroform. After this the temperature fell to normal for twenty-eight days. From this period up to the end of May her condition became gradually worse, temperature varying from 100·8° to 104·2°, pulse about 130, and respirations 20. Discharge increasing; wound dressed antiseptically twice daily. There was slight puffiness of the eyelids in the morning, but no evidence of albumen in the urine. Lungs and liver normal; appetite very bad; considerable pain over the joint.

On June 11th, the patient being under chloroform, MR. Taylor removed the head of the femur by the usual operation. The bone was found to be unusually soft and pulpy in the upper three inches of the femur. Acetabulum healthy. A considerable amount of blood was lost. A large drainage-tube was inserted, and one suture to keep the edges of the wound in closer approximation. Wound dressed antiseptically. She was under chloroform an hour and a half, and was in a most exhausted state. A drachm of ether was given hypodermically whilst she was on the table. One hour after the operation she was in great pain, for which half a grain of morphia was administered. She vomited most persistently for forty-eight hours afterwards, and took only small quantities of ice and brandy. An extension apparatus of four pounds was applied. Evening temperature 100·6°.

June 12th.—Temperature 97°. Still very sick. Wound dressed, and tube removed.

15th.—Slight improvement; able to take light solids, two ounces of brandy, and four ounces of wine. Wound dressed daily with solution of corrosive sublimate (1 in 2000). Temperature 98·4°; pulse 104; respiration 22.

The femur having been found so extensively diseased, it was considered that the patient's only chance of ultimate recovery lay in removing the limb at the hip-joint. Accordingly, on June 18th, chloroform having been administered, the limb was made bloodless by Esmarch's bandage, a reserve supply of blood being kept in the healthy limb, which was liberated at the end of the operation. The aorta was controlled by Mr. Hamilton by Lister's compressor. The anterior flap was partially dissected and partially transfixed, and the posterior transfixed. Very little blood was lost, but the patient showing symptoms of collapse, thirty minims of ether were given hypodermically. No drainage-tube was inserted, and the flaps were accurately brought together for the inner two-thirds, whilst a large opening was left at the outer angle for drainage, as a considerable amount of tissue infiltrated with inflammatory products, and riddled with sinuses, was left in the posterior flap. After operation the patient had a light sleep, and then was in great pain for an hour, which was relieved by the injection of half a grain of morphia. Dosed till 3 P.M., and then had an enema of brandy (one ounce) and two drachms of Liebig's extract. No vomiting till 5 P.M. At 5.30 respiration only 11; pulse 132. —6 P.M.: Enema repeated.—9 P.M. Temperature 101·2°; pulse 132; respiration 16.

June 19th.—Passed a good night; vomited once; passed urine in the night naturally. Took ice, barley-water, and cream. Complains of being very hungry. Temperature 98·4°; pulse 136; respiration 20. Wound dressed. Slept soundly all day. No pain. Took brandy, cream, and Liebig's extract. Vomited slightly once.—9 P.M.: Temperature 100°; pulse 128; respiration 24.

From this time the patient made a rapid recovery. The stump was dressed daily with lint soaked in solution of corrosive sublimate (1 in 2000). She took solid food on the 21st. On July 10th the wound had healed, except a small sinus at its outer angle. The patient was able to sit up in bed, and partake of middle diet.

On an examination of the femur, the whole of it was found to be in a most disorganised state, the medulla breaking down under the slightest pressure. The knee-joint was diseased, the cartilages being eroded and thinned, and the synovial membrane everywhere thickened. There was also a small collection of pus about half an inch above the epiphysial line.

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Reviews and Notices of Books.

The History of Cholera in India from 1862 to 1881. Being a Descriptive and Statistical Account of the Disease, as derived from the published Official Reports of the several Provincial Governments during that period, and mainly in illustration of the relationship between Cholera Activity and Climatic Conditions; together with Original Observations on the Causes and Nature of Cholera. By Deputy Surgeon-General H. W. BELLEW, C.S.I., Sanitary Commissioner, Punjab. With Maps, Diagrams, &c. London: Trübner and Co., Ludgate-hill. 1885.

WE owe the author of this treatise an apology for not having noticed it earlier. The work is a very elaborate one, consisting of 839 pages, and must have cost its author an enormous amount of labour. It may be a source of satisfaction to him to know that if we cannot aver we have read it through, we have nevertheless perused the greater part of it, and had marked so many passages for consideration, if not quotation, that we found the task of writing an adequate analysis of his views and the data on which these are based an impossible one—at any rate within the limits at our disposal. The book is a natural history of cholera, more particularly as an epidemic disease, and the strength of the author's argument rests upon a vast accumulation of details converging from certain definite directions. In an introductory chapter the author passes in review the various theories that have been put forward, and subjects them, one after another, to a fire of destructive criticism. He says that Bryden's theory—and, by the way, we might possibly cavil at the use of the term theory in this connexion,—shorn of its germ element and the hypotheses built thereon of reproduction, invasion, dormancy, revitalisation, &c., contains more of the truth of cholera than all the others preceding it put together. The records of cholera, as related in this volume, he declares, abound in evidence tending to prove that in India cholera is a phenomenon of season, controlled as regards period of appearance by geographical position, and as regards local activity by conditions of climate and soil coupled with those of the health state of the individual; that in its nature and properties cholera is strictly analogous to influenza, and also to malarious fever, and that, like those diseases, cholera is the result of atmospheric changes acting upon the system, in a manner specially determined in each disease, under certain conditions of bodily health; and that cholera, like influenza and malarious fever, without being contagious, is nevertheless infectious as a subordinate contingency concurrent with the general epidemic diffusion of the disease. In brief, it would amount to this: that cholera is powerless to spread as an epidemic, in spite of its introduction, in any area where it is not due to spread. The author deals on a uniform plan with the geography, climate, meteorology, and rainfall in connexion with the statistics of cholera mortality of the several provinces, and, as regards the vital condition of the population, he completes the description by a consideration of the food-supply in respect of cheapness or the reverse. In addition to showing the relation and interdependence of the statistics of cholera mortality, rainfall, and food-supply in India, the author dwells upon the fact that there is a remarkable correspondence in the cyclical periodicity of the disease—a periodicity which is observed not only in the returns from all India, but also in those relating to the several provinces separately, and to a considerable extent even in different geographical regions within their respective areas. This periodicity manifests itself in triennial cycles, cholera having its maximum, medium, and minimum degree of prevalence in the successive years respectively of each three-years period. Those portions of the book which deal with physical geography, topography, the monsoon and other meteorological and climatic conditions, are very perspicuously worked out. The discovery of the comma bacillus, and Koch's views in connexion therewith, are not mentioned, but it may be inferred that they would not be accepted by our author. Towards the end of the volume the pathology of cholera is discussed, and a simple, but to our minds a crude and inadequate, explanation of the course and morbid phenomena of the disease is set forth.

The outcome of our perusal of this work amounts to this: that there is a great deal of valuable information advanced about the conditions present in those places and at those times where and when cholera manifests itself, but we are really no nearer the root of the matter as regards the discovery of its true cause. There are a great many difficult points remaining unsolved. The late Dr. James Bryden, who was a man of original and philosophical mind and a *savant*, gave some of the best years of his life to the study of cholera from the standpoint of an epidemiologist and statistician, and there can be no doubt that on account of the occasional remarkable fulfilment of his forecasts his influence with the Government of India was a growing one; but labours such as his, making, as they did, great demands on the patience and intelligence of his readers, and not falling in with the practically inductive spirit of modern experimental science, have failed to attract the attention they demand. He appears to have been impressed with the idea that the cause of cholera was a something material—a vitalised something—that had a definite life history of its own, and an existence quite separate and apart from the subjects of its action. Be this as it may, his statistical labours have been continued on the same lines, and somewhat developed in the reports of his successor in office. What Bryden did mainly deductively now requires to be supplemented and complemented by inductive methods. Whether to this end we must look to micro-pathology only remains to be seen, but any assigned cause to be accepted must be adequate to cover all the phenomena. It must be remembered that cholera occurs elsewhere than in India—and the history of how it comports itself there has yet to be written,—that it apparently advances in a definite direction in its own time and in obedience to a law of its own, and that the duration of an epidemic is self-limited. During the past few years we have had it in North Africa, and it has been prevailing in Continental Europe; ships, men, and merchandise have passed freely and continuously from the infected or affected (as these happen to be regarded) places to this country without any extension of the disease hitherto. Bengal, the North-west, and the Punjab, of which our author writes so fully, have been singularly free from epidemic cholera of late years. There are some very acute sceptical thinkers who, agreeing with the author of this book, would contend that we are pursuing a phantom in endeavouring to discover the cause of cholera in the shape of a material object, organic or otherwise; that the disease itself as an epidemic will have disappeared from the application of sanitary laws in their most extended sense, and been replaced by other diseases, before this or the immediately succeeding generations have succeeded in detecting its cause; and that cholera, as we experience it, will be chronicled by some future Hecker in the epidemics of the past.

To conclude. The preparation of this history of cholera in India must have entailed upon its author unremitting toil; it is full of information, well written, and will form an excellent and useful book of reference for all engaged in medical, sanitary, or administrative work in India.

OUR LIBRARY TABLE.

The Rotifera, or Wheel Animalcules. By C. T. HUDSON and P. H. GOSSE. Parts IV. and V. Longmans, Green, and Co. 1886.—In the fourth part of the "Rotifera," the considera-

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tion of the Loricate division of the Ploima is continued, including the Triarthradæ, the Hydatinadæ, and the Notammatadæ, the latter constituting the typical representations of the whole class, as well as the most highly organised, fifty-four species being figured, with no less than 130 drawings of parts and organs. The descriptions are given by two masters of the subject, and leave nothing to be desired. The fifth part is occupied with a continuation of the study of the Notammatadæ, including the Genera of Diglena and Distemma, and commences the consideration of the Loricate Ploima, including the Rattulidæ, Dinocharidæ, Salpinadæ, and Euchlanidæ. The descriptions are very animated as well as correct. Thus, speaking of Distemma raptor, Mr. Gosse observes that it presents the highest expression of animal life. He has observed amongst Rotifera—"As a fowl picks up minute atoms of food from the earth and pebbles and rubbish with which it is mingled, showing sight, observation, discrimination, selection, will,—so does this Distemma manifestly snap up its food atoms, often invisible to our eyes, selecting them with rapid precision from other surrounding atoms. The jaws are thrust out and withdrawn with a quickness which we cannot follow, and with stroke succeeding stroke quite as rapidly as a hen's beak picks up morsels, and evidently takes something at each. The way in which it pounces upon animalcules that we *can* discern, and the energetic vigour with which it seizes them, are admirable, and quite unparalleled among Rotifera, so far as my experience goes. If we could descend to his level and form a personal acquaintance with him, I am sure we should find this Distemma a person of great decision of character."

The Royal London Ophthalmic Hospital Reports. Edited by MARCUS GUNN. Part 2, vol. 11. July, 1886. London: J. and A. Churchill.—The contents of this number are—1. W. Lang and James Barrett: The Refractive Character of the Eyes of Mammalia. These observers found that, in rabbits, out of 51 eyes 14 were hypermetropic, 31 were hypermetropic and astigmatic, 1 was myopic, 3 were myopic and astigmatic, whilst 2 were characterised by mixed astigmatism. Of 20 eyes in guinea-pigs, 1 was hypermetropic, 18 were hypermetropic and astigmatic, and 1 was myopic and astigmatic. In 10 eyes of mice, 5 were hypermetropic, 3 were hypermetropic and astigmatic, and 1 was slightly myopic. Of 6 horses' eyes, 1 was emmetropic, 3 were hypermetropic and astigmatic, and 2 presented slight mixed astigmatism. Of 14 eyes in cats, 6 were hypermetropic, 4 were hypermetropic and astigmatic, 2 were slightly myopic, and 2 were myopic and astigmatic. The eyes of dogs were practically emmetropic. The refraction of the eyes of several wild animals is also given. 2. W. Lang and James Barrett: The Action of Myotics on the Accommodation. 3, 4, 5. J. Hutchinson, jun.: On a Case of Unsymmetrical Tobacco Amaurosis; on a Case of Relapsing Optic Neuritis, with development of new vessels in front of the papilla, with a plate; and on a Case of Peripheral Choroido-retinitis associated with peculiar Pigmentation of Mucous Membranes. 6. J. B. Lawford: On Eyes containing Foreign Bodies at the time of Excision, and on Cases of Cystic Degeneration of the Retina.

Coca, Cocaine and its Salts. By W. MARTINDALE. London: H. K. Lewis. 1886.—The text of this little book is printed in blue ink on green paper, as a compliment to cocaine for its beneficial effects in the treatment of disorders of the eye; the violent contrast of white and black being considered injurious to the eyesight. This blue and green arrangement is very pretty, but reading the book by gaslight is apt to produce a feeling as of sand in the eye. We may say in few words that Mr. Martindale's excellent account of coca, cocaine and its salts will give those who consult it all that they can wish to know of the history, medical and economic uses, and medicinal preparations of these valuable medicaments. Generally speaking, the preparations of coca are of most use when it is desired to act on the system at large; the salts of cocaine when intense local efforts are required; and in suppositories or ointments the pure alkaloid is the form to prescribe.

The Quarterly Journal of Microscopical Science. Edited by Professors RAY LANKESTER, THISTLETON DYER, KLEIN, MOSELEY, and SEDGWICK. August, 1886. Vol. XXVII. Part 1. London: J. and A. Churchill.—The rapid succession of memoirs on microscopical subjects which appear in this valuable journal supplies good evidence that numerous workers are devoted to the study of this instrument in this country, and are contributing their fair share to the advancement of knowledge. The present part contains: 1. The Anatomy of the Madreporaria, by Herbert Fowler Berkeley, Fellow of Owens College, Manchester, with plate 1. 2. The Formation of the Germinal Layers in Chelonia, by K. Mitsukuri, Professor of Zoology, and C. Islükawa, Assistant in Zoology, University of Tokyo, Japan, with plates ii., iii., iv., and v. 3. On the Structure and Development of the Reproductive Elements in Myxine Glutinosa, by J. T. Cunningham, with plates vi. and vii. 4. Studies on Earthworms, by W. B. Benham, with plates viii. and ix. 5. On Dinophilus Gigas, by W. Weldon, with plate x.

Fuhrer durch das Medicinische Berlin (Guide through Medical Berlin). FISCHER'S "Medicinische Buchhandlung." Berlin, 1886.—This little guide will certainly be a most useful companion for any medical visitor to the German capital. It gives plans of the chief hospitals and lists of professors and teachers, with the subjects, places, and hours of their lectures. It will also serve to a considerable extent as a general guide-book, as it contains a good map of the city, with information about trains, trams, objects of general interest, theatres, &c.

Materia Medica Labels.—Mr. H. K. LEWIS, of Gower-street, has just issued a useful collection of Materia Medica Labels adapted for public or private collections, and compiled from the British Pharmacopœia of 1885. They are printed on white paper in big bold type, and will be found very useful, not only for students, but for lecturers and teachers. The number of copies issued is small, so that early application should be made by those requiring a complete set.

The Australasian Medical Directory and Handbook. London: Baillière, Tindall, and Cox. 1886.—The second issue of this Directory, which is edited and compiled by Mr. L. Bruck of Sydney, fully maintains the high character which pertained to the first issue of the work. It contains an abstract of the principal laws affecting the medical profession in Australia; a list of coroners and medical and scientific societies; regulations of colonial universities; a general alphabetical list of the names of all known legally qualified practitioners in Australia, Tasmania, New Zealand, Fiji, Samoa, Tonga, and New Guinea, with their addresses, qualifications, &c.; and a diversity of other information calculated to be useful to those interested in the practice of medicine in the colonies. A novel feature is an appendix which contains a list of unregistered practitioners, giving the names of all persons known to practise in the Australasian colonies without being registered with any of the colonial boards, with their addresses, alleged qualifications, and other particulars.

The Tape Indicator Map of London and Visitor's Guide (C. Smith and Son, Charing-cross) is worthy of extensive public patronage. Any street or public building may be readily found by means of a tape appended to the map, accompanying which is an alphabetical list of some 7000 streets, as well as a visitor's guide.

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THE LANCET.

LONDON: SATURDAY, OCTOBER 2, 1886.

UNLESS the direct representation of the profession on the Medical Council is to be a mere farce, all those who have exerted themselves to obtain this boon, and who value it at all, must resolutely resist a very ill-advised attempt that is being made to force on the general body of practitioners the three nominees of a small clique. An election by the votes of the many thousands of medical practitioners must always be a matter of difficulty, and it is absolutely essential that certain guiding principles be steadfastly maintained. First of all, there must be freedom of action. Every voter must be allowed to exercise his right without any external pressure. This was cordially recognised by the large majority of those members of the British Medical Association who were present at the meeting at Brighton, and it was accordingly decided that the Association, as such, should take no part in the election, and should not nominate, or use its powerful agencies in securing the election of, particular candidates. Secondly, care should be taken to elect only those who can really represent the wants and views of the great body of general practitioners, and in our opinion none can represent general practitioners so well as eminent members of their own body. Several candidates have come forward, and have issued their addresses and published lists of their committee or supporters. For one and all of them we would ask an impartial hearing, and up to last week we were hopeful that the election might be conducted on the lines we have drawn.

However, the entire situation has been changed by the action of the Birmingham Committee. It will be remembered that at the close of the meeting at Birmingham it was determined to issue ballot papers to the whole of the committee for the purpose of eliciting an opinion as to the three candidates most acceptable to the majority. We are informed that the vote of this committee, which now numbers about 360 members, was in favour of Mr. WHEELHOUSE (Leeds), Sir B. W. FOSTER (Birmingham), and Mr. ERNEST HART. Mr. HART, as will be seen from a letter we publish to-day, declines to be put in nomination, and it is proposed that Dr. GLOVER, whose name was fourth on the list, should take his place. So far as this poll represents the opinions of these 360 gentlemen, it is worthy of respectful attention. But two utterly unwarrantable uses are being made of it, and it is to these we would call the earnest attention of all our readers. In the first place, the assumption is made that this committee *represents* the great body of the profession. This is incorrect. *The committee represents its members, and no one else.* It has not been appointed by the profession, or even by any great body in it, and its opinions are in no way whatever to be taken as the expression of the wishes of the profession at large, still less as binding upon it. We of course recognise the perfect right of this committee or of any body of gentlemen to nominate three candidates and to endeavour to secure their election, but no such committee has any right to usurp to itself the functions of the whole body of registered practitioners; and unless the correspondence which we publish to-day is singularly misleading, the members of the electorate are alive to this, and will jealously guard their rights.

But, further than this, a bold attempt has been made to show that the Birmingham Committee is acting on behalf of and in connexion with the British Medical Association. This is a simple and absolute misrepresentation, and it must be corrected. The Association solemnly refused to take any part in the election; and even were this committee the Council of the Association itself, it could not, in the teeth of the vote taken at Brighton, presume to speak in the name of the Association in advocating the claims of three candidates. We have received many letters indignantly repudiating such conduct, and we are confident that the profession will not allow a boon which Parliament has conferred upon it as a whole to be monopolised by a caucus or a clique. The Council of the Association exists to promote the interests and aims of the whole of the members of that body, and the members must see to it that their wishes and opinions are respected, and not set aside or disregarded.

It is certainly a noteworthy comment upon the claim of the Birmingham Committee to represent the profession that no one of the three gentlemen originally selected is a general practitioner. We believe that the result of the forthcoming election will be to show that only those who have borne the burden and heat of the day in general practice, and who know its difficulties and its needs, will be trusted by general practitioners at large to speak in their name at the Medical Council.

SOME gleam of hope reaches us when we find that the urgent danger to the water-supply of the metropolis from house-boats, to which we have more than once drawn attention, has actually been the subject of "questions" in the House of Commons and the Court of Common Council, and has even been dealt with in a feeble kind of manner by a bye-law. We last week alluded to the remarks made in Parliament. Since then Mr. Deputy ASHBY has gone so far as to "complain" of the pollution of the upper Thames by house-boats; while the Lord Mayor, who is also chairman of the Thames Conservancy, replied that under the powers conferred in the Act of 1885, a bye-law had been submitted to the QUEEN in Council which prohibited such pollution. So far good. Power was necessary, and we can only regret that a year was spent in obtaining it, but we trust that Mr. ASHBY, to whom the public already owes a debt of gratitude, will increase it by continuing his questions. Let him find out whether barges are subject to the new bye-law, or to any bye-law. The barge population is much more dangerous than that of the house-boats, and being more evanescent is much more difficult to control. Above all, let him persevere till he knows how the new bye-law is to be enforced. We beg Mr. ASHBY to remember that one case of cholera, or even of choleraic diarrhœa, occurring near the intake of the great London Water Companies might infect the supply of a great part of London, and might lead to thousands of deaths. According to the carefully prepared report of the late Mr. NETTEN RADCLIFFE, the Government inspector, that was exactly what happened in the East-end of

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London in 1866. The fearful epidemic in the district supplied by the East London Water Company was, in the opinion of the reporter—an opinion supported by some of the highest scientific men of the day,—directly due to the pollution of the supply by the excreta of two patients who died in Priory-street, Bow, a few days before. Who can say that this may not happen again? The Thames is a highway for commerce as well as a pleasure-ground for idlers. Who is to inspect it; who is to discover whether perfect health and perfect sanitary conditions prevail on every barge, steam launch, and house-boat that passes by, or is moored near those important intakes? Mr. ASHBY has shown that he possesses the intelligence as well as the public spirit necessary for the solution of this great sanitary problem. He or anyone who ventures to invade the officialism which clouds the question will at once be assailed with questions as to what can be done. The reply is simple. Many things may and ought immediately to be done which would lessen the present risk, and perhaps lead the way to future safety. For example, the mooring of all boats used as habitations in the reaches between Hampton and Weybridge, if not above, ought immediately to be prohibited; and a medical officer, armed with full powers and a steam launch, ought to secure the patrolling of the river throughout the dangerous region by night and day, and not only report for prosecution all who infringe the bye-law, but also remove at once to a safe place on shore any patient who seemed to suffer from zymotic disease. Why should we wait, as Spain has done, to learn from one more visit of that terrible tutor, the cholera? We know our lesson already, and yet we allow Spain, so far behind us in sanitary knowledge, to set us an example. In this connexion we may refer our readers to the weighty article by Mr. GEORGE HIGGIN, which appeared in our contemporary, *Nature*, on the 17th of June last. In that article, upon which we commented with entire approval, the association of water-supply with the fearful calamity which befel Spain last year is shown with irresistible force. But in Spain, in the districts which escaped or were touched lightly, the intakes of the water-supply were guarded by soldiers with loaded arms. All that we shall do — unless some earnest man, some sanitarian Cromwell, intervenes — is to prohibit people from defiling the river.

THE action of drinking-water on lead is a matter of such serious public importance, and is subject to so much apparent irregularity, that many investigations in regard to it have been undertaken. But the difficulties have not been entirely cleared up, and the further contribution to our knowledge which was made at the late meeting of the British Association is very welcome. The previous state of our knowledge may be summarised in a few words. The corrosion depends on the solubility of oxide of lead in pure water. The dissolved oxygen always present in water oxidises the lead, and the oxide dissolves as it is formed. Very soft waters, and above all distilled water, act powerfully and continuously. Some salts, when present, especially the salts of ammonia, increase the action, while others diminish it by a simple chemical action. Thus sulphates, carbonates, and, as was first shown by Dr. FRANKLAND, phosphates, protect the metal remarkably. When new lead is exposed to the action of water containing any of these salts, oxide is indeed formed, but is immediately converted into the very sparingly soluble sulphate, basic carbonate, or phosphate, and the lead is thereby protected by a crust, which undergoes but little further change. On the other hand, any unusual quantity of free carbonic acid favours solution of the metal, for carbonate of lead, like the carbonates of calcium, magnesium, zinc, and iron, is soluble in free carbonic acid. This source of lead pollution has, we think, been very commonly overlooked. The net result of all these observations was the belief that hard waters had but little action, while soft waters were liable to exhibit a strong action on ordinary lead pipes and cisterns. Some apparent discrepancies were gradually explained. Thus the very soft water of the Bala lake was found to have little action on lead; but Dr. FRANKLAND discovered that this was due to phosphates, which happened to be present in unusually large quantity. Other irregularities were, however, from time to time noted, and our knowledge remained imperfect, while there was no remedy suggested except the avoidance of lead, which would be very inconvenient, for block tin pipes are too expensive, while tin-lined lead pipes, although excellent, require the greatest care in plumbing, as the least exposure of lead in the presence of tin produces a voltaic action which causes rapid corrosion.

This, then, was the state of our knowledge when Professors CROOKES, ODLING, and TIDY undertook the investigation, the results of which they read at the Birmingham meeting. They commenced systematically by dividing the waters into groups, according to their action on lead, and their tables show at a glance that the mere variations of hardness do not account for the variations of lead corrosion — that, indeed, a very soft water sometimes exerted less action than one which was considerably harder. But they were soon struck by a fact previously unobserved, which afforded the clue which guided them in their subsequent work. The least action was always observed in the water which contained the greatest quantity of silicic acid. Many more observations were of course made, which confirmed the earlier ones, and then a series of synthetical experiments were undertaken, in which silica in definite quantities was added to the water before exposing it to the action of lead. At first alkaline sodium silicate was tried, but as it was found worse than useless, dialysed silicic acid was substituted with perfect success. Then followed a series of trials with powdered glass, granite, flint, agate, and chalcedony. All of these had some beneficial effect, but flint was about the best, and subsequent experiments appear to leave no doubt that, provided excess of alkali be absent, half a grain per gallon of silica in solution deprives even distilled water of any continuous action on lead. It is, however, essential that the silication of the water shall be maintained, as otherwise corrosion will set in. Here there was not only an explanation of some, at any rate, of the irregularities which had previously been most puzzling, but the suggestion of a possible remedy.

On these new lines new experiments were made, and the result was that a system was devised which appears to be at once efficient and inexpensive, and which we trust will stand further trials, and take permanent place as one of the great achievements of applied

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chemistry. Filters were constructed in which the water passed downwards, first through sand, then through broken flints, and lastly through Buxton limestone. The water used was that of Huddersfield, which is very soft and dissolves much lead. After passing through the filter with uniform velocity, it was again analysed, and its action on lead again determined. The total solids in solution were found to have undergone very little actual increase—not more than about half a grain per gallon,—but enough silica had been dissolved to reduce the "lead-dissolving power" of the water to one-thirtieth, the lead-dissolving power being the quantity of lead dissolved under similar conditions in a given time. If so simple a filter will protect all water from lead pollution, water companies will have no excuse if they do not adopt it; it cannot injure, and will probably in every case improve the water in all respects.

The authors of this interesting research discuss in a separate section the question of the quantity of lead that may be permitted in drinking-water. They quote many authorities, and from them and their own observations conclude that a water is safe if a few ounces treated without evaporation with sulphuretted hydrogen give no reaction.

AT their meeting on Saturday the Metropolitan Asylums Board resolved to reinstate Dr. COLLIE, the medical superintendent of the Eastern Hospitals, and thus a tardy act of justice has been done. Dr. COLLIE, it will be recollected, was suspended from his office during an inquiry into certain scandalous proceedings at these institutions, and although it was clearly shown that personally he had had no connexion whatever with these misdeeds, he was, on account of some comparatively trifling omissions of clerical duty, almost removed from his appointment, and only permitted to return to his office on probation, after being mulcted in the amount of salary which related to the period of his suspension.

Every effort was made to offer Dr. COLLIE as a sacrifice to popular clamour. A scapegoat was urgently needed to divert attention from those who were really guilty, and there is no doubt that an act of serious injustice would have been done had not a strong feeling of indignation been roused, first among the members of Dr. COLLIE'S own profession, and afterwards among the public generally. We warmly espoused Dr. COLLIE'S cause, for we were from the first convinced of his integrity, and we felt it our duty to place every fact concerning his case in the most prominent manner before our readers, and to utilise every means in our power to ensure their being properly understood; while at the same time the metropolitan branch of the British Medical Association and the Medical Defence Association, headed by Dr. DICKSON and Dr. RICHARDSON respectively, bore witness to the esteem in which he was held by his professional brethren. We may, then, heartily congratulate Dr. COLLIE and the profession upon the successful results of these labours. We are convinced that, had less effort been made, even the narrow majority by which he was at first reinstated would have been replaced by a large majority against him.

Perhaps one of the most unpleasant incidents to which Dr. COLLIE has had to submit was his reappointment on probation to a responsible office in which he had to control a large number of subordinates. That he has succeeded in maintaining order and discipline under these disadvantageous circumstances is a striking proof of his administrative ability—ability which those who are best able to judge of the management of public institutions never failed to recognise. To Mr. GALSWORTHY, the chairman of the Board, and to Sir EDMUND CURRIE, thanks are due for their unswerving determination that the public should not lose the services of a capable officer. Had Dr. COLLIE been sacrificed, it would have been no easy task to induce medical men of any promise or ability to seek metropolitan appointments, and thus harm would have been done that might not improperly be described as a calamity. But the struggle is now ended, and we trust we have heard the last of the Eastern Hospitals scandal. We would, however, remind the Metropolitan Asylums Board that, if their institutions are to be properly conducted in future, it is necessary that the medical superintendent should be allowed to occupy the position which is defined by the Orders of the Local Government Board, and that he should be loyally supported in the performance of his responsible duties.

Annotations.

"Ne quid nimis."

DIRECT REPRESENTATION IN SCOTLAND AND IRELAND.

DIRECT representation, now that it is obtained in point of law, is by no means assured in point of fact. In England, indeed, though the profession is thrown into turmoil by grave questions as to the best modes of preserving the freedom of election while trying to secure the best candidates, not one candidate is in the field who is officially connected with the medical authorities, and the majority of the candidates are certainly *bonâ-fide* general practitioners. In Scotland the contest apparently will be between Dr. Sinclair of Dundee and Dr. Bruce of Dingwall, two good specimens of Scotch practitioners, between whom it would be impertinent in any man south of the Tweed to decide, and no man north of the Tweed can go far wrong. In Ireland, Dr. Kidd and Dr. Jacob are men who would adorn the Council; but they are officials of a corporation whose representative plays already a larger part in the Council than probably any other of its members. To associate Dr. Kidd or Dr. Jacob with Professor Macnamara would be a work of supererogation; but the only alternative for it is in the practitioners of the provinces of Ireland using the privilege conferred on them and sending a genuine general practitioner to the Council.

THE RISKS OF A SUMMER HOLIDAY.

PROFESSOR NETTLESHIP, of Oxford, has exposed in a letter to *The Times* the risks to which visitors to country districts are liable when sanitary authorities are negligent and lodging-house keepers are regardless of any interests but their own. He states that he engaged lodgings in a farm-house at Newquay, Cornwall, which were recommended to him by two respectable lodging-house keepers of long standing, who knew the state of affairs, and after being there ten days his child was taken ill with scarlet fever. He then discovered that his landlord's daughter, who was assisting in the ordinary housework, had three weeks before suffered from the same disease, and was therefore still infectious. Moreover, the children in adjoining cottages,

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in one of which his laundress lived, had quite recently suffered from scarlet fever, and he was drinking infected milk from his landlord's own cows. Cases of scarlet fever, he says, were wilfully concealed from the doctor, who was also medical officer of health, so as to prevent injury to the lodging-house keepers' interests, and no steps, or next to none, were taken to disinfect the houses in which they occurred. A more scandalous state of affairs can hardly be described, and *The Times* has done a public service in discussing these occurrences in indignant terms in a leading article. Our contemporary states that Professor Nettleship has no legal remedy; but it omits to mention that the sanitary authority have ample powers, under the Public Health Act, of procuring the infliction on the lodging-house keepers of a fine not exceeding £20. If they neglect to take this step, the warning should indeed be taken to heart by intending visitors, and holiday-makers should avoid Newquay as they would any other pestilential locality. But this is a case in which the Local Government Board can give assistance, and we trust that the publicity given to Professor Nettleship's story may have the effect of pressure being put upon the local authority to enforce the provisions of the Act of Parliament. Whether they will do so or not is doubtful, for it is an instructive commentary upon the history which has been given that public health services are valued at Newquay to this extent, that the remuneration of their medical officer of health is an annual payment of £10.

THE RABIES AND ANTHRAX ORDERS OF THE PRIVY COUNCIL.

THE Privy Council have just published two orders under the Contagious Diseases (Animals) Act, dealing respectively with rabies and anthrax. These orders prescribe the duties of local authorities and their officers, and empower the former to make regulations for controlling and prohibiting the movements of animals infected, or suspected of being infected, and for cleansing and disinfecting places occupied by these animals. The regulations which can now be made for muzzling and controlling dogs are very comprehensive, and much care will have to be exercised by local authorities so as not to attempt to do more than can reasonably be carried out. The order has wisely not required the hides of animals dying from rabies to be slashed, and thus the risk of infection of the ground through the saturation with blood is avoided. The orders and the regulations which will be made thereunder will doubtless prove of some value, but their chief use will be in enabling some idea to be formed of the number of cases of these diseases which occur throughout the country.

RUPTURE OF THE BLADDER.

THE result of suturing the rent in cases of ruptured bladder has not hitherto been successful, but the opinion held by surgeons, that it is the right treatment to pursue in such cases, receives strong confirmation from a case now under the care of Sir William Mac Cormac in St. Thomas's Hospital. The patient, a strong, florid, healthy man, aged thirty-three, injured his abdomen by running up against a post, about fifteen hours before he applied for admission. Interrupted silk sutures were used for the bladder, the rent in which was about three inches long, a catheter was tied in, and the abdomen drained by a glass tube. There was a large amount of urine in the peritoneal cavity, which was washed out with a solution of boracic acid. The operation was performed on the 22nd ult. The patient passed urine the following day, when the catheter was removed. The drainage-tube was taken out on the 24th, and there has been no fever or other symptom since the operation.

HOW LONG TO SLEEP.

IT is manifestly impossible to lay down any universally applicable rule as to the number of hours which it is desirable to sleep. Probably no two persons require precisely the same amount of slumber, and it is scarcely likely that any person needs the same length of sleep on all occasions. Even the most monotonous lives involve the expenditure of varying quantities of energy, and make differing demands on the stores of nerve- and muscle-power on several days. We do not, of course, mean to imply that sleep is *the* season of recuperation. That is unlikely in view of the ascertained facts in relation to tissue-feeding and physiological change; but it is nevertheless true in practice that prolonged or exceptionally severe exertion, whether of brain or muscle, requires a correspondingly lengthy or deep repose. Speaking broadly, sleep is the state in which the fires are, so to say, damped down and the machinery has opportunity for cooling. The bow is, as it were, unstrung, and may recover its elasticity during the recurring periods of slumber. The great point is to secure what Bichât characterised as general sleep made up of particular sleeps. The whole body should be rested—so far as any avoidable demand on its energy is concerned—during sleep. The Irishman, who explained that a short sleep did for him because when he slept he "paid attintion to 't," uttered a truth in his witticism. If sleep be thorough, then a short spell will do more good than a much longer duration of sleep that is incomplete and imperfect, both in its nature and in its effects. We cannot discuss the physiology of sleep in this place, but two or three propositions, based on experience and observation, may be briefly set down by way of suggestion worth thinking out for special application in individual cases. Sleep is a distinctly natural function, and therefore, both as regards its induction and management, ought to be performed in conformity with natural laws. That it is a state which should recur periodically is evident from the rotation of day and night, and approximately we ought to go to sleep when the natural light fails and wake with the sunrise. It will therefore be evident that Nature meant us to sleep longer in the winter than in the summer, for the sufficiently plain reason that the maintenance of animal heat during the cold season necessarily requires a larger consumption of energy than is expended on this vital purpose in the warm season. It has been alleged that the organism takes in and stores just as much oxygen during sleep as it has expended during the waking hours, and when the reserves are replenished wakes; but this is only a half-truth, in so far as it is a truth at all. What happens is rather a rest from the rapid movements of waking life, during which the slower activities of function have time to overtake the faster ones. Recuperation by nutrition is a more tardy process than consumption by work and heat production, and if the hare were not to sleep the tortoise would be left hopelessly behind. It is essential to health that the tortoise should not lag far in the rear, and sleep must be just as long as will enable the laggard nutritive processes to overtake the impetuous destructive processes. Practically, therefore, a man should sleep until he is refreshed. The mistake many persons make is in attempting to govern what must be a matter of instinct by volitional control. When we are weary we ought to sleep, and when we wake we should get up. There are no more vicious habits than adopting measures to "keep awake" or employing artifices, or, still worse, resorting to drugs and other devices to induce or prolong sleep. Dozing is the very demoralisation of the sleep function, and from this pernicious habit arises much of the so-called sleeplessness—more accurately wakefulness—from which multitudes suffer. That day is not the time for sleep is evident upon the face of the fact that Nature has provided

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the night, wherein no man can or ought to work. Instead of trying to lay down arbitrary rules as to the length of sleep, it would be wiser in a common-sense and physiological way to say, Work while it is day; sleep when you are weary, which will be at night if the day has been spent in honest and energetic labour. When you wake, rise; and if the day's work has been sufficiently well done, the time of waking will not be earlier than sunrise. The difficulties about sleep and sleeplessness—apart from dreams—are almost uniformly fruits of a perverse refusal to comply with the laws of nature. Take, for example, the case of a man who cannot sleep at night, or rather who, having fallen asleep, wakes. If he is what is called strong-minded, he thinks, or perhaps reads, and falls asleep again. This being repeated lays the foundation of a habit of waking in the night and thinking or reading to induce sleep. Before long the thinking or reading fails to induce sleep, and habitual sleeplessness occurs, for which remedies are sought and mischief is done. If the wakeful man would only rouse himself on waking, and get up and do a full day's work, of any sort, and not doze during the day, when next the night came round his sixteen or twenty hours of wakefulness would be rewarded by a sleep of nine or ten hours in length; and one or two of these manful struggles against a perverted tendency to abnormal habit would rectify the error and avert the calamity. The cure for sleeplessness must be natural, because sleep is a state of natural rhythmical function. You cannot tamper with the striking movement of a clock without injuring it, and you cannot tamper with orderly recurrence of sleep without impairing the very constitution of things on which the orderly performance of that function depends.

THE PROGRESS OF CHOLERA.

WITH but few exceptions, cholera is rapidly diminishing in most of the towns and provinces hitherto infected in Italy, and although a few fresh places have been attacked, the mortality in them is comparatively small. The largest number of deaths is occurring at Torre dell' Anunziata, Taranto, Ferrara, and Cagliari; but even in these places the fatal attacks only vary from about two to five a day. So also, speaking generally of Austro-Hungary, there is a decline in the extent of the epidemic. Dalmatia is reported to be practically free from the disease; in Istria the number of fresh cases is only small; at Trieste there has also been a diminution in the number of attacks and of deaths; and at Raab, on the Danube, no material extension has taken place. Pesth alone remains seriously infected, the cases and deaths during the past week having averaged some 35 and 15 a day respectively; but, having regard to the sanitary condition of the town, a much more rapid extension might reasonably have been anticipated. Thus far, there is no report of the disease having attacked Buda, on the opposite side of the Danube.

"VIEWING" REMAINS.

SURELY it ought to be settled once for all whether jurors *must* needs view remains. As a matter of fact, in so far as it is permissible for us to express an opinion on a legal question—the lawyers are not too modest in their expressions of opinion on medical questions,—there is no better foundation for the practice of viewing remains than the traditions of the coroner's court. It would have been an excellent thing if the jurors who were on a recent occasion compelled by a coroner to view the body under threat of fine had refused to go, and let the coroner do his worst. We greatly question whether the fine could have been enforced or committal to prison actually carried out in default of payment. Someone should try the eventuality by arrangement with some coroner who takes a sensible view of the matter. It is cruel to compel men, who are generally the fathers of families dependent on their health and energy of mind and body, to expose themselves to the most depressing influences with no better purpose than the enactment of a perfectly useless farce. Nothing whatever is gained by the visit of the coroner's jury to the deadhouse or apartment where the body is lying. No absurd rule compels a jury of assize to view the remains of a murdered man, and why should a jury of inquest be compelled to perform that grim ceremony? The evidence of "view" is not even made part of the case, for evidence of the fact of death is always taken from a medical or some other witness. If there be a compelling law, which we take the liberty of doubting, the sooner it is repealed the better, for at the present moment needless risks are run and nameless injuries to body and mind are done by this absurd custom, and with not a vestige of good to compensate.

TONSILLITIS IN ADOLESCENTS.

DR. C. HAIG-BROWN has published his M.D. thesis upon a very common affection, of which in his capacity as medical officer at Charterhouse School he has necessarily had considerable experience. The monograph contains much matter of interest—such as, for example, the fact that 105 out of 127 consecutive cases occurred in lads between the ages of fourteen and seventeen; the undoubted association of some cases with the rheumatic diathesis, or more immediately as a precursor of an attack of acute rheumatism; the humidity of the atmosphere as favouring tonsillitis, and the equally notorious influence of defective drainage. Dr. Haig-Brown is convinced of the contagiousness of tonsillitis, and sketches two epidemics that occurred in his practice, from the study of which he concludes that the contagium is most virulent at the commencement of the disease, at a stage when it is often overlooked. Amongst complications he discusses very fully the development of cardiac murmurs, which were met with in 9·4 per cent. of cases where there was no previous history of rheumatism. In eight cases out of 345 the evidence was conclusive in favour of endocarditis, for they terminated in chronic valvular disease, and in three there was distinct evidence of pericarditis. It would have been valuable to have had statistics upon the occurrence of albuminuria, but this is a point which is not specially touched upon. As to treatment, the opinion is expressed that, like acute pneumonia and many specific fevers, tonsillitis runs its course uninfluenced by drugs, and this applies not only to guaiacum, aconite, and chlorate of potash, but also to salicine and the salicylates, with the reservation that the latter may possibly in some cases avert an attack of rheumatic fever.

HEALTH OF SEWERMEN.

IT is a very old story that the classes habitually engaged in particularly unhealthy occupations are, generally speaking, healthy. More than forty years ago, when the science of "Vital Statistics" was in its infancy, the newspapers announced with many expressions of amazement that the "nightmen"—the men who emptied the cesspools—of London were healthy and long-lived. It must be so. Only very strong, or more accurately insusceptible, persons could engage in such an avocation with impunity, and having been habitually exposed to the effluvia for some time, they would naturally become, as it were, inured to the contact with filth. It is therefore not in the least degree surprising to be told that the sewermen of Chelsea "showed marvellous health and activity." The strangeness of the story would come out if the facts lay the other way. Let no mistake, however, be made as to the moral. Arsenic is not the less an active poison, working death with certainty, because there are arsenic eaters who thrive and

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grow fat on what kills men not habituated to its use. If the whole population lived in the sewers, the mortality would be considerable, because the weakly and susceptible would be killed off with great celerity, but the survivors would be extremely unlikely to suffer from either typhoid fever or diphtheria. If the Vaccination Acts were repealed to-morrow the deaths from small-pox would be very numerous, and again, as when the elderly part of the present community were young, the streets would be full of miserable creatures with wofully pock-marked faces, but those who had either survived or resisted the disease would not be likely to develop it in their own persons. We fail to see the force of the remark that any special class of inured persons are free from the maladies which they have outlived, and when such remarks are made they ought to be explained, or qualified by reference to the facts that elucidate them.

THE METROPOLITAN RAILWAY "MYSTERY."

FOR some time the public mind was exercised to account for the grievous injury inflicted on Mr. Moritz Fischer on the evening of the 22nd ult., whilst travelling on the Metropolitan Railway. From the first the theory of suicidal intent was not seriously entertained, as there was no apparent adequate motive to such an act, and, moreover, no weapon was found in the carriage or upon the line with which the injured man was likely to have attempted to take his own life. By whatever means the blow was given, it was clear that the force must have been great, for we learn that the frontal bone was fractured and the brain lacerated. A contemporary says "it was an incised wound, and must have been inflicted with a moderately sharp instrument, and on the edges was some black matter evidently from the weapon with which the wound had been inflicted." We now know beyond all reasonable doubt that the weapon was the projecting edge of the inner tunnel close to Praed-street Station. The term "incised wound," though not absolutely incorrect is somewhat misleading, for to the unprofessional mind it conveys the idea that a "moderately" or otherwise sharp instrument must necessarily have been the agent; whereas nothing is more common than to meet with cases of linear wounds of the scalp caused by a blow delivered by a very blunt body. This is explained by the fact that the lacerating force is received upon a curved surface, so that the counterpressure of the skull cuts, as it were, the soft tissue intervening between the bone and the external object in a more or less linear manner. Obviously the degree of curvature and the angle at which the blow is delivered will modify the nature and appearance of the wound. It is by no means rare, even for medical witnesses, to testify in police-courts that certain linear wounds must have been caused by "somewhat sharp instruments," and yet in many of these cases we imagine that if all the facts were brought to light the reverse would be found to obtain. This is an important point, because upon the medical testimony the fate of a prisoner may rest. Let it be remembered that a linear wound is not necessarily an incised wound in the strict sense of the term. Careful observation of a linear wound inflicted by a blunt instrument, such as a rolling-pin, will show that the tissues skirting the "solution of continuity" are bruised; that is to say there is interstitial hæmorrhage far beyond in amount the most that is ever found in a truly incised wound. In Mr. Fischer's case the problem has been solved. The unfortunate gentleman must have projected a considerable part of his body beyond the window of the carriage for his forehead to have come in contact with the arch. This may have been with the purpose of ascertaining the position of the train, or, as has been suggested, to watch the movements of passengers in the adjoining compartment. Be this as it may, the unfortunate incident should serve as a warning to the numerous passengers travelling on the Metropolitan Railway that, if they set any value on their lives, it is wise for them to keep their heads clear of such obstructions as tunnel walls. A "danger" notice ought to be posted in the carriages of the company warning against the possible fatal consequences of such an act as Mr. Fischer seems to have committed. As regards violence at the hands of another, in Mr. Fischer's case we need only say that the evidence was altogether against it. No robbery had been committed, the compartment of the carriage was in no way disarranged, and there was no sign of anyone other than Mr. Fischer having entered or left the part of the train in which he was found bleeding and unconscious. We commend the vigilant search instituted by the railway officials and the police, and congratulate the public upon the satisfactory solution of the mystery.

AMBULANCE INSTRUCTION TO KEEPERS AND GILLIES.

THE occurrence of a series of gun accidents during the active shooting season of autumn—some necessarily fatal from the extent of injuries inflicted, but others more dangerous from the loss of blood than from the extent of the wound—suggests that sportsmen should require every keeper and gilly to undergo a course of ambulance instruction, or, where this is impracticable, one of the popular publications issued by the St. John Ambulance Association might be supplied. A simple sketch of the human framework—just showing the bones and the parts where fractures most commonly occur, and an outline of the main arteries and veins, with the points at which pressure can be most effectually applied to arrest hæmorrhage—might hang up in the keeper's lodge. It is a matter which men liable to accident take a deep interest in, and it at the same time quickens a taste for the study of nature. We do not suppose any instruction such as is here indicated, or even the highest surgical skill, could have arrested the fatal hæmorrhage in the gunshot wound received by Lord Dalkeith, heir to the dukedom of Buccleuch, while out deer-stalking in a remote part of Scotland. But had the wound been less severe, and the brachial artery alone lacerated high up in the arm, there would have been no one but the keepers and gillies to render such simple surgical aid. A very little education in the principles of "First Aid to the Wounded" would enable bleeding from a wounded vessel to be staunched and life saved till skilled surgical assistance could be obtained.

COCAINE IN HAY FEVER.

DR. SETH BISHOP, in a lecture delivered at Chicago Medical College, points out that three conditions are requisite to the existence of a paroxysm of hay fever. "Firstly, abnormally sensitive nerve centres; secondly, a hyperæsthetic condition of the peripheral extremities of the nerves; and, thirdly, the presence of one of a vast number of irritants." No curative treatment has been discovered, and preventive treatment has led sufferers to seek relief in mid-ocean or on mountain-top. As palliatives, quinine, chloral, and morphia internally, and quinine, chloroform, and carbolic acid by inhalation, are the most useful—quinine, perhaps, being the best. The powerful local anæsthetic action of cocaine has led to its employment in hay fever, but the applications require to be repeated so often as to be open to the risk of exciting toxic effects from the absorption of the drug. Dr. Bishop has devised an insufflator, whereby a 6 per cent. powder of cocaine and sugar of milk can readily be applied, and with striking palliative results. He describes the local action of cocaine upon the mucous mem-

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brane as primarily productive of anæsthesia and anæmia, followed unfortunately by swelling and hyperæmia to such an extent sometimes as to necessitate the abandonment of the drug. In its general toxic effects it resembles, when taken in large doses, opium-poisoning, but the pupils may sometimes (not always, as when applied locally) be dilated. Alluding to cauterisation of the mucous membrane, he warns us that this treatment may induce an attack of true asthma without curing the hay fever, as in a case personally known to him.

DESPATCHING" THE VICTIMS OF HYDROPHOBIA.

IT is startling to find that in these enlightened times there lingers among the ignorant and prejudiced the notion that the victims of disease are sometimes "despatched" to "put them out of their misery." In connexion with a recent case of hydrophobia a particularly "absurd rumour" of this nature was raised. The function of the medical profession is to save life, not to kill, even "in mercy." When the subject of a mortal disease is in agony the resources of our art, medical and surgical, are ransacked for means to ease pain and prolong existence. The public only imperfectly understand how intense and persevering is the desire and endeavour of the profession to spare suffering and save life. We occasionally hear "doctors" and "surgeons" spoken about as though they were indifferent to the misery of their patients. A long experience and wide observation lead us to assert unhesitatingly that nothing can be more unjust and groundless than this charge. It is inconceivable that any man who has that inner view of the utter wretchedness of disease and the terrible nature of death which a practitioner of medicine possesses can be indifferent to the mental or physical sufferings of his patients. The wear and worry of professional life for those whose mission it is to minister to the sick consist mainly in the anxiety to do the very utmost which art empowers us to do in the discharge of a heavy responsibility to help the poor people who look to us for succour. Medicine and surgery are agencies for the rescue of those who have fallen into the toils of disease, and who are in peril of death. We care not how these troubles may have come upon them except in so far as the recognition of these causes of sorrow and suffering may avail to save others; but for the sick themselves our only and earnest care is to cure, or, if that be impracticable, to relieve them.

CLASSIFICATION FOR MEDICAL LIBRARIES.

MR. J. B. BAILEY read an instructive paper at the annual meeting of the Library Association, held at Plymouth last month. It was concerned with the best mode of classification for scientific and medical libraries. Mr. Bailey is strongly of opinion that the best plan is to have a properly made and kept index catalogue. Shelf classification he regards as almost useless, especially with regard to the periodical literature of the day. "Any bibliography ignoring the papers printed in the numerous journals and Transactions would be absolutely useless; in fact, it would not be worth the time occupied in compiling it. The impossibility of showing on the shelves anything except separate publications seems to me to at once stamp this system as useless in the class of libraries" under discussion. "With a good index catalogue all the chief periodical literature can be laid before the student, and I venture to think that no catalogue has yet been issued in which this has been so thoroughly and so well done as in the Index Catalogue to the Surgeon-General's Library at Washington." The Royal Medical and Chirurgical Society is to be congratulated on the possession of a librarian who takes such interest in his work.

"HARASSING THE SOLDIER."

UNDER the above sensational title a letter recently appeared in *The Times* from Surgeon-Major Davy of the Army Medical Staff. The object of it seemed to be to call attention to the injurious effects arising, in his estimation from the training which the recruit is put through on joining the army. He advances the opinion that the setting-up drill interferes materially with the process of respiration, "constituting grave lung embarrassments, together with (so intimately are the lungs and heart interdependent) a palpitating heart, in men who have been for many minutes standing perfectly still." Now, it is undoubtedly a matter of importance to ascertain whether the system of drill is such as to produce serious lung or cardiac derangement. But we are bound to say that Dr. Davy has failed to adduce any satisfactory evidence that such is the case. We are quite prepared to admit that drill, if continued too long at a time, or if the recruit is kept in one position, or at one set of motions too often repeated, will be very likely to induce exhaustion, and that watchful care is therefore necessary to prevent mischief; but we believe that with such care no harm is likely to be caused by the training. In support of his hypothesis Dr. Davy quotes some observations made by Dr. Parkes many years ago with reference to the great amount of lung disease in the Guards, but he does not accept Dr. Parkes' view of the cause of it; and he omits all reference to the fact that since the period at which these observations were made, a remarkable reduction has taken place in the mortality of the Foot Guards—a reduction from 17·5 per 1000 of the strength to 7·28 on the average of the last ten years. The difference has been chiefly in deaths by lung disease, and this without any corresponding change, so far as we can learn, in the system of drill to which Dr. Davy attributes such injurious consequences. But there is another mode of testing his opinion. Perhaps there is no point on which a more marked difference exists in the army and navy than their drill. But if we compare the losses in the two services by death and invaliding from lung and heart disease, the results are most remarkable. In the army serving at home the deaths and invaliding on the average of five years, 1880-84, amounted to 5·86 by tubercular lung disease, and 5·19 by heart disease; while in the navy on the home station, for the same period, they were 5·20 and 5·77 per 1000; so that there has been a slight excess of lung disease in the army, and of heart disease in the navy. Surely if the system of drill were so important a factor in the production of these diseases, as Dr. Davy asserts, it could not have failed to manifest its influence in a marked manner. During the civil war in America a large number of men became the subjects of "irritable heart," the form which chiefly gives rise to the invaliding for heart disease in our service; but as the men were sent off at once to join the army, without any previous training, it could not be in any way a result of drill. It was believed by the medical officers to be chiefly caused by hard field service, the abuse of stimulants, and the excessive use of tobacco. To the two last-named causes, and to long-continued exposure to excessive heat, we are disposed to attribute much of its prevalence in our service. We regret that Dr. Davy has based an unqualified condemnation of the system of drill on such very unsatisfactory data. One unfortunate result of such a course must be to shake the confidence of the authorities in the recommendations made by medical officers, when they find serious charges brought and sweeping changes advised upon such inadequate grounds. The proper course would have been to have brought the subject to the notice of the Director-General, with such evidence as Dr. Davy possessed to show the injurious working of the present system. We have no doubt that Sir T. Crawford would have then had the question fully investigated by experienced and competent officers,

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and, if necessary, have brought it under the consideration of the Commander-in-Chief. We must also take exception to the channel through which the subject has been brought forward. Surely the discussion of an important sanitary question, based on physiological considerations, if deemed necessary at all, would be more appropriately conducted in the professional journals, and more likely to lead to satisfactory results than an appeal through the daily press to a class of readers who may be fairly supposed to have no knowledge of the subject.

SALICYLATED BEER.

THE Parisian journals are discussing the question of the propriety of the consumption of beer that has been treated with salicylic acid in order to prevent its deterioration. The matter should in our estimation lie in a small compass. Salicylic acid is a powerful drug which has been in general use for a sufficiently long time for the medical profession to learn that it should by no means be prescribed without the exercise of due caution. It is not a substance that can be taken inwardly in the same *ad libitum* fashion as gentian, quassia, and the like. In many individuals salicylic acid produces serious symptoms, and even depression of the heart's action. These results are most frequently seen in those patients in whom the renal and hepatic functions appear not to be acting efficiently. Young children and the aged are more susceptible of its influence than those in robust health. Therefore simply looking at the matter from the medical or hygienic point of view, the employment of salicylated beer should be condemned. The same reasoning holds good for the salicylage of foods in general. The quantity of salicylic acid employed is by no means inappreciable. It has been computed that the salicylated beer of Paris contains more than twenty centigrammes of the acid in every litre, so that a considerable quantity of the noxious agent could be taken into the system by the thirsty beer consumer. There are grounds for believing that the rate of elimination of the antiseptic drug is by no means rapid, and any congestion of the kidneys or liver would certainly retard its excretion in great degree. Again, we are not sure, even supposing that the substance were excreted completely, that constantly having the tissues bathed by a weak solution of salicylic acid would be unattended with danger. Salicylic acid is a member of a dangerous group of chemical bodies, the best known of which, carbolic acid, is a most rapid and fatal poison.

GASEOUS MEDICATION PER RECTUM.

BERGERON says that this therapeutic method is based on the physiological principle established by C. Bernard that the introduction by the rectum of substances even of toxic nature is not dangerous so long as elimination by the respiratory passages is not hindered. It has been also observed that a current of carbonic acid gas may be introduced in indefinite quantity into the rectum without giving rise to any ill effects, provided certain precautions be adopted. After having tried the effect of a number of balsamic parasiticides and antiseptics, the author has concluded by giving preference to sulphurous mineral waters. A current of four or five litres of carbonic acid gas traversing from 250 to 500 grammes of sulphurous mineral water (Eaux-Bonnes, Allevard, Saint Honoré, Challes) is introduced by the rectum twice every twenty-four hours. After the employment of these measures for a few days, it has been observed that the cough has been greatly relieved, the expectoration has been profoundly altered in quality and its quantity reduced to a very low ebb, the perspirations have been stopped, the general state has been correspondingly improved, and this not only in incipient phthisis, but also in the confirmed stages of the disease.

HEALTH OF NORWICH.

NOTWITHSTANDING the recent fall in temperature, the death-rate from all causes, and especially from diarrhœa, continues to increase in Norwich. The mean annual death-rate in this city during the twelve weeks ending last Saturday was equal to 28·2 per 1000, and the rate in the last three weeks of that period was 35·1, 40·8, and 43·7 respectively. It may be noted by way of comparison that the mean rate during the same period was but 20·4 in the aggregate of the twenty-eight towns, and did not exceed 18·9 in London. The main cause of this excessive mortality in Norwich has been the exceptionally excessive fatality of infantile diarrhœa. Norwich is one of the large English towns in which the mortality from this cause somewhat constantly exceeds the average for large towns. In the summer quarters of the ten years 1875-84 the mean annual death-rate from diarrhœa in Norwich was equal to 3·6 per 1000 of the population, against an average of 3·0 in the twenty-eight towns. In the summer of 1885, however, the rate from this cause fell to 0·9 in Norwich, against an average of 2·0. The mean diarrhœa rate in the past twelve weeks now under notice was 8·4 in Norwich (considerably exceeding the rate in any of the eleven preceding summers), against a mean rate of but 3·6 in the twenty-eight large towns. With reference to this remarkable and disastrous mortality, mainly of infants, it is well to bear in mind the epidemic of typhoid fever that prevailed in the city during the early part of 1885 and the subsequent inspection of the city by Dr. Airy, a medical inspector of the Local Government Board. Dr. Airy attributed the epidemic in great measure to the foul condition of the privies, and recommended that the bins should be reduced in size, and that steps should be taken to close certain dangerous wells that were known to exist. Mr. Crosse, the medical officer of health for the city, in his report for 1885, dated in May last, writes: "Nothing has been done in either direction, and yet the complaint (typhoid fever) has comparatively speaking, disappeared." There remains, however, for the serious consideration of the sanitary authority of the city, in consultation with their medical officer of health, the probable connexion between the grave sanitary defects pointed out by Dr. Airy, and the exceptional mortality from diarrhœa that has prevailed during the past summer and early autumn.

PERCHLORIDE OF MERCURY AS AN ANTISEPTIC.

THE danger of bichloride of mercury as an antiseptic, whether as a dressing in surgery or a douche in antiseptic practice, is being unpleasantly illustrated in many cases. The *Journal of the American Medical Association* reports a case of supra-pubic cystotomy in a man of seventy years for the extraction of two stones the size of walnuts. The patient was much collapsed after the operation, but progressed favourably o the eleventh day, when severe diarrhœa with much rectal pain and tenesmus came on; later the evacuations were tinged with blood and the patient complained of a metallic taste in the mouth. These symptoms were properly attributed to the action of the bichloride irrigations, which were used twice a day. When they appeared the irrigations were discontinued, with some improvement, but death occurred on the thirty-sixth day. Professor Dennis, in a paper on Antisepticism, in which he almost out-Listers Lister, admits this risk of the bichloride. Various continental writers have shown the risks. Dr. Lucien Butte has been at pains to collect fatal cases, and has published an article on the subject in the *Nouvelles Archives d'Obstétrique et de Gynécologie*. The strength of the solutions used were from 1 in 750 to 1 in 1500 parts. He has collected thirty fatal cases. In these, mostly parturient, there was sanguinolent and fetid diarrhœa, with acute rectal

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pain. The mouth is seldom affected. The chief post-mortem lesions are a gangrenous enteritis and deposit of amorphous masses of oxalate of lime in the kidney, not always present, but pathognomonic when it occurs. The *New York Medical Record*, in giving an interesting abstract of Dr. Butte's paper, maintains that with proper precautions the solutions may still be used, observing that though they may have killed tens they have saved thousands. This is not quite satisfactory, and we should advise obstetricians to be content with less virulent germicides.

NEWSPAPER THERAPEUTICS.

THE custom of giving medical advice in the newspapers has of late years become a somewhat common one. Whatever motive of expediency may be urged in its favour by those whose practice it is, more than enough for its condemnation may, we are sure, be said on the other side. There are many points in diagnosis which can only be made out by personal examination; nay, statements in this connexion are commonly of little value. Even facts of life history cannot always be correctly learned from a written description. There is, therefore, inseparably connected with this singular mode of practice the danger of misinterpretation, the unfortunate results of which may at any time react upon the patient. We may be told that if care be taken to select simple cases, no serious evil can arise. The argument even so put, however, is a weak one. It amounts to this, that where the ailment is slight, it does not matter much if a little mischief is done. By it a wrong principle is not excused by the impotence of its practice. The trifling ailment, moreover, may be aggravated by delay or mismanagement, while even a cautious beginning in such haphazard treatment will often become the cue for heedless enterprises of a like kind. It will also be seen that while the tendency of such procedure is to debase the quality of medical advice, its effect must be to augment the already inordinate value which is assigned by many to drugs and other means of cure in themselves.

SUBSOIL FILTH IN WESTMINSTER.

THE assurance given in a letter to *The Times* from Mr. Phillips, resident engineer at the Houses of Parliament, that the subsoil filth he has discovered in Westminster is "comparatively harmless," as it is hermetically sealed down by the overlying bed of gravel and water therein, nevertheless must leave an uneasiness of mind in those residents in Westminster who concern themselves with the sanitation of the locality. With his assurance of the comparative harmlessness of this filth, Mr. Phillips concludes his letter by saying: "Notwithstanding this, the unpleasant fact remains that from 26 ft. to 36 ft. below the present surface of Westminster this objectionable stratum of sewage-water exists." In the various "well-sections," published in the Geological Survey of the London Basins, no mention is made of this filth-bearing stratum in Westminster. Thirty feet or so of made ground, sand and gravel, have to be passed through before the London clay is reached, but in none of the published accounts supplied by various engineers and artesian well-sinkers to the Government inquiry is any mention made of the sewage-bearing stratum Mr. Phillips has discovered. Had not the account been given by one so reliable as the Government engineer, the offensive stratum might have been suspected to be of the nature of that commonly found even in such uninhabited localities as the Bagshot Sands, where, as elsewhere, at the junction of a porous stratum of sand or gravel, especially the former, with an impervious clay, a bed of organic matter is found. This is nothing more than the washings from the rainfall on the higher water-shed, filtered out by the porous medium through which it passes to reach the valley. Such deposits, even when of purely vegetable origin, are often very offensive, and when tapped for a water-supply the water is very offensive also. Some assurance is needed that the wells of Westminster, which have been sunk for a pure supply from the chalk, are free from this sewage. After passing the upper porous 30 ft. of sand and gravel, about 100 ft. of London clay has to be passed through, and then various strata, till the chalk is reached at from 250 ft. to 300 ft. Any insecure joint in the cylinder would admit the filth and contaminate the water, and even some might pass down by the side of the boring, which it has been known to do, notwithstanding the assurance of engineers to the contrary.

GRANULOMA FUNGOIDES.

AN account of a case of the rare affection, Granuloma fungoides, has been published by Drs. Carl Hochsinger and Eduard Schiff of Vienna. Their paper also appeared in the *Vierteljahreschrift für Dermatologie*, No. 3. 1886, but the authors were not enabled to revise it, and they have therefore felt bound to issue it in a separate form. It will be read with interest here in connexion with the remarkable case described by Dr. Payne last session at the Pathological Society. The disease began in 1877 as a chronic eczema of the back, which gradually spread over the body. In 1883 the head was attacked, and soon became the seat of the characteristic ulcerating nodules. The patient, a female, died in November, 1885. The authors give a historical sketch of the affection, and describe its histology as a nodular formation of granulation tissue replacing the normal tissue of the cutis and the papillary body. A delicate reticulum supports the round cells, and in no part are any giant-cells detected. The transition to healthy skin is gradual. The new growth is not very vascular, and as it spreads it rapidly destroys the cutaneous capillaries. Described previously under such names as *lymphadenie cutanée*, "sarcomatosis generalis," its alliance with specific inflammatory formations has been proved by the discovery of micro-organisms in the tissue; so that Rindfleisch gave it the name of Mycosis fungoides. Hochsinger and Schiff in the present case ascertained the presence of streptococci in the vessels, leading to the obliteration of the latter; and they instituted a series of culture-experiments, which are described in their paper, and which prove that the micro-organism is distinct from the pyogenic forms.

DANGEROUS DRAIN CONNEXIONS.

MR. CROSSBER DIXEY, M.R.C.P. Ed., has published a complaint as to the sanitary administration of Dover in connexion with the system of house drainage. The sanitary authority having required that the drains of a house into which Mr. Dixey had entered should be connected with the main sewer, he was informed by the landlord that all that was required had been carried out. Soon after this the house was flooded with sewage, and it was then found that the drain had been made to empty into another, the former being a foot above the latter, and that a disused brick drain remained under the house. The complaint is that if the authorities compel alterations in the system of drainage they should see that they are properly carried out. It is certain that such a condition as that described should never be allowed to exist, but at the same time we are bound to admit that the sanitary authority can only compel such modifications in house-drainage, as remained in this case after the new junction had been made, by proving that the existing drains cause nuisance or injury to health, and this it is at times by no means easy to prove. But if it be known to a sanitary authority that such a junction as that described at this house exists—and it ought to be known—then the authority

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should at least advise the tenant to get such repairs effected as are necessary for the purposes of health. From Mr. Dixey's letter we gather that the alteration was made before he entered the house, and that it was done by the landlord. If so, it is possible that the landlord may have been informed of the dangers connected with the house. But under any circumstances some one ought to be appointed to see new drains and junctions before they are covered in, and to prevent such work as is complained of from existing unknown to the tenant.

THE LEAVESDEN SCHOOLS.

WE commented some weeks ago upon the treatment to which Mr. Adams Clarke, the medical officer of the Leavesden Schools, was subjected by the guardians of the parish of St. Pancras. The local newspapers have kept us informed of the proceedings of this body, but we have refrained from commenting upon them until the inquiry was held by the Local Government Board, which was evidently the only outcome of the situation. It is now with much satisfaction that we publish an extract of a report by Dr. Bridges, Local Government Board inspector. Dr. Bridges has fully endorsed Mr. Clarke's opinion, that the causes of any defects in the Leavesden Schools are to be found in conditions that the guardians can alone remedy, and which Mr. Clarke has repeatedly pointed out to them. The attempt made by the guardians to hold this gentleman responsible was opposed to the facts of the case; and we note with pleasure the inspector's reference to him as "a man of unusual competence and zeal."

RAG-SORTERS' DISEASE.

SEVERAL cases of rag-sorters' disease having occurred in a paper manufactory at Ligat, in the Russian Baltic provinces, Drs. Schultz, Heerwagen, and Kranhals visited the place for the purpose of investigating the outbreak. They arrived there on April 30th, and learned from Dr. Radecki, the medical officer of the factory, that there had been fifty-six women employed in the rag-sorting room. On the 25th five were seized with the disease, and seven more on the 28th. Five cases had already proved fatal, one of them in twenty-four hours from its commencement. The symptoms of the disease were very similar in all the cases. In almost every instance it began with a rigor, the temperature rising very rapidly in some cases, but not in others; great depression and headache, however, following soon after the rigor —in all with increased frequency of respiration, distressing cough, thready pulse, and then a fall of temperature. After this the patient either rapidly improved or showed signs of collapse, with an imperceptible pulse and a subnormal temperature. There was no delirium, but the patient sank, collapsed and cyanotic. Death occurred on the average in less than three days. The post-mortem examination showed rapid decomposition and long-sustained rigor mortis. The green discolouration commenced on the chest and neck—not, as usual, on the abdomen. The mediastinum was engorged with serum or bloody serum; the bronchial glands were greatly swollen. Sanguineous serum was found in the pleural cavities and pericardium in considerable quantity. The blood was dark and watery; no signs of coagulation. The heart-muscle was pale and flabby, and the endocardium tumid. Nothing remarkable was found in the gastro-intestinal canal. The lungs were pale and dry and contained but little blood, the lower lobes being hypostatically congested, especially on the left side, but there was no pneumonia. The spleen was enlarged, its capsule easily torn, and the parenchyma nearly broken down. The committee of inquiry thought there was no doubt that the disease was of an infectious description, and that it was in fact "rag-sorters' disease." As considerable uncertainty exists as to the nature of this disease, some authors, as Klob and Frisch, believing it to be simply anthrax or charbon, while others, as Reihböck, look upon it as of a different nature altogether, every opportunity of investigating the subject should be taken advantage of. Dr. Kranhals, therefore, secured portions of the bodies and specimens of the serous fluids for the purpose of bacteriological and other researches. These had not been completed when the paper from which the above account is taken was read to the Riga Medical Society, but several observations of interest had already been made. Various bacilli were found, and amongst them some which appeared to correspond with Koch's "Malignant œdema bacilli." A small dog, too, into which some of the pleural fluid was injected, died on the third day with symptoms of malignant œdema, and the organs were found to correspond exactly in their post-mortem appearances with the descriptions given of that disease by Kock, Gaffky, and Hesse.

THE GUNPOWDER EXPLOSION IN SCOTLAND.

ON Sept. 25th an explosion of gunpowder on a large scale was carried out at the Crarræ Quarries, Lochfynside. It was intended to move some fifty thousand tons of granite, and for this purpose seven tons of powder were used for one blasting. The event was made one of interest for sightseers, and many persons went by steamer to view the "fireworks exhibition." After the blasting operation was complete a number of people entered the quarry to view the wonderful effects of the explosion, although a warning of danger appears to have been given. This, however, was either not heard or was unheeded. Those who first reached the interior of the quarry seem not to have experienced any special inconvenience, but those succeeding found themselves enveloped in a cloud of choke damp, and quickly showed signs of poisoning by the noxious fumes. In gunpowder explosions the gases chiefly evolved are carbonic acid, carbonic oxide, and nitrogen; but there are secondary products, some of which are compounds of sulphur. It may for all practical purposes, however, be taken that the unfortunate persons at the Crarræ Quarries were in much the same condition as regards the nature of the poisonous gases as those exposed to "charcoal fumes" in closed or ill-ventilated rooms. "One of the first effects of inhaling carbonic acid gas is to create an utter prostration of strength, so that even on a person awake and active the gas may speedily produce perfect inability to move or to call for assistance" (Taylor). In the accident now referred to, immense volumes of the gas must have been evolved, but owing to its confinement to a great extent in crevices, and to its high specific gravity, it moved slowly onwards, and in the absence of wind rose but gradually by diffusion. This explains how it was that the first groups of holiday people passed beyond the openings from which the gas issued, whilst those who followed came in for the full effect of the lethal vapour. But it was not merely carbonic acid gas, for, as we have said, in gunpowder explosions a considerable quantity of carbon monoxide is liberated at the same time. Thus the victims were suffocated from want of oxygen and directly poisoned by the toxic effects of the carbon monoxide. The symptoms were characteristic of the event. The sudden and complete powerlessness, delirium, convulsions, and insensibility were the precursors of death in several cases. The fact that both carbon oxides are practically free from smell helps to account for the suddenness with which the symptoms supervened. When the atmosphere is charged with sulphurous acid or sulphuretted hydrogen the odour serves as a warning on the early approach of the gas. Whereas, in the case of carbonic acid and carbonic monoxide the victim may be said to be enshrouded in the veil of death before he

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is aware of his fateful position. It is matter of surprise to us that, considering the known danger from choke-damp of the gunpowder explosions in confined situations, even when ordinary blasting charges are used efficient precautions were not taken to avert so dreadful a catastrophe as happened at the Craræ quarries. The matter demands full investigation.

FORCIBLE AVULSION OF A FINGER.

M. AUCHÉ communicates to a Bordeaux medical society an account of a case of the rare accident of the complete avulsion of a finger. The patient was a carpenter, who, while engaged in lowering a heavy piece of timber by means of pulleys, got his finger caught between the rope and the block. By means of a sudden and violent effort he disengaged his hand, but left his third finger attached to the pulley. He felt but little pain, and there was no hæmorrhage. When seen by the writer some hours afterwards the wound was found to be tolerably regular, the skin-flap representing pretty closely the ordinary oval or "battledore-shaped" incision employed in amputating the fingers. From the centre of the wound the proximal fragment of the first phalanx projected. Disarticulation was then performed, and the wound, the edges of which could not be brought together, was left open and dressed with iodoform. The finger was afterwards examined. The skin was normal on the two distal phalanges, but excoriated in several places on the first phalanx, showing that this was where the finger had been caught. The external digital artery and all the nerves had been divided at the level of the wound, the internal artery having been divided higher up and its end hanging out nearly an inch beyond the torn surface of the finger. The phalanx was fractured at the junction of the distal and the middle thirds transversely but irregularly. The tendons were all left attached to the finger, those of the two flexors and extensor having been torn at their junctions with the muscular tissue and hanging out for several inches from the torn surface of the finger. The writer states that forty-two cases of avulsion of fingers have been previously collected by M. Polaillon. In none of them, however, was the severance complete. M. Farabœuf has demonstrated that a force of 150 kilogrammes (about 3 cwt.) is required to effect separation subsequently to fracture of the bone, and even then several sharp wrenches are needed, during which, of course the traction is very much greater than 150 kilogrammes. In this case the pressure of the rope on the finger against the groove of the pulley seems to have fractured the bone, and the sudden wrench given by the patient must have sufficed to tear the soft structures across.

THE KOREAN GOVERNMENT HOSPITAL.

FROM the first annual report of the work of this institution, which is situated at Seoul, the capital of Korea, it appears that since its establishment twelve months ago 10,460 out-patients and 265 in-patients, of all classes, and coming from all parts of the country, have been treated. Malaria is in Korea the most common cause of disease, and quartan ague the most common complaint. It is, however, worthy of note that while almost all the cases during the winter were quartan ague, those treated during the summer and autumn months were largely quotidian and tertian. Syphilis ranks next to malaria as a causative agent, and its effects are naturally numerous and varied. Of course, as is the case with all rice-eating nations, indigestion is prevalent. Leprosy is common, and skin diseases are seen in all varieties. In short, all the commonly known diseases are met with in Korea, with various modifications; and some uncommon ones, such as beri-beri, distoma, and filaria, are also known to exist. The native faculty, it appears, have some good ideas in regard to treatment. Their system is borrowed from the Chinese, and their medicines are legion. Acupuncture and the actual cautery are their chief remedies, and are the only surgery they attempt as a rule. Syphilis they treat with mercury, the drug being usually administered by fumigation. In March of the present year a school of medicine was opened under the hospital management, with sixteen scholars selected by competitive examination. After serving a probation of four months, twelve of these will be selected and entered regularly upon the course, the other four being dropped out. Each succeeding year twelve students will be appointed; they will receive board, lodging, and tuition, and after completing their course will enter the service of the government. Drs. Allen and Heron, under whose care the hospital is, are to be congratulated on the result of their endeavours to relieve the suffering Koreans and to provide a body of native physicians, who have been taught to disregard superstition and to treat disease by an enlightened and rational system. To the Korean Government, too, credit is due for the alacrity with which the scheme was taken up, and the liberality and official protection which have so much conduced to its success.

FOREIGN AND COLONIAL DEGREES AND THE NEW ACT.

IN view of the interest and importance of the clauses of the new Act referring to the recognition of Foreign and Colonial degrees, we have thought it desirable to procure the statement and opinions of a trustworthy member of the Bar. These will be found in THE LANCET of to-day. No nation is more impatient of the non-recognition of its own diplomas than our own, and none is more ubiquitous or more needs the advantage. We have something to gain, therefore, from a principle of reciprocity, which is one of the principles of the new Act. At the same time it is unpleasant to think that the Privy Council is empowered in certain circumstances to override the Medical Council, and insist on the recognition of degrees or persons of whom the latter disapproves. We protested strongly against this power of the Privy Council. One thing is certain, that in some countries, especially in America, medical education is very slight, and the tests of it very inadequate. We are not bound to recognise all the schools which any country chooses to permit.

MASSAGE AS A MODE OF TREATMENT.

THE *brochure* by Dr. Murrell on "Massage as a Mode of Treatment" expresses views which will be thoroughly endorsed by every observant and thoughtful physician. The author's story anent who should perform the massage forms an amusing exposition of the ignorance of what really constitutes the process. "A short time ago, in asking a medical friend if he used massage much in his practice, he replied, 'Oh yes, a great deal; my butler does it.' After that I should not have been surprised to hear the electrical treatment was conducted by his footman, and that the kitchenmaid undertook the obstetric cases." Skill in the proper performance of massage takes at least two years to acquire, and then it is necessary that the learner bring to his or her task a fair education and a certain amount of refinement, sound health, muscular strength, cheerful temperament, a soft and pliant but strong hand, and some acquaintance with anatomy and physiology. It is as absurd to suppose that "rubbing" or "shampooing" is massage, as it is to say that a daub of paint is a work of art. The duration of a sitting is another point on which the community requires enlightenment. On the principle that you cannot have enough of a good thing, the general impression is that each sitting should

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last an hour. Twenty minutes should, on the contrary, be considered a long sitting. The physiological action of massage is a subject that still requires accurate investigation, but there is little doubt that it improves the appetite and nutrition of even healthy individuals. All those who wish to obtain some idea of the meaning of massage and its possible spheres of utility should read Dr. Murrell's pleasantly written book—a light task that will not occupy more than two hours of the busy practitioner's time.

"MEDICAL STUDENTS AT WORK."

IN an interesting article, entitled "Medical Students at Work," the *Graphic* of the current week gives particulars of the requirements of the medical profession, and points out the enormous field of knowledge now to be covered by the student of medicine. After discussing the curriculum, the writer touches upon the difficult question of the housing of medical students, and roughly divides them—as seen at the metropolitan hospitals, at least—into three classes: first, university men, a class which is, happily, on the increase; secondly, young men who, by serving an apprenticeship to a medical man or being themselves sons of members of the profession, have learned something of the bearings of their future career before entering upon it; and, thirdly, raw recruits shot out of country schools into the dangers and difficulties of the modern Babylon. It is this third class which is, undoubtedly, the most difficult to deal with, and a well-managed collegiate house is, beyond denial, a very desirable thing. A good likeness of Professor Bernays appears in "The Lecture in Chemistry"; and some other portraits are not difficult to trace. To members of, and those in any other way associated with, the medical profession the current number of our contemporary will be exceptionally interesting; and few St. Thomas's men will, we fancy, abstain from procuring a copy of an article in which their *alma mater* is so deservedly and gracefully honoured.

INFECTIOUS DISEASES IN LIVERPOOL.

A DIFFICULTY has arisen in Liverpool as to the isolation of infectious diseases. The Town Council have obtained the sanction of the Local Government Board to the creation of two separate hospitals, and the Netherfield-road Hospital, heretofore a private institution, has been transferred to them under a special Act of Parliament. It appears that the Corporation have undertaken to make certain alterations at Netherfield with a view to the better isolation of the different fevers, and also to acquire property around, so that there shall be an unoccupied zone of forty feet between the buildings and the boundary of the site. At the present moment the Corporation are informed that they may at any moment be without any accommodation for isolation; and it appears that although there are plenty of empty beds at Netherfield-road, yet they are not used because, in the opinion of Dr. Stopford Taylor, the institution is not in a sufficiently sanitary state for the reception of infectious diseases. As to this, he instanced statistics which go to show that the real mortality which has prevailed there during recent years is much in excess of that which apparently appears by the reports of the hospital committee. However this may be, the Corporation felt themselves in a difficulty as to advising that patients should be sent there in the face of the objections of their medical officer of health, and at the end of the meeting at which the matter was discussed nothing was done, it being hoped that there was no positive danger in immediate prospect. The unsatisfactory aspect of the question is that no present action is being taken in order to prepare the hospital for the reception of patients, and it was hinted that nothing would be done until the property in the immediate vicinity of the hospital has been acquired. We are not blaming the Sanitary Committee for their action as to this, because it may be that it is a condition of the use of the hospital that the forty feet zone shall first be provided. We could, however, have wished that, before the onset of winter weather, Liverpool, which has suffered so much from the lack of hospital provision for its infectious fevers, could have had some better prospect immediately in view; and it would have been some satisfaction to know that such internal alterations as are necessary to improve the sanitary condition of the place were at once to be commenced.

INOCULATION OF TUBERCLE.

Now that we possess a proof of the tubercular nature of a disease in the presence of the specific bacillus, the idea of communicability of the disease which was held by the older authors is capable of demonstration, and many cases have been recorded which leave little doubt that such an origin of the disease is far from infrequent. Among the latest cases of this kind is one related by Dr. Elsenberg in the *Berliner Medizinische Wochenschrift* for Aug. 30th, in which the disease was communicated by a curious custom which prevails among the lower classes of the Jews, of sucking the wound on the penis after the rite of circumcision has been performed. From this custom the author has often seen syphilis communicated, and latterly undoubted tubercle. Lindman recorded two and Lehmann ten cases in the *Deutsche Medizinische Wochenschrift*, in which it was thought that tubercle was transmitted from one to another in this way, and it is a noteworthy fact that Lehmann's ten cases were all produced by the same person, who shortly after died phthisical. The case which Dr. Elsenberg records was a child born in the month of September of perfectly healthy parents, which was circumcised on the eighth day and the wound sucked as usual under the idea of stopping the hæmorrhage and cleansing it; but instead of healing, as customary, the wound spread and formed an ulcer, the lymphatic glands became affected, and in the month of February the child was placed under the treatment of Dr. Elsenberg; but death ensued in the month of March, and in the tissue of the foreskin and glands tubercle bacilli were found by the Ehrlich-Weigert method. The next step to complete the observation was to examine the man who had sucked the wound. This at first disclosed nothing of importance, but it was found that he coughed at times and brought up some mucus; some of this obtained after prolonged coughing was examined, and found to contain bacilli.

AMMONIA APPLICATIONS IN MALIGNANT PUSTULE.

DR. LEONIDAS AVENDANO, of Peru, who has previously written (*vide* THE LANCET, Jan. 9th, 1886) in favour of the local treatment of anthrax by ammonia, now publishes in a Lima medical journal an account of a recent case of undoubted malignant pustule in which he successfully adopted this treatment. The patient was a married woman, aged thirty-four, who, two days after being stung by some insect in the forearm, began to experience the symptoms of acute inflammation in the spot. Thinking an ordinary boil was forming, she applied poultices. The next day, when seen by the writer, the pulse was 105, there was a great deal of œdema and redness about the arm, and there was a papule, which was blackish at the centre and surmounted with a circle of vesicles. The etiology, the rapid development, and the local symptoms all pointed to the malignant nature of the case. A crucial incision was made, and a brush saturated with the ordinary solution of ammonia applied to the cut surfaces. An acetate of ammonia and aconite mixture was ordered, and in a few days the patient was well. Dr. Avendaño thinks

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that other caustics which have been employed in anthrax—as nitric acid, chloride of antimony, and Vienna paste—only partially and incompletely destroy the bacillus anthracis, but that ammonia has a much more powerful effect. This makes the fifth case in which he has seen remarkably successful results follow its employment.

MIDWIFERY STATISTICS IN VIENNA.

DR. KARL BRAUN has just published some very valuable statistics showing the improved and improving safety with which the patients in the first obstetrical clinic in the Vienna General Hospital have been delivered during several years past. He took charge in 1857, and during the twenty-six years following—i.e., to 1883—103,889 women have been confined in this clinic, which, it may be remarked, is only one out of three obstetric clinics in the hospital. Of these 1945 died, making the average death-rate for the whole period 17 per 1000. During the first six years there were 722 deaths out of 25,123 cases—i.e., 28 per 1000. The ventilation and warming arrangements were then altered in accordance with modern sanitary views, and various other hygienic improvements made, the result being that there was a decrease in the mortality during the next sixteen years, 1117 deaths occurring in 68,770 cases, or 16 per 1000. Since 1881 there has been a further decrease, owing to the use of antiseptics, &c., 15,000 cases in the last five years having resulted in only 106 deaths, or 7 per 1000. This improvement appears to be still continuing, as during 1883 the mortality was only 2 per 1000. During the whole period 7964 students received practical instruction in the clinic, the average number in each session or semester being 136.

AN UNUSUAL CAUSE OF DEATH.

ON Sept. 23rd, Dr. Thomas held an inquest at the Royal Free Hospital touching the death of Charles Atwood aged twenty-three years. Deceased was engaged, with an engine-driver, shunting trucks at King's-cross. As soon as the driver had passed the points held by Atwood, the latter was found to be insensible. Death ensued on the way to the hospital. There was no direct evidence to show that deceased had been struck by a buffer or other part of the engine or truck. At the post-mortem examination "one of the largest veins leading to the heart" was found to be ruptured, but there was no other sign of injury. The report of the evidence tendered at the inquest does not mention whether the lesion affected one of the pulmonary veins, the coronary vein, or either vena cava. In the absence of any statement regarding the existence of disease, we assume the vessel was healthy. It is well known that a person may meet his death from a severe blow or strain of the chest or abdominal wall, causing a trunk-vessel to give way, without there being any bruising of the part immediately struck. We know of a case in which the splenic vessels were torn through, the left renal artery ruptured, and the diaphragm rent from external violence, and yet the walls of the abdominal and thoracic cavities showed no sign of the physical violence to which they had been subjected. It is important in such cases to examine carefully for injury of the sternum, ribs, and spine, for it is possible to overlook a fracture where there is but little or no displacement. An instance occurs to us of death from hæmothorax caused by laceration of the vena azygos major. The body of a vertebra had been wrenched from the intervertebral substance, and the projecting edge of the bone had completely divided the vein. In another case the right subclavian vein was wounded by a fractured first rib, and here too the patient succumbed to hæmorrhage into the pleural cavity. We are not aware of spontaneous rupture of a large thoracic vessel having occurred in a young person in whom the tissues were normal in structure. Various pathological changes may so undermine the stability of a vessel as to render it unable to bear what may be termed physiological strain. Walshe cites a case of death from hæmoptysis consequent on rupture of one of the left pulmonary veins, but the pericardium was adherent and there was grave aortic valvular disease. The jury who investigated the subject of this notice returned a verdict in accordance with the medical testimony, adding that there was no evidence to show whether death was the result of injury or natural causes. From the facts at present before us we cannot help thinking that deceased received some injury during the shunting of the trucks, and this opinion, as we have shown, is consistent with the absence of any visible lesion other than that which obviously caused death.

ATAXIC PARAPLEGIA.

IN the current number of the *Archives de Neurologie*, M. Grasset of Montpellier concludes a paper on the subject of combined posterior and lateral sclerosis of the cord. The contribution is mainly one of a clinical character, and aims at throwing light on the symptoms of mixed varieties of myelitis. The author is of the same opinion as Dr. Gowers, that on clinical and pathological grounds the creation of a new name and separate consideration of the disease are desirable. M. Grasset proposes the term "combined tabes"—a name which is far less appropriate than that of ataxic paraplegia. But there seems to be some difference of opinion as to the range of symptoms. The English observer asserts that the lightning pains of true tabes are of rare occurrence in the combined sclerosis, whereas the French author states that, symptomatically, "combined tabes" is characterised by the association of symptoms of ataxic tabes (lightning pains, anæsthesia, motor incoördination) with symptoms of spasmodic tabes, &c.

THE CHAIR OF SURGERY IN QUEEN'S COLLEGE, BELFAST.

WE understand that his Excellency the Lord-Lieutenant of Ireland has recommended Dr. Thomas Sinclair to her Majesty for appointment to the Chair of Surgery in Queen's College, Belfast, in place of Dr. Gordon (resigned). Dr. Sinclair was a most distinguished student of Queen's College, where he obtained a very large number of prizes and scholarships, and at his final degree examination he carried off the gold medal. He has for some three years acted as Demonstrator of Anatomy and assistant to Professor Redfern. He is a Fellow of the Royal College of Surgeons of England, and at present occupies the posts of assistant-surgeon to the Royal Hospital, Belfast, and surgeon to the Ulster Hospital.

FALSE RABIES.

How long will it be ere it is properly recognised that every disease of the brain produced by inoculation of morbid matter is not rabies, however much the symptoms evoked may resemble those of the disease? Dr. Spitzka believes that he can produce rabies by the inoculation of any dirty matter whatsoever into the cerebral circulation. So thought earlier generations with regard to tuberculosis, but recent discovery has shown that tubercle can only be produced by the employment of specific matter. It seems to us that such confusion arises from a want of recognition of the fact that the signs of disease of the nervous system are as limited in number as the letters of the alphabet. Hence it happens that disease of any organ can be manifested only by the pathological signs peculiar to that organ. So that if disease, no matter what its nature, affect the medulla oblongata, the symptoms that arise might have a general likeness to those of rabies.

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THE HOSPITAL FOR SICK CHILDREN.

THE winter session at the Hospital for Sick Children, Great Ormond-street, W.C., will be opened on the 6th inst. with a lecture by Mr. Timothy Holmes. The address will be delivered at 3.30 P.M. We have more than once spoken favourably of the efforts of hospitals like this to give instruction in subjects which students are apt to neglect, and it is to be hoped that the efforts of the medical staff of this institution to attract learners will prove successful, no course of instruction being likely to prove more useful or profitable to the future private practitioner than that on the diagnosis and treatment of the ailments of children.

ALCOHOL IN TEMPERANCE DRINKS.

SIR WM. HARCOURT raised a laugh against the teetotalers by insinuating that they liked temperance drinks very much in proportion to the amount of alcohol they contained. This seemed rather a libel on the pure tastes of the abstemious. Mr. A. W. Stokes, public analyst of St. Matthew's, Bethnal-green, has analysed samples of ginger beer and ginger ale, with a view to clearing up this matter, and reports finding as the largest amount 1·2 per cent. of proof spirit, and the lowest 0·2 per cent. Mr. Stokes explains that such an amount arises from the very manufacture of such drinks, and is an unavoidable result of the fermentation of the sugar. He well adds, a perfect non-alcoholic drink is still greatly needed. We congratulate our teetotal friends on such a vindication of their fair character.

OPEN SPACES.

No more important subjects were broached, nor any treated with more force and precision, than those of "Open Spaces and Physical Education" in Lord Brabazon's paper. The researches of Farr, showing, other things being equal, the direct relation of mortality to density of population, were powerfully used. It is becoming more and more clear that if London is to be maintained healthy, we shall have not only to keep the open spaces we have, but to create others. Lord Brabazon's labours have our heartiest approval.

BRAIN SURGERY.

WE understand that last Saturday Mr. Victor Horsley removed a large tumour from the brain of a man, aged thirty-five, who had been hemiplegic for some months, and comatose for three weeks. The tumour measured 3 in. in length by 2½ in. wide and 2 in. thick, and necessitated the removal of much bone in order to effect its complete extraction. The man has regained consciousness, and is free from the severe headache from which he suffered before he became comatose. Up to the present the patient continues in comparative happiness, and his wound has progressed so satisfactorily that it is perfectly healed. There has been also some recovery of power in the leg on the paralysed side.

BLOWS ON THE EARS.

CORPORAL punishment of some sort may occasionally be found necessary in schools, but, if so, it should be administered with due regard to the safety of the culprit. In a case recently reported, where a child of ten was slapped about the ears and shortly after showed distinct signs of chorea, we are not convinced that any serious injury was done. The muscular jerking so characteristic of chorea was markedly noticeable, it is true, after the chastisement, but similar signs are said to have been present in a slight degree before its infliction. The child was restless and had let her book fall. These are not necessarily proofs of disease, but they are somewhat characteristic premonitory signs of the nervous disorder which afterwards appeared in this case, and it is not improbable that such was their real meaning. Be that as it may, however, the mode of punishment was certainly irregular; and if it is in a measure excused by its lightness—for it was inflicted with the open hand,—it were clearly better not repeated. Teachers and others would do well to remember that permanent deafness has been caused by such a homely reproof as a box on the ear.

SIGNIFICANCE OF GLOBINURIA.

DR. KAMENSKI, in a dissertation for the Russian M.D. degree, has discussed the significance of globinuria in chronic inflammation of the kidneys. He finds that, as a rule, the quantity of globulin is in inverse proportion to that of albumen. When patients are put on milk diet the mean quantity of globulin passed in the urine is generally greater than when they are on a meat diet. Sometimes the maximum is attained the day following the milk diet. The practical conclusion arrived at by Dr. Kamenski is that the voiding of globulin in the urine is no sign of renal inflammation. With regard to the method of estimation, he prefers to collect the precipitate on a filter, and to examine the solution obtained from it.

DR. FREDERIC FARRE.

WE regret to learn that Dr. Frederic Farre, who was formerly, and for many years, Treasurer of the Royal College of Physicians, is very seriously ill. He was attacked with pneumonia about ten days ago, and his condition has become most critical.

THE MEDICAL SOCIETIES.

THE Obstetrical Society will hold its first meeting on Wednesday, Oct. 6th, the Clinical Society on Friday, Oct. 8th, the Pathological on the 19th, the Ophthalmological on the 21st, and the Royal Medical and Chirurgical on the 26th.

FROM the report of the examination made by Colonel Sir Francis Bolton of the water supplied by the several metropolitan water companies during the month of August, it appears that the Thames water sent out by the Chelsea, West Middlesex, Southwark, Grand Junction, and Lambeth Companies exhibited no material change in quality from that of the July samples, the proportion of organic matter present being in every case, for river water, exceptionally small. The water drawn from the Lea and distributed by the New River and East London Companies contained rather less organic matter than any of the Thames waters. All the waters were clear and bright on delivery.

DR. MANSERGH, in the course of some observations he made at the recent Sanitary Congress on the water-supply of towns, appealed to his hearers to use their own efforts to keep their supplies of water clean. He was, he said, shocked at the way in which householders neglected to clean out their cisterns or reservoirs of water, in which leaves of trees and dead birds and mice are often found. Such neglect and thoughtlessness are, as Mr. Mansergh contended, perfectly disgraceful.

AT a special meeting of the Glasgow Southern Medical Society held on the 23rd ult., it was unanimously agreed to give a hearty support to Dr. James Morton's candidature as representative of the profession for Scotland in the General Medical Council.

SIR B. WALTER FOSTER has been nominated as one of the Foreign Vice-Presidents of the International Medical Congress.

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THE death is announced of Dr. Georges Renson, *agrégé* of the Medical Faculty of the University of Brussels. Dr. Renson was a young observer of great promise, having published various contributions to the science of embryology, which he had studied under Professor Waldeyer at Strasburg, and the lectures on which had been delivered by him in Brussels for the last two years, acting for Prof. P. Heger.

DR. BRIDGES will lecture at Newton-hall, Fetter-lane, on Oct. 3rd, 10th, and 17th, at 8 P.M., on "Health, Physical, Mental, and Moral."

Pharmacology and Therapeutics.

ACTION OF TIN ON THE ANIMAL ORGANISM.

THE accidental poisoning by "tinned provisions," which has been attributed to the formation of stannous or stannic salts, has induced Dr. T. P. White to investigate the subject experimentally (*Pharmaceutical Journal*). The conclusions arrived at are: that tin has a direct irritant action on the intestines, increasing peristaltic movements; that it causes weakness, as the result of some action on the spinal cord; that it irritates some of the nuclei about the floor of the fourth ventricle, said to be shown in convulsive tremors and disorder of respiration; that the heart is not directly affected; and, lastly, that experiments with the metal, when acted upon by muriatic, acetic or "fruit" acids, were decidedly unsuccessful. It is therefore considered that tin, though possessing toxic properties when introduced into the blood, is devoid of danger when taken internally in any form that could result from contact with fruit or vegetables. Dr. White regards the cases of accidental poisoning as due to the solder used in sealing the can, or to impurities of arsenic, copper and lead in the tin itself.

ANTIFEBRIN.

Antifebrin, as the *Pharmaceutical Journal* points out, is a new antipyretic, that belongs to a very different group of chemical substances than those from which antipyretics have hitherto been drawn. The class of phenols has supplied us with carbolic acid, resorcin, hydroquinone, salicylic acid, and besides these are the bases like kairin, antipyrin, thallin, and quinine. Antifebrin is a neutral body, and identical with phenylacetamide or acetanilide, almost insoluble in cold water, but freely soluble in wine and alcoholic liquors. On dogs and guinea-pigs large doses seem to have no deleterious action. The subtance has been administered to twenty-four fever patients (the kind of fever is not mentioned) in doses of not more than two grammes in the twenty-four hours, and with such satisfactory results that a quarter of a gramme is said to be as effective in reducing the abnormal temperature as a whole gramme of antipyrin.

COLOMBINE.

M. Roux has observed the effect of pure colombine on fowls, the only animals which he has been able to get to take the medicine by way of the mouth. The symptoms produced by the ingestion of the poison were those that are associated with fatty degeneration of the liver and destruction of its working elements. Colombine irritates the intestinal tube, causing increased secretion from the gastric, intestinal, and biliary surfaces. The occurrence of these serious symptoms makes it necessary that the administration of the drug to human beings should always be in the form of small doses. The daily dose to commence with should not exceed one centigramme of the alkaloid and the powders of columba are to be preferred to the less certain alcoholic and ethereal liquid extracts.

ICHTHYOL IN RHEUMATISM.

Dr. Dubelir has been using ichthyol in the Moscow Military Hospital in rheumatic cases, both of an acute and chronic type, with success. This substance is obtained from mineral oil, and is rich in sulphur. It is applied, after careful washing and drying of the affected part, either in the crude form or as a compound sulphate of ichthyol and soda or ammonia, and at the same time is given internally in the form of drops or pills, the dose being from fifteen to twenty-five drops of the sulphate of ichthyol and ammonia, or a similar quantity made up into from six to twelve pills. In all cases the pain was relieved, but the swelling was not affected, so that the author thinks that the drug must only be used in the expectation of relieving pain. He warns his readers, too, that where the external applications are carried on for a long time, or without the necessary precautions of washing, a pustular eruption is liable to occur.

SPIRÆA FILIPENDULA IN HYDROPHOBIA.

A Polish medical man, Dr. Fürst Ignatz Jagell, who says he has for five and twenty years interested himself in the treatment of hydrophobia, declares in a Russian Journal that during that period he has treated 88 persons who had been bitten by rabid dogs or wolves. 26 of the patients having already commenced to exhibit the early symptoms of hydrophobia. Notwithstanding this, however, he did not lose a single case. They were all treated with the same remedy—viz., an infusion of the cortex of Spiræa filipendula (dropwort). It is needless to say that Dr. Jagell does not approve of Pasteur's proceedings; but how is it that we have not heard of his own remarkable success before? The plant he uses is not entirely unknown to pharmacy, the root and the leaves being sometimes employed, and believed to have astringent and diuretic effects.

SQUILLS IN WHOOPING-COUGH.

M. Nettier, of Nancy, has treated a number of cases of whooping-cough with simple oxymel scillæ, which he observes, ought to be ascertained to be good, as specimens to be found in pharmacies are of very different qualities. He advises the entire abandonment of cough syrups, and gives the squill even when there is diarrhœa and a good deal of vomiting. In the case of children who do not expectorate he even adds emetic drugs to the squill. He has seen cure result from this method of treatment in a few days, cases of failure being very rare. A colleague of M. Nettier, M. Remy, corroborates his statements, and says he has seen cases that have been going on for weeks yield to oxymel scillæ in a few days.

ULEXINE.

It is curious that the common furze, or Ulex Europæus, should have been found to yield an alkaloidal substance; for it has been so frequently examined chemically in order to ascertain its nutritive qualities that one would have thought an active alkaloid could not have escaped detection. However, Mr. Gerrard has extracted an alkaloid that is very soluble in dilute hydrochloric acid, forms long oblique prismatic crystals, readily soluble in chloroform, and giving with ferric chloride a deep-red colour. The physiological action has not yet been worked out, but it has been found that the alkaloid has a paralytic action on frogs.

TRIBROMIDE OF ALLYL.

This compound, which has been known to the chemical world since 1857, has been found to be of value in medicine, in the treatment of hysteria, infantile convulsions, angina, and asthma. Dr. de Fleury administers it in five-minim doses enclosed in capsules, from ten to twenty minims being taken by the mouth in the twenty-four hours; the drug may be injected under the skin in doses of from two to four drops dissolved in one or two cubic centimetres of ether.

REPORT OF THE MEDICAL OFFICER OF THE LOCAL GOVERNMENT BOARD.

[FIRST NOTICE.]

THE volume which Dr. Buchanan has just submitted to the Local Government Board bears the title of a "Report and Papers on Cholera," and it treats exclusively of that disease, and on the action taken in this country with regard to it. It brings our knowledge of cholera, in its various bearings, up to current date, and hence it may regarded as forming, not only an official report, but a valuable handbook on the subject with which it deals. The so-called report occupies only a small portion of the volume, and in this part Dr. Buchanan gives a summary of the various papers which make up the Appendix, bringing out in relief the principal lessons to be learnt from them.

Tracing, in the first instance, the course of cholera in

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Europe since it first appeared in the southern ports of France in the summer of 1884, Dr. Buchanan calls attention to an exhaustive history of the course of the epidemic which has been prepared by Dr. Thorne Thorne. This history is very complete, and being largely based on official data received by Her Majesty's Government from consuls and foreign governments, it may be regarded as supplying authentic information, statistical and otherwise, of the epidemic of 1884-86. Some portions of the history are of especial interest—such, for example, as include details of the course of cholera in Gibraltar, in the various districts of Naples, and in other special localities. The results of the International Sanitary Conference in Rome are next dealt with, and attention is called to a paper on this subject prepared by Dr. Thorne Thorne, one of the British delegates; the paper, including a lengthened tabular statement of the results arrived at by the three conferences of Constantinople, Vienna, and Rome, so contrived as to show without difficulty the similarity and differences between the views which were held at the several gatherings. This part of the report necessarily deals largely with the question of quarantine, and Dr. Buchanan has availed himself of the opportunity of setting forth distinctly what are the views held by British epidemiologists as regards the measures needed to prevent the spread of cholera in Europe. This exposition comes opportunely to clear up difficulties which some have experienced as to the relative value of sanitary works and quarantine restrictions. Dr. Buchanan, together with most observers of the behaviour of cholera in Europe, evidently agrees with his predecessor, Mr. Simon, in regarding cholera as a disease which does admit of importation, and therefore of looking upon quarantine measures as useless and injurious, mainly in so far as they are shown by experience to be certain of failure, and because they take the place of the infinitely more valuable means of prevention which are to be found in an effective sanitary administration. In dealing with this subject he appears specially to guard himself against expressing views as to the behaviour of the disease in other than European climates; and he would doubtless not wish to imply that cholera is limited, in its means of spread, in the valley of the Ganges in the same way as it has always shown itself to be controlled in the Thames basin, and indeed in Europe generally. This portion of the report may usefully be quoted *verbatim*:—"The views of England concerning cholera in Europe, obtained from her own experience and strengthened by what she can learn of other countries, are that for European communities which have secured their soil, water, and air against befoulment there is little or no danger of cholera, no matter though the disease be actually brought into their midst; whereas communities which have not obtained this result have to encounter an unknown and serious measure of risk from cholera when it chances to be introduced among them. English medicine holds that cholera in Europe has at times a power of spreading from the sick to the healthy, exerting this power in the presence of filthy local circumstances, and most effectively where sources of drinking water have got contaminated by discharges from cholera patients. England puts her trust in measures that shall secure purity of earth, of water, and of air; and regards this purity as sufficient to prevent the spread of cholera in a European community. And as the measure that shall protect herself and other countries from such danger as attaches to intercourse with already infected places and communities, England relies, and exhorts other countries to rely, upon this same purity of local surroundings as the means for rendering that intercourse inoperative for harm. Accordingly, England imposes no restriction upon intercourse between one community and another—town and town, or nation and nation. She is content with providing for the care of persons actually sick, and with obtaining the destruction of whatever may be harmful in the discharges from cholera cases: for the rest, she is satisfied that each community, at all events under European conditions, can, if it pleases, render cholera harmless for itself, by the adoption of practices which are profitable against other diseases as well as against cholera. She would dispense, in land and sea traffic alike, with those detentions known as quarantines, having found them in practice to result rather in hazardous concealments and evasions than in any effectual exclusion of cholera."

The views here expressed as to the attitude of this country are well enforced in a passage in Dr. Thorne's report on the proceedings of the Rome Conference, where he shows that since England finally abandoned all attempt at quarantine, after the meeting of the Vienna Conference, she has spent an average of 6¼ millions sterling per annum in sanitary works, in addition to 2½ millions for current sanitary expenditure; and these sums take no cognizance of loans raised under the Artisans and Labourers' Dwellings Acts; or of the cost of many public works, as of water supply, defrayed by private companies; or of the salaries of sanitary officers; or of the large loans and current sanitary expenses of the metropolis. And again, it may be noted that this expenditure has been a voluntary one on the part of a people who trust to the results of such works rather than to the costly and injurious quarantine measures elsewhere, resulting from uncontrolled panic. Having regard to these facts, Dr. Thorne was right in maintaining at Rome that the substitution of the system of quarantine, which the majority of the delegates wished to enforce in this and other countries, in replacement of the system of sanitary administration which has been elaborated in this country, could only have a disastrous effect; and he had a right to protest that England had, by her expenditure, shown a belief in the efficacy of her system which no other country had shown as regards preparations for isolating those who must be detained under quarantine restrictions.

THE LEAVESDEN SCHOOLS.

THE following is the report of Dr. Bridges to the Local Government Board on the condition of the above schools:—

PREVALENCE OF OPHTHALMIA AND CUTANEOUS DISEASE AMONG THE INFANTS.

I visited this school on July 23rd. Major Jordan, in his report of July 5th (annexed) calls attention to the number of children under treatment, and appends a copy of a report of a sub-committee of guardians, and of a letter addressed by the medical officer to the guardians upon this subject. The numbers in the schools on the day of my visit were as follows:—

In the body of the school	Boys, 264 Girls, 177 Infants, 76	517
In infirmary		105
In probation wards		17
Total		639

About five weeks ago, after the inspection of Mr. Holgate, 53 children were transferred from the infants' department to the boys' and girls' schools, so that up to that time the number of infants was very much larger than it is now. Further, of the 105 children in the infirmary the very large majority—about three-fourths, indeed—are infants. It may be taken, then, that not less than a third of the children now in the school are under the age of eight years, and of this number, which may be called approximately 210, an unusual proportion are below the age of five. Children of two to four years are separated from children of five to seven years. Of the former class, I found 19 in the body of the school, and there were 35 in the infirmary. I examined individually all the infants in the body of the school. A large proportion of them had "granular" lids. This means that they have either had active ophthalmia (with purulent discharge more or less severe) at some former time, or at least that they are very likely to have it on some slight irritating cause, as dust, east wind, &c. The existence of this symptom is a very sure sign of some unhealthy condition in the school.

Now, in the construction of the schools I can find no unsanitary condition at all adequate to bring about this state of things. The ventilation of the drains, disconnexion of waste-pipes, &c., has been recently seen to by a very competent sanitary engineer. A few minor changes for the better yet remain to be effected, but, on the whole, in sanitary construction this school is above the average. In position, in dryness of soil, &c., it leaves nothing to be desired. The water supply is excellent. There are spacious playgrounds, which the children are encouraged to use. The superintendent and matron appear to me to take great interest in their work. The medical officer appears to be a man of unusual competence and zeal. The dietary of the children is sufficient in quantity. I was told that it was proposed to render it more variable; this will be a good thing; but I do not think that the dietary, as it stands, has

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very much to do with the present state of the infants' department of the schools.

There remains, however, one unfavourable condition which in my opinion is amply sufficient to account for it—viz., overcrowding of the infants' dormitories, and, to some extent, of their day rooms also, throughout the winter and spring. The dormitory for infants at 5 to 7, holds at the present time 70 single beds, giving 30 feet superficial of floor space for each child. But a few months ago this dormitory held 60 double beds—i.e., not very far from double the number of children. This state of things was eminently calculated to favour the growth of ophthalmia and cutaneous disease, especially among very young children. This has, in fact, been the result.

I saw every child in the infirmary. Most of the cases are exceedingly slight, and some medical officers might have been disposed to treat some of them in the body of the school. But, considering all the circumstances, I think that Mr. Clarke is right in being very cautious as to the isolation of all cases that might propagate disease to others. The Infirmary, with its annexe for infectious cases, is an airy building, but each part is so connected with the other by corridors that effective isolation of separate classes is somewhat difficult.

On review of the whole case, I think that the guardians should consider the expediency of making some provision for certain classes of their children elsewhere than at Leavesden. The number during the winter approached seven hundred, a hundred more than the schools were built for.

THE RESPIRATORY MOVEMENTS AND THEIR INNERVATION IN RABBITS.

DR. MAX MARCKWALD has recently published the results of a long series of researches on the respiratory acts and the nervous centres connected with respiration in rabbits, in Kühne and Voit's *Zeitschrift für Biologie*, and the conclusions at which he has arrived are summed up in the following propositions:—1. The centres for respiration lie in the medulla oblongata, in intimate relation with the nucleus of the vagus. These centres are an inspiratory centre and an expiratory centre, the latter being stimulated with greater difficulty than the former. In normal respiration the inspiratory centre is alone called into play, and the expiratory centre only occasionally acts. 2. There are no respiratory centres occupying a higher position in the nervous axis. All the phenomena which have been considered to demonstrate the existence of such centres may be regarded as centripetal stimulations of the medulla oblongata acting reflectorially on the respiratory centre in the fourth ventricle. The mode in which encephalic dyspnœa occurs and disappears is directly opposed to the existence of centres occupying a higher position. 3. The central paths for respiration alone run in the cervical spinal cord; special centres for the respiratory acts do not exist in it. 4. The respiratory centres in the medulla oblongata are both automatically active and susceptible of reflex stimulation. 5. The automatically acting centre can only liberate respiratory convulsive movements, but no regular rhythmic respiratory movements. 6. Normal rhythmic respiration is a reflex act, essentially liberated through the nervi vagi, which prevent the tensions accumulating in the centre from becoming excessive, and convert the inherent stimulations of the respiratory centre into regular respiratory movements. 7. The vagal nerves are constantly being excited, possess a tone, and are sufficient during absolute rest of the animal organism to constitute the exclusive regulators of the respiration. 8. The superior central paths are, next to the vagi, of great importance for the liberation of regular rhythmic respirations. They are in a condition to cover any deficiency on the part of the vagi, just as the vagi can compensate any deficiency of the superior paths. Even in sleep—as, for example, in the hibernants, or after certain narcotics—the reflexes from the superior paths upon the respiratory centre remain operative. 9. If a portion of the superior paths are defective, whilst the vagi are still in working order, periodic or Cheyne-Stokes' respiration occurs. 10. No change in the excitability of the respiratory centre is requisite for the establishment of periodic respiration. The respiratory centre can be excited to the same extent with weak stimuli during periodic respiration, both during the attack and during the pauses. 11. The sensory cutaneous nerve cannot act vicariously either for the central paths or for the vagi. 12. Whilst the cutaneous nerves in animals, otherwise intact, exert little or no influence upon the respiratory centre, any influence they do possess increases remarkably after abolition of the central paths. Cutaneous reflexes under these circumstances may liberate a whole series of respiratory movements. The cutaneous nerves possess no tonus. 13. The centripetal nerves, which inhibit the liberation of respiratory movements, such as the fifth pair, the superior laryngeals, and the glosso-pharyngeals, possess no tonus, and must be regarded as accessory nerves of respiration, which are not implicated in normal respiration. 14. Stimulation of the fifth pair and superior laryngeal nerves, as well as of the olfactory and splanchnics, retards the respiration, and ultimately arrests it in the condition of expiration, whilst the glosso-pharyngeals have no influence upon the frequency of the respiration. The action of the glosso-pharyngeals is always to inhibit the respiration, and in that phase at which the stimulus is applied. 15. The respiratory centre cannot be excited by a simple electric stimulus, but requires to be supplemented by other intracentral chemical stimuli. 16. The shortest observable movement which the respiratory centre can emit sends to the phrenic nerves four effective simple stimuli, at an interval of about one-twentieth of a second. 17. The normal stimulus of the respiratory centre is not dependent upon the blood, neither upon the want of oxygen, nor upon the excess of carbon dioxide in the blood. Animals can continue to breathe alike without circulation and after bleeding for a long time. 18. Neither can the Hering-Breners theory of respiration be correct, since rhythmical respiration may persist after opening of the pleural cavity, and even after extirpation of the lungs. 19. The stimuli which act upon the respiratory centre are possibly of the same nature as those which excite the isolated heart, and are perhaps products of disintegration of the intercellular plasma. 20. Moreover, apnœa has nothing to do with the gases of the blood, but depends probably upon the removal of the stimuli stored up in the centre by the tonised vagi. The apnœa which occurs after section of the vagi is consequently very severe, and only persists for a short time. 21. So long as apnœa lasts no respiratory movements can be liberated either by direct stimulation of the medulla oblongata or of the central vagi. 22. The respiratory centre of the fœtus in utero is in a condition of diminished excitability. 23. When during delivery central or peripheral stimuli have once excited respiration, the centre suspends its action with difficulty, and the respiratory acts proceed rhythmically and regularly. 24. Various phenomena, such as the common salt dyspnœa, cold dyspnœa, and perhaps heat dyspnœa, render it probable that stimuli proceed to the phrenic nerves directly from a motor centre in the cerebral cortex, without implication of the respiratory centre. 25. The presence of sensory fibres in the phrenics supports this view, as does also the extremely delicate muscular sense of the diaphragm. 26. Rabbits at the age of four or five months are capable of living after section of both phrenics; younger animals die from want of air in consequence of insufficient expansion of the thorax.

SANITARY INSTITUTE OF GREAT BRITAIN.

THE business of the ninth annual Congress was resumed at York on Sept. 23rd, in two sections.

In the Preventive Medicine Section, Mr. Louis Parkes read a paper on "Milk and Disease"; Mr. J. Oakley read a paper on "The Prevalence of Defective Eyesight," in the course of which he advocated that especial attention be given to infants and children; the Rev. J. Malet Lambert followed with a paper on "Sanitary Associations, their Mission and Methods of Action"; and Mr. Sykes, the hon. secretary, read a paper on "The Medical Treatment of the Working Classes," which had been forwarded by Mr. W. Bousfield, chairman of the Metropolitan Provident Medical Association, after which the proceedings of the section were brought to a close.

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In the Engineering Section, the President, Mr. Baldwin Latham, gave an address upon "The Probable Influence of Ground Water on Health"; Mr. E. C. Robins read a paper by Professor H. Robinson on "River Pollution"; Mr. Alderman Rowntree read a paper on "Municipal Government in relation to Public Health"; Mr. T. H. Harrison gave an account of an investigation into the classes who administered the Public Health Act; and Mr. W. Tattersall read a paper on "The Ventilation of Factories and Workshops," at the conclusion of which the sitting of the section was adjourned until the following day.

On the 24th ult., the Chemistry, Meteorology, and Geology Section met, Mr. Whittaker, who presided, delivering an address. Lieutenant Smith afterwards read a paper, which had been written by Lord Brabazon, who was unable to be present, on "Open Spaces and Physical Education." A discussion on the points raised was initiated by Mr. North, and carried on by Surgeon-Major Black, Surgeon-Major Pringle, Mr. C. Roberts, F.R.C.S., Alderman Rowntree, Mr. Symons, Dr. Ewart, Alderman Rymer, and the Chairman. Mr. C. Roberts then read a paper on "Medical Climatology." A discussion ensued, in which Mr. Symons, Mr. Clarke, Surgeon-Major Black, Surgeon-Major Pringle, and Professor Hope took part. Papers were also read by Dr. Percy Frankland on "Filtration of Water for Towns;" and by Dr. R. T. Cooper on "The Sanitary Condition of the Country Water Channels"; and Surgeon-Major Pringle gave an explanation of his system for the collection and storage of rain and drinking water.

In the Engineering Section, the proceedings of which were continued from the previous day, Mr. J. B. Bass read a paper on "American Sanitation," and Mr. J. V. Edwards one on "The Sanitation of our Dwellings." A discussion followed on these papers, and also on the one read the previous afternoon by Mr. Tattersall, on "The Ventilation of Factories and Workshops." Remarks were made by Mr. S. C. Robins, Mr. Tarbottom, Mr. Rogers Field, Mr. Darling, Mr. Harrison, and Mr. Hill, after which a vote of thanks to the readers of papers concluded the business of the sections.

The closing general meeting of the Congress was held in the evening, Sir Spencer Wells, Bart., in the chair. He expressed the satisfaction everyone connected with the Congress felt at the reception they had met with at York, and hoped that more attention would be drawn to sanitary matters. On the motion of the Dean of York, a vote of thanks was passed to the President, the Chairman, and Secretaries of sections. Prof. De Chaumont acknowledged the compliment, and on the motion of the President, seconded by Sir Thomas Crawford, a vote of thanks was passed to the Lord Mayor of York and the Lady Mayoress. Thanks were also accorded to the local committee, after which Prof. De Chaumont announced that the council had accepted an invitation to hold the Congress at Bolton next year.

In the evening a public dinner in connexion with the Congress was held.

On the evening of the 25th the closing meeting took place, when about 1000 members of the working classes assembled to hear addresses. Canon Fleming occupied the chair, and was well supported on the platform. "The Artistic Side of Sanitary Science" was discussed by Mr. Robins; Dr. George Vivian Poore gave an address on the "Reclamation of Waste Lands of Gascony by Bremontier" (an abstract of which we give in another column); and Mr. James Mansergh spoke of the "Supply of Water to Towns."

The Congress has been a highly successful one, about 150 members of the institute having attended the meetings, a larger number than at any previous congress, including three-fourths of the members of the council. The amount of interest taken in the gathering by the professional men of York and the neighbourhood is shown by the fact that nearly 200 associates' tickets were taken. The attendances at the sectional meetings have been very large—sometimes as many as 150; and the opening of the Health Exhibition took place in the presence of about 700 people. On the 25th ult. a number of the members of the institute spent the day in inspecting the sights of the city. The cathedral was visited in the morning; and a concert, given by the pupils of the Yorkshire School for the Blind at that institution, was attended by a small party. In the afternoon a visit was paid to the works of the York New Waterworks Company at Acomb.

BREMONTIER.

DR. POORE has done no more than justice to a very great but little-known sanitarian by choosing the work of Bremontier as the subject of his address given at the Sanitary Congress at York. The reclamation of the "Landes," a tract of country considerably larger than any English county except Yorkshire, ande the conversion of this district from a pestilential swamp into a most profitable forest, must certainly be ranked amongst the greatest sanitary triumphs which the world has ever seen. Bremontier's work is worthy of study also because of the extreme simplicity of the means employed, the absolutely insignificant amount of capital required, and the complete success which has been attained from the double point of view of both health and wealth. Bremontier saw that the only way to fix the dunes along the shore of the Bay of Biscay, and thus render the "Landes" behind the dunes drainable and cultivable, was to plant trees on them, and he succeeded in showing that by the exercise of a very moderate amount of care and ingenuity the Pinus maritima could be made to take root and flourish along the very margin of the sea. His first plantings were made in 1789, and by the dawn of the present century he had sufficiently demonstrated the practicability of his plans to warrant the French Government, at the instigation of the first Napoleon, to take up and continue the work. The result is known to all who have visited Bordeaux, Arcachon, and Biarritz. A province has been reclaimed, the inhabitants are no longer obliged to stalk on stilts through interminable swamps, malarious disease and pellagra have almost disappeared, and on the dreary sand wastes has arisen a vast forest of pine trees, yielding an almost inexhaustible store of timber, resin, and other products. The demands on our space prevent us from giving all the interesting details of the "story of Bremontier," as set forth by Dr. Poore in his address; but the concluding paragraphs seem worthy of being given at length for the benefit of our readers:—

"You will be asking, perhaps, why I have chosen this subject for my short address to the inhabitants of York, and, having listened to my tale, you will be asking for the moral. I chose this subject for my address for several reasons. The chief reason, probably, is to be found in the fact that I spent part of the early spring of this year in the district which I have been describing, and what I saw there made, as it could not help doing, a very deep impression upon me. My next reason was that it is an aspect of sanitation which is not often dealt with at meetings like this, and I was glad of the opportunity of taking you away from pipes, traps, sinks, and those expensive roads to health which we have to consider in cities, to contemplate the sanitary effect of good husbandry in the open air, and to show you on a large scale what I believe to be universally true—viz., that the cultivator of the soil must always be the right-hand man of the sanitarian. It has been refreshing for us to contemplate a sanitary work which has been a financial success. Sanitation always gives us the best of all dividends—health. And it is a short-sighted policy, especially in cities, to look for a money return on the capital expended on works for improving the public health. The thrifty French, however, have given to the world a valuable example of a comparatively small expenditure yielding *in the course of time* a magnificent return of both health and material prosperity.

"Do not run away with the idea that the Pinus maritima is a cure for all waste lands and unwholesome districts because it happens to be especially suited for the soil and climate of the eastern shores of the Bay of Biscay. In the warm climate of the south it yields abundance of resin and turpentine, grows quickly, and furnishes a large quantity of timber. In more northern climates it will grow, but does not flourish; and although there is at least one fine specimen in Kew Gardens, it is not, from all I have heard, a tree suited to this climate.

"My story seems to show that in the reclamation of waste lands we must not be in a hurry. Nature is sure, but, from our point of view, slow. Bremontier, and those who worked with him, began in a small way. We may be sure that experience had to be bought at more or less expense, and it was not until the success of his methods had been proved that the French Government seriously took the matter in hand. Bremontier was a true patriot. He worked

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olely for the good of his country and for posterity. He had no idea of immediate profit, either for himself or his contemporaries. He drew his modest salary as inspector-general of roads and bridges (for he was an official of the state department of *Ponts et Chaussées*), but looked to no further profit. He lived barely long enough to see the resin flow from his first plantings. He pointed out, as it were, the way to the promised land, but, for himself, he only saw the promised land 'in his mind's eye.' It is good for us to bear this fact in mind, for many reformers of the present day seem, in questions of land management, to look only for immediate results, and to be actuated by the not very noble sentiment of 'Bother posterity—what has posterity done for me?' There has been a good deal of talk of late about the reclamation of waste lands in this country, and the opinion of some seems to be that worthless soil presents a glorious opportunity of wasting money. These are questions concerning which I cannot speak to you as an expert, but it seems certain that the problem of reclamation must differ with the circumstances of soil and situation, and that it is far more easy to do the wrong thing than the right. The first thing necessary is to find a Bremontier to show the way. We shall want a Bremontier to show us the way out of the pestilential quagmire which we Londoners are making, by dint of large expenditure, in the estuary of the Thames. We want a genius and an enthusiast who will do for the bogs of Ireland what this great Frenchman did for the 'Landes' of Gascony."

DR. JOSEPH ROGERS AND THE WESTMINSTER UNION.

AT a meeting of the Board of Guardians of the Westminster Union, held on Friday, the 24th ult., a letter was read from Dr. Rogers tendering his resignation of his appointment as medical officer of the Workhouse and Infirmary and public vaccinator of the Westminster Union, he being no longer capable of performing his duties, owing to continued ill health, whereupon the subjoined resolution was unanimously adopted, and a copy thereof was directed to be sent to him by the clerk.

"That this Board has received with much regret the letter just read from Dr. Joseph Rogers resigning the office of workhouse medical officer and public vaccinator for the union on account of his continued ill health, and while now accepting such resignation the guardians desire to convey to him their deep sympathy that he should thus be compelled to sever his connexion with the Board after many years of faithful service, and to record their high sense of the zealous and efficient manner in which he has discharged the duties of his offices, and for the warm interest he has at all times taken in questions affecting the proper treatment of the sick and infirm poor."

We heartily join in the expression of sympathy set forth in the above resolution. Dr. Rogers has, with great patience and courage, fought the battles of Poor-law medical officers under great difficulties and in the face of stolid opposition on the part of vestries and guardians, and his compulsory withdrawal from the field of his useful labours must be a matter of unfeigned regret to the whole medical profession.

THE LONDON HOSPITAL MEDICAL COLLEGE.

UPON the site of the old college attached to the London Hospital has sprung up a new and imposing building that bears no resemblance to the familiar structure it has supplanted. Of the original building nothing remains but the chemical theatre and laboratories, and certain unimportant rooms in the basement. The new building is about double the height of its predecessor, and in the place of the latter's dingy walls is a handsome structure in ornamental red brick. The old college was in size quite inadequate for its purpose, but so liberal has been the present "enlargement" that it will probably be the last of the many alterations the school has seen. The centre of the building is occupied by the museum, which is twice the size of the previous museum. From its galleries lead the pathologist's rooms, the physiological theatre, the histology room, the special rooms for physiological apparatus, and the physiological laboratory. The anatomical theatre is on the ground floor. Into it leads the lecturer's room, which is connected with the museum by a lift. In the lecture theatres straight rows of seats, with benches, have replaced the circular seats of the old building. The dissecting room is lit from the roof; the walls and floors are made of slate, and it is in connexion with the museum galleries, with the rooms assigned to the demonstrators, and with the prosector's room. A lift extends from the dissecting room to the mortuary and injecting rooms in the basement. Four practical class rooms have been added to the new building. The library is a particularly fine room; galleries run round two sides, and a handsome bay window has been thrown out on the side looking on to the hospital field. The stained glass and the elaborately decorated ceiling have been provided for by the liberality of the staff and other friends of the college. The new college provides a dining room for the students, with smoking and reading rooms, and the accessories of a comfortable club. The building is now ready for occupation, and furnishes a practical comment upon the progress of modern medicine.

THE HOSPITAL FOR WOMEN, LIVERPOOL.

A MEETING of members of the medical profession in Liverpool was held at Dr. Imlach's residence, Canning-street, last Tuesday evening. Dr. Gee, ex-president of the Liverpool Medical Institution, who presided as chairman, said that this large and representative meeting of medical men had been called at the instance of several practitioners, engaged chiefly in obstetric and gynæcological practice, to consider the treatment of a patient who had been treated for hydatid mole in the Hospital for Women in a manner to which exception has been taken in one of the daily papers.

The Secretary, Dr. Glynn Whittle, read several letters of apology from influential members of the profession, regretting their inability to attend, and expressing their sympathy with the object of the meeting; also a letter to the editor of the *Mercury*, asking him to nominate a medical man to be present.

Dr. Imlach said that after the termination of the trial of "Casey *v.* Imlach" several letters appeared in the daily papers animadverting upon the treatment pursued at the Hospital for Women. One of these letters contained charges of so libellous a character that he felt bound, both in his own interest and that of the hospital, to institute proceedings against the writer of the letter and the publishers of the paper in which it was printed. The letter was read to the meeting, and Dr. Imlach then described the medical history of the case and the treatment adopted. The patient was admitted into hospital in August, 1885, suffering from severe and protracted uterine hæmorrhage. A hydatid mole having been diagnosed, the uterine cavity was emptied, and the usual treatment promptly adopted with a successful result. Unfortunately, the patient insisted upon leaving the hospital at an earlier period than was advised. She expressed her gratitude when she left, and Dr. Imlach heard nothing more of the case until the publication of a letter in the *Mercury* of August 18th last, in which her subsequent debility was ascribed to the treatment she had experienced in the hospital.

The hospital registers, charts, and other documents were examined by those present.

Dr. Armstrong, physician to the Lying-in Hospital, moved, and Mr. Cayzer seconded, the following resolution, which was supported by several gentlemen and carried:—"That this meeting, having heard Dr. Imlach's statement of the medical treatment of Mrs. Noble, the patient referred to in the *Mercury* of August 18th last, as treated in the Hospital for Women, and having examined the hospital books and other documents bearing upon the case, is unanimously of opinion that the treatment adopted was proper, and was carried out in accordance with recognised methods."

Dr. Williams then moved and Mr. Marsh seconded a second resolution to the following effect:—"That Dr. Imlach, having

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the full confidence and support of this meeting, do, at its special request, withdraw from the further prosecution of the proceedings for libel against the *Liverpool Mercury*."

This was carried unanimously; and Dr. Imlach thereupon said that, since a resolution carried by so large a meeting, after a thorough sifting of the case, was worth far more than the gaining of an action for libel, he would have pleasure in carrying out their wishes in this respect.

The proceedings concluded with a vote of thanks to the chairman.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF INSPECTORS OF THE MEDICAL DEPARTMENT OF THE LOCAL GOVERNMENT BOARD.

Diphtheria in Aylesbury, by Dr. GRESSWELL.—The town of Aylesbury has two of its sanitary needs well provided; it has an excellent water-supply from the Chiltern Hills, and its sewage is well disposed of at the outfall by means of the A B C system. Otherwise, all indicates sanitary shortcomings, and these are at times of a grave character. The sewer culverts are often of most imperfect construction, the old ones have no appliances for flushing or for proper ventilation, and even old-fashioned catch-pits, so fruitful a source of nuisance, may be found in them. Some of the slaughter-houses are so situated as regards dwellings as to cause serious nuisance, and the common lodging-houses need more attention as regards their bedroom accommodation. Old houses are unduly crammed together on area, some having no curtilage whatever; others, again, are very dilapidated and altogether unfit for habitation; ashpits, with festering contents in large quantities, may be found near houses; scavenging by the authority is inefficient; yards are filthy; house-drains are not properly disconnected; in-door water-closets are inadequately ventilated; the waterclosets have, in the majority of cases, no water laid on to them, the pans being foul; some privy vaults are connected with sewers, and house-drains are of such construction that rats can make their way by them into houses. Diphtheria has, off and on, prevailed in Aylesbury, and the disease has appeared fatally every year since 1881. Including other throat affections, some of which are certainly allied to true diphtheria; no year since 1858, when diphtheria was first registered as a cause of death in the town, has been free from such mortality. In 1885 there were 15 diphtheria deaths, and the disease continued into 1886. Between October 18th, 1885, and February 24th, 1886, there were at least thirty-seven households invaded; 92 persons were more or less affected, and of these 20 died. The disease has shewn itself mainly amongst those aged from one to fifteen years, and it has prevailed especially, although not exclusively, amongst the poor. Neither milk distribution, nor water, nor geological circumstances appeared to affect the incidence of the disease. But, on the other hand, the schools, did have a material influence on the prevalence. In thirty out of the thirty-seven houses attacked, the first sufferers were attending schools, the beginning being amongst the British school children, extension taking place to those of another school, the scholars of the two schools being in free communication. In each of the instances in which a person, otherwise than a child attending school, was first attacked in a household, there had been ample opportunity for contracting the infection from persons already suffering from the malady. In connexion with this spread, it is noted that there was a marked prevalence of sore-throat antecedent to recognised diphtheria, the affection being seemingly communicable from person to person. One thing should be prominently remembered, and that is that, whatever the immediate cause of the throat affections, the town of Aylesbury exhibits many of the very sanitary conditions so well known to facilitate the spread of infectious disease, and it is imperative that the sanitary authority should take action and deal with them promptly. The sanitary officers are reported to have made careful survey of the place, to possess a record of abundant shortcomings, and to have reported many of them to the authority. The ratepayers should see that they are so represented that the grave sanitary defects prevailing in the place are speedily remedied.

Diphtheria in the Wincanton Rural District, by Dr. PARSONS.—The principal places in the Wincanton Union were inspected by Sir Anthony Home, for the Local Government Board, in 1872, and he reported that enteric fever was rarely absent from the district. His visit does not seem to have benefited the rural district as it ought to have done, for the present report shows that many conditions calling for amendment still exist. The immediate cause of the recent inspection was the prevalence of diphtheria at Queen Camel, at Galhampton, and other places. Then, again, there was enteric fever in 1885 at Castle Cary. The report dealing with the several places inspected is very voluminous and complete. It describes fully all the usual sanitary circumstances of local village life and occupation, and it concludes by indicating the directions in which future sanitary administration should be carried on so as to prevent the prevalence of infectious disease. The provision of proper sewers, the remedy of defective house drains, the proper construction of privies and their systematic scavenging, the protection of water-supplies from pollution, and the reconstruction of dilapidated houses, are matters which are urged upon the authority. The need for bye-laws to control nuisances and to regulate buildings, as also the provision of means of isolation for infectious fevers, are advocated.

Scarlet Fever in the Hayfield District, by Dr. PARSONS.—This rural district lies partly in Derbyshire, partly in Cheshire, and scarlet fever has been reported as prevalent during the past few years. At one time almost every household in which there were children was invaded in Higher Disley, the propagation of the disease here and in Disley village being largely attributed to school infection, and to the habit which mothers have of carrying their children into the houses of neighbours where cases of the disease already exist. The sanitary officers appear to have done their utmost to cope with the disease, but in the absence of public means of isolation their efforts have not resulted in much ultimate benefit. Some years since the authority professed their readiness to provide some hospital accommodation, but the premises then in view are no longer available, and the authority now seem to think that without compulsory powers of removal such provision would be useless. In this view we believe they are mistaken, for no point has been more clearly established in the official report on the Use and Influence of Infectious Hospitals than the fact that a reasonably attractive hospital secures the admission of children even so young that it might have been thought useless to urge their separation from their parents. In many respects the district is shown to need more energetic sanitary action, and a series of recommendations is appended to the report with a view to the guidance of the authority in this respect.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 5599 births and 3657 deaths were registered during the week ending Sept. 25th. The annual death-rate in these towns, which had been equal to 22·6 per 1000 in each of the preceding two weeks, declined last week to 21·0. During the first twelve weeks of the current quarter the death-rate in these towns averaged 20·4 per 1000, and was 0·9 below the mean rate in the corresponding periods of the ten years 1876-85. The lowest rates in these towns last week were 16·0 in London, 17·7 in Bristol, 18·8 in Brighton, and 19·7 in Birmingham. The rates in the other towns ranged upwards to 31·8 in Portsmouth, 32·0 in Wolverhampton, 37·1 in Preston, and 43·7 in Norwich. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had been 1199 and 1132 in the preceding two weeks, further declined last week to 933; they included 724 from diarrhœa, 63 from "fever" (principally enteric), 52 from scarlet fever, 37 from whooping-cough, 29 from measles, 23 from diphtheria, and not one from small-pox. The lowest death-rates from these zymotic diseases were recorded last week in Birkenhead and London; and the highest in Preston, Hull, Portsmouth, Wolverhampton, and Norwich. Diarrhœa caused the highest death-rates in Hull, Wolverhampton, and Norwich; no fewer than 35 of the 77 deaths registered last week in the last-mentioned city being referred to this cause. The mortality from "fever" was greatest in Cardiff, Leicester, Newcastle-upon-Tyne,

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Plymouth, and Portsmouth; from scarlet fever in Leeds and Salford; and from measles in Preston, Wolverhampton, and Halifax. The 28 deaths from diphtheria included 15 in London, 2 in Birmingham, and 2 in Manchester. Small-pox caused no death in London and its outer ring, or in the twenty-seven large provincial towns. No small-pox patient was under treatment on Saturday last in the metropolitan hospitals receiving cases of this disease. The deaths referred to diseases of the respiratory organs in London, which had been 110 and 168 in the preceding two weeks, were last week 154, and 55 below the corrected average. The causes of 73, or 2·0 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Leeds, Birmingham, Newcastle-upon-Tyne, Leicester, and in four smaller towns. The largest proportions of uncertified deaths were registered in Halifax, Salford, and Bolton.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 20·6 and 18·8 per 1000 in the preceding two weeks, further declined to 16·8 in the week ending September 25th; a lower rate than had been recorded in any previous week of this year. This rate was 4·2 below the mean rate during the same week in the twenty-eight English towns. The rates in the Scotch towns last week ranged from 11·8 and 12·2 in Greenock and Aberdeen, to 19·7 in Perth and 27·8 in Paisley. The 415 deaths in the eight towns last week showed a further decrease of 50 from the numbers in recent weeks, and included 43 which were referred to diarrhœa, 18 to whooping-cough, 9 to scarlet fever, 4 to "fever" (typhus, enteric, or simple), 2 to diphtheria, 2 to measles, and not one to small-pox; in all, 78 deaths resulted from these principal zymotic diseases, against 93 and 73 in the preceding two weeks. These 78 deaths were equal to an annual rate of 3·2 per 1000, which was 2·2 below the mean rate from the same diseases in the twenty-eight English towns. The deaths attributed to diarrhœa, which had been 57 and 45 in the previous two weeks, further declined last week to 43, of which 12 occurred in Glasgow, 8 in Edinburgh, 8 in Dundee, and 8 in Paisley. The annual death-rate from diarrhœa in the eight Scotch towns last week did not average more than 1·7 per 1000, whereas the mean rate from the same cause in the twenty-eight English towns was 4·1. The fatal cases of whooping-cough, which had been 20 and 11 in the preceding two weeks, rose again last week to 18, of which 16 occurred in Glasgow and 2 in Paisley. The 9 deaths from scarlet fever exceeded the numbers returned in the previous two weeks, and included 6 in Glasgow. The 4 deaths referred to "fever," of which 2 occurred in Perth, showed a decline of 2 from the number in the previous week. The fatal cases of measles and diphtheria were few, and differed but slightly from the numbers in recent weeks. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 72 and 65 in the previous two weeks, rose again to 65 last week, and exceeded by 6 the number in the corresponding week of last year. The causes of 67, or 16 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been 25·9 and 27·5 per 1000 in the preceding two weeks, declined to 24·7 in the week ending Sept. 25th. During the first twelve weeks of the current quarter the death-rate in the city averaged 22·0; the mean rate during the same period was 18·9 in London and 17·7 in Edinburgh. The 167 deaths in Dublin last week showed a decline of 19 from the number in the previous week, and included 25 which were referred to diarrhœa, 3 to scarlet fever, 2 to diphtheria, and not one either to small-pox, measles, whooping-cough, or "fever." Thus 30 deaths resulted from the principal zymotic diseases, against numbers increasing from 18 to 39 in the preceding four weeks; they were equal to an annual rate of 4·4 per 1000, the rates from the same diseases last week being 2·9 in London and 2·3 in Edinburgh. The fatal cases of diarrhœa, which had increased in the preceding eight weeks from 1 to 29, were last week 25. The 3 deaths from scarlet fever showed an increase of 1, while the 2 from diphtheria corresponded with the number in the previous week. For the second time this year no death from "fever" was registered during the week. Nine inquest cases and 5 deaths from violence were registered; and 42, or more than one-fourth of the deaths, were recorded in public institutions. The deaths of infants showed a marked decline, while those of elderly persons exceeded the number in any recent week. The causes of 30, or 18 per cent., of the deaths registered during the week were not certified.

THE SERVICES.

ADMIRALTY.—In accordance with the provisions of Her Majesty's Order in Council of April 1st, 1881, Fleet Surgeon William Hogarth Adam has been placed on the retired list, with permission to assume the rank of Deputy Inspector-General of Hospitals and Fleets. Fleet Surgeon Archibald Grant Colquhoun has been placed on the retired list, with permission to assume the rank of Deputy Inspector-General of Hospitals and Fleets.

The following appointment has been made:—Staff Surgeon Alexander Hood, to the *Scout*.

ROYAL NAVAL ARTILLERY VOLUNTEERS (London Brigade). Herbert Collier, Esq., to be Surgeon.

ARTILLERY VOLUNTEERS.—1st Cinque Ports: Otho Robert Travers, Gent., to be Acting Surgeon.—1st Orkney: Thomas Patterson Devlin, Gent., to be Acting Surgeon.

ENGINEER VOLUNTEERS.—1st Cheshire: Acting Surgeon Joseph Lamb resigns his appointment.

RIFLE VOLUNTEERS.—1st Volunteer Battalion, the Buffs (East Kent Regiment): Acting Surgeon C. G. M. Lewis to be Surgeon.

Correspondence.

"Audi alteram partem."

DIRECT REPRESENTATION OF THE PROFESSION ON THE GENERAL MEDICAL COUNCIL.

To the Editor of THE LANCET.

SIR,—As announced in the *British Medical Journal* of Saturday last, the three candidates chosen by a large majority of the Committee for Selecting Candidates for the Direct Representation of the Profession on the General Medical Council are Mr. Wheelhouse of Leeds, Sir B. W. Foster of Birmingham, and Mr. Ernest Hart of London. Since his nomination, Mr. Hart, who is abroad, has telegraphed, "gratefully declining" the nomination. The sub-committee have therefore resolved to adopt Dr. Glover of London as their candidate in the place of Mr. Hart, Dr. Glover having stood fourth on the list.

I feel it to be quite unnecessary to say anything in justification of the action of the committee in this matter. Formed on the widest basis, irrespective of place, circumstance, or numbers—gentlemen living in 164 towns having been applied to, and acceptances to serve having been received from 363 individuals—it cannot be accused of favouritism, no hint or suggestion as to the names to be selected having been given to any one of these 363 gentlemen. Neither can the action of this committee be considered a failure—a *fiasco*—when we look at the names which it has adopted as its candidates. That those names will commend themselves to the great bulk of the profession in England and Wales I feel assured, as it *cannot be by chance* that 363 gentlemen, living in 164 towns, have almost unanimously agreed to adopt them. The Committee feel that failure would indeed be a calamity for the profession, as no other organisation like theirs has been, or is likely to be, found; and in that conviction they will leave no stone unturned, and will spare no labour, to render their efforts successful.

The importance of sending up to the General Medical Council men of tried ability, with knowledge of affairs—men who have laboured in the interests of the profession, and who are in touch with members of every branch of it,—cannot be over-estimated. A mistake once made would not easily be remedied, and *prestige* and respect once lost would not soon be regained.

Mr. Wheelhouse, for nearly the whole of his professional life, has been an active member of the governing body of

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the British Medical Association; he has been president of its Council, and in that capacity showed the greatest tact and zeal in the management of its affairs, to which he still gives the benefit of his ripe experience. He is a typical general practitioner, who has reached his present eminence by those arts which become a liberal-minded and honourable man. His place in the estimation of his brethren throughout the kingdom is sufficiently indicated by his place at the head of this poll.

Sir B. Walter Foster is widely known by his activity and zeal in the cause, not of one association only, but in that of the whole profession. It is owing to his strenuous exertions in Parliament that the very inadequate number of two direct representatives of the profession has been increased to three, for which he is deserving of substantial reward; and the best reward which can be offered to him is electing him as one of our representatives.

Of Mr. Hart's great exertions in the cause of medical reform too much could not have been said, had he decided to stand. Dr. Glover, who succeeds to his place on the list, is well known, to all those who have followed the course of medical politics, as an active worker in the way of medical reform; and as a member of the editorial staff of THE LANCET he has endeavoured to advance the interests of the profession in many ways. Dr. Glover is also intimately acquainted with the working of the General Medical Council, and will doubtless prove an ardent reformer of its abuses. All of these gentlemen are so highly respected and trusted by the profession, for whose interests they have so long striven, that it appears to be both right and proper that every member of it should use his best endeavours to secure their election. The committee I represent will not relax its exertions, feeling assured that, as they deserve success, so it will be accorded to them.

On behalf of the Committee,
I am, Sir, your obedient servant,
WILLIAM STRANGE, M.D., Chairman.

Worcester, Sept. 30th, 1886.

To the Editor of THE LANCET.

SIR,—I learn by telegram, received to-day, that I have been nominated, as the result of a ballot taken by the Committee on Direct Representation, at Birmingham, for election as a direct representative of the profession on the General Medical Council. Owing to the miscarriage of the post, I have not seen the recent numbers of the medical journals, and I am not therefore aware of what may have been the previous steps, or how it happens that the honour has fallen to me. I wish, however, with your courteous aid, at once to make it known in the profession that, while highly appreciating this mark of the confidence and favour of my professional brethren as one which I shall always treasure as a valued recollection, I am at present unwilling to accept nomination for election to the General Medical Council, and I have therefore requested that my name may be withdrawn. I am, Sir, your obedient servant,

Prague, Sept. 26th, 1886. ERNEST HART.

To the Editor of THE LANCET.

SIR,—In an article published in the *British Medical Journal* of Saturday last, respecting the action of a selection committee organised *at a small private meeting* held at the Grand Hotel, Brighton, the following passages occur:—This committee "was projected at an annual meeting of the Association, which was *of the most public character*" (italics mine); also, that "the circumstances of the establishment of the committee necessitated that it should be intimately connected with the name of the British Medical Association." So far from these statements being true, the reverse is correct, as follows:—The British Medical Association had the matter brought before its members at a general meeting at Brighton in August. They *declined to take any part in the selection or election of candidates.* No candidate or candidates have the right to make use of the name of the Association, or to pose as its nominees in any shape or form. I am, Sir, yours truly,

Harpurhey, Manchester, Sept. 27th, 1886. WM. ARMSTRONG.

To the Editor of THE LANCET.

SIR,—Having been present at the Birmingham meeting, it seems to me that Dr. Taaffe has well stated some of its defects. Only thirty-two attended on that occasion, and when the voting took place, at the termination of the proceedings, fourteen remained. In accordance with the resolution a voting paper was sent to the 343 who had replied to a circular sent by the secretary, and these are now dignified as a "committee for ascertaining the wishes of the profession collectively." This body professes to be simply an organisation to ensure facility in selecting candidates; yet its work has extended to this so-called ballot amongst its self-elected members, showing a majority in favour of the original nominees, of those who brought the matter before us at Brighton, when the Association refused to interfere in the election. No one would doubt the ability or fitness for office of those selected; yet it must be borne in mind that some intending candidates were not even proposed, no one present being acquainted with, or at any rate wishing to further, their candidature. In conclusion, this election has for its purpose the expression of the views of the profession as practitioners, and should in no way be biased by party influence; and to use the machinery of the Association as an agent in the matter is to act without authority and in direct opposition to the expressed wish of the general meeting this year. I am, Sir, yours &c.,

Sept. 27th, 1886. VERITAS.

To the Editor of THE LANCET.

SIR,—On the subject of the approaching election let me point out to provincial candidates the absolute necessity for being legally represented at the scrutiny of votes. It is simply astounding that the Privy Council should allow the Branch Councils, or rather their registrars, to go behind the Register. Add to this that the votes are not to be attested, and the absolute necessity for approaching the Privy Council, if need be, in order to ask them to insist upon the usual course being followed, of candidates being represented at the scrutiny, will be seen at a glance. I have addressed a formal communication on the subject to the Irish Branch Council. No man at the approaching election should be allowed to vote from behind the screen.—I am, Sir, yours truly,

Cashel, Sept. 26th, 1886. THOMAS LAFFAN.

*** Many other letters of a tone similar to that of the above have reached us, but want of space precludes their publication.—ED. L.

THE TREATMENT OF PELVIC HÆMATOCELE.

To the Editor of THE LANCET.

SIR,—The letter of Dr. Campbell Black in THE LANCET of Sept. 25th, on Subperitoneal Hæmatocele is interesting, and opens ground for discussion. He does not give any history of the tumour spoken of, and a doubt must exist as to its being subperitoneal. I have long been doubtful myself if pelvic hæmatocele is ever subperitoneal, and though this is very minutely described in the case recorded by Simpson, I am satisfied that in the post-mortem room there is almost insuperable difficulty in defining the serous layer of the peritoneum and differentiating it from the products of inflammatory action. I pointed out in the Ingleby Lectures in 1883 how experiments had convinced me that it is very hard to inject fluid in any quantity into the cellular tissue round the uterus post mortem, and that where blood exists in this locality it is in small quantity, and more properly comes under the category of thrombic.

I have the notes of twenty-seven cases of well-marked pelvic hæmatocele observed during some years past. In this number there have been four deaths, three of which at least I think were preventable. At some future time I hope to place these on record. In the meantime I may express my prior conviction that the majority of cases get well if left alone. The statistics of Voisin, West, Emmet, Hutchinson, Dolbeau, and others, emphatically prove this. Emmet, in speaking of puncture, goes so far as to say that "in a large majority of cases such interference would be criminal." The testimony of the late Dr. Thorburn, whose experience must have been extensive, is very decisive on this point. He says—"Every case of hæmatocele which I have seen for over twenty years (and they have been exceptionally numerous, though I cannot tabulate them), which did not die from immediate hæmorrhage, has perfectly recovered, with suppuration in only one instance."

I may point out that the puncture as mentioned by Nonat is very different from the aspiration of the present day, and

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that Nélaton and others abandoned it as dangerous long ago. In certain cases aspiration is valuable for diagnosis, and in some, carefully practised, may aid in promoting recovery.

The question of the influence of the menstrual period in aggravating the condition, as quoted by Dr. Black from Nonat, is at variance with my own observation. I am of opinion that Voisin is more correct when he states the curious fact in connexion with recovery by resolution, that after the formation of the tumour recurrence of the menstrual period seems to exercise no influence in increasing its size; on the contrary, each period is marked by a notable diminution in volume, and that, instead of gradual decrease, it recedes by successive steps, which correspond with the catamenial periods.

I am, Sir, yours faithfully,

EDWARD MALINS, M.D.,

Sept. 1886. Obstetric Officer to the General Hospital, Birmingham.

To the Editor of THE LANCET.

SIR,—Dr. Campbell Black illustrates very well the state of confusion in the nomenclature of this accident. "Sub-peritoneal" and "retro-peritoneal" hæmatocele can of course only be varieties of "extra-peritoneal" effusion, and belong to the non-fatal class. It is the intra-peritoneal hæmatocele which requires surgical interference, on the principle of "cut down and tie the bleeding point." Such a case as that quoted by Dr. Black from Nonat is precisely an illustration of this. Nonat was the best diagnostician, I believe, we have ever had in gynæcology, but he lived before the days when the peritoneum could be opened without risk, and all his cases of ruptured tubes died, as all mine did before I operated on them. Dr. Black's case illustrates the extra-peritoneal hæmatoceles, which rarely require even to be punctured, and which nearly all get well. It is certainly not such cases as Dr. Black's for which I recommend operative interference, as he might have easily understood if he had read what I have said on the subject with more care.

I am, Sir, yours faithfully,

Liverpool, Sept. 24th, 1886. LAWSON TAIT.

TRIPLE QUALIFICATION OF SCOTLAND.

To the Editor of THE LANCET.

SIR,—Allow me through the medium of your columns to draw the attention of medical tutors to the fact that candidates for the first professional examination for the triple qualification are now required to produce a *six* months' certificate of Practical Anatomy, instead of *nine* months as heretofore. At my request the joint committee made this alteration in July last. A candidate, however, cannot present himself for examination until he has been nine months registered as a medical student; consequently he can devote the summer session to Practical Physiology.

I am, Sir, faithfully yours,

Dublin, Sept. 24th, 1886. CHAS. FREDK. KNIGHT, M.D.

NORTHERN COUNTIES NOTES.

(*From our own Correspondent.*)

DURHAM UNIVERSITY.

AT a convocation of Durham University, held in Bishop Cosin's library, Palace-green, Durham, on Saturday last, the degree of Bachelor in Surgery was constituted, and the status of Licentiates in Sanitary Science, the regulations for which were approved.

THE NEWCASTLE TURKISH BATHS.

I daresay we have in Newcastle one of the most complete Turkish Baths to be found in any provincial city; latterly, too, a Russian bath has been added to the premises. The late Sir John Fife did much by his work on "The Turkish Bath" to popularise its use in the north. Dr. F. C. Coley, of this city, has already published a pamphlet on the subject, and he is now, I am told, engaged on a more complete work on the Turkish Bath, which will soon be issued.

RATING OF SCHOOLS AND HOSPITALS.

The Rev. Dr. Rutherford, who is also a qualified practitioner here, at a late meeting of the guardians moved a resolution against departing "from the time-honoured custom of the non-enforcement of the rating law against hospitals, charities, public elementary schools, &c." The *Newcastle Chronicle* says: "The resolution was, with a slight alteration, carried unanimously, and, we should say, to the public satisfaction, because to burthen such institutions with rates is, as was pointed out, to hamper their management and to clog the fly-wheel; besides, the burthen of the ratepayers would in the long-run be made heavier by it. It was generally considered that the doctor's resolution made an end of the business. Not so, however. The Assessment Committee of five have decided to the contrary. They met after the last fortnightly meeting, and, in spite of the Board's resolution, assessed—not nominally, as was understood would be the case, but substantially—the schools. The public charities of the city, including the infirmary, are, we understand, also to be burthened with rates. Moreover, it would seem that in this matter the Assessment Committee, though presumably subordinate to the Board of Guardians, is omnipotent."

DEAF, DUMB, AND BLIND CHILDREN.

The authorities of the Newcastle Deaf and Dumb Institution have received official intimation that the Commissioners appointed to inquire into the maintenance of similar charities, and the amount of education &c. they afford, will visit the institution on Thursday next. The committee of the Victoria Asylum for the Blind have also received a similar intimation of intended inspection. Lord Egerton is the chairman of the Commission.

Newcastle-on-Tyne, Sept. 28th.

LIVERPOOL.

(*From our own Correspondent.*)

HOSPITAL ACCOMMODATION FOR INFECTIOUS DISEASES.

AT the last meeting of the Health Committee, the important subject of hospital accommodation for infectious diseases was again discussed. The matter has been repeatedly before the committee, the City Council, and the public for years past, but still remains a *quæstio vexata*. The difficulty is not far to seek. The new hospital, which is undoubtedly required, must be accessible, and yet not too near any dwelling-houses. This is the difficulty; the remedy is much less easily indicated. Dr. Taylor, the medical officer of health, having been asked to report on the question, submitted one, in which he gives the following table of the number of cases of scarlatina and fever which have come under his notice during the summer months of 1884-5-6:

	1884.	1885.	1886.
SCARLATINA.			
May	55	70	67
June	48	100	59
July	63	91	48
August	38	75	129
To 18th September	41	59	125
FEVER.			
May	94	46	24
June	63	65	43
July	56	44	31
August	51	63	54
To 18th September	41	53	47

To meet this very serious state of matters, which, if not met promptly, will soon become much more serious, the following was the hospital provision for non-epidemic periods in the city until recently:—Toxteth Workhouse Hospital, 50 beds; Mill-road Workhouse Hospital, 98 beds; Brownlow-hill Workhouse Hospital, 160 beds. Besides the above, there was Netherfield Institution, stated to be capable of accommodating seventy patients. Dr. Taylor proceeds: "At the present time there is only accommodation for a few cases of fever in the Brownlow-hill Workhouse Hospital. Toxteth Hospital is closed, so is Mill-road, and the Netherfield Institution requires alterations. The hospital at Brownlow-hill cannot long be continued for the reception of infectious disease, the building being required for the accommodation of paupers; and however wishful the Select Vestry may be to oblige the Corporation, their own necessities will compel them to refuse a lengthened occupation of their hospital for public purposes.

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The only proposal so far submitted to the Council is the erection of a hospital with sixty beds, which will have to discharge the duty of the 308 beds at Toxteth, Mill-road, and Brownlow-hill, whilst Netherfield Hospital will accommodate few, if any more, patients after the alterations than before. The medical officer, after carefully considering the present position of the hospital question, and finding that a serious epidemic of scarlatina has commenced, without the provision of proper means of isolation, would strongly urge upon the Health Committee the necessity of immediately erecting some huts on a site in Kensington-fields, as being the most convenient of access from every part of the city, and the most eligible situation for a public hospital." Unfortunately, the Kensington-fields site has dwelling-houses sufficiently near to be prejudiced by the erection of a fever hospital, and with characteristic selfishness the property owners are crying out against a movement which threatens to deteriorate the value of their property. How the matter will end remains to be seen.

Liverpool, Sept. 29th.

GLASGOW.

(From our own Correspondent.)

REPRESENTATION OF THE PROFESSION ON THE GENERAL MEDICAL COUNCIL.

HERE, as elsewhere, this question is agitating professional circles. So far, the only candidate put up in the west of Scotland is Dr. James Morton, to whom a large amount of support has already been promised in and around Glasgow. The Glasgow Southern Medical Society, of which Dr. Morton is the oldest member, has declared unanimously in his favour, and his committee is large and powerful. Dr. Robert Sinclair of Dundee seems to find enthusiastic support in his own district, and as he is a Glasgow man and well known in the west of Scotland, he will no doubt receive many votes from this district also. As for the candidate nominated in Edinburgh, Sir Douglas Maclagan, there is everything to say for him and nothing to say against him, except one rather powerful objection, strongly felt here, that Edinburgh is already fully represented in the Council, and that, if he were elected, she would have four representatives, which is more than her just share. Dr. Bruce of Dingwall and Dr. D. Stirling of Perth are also understood to be before the profession as candidates, but, so far, very little has been heard from them; their friends do not seem to be working so energetically as those of the other candidates. Ultimately the vote will probably be territorial, and will turn, not so much on the merits of those nominated, as on the part of Scotland they are supposed to represent.

PUBLIC HEALTH.

At the last meeting of the Town Council attention was directed to an outbreak of scarlet fever in the east end of the city, more especially in connection with a particular dairy farm, from which no fewer than forty-four cases of the disease were known to have originated. Complaint was also made of obstacles being put in the way of the sanitary officials by the public in dealing with such epidemics; and the necessity for regular and compulsory notification of infectious disease was pointed out.

Glasgow, Sept. 30th.

IRELAND.

(From our own Correspondent.)

ROYAL UNIVERSITY OF IRELAND.

A ROYAL WARRANT approving alterations in the statutes of this University was published last week as a Parliamentary paper. The following are the chief alterations in the statutes:—To repeal the second paragraph of chapter 2, and to substitute for it the following: "No student who, previous to matriculating in this University, was or had been a student of any other university, shall be eligible to be awarded any of the exhibitions or other prizes of this University, save in some collegiate grade not lower than that which such student shall hold, or shall have held, in such other university; and the scholarships of this University shall be deemed to be prizes in connexion with the matriculation examination." To repeal paragraph 2 of chapter 4, section "Of medical fellowships," and to substitute therefor the following: "The Senate may from time to time appoint for each of the medical Fellows such salary as they shall consider proper, not exceeding £2000 a year, provided always that if any medical Fellow shall hold any fellowship or professorship in any other university, or any college attached to a university, or in any college endowed with public money, he shall receive in respect of his medical fellowship in this University only such sum (not exceeding the salary fixed for him by the Senate under this clause) as, with the salary of his other fellowship or professorship, shall amount to £400 per annum, being the sum hereinbefore fixed as the limit of the salary of Fellows of the University." By the decease of the Rev. Dr. Stevenson a second vacancy for a member of the Senate has taken place. The Crown has the right of nominating his successor.

BRITISH MEDICAL ASSOCIATION.

A meeting of the members of the Dublin Branch of this Association was held on the 24th ult., to consider a recommendation from the council of the branch, that the next annual meeting should be held in Dublin. Dr. Bennett presided; and the Rev. Dr. Haughton proposed, and Sir William Stokes, President of the Royal College of Surgeons, seconded, the following resolution, which was unanimously adopted: "That the Association should be cordially invited to meet in Dublin in 1887, and that the universities and the different medical bodies, as well as all members of the profession residing in Leinster, should be requested to join in the invitation." Dr. McDonnell, F.R.S., President of the Academy of Medicine, moved, and Dr. Finny seconded—"That in the event of the invitation being accepted, Dr. J. T. Banks, physician to the Queen in Ireland, Regius Professor of Physic in the University of Dublin, &c., be nominated President-elect of the Association," which was carried by acclamation. Sir George Porter, Surgeon in Ordinary to the Queen in Ireland, moved—"That the officers and council of the branch be authorised to make all necessary arrangements for the proposed meeting, and that a subscription list to defray the expenses thereof be now opened." This was seconded by Dr. Collins, Governor of the Apothecaries' Hall, and adopted.

DIRECT REPRESENTATION OF THE PROFESSION IN IRELAND.

A meeting will be held this week at the Shelbourne Hotel, for the purpose of nominating a committee to support the candidature of Dr. Kidd for the office of direct representative of the profession in Ireland on the General Medical Council.

SOUTH DUBLIN UNION.

The question as to the liability of the guardians to admit a person to hospital who is willing to pay for his support and treatment came before the Board of this union last week, and as there seemed a doubt on the subject, the following query has, on the suggestion of Sir J. Owens, M.D., been submitted to the Local Government Board: "If a sick person, not destitute, presents himself at the workhouse and requests to be medically treated, and claims to repay the entire cost of his maintenance therein according to the full average cost, can the master refuse his admission—has he any discretion in the matter?" Common sense would suggest that the medical officer who attends the case, if admitted, ought to be compensated for his trouble, as his appointment by the guardians only requires him to attend pauper patients.

Dr. Kearney has been elected medical officer of the Roundstone dispensary district.

Dublin, Sept. 28th.

EGYPT.

(From our own Correspondent.)

MEDICAL MISSION AT CAIRO.

UNDER this heading THE LANCET of August 21st mentions an appeal on behalf of Miss Whately's well-known and too little supported Mission. A few years ago it would have been accurate to write of it as the only agency "where gratuitous help and remedies are given to the poor"; but during the English occupation of the country other and

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more important means have been provided. To Miss Whately's Mission Schools for children of both sexes and all nationalities has been for some years attached an out-patient dispensary, presided over by a Syrian doctor, and resorted to daily by dozens of the neighbouring poor. For this no Government grant is given. At Kasr-el-Aini Hospital there is now a monthly record of 4000 out-patients, averaging 150 daily except Friday. In addition to this free aid, the Government supplies to each of the twelve districts of Cairo an Egyptian or Syrian doctor, who is obliged to attend at an office in his quarter every day, and see any patients who come without fee. In the suburbs of the town, which are not thickly populated with natives, the attendance is very small, but in six of the crowded quarters there is a daily attendance of from twenty to fifty out-patients. Besides this, about 300 patients are seen, mostly gratis, every month at the out-patient department of the Deaconesses' Hospital in Cairo, and to this there has lately been added an eye department, which already attracts nearly 100 patients a day.

STREET SCAVENGING IN CAIRO.

No less a sum than £18,000 a year has hitherto been expended on sweeping and watering the streets by the governor of Cairo, who gave an extravagant contract for the work to a European in the town. Upon March 1st, 1886, the contract having terminated, the work was taken over by the Sanitary Department, who during the first year have been able, without reducing the staff or raising the expenditure, to buy the materials, which had hitherto only been hired by the Government. About £4000 was expended in purchasing 115 mules, 50 carts, mechanical sweepers, uniforms for *employés*, &c., and the executive work has been placed under the control of an English sergeant of the commissariat department. Comment upon this economy, which will be even more marked next year, is needless. The Government was so well pleased with the result that it invited the sanitary authorities to take charge also of the street cleansing in Alexandria, which now costs £10,000 a year. This change was effected on July 1st, but no great improvement is as yet forthcoming, because the governor there yields with manifest reluctance to the loss of power and patronage. The whole sanitary budget now amounts to £100,000.

WATER-SUPPLY OF CAIRO.

The in-take of the water company has always been from a canal coming directly from the Nile, but liable to pollution from the natives on the banks, and during last winter a deplorable state of things arose owing to the temporary stagnation of this canal, consequent on some irrigating reforms. Means have now been taken to obtain the whole water-supply from the Nile itself several yards from the bank, and this now arrives untainted at the waterworks. It is pumped out to Abbassiyeh, filtered through clean desert sand, and then distributed to such quarters of the town as are fortunate enough to be provided with a supply. Greater reforms could be introduced if the whole monopoly were not in the hands of a private company, who have within the last year succeeded in obtaining a fresh term of years from the Council of Ministers. One of the water difficulties in the town is that the pressure is not sufficient to constantly force the water higher than the first floor of the tall new houses which Europeans are now building for English tenants. This at once creates a sanitary evil of much importance.

INCREASED DEATH-RATE IN ALEXANDRIA.

During the first third of this year there were 3405 births and 2637 deaths among the native population, but during the second third of the year just ended the births fell to 2784 and the deaths rose to 3771. Since the beginning of April the deaths have invariably been in excess of the native births, and the mortality per annum has mounted from 43·5 to 62·2 per 1000. This alarming increase is said to be due to an epidemic of measles and to the bronchitis, diarrhœa, and lamentable neglect with which any such outbreak is invariably associated among Egyptians. Nearly three-fourths of the deaths are of children under five years and very many are within the first twelve months of birth.

Cairo, Sept. 4th.

THE Cirencester Hospital Sunday collections were made on the 26th ult., the result of the various appeals being highly satisfactory.

Obituary.

SAMUEL WOODMAN, M.D. DURH., F.R.C.S.

THE death of this gentleman took place at his residence in Ramsgate, at midnight, on the 15th ult., from typhoid fever. How the fatal illness was contracted is not known. It may be that he acquired it on the Continent, where he had been spending a short holiday; but it is more than possible that the germs of the disease were upon him ere he started, as before he left home he had been closely occupied with the relaying of the drains in the house into which he was then moving. It is important to note that a labourer who was employed upon the work was attacked with the same disease. Strange to say, after his return to England, Dr. Woodman, though not feeling well, was playing tennis in a country house at which he was visiting—this would be on Sept. 1st and 2nd—within a fortnight of his death. Though then bright, cheerful, and active, he had a presentiment that he was sickening for a fatal illness, and spoke to his host upon the subject. Returning to Ramsgate, he at once took to his bed (Sept 3rd) under the advice of his brother-in-law, Mr. Raven of Broadstairs, who at once recognised the serious nature of his malaise. Everything went on well at first, with the exception of the intercurrence of albuminuria; but two days before death symptoms of perforation of the bowel appeared, and with them came the fatal collapse. Though only forty-five years of age, Dr. Woodman had accomplished a larger share of work than many a man could get through in a much longer time. He was extremely active and energetic, and of a warm, impetuous temperament. He believed that language was given to express, not to conceal, one's thoughts; and thus as an opponent he was free and hard-hitting—as a friend chivalrous and endeared. By sheer force of will and power of work he had obtained the Fellowship of the College of Surgeons, and the Doctorate of Medicine of the Durham University. He was a Justice of the Peace, Presiding Councillor of the Primrose League, and chairman of the High School for Girls. Dr. Woodman was a zealous champion of straightforwardness and kindliness in professional dealings, as, indeed, in everything else, and his medical brethren would probably ascribe to his personal influence much of the good feeling which so strongly prevailed amongst them. Would it be too much to say that they regarded Woodman as their chief? The subject of this notice was about 5 ft. 9 or 10 in., strongly built, with a high forehead, cleanly cut features, and a prominent nose. No one could converse with him without observing that he was a man of unusual mental capacity, whilst his bright and cheerful manner gave assurance of excellent social parts. He recently remarked to the writer that he did not consider an obituary notice complete unless reference were made to the religious opinions of the individual. Brought up as a nonconformist, Woodman eventually joined the Church of England, whose doctrines fell more in harmony with his own liberal and intellectual opinions. More by habit than by effort, his life and acts were deeply influenced by the spirit of Christianity. He took a practical interest in everything that concerned the poor and needy, and was an active member of his parish church, in which he recently filled the office of churchwarden.

HIBBERT SULLIVAN PARKER, F.R.C.P., &c.,

SURGEON, ARMY MEDICAL STAFF.

IT is with deep regret that we have to record the death of this promising young officer, which took place at Ferozepore on August 1st last from remittent fever, at the early age of twenty-eight years, a few days only after his return to duty from three months' "privilege leave" in Kashmir.

Mr. Parker was educated at Hailebury College and at King's College, London, where he devoted a year to the Arts and Science courses. He became an A.K.C., and then proceeded to the study of medicine in King's College Hospital. He soon showed marked ability in the profession he had chosen, and gained several prizes in medicine, surgery, and gynæcology. He was for some time obstetrical house-physician to the hospital. In 1879 he became a M.R.C.S. and L.S.A., and in the following year he passed the examination for the F.R.C.S. and F.R.C.P. Edin. He entered the Medical Service of the Army in October, 1880, taking a

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high place at the competitive examination, and after the usual course at Netley was gazetted to a commission on Feb. 5th, 1881. He served for about a year in England, chiefly at Woolwich, and was then ordered to India, where he arrived in March, 1882. Soon after his arrival he was posted to Ferozepore, Punjab, where he remained during the whole of his Indian service. For the last two years he had held the appointments of staff-surgeon, surgeon to the Ordnance, and had medical charge of the lock hospital at Ferozepore.

Mr. Parker was a keen lover of his profession, and regularly kept himself conversant with the medical literature of the day. He was also an extremely kind and painstaking medical officer, never giving himself a thought where his patients were concerned. He was, moreover, an ardent Freemason, and was at the time of his death Worshipful Master in Craft and Mark Lodges, Worshipful Commander of the Ark Lodge, and P.Z. of the Royal Arch Chapter at Ferozepore. He was also a Grand Steward in the District Grand Lodge of the Punjab. The deceased gentleman was under orders to return to England during the present trooping season, on the completion of his term of Indian service, and by his early death the Army Medical Service has suffered a severe and irreparable loss.

Mr. Parker was an only surviving son, and his loss will be keenly felt, not only by his immediate relatives, but by a large circle of friends both at home and in India, to whom he had endeared himself by his kindly and gentlemanly manners. He was buried in the Ferozepore cemetery on Aug. 2nd with full military honours, the funeral being attended by all the officers in garrison and by representatives from all the various Masonic lodges in Ferozepore.

Medical News.

SOCIETY OF APOTHECARIES.—The following gentlemen passed their examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received certificates to practise, on Thursday, the 23rd ult.:—

Evans, William Edward, St. Mary Church, Torquay.
Gedge, Arthur Johnson, Methwold, Brandon, Norfolk.
McIlroy, John Black, Derwent Villa, Shooters-hill.
Rutherford, Vickerman Henzell, Elswick-road, Newcastle-on-Tyne.
Stelfox, Harold, Rotherhithe New-road.
Woodhouse, Robert Hall, Hanover-square.

DR. GAMALEI of Odessa has been inoculating large numbers of cattle for rinderpest.

DR. VON GUDDEN'S widow has been granted the sum of £5000 from the Civil List by the Bavarian government.

PRINCE ALBERT VICTOR has accepted an invitation from the committee of the Burnley Victoria Hospital to open the new institution on the 13th inst.

THE committee of the Birmingham Hospital Sunday Fund have decided to hold the next collection on the 31st inst.

COLONIAL AND INDIAN EXHIBITION.—H.R.H. the Prince of Wales has decided that the present Exhibition shall close on the evening of Wednesday, November 10th.

DR. SCHROEDER of Vienna was lately sent for to Kieff in Russia, to perform an operation for uterine fibroid. His fee was £500.

ON the 24th ult. Mr. W. H. Browne, of Aldborough sustained a severe injury to the spine by a fall, which is likely, we regret to state, to necessitate the relinquishment of his professional duties for a considerable time.

AT the meeting of the Kilrenny School Board on the 15th ult., it was reported that the epidemic of scarlatina in Cellardyke was not of sufficient importance to warrant the closure of the elementary schools.

UNDER the title "Just one more book" the Kyrle Society has just issued an appeal for further aid for its literature branch; an appeal which deserves what it will doubtless obtain—a generous response.

ON the 28th ult. an inquest was held at North Shields on the body of a young woman who had committed suicide by drinking liquid in which the ends of lucifer matches had been steeped.

THE new Government Medical Service was inaugurated at Georgetown, British Guiana, on the 1st ult., by a largely attended and highly successful dinner, Dr. Grieve, Surgeon-General, presiding.

AN inaugural address in connexion with the Medical Prayer Union will be delivered to medical students by the Hon. and Rev. W. Talbot Rice, M.A., at 8 p.m. on the 8th inst., at St. Martins-in-the-Fields, Trafalgar-square.

UNIVERSITY OF CAMBRIDGE.—The next examination in Sanitary Science will begin on Tuesday, October 5th. The names and fees of candidates should be sent to Dr. Luard, Registrar of the University, before the end of September.

UNFITNESS FOR MILITARY SERVICE IN BAVARIA.—The Bavarian military medical authorities examined during last year 76,623 men liable to military service, and reported 49,206, or 64·2 per cent., unfit.

EXCLUSION OF FEMALE STUDENTS IN PRUSSIA.—It is stated that the Ministry of Public Instruction in Prussia has issued an order that females are not to be admitted to Prussian universities either as regular or occasional students.

THE general annual meeting of the supporters of the Royal Albert Asylum was held at Durham on the 24th ult., when satisfactory financial and medical reports were presented. An election of seventy candidates for admission was also held on the same day.

SEVERAL persons are reported to have been poisoned in a village between Canterbury and Dover, by drinking some beer, several narrow escapes from death being recorded. The cause could not be traced until the cask was examined, when, it is stated, an adder was found.

AT the weekly meeting of the Workhouse Committee of the Liverpool Select Vestry on the 23rd ult., it was reported that out of 140 cases of infectious disease in the institution during the past week, 77 were those of patients suffering from scarlatina.

A NEW high-level reservoir, which forms part of the scheme for an improved water supply and other sanitary improvements arising out of a typhoid epidemic, was formally opened at Kidderminster on Sept. 28th. The entire scheme is estimated to cost about £25,000.

HOSPITAL SATURDAY FUND.—At the usual monthly meeting of the Board of Delegates of this fund on the 25th ult., it was reported that the amount to hand from the various workshops was £1500 in excess of the amounts received to the same date last year, thus more than compensating for the falling off in the street collection.

CHURCH PARADES.—On the 26th ult., a temperance demonstration and church parade was held in aid of the funds of the Royal London Ophthalmic Hospital, Moorfields. A church parade was also held on the same day on behalf of the Evelina Hospital for Children in Southwark-bridge-road.

MANCHESTER HOSPITAL FOR CONSUMPTION AND DISEASES OF THE THROAT.—The new out-patient department of this hospital is to be opened on the 8th inst. by the Earl of Derby, the patron of the institution. The extension will accommodate about 100 patients at one time, with consulting-rooms and dispensary *en suite*. To complete the building there is yet a deficiency of £1500, and the committee have issued an urgent appeal for this sum.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

DAVIES, THOMAS L., M.B., C.M.Ed., has been appointed Medical Officer for the Second District of the Conway Union.

EALES, GEORGE YOUNG, M.R.C.S., L.R.C.P., has been appointed Senior House-Surgeon to the Torbay Hospital, Torquay, vice W. G. R. Tyrrell, resigned.

FETHERSTONHAUGH, R. T., L.R.C.P.Lond., M.R.C.S., has been appointed House-Surgeon to the St. Peter's Hospital, Henrietta-street, Covent-garden, vice P. Edgelow, M.R.C.S., L.S.A., resigned.

LYON, ADAM C., M.D.Aber., has been appointed Medical Officer for the Bawtrey District of the Doncaster Union.

MCCARTHY, EDWARD C., L.R.C.S., L.R.C.P.Ed., has been appointed Medical Officer for the Waddingham District of the Caistor Union.

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MEYER, CHARLES H. L., M.B., B.S.Lond., M.R.C.S., has been appointed Medical Officer for the Sixth District of the Hollingbourn Union.

MORRIS, PRICE, L.R.C.P.Ed., L.F.P.S.Glas., has been appointed Medical Officer for the Third District of the Conway Union.

NELSON, GEORGE D., M.D.St.And., M.R.C.S., has been appointed Medical Officer for the Second District of the Bridlington Union.

SHAW, HUGH GROSVENOR, L.R.C.P., M.R.C.S., has been appointed Senior House-Surgeon to the Cancer Hospital, Brompton, vice E. W. Paul, M.R.C.S., &c., resigned.

SIMPSON, ALEXANDER, M.B., C.M.Aber., late Second Salaried Medical Officer, has been appointed House-Surgeon to the Weston-super-Mare Hospital, vice H. J. Powell, M.R.C.S., resigned.

WETWAN, W. A., M.R.C.S., L.S.A., has been appointed Medical Officer of Health for Bridlington.

Births, Marriages, and Deaths.

BIRTHS.

BARTLETT.—On the 22nd ult., at Connaught-square, the wife of Edward Bartlett, M.R.C.S., of a son.

BIGGS.—On the 19th ult., at Hillside, Child's-hill, N.W., the wife of John M. Biggs, L.R.C.P.Lond., M.R.C.S., of a daughter.

COLGATE.—On the 21st ult., at Kent Lodge, Eastbourne, the wife of Henry Colgate, M.D., F.R.C.S., of a daughter.

FOLEY.—On Aug. 13th, at Pertabghur, Assam, the wife of C. N. Foley, M.R.C.S., L.S.A., of a daughter.

FRANKS.—On the 21st ult., at Fitzwilliam-square, Dublin, the wife of Kendal Franks, M.D., of a son.

KNOBEL.—On the 5th ult., at Colesberg, Cape of Good Hope, the wife of J. B. Knobel, M.B.Glas., L.R.C.S.Ed., of a daughter.

MEREDITH.—On the 26th ult., at 6, Queen Anne-street, Cavendish-square, W., the wife of W. A. Meredith, M.B., C.M., of a daughter.

ROE.—On Aug. 29th, at Amraoti Camp, Berar, India, the wife of R. Bradley Roe, I.M.D., of a son.

SAUNDERS.—On the 3rd ult., at Mhow, Central India, the wife of Surgeon-Major W. Egerton Saunders, Medical Staff, of a son.

WALKER.—On the 24th ult., at 18, London-road, N. Lowestoft, the wife of Henry Bournes Walker, L.R.C.P., L.R.C.S.Ed., of a daughter.

MARRIAGES.

PASS—BISHOP.—On the 29th ult., at St. John the Baptist, Crowthorne, Berks, by the Rev. E. C. Wickham, Head Master of the Wellington College, assisted by the Rev. H. T. Morgan, Vicar of the Parish, Charles William Bass, M.R.C.S.E., of Langsett, Ilford, Essex, to Edith Mary, eldest daughter of George Bishop, of Wellington College, Berks.

COLDSTREAM—FRASER.—On the 23th ult., at Queen's-road Presbyterian Church, Brighton, by the Rev. Donald Fraser, D.D., of London, uncle of the bride, assisted by the Rev. A. Hamilton, D.D., of Brighton, Alexander Robert Coldstream, M.D., F.R.C.S.E., of Florence, to Janey Speirs Playfair, eldest daughter of the Rev. William Fraser, M.A., of Brighton.

COUNSELL—RITCHIE.—On the 23rd ult., at the Parish Church, Amberley, Gloucestershire, Herbert Edward Counsell, M.R.C.S., L.R.C.P., of Lyss, Hants, to Helen, youngest daughter of the late Alfred Ritchie, Esq., of Stroud.

HOOLE—ADAMS.—On the 28th ult., at St. George's, Tufnell-park, by the Rev. Marcus Rainsford, Henry Hoole, M.D.Lond., to Emily Sarah, younger daughter of the late Henry Adams, of 59, Fleet-street, E.C., and Knottywood, Priory-road, West Hampstead.

LEACH—HILL.—On the 14th ult., at St. Luke's, Torquay, Alfred Leach, L.R.C.S.Ed., L.S.A., to Edith Caroline, daughter of the late C. J. Hill, Esq., of Kenwood, near Manchester.

MACKINLAY—ALLEN.—On the 7th ult., at St. Saviour's Church, Warwick-road, W., James Grosvenor Mackinlay, F.R.C.S., to Mrs. Allen, of Blomfield-street, Westbourne-square.

PEACOCKE—VINCENT.—On the 25th ult., at St. Stephen's, East Twickenham, J. C. Harding Peacocke, Surgeon, Indian Medical Service, to Norah, daughter of the late William Vincent, of Wastdale, Terenure co., Dublin.

STEELL—MCKIE.—On the 22nd ult., at St. Paul's, Withington, Manchester, Graham Steell, M.D., to Agnes Dunlop, eldest daughter of the late Rev. Thomas McKie, of Erskine, Renfrewshire.

WILLIAMS—SMITH.—On the 21st ult., at W. Kensington, by the Rev. Dr. Sinclair Patterson, T. Hammond Williams, L.R.C.P., of Oswestry, to Annie Lucy, daughter of W. Hind Smith, Esq., of Exeter Hall, London.

DEATHS.

BELL.—On the 24th ult., at Waverley House, Hull, John Pearson Bell, M.D., J.P., late D.P.G.M., North and East Ridings of Yorkshire, in the 78th year of his age.

BERWICK.—On the 18th ult., at 7, Thornhill-crescent, Sunderland, George Berwick, M.D.

LACEY.—On the 12th ult., at Kiama, New South Wales, Chas. William Lacy, L.R.C.P.Lond., M.R.C.S.

PESKETT.—On the 21th ult., at Leyton, Essex, Alfred Peskett, M.D., aged 58.

SMIRTHWAITE.—On the 22nd ult., at his residence, Hargreaves-street, Burnley, Lancashire, Sagar Veevers Smirthwaite, M.R.C.S., L.R.C.P., aged 46.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

BOOKS ETC. RECEIVED.

BAILLIÈRE, TINDALL, & COX, King William-street, Strand, London.
The Australasian Medical Directory and Handbook. Edited and compiled by Ludwig Bruck.
Lectures on Medical Pathology. By H. Gawen Sutton, M.B., F.R.C.P. pp. 215.

BELL, G., & SONS, York-street, Covent-garden.
Therapeutics founded upon Organopathy and Antipraxy. By Wm. Sharp, M.D., F.R.S.

BLAKISTON, SON, & Co., Philadelphia.
Transactions of the College of Physicians of Philadelphia. Vol. VIII. pp. 460, with Illustrations.

CARRÉ, G., Paris.
Manuel Pratique de Bacteriologie, basée sur les Méthodes de Kock. Par Edgar M. Crookshank. Traduit par M. Bergeaud. pp. 280, avec 32 planches et 44 gravures sur bois.

CHANTRAUD ET CIE, Paris.
Elements de Thérapeutique et de Clinique Dosimétriques. Par le Dr. d'Oliveira Castro. Traduit du Portugais par E. Gras. pp. 464.

CHAPMAN & HALL, London.
Food-grains of India. By A. H. Church, M.A.Oxon., F.C.S., &c. pp. 180, with numerous Woodcuts.

CHURCHILL, J. & A., New Burlington-street, London.
The Diagnosis and Treatment of Syphilis. By Tom Robinson, M.D. pp. 138.
Diseases and their Commencement. Lectures to Trained Nurses, delivered at the West London Hospital. By Donald W. C. Hood, M.D.Cantab. pp. 138.
The Normal and Pathological Histology of the Human Eye and Eyelids. By C. F. Pollock, M.D., F.R.C.S.E., F.R.S.E. pp. 172, with 230 Original Drawings by the author (lithographed in black and colours).
A Manual of Diseases of the Nervous System. By W. R. Gowers, M.D., F.R.C.P. Vol. I.: Diseases of the Spinal Cord and Nerves. pp. 463, with Illustrations.

DI GIUS, R. M., Naples.
Fermenti e Microbi saggio di Igiene Antimicrobica. Di Prof. Italo Giglioli. pp. 682, con 20 figure intercalate nel testo.

FISCHER, G., Jena.
Lehrbuch der Vergleichenden Anatomie der Wirbelthiere. Auf Grundlage der Entwicklungsgeschichte bearbeitet von Prof. Dr. R. Weidersheim. Zweite Vermehrte und Verbesserte Auflage. Mit 611 Holzschnitten.

HOFER & BURGER, Zurich.
Sketch-book for Ophthalmological Observations of the Fundus of the Eye. By Dr. O. Haab.

KORNFELD, H., Berlin.
Führer durch das Medicinische Berlin. Nach authentischen Quellen bearbeitet. S. 208.

LEWIS, H. K., Gower-street, London.
Illustrated Lectures on Ambulance Work. By R. Lawton Roberts, M.D. pp. 179, with Illustrations.

LONGMANS, GREEN, & Co., Paternoster-row, London.
Social Arrows. By Lord Brabazon. pp. 382.

NEW SYDENHAM SOCIETY, London.
Lexicon of Medicine and the allied Sciences. By Henry Power, M.B., and Leonard W. Sedgwick, M.D. Part XII.: Gly—Her.

SMITH, ELDER & Co., Waterloo-place, London.
Dictionary of National Biography. Edited by Leslie Stephen. Vol. VIII.: Burton—Cantwell. pp. 458.
Clinical Manual for the Study of Medical Cases. Edited by James Finlayson, M.D. Second Edition, Revised and Enlarged, pp. 764, with Illustrations.
A Treatise on the Science and Practice of Midwifery. By W. S. Playfair, M.D., LL.D., F.R.C.P. In Two Vols. Sixth Edition. pp. 411-424, with Illustrations.

STANFORD, E., Charing-cross.
Tobacco: a Farmer's Crop. By P. Meadows Taylor. pp. 70.

WHITTINGHAM, W. B., & Co., Gracechurch-street, London.
South Africa as a Health-resort. By Arthur Fuller, M.B., C.M.Ed., &c. pp. 70.

La Rage, avantages de son Traitement par la Méthode Pasteur; par le Dr. Constantin James.—John Leech's Pictures of Life and Character. Parts IV. & V.—La Inoculación Preventiva contra el Cólera Morbo-Asiático; por J. Ferran, con la Colaboración de los Dres. Gimeno y Pauli (Ramon Ortega, Valencia).—Malarial Fever as met with on the Gold Coast; by C. H. Eyles, L.R.C.P.Ed., L.R.C.S.Ed. (Waterlow).—Tape Indicator Map of London and Visitors' Guide (Smith and Son, Charing-cross).—Religio Medici; by Sir Thomas Browne, M.D., 3d. (Cassell's National Library).—La Vue aux Aveugles par la Cornée artificielle; par le Dr. Emile Martin (Baillière et Fils, Paris).—Die Athembewegungen und deren Innervation veim Kaninchen; von Dr. Max Marckwald.—Dr. Paul Börner's Reichs-Medicinal-Kalendar für Deutschland auf das Jahr 1887. I.: Vasi Linfatici Nel Sarcomi; pel Dott. G. Pacinotti.—Die Mittel zur Verhütung der Conception; von Hans Ferdy.—Die Kunstfehler der Aertze vor dem Forum der Juristen; von Dr. Kühner.—Monomanie sans Délire; by A. Wood Renton, M.A., LL.B. (Clark, Edinburgh, 3s. 6d.).—Walks in Epping Forest: a Handbook to the Forest Paths, with Cycling and Driving Routes, with Illustrations and Maps; by Percy Lindley, 6d.—Zur Lehre vom Ganuloma Fungoid; von Dr. O. Hochsinger und Dr. E. Schiff.—The Index Medicus, Vol. VIII., No. 8.—The Geography of Malaria; by Jos. Parrish, M.D.—Good Words, Sunday Magazine, for October; Leisure Hour, Sunday at Home, Boys' Own Paper, Girls' Own Paper, for October.

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METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, September 30th, 1886.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Sept. 24	30·15	N.	52	49	75	59	49	...	Cloudy
,, 25	30·15	W.	51	50	78	61	56	...	Overcast
,, 26	30·07	W.	56	54	75	62	51	·03	Raining
,, 27	30·05	W.	58	56	80	64	53	·09	Overcast
,, 28	30·15	W.	56	53	100	65	51	·31	Fine
,, 29	30·06	W.	63	61	105	72	55	·01	Overcast
,, 30	29·99	S.W.	62	59	78	66	59	...	Cloudy

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

We cannot undertake to return MSS. not used.

SANITARY REFORM.

UNDER this heading, in a letter to the *Yorkshire Post*, Mr. J. Ingham Ikin, F.R.C.S., whilst congratulating the promoters of the recent Sanitary Congress at York upon the success with which their efforts were attended, points out that in the papers which were read and the addresses which were delivered the earliest promoters and advocates of sanitary reform had scanty justice done to them. Mr. Ikin alludes chiefly to the writings, lectures, and papers of Dr. Southwood Smith, Dr. Black, Mr. Hastings, Dr. Kilgour, the late Earl of Shaftesbury, and Mr. Richardson, supported by the strong advocacy of the late Mr. Wakley, M.P., who originated a special commission to report on the subject. The Social Science Association, aided by the veteran sanitary reformers Dr. Chadwick, Dr. Lankester, and others, advanced the science of sanitary reform materially, and might, he thinks, with justice have been alluded to.

J. S.—The regulations of the General Medical Council making an examination in mechanics obligatory before qualification came into force on Jan. 1st, 1882, hence our correspondent will be obliged to pass in that subject.

Professor Clay's paper will appear in an early number.

OVERCROWDING OF THE PROFESSION.

To the Editor of THE LANCET.

SIR,—As showing the seriously overcrowded state of the profession in this country, will you permit me to state in your columns the result of an advertisement which appeared in your last issue for a "surgeon to be located on one of the West African rivers"? I received no fewer than sixty-seven replies, and they continue to arrive, six having been received by this evening's post. Very many of them are from men of very good social and professional standing, and most of them have had many years' experience in private practice. The climate of the West Coast of Africa has a notoriously evil reputation for its effects upon the European constitution; and although I believe the climate is often made the stalking-horse for the injudicious habits of many of the Europeans resident in the tropics, Africa, on its west coast, cannot be deemed the most salubrious place in the world. I have lived there myself, and can therefore vouch for the fact. The emoluments offered amounted to a guaranteed minimum of £500 a year. I answered the first score of letters; and perhaps the other gentlemen who do not receive replies will accept this letter as an acknowledgment of the trouble they have taken.

I am, Sir, yours faithfully,

Aylesbury, Sept. 28th, 1886. R. HARVEY HILLIARD, M.D.

THE BROMPTON CONSUMPTION HOSPITAL.

WE are asked to state that any former clinical assistant or pupil of the Hospital for Consumption and Diseases of the Chest, Brompton, who has not yet received an invitation to the conversazione to be held at the Hospital on Thursday evening, October 7th, will receive one on forwarding his address to Dr. Waugh, the resident medical officer.

W. F. M.—Tables of the weight of the human body and brain in health and disease may be obtained of Messrs. Churchill, New Burlington-street.

Mr. Eales (Torquay).—In an early number.

THE FIRST PROFESSIONAL EXAMINATION IN SCOTLAND.

To the Editor of THE LANCET.

SIR,—In one of the "leaders" in your Students' Number you say: "There is plenty of complaint of bad students." That may be so; but are many of these students not the victims of a badly-arranged system of teaching? I opine so. Keeping only in view the Scottish universities, it is the case that the student, after passing what is called the preliminary examinations, is confronted with chemistry, botany, and natural history: the width of which sciences, and the difficulty of successful concentration upon their study, harass and sour him near the beginning of what ought to be a delightful course of study. Mr. Paget said at one time that 10 per cent. of medical students do not complete their studies. This first professional examination has been truly a stumbling-block to some young men known to me, excellent in their character and studious in their habits, who have retired, baffled and disgusted with this examination. With others, who have appeared again and again for examination, the necessity of grinding or cramming for it has most seriously interfered with their study of anatomy, physiology, and the other practical subjects later on. Plucking is so common at this stage that it has ceased to be a disgrace to the students. I have nothing to say against individuals; but there is surely something wrong with (1) either the training of the students, (2) the relation of the examination to the previous education, or (3) the mental calibre of the students. A living professor in a Scotch university says that students are generally poor, and cannot afford to waste time and neglect their studies; and I believe him. Yet there is the humiliating fact that not a few of them pay "grinders" to post them up in the "tips" of the examiners. Philosophers may sneer at "cram"; but as the whole alpha and omega of a student's career is to get successfully through the examinations, whatever plan helps him most in that direction will have his support. If excessive stress continue to be put on chemistry, botany, and natural history, then let every practitioner who is dedicating a son to the medical profession agitate that these three subjects be included in the preliminary examination, so as not to interfere with the study of the human body and its diseases. If unable to pass this enlarged preliminary examination, the candidate could retire in reasonable time and betake himself to other pursuits.

I am, Sir, yours truly,

Sept. 24th, 1886. M.D. GLASGOW.

*** We have always urged that these scientific subjects should be passed before a student enters on his strictly medical work.—ED. L.

SAMPSON GAMGEE,

DIED SEPT. 18TH, 1886.

In Memoriam.

YEA, his the sacrificial life well spent—
Ah! who shall say that it is spent in vain?
To bind the soldier's wounds on battle-plain,
And heal the bleeding heart, by sorrow rent,
His sacred trust; and now the deathless prize
Of faith and pious works is nobly won;
And we who mourn him here shall dry our eyes
As his green grave of righteous deeds the sun
Illumes, and seraph voices chant "Well done!"

CLARENCE FOSTER.

A CASE OF GUINEA-WORM.

To the Editor of THE LANCET.

SIR,—Can any of your readers give me any advice as to the treatment of a case of guinea-worm (*Filaria medinensis*) which I have under my care? All the text-book authorities say: "Wind the worm round an ivory peg, taking care not to break him;" but they all forget to tell you what to do if the worm refuses to come out, and goes on burrowing, as it is doing in this case, and showing no signs of appearing above the surface. This guinea-worm has been in the leg about three months, and is constantly on the move. Can nothing be done, either in the way of killing it or of getting it out by an operation? If any of your readers could give me any information I should be obliged.

I am, Sir, yours truly,

Sept. 29th, 1886. READER.

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CYPRUS OF THE COMMANDERY.

W. L. T. (Reading).—This wine derives its name from that part of the island of Cyprus where the "Commendatore de' Cavalieri di Malta e di Rodi" (Commander of the Knights of Malta and Rhodes) resided and exercised authority over the various insular "Commanderie" or Commanderies. The wine itself is grown in a rather primitive manner, minutely described by the Italian Consul at Larnaca, the Cavaliere E. Chicco, in the "Bolletino Consolare." It owes less to art than to nature, the vines growing well in the temperate climate of the island, where it has nothing to fear but the occasional droughts or rain-mists, while the phylloxera is unknown and the oïdium in an atmosphere so dry is almost innocuous. The grapes of the Commandery are gathered about the middle of September. The bunches, stripped or cut off the vines, are spread out on the house-tops, which are composed of mud and straw dried together, and they lie on vine-leaves exposed to the sun for some fifteen days, after which drying process they are put into heavy wine-presses. The must which is squeezed out is collected in big jars, tarred inside and closed at their narrow orifices by a cork, which is pierced with holes. There it stands till fermentation has taken place, and then the jars are hermetically sealed, and the wine remains in this condition until it is sold or consumed. Cyprus of the Commandery is hardly ever adulterated, and its growers rarely have recourse to plaster-of-Paris, because such treatment invariably leaves it turbid or with an unpleasant after-taste. The island does not grow the wood adapted for butts or barrels; so the wine is kept in jars or earthen vessels, almost entirely made by hand on the spot where they are required. These vessels are baked in the furnace, and then their interior is coated with liquefied resin. It is this resin which gives the Cypriote wines their peculiar taste, which lowers their value in European markets, and the deteriorating practice will cease only with the opening up of roads in the island which will facilitate the transport of proper materials for making casks or barrels. In its first year the wine of the Commandery is apt to acidify, owing to a second fermentation; but if this is successfully overcome, then the wine suffers no other change, not even if left for many months exposed to the air. It is then kept in wood, the casks being never disturbed. In these it matures, and becomes the rich, palatable beverage so much in favour with Italian physicians, with whom it has the credit of having prolonged for some years the life of the octogenarian, Pius IX. Since the island became English, so far as its administration is concerned, the Cypriote husbandman has gradually thrown off the lethargy contracted under the Turk. He knows he can live and thrive, the taxes being no longer fixed by despotic caprice or by dishonest speculation, but being, on the contrary, regulated by sound laws. Private enterprise is on the increase, and both the quality and the quantity of the famous Cypriote wines will be enhanced. As it is, the export, according to statistics, has so increased since 1878 that within the last two years it has doubled.

Inquirer (Merthyr).—1. Yes.—2. M.R.C.S.Eng..—3. Yes.

"A NEW AND IMPROVED CLAMP FOR HÆMORRHOIDS."

To the Editor of THE LANCET.

SIR,—Having seen the account of Mr. C. J. Smith's clamp in a recent number of THE LANCET, and having a suitable case on hand, I wrote to Messrs. Maw, Son, and Thompson for the instrument, and used it very satisfactorily on Sept. 16th. Just after ordering the instrument I read Mr. Fitzroy Benham's criticism in your issue of Sept. 4th; but I certainly did not find the jaws of the clamp spring in the least from the parallel direction, as he therein states—on the contrary, they held firm as a vice with each fresh application. It appears to me, and this I have suggested to the makers, that if the instrument were made curved, instead of straight, it would be much easier of application. Being straight, it can only be applied from above or below, as the patient lies on the side, and if the nates are large it is difficult to apply it closely; whereas if it were curved it would be easily applied in any direction. If Mr. Smith will allow me to make another suggestion, it is this: the jaws would be more serviceable if made a little longer, in order that more of the piles might be grasped at once, and save the necessity of too frequent applications. The screw is a little too slow; otherwise the instrument is a very useful one.—I am, Sir, yours faithfully,

Bridlington, Sept. 21st, 1886. FRANCIS C. BRETT.

SMALL-POX IN SOUTH AFRICA.

To the Editor of THE LANCET.

SIR,—I think I saw in a recent number of THE LANCET an account of the ravages of small-pox in South Africa, and of the dearth of vaccine lymph in the neighbourhood of the epidemic. I should at all times be glad to send out gratuitously to practitioners who cannot obtain it readily a supply of charged tubes, of which I have always by me many more than I want. If you would kindly publish this letter it will very probably come under the notice of practitioners in want of lymph, and they can apply to me.—I am, Sir, yours faithfully,

J. H. GRAMSHAW, M.D.,

Sept. 22nd, 1886. Public Vaccinator for Gravesend.

EDITORS AS REPRESENTATIVES.

Mr. W. D. Spanton thinks the editors of the medical journals would make the best direct representatives. We must adhere to our view that the new Council ought to be furnished, above all things, with representative general practitioners. Such men have been hitherto lightly esteemed by the medical authorities and the Medical Council. It is time that they had seats in the Council for each division of the kingdom.

Mr Wilkinson (Rotherham).—The interest of the question submitted to us rests for the most part upon local considerations. It is not easy to decide as to whether parks or baths or free libraries have superior claims on the sympathies of philanthropists. All of these provisions are important, and, if possible, should be obtained for the benefit of the community.

Dr. Thos. Reid.—To the first and third of our correspondent's questions we answer, Yes. To the second question we reply that the chemical analysis leads to the water being regarded as open to grave suspicion.

Dr. F. E. Pearse (Frome).—Will our correspondent kindly repeat his question, as his letter has been mislaid?

Dr. F. de Havilland Hall.—Will our correspondent address Dr. Saundby, of Birmingham, on the point?

Beta.—Either Carter's "Elements" or Charteris' "Practice of Medicine."

MILK-POISONING.

To the Editor of THE LANCET.

SIR,—I think public attention should be drawn to the present very injurious practice of adulterating milk during the hot weather with chemicals, which is practised at the smaller dairies. Eleven days ago my little boy, a robust child of nearly two years of age, went to bed well, but awoke at 2 P.M. in frightful agony, which continued for several hours, and with high fever. The latter soon subsided under treatment; but the child has ever since had very intractable dysentery, and has become very much pulled down. An infant was seized at the same time, but in less degree. This proved that the milk was at fault; and I have since known an exactly similar case caused by milk from the same dairy. I was unable to procure a satisfactory specimen for analysis; but it is apparently the sediment given to the child late at night, after the milk has been standing some hours, that does the mischief. I beg to subjoin a letter, with which Mr. Stokes, the Public Analyst for Paddington, has, in answer to inquiry, kindly favoured me, and remain

Your obedient servant,

Norfolk-terrace, W., Sept. 16th, 1886. HERBERT SNOW.

P.S.—I would add that the symptoms in the first instance were so acute as to suggest to me arsenical poisoning. A more delicate child might readily have succumbed.

"Analytical Laboratory, Vestry Hall, Harrow-road, W.,
"Sept. 11th, 1886.

"My dear Sir,—It is quite possible that the sediment you speak of in the milk was borax or boracic acid. Both of these are too frequently used in the milk trade during the hot weather. Being but slowly dissolved, they would, if added direct, very likely be found at the bottom of the can, even after some hours. They would act, if in any quantity, as irritants to the gastric mucous membrane. This week I received a sample of milk containing much washing soda, evidently added instead of the bicarbonate. Such samples are not obtained from the larger firms, who rely upon cold rather than upon chemicals to preserve their milk.

"Yours faithfully,

"ALF. W. STOKES, F.C.S.,
"Public Analyst to the Vestries of Paddington, Bethnal-green, and St. Luke's."

Mr. H. Craven Smith.—It is impossible to answer the question of our correspondent. The recognition of the degree in question will depend on the General Medical Council and the Privy Council. Our correspondent is right in his interpretation of the 16th clause.

Subscriber (Northampton) can hardly expect us to become the medium of the information he desires.

Practitioner has not mentioned the particular preparations he finds unsatisfactory.

Barnacle.—The paper is marked for insertion.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Theodore Williams, London; Rev. G. W. Weldon, Bickley; Sir W. B. Dalby, Alnwick; Mr. F. Treves, London; Col. Tulloch, London; Dr. de H. Hall; Dr. C. F. Knight, Dublin; Dr. J. J. Bailey, Marple; Mr. Morton Small; Mr. T. Lawrence, York; Mr. S. Wallis, London; Mr. R. H. Keen, St. Leonards; Dr. J. W. Fraser, Hull; Messrs. Harboron and Co., London; Mr. W. Berry, Wigan; Dr. Macaulay, London; Dr. P. Foster, Leeds; Dr. Chalmers, London; Dr. Wadham, London; Mr. F. Wilkinson, London; Mr. W. D. Spanton, Hanley; Mr. W. Armstrong, Harpurhey; Dr. F. E. Pearse, Frome; Mr. E. S. Sykes; Dr. Imlach, Liverpool; Mr. Greenwood, Stronapyne Dr. Tempest Anderson,

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York; Mr. H. C. Smith, Torquay; Mr. Cotterell, Bicester; Mr. Lawson Tait, Liverpool; Dr. Anningson, Cambridge; Messrs. Williams and Son, Mold; Mr. Midland, London; Mrs. E. S. Busk, London; Dr. G. Johnson, London; Mr. Hourigan, Freshfield; Mr. Jas. Black, London; Dr. Maxwell, Woolwich; Mr. T. Cooke, London; Messrs. Matthews and Co., Birmingham; Mr. Gibson, Bromley; Messrs. Fraser and Sons, Arbroath; Dr. Hassall, Lucerne; Mr. Freves; Messrs. Condy and Co., London; Mr. Rawlinson, Burnley; Mr. Currie, Newton-le-Willows; Mr. Pentland, Edinburgh; Dr. Roberts; Messrs. Evans and Co., Liverpool; Mr. Earp, Notts; Mr. Moore, Birmingham; Dr. T. Williams, London; Dr. Williamson, Ventnor; Dr. Morris, Spalding; Dr. Thomas, Glasgow; Mr. St. Dalmas, Leicester; Messrs. Bell and Sons, London; Mr. Birchall, Liverpool; Mr. P. Smith, Shepton Mallet; Dr. Taaffe, Brighton; Mr. Mullin, Salford; Messrs. Keith and Co., Edinburgh; Mr. Crassweller, Highbury; Messrs. Smith and Son, Liverpool; Mr. Power, London; Dr. Savage, London; Dr. Nilson Gwynne, Sheffield; Mr. G. Berwick, Sunderland; Dr. Gordon Black, Harrogate; Dr. Malins, Birmingham; Dr. Oxley, Liverpool; Mr. Williams, Worthing; Dr. Kammerer, Berlin; Mr. Ernest Hart, Prague; Mr. Russell, Glasgow; Mrs. Maitland, London; Mr. F. Churchill, London; Mr. Basanquet, London; Messrs. Macmillan and Co., London; Mr. Tallack, London; Mr. Foulerton, Ryde; Dr. Strange, Worcester; Mr. J. Ikin, York; Dr. Hilliard, Aylesbury; Mr. Cresswell Rich, Liverpool; Mr. Blair, Leeds; Mr. Hope, London; Messrs. Low and Co.; Mr. Loftus, Galway; Mr. Moss, Carlisle; Messrs. Loeflund and Co., London; Mr. Michel, Nottingham; Messrs. Marlboro' and Co., London; Mr. Smith, Brighton; Messrs. Smith and Co., Sittingbourne; Mr. Glatano, Manchester; Mr. Baker, Hereford; Miss Selby, Surbiton; Dr. Williams, Torquay; Mr. Althaus, London; Mr. Barling, Birmingham; Mr. Wheelhouse, Leeds; Messrs. Hall and English, Birmingham; Mr. Davidson, Cork; Messrs. Lofts and Co., London; Mr. Greene, Wexford; Mr. Wardley, Buxton; Messrs. Parkins and Gotto, London; Mr. Mundy, London; Messrs. Beal and Sons, Brighton; Practitioner; G.; M.D. Glasgow; M.R.C.S.; Subscriber; H.; Nous Verrons; The Director-General of the Medical Department of the Navy; E. E., Fulham; A. G.; M.D.; Veritas; Barnacle; M.D., Aylesbury; Enquirer; Reader; Volo.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Mann, Ferrybridge; Mr. Hodgkinson, London; Dr. Petterson; Dr. Fletcher, Highgate; Mr. Lovibond, Bridgwater; Mr. Thompson, Stockton-on-Tees; Mr. Lane, Hereford; Mr. Burcombe, Lincoln; Mr. Pritchett, Brighouse; Mr. Heydon, Leeds; Mr. Strover, Girtford; Mr. Procter, Shipnal; Mr. Day, Billinghey; Dr. Thomas, Leeds; Messrs. Hewlett and Son, London; Mr. Adcock, Rutland; Mr. Bishop, Wokingham; Mr. McMunn, Sligo; Mr. Birchall, Liverpool; Mr. Rose; Mr. Knobel, Colesley; Mr. Reynolds, Leeds; Dr. Morton, Sheffield; Mr. Wheeler, Manchester; Mr. Rusher, Persham; Dr. Smith, Reigate; Dr. Gilbert, Hackney; Mr. Morris, London; Dr. Bower, Bedford; Mr. Whitaker, Manchester; Dr. Black, Burnley; Mr. Rideal, London; Mr. English, Clerkenwell; Mr. Plummer, Malmesbury; Messrs. Porter and Co., Lee; Dr. Walker, Lowestoft; Mr. Whitten, Tottenham; B. J. W.; A. C.; A. B. C., Buckhurst-hill; Medicus, Holloway; Tunbridge Wells; Matron, Preston; H., Leicester; Doctor, Sale; R., North Kensington; N. T. G.; R. J. H., London; J. L., Rochdale; Nemo, Derby; A. D. C.; A. B. C., Wantage; J. B.; B. J. W.; A. X.; M.B., Halifax; Sphinx; W. V.; M. S. D.; Delta, London; G. P.; M.R.C.S., Wimbledon; E., Notts; Matron, Bedford; Medicus, Bolton; Hansom, Brighton; J. A. D., Bridgnorth.

Darlington and Stockton Times, Rotherham Advertiser, West Briton and Cornwall Advertiser, Liverpool Courier, Pall Mall Gazette, Lancaster Guardian, Yorkshire Post, Glasgow Herald, Herald of Health, &c., have been received.

Medical Diary for the ensuing Week.

Monday, October 4.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesdays, same hour.
CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2 P.M.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.
PARKES MUSEUM OF HYGIENE.—8 P.M. Introductory Lecture by Dr. G. V. Poore: General History, Principles, and Methods of Hygiene.

Tuesday, October 5.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.
CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

Wednesday, October 6

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesdays and Thursdays, 1.30 P.M.
ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department, Tuesdays and Fridays, 9.30 A.M.
ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.
LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.
KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; and on Friday, 2 P.M.; and Saturday, 1 P.M.
PARKES MUSEUM OF HYGIENE..—8 P.M. Prof. Corfield: Water-supply, Drinking-water, Pollution of Water.
OBSTETRICAL SOCIETY OF LONDON.—8 P.M. Specimens will be shown by Dr. Lewers and Dr. John Phillips.—Dr. Swayne and Dr. Cox: Cases of Rupture of the Uterus.—Mr. Alban Doran: Papilloma of Fallopian Tube.—Dr. Champneys: On the Obstetrics of the Kyphotic Pelvis.

Thursday, October 7.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M

Friday, October 8.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
PARKES MUSEUM OF HYGIENE.—8 P.M. Prof. H. Robinson: Drainage Construction.
CLINICAL SOCIETY OF LONDON.—8.30 P.M. Dr. Charlewood Turner: A case of Congenital Malformation of the Heart, with Systolic and Pre-diastolic Base Bruits, with Observations on the Causation of Bruits preceding the Cardiac Sounds.—Mr. Pearce Gould: A case of Undeveloped Sexual Organs associated with Congenital Defect of the Tonsils.—Mr. F. Treves: A case of Pulsating Tumour of the Head, with Raynaud's Disease.—Mr. Butlin: Further Notes of a case of Renal Lithotomy published in the Transactions of the Society, vol. xv., p. 113 (1882).—Mr. Treves: Case of Pulsating Tumour of the Head (living specimen).

Saturday, October 9.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.

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Introductory Address

DELIVERED AT

ST. THOMAS'S HOSPITAL,

At the Opening of the Winter Session 1886-87,

BY J. S. BRISTOWE, M.D., LL.D., F.R.S.,
SENIOR PHYSICIAN TO THE HOSPITAL.

MR. TREASURER AND GENTLEMEN,—At the request of my colleagues I appear before you to-day to give the introductory address. I need scarcely say that I deeply appreciate the honour which they have done me, and the privilege it confers upon me of delivering myself as I please on whatever subject I may choose as suitable for the occasion; yet I must confess I would gladly have declined the honour and foregone the privilege had I dared. For, as we are constantly reminded by our critics, we orators of the 1st of October rarely say anything particularly new or particularly worth hearing; and it requires some exercise of moral courage for one who acknowledges that he has nothing new or important to say, and who finds himself for the third time in this unhappy position, to brave the adverse criticism which he feels that he shall deserve, and which has been passed upon him over and over again by anticipation. On the other hand, gentlemen, for reasons which I will briefly state, I have always been a consistent advocate of the maintenance of the custom which we are met this day to honour. It is admitted that the duties of the lectureship are difficult of adequate fulfilment; but if difficult, so much the more is success worth achieving, and at any rate the mere endeavour to do one's best is a wholesome experience (I am saying this for the benefit of my younger colleagues). The occasion is one which, as I believe, most old pupils regard with interest; and certainly it never fails to attract, besides new faces, many old friends whom it is a pleasure to greet. The introductory speechifying, moreover, however poor many of the addresses may be or may be thought to be, is made the occasion by the daily papers of drawing the attention of the public to the large hospitals and to the important educational work which is being systematically carried on in them and in the medical schools associated with them. Lastly, the oratorical display of October 1st is a time-honoured institution which links the present with the past, and on which respect for our predecessors and veneration for what is old should restrain us from laying violent hands. I felt it, therefore, my duty to accept—and I accepted readily, but not without misgiving—my present responsibility.

I have alluded to the fact that this is the third occasion on which it has fallen to me to give the introductory address. The first was eight-and-twenty years ago, and my lecture was delivered in the grand old hall of the hospital in the Borough before an audience of ladies and gentlemen (for ladies at that time were invited to be present), and prior to the distribution of prizes, which then also took place on the 1st of October. I was a young man then, and felt it a high honour to be invited by my older colleagues to represent them on the occasion; and, like a young man, I did represent them in a speech of such eloquence and floweriness that now in a calmer and more critical period of life I can scarcely understand how it was I had the presumption to deliver it or even to write it; and so full of admirable advice, that it might have been in this respect the joint production of the Archbishop of Canterbury and my friend Mr. Mac Kellar. Nevertheless, it was kindly received, and if any felt the amusement in hearing it which I felt in recently perusing it, they did not show it.

My second lecture was given four years later. In the interval vast changes had occurred. The old Borough Hospital had been sold to a Railway Company, the institution had just found a temporary home in the Surrey Zoological Gardens, and what the future was to be was a problem awaiting solution. Crude sanitary notions were at that time rampant; sanitary reformers inveighed against the iniquity of retaining establishments for the treatment of the sick in towns, and the enforced removal of St. Thomas's was hailed by them as a glorious opportunity for translating their theories into fact at the expense of one of the largest and richest metropolitan hospitals. Unfortunately, too, the treasurer for the time being, and some of the more influential governors, were largely under the influence of the prevailing sanitary craze, and also were inclined to transport the hospital wholly or in part into the country. The plan which most commended itself to them was to erect and maintain a small receiving house or hospital for acute and urgent cases in London, and to build a large hospital some miles away in the country, to which convalescent and chronic cases, and, in fact, all patients who were not likely to be injured by the journey, should be conveyed. The views of the governors had not been submitted to the medical officers for consideration, nor had their collective opinion been sought in any way; nor, again, had the medical officers (not accurately knowing what was gong on) held any meeting to discuss and consider the state of affairs. I need scarcely say that the position was a very difficult and critical one, and the prospect exceedingly gloomy. The hospital and school, both of which had been in abeyance for a few months, opened simultaneously on Oct. 1st. The inaugural ceremony, including the distribution of prizes, attended as before by ladies, took place in a large tent erected for the occasion. My address, I admit, presented occasional outbreaks of grandiloquence quite worthy of my former self, but I am pleased to say that on the whole my style had become much more sober than it was in my earlier essay; nor did I again venture after so short an interval to inflict a sermon on my younger auditors. The occasion, in fact, was unique, and I gladly availed myself of the opportunity it afforded me to discuss the future of the hospital and school, arguing as strongly as I could in favour of retaining them wholly in London, and refuting as vigorously as I dared the views (so far as I understood them) of the treasurer and his supporters. I cannot pretend that my lecture had any direct influence; but it was, I believe, the first distinct public expression of opinion adverse to the views of the sanitary crotchet-mongers, who, if they had had their way, would have ruined our school and converted our great hospital into a mere sanatorium. Subsequently, other men of greater influence and greater ability than myself took up the matter energetically from the same point of view as I had done, and before long common sense was triumphant, and the danger which had seemed imminent was averted. Few persons now know how much we are indebted to Mr. Simon and the late Mr. Whitfield for the acquisition of the magnificent site on which the hospital now stands.

My third appearance occurs under very different circumstances from those which attended my first two lectures. I was then young; I am now, I prefer not to say old, but at any rate no longer young. I was then at the bottom of the hospital staff; I am now at its summit. I then lectured to students whose younger sons are probably listening to me for the first time to-day; the troublous times have passed, and we are now, and have been for some years, in the sunshine of assured prosperity.

What should be the subject of my discourse on the present occasion? I have already uttered more good advice than I ever knew how to follow, and I do not care to furbish up my old lecture. I scolded the authorities at an important crisis in the history of the hospital, but there is no crisis now and no occasion of quarrel. Even if there were I would avoid it. You may perhaps agree with me, gentlemen, in thinking that the fact that the dates of my three addresses correspond to three important periods in the history of our hospital and school suggests, as the obvious answer to my query, that my present address should be mainly retrospective.

The first seventeen years of my professional life, during which I was successively student, teacher, and physician, were passed in connexion with the hospital in the Borough—the hospital of Meade, Fordyce, Elliotson, and Robert Williams; the hospital of Cheselden, the two Clines, Travers, and Green. It is not unnatural, therefore, that I should still feel affection and veneration for that ancient and ennobled building, and should look back wistfully to the many happy and instructive hours spent within its walls. At the time at which I became a student, the school of St. Thomas's had just emerged from that cloud of failure and disaster (the causes of which I need not enter upon) under which it had lain for many years, and though the entries were still few,

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the school on the whole was extremely well managed, and the teachers as a rule were exceptionally good. The hospital, of which an excellent model is preserved in our central hall, was one of the largest and best appointed in the United Kingdom. The greater part of it dated from the early years of the last century, and bore a close resemblance to the older part of Guy's. The old wards were not perhaps exactly the kind of wards that one would erect nowadays; but they were roomy, well-ventilated, and healthy, and answered their purpose. Two new wings, abutting on the High-street, had been recently erected, and it was intended that all the ancient part of the hospital should (as funds allowed) be taken down, and replaced by blocks on the same plan. The new wings were handsome structures, and the wards the noblest I have ever seen. Had the reconstruction been completed, St. Thomas's in the Borough would have been, I think, even a grander hospital than its grand successor, though possibly its arrangements might not have so well fulfilled all the sanitary requirements of this fastidious age. The school buildings were compact and well arranged, with a magnificent lecture-theatre, and an excellent museum, library, dissecting-room, and chemical laboratory.

Among the physicians, surgeons, and other teachers were many men of high eminence. Robert Williams, the author of the classical work on "Morbid Poisons," and one of the most philosophical physicians of this or any age, was the senior physician in my first year, and died in the course of it. I only have a vague recollection of seeing him occasionally cross one or other of the hospital squares. Next to him was Dr. Burton, whose name is identified with the discovery of the blue line on the gums in connexion with plumbism. He was, as far as my memory serves me, a quiet, amiable, gentlemanly man, and much liked; but he died of cholera in the epidemic of 1849, and I never, therefore, became very well acquainted with him. Dr. Barker and Dr. (now Sir) Risdon Bennett were also members of the staff, and before long were joined by the late Dr. Peacock. It was to these three able physicians mainly that the students of the period to which I am now referring owed their training in clinical medicine. Many an old student will recall the Dr. Barker of those days, twirling a quill pen windmill-like between his finger and thumb as he walked from ward to ward. I think most of us were a little bit afraid of him; but we all acknowledged his great qualities as a physician, his intimate acquaintance with morbid anatomy, his remarkable accuracy of diagnosis, and his simplicity and directness of treatment. Very few of those who wished to learn medicine failed at one time or another to attend his clinique. Dr. Bennett, again, is not likely to be forgotten by those who studied with him at that time. He, too, was recognised as an admirable physician, and as one who gave special care to the therapeutical and dietetic treatment of disease. There was never a more painstaking, accurate, and methodical physician than Dr. Peacock. He took the notes of all his cases in great detail, and generally dictated them to his clerks. His teaching, therefore, though excellent in quality, was perhaps a trifle dry and unattractive; nevertheless, it was very highly appreciated. Among the surgeons Joseph Henry Green took the lead. He enjoyed an immense reputation, and I believe deserved it. He was of lofty stature and commanding presence, with a handsome intellectual face. He was a man of rare endowment and wide culture, and an admirable surgeon. He was a consummate orator. I did not know him at his best; for though he did his work in the hospital and school, he had ceased to take much interest in it. His lectures were the lectures which he had delivered without change for years. In the hospital visits he was always accompanied by his assistant, Mr. Solly, who did most of the duties under the eye, and liable to the correction, of his superior. John Flint South was a man of a very different stamp. He was kind-hearted, but hot-tempered and crotchety, and delighted to put on a roughness and not unfrequently a coarseness of manner which those who knew him could pardon on account of his many excellent qualities, but which to strangers and patients was often offensive. But he was a most industrious man, and performed all his duties with remarkable thoroughness and conscientiousness. I suppose people now rarely consult his great edition of Chelius's Surgery, of which his own notes formed by far the larger portion, and I am inclined to think by far the more valuable. It would be impossible in the limits of a brief address to speak of all the members of the staff. But I must not overlook Samuel Solly, Le Gros Clark and John Simon. Solly was a brilliant and enterprising surgeon. But he was more than that, for he wrote a work upon the anatomy of the brain which had and deserved a high reputation; and he was a landscape painter of no mean skill. Of Le Gros Clark and John Simon I should like to say much more than I dare. Suffice it for the moment that to these two great surgeons and to South and Solly, probably more than to any others, students were indebted for their surgical education.

Although there was abundant opportunity of learning medicine and surgery in the wards and in the out-patient rooms, students were not required, as they are at the present time, to take clinical appointments, and most of the more valuable posts that are open to them now did not then exist. The clinical clerkships were got for asking, and those who did not ask were not appointed. There was no such post as that of house-physician, but all medical duties in the absence of the physicians and surgeons were performed by the apothecary and his assistant. The dresserships were more sought for, and indeed they were of remarkable value, for the dressers enjoyed much more freedom in dealing with patients and in taking responsibility in the emergencies of practice than they are allowed at the present time. But house-surgeoncies were instituted in my own early days (I was one of the first to fill the post), and curtailment of the privileges of dressers began to take place.

We were provided with good teachers. Members of the staff were responsible for the systematic lectures on surgery and medicine, but, in addition, Dr. Marshall Hall lectured on nervous diseases, and Dr. Gregory discoursed on the exanthemata. But it was, I think, in the anatomical and physiological departments that the teaching was most systematic and best. We had no practical physiology in those days, but the systematic course of lectures was efficiently carried out. Richard Grainger had been associated with his elder brother for some years in teaching anatomy and physiology in the Webb-street School, and had been imported into St. Thomas's three years before I joined it. He was an excellent physiologist, one of the best of his day, and his lectures were singularly instructive, clear, and attractive. He was a striking illustration of the fact that a man who is in earnest may be a first-rate lecturer, in the sense of being able to make his meaning clear and to command the attention of his audience, without being in any sense an orator or even a fluent and consecutive speaker. Mr. Grainger was a tall, gentlemanly, quiet, amiable, and amiable-looking man, who took a great interest in his work, as well as in his pupils, who, in return, held him in the greatest affection. I may perhaps recall the fact that latterly much of his time was given to sanitary investigations, and that he was one of the pioneers in the field of public health. Mr. Le Gros Clark was the lecturer in anatomy; and those who know how he speaks now may judge how well and pleasantly he lectured then. Perhaps in relation to this I may venture to recall a little incident of my student days. I recollect that when I went into the anatomical theatre to hear my first lecture I had no notion until the lecturer entered the room what kind of man he was, and I have to acknowledge that I was so far attracted by the personality of the lecturer that, though I was a fairly industrious student, I proceeded to spend my time in taking his portrait in my note-book, instead of paying due attention to his discourse.

I shall not recall all the excellent men who at one time or another taught in the dissecting-room. But in my second year a gentleman became chief demonstrator who, I believe, had previously for a short time occupied the same post, and who continued chief demonstrator for more than thirty years. I speak of George Rainey, who was in the fulness of his powers, I think, during the period to which I am now specially referring. There were men at the hospital of higher intellect, of wider culture, of more imposing presence, and of greater refinement than he; but there was not one whose lessons were more highly appreciated, who had greater influence among the students, or who stands out more prominently among the memories of those days. He was a small, spare, ill-dressed, untidy man, with a bald head, auburn hair, a ruddy face, which in form, features, and expression bore a close resemblance to that of John Stewart Mill, and a weak, husky voice. He passed his time almost wholly between the dissecting-room and a small apartment with a bay window looking into the dissecting-room from above, where the chief part of his microscopical work was done. It was in this room that most of those fine injections for the microscope with which his name

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is identified, and of which our museum contains a choice collection, were made; and it was here that he carried out most of those inquiries which brought him reputation as a physiologist and a thinker. Possibly some here present may call to mind one occasion when in the midst of a winter session he obtained leave of absence for six weeks. It was naturally thought he was out of health and wanted change of air. But he passed the whole of the time (excepting the nights) in his den above the dissecting-room, where he could be seen from below deeply engaged in some physiological investigations. His demonstrations were very clear and simple, and largely done by putting questions to those whom he was teaching. But the most interesting feature about the man, and that which chiefly explains the great influence he had over his pupils, was his habit, usually about luncheon time, and later in the afternoon when the daily work was drawing to a close, of sitting in front of the dissecting-room fire and entering into conversation with such pupils as happened to congregate around him. The conversations were on all kinds of topics. But, no matter how they began, they generally before long diverged into discussions concerning science, morality, or religion. A favourite method with him was to fix upon one man, to ply him with questions on the Socratic principle, and then (as often happened), having led him into contradictions, or having made him display his utter ignorance of the subject he was talking about, or having induced him to express views or sentiments which were absurd or reprehensible, to lay bare the unhappy victim's errors and inconsistencies, to overwhelm him with a torrent of chaff, sarcasm, and logic, and to wind up by expressing his own views with a manner and in language which were singularly impressive. Many a student retired from such encounters a good deal crestfallen, but few, if any, showed resentment, and many I am sure were benefited by them.

The celebrated Dr. Thomas Hodgkin had been imported from Guy's Hospital to be the demonstrator of morbid anatomy at St. Thomas's, but he remained only a short time, and had left before I entered. The growing importance of pathology, however, was fully recognised, and it was as a pathologist with clinical duties that Mr. Simon shortly afterwards was introduced into St. Thomas's Hospital. I recollect well the introductory address he delivered in the Grand Hall of the Hospital before the governors, the staff, and the students, on the occasion of his appointment, and its striking eloquence. It is needless to say that whatever Mr. Simon undertook to do, he did with all his strength, and admirably. His lectures on general pathology were always eagerly attended, and were valuable not only for what they taught directly, but for their suggestiveness, and for the impulse they gave to pathological work in the hospital. Among others who lectured at one time or another during this period were some men of assured eminence, and some who were then comparatively unknown, but have since achieved greatness. Among the former were Mr. Thomas Taylor and Dr. Dundas Thomson, distinguished chemists; among the latter, Dr. Gladstone (now a well-known member of the School Board, and a chemist of the first rank as an investigator and discoverer) and Mr. Huxley.

Any picture of the old St. Thomas's would be incomplete which did not include a sketch of the apothecary and medical secretary. There was no more striking figure in the institution than Mr. Whitfield, the third and last of his name who had filled these important posts. He was then a handsome man in the prime of life, and occupied a position which gave him immense influence. He was the apothecary, and that meant, not only that he was at the head of the drug and dispensing department, but that he was the resident medical officer, and exercised control over patients, over house-surgeons and dressers, and over nearly everybody and everything else, and that he shared with the physicians the medical fees. He was the medical secretary, and in that capacity had more authority than anyone else over the medical school and all its arrangements. He was the depository of all the unwritten rules and traditions of the hospital and school. Moreover, he was in fact, though not in name, the treasurer's prime minister. He was thus the most powerful subject in the hospital kingdom. Nor was he the man to let any advantage or influence which he possessed slip from his grasp. As a rule, he no doubt exercised his legitimate and his usurped powers for the benefit of the place, at any rate for what he thought its benefit, and took an active part in introducing useful reforms. But there is also no doubt that he was instrumental in introducing changes of which the staff did not approve, and which many of us thought and think were detrimental in their effects. He was a man of much liberality and kindness of heart, and ever a real friend to the student and all who were in need.

In some important respects the times to which I am referring were times of transition; and not only were great changes actually in progress, but the foundations were being laid of improvements which have since been effected. In my early days the nursing at St. Thomas's, like that at all other hospitals, was, to say the least, discreditable. The sisters were, for the most part, respectable women, if not trained nurses, and some were women of remarkable ability and fitness. But the nurses generally were slovenly, dirty, and disreputable, which is not to be wondered at when it is borne in mind that they not only nursed the patients, but scrubbed the floors, purchased and cooked their own food, and slept, many of them, outside the hospital. But after a few years the treasurer of that time, the late Mr. Baggallay, with the aid mainly of Mr. Whitfield and our present excellent matron, cleansed the Augean stable, and gradually introduced the system of nursing, which has become perfected with time and now prevails. The reconstruction of the nursing department led, in the course of a few years, to further far-reaching arrangements. For when, shortly after the Crimean war, Miss Nightingale had decided that the national testimonial which had been presented to her should be devoted to the establishment and maintenance of a school of nurses, she, on account of the recognised excellence of our nursing arrangements, entered into negotiations with the governors, which resulted in the establishment of the Nightingale School in connexion with St. Thomas's—a school which for more than a quarter of a century has provided skilled nurses for hospitals and infirmaries throughout the British dominions, has helped to develop and still further improve our own nursing, has been the parent of many similar institutions, and still flourishes in our midst. As I have already stated, the house-surgeoncy was instituted within my recollection. The creation of this office foretold the creation of the correlative office of house-physician. But, though the importance of such an appointment was fully recognised, it was not possible to make it until the retirement of Mr. Whitfield should leave the authorities free to deal with the clinical portion of his duties; and that was not to take place for a good many years. And lastly, the medical and surgical registrarships, appointments valuable for the hospital and valuable for those who hold them, were created towards the end of this time. It may be interesting to recall the fact that the first registrar was my colleague Dr. Ord; the second, my colleague Dr. Stone.

It will be acknowledged, I think, gentlemen, that St. Thomas's in the Borough during the time I knew it was a great and growing institution, and that the survivors of those who were then connected with it, and their heirs, are justified in looking back upon it with pride. The hospital itself was a grand hospital. As I have shown, among the physicians and surgeons were men of the greatest eminence in their profession; among the lecturers and teachers men whose teachings were unsurpassed. I am bound also to acknowledge that, though we were not always on such good terms as were desirable with the treasurer and the governors who acted with him, these gentlemen had the good of the hospital and school at heart, and did much in many ways, and much successfully, to promote their interests and advancement. The school, too, was successful. Students had excellent opportunities afforded them, and, on the whole, were well taught; and many men who have since achieved eminence were turned out by us in those days. Our numbers, too, had been gradually increasing, so that latterly we were treading on the heels of our successful rival, Guy's. When I delivered my first address in 1858 there was no suspicion of the fate that was impending; everything was prosperous, and prosperity seemed assured. A few domestic troubles occurred, indeed, about this time; but they were temporary troubles affecting the staff and teachers, and not the students, and could have had little, if any, injurious effect on the progress of the school. In 1862 the hospital became the property of a railway company, and for some months hospital and school were in abeyance.

When the crisis came it was a subject of serious consideration among those who were in authority whether the hospital should remain dormant until a new permanent hospital was erected on a new site, or whether in the meanwhile it should go into lodgings. By the adoption of the former plan much money would have been saved, which

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would have gone towards defraying the cost of the new buildings; by the adoption of the latter the continuity of the beneficial functions of the hospital would be secured. I think the governors did right to adopt the latter alternative. But it was also a serious question among the members of the medical and surgical staff and the lecturers whether, even if the hospital should continue its functions, the medical school should be maintained. For some thought that the maintenance of a failing school would be attended with no credit or advantage; and everyone knew that, as in order to keep the school together the expenditure would have to go on as before, there was not only a strong probability that the surplus for division would prove scarcely worth dividing, but a possibility that the lecturers and teachers might have to put their hands into their pockets to pay for the privilege of teaching. It was decided to continue the school; and, again, I think the right course was taken. I may mention, however, that the latter anticipations were in the main justified; for on looking through my memoranda for the purposes of this address, I find that for seven years of those passed in our temporary abode my average yearly income from the school was just £16 10*s*., and in one year amounted to the magnificent total of £12. I was lecturing on physiology with Dr. Ord.

The site acquired for the temporary hospital and school was the old Surrey Zoological gardens, which had ceased for some few years to fulfil their original functions, and in which there had subsequently been erected a large hall for music and dancing, where also Thackeray lectured and Spurgeon preached. With no little skill the building was converted into a hospital of three floors, of which the lowest one was devoted, half to the purposes of a ward, half to the out-patient department, and of which each of the upper two floors constituted one magnificent ward holding upwards of eighty patients. The hospital contained about half the number of beds the old hospital had contained. It was designed only for temporary occupation, and its plans and arrangements had of course to be made conformably to the capabilities of the building to be adapted. Nevertheless, the arrangements were really good; the wards were very imposing, light, airy, and convenient, and they remained sweet and healthy to the last. The infectious cases were accommodated in the giraffe-house. The museum, library, dissecting room, and lecture theatres were distributed about the grounds, some occupying the monkey-house and other former abodes of beasts or birds. The school buildings, though they had been hastily prepared and were somewhat rough in character, were fairly convenient, and no one had much reason to complain of them. But the charm of the place was the beautiful and large garden in the midst of which the hospital and school were placed, with its pretty walks, its avenues and copses, its flower beds and lawns, and its picturesque lake of one or two acres or more in extent.

By this time many changes had taken place in our staff of medical officers and lecturers, and many others occurred before we found ourselves in the building in which we are now assembled. Green and South had retired from the surgical staff, and Grainger from the physiological lectureship, and, among others, Dr. Brinton had been added to our number. Before we left the Surrey Gardens Barker and Bennett, Solly and Le Gros Clark, had all taken farewell of us, and Brinton had died. I may add that few of the later vacancies thus created were immediately filled up; not, however, because suitable applicants were not forthcoming, but partly because a large staff was not needed for the work of the hospital, and partly because it was thought best that the inauguration of the new hospital that was preparing for us should be made the occasion for strengthening the staff by the addition to it of a careful selection of men of eminence or of promise, whether educated in our school or attracted from other institutions.

There are two men whose names are identified with the later history of the old hospital and the earlier history of the temporary hospital of whom I may venture to speak. Dr. Brinton became connected with the school, as Mr. Grainger's coadjutor in the chair of physiology, at a time when Mr. Grainger was beginning to find his strength failing and unequal to the work required of him. He was a man of much ability and brilliancy, an eloquent and effective lecturer, and, as a physiological lecturer should be, an excellent draughtsman. After a few years he was appointed one of the physicians, and at once took a leading position as a clinical teacher. His career unfortunately was a short one, and he died while quite young of kidney disease. The other was a man whom I have not yet named, and who, I daresay, has long slipped out of the memory of many here who were once familiar with him. I speak of Edmund Montgomery, who for several years was our demonstrator of morbid anatomy. I think, however, some may manage to recall that tall, slim, handsome young man, with his profusion of crisp, curly, dark hair; with his British name but German accent, for he had been brought up from infancy in Germany among Germans, and when he came to England a few years before he joined us knew little or nothing of the English language. Some of us who were intimate with him knew that he possessed a depth and striking originality of thought, an extent of knowledge, and a command of language which casual acquaintance would probably never have suspected of him. It must be more than twenty years since he left us, and nearly as many since circumstances took him to the wilds of Texas, where he has since resided, leading (not from choice) the precarious and hard existence of a backwoodsman. It will surprise most, and I hope gratify many, of those who were his friends to learn that among his rough, uncouth, and uncongenial surroundings, in spite of continuous daily toil and penury, he has continued to pursue his philosophical studies, and that his papers published during the last few years, discussing with exquisite eloquence profound metaphysical problems, have secured for him at length a foremost place amongst American, and I believe European, philosophers.

Although our migration to the Surrey Gardens, and our sojourn there, were in many ways of serious injury to most of us, although our labours there were carried on under many discouragements and with much inconvenience, although for the second time within the memory of some among us the school had become unprosperous, and although we looked forward to the better days which we saw approaching, I must acknowledge that I look back to our nine years' sojourn in the Surrey Gardens with much more pleasure than pain. There was much good fellowship between all those who were banded together to carry on the work of the institution. The few pupils we had were of more than average merit; they were, I think, content, and certainly were loyal. And there are few more pleasing recollections than those of the academic shades haunted by the studious and meditative, of the grassy lawns alive with cricketers and others who indulged in athletic exercises, and of the frozen lake gay with its crowds of skaters.

The scene once more changes. In 1871 Her Majesty opened the magnificent hospital within the walls of which we are now assembled—a hospital, as far as I know, unsurpassed, and which, whatever its faults may be, and despite all the adverse criticisms of native faultfinders, is the admiration of almost every foreigner that visits it. We turned our backs on the old Surrey Gardens, over which the tide of time has since swept, carrying away with it everything of interest and beauty that adorned its surface, and leaving only a sediment of bricks and mortar; and we entered on our new career with the commencement of the winter session. The hospital, which was now practically completed, had been three years building. During this time arrangements (in which the medical officers had had no unimportant share) were carefully made for strengthening, by the infusion of new blood, the staff, which had been undergoing attenuation through the successive retirement of some of its most experienced and ablest members, and for effecting many improvements in the hospital and school. Among those who were invited to become members of the staff were, on the surgical side, Mr. (now Sir William) Mac Cormac (who indeed joined us ere we left the Surrey Gardens), recommended to us by his brilliant services during the Franco-Prussian war, and by his recently-published "Notes and Recollections of an Ambulance Surgeon"; Mr. Francis Mason, one of Sir William Fergusson's favourite pupils; and Mr. Henry Arnott, who has since left us for the Church, but whom we selected on account of his scientific promise;—on the medical side, Dr. Murchison, whose reputation was even then world-wide; Dr. John Harley, who had passed a distinguished career at King's College; and Dr. Payne, who had already made a reputation for himself as a pathologist;—and, lastly, in the ophthalmic department, Richard Liebreich, at once oculist, artist, and musician. It will probably still be allowed, as I think was acknowledged at the time, that the selection was, on the whole, well made, and that the addition of these to a still larger

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number of able and distinguished men, already fellow-workers for years, constituted a strong and many-sided staff. Among the beneficial reforms introduced into the hospital were those relating to the resident medical appointments. The long-delayed retirement of the apothecary, who, however, retained his medical secretaryship, made it possible to put the drug and dispensary departments under the care of an educated pharmaceutical chemist, and to bring the arrangements for the care of the medical patients, during the absence of the physicians, into harmony with the corresponding surgical arrangements. I will not discuss details; but all who know anything about the hospital, are aware that the plan of having a resident assistant-physician and a resident assistant-surgeon, who enjoy supreme control in the absence of their superiors over the medical and surgical patients respectively, house-physicians and house-surgeons, who are responsible under these rules for the specific care of groups of patients, and clinical clerks and dressers at the bottom of the scale, who perform various subordinate but necessary duties in respect of the patients and make records of their cases, has answered admirably in practice; that the scientific interests of the medical officers, the educational interests of the pupils, and the sanatory interests of the patients alike have been more and more advanced; and that, while no doubt the nursing of the hospital has been undergoing gradual improvement under the direct and indirect influence of the Nightingale School, the relations between the nursing department on the one hand, and the medical students and others who work in the wards on the other, has become more and more friendly and pleasant. Indeed, the experience at St. Thomas's has shown in the most striking manner that a large medical school and a large nursing school may be carried on concurrently in the same institution, not only without jealously and without quarrels, but with the maintenance of the most cordial relations and to their mutual benefit. Among the clinical improvements, it must not be overlooked that the obstetrical has advanced like other departments, and that the specialties, more particularly perhaps those relating to the eye and throat, have been developed with singular success.

As regards the school, old lectureships and demonstratorships were rearranged, and new lectureships and demonstratorships were created; a redistribution of appointments was effected, and the newly added members of the staff had freely allotted to them such posts as seemed best suited to their abilities and their lines of work. It would be impossible within the limits of time at my disposal to discuss all the changes that were made. Moreover, many further changes have occurred between that time and the present. I may, however, refer to two or three matters. A few years ago practical physiology as a course for medical students was undreamed of; but a department of practical physiology was provided for in the new school, and has been, and is being, conducted with much success. It is only within the last few years that the pathological importance of microbes has been discovered and bacteriology has come to be recognised as an important part of medical study. Thanks to the energy and scientific spirit of Mr. Ballance and Dr. Theodore Acland, a bacteriological laboratory has been established, and is in work. It is well known that the museum of St. Thomas's Hospital has always been peculiarly rich in pathological specimens, and that it contains a series of preparations which are of great historical interest, notably Sir Astley Cooper's collection, including many of those from which the illustrations for his works were taken. The museum was much damaged by its two removals and during its sojourn in the Surrey Gardens; but since it has again found a suitable home, its importance and value have increased year by year, and now, in its way, I should think it is almost unrivalled. We are indebted for the progress, largely to the enlightened liberality of the treasurer and governors, but directly to the admirable labours of two successive curators: Professor Charles Stewart, who was with us for many years, and who was a year or two ago, much to our loss, elevated to the curatorship of the museum of the College of Surgeons; and Samuel Shattock, who now occupies the post, and has signalised his brief tenure of office by the most splendid work, and of whom I may mention especially that during the last few months, with the aid of Dr. Stone and Mr. Plowman, he has rearranged, renovated, and enlarged the Museum of Materia Medica, which, now that it is completed, is probably the finest, most perfect, and most serviceable museum of the kind in existence.

Year by year, gentlemen, during the fifteen years we have occupied our present site, our school, which had been so often and so seriously checked in its career, has increased in usefulness and prosperity, until once more it occupies a leading position among the metropolitan schools of medicine. Nor can I see any cloud in the horizon—any reason why our success should not be maintained in the future. But while the school grows and prospers those who contribute to its progress drop out one by one, and one by one new comers fill the places thus vacated. Fifteen years is a short time—at any rate seems short to those whose journey of life approaches completion, and for whom the abyss into which all must finally plunge is already within easy distance. Yet many changes have occurred even in this short time; and not only have we had losses amongst those who were with us from the beginning, but some of those who joined us later have disappeared from our midst. Some have died; some have left us from age or from ill health; some have transferred themselves to other spheres of usefulness. Our late treasurer, Sir Francis Hicks, under whose reign the present hospital was built, and to whose sagacious energy we are indebted for the carrying out of most of the improvements which I have discussed, died after a short illness nine years ago. Mr. Whitfield passed away a year earlier. Poor old Rainey, whose laborious and useful career among us had extended over so many years, worked with us for a time at this hospital; but he was falling into ill health, and probably few of those who only knew him here could form any conception of what kind of man he had been. He retired on a pension some years ago, and died but recently. Peacock and Murchison are both dead; and it is only within the last few months that poor Frank Mason, whose genial temper and kindness of heart had won for him the warm affection of all his colleagues and of everyone who knew him, whose musical accomplishments were our admiration and delight, and whose eminence as a surgeon was universally recognised, was, to our infinite loss and grief, snatched away by death, in the prime of life, in the fulness of his powers, and when there seemed for him the promise and the assurance of a long and prosperous career. But great though our sorrow is when those we love are removed from among us, Time, the healer, brings its compensation in the hallowed memories that remain when the sting of loss is no longer acutely felt. And irreparable though our loss may seem when eminent colleagues and great teachers depart, they are yet not wholly lost to us, for their names, their examples, and their works survive and add accumulating lustre to the school which they adorned.

I have now completed, however inadequately, the task which I had set before myself; and it only remains for me to give, on behalf of myself and colleagues, a cordial welcome to you who come among us to-day for the first time; to advise you to do your duty, and work systematically at your studies, for you have much to do and little time to do it in; and to urge you here and in the future to show yourselves worthy heirs of those proud traditions which are the common heritage of all who join our ancient hospital and ancient school; and lastly, to thank you, Mr. Treasurer, and you my audience, for the kind patience with which you have listened to my address.

ON BASIC TUBERCULOUS PHTHISIS.

By PERCY KIDD, M.D., F.R.C.P.,
ASSISTANT-PHYSICIAN AND PATHOLOGIST AT THE BROMPTON HOSPITAL.

(*Concluded from p. 617.*)

Cases where the Physical Signs were at first confined to the Base. Post-mortem: Oldest Disease at the Apex.

1. G. W——, aged twenty-one, engineer, admitted in August, 1883. Family history of phthisis very marked. Winter cough for three years. Continued cough and symptoms of phthisis for two months. At right posterior base, dulness, bronchial breathing, and scanty subcrepitant râles; at left base a few similar râles. Gradual extension of disease, and death from pneumothorax one month later.

Necropsy.—Lobular caseous infiltration of right upper lobe, with a small cavity at the apex, which had perforated the pleura. Lower parts of lung showed a massive catarrhal pneumonia of a greyish pink colour, marked with small yellowish spots. Left lung showed scattered nodular

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disease only. The disease was evidently oldest in the right upper lobe.

2. E. B——, aged thirty-four, female, admitted in July, 1883. Winter cough for two years. Slight hæmoptysis in the summer of 1882. Cough worse since her confinement in March, 1883, and several attacks of hæmoptysis. At right posterior base dulness and crepitation; in the left interscapular region some crepitation also. The diagnosis at first was "chronic pneumonia," but was soon altered to "phthisis." The patient died in November, 1883.

Necropsy.—The right lung contained a large apex trabeculated cavity with several small cavities in upper lobe. The lower parts were studded with tuberculous nodules, but contained no cavities. The left lung showed similar but less advanced disease, with one small cavity at the apex only.

3. H. N——, aged thirty-seven, female, admitted in September, 1883. She had pleurisy thirteen years ago; cough and expectoration for nine months. At the right posterior base there was slight dulness and subcrepitant râles. Gradual extension of disease, and death from pneumothorax in March, 1884.

Necropsy.—Right upper lobe entirely excavated. A large cavity at the apex of the lower lobe. The rest of the middle and lower lobes was studded with caseating nodules, and contained a few small cavities. The left apex contained one small cavity, and was very fibroid and studded with some old dry caseous nodules; the rest of the lung was spongy, and contained a few tuberculous nodules. There was one small cavity in the lower part of the upper lobe. The oldest disease here seemed to be situated in the right upper lobe.

Cases where the Physical Signs were most marked at first at the Base, but were present also at the Apex. Post-mortem: Oldest Disease at the Apex.

1. T. M——, male, aged fifty-two, admitted in October, 1884. His mother died of phthisis. The patient had been ailing for three months, and had had cough, expectoration, &c. At the left posterior base, dulness, bronchial breathing, and subcrepitant râles; a few similar râles at the left apex also. The disease extended gradually, and the patient sank.

Necropsy.—Pleura over left lung much thickened along the posterior border; left upper lobe fibroid posteriorly, and studded with caseous nodules; at the apex a large trabeculated cavity; anterior parts spongy, but contained some tuberculous nodules; lower lobe fibroid at its apex, and contained a small cavity; remainder of lobe spongy and studded with a few nodules. Right lung emphysematous; it contained a few scattered nodules, most abundant at the upper parts. Disease most advanced and oldest at the apex of left upper lobe. Old disease also at apex of lower lobe.

2. E. M——, female, aged forty-three, admitted in February, 1886. Had suffered from occasional winter cough for some time; for the last nine months continued cough and expectoration. Physical examination revealed contraction of the left side; dulness throughout, most marked at posterior base; breath sounds weak over front and at posterior aspect of apex, with increased vocal resonance. Behind, at the base and lower interscapular region, there were intense cavernous signs, amphoric breathing, and gurgling râles. On the right side the breath sounds were exaggerated. The case was thought to be possibly an empyema communicating with the lung, or fibroid disease of the base and bronchiectasis. The patient died suddenly from profuse hæmoptysis.

Necropsy.—The apex of the left lung contained a very old cavity, with dense, blackish, fibroid walls, and the pleura in this region was very much thickened. The bronchus leading to the cavity was greatly constricted by the fibroid growth. The lower lobe contained numerous cavities of more recent date, and the lung was studded with numerous nodular caseous masses. A ruptured pulmonary aneurysm was found in one of the cavities in the lower lobe. The right lung was spongy, but contained some tuberculous nodules.

A consideration of the foregoing cases will show, I think, how easily an erroneous estimate of the proportion of basic to apical phthisis might have been framed if the clinical investigation had not been supplemented by post-mortem examination. To Cases 1 and 2, which I described first, six or seven others might have been added in which the clinical evidence of basic phthisis was fairly strong, and the number of basic cases then would have appeared to be at least eight in a total of 412, or about one in fifty. The fact that physical signs of disease are at first limited to the base, or are more marked here, does not prove that the disease has originated in this position, and does not preclude the existence of older lesions in the upper parts of the lung. In making post-mortem examinations of cases of phthisis it is not uncommon to find that one lung is apparently healthy, whereas, on making the usual sections of the organ, deeply seated nodules or even cavities are discovered, surrounded by healthy lung. Such lesions are usually not recognised, and often cannot be detected during life. The existence of cavities of considerable size in the apex of the lung may be masked by other conditions—e.g., great thickening of the pleura, rigidity of the walls of the vomica, or, what is still more important, narrowing or obliteration of the bronchus leading to the cavity. It must be remembered that cavities and other diseased conditions of the apex are much more likely to escape detection than similar lesions of the base. At the lower part of the lung the respiratory current is extremely vigorous, owing to the proximity of the diaphragm and the greater range of expansion possessed by the chest walls in this region. On the other hand, the circulation of air in the apex is much less forcible, as the result of its greater distance from the diaphragm and the comparatively unyielding nature of the upper part of the thorax. If, in addition to these natural disadvantages, the elasticity of the apex is impaired, there must be a corresponding weakening of the respiratory current in this part of the lung. When excessive secretion accompanies such a transformation of the apex, as is so commonly the case, we have the effects of obstruction of the bronchus superadded to the diminished expansion of the lung tissue, and there may be no auscultatory signs to help us beyond weakness or absence of the respiratory murmur. This condition is more likely to be produced where there is a permanent obstruction of the bronchus in question from surrounding fibrous contraction or from other causes, which need not be discussed here.

It remains now to account for the presence of marked physical signs at the base in those cases where old apex disease gives no evidence of its existence. The physical signs are probably the result of a congestive or inflammatory condition associated with œdema, and at times with partial collapse, of the lung. The lower lobes are known to be specially prone to such affections, and the lungs of persons that are already the subjects of tuberculosis are more liable to intercurrent congestions than healthy lungs. The presence of scattered tuberculous nodules might of course give rise to a localised congestion, but I do not think it is necessary to assume the existence of actual tuberculous lesions at the base in all such cases. This view receives some support from the analogy of pleuritic effusion in phthisical patients. Clinical and post-mortem experience would seem to show that such pleurisies are by no means invariably tuberculous. It is difficult to see why the disease departed from its usual order, and selected the base as its starting-point in Cases 1 and 2. As far as could be ascertained, there had been no previous affection of the lung that could have impaired the vitality of the base in either case, though such an explanation is naturally suggested at first. In both instances the patients stated that they caught cold some few months previously, and never recovered from the effects of it. It may be that the initial affection was a simple congestion or pneumonic attack of the base, which prepared the soil in this region for tuberculous infection. I cannot believe, however, that this is the whole explanation; for on this supposition basic phthisis should be of more frequent occurrence than it actually is. It would be admitted, I think, that a history such as this is not uncommonly given by phthisical patients, in whom it is the rule to find the disease limited to the apex at the outset. It is worthy of note that both the cases described were men. Dr. Pollock (*loc. cit.*) mentions that of the sixty-four cases in which he found the base most affected fifty were males.

The special incidence of phthisis on the apex of the lung has yet to be adequately accounted for. It is unnecessary here to enumerate the various explanations that have been suggested, none of which are entirely satisfactory. There is certainly much evidence in favour of the view that phthisis, in most cases at least, is the result of the entrance of a virus into the lung through the respiratory passages, though it is probably an indispensable condition that the lung shall be in some way prepared for the reception of the

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poison. If this be so, it is not unlikely that the phthisical proclivity of special regions of the lung will be found to depend, in part at least, on certain peculiarities of the corresponding bronchial tract. In his monograph on "Pulmonary Hæmorrhage," Dr. Reginald Thompson makes a remark which I think suggests one factor in the case. In speaking of the respiration of the upper lobe, he says (p. 23), "The bronchial tubes of this lobe, which are not altered in size, remain permanently open, and do not filter the air in the same way as the bronchial tubes of the lower lung." If we compare the slight expansion of the upper lobe which takes place in ordinary respiration with the free expansion and contraction of the lower lobes depending on the immediate action of the diaphragm, assisted by the elasticity of the lower thoracic walls, we must acknowledge the truth of Dr. Thompson's statement. The bearing of this fact on the direction most likely to be taken by particles inhaled into the air passages is obvious.

In conclusion, it may be said that the cases which have been related show that the diagnosis of basic phthisis is not so easy as would appear to be the case at first sight. There are several diseases of the base which cannot always be distinguished from tuberculosis by the ordinary methods of examination. Without attempting to discuss the diagnosis of these various diseases, I would strongly urge the importance of a routine examination of the sputum in all such cases. I could quote instances where a most unexpected light was thrown on the case by this means. True basic tuberculosis is extremely rare; I believe it is even rarer than it is commonly thought to be; whereas the base is specially prone to other affections. I would suggest that the question which has been discussed not only possesses pathological interest, but has also a distinct bearing on the prognosis of certain cases. Keeping in mind the extreme rarity of primary basic tuberculosis, we may reasonably hope that a given case of localised disease of the base is not tuberculous, and if we fail to discover tubercle bacilli in the sputum on repeated examination, our hope becomes almost a certainty. But inasmuch as non-tuberculous disease of the base may be complicated by the supervention of tuberculosis, as in four of the cases that have been described, it is well to examine the sputum at intervals, even when we are satisfied in the first instance as to the non-tuberculous nature of the case, especially if the patient's progress be unsatisfactory. It may be said that the prognosis of chronic disease of the base is generally unfavourable, and this is true up to a certain point; but if tuberculosis can be excluded, a more hopeful prognosis may generally be given.

Brook street, W.

SOME REMARKS ON THE OPERATIVE TREATMENT OF CHRONIC OBSTRUCTION OF THE SMALL INTESTINE.

BY R. L. KNAGGS, M.A., B.C. CANTAB., F.R.C.S. ENG.

THOUGH intestinal obstruction has been brought prominently forward of late years at the Societies and in the journals, the operative treatment of chronic obstruction, when the small intestine is the seat of the disease, has attracted but very little notice. This may result from a feeling that was expressed in 1863 by Dr. Fagge, that "contractions[1] are *par excellence* the cases in which an operation must necessarily fail." But a study of Dr. Fagge's own cases—sixteen in number, three of which were hopeless cases of malignant disease—shows that there were no less than nine in which modern surgery might have interfered, otherwise than by a palliative enterotomy, with some prospects of success. It is true post-mortem records may appear to lend themselves to surgical ideas with much greater ease than the cases themselves would have done, but, after making some allowance for this, there would still remain a considerable proportion not beyond the surgeon's aid. This fact alone is sufficient to justify exploratory laparotomy in all cases of obstruction from contractions which are not obviously hopeless.

But though exploration is not unfrequently undertaken, it seems generally to end in an attempt to obtain relief by enterotomy only, or further action is altogether abandoned. Now, though this operation in the majority of cases can only be expected to be palliative, it occasionally proves to be of greater value, as will be seen from cases quoted further on. Its *modus operandi* is probably to relieve the distension above the obstruction—a condition which in not a few is sufficient to cause complete occlusion of the intestinal canal; and when by this relief the channel is once more opened, the intestinal contents are enabled to pursue the normal course, care in diet and medication being quite sufficient to prevent a fresh accumulation taking place. But these cases can hardly be considered to be free from the danger of a fresh obstruction occurring at future dates; though, should that happen, the reopening of the old wound would probably be all that was needed for their relief.

So few cases of operation bearing upon this form of obstruction have been recorded during the last seven years that the following are all that have been obtained from the different available sources.

1. Mr. Sidney Jones[2] records a case of chronic obstruction resulting from localised peritonitis, consequent upon ovariotomy performed four years previously. Enterotomy was performed after abdominal section, the artificial anus being 29 in. from the ileo-cæcal valve and the intervening coils, and the cæcum "being matted together by glandular and inflammatory infiltration." The patient survived three weeks.

2 and 3. Dr. Malins[3] records two cases in which obstruction occurred from adhesions of the intestines from pelvic inflammation. In one laparo-enterotomy was performed with success, and the artificial opening closed spontaneously, the natural passage becoming restored. In the other the same operation was adopted, but first some adhesions were separated. When reported, the bowels acted weekly, and the artificial anus, though diminishing, had not closed.

4. Mr. Treves[4] records the case of a woman upon whom he operated for obstruction three months after the reduction of an inflamed hernia. Laparotomy was performed, and a distended coil was found adherent in a bent position close to the femoral ring. The adhesions were broken down, and the case did well.

5. Mr. Meredith,[5] at the Clinical Society, recorded the case of a woman in whom intestinal obstruction set in a week after ovariotomy, which had been complicated with general adhesions. Laparotomy was performed early, and two separate coils of intestine were found kinked and obstructed by the traction of two separate omental bands. These were released, and the patient was in good health six months after.

In these few cases enterotomy has certainly played a successful part, but such success is exceptional and cannot be held to justify the employment of enterotomy in the hope of its being a curative procedure. The attempt to remove the obstruction by the separation of adhesions alone was made in two cases, but one, being an example of acute obstruction, perhaps hardly comes within the scope of this paper. No record of resection of the intestine for this condition, except Koeberlé's case (*vide infra*) has been found, and yet it is particularly applicable, as Mr. Treves has pointed out, for those cases where the obstruction is due to the effects of a contracted mesentery.

In Dr. Fagge's forty-ninth case[6] the cause of the obstruction "was found in a mass of rounded tubercles in size from that of a pigeon's egg to a nut. These formed collectively a mass as large as a small fist, situated in the mesentery close upon the intestines, and the surrounding inflammation, which appeared to have been long passed, had by contraction produced much puckering, shortening, and thickening of the mesentery, and so complete a stricture of the intestine that scarce room was left for the passage of a small quill." Here is a case in which resection seems to be specially indicated; whilst in the preceding one (Dr. Fagge's forty-eighth case), though several feet of bowel were implicated in the obstruction, which was also due to disease of the mesenteric glands, the same operation might also have been found possible; and in considering the propriety of resection in any particular case, it may be remembered that as much as two yards of small intestine have been successfully removed by Koeberlé.[7]

Cases may occasionally present themselves in which relief

[1] The term "contractions" includes several pathological conditions—such as matting of intestine, kinking by traction of adhesions &c., adhesions compressing the gut, and shrinking of the mesentery. Though "contractions" practically comprise all cases of chronic obstruction of the small intestine, three of Dr. Fagge's cases affected the large intestine.

[2] THE LANCET, May 12th, 1883.
[3] Brit. Med. Jour., Sept. 22nd, 1883.
[4] Intestinal Obstruction, p. 109.
[5] THE LANCET, April 3rd, 1886.
[6] Guy's Hospital Reports, vol. xiv., p. 335.
[7] Treves on Intestinal Obstruction, p. 477.

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may be afforded by some exceptional method, which the condition of the parts will suggest. Such would Dr. Fagge's fiftieth case seem to have been. In this, "three feet from the cæcum a portion of small intestine, not more than an inch in length, was pale, empty, and contracted. Opposite the constricted point the mesentery contained a group of enlarged strumous glands, the largest the size of a walnut, filled with chalky matter. It appeared as if these glands, more particularly the largest, had by their growth and increase drawn a portion of mesentery backwards to the spine, and thus, by expanding the two layers of the serous membrane and widening the base of the peritoneal ligament, had acted like a broad ligature." Here, though somewhat contracted, the channel was not completely obstructed, and it is possible that the less serious operation of enucleation of glands might have removed both the obstruction and the disease. Now, although a fair proportion of cases of "contraction" might be satisfactorily treated either by enterotomy, which might lead to cure, or by division of adhesions, or by resection, or possibly by some other method which particular conditions might suggest; yet there will be met with cases in which the second and third plans can hardly be entertained because of the large amount of bowel implicated, or the intimate nature of the adhesions between the matted bowel and other parts, or perhaps for other reasons.

In the *British Medical Journal* of Feb. 13th and March 13th, 1886, cases of pyloric stricture are recorded by Mr. A. E. Barker and by Mr. T. H. Morse of Norwich, in which it was attempted, in one case with success, to open a fresh path for the passage of alimentary matters by uniting an opening in the jejunum with an opening in the stomach. This idea, apparently new to English practice, is capable of a much wider application, and it is probable that it may be found of use in dealing with certain cases of contractions not amenable to the two methods just alluded to, and yet in which enterotomy, with its attendant discomforts and probable evils, should be avoided if possible. It must be remembered that in the latter operation, in these cases, the small intestine may be opened, either of necessity or by accident, high up; and that if the fæcal fistula does not close, the whole or a part of the contents of the intestine are discharged from the body in a very imperfectly digested state.

Quite apart, then, from other discomforts which are likely to be present, the results of malnutrition will not be long delayed, and the patient may die of inanition as the result of an operation undertaken in the hope of saving his life. If, however, a connexion can be made between the intestine above and the intestine below the obstructing coil or coils, a fæcal fistula is avoided, and the absorbing power of the intestine below the obstruction is still utilised. Moreover, in some cases the coils constituting the obstruction may be rendered useful; for the distension above them, being relieved entirely at the operation, would be prevented from again taking place, and the passage through the obstruction might possibly be reopened and kept patent. The intestinal contents, having a choice of two ways, would probably make use of both, and in the event of any renewal of obstruction occurring, or should the original track remain impervious, the artificial deviation would become the regular channel. It might act either as a safety valve, as a colotomy wound has been known to do, or it might replace entirely the normal canal. By this operation extensive division of adhesions between coils, and between coils and the parietes, might be avoided, and less risk would be run of fresh adhesions forming and a similar state of affairs resulting. The obstruction would be overcome without interfering with its cause—a point of considerable importance, and one which hitherto has only been accomplished by enterotomy, to which there are grave objections. Lastly, it is interesting to note that Nature has herself solved the difficulty in this very way, though in Nature's cure there existed imperfections that art might hope to avoid. The case referred to is the well-known one recorded by Mr. Birkett.[8] In this case a loop of small intestine contained in a strangulated inguinal hernia, which had been reduced, was found to have become adherent, and narrowly constricted at the site of the neck of the sac. A communication had formed between the adherent coils above the constriction, and this communication had served as the channel for the passage of the contents of the small intestine. Death was caused by extravasation of fæces through the breaking down of some of the adhesions.

(To be concluded.)

[8] Path. Soc. Trans., vol. x., p. 128.

TROPICAL ABSCESS OF THE LIVER.[1]

By SURGEON A. TOMES,
INDIAN MEDICAL SERVICE.

THE term "tropical" applies to those large, usually single, but frequently multiple abscesses of the liver which are met with in persons who reside in the tropics, or who have been subjected to tropical influence at some period of their lives, and which are the result of a parenchymatous inflammation of the organ induced mainly by such influence. The disease is now so well known and recognised as an independent affection that further definition is unnecessary. On the average, hepatitis causes every year 1600 admissions to hospital, from 70 to 80 deaths, and from 160 to 200 invalidings, in the British army in India, consisting of 56,000 men. This heading includes many cases of "liver" that do not go on to suppuration, but the deaths are to be attributed to abscess.

In the Bengal army, with a strength of from 35,000 to 38,000, the average annual admissions for the five-year period 1877-81, for liver-abscess alone, amounted to 63. Broadly speaking, the admission-rate for hepatitis in the army in India is over 28·9 per 1000 of strength, the invaliding rate 3·03, and the death-rate 1·13, the admission-rate for abscess in Bengal being 1·8 per 1000. All parts of the peninsula are not equally unhealthy in respect of hepatitis. The Madras Presidency comes first and Bengal follows. In 1883 the mortality was distributed thus:—Madras army, 1·72 per 1000; Bengal army, 1·06; Bombay army, 0·82.

It is open to doubt whether army returns fairly represent the liability of Europeans generally, irrespective of class or occupation. The proportion of admissions to hospital for hepatitis to total admissions is 2·1 per cent. in the army. What it is in civil life I have not been able to ascertain. Nor have we the means of determining the liability according to class. My own impression is that no great difference obtains, if any, in respect of class or occupation. Cases of abscess are constantly being reported from civil practice, and for every one so recorded there must be many that we hear nothing of, while every case is recorded in the army.

The next question is, to what extent is the native of the country liable? It was formerly supposed that he enjoyed almost complete immunity. Everyone who has had experience in native practice must be aware that this is not the case. That hepatitis is far less common in the natives than in foreigners is strikingly shown by the accompanying figures for 1883.

	Admissions per 1000.	Deaths per 1000.
British army (54,673)	1602 = 28·9	63 = 1·13
Native army (114,830)	173 = 1·5	21 = 0·18
Native gaols (88,174)	87 = 1·0	19 = 0·22

While in British military hospitals the proportion of admissions for hepatitis to total is 2·1 per cent., in native military hospitals it is only ·16 per cent., and in native gaols ·09 per cent.

My experience leads me to believe that the disease is not necessarily so rare among natives in civil life as these returns show it to be in the army, and that its prevalence varies according to season and locality. I am of opinion, too, that liver abscess in the native has a somewhat different mode of origin, being exclusively due to climatic influence, and independent of habits of life. It occurs in the native as a late result of general constitutional decay from prolonged malarial poisoning. The subjects have invariably been exposed for a long period to malarial influence, and are the victims of a profound cachexia. In Europeans, on the other hand, the liver appears to be excited to inflammation under short exposure to local influence; more than 50 per cent. of the cases occur during the first four years of residence. The attack may be of a splenic type in the European, but it is low and insidious in the native. It is a more serious affair in the latter, and the mortality per cent. of those treated is higher. In a vast country like India climates of every degree of unhealthiness are to be found; and malarious districts, from topographical or meteorological causes, are subject to changes in the intensity of the endemic incidence. A notable example of such a phenomenon has occurred during the past ten or fifteen years in Bengal. Since 1870 a portion of that

[1] Read before the Middlesex Hospital Medical Society.

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province has become decidedly more unhealthy from malaria. A kind of epidemic wave passed over the tract from north to south-west, involving in its course the district of Midnapore. The result of the invasion is that the inhabitants now bear the impress of the noxious influence in a marked degree, in the shape of enlarged spleens, anæmia, bowel complaints, and cachexia generally. Dispensary records also show an increase in admissions for liver abscess coincident with the increased prevalence of fever. While civil surgeon at Midnapore, I treated there, in the three years 1882-84, no less than twenty-one cases, all in natives. Local practitioners informed me that in former times the disease was practically unknown.

In Europeans the greatest liability occurs between the ages of twenty and forty-five. Abscess has never yet been met with in any person, native or European, below fifteen, and it is rare above fifty. In childhood it is absolutely unknown. Among Europeans men are more liable than women.

British Army in India, 1883. Hepatitis.

	Admissions per 1000.	Deaths per 1000.	Admissions per cent. of total admissions.
Men (54,000)	30	1·41	2·1
Women (3290)	15·5	·91	1·8

The disproportion is still more marked as regards abscess itself. In Waring's 300 cases 9 only were in women, and out of 82 cases reported in various journals 2 only were in women. On the other hand, out of 23 cases in Europeans and Eurasians treated at the Presidency Hospital, Calcutta, as many as 15 were females. The proportion of females to males among the British-born population in India is 1 to 7. I have reason to believe that owing to the exclusive climatic mode of origin in natives there does not exist the same difference in liability of the sexes as in Europeans. Among my 21 cases, mostly dispensary patients, 3 were females; and bearing in mind that the population of females to males attending dispensaries in Bengal is about 1 to 6, this, as far as it goes, does not indicate any very great irregularity.

Authorities are agreed that suppurative hepatitis in Europeans in the tropics is mainly due to the effect of climate. But intemperance, over-indulgence in animal and highly spiced foods, and indolence, are spoken of as predisposing causes in the individual; while exposure and chills are frequently noted as exciting causes. I am quite disposed to admit that chill or exposure starts the attack in many instances; this is clearly the mode of origin of many of the reported cases. But have we sufficient evidence of the part the other conditions play in the production of the disease? The great difference in the liability of the two races is attributed to the variation in the nature of diet and drink, but it may equally be due to difference in degree of acclimatisation. The great reduction in liver diseases in the army is as likely due to improved sanitary arrangements and protection against climate as to the steadier habits of the men. I am inclined to think that the "intemperate" theory, at all events, has been made too much of. An examination of reported cases throws very little light on the subject, because complete histories are so rarely given. It is a significant fact, however, that out of 425 cases of hepatic abscess, including Waring's 300 and others from the journals, the subjects were said to be intemperate in 50 instances only. Whatever influence personal habits may have, the fact remains that, quite independently of any of them, when an inhabitant of temperate climates goes to reside in the tropics, there is a tendency for his liver to become disorganised, though fortunately this actually occurs in a relatively small proportion only. This applies to the dark races as well. Natives of mountain regions in India, on taking up their abode in the steamy plains of Bengal, are said to become liable to hepatic abscess. Change of climate affects hill cattle in the same way. Imported horses suffer to a large extent; the death-rate from hepatitis among troop horses in India amounts to 2 per 1000 (Collins).

What is the particular element or combination of elements in a tropical climate that induces hepatic disease? It cannot be heat alone; liver abscess is least common in such parts as the Punjab, Central Provinces, &c., where there is greatest heat. Nor is it malaria alone, for the disease is unknown in malarious parts of the temperate regions of the world. The distribution of hepatitis according to district points to a combination of moist heat, dampness of subsoil, and concentration of malaria as the condition most favourable to its production. Still there is something over and above this in the climate of India that we do not understand. An exactly similar combination exists in the West Indies, though the disease is not so frequent there (in the proportion of 1 to 4).

Dr. Budd's now obsolete theory of the dependence of tropical abscess upon dysentery only requires a passing notice. It is unsupported by clinical observation, statistics, and post-mortem examinations. Dysentery being a disease caused by similar conditions of climate, very frequently complicates liver abscess, and a very serious complication it is, but there is no causal relation between the two. Their concurrence in the same individual is a pure coincidence. It is important to remember that the signs and symptoms even of the hepatitis that precedes it, and of the abscess itself, are apt to be ill marked and insidious; they often escape notice, or some or all of them may be absent. It has been estimated that they are well marked in 8 per cent. only, while the abscess runs a perfectly latent course in 13 per cent., even in Europeans. Instances are on record where the subjects were engaged in their usual occupations up to the very last. Soldiers have been on full duty up to a few hours of death by the bursting of an abscess internally. In one case an abscess burst while the man was actually on duty. The signs which in a given case of hepatitis lead to suspicion of suppuration are: The enlargement of the liver, which loses its uniform contour and develops more particularly in some one direction so as to form a bulging; localisation of pain and tenderness; pleuritic or peri-hepatitic friction; rigors, chills, sweats, and—most important of all—the temperature. Several apyrexial cases are on record, but I cannot conceive suppuration occurring without the temperature being affected at some time or other. A careful scrutiny of the temperature range, auscultation, and bilateral measurements of the chest are called for. The temperature must be taken every hour, so that a complete reading for the twenty-four hours may be obtained. Subjects of liver abscess are frequently also suffering from malarial fever. A want of periodicity and a resistance to quinine will indicate hepatic origin.

By combined statistics the mortality of unrelieved hepatic abscess is found to be about 90 per cent. Death occurs with or without rupture. About one-half of all abscesses that are left alone remain intact. Spontaneous evacuation through the lungs occurs in about 20 per cent., less than half of which recover. Out of 33 cases that recovered spontaneously (Waring's and others), 16 burst into the lungs, 8 into the intestine, 1 into the stomach, and 2 ended apparently in spontaneous absorption. The extent to which an abscess will develop is surprising. The contents are sometimes to be measured rather by quarts or gallons than by ounces. The whole organ may be converted into a bag of pus. In one case 17 pints were found at the post-mortem examination. I have myself removed as much as 80 oz. at a single operation; while 200 oz., 400 oz., and even 1000 oz. represent the aggregate amounts removed by successive tappings by others. These enormous collections are mostly seen in natives, who are apt to apply for treatment only at too late a stage of the disease.

Solitariness is a character of tropical abscesses, but they are often multiple. In Waring's 300 cases they were solitary in 62 per cent., multiple in 37·8 per cent. Multiplicity is explained by the mode of origin. The disease begins as multiple foci of softening. The foci coalesce as they increase in size. If the areas coalesce into one, a single abscess results; if they combine in groups, the abscesses will be multiple.

(To be concluded.)

TWO CASES OF ABDOMINAL SECTION.

BY A. S. UNDERHILL, M.D., M. CH., S.S. CERT. CAMB.,
SURGEON TO THE GUEST HOSPITAL, DUDLEY.

RECENTLY I have had two cases in which I performed abdominal section, and as these—although fatal—possess points of clinical interest I venture to record them.

CASE 1. *Rupture of a Tubal Pregnancy.*—M. I——, aged twenty-two, married eighteen months, one miscarriage at eighth week, a florid, healthy-looking woman, had catamenia regularly till seven weeks ago, when she was suddenly seized with acute pain in the abdomen, referred chiefly to the region of the right ovary, which continued for about

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ten days, leaving her fairly convalescent at the end of two weeks. As she was feeling stronger, she walked for some little distance, but on her return home was again seized with the acute pain over the right ovary, became perfectly blanched, staggered to a sofa, and was profoundly collapsed for about twelve hours; from this condition she very slowly recovered, and still referred all her pain to the right side of the lower abdomen. On vaginal examination I found the os and cervix uteri œdematous and very tender, but unlike what is usually found in commencing pregnancy, the uterus was fixed and deflected to the right; posteriorly there was a tender semi-solid mass; abdominal percussion—as far as could be ascertained on account of the tenderness—gave a duller note than normal from the groin to the umbilicus on both sides. Her condition during the next twelve days was very unsatisfactory. She had a recurrence of peritonitis, and suffered most distressing pain. Her pulse was never under 140, and her temperature averaged 103° F. Neither herself nor relatives would consent to any operative interference. On the fourteenth day her symptoms became aggravated, and as she would evidently sink before many hours elapsed, permission was given for abdominal section.

On opening the abdomen in the mesial line about a pint and a half of very dark-coloured serous fluid gushed out. On the right side the uterus was bound down by adhesions and coagula to the brim of the pelvis. The right broad ligament was a mass of coagula, the Fallopian tube being much thickened and enlarged; the left broad ligament was encased in coagula, but it was impossible to recognise the Fallopian tube; the intestines at the lower part of the abdomen were matted together by inflammatory adhesions. To appearance and touch much of the coagula resembled placental tissue, but nowhere could I find a trace of an embryo. I removed as much of the coagula as possible without injuring the intestines, thoroughly washed out the cavity with warm water, and inserted a glass drainage-tube into the pelvis. She rallied well from the operation and suffered little pain. On the eighth day, however, she died, obstinate constipation and vomiting being the predominant symptoms.

In my opinion the patient had a right tubal pregnancy; the first attack of peritonitis killed the ovum, which burst after the exertion of walking, and so caused the hæmatocele. If at this time consent had been obtained for the operation her chances of recovery would have been more promising; but on the fourteenth day fresh bleeding took place and handicapped the operation, from which she had not sufficient strength to rally. Under similar circumstances I should not hesitate to advise an early operation, as I think I might promise a fair relief from pain and a probably favourable result.

CASE 2. *Cystic Degeneration of both Ovaries with an old Hæmatocele.*—M. C——, aged forty-two, married, with six children, nine months ago was attended by a midwife, who delivered her after a very severe labour. Some weeks afterwards, not feeling strong and suffering great bearing-down pains and pain in defecation, she consulted a medical man, and was treated by rest in the recumbent position and tonic medicine, but not feeling much better she was admitted under my care into the Guest Hospital. I found the uterus retroflexed, but fairly movable on the sound. Posteriorly, in Douglas's pouch, there was a tense swelling, somewhat caudate in shape and very painful on pressure. Per rectum it was more defined; over both ovarian regions there was considerable tenderness, so much so that it was impossible to ascertain their condition. She could not walk or stand without much bearing-down pain, and she had occasional attacks of obstinate vomiting; the temperature was normal. Permission to explore the abdominal cavity could not be obtained; I therefore treated her with morphia suppositories and mild aperients, keeping her entirely in bed, considering that hers was a case of pyosalpinx—very full—coming on after delivery. As she did not obtain the relief she anticipated, she left the hospital at the expiration of three weeks, but returned after two months, during which time she had had no cessation from pain, and had lost 12lb. in weight.

As the patient was now quite unable to do anything, and was evidently becoming worse, after consultation I performed abdominal section, and found the right ovary considerably enlarged and full of cysts; the left ovary was also in a state of cystic degeneration, and bound down firmly in the recto-vaginal cul-de-sac. On removing it, a small cyst which was adherent burst, its contents being lost in the pelvic cavity. On rectal examination, directly after its removal, the caudate swelling could still be felt, tense and firmly adherent, evidently an old hæmatocele, which had become partially absorbed, and was now organised. In both instances the Fallopian tubes were intact. I thoroughly washed out the pelvic cavity with warm water; and as hæmorrhage was very slight, I did not resort to drainage. She passed a fair night, but never completely rallied from the shock, and died twenty-eight hours after the operation.

No post-mortem examination was allowed, but I examined the wound, and found that there had been no bleeding; the stumps of the appendices were healthy-looking, and, as far as I could ascertain, there was no appreciable cause for her death except exhaustion. Had she consented to the operation when it was first proposed, I feel assured that her life would have been saved. I have twice operated on more seemingly unpromising cases with favourable results, but this patient was of a depressed, nervous temperament, and greatly dreaded the operation, making her on this account a very unfavourable subject. The case was of interest on account of its diagnostic difficulties, as the swelling was in shape, position, and history typical of what is usually found with pyosalpinx.

Tipton, Staffs.

A CASE OF RAPID PLEURAL EFFUSION TREATED BY ANTISEPTIC INCISION.

BY ALBERT WILSON, M.D.

THE following case is of interest, as it shows the advantage of an incision made during the early stage of pleural effusion before it had become a case of empyema. In fact, the effusion was so large and so rapid, and the dyspnœa and cardiac depression were so great, that the case would never have reached the stage of empyema if prompt operative treatment had been delayed.

The patient, Mrs. B——, aged thirty-five, was first seen by me on March 3rd, 1886. She complained of breathlessness and increased cough, and she had been ill nearly a week. There had been no rigors; the pulse was 140, small and weak; the expectoration was mucous, slightly rusty; respiration 40; temperature under the tongue 102°. On examining the chest, the left base was dull on percussion. The front of the chest was normal in all respects. Auscultation: At the right base there were moist râles and crepitations; at the left base there were no respiratory sounds audible; vocal resonance was increased over the right base, whilst it was œgophonic over the left base; vocal fremitus was increased over the right base, but absent over the left. The absence of vocal fremitus decided the diagnosis as pleurisy and pneumonia.

March 4th.—The dulness is higher posteriorly, and in the axillary line there is also dulness in front from the left side when she sits up. The first sound, which is weak, is loudest behind the sternum. Temperature 101°; pulse 140; respiration 46.

5th.—General condition worse and increased effusion. Absolute dulness at and below the third rib in front, and from a line parallel with the fourth dorsal vertebra behind. The right chest is normal, except for cardiac dulness over the fourth right costal cartilage. The apex of the heart is now almost under the right mamma. There is a total absence of respiratory sounds all over the left chest, both back and front, except above and just below the clavicle. Œgophony is well marked at the angle of the left scapula, the vocal resonance is altered in front, vocal fremitus is absent on the left side, and there are moist sounds over the right base. Temperature 101°; respiration 48; pulse 140. The pulse tracing shows a very small wave, due to the feeble cardiac impulse and the contracted arteries. Operative treatment was now imperative. Being a disciple of Lister, I did not feel justified in opening this large cavity without the spray, as it was a small foul room, and the impure air entering the pleural cavity would be very dangerous and certain to cause suppuration. Further, to wash out the cavity, which I had allowed to become septic, would be an unnecessary labour for me, and a needless and rather dangerous entertainment for the patient. I preferred prevention to cure. I made an incision between the seventh and eighth ribs posteriorly to the axillary line. Clear serum poured forth in abundance; more than five pints were

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collected and about a pint was wasted. Air entered the chest freely. When I introduced my finger through the ribs, I could not reach the lung for at least half an hour after the incision was made. When the lung did expand the surface of the pleura was found to be quite rough. A tube four inches long was inserted downward and backwards, and I applied a small dressing of boracic lint soaked in mercurial solution. Within an hour the heart sounds were to be heard under the left breast. Friction was heard posteriorly as soon as the pleural surfaces were apposed. The friction gradually appeared from above downwards, as the expansion of the lung was very gradual, and when I left it had not fully expanded at the base, which I proved with my finger. The pulse tracings, taken every few minutes, were very interesting. Before the operation it was a slight deviation from a straight line, being so feeble. Soon after the operation the pulse wave expanded, getting larger and fuller until there was a full, sharp, apex systolic wave with a marked dicrotic wave, showing low arterial tension, due to the relaxation of the arteries and the removal of the pressure on the heart and main vessels.

6th.—Temperature 101°; pulse 120; respiration 32. The wound was dressed under the spray. There was a free serous discharge through the tube, and air enters with inspiration. The physical signs of pleurisy are well marked.

7th.—Temperature 101°; pulse 120; respiration 26. Wound dressed and tube removed. I inserted my finger to feel the pleura. It felt rough and spongy, like the placenta. I passed my finger round, separating the adhesions of the two surfaces, and it reminded me of a case of placenta prævia. It was the adhesion of the surface that determined me to remove the tube.

8th.—Temperature 101°; pulse 108; respiration 26.

10th.—Temperature 100°; pulse 98; respiration 24. Wound dressed. Very little thin serous discharge. Physical signs normal over both lungs. I could not trace the cause of the slow fall in temperature. The patient, though very weak, is doing well, considering that she was at death's door before I operated.

15th.—Temperature 99°; pulse 90; respiration 20. Wound dressed, and healing satisfactorily. Before the operation I measured each side of the chest from the anterior to the posterior mesial line just below the mammæ. The right half was 16 in., the left 17¼ in. To-day, five days after the operation, each side measures 16 in. alike. The spine is perfectly straight, and the left chest is not shrunken. These results could not be attained by aspiration, however skilfully done. The patient was soon restored to perfect health.

Leytonstone.

A CASE OF SUPPOSED FRACTURE OF NECK OF SCAPULA.

BY G. Y. EALES, M.R.C.S. ENG., L.R.C.P. ED.,
HOUSE-SURGEON, TORBAY HOSPITAL; LATE ASSISTANT DEMONSTRATOR OF ANATOMY AT ST. GEORGE'S HOSPITAL; AND SENIOR ASSISTANT-SURGEON, SIRHOWY IRONWORKS.

LAST September R. B——, aged fifteen, a spare, delicate-looking lad, came to me with an injury to the left shoulder. He was playing with several boys, butting at each other with folded arms, when he was knocked over and fell on his left shoulder. On examination I found the following points of observation:—1. Considerable bruising of the deltoid. 2. The acromion process prominent, with depression underneath, and outer third of the deltoid flattened. 3. Arm lengthened about an inch and a half, and drawn away slightly from the side. 4. A rough object high up in the axilla in the neighbourhood of the neck of the scapula. 5. Humerus rotated freely and smoothly, and with but little pain. 6. A round projection in front and below the shoulder, which proved to be the head of the humerus on rotating that bone. 7. On raising this projection upwards, outwards, and backwards, crepitus was produced; the contour of the shoulder was restored, with disappearance of the deformity. 8. Slight increase of vertical measurement around the joint. 9. Great freedom of passive motion, with but little pain.

Owing to the bruising I was unable to manipulate the coracoid process; I therefore put the arm up with a pad in the axilla, with the elbow raised and bandaged to the chest. Five days afterwards, the bruising and swelling having partially subsided, I took off the bandages and found the same condition of things as when I first saw him, but much more plainly. On raising the head of the humerus all the symptoms disappeared, accompanied by loud bony crepitus audible to the bystander; and on removing the reduction force all the above-named symptoms again appeared. I was struck with the ease and comparative absence of pain with which the fracture could be reduced, also the readiness with which it became displaced on removing the reduction force. The rough object in the axilla was now more distinct, and disappeared on reducing the fracture, and was apparently the scapular neck. I now noticed also that the coracoid process did not appear to move on reducing the fracture.

Remarks.—The noteworthy features of the case were (1) the ease with which the fracture could be reduced, together with the ensuing deformity on removing the reduction force; (2) the great freedom of passive motion; and (3) the striking resemblance to dislocation into the axilla. With regard to this latter, the lengthening of the arm, the freedom of passive motion, and the easy reduction of the deformity in the way I have mentioned were sufficient to exclude simple dislocation into the axilla. The other lesions which this injury simulates appear to be (1) dislocation of the humerus into the axilla, with fracture of its neck; (2) separation of the epiphysis of the humerus; and (3) dislocation of the humerus into the axilla, with fracture of a portion of the glenoid cavity of the scapula. The lengthening of the arm and the movement of the head of the humerus on rotation are against the first two. Holmes, in his System of Surgery, states that it is the opinion of most modern writers on surgery that a simple fracture of the anatomical neck of the scapula never occurs, and that Malgaigne has shown that the symptoms of the supposed lesion are identical with those of dislocation of the humerus into the axilla, with fracture of a portion of the glenoid cavity of the scapula. In another place Holmes admits that the two lesions are indistinguishable during life. I hardly dare to express an opinion in the face of such high authority; but why should not a simple fracture of the anatomical neck of the scapula occur as readily as the more complicated injury? because the force to produce either must be of the same nature and very considerable. It appears to me that the symptoms of this case are so analogous to those quoted by Dr. Lotzbeck of Munich[1] and that recorded by Spence,[2] and bearing in mind the fact of the coracoid process being apparently stationary, that I feel justified in saying that in all probability this was a case of fracture through the anatomical neck of the scapula.

The lad having passed from my care and observation for treatment by another surgeon, I am unable to give any details of the progress of the case, but I afterwards ascertained that he eventually gained very good use of the arm.

Torquay.

A Mirror OF HOSPITAL PRACTICE,

BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Procemium.

WEST LONDON HOSPITAL.

ABSCESSES OF THE NECK AND BEHIND THE PHARYNX, ALMOST CAUSING DEATH FROM SUFFOCATION.

(Under the care of Mr. WAINWRIGHT.)

ABSCESS at the back of the pharynx is a very formidable disease, as is illustrated by this case, and requires the most prompt surgical treatment. The chief danger is that of suffocation, either from œdema of the glottis or the mechanical effect of the swelling. In this case the relief afforded by incision of the external abscess made it probable that the post-pharyngeal abscess communicated with it, but the subsequent progress of the case negatived this view.

[1] See New Sydenham Society's Biennial Retrospect for 1867-8, p. 240.
[2] Edinburgh Medical Journal, 1863.

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Simple incision with a guarded knife is usually sufficient to relieve the symptoms; but occasionally tracheotomy may be required, as in a case which was recently under our observation, where the flow of pus from the abscess was so copious as to stop respiration. For notes of the following case we are indebted to Mr. R. Lake, house-surgeon.

On May 10th, 1886, an adult, G. H——, was admitted into the hospital suffering from attacks of dyspnœa. His voice was low and harsh, his face very anxious, and the breathing distressed, with frequent attacks of dyspnœa. On examination of the neck a large fluctuating swelling was found beneath the trapezius on the right side, and on looking into the mouth the pharynx was found bulged out on that side and pushed towards the left. There was much swelling in the right submaxillary region. He gave the following history: The swelling with pain began six weeks previously, and there had been gradually increasing dysphagia, so that for the last seven days he had only been able to swallow fluids. He had had syphilis five years previously, and some months ago a general eruption of rupial character broke out, from which he is still suffering.

An incision was made into the abscess under the trapezius, with antiseptic precautions, and about two ounces and a half of pus let out. This relieved the breathing, and it was hoped that the other abscess would be emptied through this. He was given ice to suck.

May 4th.—At 1.30 A.M. he had become much worse; the breathing stopped entirely for a few moments, and it required artificial respiration to bring him round. An examination was now made with the laryngoscope, and there was found to be a large amount of œdema of the right side of the pharynx and tongue, and a swelling on the same side involving the whole of the right side of the pharynx, and projecting beyond the middle line. This was incised, and about two ounces of fetid pus escaped. The symptoms were at once relieved, and when the patient spoke it was with a voice which was now full and clear.

12th.—A mixture containing ten grains of iodide of potassium was ordered, and he was placed on a diet of meat, and allowed stout. He was able to take solid food for the first time during nine days.

14th.—The incision in the pharynx had closed, and so was reopened, two ounces of glairy fluid escaping.

17th.—The dose of iodide of potassium was increased to twenty grains.

20th.—Much better. There is only slight discharge from the incisions.

27th.—The abscesses are quite healed, and the eruption on the body is rapidly improving under large doses of iodide of potassium.

STROUD GENERAL HOSPITAL.

TWO CASES OF EXTERNAL URETHROTOMY.

(Under the care of Mr. STORRY.)

CASE I.—Walter W——, aged twelve, was admitted on Feb. 26th, 1886. The boy gave a history of having fallen, some sixteen months ago, on some stone steps, the sharp edge of one step having caught him in the perineum. There was at the time of the accident considerable bruising and swelling of the perineum, and blood issued from the meatus on attempting to pass urine. He was unable to micturate, and a medical man was consequently sent for, who passed a gum-elastic catheter, and repeated this operation in a week's time. From this time up to the date of his admission the boy had not sought further advice.

On admission, the urine passed in drops, the boy crying out and straining severely; he complained also of a smarting pain at the back of the perineum. Several attempts were made by Mr. Storry and the house-surgeon to pass an instrument, but without success. External urethrotomy was therefore decided upon, and on March 2nd the patient was etherised with one of Clover's small inhalers; and before operating Mr. Storry tried again to pass a catheter, but this was impossible. Mr. Wheelhouse's grooved straight staff, with the beak turned up as a blunt hook, was passed down to the stricture; the urethra was opened upon the staff, and the sides of the divided urethra being held apart with forceps, the small probe-pointed director was after considerable difficulty passed into the bladder. The strictured portion of the urethra was then divided, and the tapering probe-pointed gorget introduced above the director into the bladder; a No. 8 silver catheter was passed through the meatus upon the gorget into the bladder, and the catheter tied in. This catheter was left for ten days, when a No. 9 silver was passed, the perineal wound having healed by this time. After this a No. 8 silver was passed daily, which after a time was changed for a No. 9.

The boy was discharged on April 12th, a No. 10 silver catheter being passed the same morning. He was told to return in three or four days, but failed to do so until a fortnight afterwards, when a catheter could not be then passed, so he was readmitted for a day or two, and was taught to pass for himself a No. 7 gum-elastic catheter.

July 19th.—He passes easily a No. 7 gum-elastic catheter every morning before going to work at a stick-mill in his neighbourhood.

CASE II.—Thomas W——, aged sixty, was admitted April 7th, 1886. The patient had gonorrhœa in the year 1855. He was for three months under treatment. He says "it gathered" at the time in three different places in the spongy portion of the urethra. After this he had no other attendance until 1886 when he suffered from retention and œdema of the penis and scrotum, and was admitted as an in-patient of this hospital. He then had catheters passed. For three years, at the least, he has had a fistula in the perineum and one at the inner part of the right thigh, and for two years he has had another fistula by the side of the frænum preputii.

On admission, the last three inches of the spongy portion of the urethra was of a cartilaginous hardness. Urine came only from the three fistulæ, none by the meatus. There was a deep cicatrix involving the lips of the meatus, through which a No. 1 silver catheter could be passed about a quarter of an inch.

April 13th.—The patient was placed under ether and a way into the urethra was attempted by the meatus, but a very fine probe only reached about a quarter of an inch. An attempt was then made to get at the urethra by means of the fistulous opening by the side of the frænum preputii, but this failed also. An incision was now made in the central line of the perineum through tissues which cut like cartilages, and after great difficulty the proximal end of the urethra was found, but after half an hour's searching the distal end could not be seen or reached. Mr. Storry then prolonged the incision in the left lateral lithotomy line and entered the bladder. The hæmorrhage was very slight. The patient was then taken back to bed, the urine for four or five days passing by the lateral incision. Several attempts were made to pass a catheter by the meatus, and at last one was passed about four inches.

27th.—The house-surgeon was successful in passing a No. 9 silver catheter, after having introduced several smaller ones through the meatus into the bladder. This was tied in for twenty-four hours, and the following day a No. 4 silver was passed and tied in, but this had to be removed on account of the pain and irritation it caused. For three days no instrument was passed; but on the 4th of May a No. 8 silver was passed pretty easily; a day or two later it was passed again, and the patient himself was instructed to pass a No. 5 gum-elastic for himself. The wound in the perineum by this time was healing rapidly, and no urine flowed by the fistulæ.

June 7th.—The sinus on the inner side of the thigh was laid open and scraped; the incision in the perineum has nearly healed, and the patient passes for himself a No. 6 gum-elastic easily.

21st.—The sore on the inner side of the thigh has healed, the fistula by the side of the frænum also is closed, and there is only occasional slight weeping from the perineal fistula. The patient was discharged to-day, being able to pass for himself easily a No. 7 gum-elastic catheter.

MATER MISERICORDIÆ HOSPITAL, DUBLIN.

CASE OF SPONTANEOUS CURE OF OVARIAN TUMOUR.

(Reported by Mr. C. H. CALLANAN; clinical assistant.)

MARY C——, aged twenty-nine years, was admitted on May 21st, 1886, suffering from ovarian tumour, which caused her great inconvenience, and had been undermining her health for some months past. She had been married two years, but had no family. Three months ago she consulted Dr. Duke, of Steevens's Hospital, for a swelling over the right ovary. It was excessively tender and painful, and gradually increased in size until it extended over the

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abdomen. Steevens's Hospital being closed, she was taken into the Mater Misericordiæ Hospital, and seen by Dr. More Madden, the obstetrical physician, who considered the case one for immediate operation, in consequence of the delicate state to which the woman was reduced in a short period and the intense degree of pain caused by the tumour. A few days after her admission the patient was seen in consultation by Dr. More Madden, Dr. Duke, Mr. P. Hayes, and Dr. Boyd, all of whom agreed that the case was one for ovariotomy, the diagnosis being a thin-walled, globular, well-marked multilocular ovarian tumour. The abdomen then measured 43½ in. in girth. Being close on the menstrual period it was decided not to operate until this should have passed, and it was accordingly postponed until June 15th, tonics being administered to increase the woman's strength. She was up and going about the ward, but on June 9th she took to her bed, complaining of intense abdominal pain. After some hours the pain was followed by incessant diarrhœa and profuse diuresis, which lasted four days. At the expiration of this period the abdomen was found to have considerably decreased and no trace of the tumour was discernible. The patient was again seen in consultation by the before-mentioned gentlemen, including Dr. Byrne. All concurred that spontaneous rupture of the cyst had taken place, with effusion of the ovarian fluid into the peritoneal cavity, its absorption thence, and evacuation by the bowels and kidneys. After this the patient gradually improved. An examination was made on June 16th. Some fluid was still discernible in the peritoneal cavity, but the abdominal pain and soreness were greatly reduced. To relieve the pain and help the absorption, an ointment made up of extract of belladonna and mercurial ointment was rubbed over the abdomen, and a mixture of iodide of potassium given, which she had been taking some time previously. The patient remained in bed about fourteen days, recovering both health and strength. The abdominal swelling had gone down to 29 in. The woman finally left the hospital on July 15th, and was again seen after a week, when she was in excellent health and spirits, being about to take a journey to the country.

ST. JOSEPH'S HOSPITAL, VICTORIA, BRITISH COLUMBIA.

ANEURYSM OF THE INNOMINATE ARTERY; SIMULTANEOUS LIGATURE OF THE COMMON CAROTID AND SUBCLAVIAN ARTERIES; HEMIPLEGIA; DEATH.

(Under the care of Mr. E. A. PRAEGER.)

S. B——, a Frenchman, aged sixty, applied for advice on Jan. 26th, 1885, giving the following account of himself. Family history very good. Has never had any serious illness. Had gonorrhœa years ago, but never had syphilis. Has been a gold miner and has done a great deal of "packing" goods to and from the mines. Two years ago a heavy weight fell on his chest. Shortly afterwards he noticed a swelling on the right side of the chest, between the first and third ribs. The swelling has gradually increased in size. Feels an oppression when he draws a long breath. Has a cough, which has only existed the last month or two, and expectorates a little bright blood occasionally. When he walks fast or goes upstairs, he experiences a feeling which he describes as "like palpitation of the heart, under the swelling." Sometimes when walking in the street he is seized with dizziness and inability to breathe, and has to catch hold of anything at hand to prevent himself from falling. Complains of constant pain at the back of the right shoulder and in the chest, under the swelling. Has a constant numbness in the right arm and hand, and says the pain is so bad that he is unable to sleep at night.

The patient's condition on examination was as follows:—Muscular, but not fat. There is an expansile pulsating tumour extending from the right sterno-clavicular articulation to the second intercostal space. The first and second bones of the sternum and the sternal ends of the corresponding ribs are bulged forwards. A loud rasping bruit is distinctly audible all over the upper part of the right side of the chest. Pulsation in the right radial is hardly perceptible; strong and regular in the left. On pressure being made over the subclavian artery the symptoms are modified. Heart sounds normal. The man was ordered fifteen grains of iodide of potassium three times a day and a low diet. This treatment was continued for some weeks without benefit. At the request of Mr. Praeger the patient was carefully examined by Surgeon-Major Harrison, A.M.D., and Staff-Surgeons T. Canning Hickey and J. Lyon, R.N., who concurred in the diagnosis of aneurysm of the innominate artery.

The man was so anxious that operative measures should be adopted for his relief, although the immense risk attending surgical interference was fully explained to him, that with the consent and valuable assistance of the gentlemen above-named, it was determined to ligature the common carotid below the omo-hyoid and the subclavian in the third part of its course. He was accordingly admitted into hospital, and, on March 26th, chloroform having been administered by Dr. Hickey, an incision parallel with the anterior border of the sterno-mastoid was made through the skin and superficial fascia. The deep fascia having been scratched through with the finger-nail, the artery was reached. At this stage the patient vomited, which caused slight delay, but eventually the aneurysm needle, threaded with strong carbolised gut, was passed from without inwards around the artery, and it having been ascertained that nothing but artery was included, the ligature was applied and pulsation in the temporal artery was found to have stopped. Neither the jugular vein nor the pneumogastric nerve came into view. The wound was sponged with carbolised water and drawn together with silver wire sutures. The patient's shoulder being depressed, an incision was then made in the usual way by drawing down the skin and dividing it on the clavicle. While making this incision the patient vomited, and two small superficial veins (which it was the intention to avoid) were accidentally cut across, and caused great difficulty in securing them. A second incision was then made upwards at right angles to the first, and the deep fascia having been torn through with the finger-nail, the subclavian artery was felt for, and the aneurysm needle, threaded as before, passed around it, and the ligature applied. Pulsation was found to be wanting in the radial artery. The brachial plexus was felt, but the subclavian vein was not seen. The edges of the wound were brought together with silver wire, and the arm having been enveloped in cotton-wool, the patient was removed to bed. Pulsation in the tumour was hardly perceptible. The patient soon rallied from the shock, and complained of pain in the neighbourhood of the operation wounds only. 9 P.M.: Very feeble pulsation was felt in the right radial, none in the temporal, strong and regular on the left side. Temperature in the left axilla normal, in the right 96°. He was perspiring profusely. A subcutaneous injection of a quarter of a grain of morphia was given.

March 27th.—Slept fairly well, but has been vomiting and retching violently. Temperature normal in both axillæ. Pulsation in tumour very much diminished, no bruit. Pulsation in right radial rather stronger than last night; hardly perceptible in the right temporal.

28th.—Temperature normal in both axillæ. Pulse 92. Very much stronger in the left than in the right radial. Not properly established in the right temporal. Pulsation in the tumour hardly perceptible.

29th.—Temperature normal. Pulse 72. Feeble in left radial; more so in right. Has difficulty in swallowing; complains of pain in his head; cannot protrude his tongue properly; his speech is thick and he appears deaf. Pupils contracted.

30th.—During yesterday the left side of the face became paralysed, and during the night the left side became hemiplegic. Temperature normal. Pulse 84, becoming stronger in the right radial, but not so strong as in the left. Still complains of pain in the head. Is quite conscious; converses sensibly, but with thick utterance.

April 1st.—Operation wounds have healed by first intention; hyperæsthesia of left side.

May 3rd.—Less hyperæsthesia; passing large quantities (several pints) of urine of low specific gravity (1005); acid, no albumen.

Aug. 10th.—The quantity of urine has steadily diminished under ergot. Complete loss of sensibility and motion in the left side.

Feb. 20th, 1886.—Has continued in much the same state; eats and sleeps well; has recovered sensibility, but not power of movement in the left side.

March 10th.—Caught cold a few days ago; had bronchitis, followed by exhaustion, to which he succumbed to-day—a year, less a few days, from the date of operation.

Remarks by Mr. PRAEGER.—I greatly regret that, owing to a mistake on the part of the hospital porter, no post-

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mortem examination was obtainable. The diagnosis arrived at was that the aneurysm was innominate, possibly subclavio-innominate, but that the aorta was not involved. Judging from the rapidity with which circulation was re-established in the right arm, it is probable that the first part of the subclavian, with the thyroid axis, was abnormally dilated. On several occasions previous to the operation, the patency of the vessels to the brain had been tested by making pressure on the right and left carotids together and singly, and after reading the article, written by Mr. Barwell, on this class of cases, this was considered one suitable for operation. Although the patient subsequently became hemiplegic (probably from failure in re-establishing the cerebral circulation), the symptoms of aneurysm gradually subsided, and there is little doubt that the operation succeeded in prolonging his life.

Reviews and Notices of Books.

An Introduction to General Pathology. By JOHN BLAND SUTTON, F.R.C.S. London: J. and A. Churchill. 1886.

IN this handsome and well-illustrated volume we have not only to welcome the work of a new writer, but, what is equally gratifying, to receive in it an abundance of new facts added to the pathological store. When, at Mr. Hutchinson's suggestion, the Pathological Society of London undertook to investigate more thoroughly than had ever before been attempted the diseases of animals, and had obtained with this object the co-operation of the Zoological Society, the services of Mr. Bland Sutton were secured, and in the main the facts recorded in the work before us have been gathered by him in the course of his five years' steady and unflagging pursuit of the objects which the Pathological Society had in view. The Transactions of that Society have been enriched by many communications from Mr. Sutton; but we venture to think that this further publication, which embraces so considerable a range, will astonish even the members of the Society, who have already been witnesses of the thoroughness and zeal with which he has pursued his researches. The gist of the contents of the volume was given by the author in his Erasmus Wilson Lectures at the College of Surgeons last spring; but it is needless to say that the topics there treated have received fresh illustration and considerable expansion here. The work is divided into five sections: the first, dealing with aberrations of nutrition, illustrates the subjects of hypertrophy and atrophy, correlation and degeneration; the second treats of inflammation and its results; the third is devoted to the cystomata; the fourth to neoplasms; and the concluding section reviews the subject of evolution as influenced by pathological processes. To adequately treat of such subjects in respect to the animal world, the writer must be as much a naturalist as a pathologist, and undoubtedly the present author presents just this combination. Such chapters as those on correlation and on the cystomata exemplify this, whilst the predominant idea of the work is the explanation of pathological facts by means of the evolution hypothesis.

Although for the most part the work consists of an aggregation of original observations upon facts of pathological interest in the animal world, there are not wanting pages in which the author shows that he possesses to a marked extent that great gift of generalisation which is so essential in the collation and comparison of individual facts. Perhaps the best instance of this is to be found in the chapter upon Inflammation, where Mr. Sutton boldly assigns a *rôle* to the ubiquitous leucocyte which far outstrips the conception of Cohnheim. For whereas that much-lamented observer and acute thinker was content to attribute the phenomena of inflammation mainly to deterioration of the delicate tissue of the vessel wall, Mr. Sutton, by a skilful use of the most recent discoveries of intercellular digestion and the phenomena of tissue-resorption as observed in the metamorphosis of the amphibian, sees in the white blood-corpuscle an active (we might almost say a combative) body which is stimulated to increase and multiply for the purpose of resenting injury and preventing the intrusion of foreign matter into the living organism. The conception is one which dazzles as much from its simplicity as from the ideas to which it gives rise, opening up suggestions in the direction of explaining the nature of so-called specific inflammatory neoplasms, and capable even of extension into the wider field of all new formations. Great as has been the dignity of the leucocyte hitherto—indeed, its amœba-like characters long since fascinated some naturalists, who endowed it with a special individuality,—it has certainly never been assigned so wonderful a *rôle* as Mr. Sutton would fain have us admit it to possess. We may nevertheless commend the study of this chapter as one full of suggestiveness to those who desire to extend our notions of pathological processes a little beyond their mostly too confined limits.

The chapters devoted to the Cystomata are full of interesting facts well marshaled. They go far to fill up a distinct lacuna in our knowledge. Indeed, the subject has never been adequately treated hitherto in any English text-book; for Virchow's classical description in his great (but unfinished) work on Tumours is not available to the English-reading student. Again, thanks to many observers, and largely to the author of this book, very material additions have been made to the subject, especially as concerns cysts in connexion with the reproductive organs; so that we venture to think that subsequent writers will be under great obligation to him for what he has done in this direction.

As to the chapters on Neoplasms, it must suffice here to say that Mr. Sutton is an ardent adherent to Cohnheim's doctrine of "tumour-germs," and that he adduces very numerous instances of various kinds of new growth in all varieties of animals which bear largely on that doctrine. Especially to be mentioned are the examples of teratomata, where, again, we find many new paths opened up, and advantage taken of the knowledge afforded by embryological research. Indeed, the book is one which will well repay careful study; and the fact that it is the product of one of our younger pathologists is encouraging, not only because it is written in the true scientific spirit, but because it is of good augury for many future contributions from the same source.

Il Clima di Roma. Conferenze fatte nella Primavera del 1885, inaugurando l'Istituto d'Igiene Sperimentale della R. Università di Roma. Con una Carta Topografica e Geologica dell' Agro Romano, e cinque Tavole illustrative. Por CORRADO TOMMASI-CRUDELI. (*The Climate of Rome.* Lectures delivered in the Spring of 1885, at the opening of the Institute of Experimental Hygiene in the Roman University. With a Topographical and Geological Map of the Agro Romano, and five illustrative Plates. By Dr. CONRAD TOMMASI-CRUDELI.) Rome: Hermann Loescher and Co. 1886.

MEDICAL climatology has made advances of which the importance could not be better appreciated than by comparing the present work with that published on the same subject by Sir James Clark half a century ago. Dr. Tommasi-Crudeli comes to his task equipped with accomplishments which were hardly considered as within the medical province in his distinguished predecessor's time. Himself an original authority in physiology and pathology, he possesses a knowledge of the earth's crust, its flora and its fauna, the waters that permeate it, the winds that sweep it, such as more than fulfil the Hippocratic ideal. So qualified, he has made a special study of the climate of Rome, and the results of his successive monographs on the subject are revised and condensed in the present volume.

When we talk of the Roman climate we cannot dissociate the theme from its distinctive characteristic—the malarial

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poison. What is this poison? Till the researches of Tommasi-Crudeli and Klebs, published in 1879, the most plausible answer was that of Dr. Léon Colin, who defined it as an "intoxication tellurique," an earth-poison generated by the surplus vegetative energy of an abnormally fertile soil, whose fecundity was very partially absorbed by the scanty sprinkling of herbage that overspread its surface. Cultivate this soil, render to this vegetative energy its appropriate pabulum, and you provide the antidote to malaria. Such, stated with extreme brevity, was the theory of Léon Colin, embodied in a work of great ability, which, appearing as it did at the outbreak of the Franco-German war, encountered a public too preoccupied to give it the study it deserved. Tommasi-Crudeli combats this theory. He denies that the Roman Campagna possesses anything like the exuberant fecundity with which it has been credited. Its really fertile tracts are few and far between, rarely compensating the agriculturist for his labour—as, indeed, was well known to ancient husbandmen. Then, again, if the poison were gaseous, as Léon Colin's theory implies, the malaria-surcharged atmosphere ought to be at its maximum at noon-day, when the exhalation from the soil is greatest; but, on the contrary, the localities in which malaria is most pronounced reach their maximum of danger in the morning and evening—those periods of the day when the difference of temperature between earth and atmosphere renders the ascending aerial currents most powerful and most apt to transport the material of the poison. That material, according to Tommasi-Crudeli, is a living ferment, encountered equally on the mountain and the plain, in dry soils and in humid. Its existence was suspected and unscientifically described as long ago as the decline of the Roman Republic by the agriculturist Varro, and its nature and form are defined by Tommasi-Crudeli as a "Schizomêtês bacillaris." For its development it requires a temperature not lower than 20° C. (a moderate degree of humidity) and the immediate contact of the atmosphere with the soil it infects. As the absence of a single one of these conditions prevents the development of the malaria, so certain localities exhibit at times a natural suspension of the poison. In winter, for example, the fall of temperature below the required 20° causes a thermic suspension; the loss of the necessary humidity under prolonged drought causes a hydraulic suspension; and the interposition of sheets of water or of a thick matting of turf on the laying down of a pavement, by preventing the immediate contact of the atmosphere with the infected soil, produces an atmospheric suspension of the malaria. All this argument is worked out with great clearness and force of style in the fourth and fifth lectures, which may be recommended to the teacher or lecturer as models of what academic exposition ought to be.

The various modes of clearing the Roman climate of malaria are examined in much detail, and cannot but interest the practical hygienist who has to deal with similar problems elsewhere. One striking demonstration, in which Tommasi-Crudeli's proficiency as a classical scholar and archæologist comes into play, is that of the immunity from malaria enjoyed by Rome, under the *régime* of the Antonines, whose system of cunicular drainage, whereby the hydraulic suspension of the poison was attempted, was at once ingenious, laborious, and—but for its premature discontinuance—efficacious. Beautifully executed illustrations of the process supplement the author's exposition, and are the next best thing to a personal visit to the spots where excavation has brought the works to light. Other specimens of his power of evoking and rewarding attention are his criticism of Lancisi's doctrine of the causal relation of stagnant water to malaria—the "palustral prejudice," as he calls it,—and his exposure of the same eminent physician's fallacies on the influence of forest-planting as a protection from the poison in its alleged transport by the wind. But on these subjects we have already, in other departments of the journal, summarised the author's conclusions, and we refer to them now as having received his latest touches in answer to the animadversions of recent critics. Notwithstanding its localised theme, the book leaves no vital phase of meteorology untouched, so that its publication in an English dress would be a genuine boon to the profession at home and in the colonies. Messrs. Loescher, we may add, have done their part most creditably. The excellence of the plates and of the maps, particularly the fully-detailed and finely-coloured geological and topographical chart of the Agro Romano, are quite in keeping with the almost sumptuous finish of the paper and typography.

Chemistry of the Carbon Compounds; or, Organic Chemistry. By Professor VICTOR VON RICHTER, University of Breslau. Authorised Translation from the Fourth German Edition, by EDGAR F. SMITH, Professor of Chemistry, Wittenberg College, Springfield, Ohio. London: Henry Kimpton. 1886.

LET us begin by admitting that Professor Smith has done good work in translating Professor Richter's well-known text-book. It was wanted, for, alas, German is still an unknown tongue to many, and we have no English equivalent to Richter. The translation, and we may add the printing, of the American edition are excellent, and any faults we may find are personal to the German author. Fault-finding, however, is not our primary duty here. Organic chemistry is now such a huge growth that no ordinary text-book can adequately represent it. Of late real knowledge has been gained of the constitution of carbon compounds, and the rapid growth of the so-called organic chemistry has been mainly due to this study, and to the development of a symbolic notation by which its results are expressed, and indeed constantly anticipated. A structural formula is at once an explanation and a prophecy, for when once we know the structure of a compound, its synthesis generally follows as a matter of course. The artificial production of alizarin is a case in point. If we knew the structural formula for morphine we should probably be able to prepare it without the assistance of the poppy. Now, Professor Richter's book of over 700 pages, much of it printed in small type, is mainly devoted to classification and structure. An immense number of compounds are included, and the most modern views of their constitution are stated. The book covers the whole range of organic chemistry, and we have only to look it over to realise the enormous extent of the science. Short descriptions—generally very short, and even meagre—are given of each compound, and the general effect of the whole is that of a *catalogue raisonné*, rather than of a manual for practical use. The book is extremely valuable as an adjunct to others, but alone it would be useless to anyone. Of experimental detail there is very little indeed, and condensation is carried so far that in some cases it would be hardly possible even for a trained chemist to carry out the operations alluded to in the text. Nevertheless, every chemist will use it, and will only regret that it was not twice as large as it is. We are glad to see that the trimethylene and tetramethylene groups, so important as intermediaries between the paraffins and the benzene series, receive fair recognition.

THE FEMALE MEDICAL AID ASSOCIATION.—At Simla, on Sept. 29th, a meeting of the above Society was held, under the presidency of Lady Dufferin. An account was given of the useful work done by the Association, and an appeal made for funds to warrant a widening of the scope of its operations, in honour especially of the Queen's jubilee next year.

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Abstracts
OF
INTRODUCTORY LECTURES
DELIVERED AT
MEDICAL SCHOOLS OF LONDON AND THE PROVINCES
AT THE
Opening of the Session 1886-87.

ST. GEORGE'S HOSPITAL.

INTRODUCTORY ADDRESS BY DR. WADHAM,
SENIOR PHYSICIAN TO THE HOSPITAL, AND DEAN OF THE MEDICAL SCHOOL.

AFTER welcoming his audience, and especially the new students, Dr. Wadham described the additions and improvements which had been made in the school premises, the increased facilities which had been provided for the study of physiology, and the appointment of Dr. Delépine as special physiologist. Those who knew him, and had already worked under his supervision, would, he said, recognise in his name a guarantee as to the efficiency with which this subject would now be taught, and would find that, for practical work and teaching purposes, the physiological laboratories of the school would be as complete as the most exacting students could require. He then alluded to the competition which was taking place between the medical schools of London and the system of offering entrance scholarships, saying that bold advertisements and offers of pecuniary advantages were superseding the attractions which formerly hung like a halo round the names of men of reputation and experience, and that the old feeling which made a man regard his school as his *alma mater* was threatened with extinction; that students were being bribed to enter the schools; and that there seemed to be a growing tendency to make medical education, like medical advice had long become, a gratuitous gift to all who sought it. He warned the students that the medical profession was comprehensive and difficult beyond most others, that it required for its study more than average abilities and energy, and that, in order even to master the scientific portion of it, they would have to make use of their brain as well as their memories. In advising them as to their conduct, he said: "Remember the oft-repeated boast of Mephistopheles, 'how little beyond devilish opportunity is needed to make men sin,' and keep out of the way of temptation. Above all, neither forget nor be ashamed of the religious and moral principles in which you have been reared; these are the connecting and preserving bonds of civil society, the source of all good and much happiness, and our best comforters in those days from which no man can expect wholly to escape, when the clouds obscure the sun, and all seems dark and desolate before him. You will require them also as safeguards against the temptation to idleness, and perhaps worse, by which, in common with all young men living in large towns, you will find yourselves constantly surrounded—dangers against which neither the care nor the advice of others can shield you, and which can only be avoided by the possession of those good principles which, I trust, have been bred in your bone and burnt into your blood as the richest heritage your parents could give you."

In referring to the difficulty students experience in passing their numerous examinations in the four years supposed to be sufficient for that purpose, the lecturer said, "As a rule, I should say that this is only done by students of exceptionally good abilities and memories, and only by such of them as have the good fortune not to fail in any of their examinations. It would, I think, be better to recognise this fact and extend the period of study for at least another year. This would be fairer to parents, who are now systematically deceived as to the length of time their sons have to remain at the schools, and would be a decided relief and advantage to the latter. The authors of the conjoint scheme appear to have some inkling of this, for they invite students to present themselves for examination in several subjects immediately after registration. In other words, they invite, but do not compel, them, before entering the medical schools, to study chemistry and physics, and pharmacy and materia medica, in the latter case putting the horse behind the cart, and asking students, before they know anything of disease, to come and be examined as to their knowledge of the medicinal action of the agents used for its relief. The effect of this regulation is either that students are crammed in these subjects beforehand, or else have to commence their studies with an amount of work which they ought to get through in their first year, and which they can only accomplish by a process closely allied to cramming here. In this manner they learn an innumerable number of facts, but have no time to assimilate or coördinate them. They acquire information, but not knowledge, not even the knowledge of how to put this information to practical account. This information they deliver over to their examiners as much as possible in the very words in which they received it from their teachers, and, unless gifted with very good memories, forget it immediately. To borrow a very old illustration, it is as if sheep were to vomit up the very grass itself which they have cropped and swallowed, to show how much they had eaten, instead of concocting it into wool and milk. The regulation is also unfair to the schools, for it obliges them to maintain a staff of teachers upon subjects which students are allowed, if not encouraged, to study elsewhere. Unless a student by the end of his first year is successful in passing his examination in all these subjects, with the addition of elementary anatomy and physiology, he has either to sacrifice his next winter session in getting them up, or else to study higher anatomy and physiology, and to dissect, at a time when his mind is busy with some or all of these subjects. In either case the result is that he falls behind with his work, and probably takes nearer six than four years to obtain his qualification to practise. It is true that an attempt has been made to bring the examinations within the capacity of students by issuing synopses as to the range of most of the subjects, and allowing them to take them up one at a time. The privilege has also been lately granted of allowing students to postpone until the second stage of their examination the subjects of pharmacy and materia medica. By this arrangement the student, even without being once rejected, has to appear nine times before his examiners in order to obtain the double qualification under the conjoint scheme. These synopses, however, are either so obscurely worded as to render their meaning difficult, or else some of them are of such a nature as to be only imperfect guides to students, and can hardly be said to bind the examiners at all. For instance, in the case of the synopsis relating to elementary physiology, we find that although the varieties of connective tissue which have to be learnt are carefully marked, yet those of epithelial, muscular, and nervous tissues are not mentioned. The teacher is therefore obliged to demonstrate all the varieties of these in order to cover the whole ground. This brings us to the fact that at the end of his first year a student is supposed to know all the elementary tissues of the body and their varieties, with the exception of a few varieties of connective tissue. It seems, also, an anomaly to tell the unfortunate first-year student—as he is told in the synopsis—that the anatomical knowledge required of him is merely an acquaintance with the bones and the attachment of the muscles to the bones of the upper and lower extremities, and at the same examination to ask him to enumerate the principal changes which the food undergoes in the mouth, the stomach, and intestines, to explain, in fact, the function of organs with which he is anatomically unacquainted—a subject about which he can know nothing except as an effort of memory. This, I suppose, is the necessary consequence of dividing into two parts the examination in that which is really one science—a proceeding no more reasonable than it would be to divide astronomy into two sciences, one teaching the figure and size of the heavenly bodies and the other their movements.

"If I have detained you so long with all these details, it is because I consider that some reform is needed in the present system of examinations, and that the studies of the first-year student should be made less burdensome. These synopses should also be made clearer and more definite, should indicate all the questions that can possibly be asked, and, in addition to being a guide to the student and teacher, should be binding on the examiners. I believe, however, that the best reform would consist in an extension of the period of study; and in obliging the student to pass an

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examination in such subjects as chemistry and physics, and pharmacy and materia medica, excluding therapeutics, before he enters a medical school, or, at least, before he commences the study of human anatomy and physiology. If animal and vegetable biology were substituted for pharmacy and materia medica, which latter concern the chemist more than the physician, and therapeutics were included in the examination in medicine, it would, I believe, be a better arrangement, an improvement in the student's education, and facilitate his subsequent studies. I also think that the examinations in elementary anatomy and physiology might with advantage be abandoned. These repeated examinations worry the student and interrupt his work, and are merely tests of his progress which might be much better carried out by the school authorities. Should the conjoint board ever take this view of the subject, they would find the materials for teaching ready to their hand at the London University, in the arrangements of some of the larger schools, and in that which we, in common with some of the smaller schools, have made with the Normal School of Science at Kensington. In this manner students would have time and facilities for studying and understanding subjects which they now only get up by memory for examination, and a check would be put to the pernicious system of cramming, without which no ordinary student can now get through his examinations in the time allotted to that purpose. The period of study being thus prolonged, the expense of medical education would be apparently increased. This increase, however, would be more apparent than real, for the intelligent student from choice and the dull one from necessity invariably occupy more than the conventional four years in acquiring even the rudiments of their profession."

In speaking on the subject of the discipline of medical students, and the proposal to attach colleges to each of the medical schools, the lecturer said: "I believe that in the treatment of the subject the public have not used the wisest method of arriving at a just conclusion. They have placed theory before experience, and the visionary before the practical, and in forming their opinion have been influenced more by their feelings and sentiments than by their reason and judgment. Many, too, who have written on the subject have evidently had no intercourse with students, and are ignorant of their disposition and feelings. At present I have neither read nor heard any argument in its favour which my own knowledge and experience do not enable me to refute. Few men have seen more of students than I have. I have known them living under the roofs and protection of their parents; in small parties under the care and supervision of gentlemen of upright character and having a full sense of their responsibilities towards them and towards their parents; and I have known them living in lodgings free from all control. I can honestly say that the last of these students were as a rule quite as good as the first, and that my experience of the result of associating students together has been anything but encouraging to an extension of that system. So far as my experience goes this tends far more to idleness and gossiping and card-playing than to habits of industry and study; and not unfrequently in these small coteries the evil influence is stronger than the good. Some of those who have proposed the foundation of these establishments have probably done so from an amiable desire to secure for the medical student the advantages of the collegiate system as it exists at the two Universities, and probably in ignorance of its many drawbacks even there. They have, however, overlooked the fact that these colleges exist as the result of past liberality and benevolence, and that the authorities by whom they are managed are supported by funds derived from the same source. Here they would have to be built and managed upon such conditions as would make them successful mercantile enterprises, and this I hold to be impossible except at an expense to students greater than their parents would be prepared to pay. The fact is also ignored that the most important factor in the success of the University system is, not that the students themselves are much controlled, but that the authorities possess the power of controlling and suppressing throughout a considerable district many of the temptations to idleness and dissipation and vice which exist, unchecked and uncontrollable, in this metropolis. What advantage would there be in 'gating' a student in this town at ten or nine, or even eight in the evening? Long before that hour, if so disposed, he would find time and opportunities to commit all the sins in the Decalogue, and a good many indiscretions outside it. The success and character of a student depend much more upon his early training than upon any other circumstance. If his parents have brought him up to be industrious, in the principles of virtue and honour, and with a love of truth, he will succeed and prosper in whatever situation he is placed, and the earlier he is encouraged in habits of self-reliance and independence the better he will be fitted to withstand the temptations and accept the responsibilities inherent to his profession. If, on the other hand, his parents have failed in their early duties towards him, no amount of supervision or discipline to which he can be submitted here will compensate for their neglect. They will reap as they have sown, and he will go to the bad under whatever system he is placed. Much of this outbreak of anxiety for the welfare of medical students is due to a still-existing delusion that the morals and conduct of medical students are worse than those of other young men. On this subject I will read you a passage from an address given to the students of this hospital thirty-six years ago by Sir Benjamin Brodie. After advising the students as to their conduct he said:—'Gentlemen, I offer you this advice, not because you are medical students, but because you are young men. I do not believe that you are more in need of such admonition than others of the same age. I know not what medical students may be at other schools, but as to those belonging to this school, with which I have been so long and so intimately connected, I feel it but just that I should express my sincere conviction that there was always as large a proportion of young men diligent in the pursuit of knowledge and decorous in their general conduct as is to be met with in any class of society.' That which Brodie said so many years ago I can now repeat; for if in these times of constant change we are in danger of losing some of our traditions, we still hold fast to that which is comprised in the motto, so brief and yet so comprehensive—'Manners make the man.' It is probable that, as the outcome of this discussion residences of some description capable of accommodating a few of the first-year's students will be established in connexion with some of the schools. Such an establishment would doubtless serve as an attractive advertisement and be a kind of harbour of refuge into which a parent might steer and anchor a troublesome youth, in the hope of finding for him there a more skilful pilot than he himself had proved. But that such establishments will ever be popular with students or have a beneficial influence on their moral training, or on their medical studies, I, for reasons already stated, have no belief. It is with students as with every living product of creation—a case of the survival of the fittest; and in the inevitable contest many of them will disappear.

My task is finished. I have spoken to you of subjects having only a passing interest. I might have addressed you from a higher standpoint, and told you of the endless potentialities of the science and art you are here to study—the science of life, the art by which that life is prolonged and preserved; that science has many problems to be solved and many secrets to be revealed; that art is yet in its infancy, and has many triumphs and rewards for those who shall carry it forward on its conquering course. They who have wrested the secrets of creation from the antediluvian rocks, or subdued the forces of the elements around us to the purposes of man, did not rest content with text-books or the words of the teacher. They went to them only to learn to read. They studied their real tasks with unceasing industry in the book of nature herself. Is less required from those who would read the mysteries of life? You learn here the alphabet and the primer. If you would go further and learn those deeper lessons which enable you to grapple with the enemies of life, with pain, disease, and death, you must read with your own eyes, you must reason with your own brains, you must feel with your own hearts, and your lives must be devoted to the profession into whose ranks you have this day entered as students."

KING'S COLLEGE

INTRODUCTORY LECTURE BY DR. GEORGE JOHNSON, F.R.S., EMERITUS PROFESSOR OF CLINICAL MEDICINE AT THE COLLEGE.

DR. JOHNSON began by referring to the death of Mr. H. Royes Bell, one of the most esteemed members of the surgical staff of the hospital, who, not long since, was suddenly called away, to the great grief of all who knew him. Then with reference to the three great subjects of anatomy, physiology, and chemistry, to which the student's attention has first to be directed, he said it need not be

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insisted on that a knowledge of the structure and functions of the human body is an essential foundation for the practice of medicine and surgery. It may not appear so obvious, but it is not less true, that some knowledge of chemistry is absolutely necessary for every practitioner. In addition to its great practical utility, a diligent study of the facts and laws of chemistry will prove an invaluable means of mental training and discipline. Observation, memory, and the reasoning faculty are all exercised and strengthened by a thorough study of that delightful science. Referring next to the various classes of physicians, surgeons, general practitioners and specialists, the lecturer maintained that the only safe foundation for specialism is a thorough knowledge of disease in general, and he illustrated this by reference to diseases of the eye and the larynx. There are, he said, few, if any, special departments of practice which have so indisputable a *raison d'être* as ophthalmic surgery; but there are few diseases which afford so many and such striking illustrations of the close relationship between various tissues and organs and the dependence of apparently local structural changes upon remote, and often general, constitutional states as those which affect the eye. Thus, in one case, impaired vision may be seen to be caused by degeneration of the retina, the result of Bright's disease of the kidney; in another, blindness may result from mechanical obstruction of a retinal artery by a small blood-clot detached from a diseased valve of the heart; while in yet another, loss of sight may be due to degeneration of the nerve of vision, consequent on the growth of a tumour in the brain. Thus, an oculist unacquainted with diseases of the kidney and heart and brain would often fail to correctly interpret the ocular defects with which he had to deal; while on the other hand, a physician who undertakes the treatment of renal, or cardiac, or cerebral disease, without having acquired the power of inspecting the interior of the eye with the ophthalmoscope, is at manifest disadvantage. Again, the laryngoscope has shown that while in one case loss or impairment of voice may be due to some disease within the larynx, in another, it may be caused by an aneurysm or other tumour in the neck or within the chest pressing on a nerve which supplies the organ of voice; while, in yet another case, the laryngeal trouble is traceable to disease within the brain or spinal cord. A mere laryngoscopist then, whose vision is limited to the larynx, would be incompetent to deal successfully with the diseases of that organ. These and other like facts show that between the various organs and functions of the body there exists, both in health and in disease, a correlation, the recognition of which is of the highest practical importance. The universe is governed by all pervading immutable laws. As the astronomers, relying upon the laws of gravitation and of planetary motion, have discovered a previously unknown planet by observing the disturbed orbit of one previously known; as the biologist, in reliance upon the invariability of organic types, has been enabled from the fragment of a skeleton, or from a tooth, to reconstruct the framework of an extinct reptile or bird or mammal; so the pathologist and the practising physician, relying upon the laws of physiology, which, although modified, are not suspended by disease, have learnt that a disease commencing in one organ may involve widespread structural changes in many other parts. It is obvious, then, that the body cannot be separated into different parts so as to make one of them the exclusive object of study and practice. The lecturer entered a protest against the rapid multiplication of small special hospitals, which are injurious by diverting funds from the general hospitals, of which most of them are sorely in need, and by attracting special classes of patients which in the hospitals connected with medical schools would be utilised for the practical instruction of their students. Reference was made to the value of the various modern aids in the diagnosis of disease, such as the ophthalmoscope and the laryngoscope, and the importance of a correct interpretation of symptoms. A most important duty of the practitioner is to ascertain what in the habits or the surroundings of the patient is the cause of disease, and the frequent and powerful operation of mental influences was next adverted to. Referring to the disobedience of the law with regard to vaccination by a large proportion of the inhabitants of Leicester, Dr. Johnson said, "It is as certain as that the sun will rise to-morrow that at no distant period small-pox will invade the town of Leicester, and as a result there will be such a massacre of the innocents—innocent victims of parental ignorance and prejudice—as will probably carry conviction to that eccentric member of the House of Commons who lately had the assurance to ask for an inquiry into the practice of vaccination." Briefly referring to the question of medical ethics, the lecturer said that few special rules would be required if all could act upon the comprehensive maxim, "Thou shalt love thy neighbour as thyself." He warned his hearers against the error of supposing that their studies were at an end when they have obtained their legal qualification to practise. The conscientious practitioner must be a diligent student to the end of his days. The man who is too old to learn is too old to practise. "That which Lord Bacon has eloquently said of all knowledge is in an especial manner and degree applicable to the knowledge which it will be the chief business of your lives to acquire and to use for the benefit of mankind—'It is not a couch whereupon to rest a searching and restless spirit, or a terrace for a wandering and variable mind to walk up and down with a fair prospect, or a tower of state for a proud mind to raise itself upon, or a fort or commanding ground for strife and contention, or a shop for profit or sale, but a rich storehouse for the glory of the Creator and the relief of man's estate.'"

MIDDLESEX HOSPITAL.

INTRODUCTORY ADDRESS BY CECIL YATES BISS, M.A., M.D. CANTAB., M.R.C.P.,

ASSISTANT-PHYSICIAN TO THE MIDDLESEX HOSPITAL, AND THE HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, BROMPTON.

THE lecturer commenced by remarking on the object to be kept in view by one giving an introductory address, and then proceeded to offer a hearty welcome to the students present for the first time, and with whose aspirations, desires, and perhaps misgivings in view of the apparent difficulties before them, he strongly sympathised. "Let me," he said, "greet you as pupils and as fellow-students. Our office is to assist you to decipher the characters, written often legibly, often most illegibly, upon the leaves of that great volume of disease that this hospital constitutes; and as fellow-students we invite you to take your stand with us in its wards that we may study together the ever-new and ever-varying phenomena of disease, all sharing alike the conviction that the moment the consciousness of knowledge received shuts the eye to the access of more, the moment that the baneful idea of finality in such learning infects the mind, and we conclude that there is no more light or truth to break forth than that which we have perceived, that moment does the man who has finished his learning become unfit to be, in any worthy sense, the instructor of others. For in clinical teaching, as in all other training worthy of the name of education, according to the true meaning of that word, the office of the teacher is (and perhaps here more than anywhere) so to influence the mind of the pupil as to evoke and train his undeveloped powers for the independent observation and induction of the studied facts."

Having spoken of the increased strength imparted to the school by the addition to the teaching staff of Mr. Sutton and Mr. Hern, the lecturer referred to the advantage that would be derived by the students in the proposed residential college—"a building commodious and handsome, occupying the site of those adjoining edifices in whose windows many of you have had the opportunity, during your brief intervals of leisure, of studying domestic life in its apparel, utensils, and casual incidents." In congratulating the new comers on the choice of the medical profession, Dr. Biss said: "The ruthlessness of examining boards within, and the steady pressure of public opinion from without our borders, are forces that are steadily lifting the profession to a higher level of knowledge and skill, coupled with a greater delicacy of thought and work. And a force as strong as either of these is the improved tone of feeling within the profession itself as to the responsibility of its functions and the esteem they merit at the hands of society. The doctor was once expected to ring the servant's bell—in country houses, at least; nowadays, I fancy, the squire and the doctor would both feel equally ashamed to meet on such terms. Little wonder that it should have been so, when the art of healing was regarded as a mere craft rather than as an intellectual and scientific calling, demanding a mind expanded by education, trained to feel and decide for its patients in the direst emergencies of anxiety, pain, and danger. The barber, the leech, the apothecary, the surgeon of ancient days, a man dismal with bones and blood, formed an ascending series,

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from which we now see evolved modern physicians and surgeons whose claim to a scientific recognition and a social standing equal to that of any other calling is, happily, justified by facts and, for the most part, admitted at the hands of society. Yet not altogether so: there is not yet that ability that there should be, even amongst educated people, to differentiate the physician from the quack and the surgeon from the bone-setter, and to discern that the advertising pretender or practitioner probably takes the course of displaying his merits to the world, not so much from fear that he might otherwise be unknown, as that if left to the prior recognition of more competent judges it might be decided that there was nothing worth publishing. Nor is the social recognition of our members yet all it should be, though, as to our rank and file, it is a simple statement of fact to say that the medical students and practitioners of modern times are, in point of general culture, knowledge, manners, and gentlemanly feeling, quite abreast of their fellows, who are aiming to fill, or who stand in, the ranks of the Army, Navy, Bar, and Church, while I venture to think that in point of earnestness for work, devotedness, and self-denial in it, they are second to none, and perhaps ahead of all." The lecturer then entered upon a survey of the path of study, and pointed out certain facts, which might, in the absence of personal experience, help his hearers to save time, concentrate their energies, methodise their work, and avoid the pitfalls into which many a student falls. He counselled them to practise from the first day of their course the thrift of time. The curriculum being limited to a minimum of four years, the division of the course of study had been framed so as to meet, stage by stage, the arrangements of the conjoint scheme of the Colleges of Physicians and Surgeons. It followed that no student had any time to lose. It was impossible for him who dawdled through his first year to make up satisfactorily for it in his second. When the second year came it would bring with it its own tale of work, and it was a real misfortune when a man found out too late the disadvantages of dislocating his work from its due relation to the curriculum, and had to grind away at revising for the anatomy and physiology examinations when he ought to have his mind at leisure for the clerkship or dresserships he had come to hold.

The lecturer went on to say that in medical study there was a special faculty that must be trained—namely, the faculty of close, shrewd, thoughtful observation, and the power of correct, inductive reasoning upon the phenomena observed, connecting effects with causes, and drawing true inferences. But that upon which he would ask his hearers to lay supreme emphasis was that in medical studies there was absolutely nothing that could supply the place of the observing faculty. With it all else might follow; without it a man could no more make a truly able physician and surgeon than an ordinary mortal could write Byron's poetry, fashion the sculpture of Praxiteles, or compose the immortal strains of Handel. Jenner observed, what indeed many had observed before, that cow-pox was communicable to man; but it was not till he had patiently carried out the toil of observation and induction for a very long time, and ascertained that it was only in a particular condition of the cow-pox pustule that the virus was capable of efficiently protecting the human constitution, that the magnificent discovery of vaccination was attained. "The noble words of Harvey, spoken two hundred years before, seems almost prophetic of his success: 'Nature herself is to be addressed; the paths she shows us are to be boldly trodden; for thus, and whilst we consult our proper senses, from inferior advancing to superior levels, shall we penetrate at length into the heart of her mystery.' ..... The demonstrative is the most interesting as well as effective method of instruction. Tell a child that heat expands mercury, and such-like facts, he yawns, or thinks of his marbles. Show him a thermometer, let him hold its bulb in warm water and see the index rise, and he is all interest; probably never will forget the fact; and, better still, will shortly apply the observing faculty, thus trained, to the attempted elucidation of something else. This is what makes medical study so charming: the method of demonstration pervades it. If your work is carried on on these lines, your progress will be sound, and you will really be trained, not for examinations merely, but for the more difficult work beyond. But if you substitute books for facts and words for things, you will find yourself in the end far wide of the mark, not having (as has been said) 'at the back of your mind, the change for words in definite images which can only be acquired through the operation of your observing faculties on the phenomena of nature.' I remember hearing one of my old teachers say—and it made a great impression on me—that the most clever clinical note he ever remembered to have heard read to him in the wards by a clinical clerk was found on examination of the patient to be incorrect—pure romance, not fact! Train your senses, then, by observing facts above everything, and you will be as much surprised at how little you can at first see, feel, and hear with certainty in handling cases of disease, as you will afterwards be at how much you can make out with perfect certainty when your training is advanced. ..... Let me venture to advise you to acquire your knowledge of anatomy from the structures themselves more than from books, though books, in their proper place, may not be neglected. Anatomy, however, can never be interesting if it be viewed as the aggregation of detailed facts. It is the grouping of those facts by relations of structure and function, and the generalisations that may be built upon such associations, that cause the subject to teem with interest and facilitate its comprehension. To notice such facts as that all the muscles which have for their function the expression of emotion are supplied by the facial nerve (though some of them in man are ordinarily insignificant and inert, such as the occipito-frontalis or the muscles attached to the auricle, yet in many animals largely subserving that function); or that, as was pointed out by the late Mr. Hilton, the same nerve that supplies a muscle or joint supplies the skin over the insertion of that muscle, or over that joint; or, again, that the nerves which supply muscles enter them at the points where they are the most secure from pressure, well illustrated by the curious fact that the phrenic nerves (literally 'the threads on which our lives hang') pierce the diaphragm, to be distributed upon its *under* surface, where gravitation tends to relieve them of the pressure of adjacent organs,—to note all this not only removes tedium from the work, but greatly assists the burdened memory by classifying in a natural manner the facts it has to carry to the examination table." Having warned his hearers against the danger of depending upon "tips" and "rhymes," the lecturer spoke of the place occupied by Physiology in medical studies. "Let me beg of you," he said, "to form a right conception of what that place is. Physiology is the science of *function*; it does not mean cutting and mounting sections or analysing fluids, important as these things are; that is but anatomy still, the minute anatomy of the tissue, or, if I may say so, of the fluid. It is when you ask, 'What does this muscle do?' 'What does that nerve connected with it do when contraction happens?' 'What is the chemistry of these changes?' 'What their relation to other vital processes?' and questions like to these, that you are studying true physiology. Much as our teaching has improved in this particular, it seems to me that there is room for improvement still. The precious hours of the physiology student are so much swallowed up by section cutting and staining (often so fascinating a thief of time) that the problems of pure physiology are but too little considered with that detailed reflection that they should be when it is remembered that so much of our future work in the treatment of disease depends upon the application of such knowledge. For let us never forget that there are many diseases that, in the anatomical sense, have no pathology. Epilepsy, migraine, diabetes, asthma, and not a few others, wait their complete elucidation at the gates of the medical physiologist. Grateful as I feel for the immense advances of physiology in recent years, and for the enormous advantages to medicine that the labours of such men as Michael Foster and Burdon Sanderson have conferred, I would with all deference venture to record the conviction that, advantageous though it be for some reasons, to study pure physiology—that is, physiology apart from its pathological bearings,—the day must come when the relations of pathological to normal function shall be more habitually studied together, and a fresher development of the science be reached, which, if less "pure" in its ideal, shall be much more complete in its scope, and much more useful to mankind ..... The examinations in anatomy and physiology over, the way is clear to clinical medicine and surgery for a space of two years. This is the period of supreme interest, as of supreme importance; utilise every moment of it. And that you may do so, allow me to offer you one or two counsels. Do not be

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satisfied with the cases allotted to you, but study every case in your wards, and keep in your own case-book a concise record of each. Make a point of seeing every case, examining it (if there is no reason to the contrary), and forming at least a provisional diagnosis for yourself before the physician's or surgeon's visit, and, if possible, independently of the resident.....Remember, too, that it is the out-patient department, rather than the wards, that supplies you with the class of cases of the slighter disorders and accidents, as also of those functional, subacute, and chronic diseases that will form the staple of future practice, besides presenting to you a far greater number and variety of cases than the wards. The casualty department, too, must not be forgotten. There alone you will see the exanthematous and other rashes, sore throats, and cases of unusual character and sudden emergency, with special frequency and advantage."

The lecturer then offered the students some advice on the kind of books it would be best to read, and afterwards addressed himself to those who were drawing near to the end of their curriculum. "I may perhaps remind you, in the words of Sydenham, 'That the art of medicine is to be properly learnt only from its practice and exercise,' according to which definition your learning is now really about to commence. If, inspired by the philosophy as by the humility of this thought, you address yourself to the work before you, your success is certain—financially I trust, but, better than that, the success of real usefulness in life. Great responsibilities await you; but these are to be met by preparing for them, not by fearing them. And this preparation will be, and ought to be, a daily task: we must always be learning. Disease is no more stereotyped than are any other vital phenomena; and it speaks to us frequently, if I may say so in its *dialects*, which we must be as ready to understand as its ordinary speech. How needful, then, is it that we should carry forward the spirit of philosophical study with us through our daily round, and not degenerate into mere distributors of drugs—a work which the prescribing chemist or the quack can often do as well as we, finding, indeed, his *raison d'être* in our contentment with mere routine, a spirit which our patients too soon catch from us. 'You can always prescribe for him' I once heard advised to a student in a dilemma about the diagnosis, as a hint for his future practice. We may be very sure that it is of this spirit that is born the feeling in the public mind that blind empiricism is the best guide after all—a feeling the extent of which is witnessed by the endless columns of quackery in our daily papers." Alluding to the importance of the movement for the collective investigation of disease, Dr. Biss indicated three lines of inquiry, which, on account of their greater command of material, could be best worked out by men engaged in general practice—viz., (1) the varieties and relationships of the acute contagious disorders; (2) the real value and use of drugs in clinical treatment; (3) the complete examination and estimation of the value of family histories in relation to the etiology of disease. The lecturer concluded by exhorting his hearers to follow the example of the illustrious men whose names adorned the roll of *alumni* of the Middlesex Hospital Medical School.

UNIVERSITY COLLEGE.

INTRODUCTORY ADDRESS BY MR. A. E. BARKER, F.R.C.S., ASSISTANT PROFESSOR OF CLINICAL SURGERY AND TEACHER OF PRACTICAL SURGERY AT THE COLLEGE.

AFTER alluding to the tendency at the present day to disparage the custom of introductory lectures, the speaker pleaded for them that at least they afforded an opportunity of offering to newcomers launched for the first time on the wide sea of London life a hearty welcome on the part of their teachers, and the assurance that in all their difficulties they will have the sympathy of men who have trodden the same path before. If for no other reason than that these addresses helped to promote that personal cordial goodwill between teachers and students which ought to exist, and which is so apt to be tried, or actually to perish, in the hurry of the daily academical routine, they should be maintained and further developed. In University College especially, which gathered strangers from all parts of the civilised world, and where work is so absorbing, every means should be taken to assure all students that they were welcome. No opportunity should be omitted of drawing closer the social bonds between all its workers. Addresses of this kind might be made of use, too, in introducing students to some of the questions which must sooner or later present themselves to those entering the profession. In this case those present were asked to consider some of the relations of medicine to society and the State, and then to survey the position now accorded to the medical profession by the latter. Two questions were first propounded as bearing especially upon this subject. First, whether medical effort as a whole really resulted in actual benefit to the human race; and, secondly, whether the influence of the medical profession strengthened the moral sense of mankind or weakened it. In answer to these questions, the speaker alluded to what the public require to be constantly reminded of—namely, that their lives are daily protected and their happiness enormously increased by the discoveries of medical science as to the causation of disease as well as by the daily practice of the profession in relieving individual ailments. "The great laws of sanitation, embracing provisions for the prevention of epidemics and plagues, and the cleansing of cities in the wisest and most economical manner, the regulations regarding the examination of food with a view to the prevention of adulteration, and to secure its purity, all owe their inception and much of their elaboration to medical science." The remarkable reduction of the death-rate in large towns within recent years was pointed to as one practical outcome of all this. The immense diminution of suffering and death owing to the discovery of the causes of mortality after wounds and the introduction of the antiseptic methods into surgery were alluded to as special illustrations of the good reaped from medical effort. As to the question whether the moral sense of mankind is strengthened and elevated by scientific medical thought, it was pointed out that the profession is assailed by two different sets of thinkers from two opposite sides. One set asserts that the tendency of our teaching in physiology, biology, &c., is directly towards pure materialism, the other charge us with sacrificing strict reason and yielding in our life work solely to humanitarian sentimentalism and religious enthusiasm. The first reproach us with undermining old and revered beliefs, the second taunt us with committing inconsistencies and blunders, such as prolonging or saving lives rendered miserable by disease we are at present powerless to cure. Referring to these charges, the students were assured that neither is well founded, that the medical profession of all others is least open to the taunt of being carried on in defiance of reason, its whole work having a scientific basis; and that the sadder reproach of arid materialism is equally baseless in view of the spirit of lofty devotion to the older, grander principles of pure charity exhibited daily in the whole work of the profession. As to the charge of undermining the venerable and cherished beliefs of mankind, a few illustrations were furnished from medical teaching showing how some of their best doctrines are confirmed and rendered more intelligible thereby. As students then in this calling, beneficial alike to the bodies of men and to their moral being, the audience was invited to consider how far society and the State accorded that position to the medical profession which was its due, and what both were doing to further stimulate its beneficent energy. It was pleaded that society treated medicine with comparative coldness, that the fact that medicine was rapidly developing into a public service was not recognised, that the State encouraged it but little in comparison to other professions with no higher aims or practice. It was pointed out that while public thanks and public funds were often voted in Parliament to successful commanders and diplomatists, nothing equivalent was forthcoming for the great discoverers in medical science, whose work affected the lives and happiness of millions for all time. Even the less substantial though prouder honours of high position near the throne and hereditary titles were rarely or ever bestowed on medical men. It was suggested that the State might itself derive much benefit by the more public recognition of its achievements and by grants for the prosecution of further research, as well as by calling the highest minds of our profession into its councils officially. It was also suggested that the gracious Sovereign now on the throne, who has ever shown such a warm sympathy with all that ministers to the happiness and improvement of her people, might greatly encourage the medical profession by calling some of its leaders nearer to the throne and giving them a place on her Privy Council, or even among her peers. The result, it was contended, would be beneficial to the Upper House in

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many ways, and would also benefit the nation when certain questions of legislation came to be discussed there. It was also thought by the speaker that the interest already occasionally shown by members of the Royal Family in the greater meetings of medical men, if more frequently exhibited, and especially in the annual gatherings of medical students, might stimulate the public to sympathise more with medical life a matter in which the whole nation is very deeply interested. The same personal interest that is shown by our Royal Princes in the doings of the army, the legal, and even in the musical and other artistic professions would not be thrown away if bestowed upon medicine. But while these things were put forward as worthy of the attention of society, of the State, and of the Crown, the prospect of their being granted was not held up as an inducement to younger men to enter the medical profession, and to devote themselves to it. The divine science and art of healing contained in itself the highest of all rewards worth seeking. It offered to the highest intellects problems which should carry them into the deepest mines of research or up to the loftiest regions of speculation. It offered also to men of warm sympathies quiet walks in the valley below amid the homes of men, where they would have the freest outlet for all their purest impulses, the widest field for kindly, patient, useful activity for others. It offered, in short, to all earnest men work of the best kind suitable to their particular bent, and if old Carlyle's saying is true, that "blessed is the man who has found his work, let him ask no other blessedness," Medicine has indeed the highest reward for all her sons.

WESTMINSTER HOSPITAL.

INTRODUCTORY ADDRESS BY MR. JAMES BLACK.

THE introductory address was delivered by Mr. James Black, B.A., F.R.C.S., lecturer on anatomy at the new schools in Caxton-street, Westminster, on Oct. 4th, at 3.30 P.M. He stated that he thought the time placed at his disposal would be most profitably employed in offering a few words of practical advice to those who were commencing study for the medical profession, and some suggestions relative to preliminary training and future prospects. One of the first questions arising was how the student should profitably employ his time. The answer to an extent was furnished in the prospectus, where he would discover that most of the hours of the day were mapped out either for attendance at lectures and demonstrations, or for practical work in the dissecting room and chemical and physiological laboratories. Students, however, quickly discover that, even then, their labours are not at an end; but that extra hours must be spent in reading over those subjects which had occupied the mind during the day, and which would be quickly forgotten unless subjected to methodical and critical reflection. The inquiry also arose, should there be no time for recreation and out-door exercise? The reply was undoubtedly there should be, for a curriculum defective therein must inevitably produce pernicious results. From his experience at Cambridge the lecturer advised that a moderate indulgence in athletic sports was well calculated to develop the student's physique as well as cultivate his mind. He complimented the school on the fair success which had attended their efforts in the public competitions, and referred particularly to the case of one gentleman who upheld the credit of their hospital in the sports, also carried off the exhibition, scholarship, most of the prizes, and, what would prove of the greatest value of all to him, was in turn elected to several valuable appointments in the hospital. Concluding his remarks on this subject, with the caution that such devotion must be circumscribed within due limits, Mr. Black spoke a few words on music and drawing, which he strongly advised his hearers to cultivate. Music was a special blessing; it afforded the most perfect solace to the jaded intellect. As Dr. Clouston, in his address on Psychology before the British Medical Association at Brighton, explained, "Intense thought will inhibit emotion; whilst, on the other hand, intense attention to objective sounds will inhibit thought." The medical profession included within its ranks many who, to judge by the excellence of their art work, had reached the pinnacle of fame as artists, and who, none the less, had attained an exalted position in their own profession. Dr. Oliver Wendell Holmes, whose recent visit had reminded us that literature too, has for one of its brightest ornaments a member of our profession, happily remarked—"Literature is a good staff to walk with, but not a good one to lean upon. Coleridge had told him, 'Every man should have as well some fixed and regular occupation,' and this advice he would hand on to any who might feel tempted to exchange the steady preparations for a practical career for the uncertain pathway of a literary life." Edward Jenner, one of the greatest benefactors of mankind, often solaced himself, when the cares connected with the progress of his discovery weighed upon him, by playing on the violin and flute with all the mirth of youth. Whilst, then, avoiding unmitigated study, the student should vehemently despise the wanton recklessness of uninterrupted frivolity. To those who could not help working, even at the expense of their bodily and mental powers, he would say, Guard against this as much as possible by systematically taking a good night's rest and sacredly observing the Sabbath.

To proceed to the course of studies, the field open to the medical student was endless in variety, as was illustrated by reference to the following, among other subjects: anatomy, physiology, and chemistry. Allusion was made to the researches of Fraser, Crum-Brown, Lauder Brunton, and others, who have established a scientific explanation of the action of different substances founded on the investigation of their molecular constitution; a distinct connexion being proved to exist between the specific atomic grouping of these bodies and their physiological action. And Mr. Cresswell Hewett's remarkable discovery of the synthetical manufacture of quinine, by which the price of the drug was likely to be reduced to something like 3*d.* per ounce, was also referred to. A certain amount of natural science, physical and biological, the lecturer thought, should be acquired before joining a hospital school, and he sketched out a preliminary course founded on the lines lately laid down by a committee of naval instruction for the preliminary training for the navy. At fifteen an examination equivalent to that for the lower certificates conducted by the Oxford and Cambridge School Examination Board was to be passed. For the ensuing year the boy should remain at his school and specially devote himself to mathematics, physics, modern languages, and drawing. At sixteen, when the above committee decided the naval cadets should join the *Britannia* training-ship to pursue a year's course of technical and nautical instruction preliminary to the succeeding three years spent afloat, when, of course, their studies would be strictly practical and professional. Mr. Black proposed that the candidate for the medical profession should attend some well-equipped laboratory for the ensuing twelvemonth, where he was to be practically taught biology, chemistry, and physics. Certificates should be required of having undergone such a preliminary training, and the student be expected to matriculate in the above subjects on entering a hospital school. The lecturer, whilst profoundly appreciating the value of a thorough classical education, could not but feel convinced that by adopting some such course as the above there would be more likelihood of the student successfully completing his present curriculum in the allotted four years, and that the benefit of a satisfactory preliminary scientific training would become universal, whereas such is now too much limited to those only who intend taking a university degree. Referring to future prospects, he congratulated his audience on the chance there seemed of taking an M.D. degree in London on the same conditions that already existed at certain universities. The corporation of the venerable College of Physicians and the illustrious College of Surgeons amply provided England with a truly representative body, admirably suited to confer an M.D. degree on all really well-educated metropolitan students.

In conclusion, Mr. Black observed that the success of their own school depended mainly on themselves—not less upon the students than those who were members of its staff. All must be actuated by high motives. The splendid site of the hospital, under the shadow of that Abbey where lie the ashes of the good and great, the long roll of eminent men who devoted their services to the good work done in the hospital, and, lastly, the enormous vitality which had enabled the school to survive the crushing blows it had received during its existence of half a century, and to appear as it now did, must inevitably inspire them all with enthusiasm to do their utmost to maintain the traditions of the past.

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ROYAL VETERINARY COLLEGE.

IN his introductory address Professor ROBERTSON referred to the changes which had taken place in our views of matters purely biological and pathological. In both human and veterinary medicine, he remarked, the elaboration of the germ theory of Pasteur in its earlier triumphs in the department of surgery is likely to be surpassed by what we may reasonably expect will yet be achieved in the domain of medicine. In preventive medicine, as applied to animals, the recognition of the specificity of many of those diseases which have attracted attention through their destructiveness has given us a solidity of basis in dealing with them which was unattainable while they continued to be regarded as the result of variable influences, sanitary and dietetic. Professor Robertson afterwards directed the attention of his audience to the arrangement of the students' curriculum in its two great divisions of theory and practice, exhibiting the relation of one to the other, and pointed out that no facilities, however abundant, nor teachers, however good, would of themselves be sufficient to enable anyone to secure the ends contemplated unless they were supplemented on the pupil's part by earnest work and the exercise of observation and reflection upon all the facts, physiological and pathological, which they encountered.

SHEFFIELD SCHOOL OF MEDICINE.

INTRODUCTORY ADDRESS BY DR. WILLIAM S. PORTER, LECTURER ON PHYSIOLOGY TO THE SHEFFIELD SCHOOL OF MEDICINE, AND PHYSICIAN TO THE SHEFFIELD PUBLIC HOSPITAL AND DISPENSARY.

DR. PORTER, after defending the retention of an introductory lecture and welcoming the new students, said that they had chosen a profession which only offers very limited rewards in a worldly sense, which would make great demands upon their powers of physical and mental endurance, which would impose upon them duties and responsibilities requiring the exercise of much delicacy, tact, and discretion; and which might expose them to personal danger, and their reputation, and even liberty, to some risk. What, then, is there to counterbalance these disadvantages? Pecuniarily, an honourable competence, if nothing more, the medical profession does offer with tolerable certainty; intellectually, a wider and more interesting field for study than almost any other vocation; and, if pursued conscientiously and faithfully, the esteem and gratitude of many of their clients and the reward of an approving conscience. In the words of one who has left us for all time the memory of an honourable and upright life, and the classical productions of his pen, the late Sir Thomas Watson: "It affords ample scope and exercise for the intellect, and is conversant with objects that tend to elevate the thoughts, to chasten the feelings, and to touch the heart." Although it may be undertaken from no higher motive than that of earning an honest livelihood, it is a profession which affords greater scope than most other vocations for the exercise of philanthropy; and it is in availing ourselves of the opportunities afforded us of doing good and unselfish work that we can establish its claim to the attribute of nobility, with which on these occasions it is customary to invest it. It is in the sacrifice of our own comfort, and even safety when necessary, in the interests of those committed to our care; in the little acts of kindness, forbearance, and consideration to those who have, perhaps, only their gratitude to offer in return, that the higher ideal of our vocation is realised. He was not one of those who see very much to grumble at in the social status and position which are accorded us as a profession. We are not a wealthy body, and cannot expect to compete with the advantages which wealth confers; and in this respect we rank much as other professional men do. As individuals, general culture, education, and some advantages derived from early associations and training will always obtain recognition; and the position which a man's individual qualities win for him is more satisfactory than one which is accorded him in right of his profession. If he is a gentleman, and shows that he is actuated by gentlemanly instinct in his private and professional relations with others, he needs no table of precedence to maintain his rank, and is above the disparagement of vulgar minds. But as it is that which cometh out of the man that defileth him, so is it the acts of members of the medical profession themselves that lower their vocation in the eyes of the public. Let it be the aim of each one to maintain the traditions and honour of the profession in his relations to the public, to his patients, and to his medical brethren; that when his race is run he may hand on that honourable heritage to his successors with the knowledge that it has never been disgraced by any act of his. After briefly sketching the curriculum and advising his hearers as to their studies, Dr. Porter entered into a long and eloquent defence of vivisection, and, alluding to Ferrier, Pasteur, and other workers, pointed out the benefits which the world has reaped from their investigations, which could not have been carried out without experiments on animals. "More recently," said the lecturer, "Professor Ferrier and others have made most important discoveries in connexion with the localisation of function in the brain by experiments upon animals. These experiments have not only furnished us with the means of diagnosing, in some cases, the exact situation of a tumour or other local lesion in the brain, but they have also demonstrated the fact that such lesions are within the reach of operative surgery." The concluding words of the address were as follows:—

"Gentlemen, there is a great future before us as a profession, a future which is already beginning to take very definite shape. Great social and physiological questions are casting their shadows before them, and the public are learning to look to us for advice upon matters which concern the health and prosperity of the nation as well as the single interests of the individual. Public health is yet an infant science; let me urge upon you all the importance of its study. The prevention of disease, although it may be the means of cutting down our own incomes, claims a natural precedence over the curative department of our art. One of the social problems of the day is what is known as the alcohol question. And it is not merely the effects of alcoholic excess upon the individual, but the effects transmitted to the race by heredity that brings this question within the domain of public medicine. We have long been familiar with the degenerative lesions in tissues and organs and their consequences produced by long-continued and excessive indulgence in alcohol; but we are only beginning to realise fully, in connexion with this question, by the study of mental disease and brain pathology, the awful fulfilment of the threat that the sins of the fathers should be visited upon the children. We know now how this tendency to degenerative change in the delicate tissue of the brain may be handed down from generation to generation, unless corrected by other hereditary influences and healthier modes of life; and how much mental and moral instability, as well as actual insanity, may be assigned to such a heritage..... In the course of your clinical studies regard alcohol in the light of a drug, often an invaluable one, and notice particularly in what sort of cases and for what conditions it is prescribed, that you may apportion it its proper therapeutic value, and not use it recklessly or indiscriminately. We, as a profession, have often been charged with fostering a passion for alcohol by ordering it indiscriminately; but I believe that such charges generally come from those who seek to excuse their own weakness and want of self-control. Be especially careful how you prescribe it in the case of children and young persons, or for those in whom there is reason to suspect an inclination to indulgence in alcohol, opium, or chloral, for the craving for any of these is an indication of the same essential condition of brain. In treating those who are addicted to alcoholic excess the employment of moral therapeutics is mostly called for, and may not we as medical men do something in this direction? Let us at least endeavour to ward off temptation from those in whom we have reason to suspect an hereditary tendency. Here it is that teetotal organisations come to our aid, and we cannot too gratefully acknowledge their help as a means of voluntary restraint under such circumstances. With those upon whom this vice has fastened we have much less hope of success; but the only course to pursue, I believe, is to insist upon as complete abstinence as possible. I have heard the objection urged, that if you do so your patient will probably leave you and go to somebody else, who is, perhaps, less conscientious and more indulgent to his weakness. Well, gentlemen, I think it is a question of your duty to your patient to advise him for the best; and the fact that others may not be so scrupulous does not absolve you from the obligation to do your duty at whatever cost. Your studies may, not unnaturally, lead you to reflect upon the relations

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of theology to scientific teaching. The progress of science has led some of its most distinguished votaries to seek in natural laws the explanation of all that has been hitherto regarded as evidence of supernatural existence, and to refuse credence to anything which is insusceptible of proof. There is in the human mind a natural desire to probe everything to the bottom, and a yearning after finality which tempts us to hasty inferences and conclusions. There are epidemics of opinion as there are epidemics of disease, and the world's history shows us many such instances of waves of infidelity and doubt. The deeper scientific investigation penetrates the more the unity of nature is becoming apparent. In the words of Sir James Paget, 'As the rays of knowledge have extended and diverged, so has their relation to one common centre become more evident, and the unity of nature has become more significant of the unity of God.' Let us rather hold by our faith, and wait in patient confidence for the light of further knowledge. If we renounce our faith, what have we left to live for?

'Work without hope draws nectar in a sieve,
And hope without an object cannot live.'

The spread of materialism warns us that we are in danger of drifting into the realisation of Pope's prophecy in the closing lines of the 'Dunciad':

'Lo! thy dread empire, Chaos! is restored,
Light dies before thy uncreating word.
Thy hand, great Anarch! lets the curtain fall;
And universal darkness buries all.'"

UNIVERSITY COLLEGE, LIVERPOOL.

PROFESSOR CONWAY, in delivering the introductory address on "The Succession of Ideals," said the spiritual and intellectual products of the human mind are different at different times and in different places. It is with humanity as with individuals. No one is the same at any two moments. What a man strives and hopes, and even lies and sins for at one time, may be unattractive, may be hateful, to him at another. No conception returns unmodified to the mind. Do what he will, his work repeated results in something new. The ideals of youth, of middle life, and of age, how they differ one from another—differ as widely as the ideals of different men. As with the individual, so with the nation, with the race, and the sum of the races. That which mankind as a whole, or which nations as a whole, have at any time striven after, in so far as they have attained it, enters into the sum of human possession, and may become the property of the individual; nay, if it has once produced a moulding effect upon the race, heredity stamps the sign of it on the babe unborn. Any study, if pursued to the end, leads on to all other studies. Any fact may be chosen as the centre of all knowledge, because whilst the area of what is known is limited, the universe or possible knowledge is infinite. But the boundaries of the known are constantly enlarged, first in one direction, then in another, by the passionate striving of men outwards. The goal-point of one generation's endeavour becomes a detail in the possession of the next. The centre of effort changes, but that which has been a centre ceases not to exist, because the forces of humanity bear past it instead of upon it. A fact does not become more true by being known, nor an ideal more fine because men strive towards it. Whatever part of any ideal is true and good remains for ever a possession of mankind. Every ideal worthy of the name manages to get itself enshrined in some form that would endure if only men cared to preserve their heritage from the past. He that destroys a thing that another once laboured to make murders a dead man. An honest carpenter may continue the influence of his honesty long after his death, if the work he had done be respected by those privileged to use it. If they wilfully destroy it, the good man's influence is at an end. The work of the dishonest clears itself speedily enough away. We may destroy what we please, and leave behind whatever wilderness seems to us good to be our record in the face of eternity. The noble works of noble men once formed we may demolish, and so make the desert about us more complete. Their noble deeds once done we may forget; but works and deeds are beyond our power to annihilate; they have a larger and higher existence there where the hand of man reaches no more back to wither and destroy. Dreaming of such an existence, and of such only, is it possible to say to any man, or race, or civilisation, or ideal, *esto perpetua?*

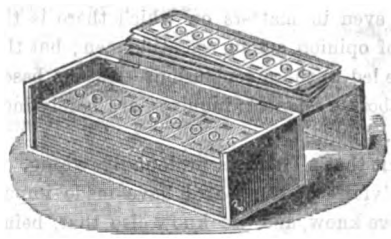
LEEDS SCHOOL OF MEDICINE.

THE REV. F. J. JAYNE, vicar of Leeds, said that whilst trying to find and think out some appropriate topic for this introductory address, he was at the outset impressed by the very large amount of ground common to the various departments of education and the different professions. What is true of one is found to be true, with a few obvious modifications, of all. The physician must possess certain mental and moral qualities—promptitude, discernment, firmness, and the tact which can bring men and circumstances to contribute towards the end he has in view. The learning of the specialist may be profound, his enthusiasm pure and ardent, his instruments and appliances the best that money and contrivance can procure, yet if he lacks the practical wisdom which will enable him clearly to read and deftly to handle those with whom he has to do, he will be baffled and daunted by difficulties of no real moment, he will cause confusion where he should have established confidence and order; he will fail where others, in some respects his inferiors, would have achieved a conspicuous and solid success. We must not be content with a commonplace and low-pitched estimate of the end towards which we are moving. In the very childhood of the medical art a clear and lofty conception of its functions and responsibilities was formed and established. Having briefly sketched these responsibilities, Mr. Jayne impressed upon his hearers the importance of cultivating those moral and spiritual qualities in the absence of which our opinions may, indeed, have the subtlety and brilliancy of the advocate, but not the impartiality and authority of the judge.

New Inventions.

NEW PORTABLE CABINET FOR MICROSCOPIC SLIDES.

MR. MEDLAND, of the Borough, London-bridge, has forwarded for our inspection a specimen of his new portable cabinet for microscopic objects. Its chief recommendation is the circumstance that without greatly increasing the size of the ordinary cabinet (which can accommodate six dozen



slides), the new box can enclose, without more than the usual risk, twice that number. Each glass slide is secured in its place by part of a long flap that projects for a quarter of an inch or so over each end of the oblong slide. This arrangement may with advantage be made more efficient by means of slips of elastic ribbon, which should cause the flaps to snap back after any desired slide had been removed. The price of the cabinet, which is cased in polished pine, is 7*s.* 6*d.*

POISON GUARD.

MESSRS. PITTUCK and SNOWDON, of Hebburn-on-Tyne, have recently patented an appliance which is intended to prevent the accidental handling and unintentional dispensing of poisons. The apparatus, if such a simple, though withal effectual, contrivance merits a name of such dignity, consists of a brass collar to be fitted to the bottle neck, and a perpendicular slide consisting of two bars, which pass, one on each side of the handle of the stopper, and so keep the stopper base firm in the neck of the bottle. When this fastener is used, the immunity from error through unwittingly dispensing poisons from ignorance or absent-mindedness is complete. No one can remove the stopper from a bottle to which this guard is fitted except by a deliberate act requiring the use of both hands. Druggists and medical men who dispense their own medicines would do well to protect their poison bottles by means of this guard.

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THE LANCET.

LONDON: SATURDAY, OCTOBER 9, 1886.

THE recently published annual report of the Metropolitan Board of Works illustrates at once the strength and the weakness of the great London sanitary authority. The work entrusted to the Board by scores of Acts of Parliament is enormous both in extent and magnitude, and all agree that a great part of the work is done well. Theoretically Parliament has, of course, control over the Board, but none is in practice exercised, and for more than thirty years every successive Act has increased the powers of the metropolitan authority. Questions are occasionally asked in the House, but the usual official replies are always forthcoming. Either the Board "will make the necessary inquiries," or "it has the matter under consideration," and neither Parliament nor the country takes any further trouble. The apparent indifference of the public to the proceedings of the Board in matters of vital moment is indeed remarkable. It is based, we venture to think, less on unlimited trust than on imperfect knowledge, and a conviction, founded on experience, that interference would be useless. The annual report affords abundant evidence in support of this view. It is absurdly meagre considering its immense range, and the evidence given in support of its statements is often most vague. Frequently, indeed, no evidence of any kind is adduced. The conclusions to which the Board in its wisdom has arrived are stated in few words and with ample self-confidence, even in matters on which there is the widest difference of opinion among scientific men; but the reasons which have led to those conclusions—reasons based, we are told, on elaborate scientific inquiry—are barely indicated in few lines.

We submit that all this is profoundly wrong. That the scientific advisers of the Board have made important experiments we know, and we know also that, being men of great skill and high repute, their experiments are valuable contributions to sanitary science. Whether other sanitarians agreed or disagreed with the inferences, they could not fail to be benefited by a study of the researches. Why, then, are these researches withheld, and with them the written opinions of the eminent scientific authorities who have been consulted? The Board arrogates to itself the position of a private company trading with its own capital, whereas all the world knows that its money is public money expended in enormous sums by a public department. Whatever scientific evidence is gained by the expenditure is public property, and should be available, not only to Londoners, but to the whole civilised world. There is another assumption even worse than this in the position taken by the Board. It assumes the right to wage war against those who on scientific grounds venture to differ from it, as though they were guilty of heresy. And the war is not waged fairly; for the arguments of the opponents are not duly set forth, and are only met by dogmas based on evidence alleged but not stated. The defendant in a civil action would scarcely be justified in adopting such a course, and it is palpably absurd in a body created by the Legislature and supported by the money of the ratepayers. If the policy of the Board be right, why object to showing the grounds on which it is based? If it be wrong, who will be damaged by its modification?

These criticisms apply to many parts of the report before us, but above all to the two or three scanty pages which are entitled "The Sewage and the River Thames." This exceedingly important question was, as our readers are well aware, forced upon the attention of the Metropolitan Board of Works by the reports of the Royal Commission on Metropolitan Sewage Discharge, which was presided over by Lord BRAMWELL. This Commission, in two reports—the second even stronger than the first,—condemned the system of river pollution which the Board devised, and which during the sitting of the Commission it defended with elaborate evidence and at enormous expense. The Commissioners, among whom were three distinguished chemists, two of them physicians, decided against the Board after a most protracted inquiry, and advised in the most forcible terms that the sewage of London, which polluted the Thames throughout the whole tidal area, should be carried down to a suitable spot in Sea Reach, there *purified*—the italics are important,—and afterwards thrown as a clear effluent into what would practically be an arm of the sea. Parliament is, most unfortunately, for the present, unable to deal with great social questions such as this when they involve matters of controversy. Ireland and Egypt, not to speak of Bulgaria and Burmah, make it impossible to do anything for London, and so the matter was referred to the Metropolitan Board of Works, although that body had spent an enormous sum in opposing the conclusions finally adopted unanimously by the Royal Commissioners. What the Board has subsequently done is about what might have been expected. It is set forth with almost contemptuous curtness in the present report. One point is, indeed, conceded in face of the overwhelming testimony adduced before the Commission. It is no longer pretended that the pouring the sewage of all London in a raw state into the Thames near Woolwich is no injury or danger to the river. Many witnesses, indeed, asserted as much before the Commissioners; but the Commissioners themselves inspected the river, and as several of them were half poisoned by the stench, and recorded the fact, the contention had to be abandoned. The first line of defence was, after hard fighting, found to be untenable, but another as near as possible to the old was at once adopted, and there in its new ditch the Board at present remains entrenched with a new show of obstinate valour.

This second line may be shortly described as follows. The present outfalls are to be retained. Barking and Crossness, and the New West Kent outfall opposite Purfleet, are, it seems, essential, in spite of the very strong opinion of the Commissioners to the contrary. But in a leisurely manner "purification" is to be adopted at each outfall. Some portion of the solid matters is to be precipitated with sulphate of iron and lime. After settling for "an hour or two" the effluent is to be thrown into the river. The first idea evidently was to throw it in without further treatment, but as, in the opinion of the chemists consulted, "in hot weather something more would

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be necessary to ensure complete immunity from offensive effluvia arising from secondary fermentation"—in other words from putrefaction,—it was decided to treat the effluent with permanganic acid (that is, with a mixture of manganate of soda and sulphuric acid) before sending it into the river. As to the sludge, of which even after pressing there would be 850 tons daily, the Board properly despairs of disposing of it in the vicinity of the outfalls. It therefore proposes to purchase steamers of suitable construction, which shall carry the objectionable deposit out to sea; to what part of the sea we are not told. Then follows in the report a passage of almost child-like simplicity in regard to the alternative scheme of carrying the sewage further down the river. This scheme was submitted to the Commissioners by Sir JOSEPH BAZALGETTE, the engineer to the Board, who, by-the-bye, on a previous occasion had declared it to be impossible. It involves, of course, more expense than the present dirty system, even with its proposed modifications, but the expense would be a small matter for London, and it was strongly and unanimously recommended, as far as its main features go, by the Royal Commissioners, among whom were some very eminent engineers. It is dismissed by the Board in a few lines. The Board objects partly on the ground of expense, but mainly, as we gather, because Southend objects. Surely the force of absurdity could no further go. The Board maintains, first, that the sewage of all London thrown raw into the river near Woolwich does not damage the river; secondly, that any possible sentimental objection may be removed by purification at the outfalls; and thirdly, that the discharge of sewage in Sea Reach would be an irreparable injury to Southend. The Board calmly ignores the condition insisted on by the Royal Commissioners, that even at Sea Reach the sewage ought to be disinfected before entering the river. In Canvey Island, or near it, both the sludge and the effluent could be effectually, economically, and conveniently applied to the land.

OUR readers will learn from letters we publish elsewhere that the committee formed to promote the election of Dr. GLOVER to the Medical Council has been asked to join what is now known as the Birmingham Committee, who resolved last week to adopt as their candidates Mr. WHEELHOUSE, Sir B. W. FOSTER, and Dr. GLOVER. After due consideration this invitation has not been accepted, and the two committees remain separate, each to pursue its own particular aims. The reasons alleged by Dr. GLOVER'S committee for this decision are in our opinion conclusive. Some of his supporters are already pledged to other candidates, while many others "decline to have their freedom of selection curtailed." It is this latter point which must be steadily kept in view. Unless the general body of the profession determines resolutely that it will not brook any limitation of the most perfect freedom of selection of its representatives, there is a great danger that the gift of direct representation will become worthless. For years we have been suffering the disadvantage of having a Council composed of men chosen in a very large proportion by the governing bodies of medical corporations and universities. Matters will not be mended if to them are added other men selected by a small self-appointed committee, and who will be able to pose as the representatives of the thousands in the ranks of general practice. All registered practitioners must be careful to exercise their new right independently, and not submit to the dictation of a committee which assumes to itself the power or the right of selecting the most eligible candidates. We believe that the feeling in favour of a perfect freedom of selection is very strong, and that if this feeling is tampered with a storm of remonstrance will be evoked from the constituents. By all means let us have candidates recommended as suitable for posts on the Council by committees of their friends and acquaintances; but this having been done, let the selection of the three who are to represent the practitioners of England be left absolutely free and unfettered.

Of the merits and claims of individual candidates, it is perhaps not the time to write fully. We would deprecate an early pledging of votes. Better is it for an elector, when canvassed, only to promise to consider well the claims of the candidate in question, and then to vote only for those who will most surely express at the Council the views of the great electorate. An intimate acquaintance with the duties and responsibilities of general practitioners is a prime requisite in a good candidate. A knowledge of the past work of the Medical Council, of its duties, its powers, its resources, and its defects, is scarcely less valuable. A desire to advance the highest welfare of the profession and to free it from all that savours of charlatanism and chicanery is also important. Mere professional eminence and merit, praiseworthy as they are, will not—must not—be accepted in lieu of these requirements.

AT the recent Congress of the Sanitary Institute Dr. SEATON read a paper on the Notification of Infectious Diseases, as to which he had, in his former capacity of medical officer of health for the borough of Nottingham, a somewhat wide experience. He takes it for granted that, both on the part of the medical profession and on that of the public generally, the need for notification is generally admitted, and in this view he is doubtless correct. But the progress which is being made in the extension of the system is slow, and this tardiness is due to a number of difficulties with which the subject is surrounded.

In the first place, the actual utility of compulsory notification in preventing the spread of infectious diseases is, in several respects, not so marked as had been anticipated. Where such diseases as cholera and small-pox are concerned, there is, except perhaps as regards the latter disease in the metropolis and some large cities, little difficulty in securing notification and in dealing with the sick; but when scarlet fever, the most fatal perhaps of our current infectious fevers, is in question, it is extremely difficult to show that, apart from such general diminution as has during the past few years prevailed throughout the country, any material result has followed in the towns where the system of notification is in operation. Such result as has been obtained relates rather to a diminution in the percentage of deaths to attacks than to any falling off in the number of cases. It must, however, be remembered that the system of notification has not very long been in operation, and that the time which has elapsed may scarcely have sufficed to have allowed of any material

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effect on an infection which has acquired the firmest possible hold on the inhabitants of our towns. Then, again, such failure as has followed on compulsory notification must, to an important extent, be set down to the want in many districts of any efficient sanitary organisation for dealing with the diseases notified. There are, indeed, towns which have made little or no use of the special powers granted to them, and which have not so much as a decent hospital for the proper isolation of first attacks of such infectious fevers as constantly occur in their midst. Neglect of this sort tends largely to bring the whole system into serious disrepute, and although we do not doubt that some good may be done by way of controlling school attendances and otherwise, where notification is not followed by any efficient isolation and disinfection, yet we are inclined to think that in the long run it would be advantageous if powers of compulsory notification were withheld from all authorities until they had shown their intention to make proper use of the information they wished to acquire, by providing an appropriate hospital and some efficient means of disinfection.

The difficulty of deciding who is to give the notification to the sanitary authority must also be regarded as a prime obstacle to any rapid extension of the system. Dr. SEATON, as an officer of health, evidently feels very strongly that the medical practitioner in attendance on the case is the proper person to make the notification, and he instances the case of Greenock, where notification has had to be made by the householder, as typical of the failure of the latter method. A perusal of the current reports of medical officers of health favours the same conclusion, and in the towns where notification is required both of the householder and the medical man, it is admitted that the former is rarely or never required to make it, and that it is almost invariably effected by the latter. But at the same time it must be remembered that there is a strong feeling on the part of a large number of medical practitioners that this duty should not be imposed upon them by the Legislature, and until they can view the matter in the same light as the medical officer of health does there will probably be no very large extension of the system. But notwithstanding all the drawbacks which attach to the compulsory notification of infectious diseases, as now carried out, it is certain that for the class of disease of which enteric fever is the type much good has been done, and more still is in progress.

The inspection of premises which follows on the notification of such diseases has revealed a large number of defective sanitary conditions which would otherwise never have been discovered, and the action which has been taken to secure their abatement has greatly tended to an improvement of the circumstances under which the people are living in the sanitary districts where exceptional powers as to notification are in operation. Works of water-supply, sewerage, and of house drainage, the prevention of overcrowding, the control of dairies and the sale of milk, have all been materially facilitated by the discovery of infectious diseases under conditions which have called for action on the part of the sanitary authority; and even if this were the only result as yet attained by notification, it would be an important one. But the time has not yet come when it can be shown that all the results originally claimed for the system have been brought about.

There is one part of Dr. SEATON'S paper with which we cannot agree. In dealing with the question of providing means of isolation for the diseases notified, he admits "the fact" that small-pox has been found to be most prevalent in the neighbourhood of the large London hospitals," and then, curiously enough, he rather complains of "a most unreasonable fear of the dangers which may arise from an infectious hospital." We think that "the fact" he refers to makes the fear of small-pox hospitals most reasonable. But, in maintaining the contrary opinion, Dr. SEATON goes on to state that it has been shown that the experience of the country towns is altogether opposed to that of London. We know of no such proof. But we do know that this same view of the harmlessness of London small-pox hospitals was held quite as stoutly as that relating to the country ones is now maintained, until the metropolitan hospitals were put to a test to which no other hospitals in country districts have been subjected. And further, whatever be the cause which leads to mischief around small-pox hospitals, we believe it has operated as regards several country as well as London hospitals. There was a large incidence of small-pox around the Oldham Hospital; the same has been alleged at Birmingham, and, curiously enough, although maps are issued showing the incidence of other infectious disease in various parts of the borough, the reports give no such information as to the localisation of small-pox. And again, a careful perusal of Dr. SEATON'S own paper before the Epidemiological Society as to small-pox in Nottingham leads us to believe that if the rate of attack per house in the different zones around the Nottingham Hospital had been calculated in the same method as that adopted by Mr. POWER in his masterly report on Fulham, the case of Nottingham would, in all probability, have afforded a striking proof of the truth of Mr. POWER'S conclusions. Until country small-pox hospitals have been subjected to the same crucial test as the metropolitan ones have been put to, the less that is said about them the better.

TRULY there is no limit to the application of the term "hysteria." The Clinical Society during its last session listened to the doctrine of hysterical hyperpyrexia. This was by an English observer, Dr. HALE WHITE; and now a French observer, M. DEBOVE, is discoursing on hysterical apoplexy. There is right and there is wrong in the use of this term to express the phenomena to which the English and the French physicians wish to draw attention. We think that the word "functional" would be preferable even when the ordinary phenomena of hysteria are under discussion. M. DEBOVE speaks of apoplexies due to the influence of lead, mercury, and alcohol as also hysterical. The essence of the controversy lies in the nutshell of a name. There are in the brain certain centres having certain functions, which may be deranged by organic and by non-organic causes—i.e., irremediable and remediable or removable causes. A hæmorrhage may abolish certain functions by placing *hors de combat* certain structures exercising those functions. It is conceivable that the same structures may be the seat of intrinsic disabilities leading to

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an overaction or cessation of action. And the same structures may be excited to overaction or inaction by toxæmic conditions. Is there any good reason why we should style a paralysis "hysterical" because we cannot ascertain the cause that has led to the inactivity of the paralysed centre? If the etymologically unfit word is to be retained at all, its use should, in our opinion, be limited to describe those cases in which there is every reason to believe that the affection has been brought about as the result of an inherently faulty condition of the nervous protoplasm, such as is inferred when we recognise the existence of the well-marked neuropathic disposition. For all this, the case which M. DEBOVE described as hysterical apoplexy is full of interest. The following is an outline of the case. A man aged thirty-one, whilst walking away from the dinner-table, suddenly lost consciousness and remained in this state for twelve hours; no convulsions appeared to have occurred, the lumbar centres of the cord did not give way (or at least neither defecation nor micturition was noted), and the limbs remained relaxed. At the end of the period of unconsciousness the left side of the body was found to be paralysed, and there was absolute loss of sensation in the whole of the left half of the body, including the special senses. The paralysis of motion disappeared considerably in the course of a few hours, so that there was but some weakness on the next day. The hysterical, or, as we should prefer to call it, "functional," nature of the affection is proved by the circumstance that the defect of motion and the loss of sensation could be made to pass over to the opposite side of the body by the employment of any of those agencies that are ordinarily effective in the causation of the phenomena of "transfer," and by the further fact that the whole of the symptoms disappeared in the course of a few days. One more principle should be borne in mind: "hysterical" phenomena are not unfrequently met with in cases of genuine organic disease of the brain. It is important to add that M. DEBOVE'S patient was in the marine service, and had never been known to suffer from any phenomena that could be classed under the heading of nervous—surely an argument against labelling his case as one of hysterical apoplexy. But there is some consistency in M. DEBOVE'S method, for he apparently designates most functional paralyses by the same inappropriate adjective.

Annotations.

"Ne quid nimis."

THE GENESIS OF TYPHOID.

TILL within the last fifteen years Rome stood conspicuous among European cities for her exemption from gastro-enteric fever, and yet she had many of the conditions which favour the rise and progress of the malady—a town council whose neglect of sanitary law had passed into a by-word, and periodical overcrowding from the hordes of pilgrims that even in Dante's time formed a veritable "army" of conscientiously filth-despising, flesh-crucifying ascetics. With every facility for its being imported and effecting a foothold in the Eternal City, typhoid was known to Baglivi, Lancisi, Puccinotti, Valentini, Folchi, and other great Roman physicians only from foreign treatises or correspondents never in their own practice, whether private or in hospital. True, there were acute fevers, there were "subcontinuous remittents"; but their response to treatment, hygienic and clinical, proved their absolute non-connexion with typhoid. The Leonine City, for instance, was visited by a fever which, in Lancisi's time, swept away 2000 victims in three months, but which disappeared under the prompt measures of that eminent physician—the draining of the moat of Castle St. Angelo and the exhibition of Peruvian bark. Besides this fever described by Lancisi as "febris castrensis" from its association with the stagnant water of moat-defended garrison-towns, there was the "febris hemitritæa," or semi-tertian remittent, which Liebermeister has tried to classify under "typho-abdominal." But even this, both in symptoms and in response to treatment, was not a true typhoid, and is described by Petroni, a predecessor of Lancisi's in Rome, as occurring very rarely (*perraro*), and by Lancisi himself as only epidemic when an inundation of the Tiber had preceded it; while Professor Valentini, an eminent authority for the first half of this century, says of it: "Nostris temporibus fere nunquam observatur." The statistics of the Roman hospitals afford further proof of the city's immunity from typhoid till within the last decade or so, these hospitals lying low and very inferior in construction and sanitary appointments to those of London, or even Paris and Vienna, yet hardly ever exhibiting even an imported case of typhoid for the instruction of the students. But now all this is changed, and in the new quarters of the city which have sprung up since 1870 typhoid is getting far from rare. The introduction of English waterclosets into the Roman dwellings is, by common consent of the local physicians, the cause of this formidable importation. Dr. Fattorini has recently published an able essay on the genesis and propagation of typhoid in Rome, and traces the appearance of the disease to the sewage poison for the first time finding its way into the drinking-water of the inhabitants. "The ancient Romans," he says, "knew nothing of the microscope nor of bacteriology, but they had an intuition of this double source of infection, and they set themselves to protect their city from it by their marvellously constructed *cloacæ*, which promptly carried all excreta away from inhabited neighbourhoods, and by their equally marvellous aqueducts, which supplied every urban quarter with the purest water in such volume that it kept constantly flushed the *cloacæ* themselves. This hygienic practice they consecrated in their cult of the goddess Cloacina, and they sealed it with the physiological axiom: 'Ubi bonæ sunt aquæ, ibi bonus; ubi malæ, malus itidem est aer.' A part of this precious heritage, the aqueducts, abides with us their effete posterity, and it was precisely this which kept us in the health and strength we enjoyed, in spite of everything we did, by our effeminate lives, led amid corruption and dissipation, to spoil it. It was precisely that portion of the antique, supremely pure, potable water which chanced to remain to us, notably the Acqua Vergine, which maintained Rome up to the other day, even in her Ghetto, free from those terrible typhoid epidemics which in every other city have for centuries raged so fiercely and reaped so many victims." Dr. Fattorini then describes to his readers how the Acqua Marcia reintroduced into Rome in 1870, and distributed to the new quarters in scanty volume, has combined with the English watercloset system to convey the sewage effluvia from floor to floor of the dwelling-houses. Moreover, this Marcia water having lost its great original purity, lies in cisterns on these floors till it loses its initial coolness (12° C.), at which bacteria do not live, and rises in warm weather to 25°, or even 30° C.—a temperature most favourable to all manner of putrid fermentations. Dr. Fattorini urges the ædiles of modern Rome to insist on every house, before it is inhabited, being furnished with the ordinary means of preventing the drinking-water from communicating with sources of sewage

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contamination, and in the meantime recommends all inhabitants of the Marcia-supplied quarters to use that water only in the boiling state for culinary purposes, and to drink nothing but the Acqua Vergine, which feeds the public fountains in such sparkling and exhilarating volume.

THE "CAN" AND THE "SHALL" OF WOMAN-CULTURE.

No physiologist will question the possibility of developing by appropriate stimuli, exercise, and food, any particular part or parts of an organism in such manner as to make it respond to the demands of its environment. Beyond doubt this mode of development is the natural process of evolutionary growth and modification. It must, therefore, be theoretically possible, as it has been abundantly shown to be practicable, that a female of the species *homo* shall be developed in respect to any one or more of her organic potentialities to a level with the male. And what has happened in the case of an individual may occur in any number of instances. In short, the difference between woman and man in respect to any of the brain or muscle functions is, as the difference between any two women or any two men respectively, one of development by training. The female is undoubtedly, from a developmental point of view, an animal in which the evolutionary process has been arrested or, more accurately speaking, diverted from the general to the particular, for special reproductive purposes, before the culminating point could be reached; moreover, it has been maintained that the controlling force as regards the determination of sex is one of procreative ascendency, the temporarily more exigent parent determining sex on the side of desire; the male parent selecting, in an evolutionary sense, female offspring, the female parent selecting or determining males. The explanation of the *modus operandi* of procreative exigency is that this exigency is the effect of preparedness to produce. The point to perceive is that the differentiation of sex is not in the nature of superiority or inferiority as regards the integrity of the animal organism, but one of special fitness, and therefore there are certain *plus* or *minor* qualities connected with sex which are the natural concomitants of the differentiation, but do not constitute disabilities. Thus the female is smaller than the male, unless smallness be an advantage in respect to locomotion, as in certain birds, when the apparent rule is not followed, because the real underlying and constant principle necessitates a change of policy, with the same object and a seemingly different, though actually identical, result. Meanwhile there is no physiological reason why the female should not be developed to proportional size equal with that of the male if suitable stimuli, exercise, and food be applied. We do not doubt that in a certain number of generations, women, if cultured as men are cultured, might be developed in all respects to the same proportions as men in respect to brain or muscle, or both; but we contend that if this were accomplished they would be *monstrous*. A masculine race of women would be as abnormal as an effeminate race of men, and in process of time the instinct of nature would assert itself, so that womanly women would feel the same contempt for masculinity in their sex as manly men feel for effeminacy in theirs; and when this instinct asserted itself, there would commence, involuntarily and uncontrollably, a reversion to the normal type, so in time the monstrosity of development would correct itself; though not, perhaps, until—as often happens in revertings to a lower type—the returns were carried too far, and the female unduly degraded for a time. There is evidence that this has occurred. As [illegible] individual woman or any number of women [illegible] ective in regard to organic capabilities, [illegible] must be [illegible] that she or they *can* do anything [illegible] similar organic capabilities is able to do; but the question *shall?* arises; and though we are not prepared to go the length of saying that the special powers of sex will be impaired by the general development, we are of opinion that the rule of natural fitness will be broken, and in the end so disadvantageously that Nature must and will interpose to restore the type by reversion. This we take to be the sum of the argument in explication of the question, "Can a woman do a man's work?" The subject is one which cannot be intelligently studied or discussed apart from the recognition of physiological laws and principles.

OUR INCREASING POPULATION.

HAVING, in his annual report on the parish of St. Mary's, Islington, announced that the death-rate for 1885 was the smallest on record, Dr. Meymott Tidy discusses the meaning of the facts relating to diminishing death-rates as affecting the population of England and Wales. The present population may be set down at 24,000,000, and the acreage of cultivated land at 30,000,000; there being thus one person to 1·25 acres, or about one-fourth the quantity of land per head of the population of Europe as a whole. But statistics show that 150 people are every year added to every 10,000. Reminding his readers that about twenty generations have passed since the Norman Conquest, Dr. Tidy asks what will be the result when twenty more generations of Englishmen are numbered among the dead; and he explains that at the present rate of increase there will then be a population of 27,220,000,000, who would require a place of abode of twenty earths if the then population were no more dense than the present one now is. Tracing the increase in population through its various stages, the report points out that in the reign of Henry VIII. the population of England, kept in check by wars and pestilence, numbered not more than 5,000,000, whilst in the early part of the reign of George III. it was about 7,500,000. Then came a period of commercial prosperity, and with this the population of England went up first to 10,000,000 or 11,000,000, and then to 16,000,000 at the period of the repeal of the Corn Laws. At the present time 24,000,000 have to be housed and fed in England and Wales; and in face of this fact we have to remember that our exports are things that cannot be eaten, whereas 50 per cent. of the food we require comes from abroad. Dr. Tidy doubts the healthy condition of a nation that cannot maintain itself, and he regards the present increasing population and declining trade as serious facts for the sanitarian and sociologist.

MUSCULAR ATROPHIES.

THE most commonly recognised muscular atrophies are those that result from disease of the spinal cord and nerves, as well as that variety which is due to simple disuse. The neuritic and myelitic muscular atrophies are remarkable for the rapid rate of the wasting. That which is the simple outcome of disuse is manifested gradually. The electrical reactions of the wasting muscles are of great interest, and serve to group the different varieties into at least two main classes. Inflammation of the spinal motor cells, or of their prolongations in the mixed spinal nerves, leads to rapid atrophy, and the nerves soon cease to respond and the muscles to contract to the faradaic current. In chronic spinal muscular atrophy, or progressive muscular atrophy, the reaction of the muscle to faradaism is retained so long as any muscular fibres remain. In this disease it would seem as though we had to deal with a degenerative affection of the whole muscular apparatus, for in many cases the whole length of the nerve-cells and fibres of the brain (pyramidal tracts), as well as those of the spino-muscular segment, are found to be wasted. In the amyotrophy resulting from arthritis, about the pathology of which some difference of opinion exists, the electrical reactions are generally

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normal, but a change may be detected in some cases. As a general rule the wasting occurs in the entire length of the extensors of the joint affected, though other muscles moving the joint may be wasted, and occasionally the whole of the muscles of the limb are involved. The muscular atrophy that attends arthritis deformans of the multiple type is frequently remarkable. It has been ascribed, with the joint affection, to the influence of abnormal impressions from the generative organs acting on that part of the spinal cord corresponding to the muscular and arthritic atrophy. But it is quite as probable that the muscular wasting is the result of the joint disease, and of the same order as the amyotrophy resulting from an arthritis, however induced. It is supposed that the arthritic muscular atrophy is of reflex origin, due to the disturbance of some trophic nerve centre, irritated by the painful state of the sensitive nerve fibres. In addition to the amyotrophies already mentioned, there is a variety due to over-use; this is most frequently met with in feeble individuals, who use the muscles, generally those of the hands, unduly. But the list of muscular atrophies is not yet exhausted, for we have to recognise the idiopathic forms, of which the pseudo-hypertrophic paralysis is the best known. The simple idiopathic kind, in which the muscles waste gradually, without, so far as is known, any atrophy of the nerves or spinal cord, runs in families, and usually begins before adult life is reached. Some have even endeavoured to make another variety of this idiopathic group by separating those cases in which the atrophy begins in the face. Sometimes the amyotrophy accompanies hysterical paralysis, and cannot be ascribed to simple disuse, for the atrophy is frequently of rapid course in these cases. The same sort of atrophy of muscles is witnessed in the cases of disease of the spinal cord where the lesion does not anatomically affect the parts presiding over the nutrition of the wasting muscles. We must here suppose that some kind of morbid influence is exercised by the coarse disease of possibly the same kind as is transmitted to the trophic centres from diseased joints. The electrical reactions in this last class of cases are also generally normal.

SUFFOCATION IN A WELL.

A PAINFUL story of death from misadventure, which in this as in so many other cases means death from ignorance or carelessness, was investigated the other day by Dr. Danford Thomas. A prisoner in Pentonville Gaol volunteered, with a colleague, to descend a disused well for the purpose of removing pumps. The danger of such a proceeding is manifest, and it is reported that the authorities were warned of the danger, and the jury certainly appended a censure to their verdict. One of the men died and the other was so much affected that he had to go to a hospital. It is scarcely necessary to remind our readers that the utmost caution should be used before entering any well or confined space. Carbonic acid generates under a variety of conditions, and its action, even in small quantity, is not only poisonous but paralysing. The candle test is, when properly used, sufficient. If the candle burns clear and bright to the very bottom there is no danger, but if it does not go to the bottom there is always a possibility that carbonic acid, which is half as heavy again as air, may lie there, as in the celebrated Grotto del Cane, in which a man can stand while a dog is asphyxiated. It is commonly supposed that carbonic acid accumulates only in old or disused wells. This is a dangerous delusion. We were present a few years ago at an inspection of a new well on the estate of our lamented Editor, the late Dr. Wakley. The well had only been sunk a few weeks before in a country place remote from houses. It was loosely covered, and one of the men was about to descend for the purpose of inspection, when Dr. Wakley, with characteristic caution, insisted that a candle should be lowered first. It went out before it had gone six feet; and it is certain that if the man had gone down, as he proposed, he would have fallen lifeless to the bottom. The generation of carbonic acid below the surface of the earth is apparently capricious. The curious pits or caves, some of them more than a hundred feet in depth, which abound in the neighbourhood of Bexley, in Kent, contain no carbonic acid, as we can testify from personal experience, although they are said to have been excavated in prehistoric times; whereas, as in the instance already quoted, the gas may accumulate in a perfectly new chamber. The mere extinction of a flame is not a sufficient indication of danger. If the candle burns dimly there is risk, for the gas acts on living beings as on candles, and insensibility, or exhaustion tantamount to it, may be produced by a quantity of carbonic acid which would not immediately kill.

THE "BONE-SETTER" TRIUMPHANT.

A CASE of considerable importance to the medical profession was decided at the end of last month in the County Court of Cockermouth. The facts were briefly as follows. On June 27th, 1884, a solicitor named Nicholson injured his ankle, and sought the advice of Mr. Spurgin, in practice at Maryport. He remained under his treatment until the 16th of July, when, being dissatisfied with the results, he called in a "bone-setter," who, by the way, was not a duly qualified man. On the part of Mr. Spurgin it was contended that the said injury was only a severe sprain of the ankle, without fracture or dislocation, whereas the bone-setter alleged that the fibula was dislocated, and, further, that he reduced the dislocation. Judgment was given for the defendant (Mr. Nicholson), on the grounds that, according to the testimony of the defendant, "after a somewhat lengthened treatment by the plaintiff his pain and inability to move his foot rather grew worse, but upon the bone-setter operating upon his foot he felt the bone set right and obtained almost instant relief, and was in a short time able to walk as usual." The judge added "could this possibly have happened if the ailment had been a sprain?" He came to the conclusion it could not, and expressed himself "driven to the conclusion that it was dislocation, and not simply a sprain." His honour, with great frankness, gave as his reason for accepting the evidence of the bone-setter in preference to that of Mr. Spurgin and his assistant, that "there have been hundreds of cases where certified professional men have failed to discover the nature and cause of ailments in which uncertified men, or what are denominated 'quacks,' have succeeded in effecting cures." We cannot but think that the argument on this point was unsound, for to make the conclusion valid it ought to have been shown that uncertified men are more often right in their diagnosis and treatment than are duly qualified practitioners. But, apart from this, we maintain it is impolitic to set a greater value upon the alleged experience of a bone-setter than upon the opinion of a properly educated and legally qualified medical man. Having decided that the ankle was dislocated, his honour continued, "I have abundant authority for saying that any surgeon with a moderate knowledge of anatomy ought and might have discovered it." It is a pity Mr. Spurgin did not call medical evidence as to the probable nature of the accident, but doubtless he never dreamed of the judge discarding his professional opinion in favour of that of an unqualified man. We have not the slightest hesitation in saying the judgment was not warranted by the published facts of the case, whatever it may have been by the facts before the court. It is beyond all question that there never was a dislocation of the ankle in this case. The evidence of the defendant Mr. Nicholson, as well as that of the bone-setter, conclusively prove this; for had there been a dislocation, it is quite clear the foot would have been crippled too much

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to allow of the patient walking in so short time as a week after the reduction of the dislocation. This is one of those cases which Sir James Paget, in an admirable clinical lecture, speaks of as "cases which bone-setters cure." The improvement that followed the manipulation by the bone-setter was clearly due to the rupture of an adhesion consequent on the inflammation and forced rest of the foot incidental to the sprain. From the report of the trial, we cannot find one single fact to show that Mr. Spurgin did not recognise the true nature of the case and treat it with sound judgment and skill. Every surgeon knows that a sprained joint needs rest, and equally that it may be necessary, in order to complete the cure, to use some force at a later period with a view to freeing the joint from impediments which restrict its movements. We commend these remarks to the consideration of the judge who tried the case, for we feel fully convinced that, had he been instructed in the natural history of a severe sprain of the ankle and its appropriate treatment, he would have found abundant proof that there had been no dislocation of the joint. Should his honour ever have the misfortune to meet with a similar mishap as Mr. Nicholson, we ask him to believe (and to act on the belief) that a legally qualified surgeon is more competent to treat a *surgical* injury than a "bone-setter," even though the latter be gifted with hereditary talent unto the fourth generation.

FATAL RESULT OF PEROXIDE OF HYDROGEN INJECTIONS.

A NORWEGIAN surgeon, Dr. Laache, has reported a case in which a fatal result followed an injection of peroxide of hydrogen into the pleural cavity. The patient was a man twenty-eight years of age, who had had a portion of the ninth and tenth ribs resected for empyema. The operation had been successful and the wound progressed favourably, and two months after the operation there remained only a fistula about an inch and a half long. In order to hasten the healing of this, hypodermic injections of a 3 per cent. solution of peroxide of hydrogen were resorted to, as this method of treatment had given very satisfactory results in two somewhat similar cases in which it had been tried. Six injections, each containing 0·8 cubic centimetre of the solution, were administered without any particular effect. At the seventh, however, the patient complained of pain and faintness, the pulse failed, the respiration became oppressed, clonic contractions occurred in the right arm, the head turned to the left, the jaws became tightly set, the face became cyanotic, and the patient died in ten minutes. The necropsy, which was not made till forty-eight hours after death, revealed nothing very striking. The heart was dilated, and contained liquid blood without air bubbles; some ecchymoses were found in the parts of the left lung, which were adherent to the chest walls. In the fourth ventricle of the brain an ecchymosis the size of a pin's head was seen. A number of air bubbles were present in the blood of the hepatic veins, and some were seen on cutting into the spleen and kidneys. The cause of death was therefore by no means clear. Dr. Laache suggests that it may have been the small extravasation in the fourth ventricle or shock. Dr. Wulfsberg, who took part in the discussion on the case at the Christiania Medical Society, thought it was probably due to the introduction of the drug into the circulation. He thought that the strength of the blood current might have carried the peroxide, if introduced into a vein, through the right heart and lungs almost unchanged, but that afterwards more oxygen might have been disengaged than the blood could absorb, and bubbles were thus produced, which may have been the immediate cause of death. Where animals have been subjected to injections of air into the veins bubbles are not always found in the blood. In these cases Dr. Wulfsberg thinks that death has been due to paralysis of the heart, for when examinations have been made immediately after death bubbles have been found in the coronary arteries. As so long a time had elapsed before the necropsy in Dr. Laache's case, these might have been absorbed.

THE TRAGEDY AT FINSBURY PARK.

ON the 20th ult., an inquest was held by Dr. Danford Thomas concerning the deaths of Henry George Underwood, aged fifty-seven, and Jane Underwood, his wife, aged fifty-four. From the evidence it appeared that on Sept. 16th the son of deceased, on returning home late in the evening found the body of his mother lying on the back in her bedroom in an almost naked condition. Expecting his father to come in shortly, he went to bed; but in the morning, finding that his father was not about, and the body of his mother in the position in which he left it overnight, he raised an alarm. On a search being made, Mr. Underwood was found dead in the watercloset, with his throat cut. A razor was grasped in his hand, and the door was fastened on the inside; so there could be no doubt that he had taken his own life. In his case a verdict of suicide during a fit of temporary insanity was returned. It was naturally suggested that he had first killed his wife and immediately afterwards cut his own throat, the supposed motive being an insane impulse caused by his depressed state of mind consequent on the long-continued drunken habits of his wife. The body of Mrs. Underwood was covered with bruises of different ages. Round the neck a silk handkerchief was found loosely tied. On the front of the neck were some marks which might have been produced by an attempt at strangulation; and on the neck, face, and ears were a number of recent abrasions. The lungs were congested, but not particularly engorged. The liver was cirrhotic, and the stomach contained "a quantity of port wine." The deceased was intoxicated in the morning of the day on which she was found dead; after that she was not seen alive. There being some doubt as to the interpretation to be put on the evidence concerning the marks of injury, the inquest was adjourned, and a second necropsy was ordered to be made by an expert pathologist. At the adjourned inquiry on the 27th ult. Mr. Pepper stated that in his opinion the marks on the neck, face, and ears were scratches made by deceased in attempting to free herself from the constricting force applied to the neck. There were three bands of congested skin on the front of the neck, tapering away at the sides, and over them the skin was slightly excoriated. On the right side of the neck and at the nape were two recent bruises. The trachea and windpipe were deeply congested. On the right of the umbilicus was a bruise the size of the palm of the hand, which at the first examination was observed to be purple, but which a few days later had become bright-red in the centre. The bruise was a recent one, and the change in colour was evidently due to the oxidation of the colouring matter of the blood, as this had become diffused in the substance of the skin. Two or three coils of intestine underlying this bruise were deeply congested, but they presented no signs of constriction, ulceration, or rupture, and it appeared certain that the same injury had bruised both the abdominal wall and the bowel. As to the exact sequence of events preceding death it was impossible to speak with certainty, but in all probability the woman was strangled whilst in a helpless state of intoxication, and possibly after she had received a blow in the abdomen, either by falling heavily on some solid body, or at the hands of another person. That no great violence was employed to effect strangulation was proved by the comparative slightness of the marks made by the constricting force, especially as the state of nutrition of the tissues was such as to favour the easy

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development of bruises. The jury returned a verdict that deceased died from asphyxia caused by constriction of the neck whilst in a state of deep intoxication, but that there was not sufficient evidence to show by what means the strangulation was effected.

SCARLET FEVER AT NEWQUAY.

THE correspondence in *The Times* on scarlet fever at Newquay has been continued during the past week, and has sufficed to show that the prevalence of this malady was probably in the first instance due to milk infection, and was continued through the suppression of information by lodging-house keepers and others. *The Times* has certainly taught these persons a lesson that their own interests are not best served by such conduct, and if the same powerful voice still continues to give publicity to similar occurrences, lodging-house keepers will find that their own interests are absolutely dependent upon the measures they adopt for ensuring the welfare of those whom they receive, and will be forced to have more regard for the safety of those who visit summer resorts. A system of notification of infectious diseases faithfully carried out is the chief step which must be taken, but more good would come if those who provide lodging accommodation would voluntarily agree to a register being kept at the office of the sanitary authority, which could be consulted by visitors, and give all necessary information as to the sanitary condition of such houses, and as to their freedom from infection. Doubtless, concealment is due to the fear of losing profits which would otherwise be made during the season, and it is therefore necessary that there should be some provision for reducing this loss; this could best be done by the organisation of a system of insurance which would guarantee the payment to the letter of lodgings of some sum as compensation for loss incurred through the house remaining unoccupied on account of the occurrence of infectious disease within it. Such an organisation might also assist in checking the importation of infectious persons. "Medical Officer of Health," in a letter which forms part of the correspondence to which we have referred, writing on the scope and intention of the 90th section of the Public Health Act, 1875, says that this clause applies to houses of the artisans and labourers' class. It is true that this limitation exists as a matter of practice, but there appears to be no reason why these regulations should not be made to apply to houses of all classes which are thus let; the limitation hitherto observed has been due to the belief that they were not required for any but those occupied by artisans and labourers.

THE EASTERN GIPSY 'CRUX."

AN amusing illustration of the difficulties of self-government is afforded by the dead-lock to which matters have come in connexion with the Eastern—it is absurd to call them *Greek*—gipsies, who, having been landed in this country, can neither be got rid of, nor, as it would seem, reduced to the condition of a tolerable integer in the sum total of the population. An autocratic government would simply have shipped them to some other shore and landed them either by stealth or defiantly. Under our milder system of self-rule, we are struggling with the difficulty of solving the question what to do with these children of Esau. The serio-comic element of the situation comes out strongly in a charming succession of incidents. The local police stop them while travelling, and finally direct them to a place of encampment on certain land, the owner's permission being either asked by, or volunteered to, the chief constable. After a while the medical officer of health strives to enforce sanitary provision, and, failing in his laudable endeavours, reports the existence of a nuisance. Whereupon the owner of the property is to be indicted for a nuisance! Could anything be more absurd than this business throughout? It doubtless seems perfectly proper to the authorities concerned. Their sole concern is to get rid of the nuisance. It was even suggested that some benevolent person should provide a cart, and these gipsies could then "move on" on the Queen's highway, where no one would stop them. A vagrant band has no special interest for local sanitary authorities, provided only that it keeps moving. Thus it is that public health is reduced to the position of a football which may be kicked about at pleasure, and the only aim of the players is to keep it out of their bounds, where else it may go being a matter of perfect indifference. The aim of the medical officer to establish sanitary conditions in this case was frustrated at the outset by the mere objection of the owner of the property to allow the erection of even movable closets!

DRESS OF SOLDIERS ON FIELD SERVICE.

COLONEL TULLOCH, in a recent number of the *Illustrated Naval and Military Magazine*, has given a description of an extemporised dress which was adopted in the battalion of the Welsh Regiment under his command in South Africa, in anticipation of being sent on field service. The clothing of the men was the same as in England, and was ill suited for active service during the hot season in Natal; the colour of the scarlet kersey was also considered to be objectionable, and there was not time to obtain suitable light clothing from England or khakee from India. An additional stout grey flannel shirt was therefore issued to each man, to be worn as a blouse over his other shirt instead of the kersey. Shoulder straps of cord were put on to retain the belts in position. This dress had the advantage of being loose about the neck and throat, cooler than that which it replaced, and of a less conspicuous colour. It seems to be remarkably well suited for the purpose for which it was devised, and would doubtless have added materially to the comfort of the men in the field. Colonel Tulloch also suggests the removal of the metal ornaments from the helmets, or, still better, the substitution of a pith helmet for that now in use. These were worn by the "Royals" at Hong-Kong and on field service in China twenty-five years ago, and have the great merits of being light, cool, and inexpensive. Colonel Tulloch's experiment might prove practically suggestive to those in authority who are responsible for the clothing of the soldier.

SUFFOCATION; MUSSEL POISONING; HEART DISEASE; SYNCOPE?

THE evidence tendered before the coroner at Westgate, Rotherham, on Sept. 28th, concerning the death of a labourer named John Sykes, aged thirty-six years, was consistent with death having occurred from one or more of the causes mentioned at the heading of this note. Deceased had "rheumatic fever" three or four years ago, but whether it left any cardiac mischief was not known. On the day before his death he got drunk and vomited. He was put to bed in the evening, and at half-past four in the morning he was found dead. It seems not improbable that vomiting occurred whilst deceased was in a state of partial consciousness, and that he was suffocated by some of the vomited matter getting impacted in the air passages. Or the exhaustion consequent on persistent vomiting in a person of weak bodily powers may have terminated in a fatal fit of syncope. Or, again, there may have been cardiac valvular disease, and the strain on the heart incidental to vomiting may, together with this, have determined the issue. We do not attach much value to the fact that he had been eating mussels, for no one else seems

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to have suffered any ill effects from this possible source. Lastly, death may have ensued from acute alcoholic poisoning. The coroner left it to the jury to say whether it was desirable to have a post-mortem examination made, but "the good men and true" were satisfied, and returned a verdict to the effect "that death took place from natural causes, probably from heart-disease"—a most unsatisfactory ending to the inquiry, as we think. If, as seems likely from the evidence, deceased was so intoxicated as to necessitate his being carried home, someone ought to be made answerable for having supplied him with a poisonous quantity of alcohol, or with having served him with more "drink" when he was already inebriated. It is true the matter was one for the jury to decide, but a little persuasion and guidance on the part of the coroner generally suffices to induce them to be led in the desired direction; and in this case, we think, the inquiry should have been adjourned for further medical evidence—viz., that which could only be obtained by a necropsy.

THE DIRECT REPRESENTATIVE FOR IRELAND.

DR. KIDD'S candidature has been pressed forward by a large meeting of the profession at the Shelbourne Hotel on the 29th ult. Resolutions were proposed by Drs. Gordon, Aquilla Smith, and R. McDonnell, the chair having been filled by Sir George Porter. The Executive Committee consists of Drs. Bennett, Corley, Gordon, Mapother, and Wm. Stoker. The only objection to Dr. Kidd is that he is not a general practitioner; that Dublin and its corporations are already amply represented. If the new seat is to go to a dignitary of one of the colleges, it might as well not have been granted. It rests with the practitioners of Ireland to show that they are capable of promoting successfully the election of one of their own number.

"FOUND DROWNED."

NOT long since the body of a young woman named Elsie Corfe, of highly respectable position and family, was found drowned in the river at Bath. There was no evidence to show how deceased got into the water, or how her death was occasioned. On the evening before her body was discovered in the early morning, she appeared in good health and spirits, and there was utter absence of known motive to commit suicide. The fatality has caused considerable excitement in the neighhourhood, where deceased was well known and respected. We cannot help thinking that it would have been a wise procedure on the part of the coroner's court if a post-mortem examination had been ordered. The cause of death would then have been elicited, whereas the case now stands—"a mystery"—just as the jury received and dismissed it.

DR. VON HOLST ON NITRO-GLYCERINE.

DR. L. v. HOLST reports in a St. Petersburg journal a number of observations on the action of nitro-glycerine on heart diseases. He considers that it is especially useful where little or no serious organic change in the heart muscle or valves has taken place, and where the affection is mainly due to a debilitated condition of the organ. In angina pectoris Dr. von Holst has found nitro-glycerine very useful; in one case, indeed, it produced a permanent cure. He recommends recourse to this drug instead of to camphor and musk in cases where great cardiac weakness threatens immediate danger to life. He considers that the diuretic action is not due to any direct stimulation of the kidneys, but is a consequence of the regulation of the heart's action. He finds that dropsy, if due to heart weakness, diminishes under the use of nitro-glycerine, but that the renal form is uninfluenced by it. With regard to the dose, the author advises that small quantities should be given at first, and increased gradually according to the effect on the particular case. The preparation he uses is a 1 per cent. alcoholic solution, and of this he gives from one to six drops three times a day.

FACULTY OF PHYSICIANS AND SURGEONS, GLASGOW.

AT the annual general meeting of the Faculty on Monday last, Dr. James Morton, Professor of Materia Medica in Anderson's College, was elected president. Dr. Morton has fairly earned the compliment thus paid him, and the dignity and interests of the Faculty will be safe in his hands. A special meeting was held at the close of the annual meeting, for the purpose of disposing of the case of the "Erring Fellow," whose name is associated with a much-advertised liniment. The Fellow in question was suspended from the Fellowship for a period of six months, as, notwithstanding the facts that he had professed submission to the will of the Faculty, acknowledged his error and made an abject apology, and had also promised to withdraw from all connexion with the liniment by Sept. 1st, the preparation was still advertised and purchasable at the time of the meeting of the Faculty. The Faculty deserves credit for the manner in which it has dealt with this case, for, while it acted with energy, it gave every opportunity to the offender to withdraw from his unfortunate position, and proceeded to extreme measures only when it was seen that the dignity of the profession, as represented by the Faculty, could be maintained in no other way.

THE JUBILEE OF HARVARD UNIVERSITY.

ON the 7th of November next, the Harvard University of Cambridge, Massachusetts, will have completed its 250th year, and it is proposed to celebrate the event in a suitable manner from the 6th to the 8th of that month. The University was established by an Act of the Colonial Legislature, and a certain John Harvard so liberally endowed it that it was decided to give the new institution his name. The jubilee will have great interest to the members of the medical profession, for this University has taken a leading part in the education of medical men for the Eastern States of America; and it has particularly distinguished itself by its persistent efforts to raise the standard of medical education. Its medical degrees have been very highly valued, and all friends of higher medical education will rejoice to know that age has in no way impaired the usefulness or the vigour of the University. With one exception, Harvard is the oldest university in the New World. Nearly 100 years before, in 1551, the Emperor, Charles V., established the University of St. Mark's at Lima.

BLIGHT ON AUTUMN AND WINTER GREENS.

THE value of green vegetables as an article of diet was recognised a century and a half ago by Arbuthnot, physician to Queen Anne, who in a treatise "On the Nature and Choice of Aliment," which was published in 1732, writes that "of alimentary leaves, the *potherbs* afford an excellent nourishment; amongst these are the cale or cabbage kind." Few things add to the relish of the poor man's dinner more than an abundance of well-cooked cabbage. "Bacon and greens" are proverbially popular. The old and general idea that green vegetables act beneficially in counteracting a disposition to what are popularly known as scorbutic affections is confirmed by modern experience. Thus any lessening of the supply or deterioration in quality of winter vegetables of the cabbage tribe is a subject of regret both to poor and well-to-do persons. The present autumn has been very favourable to the development of the species of blight

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or aphis which attacks the cabbage tribe in particular. These diminutive insects prey upon the plants and so stunt their growth that gardeners are much concerned about their autumn and winter vegetables. In spring the aphis commits great havoc among young cereal plants, but in autumn, which is a period of active propagation, it attacks chiefly garden vegetables. It is a curious fact in natural history that the aphis propagates after fecundation for eight or nine generations without intermediate fecundation. "L'influence d'une prémière fécondation s'étend ainsi sur plusieurs générations successives." So writes a French naturalist; and it is calculated that a single mother may be the means of producing five thousand million offspring in the course of a few generations of ephemeral existence. These numbers account for the havoc such diminutive creatures can cause.

THE RETIREMENT OF SIR HENRY ROSCOE.

THE Victoria University, formerly Owens College, Manchester, sustains a great misfortune in the resignation of Sir Henry Roscoe. For many years Sir Henry has been recognised all over the civilised world as one of the greatest scientific men of our age. His researches have added chapters to the history of chemistry, his writings have adorned it, and his teaching has equipped a host of brilliant and useful scientific workers and successful teachers. His uniform courtesy, and the ready help he has afforded to all who sought it, have procured him high esteem among men, and when he was elected to a seat in Parliament all lovers of science rejoiced. The great empire of science is but imperfectly represented in England, and all felt that in Roscoe it had gained a worthy supporter. It is no doubt the pressure of Parliamentary duties which has led to the loss with which the Victoria University is threatened. We say threatened, because we are inclined to hope that even at the last moment Sir Henry Roscoe may be induced to reconsider his determination. Of course his Parliamentary duties would diminish considerably the time he could devote to the work of personal teaching in Manchester, but he could still deliver the most important part of the course of lectures, and his great reputation and experience and his power of organisation would still be at the service of the young University. The details of teaching could easily be carried out by others, but no one can replace Roscoe as a head. Doubtless the University authorities see all this as plainly as we do, and will do their utmost to prevent their most distinguished ornament from leaving them.

RELATION OF MEDICAL MEN TO DENTAL QUACKERY.

WE have had a matter of professional etiquette referred to us lately. A medical man writes saying that he was called in upon two occasions to administer chloroform to patients by a man who practises dentistry, but who, he has since been informed, is not registered, and our correspondent wishes to know what course he should pursue in future. There can be only one possible answer. He should absolutely refuse to attend. To associate in any way with one who is liable to prosecution, should he ever call himself a dentist and yet practises, must bring discredit not only upon himself but upon the medical profession generally. We will go further and say that no medical man should allow his name to be connected in any way with dental quackery or advertisement. Dental specialists have for years worked hard, and with success, to raise their professional and social status, and they look to their parent—the medical profession—to help them by not encouraging irregular dental practitioners.

ROYAL UNIVERSITY OF IRELAND.

BY the death of the Rev. J. Kavanagh, who was accidentally killed last Monday, another vacancy on the Senate of the Royal University has arisen. The deceased met his death in a singular manner. While performing service in the chapel a statue on the canopy of the altar, weighing about 40 lb., fell, striking the unfortunate clergyman, and precipitating him with considerable violence to the ground. This caused a fracture of the skull, and an injury to one of the branches of the temporal artery, which caused death in less than an hour. It is probable that to the names already mentioned as candidates for a seat on the Senate may now be added that of Dr. Knight, who may be induced to come forward.

TREATMENT OF TUBERCULAR MENINGITIS.

THE *Revue de Thérapeutique*, after stating that tubercular meningitis kills 25,000 persons every year in France alone, and quoting a passage from Jaccoud, in which he speaks of the powerlessness of medical men to cope with this terrible disease, cites some recent observations of a Swedish physician, M. Warfwinge, on the marvellous effects of a 1 to 5 iodoform ointment rubbed into the previously shaved head in quantities of seventy-five grains, night and morning. During the interval, the head was covered with an oilskin cap, which was secured by a bandage. M. Warfwinge treated five cases in this way, with a successful result in every case. The first case was treated for seventeen days, the second for nineteen, the third for thirty, the fourth for thirty-two, and the fifth for nine days only. Ordinary remedies were given in addition for any complications which arose, but M. Warfwinge attributes the successful results to the iodoform alone.

A STEP IN THE RIGHT DIRECTION.

OUR correspondent in Rome writes:—"The Hygienico-sanitary Commission has sent in its report to the Minister of the Interior, and that functionary has accordingly issued a circular to all the Italian communes, requesting them to furnish him with scientifically ascertained particulars of their water-supply, which the aforesaid commission had animadverted on as being bad, suspected, or insufficient. This step, he says, is taken with a view to providing every commune throughout the peninsula with sound potable water, and to invoking, if necessary, the authority of Parliament *ad hoc*. Such announcements are reassuring as to the public health of Italy, especially if taken in connexion with her fast-waning belief in quarantine by sea as well as by land."

ARMY MEDICAL SCHOOL.

THE winter session of the Army Medical School was opened on Friday, the 1st inst., when the introductory address was delivered by Surgeon-General Sir T. Longmore, C.B., Professor of Military Surgery. There were sixty-six surgeons on probation present, forty-one being candidates for commissions in the British Medical Service and twenty-five in the Indian Medical Service.

LOCAL AUTHORITIES.

MR. T. HARNESS HARRISON appears to have read at the Congress of the Sanitary Institute a paper which condemns, in terms not of the mildest, the motives and actions of members of local authorities. While expressing the opinion that the Public Health Acts are fairly satisfactory measures, he says that the bodies who administer them consist largely of men whose object is to frustrate their operation—these members, together with those who are passive, making 95½ per cent. of the total number. We do not doubt that this

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estimate may be true for certain authorities. There are some who have earned an unenviable notoriety for their opposition to sanitary measures and their treatment of officials whose duty it is to carry the law into effect; but the progress the country has made during the present century, the large sums of money spent in public sanitary works of water-supply and drainage, are themselves evidence that local authorities as a whole are not backward in their duty. More harm than good is done by neglecting to recognise the benefits many districts have received at the hands of local representatives; condemnation should be reserved for those who are alone to blame.

MORE CANDIDATES FOR DIRECT REPRESENTATION IN ENGLAND.

MR. JOHN PAGE HENTSCH writes us to say that the members of the Medical Alliance Association and others have invited Mr. R. H. S. Carpenter and Mr. George Brown to stand as candidates for the Direct Representation seats in the General Medical Council, on the ground of the services of these gentlemen in connexion with attempts to prosecute illegal practice. Both of them have accepted the invitation. Whoever be the candidates returned, it will be their duty to use the powers of the Council and of the Act to the utmost in discouraging and punishing illegal practice.

THE SANITARY ASSOCIATION OF SCOTLAND.

THE twelfth annual meeting of this Association was held last week at Paisley, under the presidency of Mr. William Mackison, C.E. Two excellent papers were read by sanitary inspectors. "The Higher Aspects of Sanitation" were discussed by Mr. George A. D. Mackay, who gave some interesting statistics of the proportion of the total number of families living in one room in eight Scotch towns; while Mr. George McKay contributed a paper on "Ancient and Modern Sanitation," and showed in a tabular form the percentage of improvement in the death-rates in different districts in Scotland, and concluded with a number of suggestions, having as their object the promotion of sanitary work. The published accounts of the meeting appear fully to justify the statement of the chairman, that never was there a time when so much was being done to remedy existing sanitary defects as at present.

DENTAL CARIES IN BAKERS.

PROF. DR. HESSE of Leipsic, in the *Deutsche Monatschrift*, points out the deplorable condition of the teeth of bakers, and says that he is often able to tell the profession of the patients by the condition of their teeth. The caries is soft and rapidly progressive. The principal parts attacked are the labial and buccal surfaces of the teeth, commencing at the cervix and rapidly extending to the grinding surface. The approximal surfaces do not seem to be attacked more than in other patients. He believes the disease to be due to the inhalation of flour-dust, the caries being caused by the action of an acid which is formed in the presence of fermentable carbohydrates.

CARE AND EDUCATION OF IDIOTS.

AT the congress of those in charge of idiots held last month in Frankfort, Dr. Wulff, director of the asylum at Langenhagen, spoke strongly of the great importance of good nourishment for the inmates of such institutions, the meals, which should if possible number five daily, requiring skilled supervision, and the idiots being attended to by intelligent and careful persons. Dr. Berkhan, of Brunswick, spoke on Cretinism, and demonstrated the points of resemblance of a cretin's skull to the skulls of microcephalic subjects and Aztecs. He dwelt upon the diminution in cretinism which had already been produced by better attention to the nourishment of children in their earlier months and improvements in their surroundings. Dr. Barthold, director of the M.-Gladbach Asylum, read a paper on the Education of Idiots, showing how the doctor and the schoolmaster must work hand in hand. Suggestions were also made for forming classes for children of weak intellect in large towns; and Dr. Sengelmann, of Alsterdorf, read a paper on the Training of Teachers and Attendants for Idiots It was decided that the next place of meeting should be Brunswick.

TUBERCULAR ULCERATION OF THE VULVA AND VAGINA.

THE current number of the *Viertel. für Dermatologie und Syph.* contains a paper on a rare case of extensive ulceration of the vulva and vagina, by Dr. H. Chiari. A lithographed plate shows the extent and shape of the ulceration in the parts as removed from the patient, aged thirty Most of the internal organs of the body were the seat of chronic tubercle—lungs, bronchial and mesenteric glands, intestines, left suprarenal body, cerebral meninges, liver, spleen, and kidneys. The manner in which the infection of the vulva was effected is discussed, and the suggestion made that the germs from the intestinal disease may have been accidentally inoculated on the site affected. It should be stated that the uterus and its appendages were free from disease, and that the patient was a nullipara.

THE CHOLERA IN EUROPE.

THE cholera is steadily diminishing in Italy, and intelligence as to fatal attacks is almost entirely limited to the south of the kingdom. The disease still clings to the Bay of Naples, although it is much less severe than formerly. In the Austro-Hungarian Empire some fresh places have been attacked, and the malady is still fatally prevalent at Trieste and Pesth. In Pesth the fatality is now reduced to about four a day; and Szegedin, where twenty-eight cases and eleven deaths occurred in the forty-eight hours ending the 5th inst., is the only place where the disease shows any important increase. There are serious accounts of the ravages committed by cholera in Seoul, Corea.

MANSION HOUSE CHARITIES.

THE Hospital Sunday Fund has now reached a total of £40,000, and there are still fifty-four collections from churches and chapels to come in. Adding this to £78,0000 subscribed for the unemployed poor of London, nearly £120,000 has been raised for strictly metropolitan purposes, not to mention £6500 raised for the relief of the sufferers of the appalling earthquakes of Charleston and Greece. The Mansion House authorities must be congratulated on such results, especially when the badness of the times is considered.

FOREIGN PROFESSORIAL APPOINTMENTS.

THE following *agrégés* have been appointed for eight years to lecture on their respective subjects in the different Faculties of Medicine in France:—*Paris:* MM. Quenu and Poirier, Anatomy and Physiology. *Bordeaux:* M. Ferré, Anatomy and Physiology; M. Nabias, Natural History. *Lille:* M. Assaky, Anatomy and Physiology; M. Barrois, Natural History. *Lyons:* MM. Rodet and Jaboulay, Anatomy and Physiology. *Montpellier:* MM. Gilis and Tapis, Anatomy and Physiology. *Nancy:* MM. René and Nicolas, Anatomy and Physiology.

Buda-Pesth.—Drs. Israi and Bakó have qualified as privat-

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docents for Laryngology and Diseases of Urinary Organs respectively.

Prague (Bohemian Faculty).—Dr. Joseph Thomaier has been appointed Extraordinary Professor of Special Pathology and Therapeutics.

St. Petersburg.—Dr. A. Pöhl has been granted the title of Honorary Professor of Medical Chemistry in the Princess Helena Paulovna Clinical Institute.

Würzburg.—The names of Professors Schörnborn, Trendelenburg, and Miculicz are those selected for the vacant Professorship of Surgery.

AT a recent meeting of the Glasgow Town Council an account was given of an outbreak of scarlet fever which is likely to promote the adoption of measures for the notification of cases of infectious disease. Scarlet fever has, it appears, attacked a number of persons receiving milk from a particular dairy, forty-four cases occurring among the milk consumers. A child suffering from this disease was found at the dairy, but the parents refused to permit its removal to hospital because their own medical man had declined to certify to it. For the protection of the public the dairy was closed, the premises fumigated, and the milk found upon them destroyed.

IT will be seen from our advertisement columns that the inaugural dinner of the Glasgow University Club, London, will take place at the Holborn Restaurant on October 22nd, at 7 P.M. The hon. secretaries are Dr. Heron, 57, Harley-street, W., and Mr. McIlraith, 3, Furnival's-inn, E.C., of whom tickets may be had.

AT the Westminster Hospital, Mr. Arthur Marmaduke Sheild, M.B., F.R.C.S., has been appointed assistant-surgeon, in place of Mr. Boyce Barrow, who has resigned; and Mr. James Black, F.R.C.S., has been appointed aural surgeon.

THE MEDICAL ACT, 1886: FOREIGN AND COLONIAL PRACTITIONERS.

BY A BARRISTER-AT-LAW.

THE Medical Act of the present year restricts the right of practising in the colonies which our registered practitioners have hitherto possessed; and it prescribes terms upon which both colonial and foreign practitioners may be admitted to registration in the United Kingdom.

Under the Medical Act of 1858 (Section 31) a registered practitioner had the right to practise, according to his qualification, and to recover his fees in any part of Her Majesty's dominions. A subsequent Act (the Medical Act of 1868, Section 3) enabled every colonial legislature to require such practitioner to register, as a condition of practising, within its jurisdiction; but it left him entitled to registration upon payment of the proper fee, and therefore (though in the requirement of a fee there may have lurked some possibility of obstruction) it left his right to practise unimpaired. In future, however (from June, 1887), though all existing rights of individuals are reserved, the right of our registered practitioners to practise in the British possessions is made "subject to any local law" (the Medical Act, 1886, Sections 6 and 25); it will exist wherever, in the British empire, and so long as, there is no local law regarding it; but every local legislature may impose conditions upon it, and may even, if so disposed, exclude it altogether.

In this, no doubt, a concession—a large one, too—has been made to colonial practitioners at the expense of practitioners registered in the United Kingdom. To deter them from pressing for an illiberal use of it, there are the conditions upon which they in their turn, and foreign practitioners also, are by the recent Act enabled to claim registration in the United Kingdom. Broadly speaking, this Act provides for a sort of reciprocity, as regards the right to practise and recover fees, between the United Kingdom on the one hand, and foreign countries and British possessions on the other.

The decision to admit any colony or foreign country to the benefit of the Act will be made by the Queen in Council, but this will be preceded, no doubt, by communications or negotiations, and probably by some more or less formal compact, between the colony or foreign country and our Colonial or Foreign Office. And any British possession or foreign country may, by order in Council, be declared to be a British possession or foreign country to which the Act will apply (from a day named in the order), if it affords to the registered medical practitioners of the United Kingdom "such privileges of practising as to Her Majesty seem just." (Section 17.) Till this is done for a colony or foreign country no right will accrue to any practitioner holding its qualifications. And this done, it will fall to the Medical Council to decide what degrees or diplomas, or combinations of degrees or diplomas, granted by the colony or foreign country can be recognised as furnishing a sufficient guarantee for the knowledge and skill required in the efficient practice of medicine, surgery, and midwifery. It should be said, however, that where, in working the Act, qualifications which have not been thus recognised are tendered to the Medical Council and rejected by it, the claimant of registration may appeal to the Privy Council, and that the Privy Council may order his qualifications to be recognised. (Sec. 13—1, 2.)

The provision that may so be made in favour of any colony or foreign country may be revoked by subsequent order in Council, and may thereafter be renewed. Rights acquired under an order will not be prejudiced by its revocation; but on its revocation the country affected will fall out of the list of countries to which the Act applies, so that no further claim to registration can be received from persons holding its diplomas or degrees.

The Act provides (Section 14) that the Medical Register shall in future contain a list of colonial practitioners and a list of foreign practitioners, and it allows those who are so entitled to be registered in both lists. For the phrase "colonial practitioner" does not in the Act mean a practitioner of colonial birth, but a person, wherever born, who holds colonial diplomas, granted in a colony to which the Act has been made applicable, and recognised by the General Council; who is by law entitled to practise medicine, surgery, and midwifery in the country which gave him his qualification; and who, moreover, fulfils certain other conditions. And, similarly, the phrase "foreign practitioner" extends to all persons, wherever born, who hold recognised foreign diplomas, granted in a country to which the Act applies, who are by law entitled to practise as aforesaid in the country which granted them, and who fulfil certain prescribed conditions. An applicant for registration in either list must prove his qualification and right to practise as above mentioned, and also that he is of good character, to the satisfaction of the Registrar of the General Council. Thereafter, the "colonial" applicant must prove, to the satisfaction of the same functionary, that he obtained his qualification either (1) at a time when he was not *domiciled* in the United Kingdom, or (2) in course of a continuous absence from the United Kingdom lasting for not less than five years (these are the continuing and more important provisions); or (a transitory provision) that when the Act became applicable to the country from which his qualification is derived he was practising medicine and surgery (or a branch of either) in the United Kingdom, and that he had been so practising, in the United Kingdom or elsewhere, continuously for ten years preceding at least (Section 11). The "foreign" applicant, if he is a British subject, whether a native of the United Kingdom or a colonist, is under precisely the same conditions. If he is not a British subject, proof of that fact suffices for him (Section 12). Registration in either list, where a claim to it has been established, will be granted, without examination, on payment of a fee, not exceeding £5, to be fixed by the General Council. That there may be an appeal to the Privy Council as regards the qualification tendered has already been mentioned. There may be an appeal, also, when registration is refused on any other ground (on a question of character, for example, or on a question of domicile), and the Privy Council may overrule the decision of the Registrar.

Of the transitory provision for the case of persons practising in the United Kingdom when an order in Council comes into force, and having qualifications recognisable under the order, all that need here be said is that while, on

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the one hand, there will be no inquiry as to the circumstances in which they obtained their qualifications, they must, on the other hand, have been at the date referred to in practice continuously for not less than ten years. The meaning of the proviso is plain enough, and it is with that only that this article is concerned. As to the continuing provisions, a foreigner of good character claiming on a sufficient foreign qualification will always have an easy task, having merely to prove that he is not a British subject. In other cases the question of domicile may now and then raise a difficulty. The word "domiciled" is of course used in the Act in its technical meaning; and (though that is not to be explained briefly) it seems necessary to say that, in the legal sense, one may be domiciled in England though not a resident in it, or a resident in England without being domiciled in it. A man's domicile is, to begin, in the country of his origin, and mere absence from that country, however prolonged, will leave his domicile still there; for a change of domicile, he must be absent without thought of returning, and resolved to spend his life in some other country in which he is settled. It is needless, however, to forecast the questions of domicile that may arise. Here it is enough to say that, in general, a person born and bred in the United Kingdom will, as being domiciled in the United Kingdom, be unable to claim registration on either a colonial or a foreign qualification, unless he got it in course of a continuous absence from the United Kingdom of not less than five years; and that, in general, both a foreigner and a colonist (as to whose domicile there will usually be no room for doubt) will have no difficulty in claiming on either.

Provision is made (Section 15) for the entry in the Register of the qualifications possessed by persons registered as colonial or foreign practitioners. Provision is made also (Section 16—another transitory provision) for the registration of foreign degrees in medicine possessed by practitioners registered on British or Irish qualifications which have been obtained after proper examination, and prior to the passing of the Act.

As to previous proposals or suggestions on the subject of the Act, the clause relating to foreign and colonial practitioners contained in Lord Ripon's Bill of 1870 differed widely from the provisions now enacted, since it would have confined registration to persons over forty years of age, and who had been not less than ten years in practice. The General Council had previously (July, 1869) expressed itself in favour of provision being made to enable it, by special orders, to dispense with such conditions of the Medical Acts and such of the regulations made under them as it should think fit, where foreign or colonial practitioners applied for registration. A resolution altogether unfavourable to the registration of foreign degrees—proceeding upon a communication from graduates holding such degrees, themselves apparently already upon the Register—was subsequently, in 1876, arrived at by the General Council. A close approach, however, to what has now been enacted was made by the President of the General Council in 1879 in a communication written for the Select Committee of that year. There was at that time in France an agitation for the exclusion of foreign practitioners from the privilege of practising in France. The President thought that, if a joint committee of foreign and English representatives could be got to consider the matter, "it might be possible to bring about reciprocal action which would be just and beneficial to all parties"; and which "would tend to secure a wise and uniform standard of medical education, whether practical or scientific, in all civilised communities."

*** The above article was unavoidably omitted from our last issue.

OUTBREAK OF ANTHRAX IN CATTLE, AND FIVE MEN INFECTED.

By JAMES A. FRASER, L.R.C.P. Lond., M.R.C.S.

THINKING that a history of the following outbreak of anthrax might prove of interest to many readers of THE LANCET, I send a short sketch of it.

On June 6th a cow was taken suddenly ill, the cause of the illness being attributed to the excessive heat; it was slaughtered, and the meat, not being condemned, was disposed of. No farther case occurred until July 1st, when a second cow was taken ill suddenly and died. Splenic fever was diagnosed, and found correct on post-mortem examination. On the 6th two beasts, a cow and pony, were affected and died, splenic fever in both being found to be the cause of death. On the 11th a sow was taken ill, and on inspection was found to be enormously swollen. This sow was fed on the offal of the cow that died on July 6th. On the 12th a fourth cow died of splenic fever. The entrails of this last cow were buried in a dung-heap situated at the top of an incline in the pasture. All the above beasts were pastured in the one field, which had never had a case of splenic fever in it before June 6th, a stagnant pond being supposed to be the source of infection.

On July 24th I was informed that Henry P——, by occupation an odd job man about the market, and who was in the habit of wheeling offal from the slaughterers, had been admitted into the union infirmary, the time of admission being 4.30 P.M. He was seen by my assistant, Dr. James Lawson, the note on his admission card being "mitral disease and pneumonia." His condition was as follows:—Cyanosis of face, ears, hands, and arms up to elbows, and of feet and legs up to knees; breathing very laboured, 40 per minute; dulness over base of left chest at back, and slightly over base of right lung; loud râles, especially in left chest; heart sounds rapid and faint, and covered by the chest râles; radial pulse not to be felt; perspiration standing in beads on the face. The patient spoke once, and said that he was infected while helping to dress a cow. The date of such dressing could not be ascertained, as he became comatose, and died at 8.30 P.M.

A post-mortem examination was made forty hours after death, the following being a copy of the report:—Skin of face jaundiced; lips livid; cyanosis marked; hypostatic congestion of skin of body; an ulcer at junction of upper and middle thirds of right tibia; no other skin lesion found. The pericardium contained an ounce and a half of blood-stained serum. Pleura on right side non-adherent; on left side, new and old adhesions present, very firmly bound down at the base, the lung tearing on attempting to remove it. Right lung congested; left lung congested and rotten at the base; no sign of abscess anywhere; lung floating. Heart: Right side contained clot; both valves normal. Left side, wall hypertrophied; full of coagulated blood, which was soft, not firm; the lining membrane much stained. Aortic valves would not admit the finger; patches of atheroma were present on the aorta; patches of granulation on ventricular surface of the valves. Mitral valve puckered and incompetent, and granulations on the ventricular surface; admitted two fingers. The liver weighed 3 lb. 5 oz.; it was healthy, but congested. The spleen was not enlarged, but was congested and broke down easily. Kidneys: Weight, 11¾ oz.; congested and tough. Intestines very congested in patches, corresponding to the long axis of intestine; the congestion of the intestines was most marked towards the ileo-cæcal valve; the glands of Peyer showed nothing abnormal; solitary glands enlarged; mesentery much congested. Brain: Vessels full; on section the vessels stood out full of clot; ventricles empty. The pleural, pericardial, peritoneal, and meningeal spaces contained blood-stained serum. On examining the blood, dried on cover glasses, stained with gentian violet, and mounted in balsam, great numbers of anthrax bacilli, some very long, were found in every field. On examining scrapings of the spleen prepared in the same way, more numerous but shorter anthrax bacilli were present.

On making inquiry, Mr. Mackenzie, under whose care the above patient was before admission into the union, has furnished me with the following list of cases which have been under his care:—

1. G——. Summoned to attend fifteen hours after infection; found patient with pneumonia and hæmoptysis; two malignant pustules on right forearm. Died four hours after seeing him.

2. S——. Large malignant pustule on right cheek; great swelling; free application of absolute phenol; large slough; no secondary mischief. Recovery in three weeks and a few days.

3. K——. Malignant pustule on left brow, treated with absolute phenol. Recovery in a fortnight.

4. M——. Questionable pustule on hand; seen early; arm œdematous and inflamed. Used absolute phenol. Recovery in ten days.

It will thus be seen that Mr. Mackenzie had five cases under his care, three of which were recovering.

The fact of anthrax not coming under the Contagious

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Diseases of Cattle Act prevents the local inspector from proclaiming the pasture on which the outbreak occurred as an infected area, so that other beasts may be turned down on it and so become infected. If the meat is not condemned it may become a source of infection to human beings. The slaughterers, not being aware of the danger attending the skinning and cleaning of such infected cattle, are very careless, and run great risks—e.g., eating pieces of the suet, holding the skinning knives in their teeth, &c.; and, last but not least, the offal not being burned, but buried, proved to be a fresh source of infection, as may be seen by what follows.

On July 26th, the veterinary surgeon (Mr. Gray) was called up early in the morning to see a horse which had been taken ill and died, the symptoms being great thirst, purging, and staggering. On post-mortem examination splenic fever was found to have been the cause of death. Four hours afterwards he was called to the same field to a pony with the same symptoms; this also died; cause of death splenic fever. These two beasts had been feeding round the manure heap, in which the offal from the cow which died on July 12th had been buried. I was given specimens of the blood of the horse and pony, the buffy coat having already formed. On drying on covered glasses, staining with methylene blue, and mounting in balsam, very numerous and well-marked anthrax bacilli were found. I have shown the above specimens of human blood and spleen scrapings, and of the blood of the horse and pony, to Mr. Davies-Colley and Mr. Jacobson of Guy's Hospital, and both declare them to be doubtless specimens of anthrax bacilli.

THE AFGHAN BOUNDARY COMMISSION.

THE Medical Report of the hospital service connected with the escort which accompanied the Afghan Boundary Commission in 1884–85, by Surgeon-Major Charles, of the Indian Medical Service, contains some very interesting information regarding the countries through which it marched, and the health of the men under the arduous work they had to perform. The escort, consisting of 7 officers, 455 fighting men and 286 followers, a half field hospital with 1 medical officer, 3 subordinates, 10 medical establishments, and 56 followers, left Sirimungli, near Quetta, on Sept. 22nd, 1884, and reached their winter quarters at Bala Murghab on Dec. 13th. Here they remained in a standing camp till Feb. 15th, when they marched to Gulran in very severe weather, arriving at their destination on Feb. 23rd. On April 3rd and 4th they moved in two parties across the Ao Safed Pass to Tirpul, near Khusan. The second party encountered a sudden storm of great violence in the Pass, and lost by it twenty-four men, with many mules, camels, and some horses. "The men of this division continued to arrive at Tirpul in driblets for some days. During this time and for long after, the half field hospital had a sufficiency of work, and with most excellent results to the storm-tossed sick." After the recall of Sir P. Lumsden in May, the escort, divided into two parties, was stationed in or near the Herat Valley, occupying various camps till the end of September, when the strength was reduced, and a return party formed of 254 fighting men and about 220 followers. These started from Mamisak on Dec. 1st, and reached Sirimungli on Jan. 22nd, 1886, having been one year and four months employed on this service. The total distance marched during the expedition was 2316 miles. The rate of marching on the upward journey to Bala Murghab averaged, exclusive of halts, eighteen miles a day, and on the return from Mamisak, fifteen and a half miles. On the way up, the marching was done at night; on the way down, by day; and the health of the men was decidedly better during the latter, but this may have been due, in a considerable degree, to better arrangements, better water, and the men being more inured to marching. On this service the men were exposed to great vicissitudes of temperature, the thermometer in 1885 having ranged between zero in January and 104° in July. "The extremes of temperature are at times very great, as many as 70° or 80° F. between day and night temperatures." During the winter at Bala Murghab the men were lodged in Kibitkas, and every care was taken to protect them from the damp. Dr. Charles says that "in the coldest weather an equable temperature can be maintained in them. ..... Looking back at the time spent in Kibitkas, properly prepared as I have noted, I have no hesitation in saying that they served their ends in a way that could not be surpassed, and I attribute to them, in a measure, the small mortality among the sick treated in hospital. Kibitkas can be made cool in hot weather, and warm in cold weather; and the ventilation at all times, with care, can be rendered excellent." The information given respecting the health of the men is unsatisfactory—probably unavoidably so, owing to the frequent moves and to the party being so often broken up; but there is no statement of the mortality, except that already noted as arising from the storm in the Ao Safed Pass, and the admissions into hospital are only recorded for broken periods, while the principle on which the return of out-patients has been made up is not stated. We can, therefore, only draw some general conclusions as to the diseases from which the troops suffered. On the march up there seems to have been a considerable prevalence of dysentery among both the fighting men and the followers, but this apparently ceased after reaching Bala Murghab. Surgical injuries and diseases, and fevers, were the chief causes of admission into hospital after that date. In the first two months of 1885 cases of bronchial catarrh were very frequent among the out-patients of both classes, and next to these boils and ulcers, and dyspepsia. In June, July, and August a considerable number of cases of conjunctivitis occurred, attributed chiefly to the dust and sand. It is worthy of remark that, notwithstanding the very low temperature of the winter, there were scarcely any cases of frost-bite till after the march across the Ao Safed Pass. This immunity was probably due to the housing of the men in the kibitkas and to providing them with a liberal supply of warm clothing.

Among the diseases most prevalent in the civil population of the country, Dr. Charles specially notes paroxysmal and typhoid fevers, rheumatism, dyspepsia, bronchial catarrh, syphilis, scurvy, and worms. Cholera is said to have been very rife in the Herat Valley in the past, but it did not appear among the men of the escort or the followers. No cases of sunstroke occurred among the men, and although many of them were bitten by camp and pariah dogs, none of them suffered from rabies. Some interesting notes are given of cases, and of the remedies found most efficient in their treatment. We would merely notice the internal use of hot water in ague and remittent fever, instead of the usual diaphoretics. Dr. Charles says that he never found it fail to give relief. "Pain would vanish, giving place to a feeling of ease; thirst would be no longer felt; the burning skin would be suffused in a gentle sweat; the aching head, with heavy eyelids, would sink to rest in a calm and placid slumber." The water must be hot, not tepid—"so hot that it can just be swallowed without scalding, and no more,"—and is to be followed by quinine.

There are, we think, some valuable practical lessons to be derived from the experience gained on this expedition. We would note the importance, from a health point of view, of marching the troops by day instead of night, but this, of course, would not be applicable to the hot summer months; the advantage of housing the men in winter in a manner adequate to protect them from the excessive cold, and of providing them with sufficient warm clothing; the propriety of avoiding the occupation of old buildings, such as the robats and forts, as quarters for the men, which at one time it was proposed to do, but which was abandoned on the recommendation of the medical officer. Dr. Charles, in some notes on the transport of the sick, has pointed out the disadvantages of the Moseley Khajawa, as supplied to the expedition, and recommends the Herat Khajawa, as being much better suited, especially for winter use, in such a climate. He has also called attention to the necessity of an inspection, by a medical officer, of the followers who are to accompany the troops on service, as men unfit for field service or the inclemency of a severe climate are often taken, and prove a serious encumbrance to the force. He also strongly advises the erection of urinals for standing camps. "No urinals were used in the standing camps (in spite of remonstrances), so that in a short time the top soil became saturated with urine and a breeding-place for flies and noxious effluvia, &c."

AT the Newcastle-under-Lyme Police-court on the 5th inst., a Macclesfield dealer was fined £10 for exposing for sale a quantity of beef which was unfit for human food.

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CALENDAR OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

THE Annual Calendar has just been published by the Council of the College. From it we ascertain the following facts:—

It appears that there are 1124 Fellows on the roll of the College, of whom 639 obtained the Fellowship by examination, 7 were elected as Members of twenty years' standing under Section 5 of Charter 15 Vict., and 2 are *ad eundem* Fellows. There are 17,040 Members, and 957 Licentiates in Midwifery (the examination for this licence having been suspended for the last eleven years). The Licentiates in Dental Surgery number 590.

The examiners in Elementary Anatomy and Physiology, appointed in conjunction with the Royal College of Physicians, under the scheme for an Examining Board in England, are elected annually. There have been four examinations during the past year, 716 candidates presenting themselves, of whom 474 passed in both subjects, 77 in Elementary Anatomy, and 96 in Elementary Physiology; 55 candidates were referred in both subjects; 63 were referred in Elementary Anatomy, and 63 in Elementary Physiology. The fees received from candidates for this examination amount to £3581 16*s.* 3*d.*, the Examiners receiving in fees £506 15*s.*

The examiners in Anatomy and Physiology appointed in conjunction with the Royal College of Physicians, under the scheme for an Examining Board in England are elected annually. They have conducted the Primary Examinations for the diploma of Member under the old regulations, as well as the Second Examination of the Examining Board, and have held during the year four examinations, at which 1079 candidates presented themselves, of whom 262 passed in both subjects, 173 in Anatomy, and 246 in Physiology; 97 were referred in both subjects, 240 in Anatomy, and 214 in Physiology. The fees received from the candidates for this examination amount to £4363 16*s.*; the examiners receiving £2259.

The Board of Examiners in Anatomy and Physiology for the diploma of Fellow consists of nine members annually elected by the Council from the Fellows of the College, and has held during the past collegiate year two examinations, 117 candidates presenting themselves, of whom 62 passed and 55 were referred. The fees received from this examination amount to £829 10*s.*; the Board receiving in fees £526 10*s.*

The Court of Examiners consists of ten members, elected by the Council from the Fellows of the College, all of whom, however, are members of the Council, except Dr. Humphry, Mr. John Langton, and Mr. T. Pickering Pick. During the year the Court has held two examinations for the Fellowship and four for the Membership. At the former there were 51 candidates, 28 of whom passed, 19 being referred for one year and 4 for six months. For the Membership there were 1048 candidates, 319 of whom obtained their diplomas, and 270 passed in Surgery only; 103 were referred for three months, 320 for six months, 14 for nine months, and 22 for one year. The fees paid by candidates amounted to £12,737 16*s.*; the fees paid to the Court of Examiners amounting to £6027 7*s.*

The Board of Examiners in Dental Surgery has held two meetings for the examination of twenty-eight candidates, twenty-one of whom obtained their diplomas. The fees paid by them amounted to £220 10*s.*, of which the Board received £88 4*s.*

The income of the College from all sources during the past year amounted to £40,742 11*s.* 5*d.*, derived principally, as already shown, from fees paid by candidates for the diplomas of the College—viz., £21,753 8*s.* 3*d.* Rents from chambers adjoining the College produce £1520 0*s.* 6*d.*; dividends on stock, £1154 19*s.* 2*d.*; from members of the Council and Court of Examiners on their election, £76 6*s.*; from sale of stock, £12,500 7*s.* 1*d.*; from trust funds and sale of Calendar and Synopsis, £273 6*s.* The expenditure for the year amounted to £40,137 5*s.* 7*d.*, the largest item being £12,816 7*s.* 7*d.* for purchase of house, No. 44, Lincoln's-inn-fields. The next largest amount appears in fees paid to examiners—viz., £9446 6*s.* Salaries, wages, and pensions for officers and servants of the College in the three departments—library, museum, and office—amount to £4645 14*s.* 6*d.* Taxes, rates, diploma stamps, and insurance absorbed the sum of £1670 1*s.* 9*d.* Half expenses for new Examination Hall, £5978 5*s.* 5*d.* Under miscellaneous items, extraordinary expenses, alterations and repairs, the sum of about £4000 appears to have been expended.

THE PHARMACEUTICAL SOCIETY.

THE introductory address at the commencement of the forty-fifth session of the School of Pharmacy was delivered on the 6th inst., by Sir Henry W. Acland, Regius Professor of Medicine in the University of Oxford, and President of the General Medical Council. After alluding briefly to the future of Science, he spoke of some of the medical agents contained in the Pharmacopœia of 1651—silkworms, toads, swallows, ants, &c.; and remarked that it was surprising how so monstrous a list could have been authoritatively issued after Linacre had lived and taught in that great college which he founded, and which was destined to shed lustre on the history and character of medicine. Sir Henry next spoke of the step about to be taken by the Pharmaceutical Society—viz., the establishment of a laboratory for special research into the exact chemical constitution of drugs and alleged remedies, with a view to the precise fixing of the constitution of alkaloids of acknowledged or hypothetical value, and to the discovering, and generally the guaranteeing to the experimental therapeutist and the physiological inquirer, absolutely pure bodies of known chemical constitution, whether existing in commerce or not. Sir Henry then reviewed the progress of the Pharmacopœia, and advocated the publication of a small volume which would lay down, by international consent, the mode of obtaining with certainty the best remedies made in the best manner, with rules of how to preserve them in all climates, and how readily to distinguish them. He regretted that no steps had been taken to obtain representatives from India, from the Dominion of Canada, and from Australasia to co-operate with England in researches connected with the Pharmacopœia, this being especially desirable owing to the admission after the present year of colonial and foreign practitioners to the Medical Register. The conclusion of the address was devoted to an exhortation to diligence, cleanliness, order, and exactitude on the part of the students in their studies, and in their future career as dispensers.

HOSPITAL REUNIONS.

MIDDLESEX HOSPITAL MEDICAL SCHOOL.

AT the distribution of prizes to the successful students of the Middlesex Hospital, which took place on Monday last, after Dr. Biss's introductory lecture the chair was taken by Dr. Headlam Greenhow, F.R.S., who was formerly so long attached to the hospital. The Dean, Mr. Pearce Gould, in his report, stated that plans for an extension of the school buildings had been prepared, and that the erection of these buildings and those of the proposed residential college would shortly commence. Dr. Greenhow addressed a few words to the students, and a cordial vote of thanks to him was passed with acclamation. The customary annual dinner took place at the Holborn Restaurant in the evening. The chair was taken by Mr. Andrew Clark, F.R.C.S., who has held the office of Dean for ten years. The gathering was an unusually large one, and the post-prandial speaking was lightened by most excellent singing and music by Mr. Ganz, Dr. Pringle, Mr. Critchett, Mr. Hepburn, and Mr. Fulkerson, the proceedings terminating at a late hour with the whole company joining in "Auld Lang Syne." The toasts included "The Middlesex Hospital Medical School," given by the chairman and responded to by Mr. Hulke, F.R.S.; "The Middlesex Hospital," proposed by Dr. C. West and acknowledged by Major Ross, M.P., chairman of the Weekly Board; "The Past and Present Students," given by Mr. T. W. Nunn, and replied to by Sir Oscar Clayton on behalf of the past students, and Mr. W. G. Nash on behalf of the present students; the health of the "Orator of the Day" was proposed by Dr. Edis and acknowledged by Dr. Biss; that of "The Chairman" was given by Mr. Morris; and the toast of "The Visitors," which was

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given from the chair, was responded to by Mr. Burdett, who, in concluding, proposed the health of the new Dean, Mr. Pearce Gould. The gathering was acknowledged by all to have been a great success, and it was marked by much cordiality and heartiness.

UNIVERSITY COLLEGE.

THE annual dinner of the old and present students of the Faculty of Medicine took place at the Freemasons' Tavern on Oct. 4th, under the presidency of Sir William Roberts, Professor of Medicine in the Victoria University, Fellow of University College. The chairman was supported on his right by Dr. George Buchanan, and on his left by Professor Michael Foster. Among those present were—Professor Russell Reynolds, Professor Burdon Sanderson, Dr. Henry Maudsley, Dr. William Wood, Dr. Morris (Spalding), Mr. Waggett, Mr. Bluett (Chesterfield), Mr. Humphreys (Shrewsbury), Mr. Kiallmark, Dr. Allen (Hastings), Dr. Snow (Bournemouth), Dr. Price (Cardiff), Mr. William Gill, Mr. Bernard Roth, Mr. Embleton (Bournemouth), Dr. C. Beevor, Mr. Hodson (Brighton), Mr. Peter Cooper (Blackheath), Mr. Buckston Browne, Dr. Percy Gabb (Guildford), Dr. Amand Routh, Mr. W. Rigden, Mr. J. Prince Bartlett, Dr. Magrath (East Grinstead), Mr. Foster Macgeah, Mr. Harvey (Bromley), Mr. Twynam (Sydney, N.S.W.), Dr. Easmon (Gold Coast), Dr. Pasteur, Mr. Campbell Williams, Mr. Drew (Oxford), Dr. Lewers (London Hospital), Mr. Williams-Freeman (Portsmouth), Mr. Stewart Norman (Havant), Mr. Swift, Mr. Peter Giles (Hereford), Mr. W. A. Meredith, Dr. Cock, Mr. Bowreman Jessett, Mr. H. A. Powell (Beckenham), Mr. Copley (Wisbech), Mr. Fraser Stokes, Mr. Frankish, Dr. Penrose, and others. The present members of the hospital staff and the professors of the Medical Faculty of the College were all present, with very few exceptions; and these, with a large contingent of students, made up a company of about 100. There was some excellent speaking from the chair, and from Dr. Buchanan, Dr. Michael Foster, Dr. Burdon Sanderson, Dr. Wilson Fox, and Dr. Graily Hewitt; and the proceedings were enlivened by some first-rate singing by Dr. F. T. Roberts, Dr. Beevor, Mr. Campbell Williams, and Mr. Copley. This very pleasant reunion of old friends was brought to a close at about 11 o'clock.

WESTMINSTER HOSPITAL MEDICAL SCHOOL.

After the delivery of the introductory address on the 4th inst., the Dean read his annual report for the year, and drew attention to the fact that all the first-year's students who came under the new regulations had passed the examination recently instituted by the conjoint Board of the Royal Colleges of Physicians and Surgeons in Anatomy and Physiology at the end of the first winter session. The prizes gained during the past year were given away by the Venerable Archdeacon Farrar, who afterwards addressed some eloquent remarks to the students on the connexion between the medical profession and the clerical profession and literature, giving numerous illustrative examples, and he concluded by exhorting his hearers to respect humanity and to respect themselves. The annual dinner of the staff and past and present students was held in the evening at the Holborn Restaurant. The Hon. Mr. Justice Wills was in the chair, and among the guests were Col. Duncan, R.A., M.P., Col. Sparkes, Major Davis, the Rev. T. S. Echalaz, &c.

ST. THOMAS'S HOSPITAL.

A CROWDED audience of students and their friends assembled in the operating theatre to listen to the introductory address of Dr. Bristowe, on Friday last. Nearly all the members of the hospital staff and lecturers were present, and several students from other hospitals. The address, which we publish this week, was listened to with great attention, abounding, as it did, in sketches of bygone members of the staff who helped to make it famous, and on its completion the lecturer was greeted with loud applause. In the evening the annual dinner took place in the Governor's Hall, at which there was a good attendance. Mr. C. W. Chaldecott, of Dorking, occupied the chair, a most pleasant evening being spent. The chairman proposed the usual toasts; Dr. Stone, in a witty speech, "The Health of the Visitors," which was replied to by Professor Wm. Thomson and Dr. Savage. Alderman Stone (treasurer) replied for the hospital. Dr. Bristowe, F.R.S., proposed "The Chairman," and Mr. J. R. Lunn, in the absence of Mr. John Simon, C.B., F.R.S., "The Medical School," to which Dr. Ord replied, referring to its increased prosperity, and the additional accommodation recently provided in the anatomical and other departments, and to changes in the teaching. Mr. Le Gros Clark, Mr. John Croft, Dr. Alfred Carpenter, and Dr. H. W. G. Mackenzie also spoke.

GUY'S HOSPITAL.

PUPILS' PHYSICAL SOCIETY.

IN order to mark the beginning of the session, the Pupils' Physical Society held their first meeting on the evening of October 4th, in the anatomical theatre, which was completely filled, there being only standing room for several members both past and present. The treasurer and many members of the staff attended. Dr. Wilks, LL.D., F.R.S., was in the chair, and in a short opening address he first referred to the great loss the hospital had sustained in the death of Dr. Moxon, alluding especially to the manner in which he had by his untiring industry, energy, and skill enriched the pathological department by the addition to it of the well-known and beautiful series of water-colour drawings of pathological specimens which now hang on the walls of the post-mortem theatre. Dr. Wilks pointed out that, although the profession sustained from time to time great individual losses, yet the profession itself went on, and we must by hard work keep ourselves ever ready to fill up the gaps in the ranks. After congratulating the new students upon having entered a school which he so loved, of which he thought so highly, and at which the opportunities for work in all the departments were so numerous, the speaker went on to tell the students of the antiquity of the Physical Society of Guy's, which is the oldest medical society in London. He then mentioned the distinguished men, such as Dr. Jenner, who had spoken from the same theatre as that in which the Society now holds its meetings, and read extracts from the address delivered on similar occasions to the present, many years ago, by such men as Dr. Babington and Mr. Allen. Finally, after telling the new students that by joining Guy's they had taken upon themselves an obligation to work for the credit and fair name of the school to which they were attached, he called upon the reader of the paper of the evening to begin. Dr. Ryle, whose paper was entitled "The Rise and Progress of Medicine," gave a most interesting and full account of our advance from the time of Hippocrates downwards, showing that that father of medical art and science had a most wonderful insight into many of the problems of his craft, and that often there was an exactitude in his observations which it would be well if we nowadays were sometimes to imitate. Dr. Ryle proceeded to read several very instructive reports of Hippocrates' cases, making comments upon them in passing. He then touched upon all the epoch-marking periods of medicine, alluding especially, first of all, to Galen, who had done as much to retard medicine as to advance it by promulgating with his great authority many ill-founded theories. After alluding to Harvey and some of the later masters in medicine, Dr. Ryle concluded his paper. A brisk debate, carried on by the past and present members of the society, followed, and the reader of the paper replied. A vote of thanks to the treasurer was proposed by Mr. Lund, the senior house-surgeon, and seconded by Mr. Beard, the junior house-surgeon. The Treasurer, in replying, alluded to the great loss which the governors felt in the death of Dr. Moxon. He said it was a great pleasure to come to these meetings, and that he never failed to hear something which gave him material for deep thought for some time to come. Mr. E. W. Goodall, M.B., the senior house-physician, proposed, and Mr. Beard seconded, a vote of thanks to Dr. Wilks for presiding. In the course of his remarks Mr. Goodall said what a pleasure it was to the students that Dr. Wilks, although consulting physician to the hospital, still came down often in the afternoon and gave them the benefit of his great knowledge. After a brief reply from Dr. Wilks the meeting broke up. During the evening the museums were lit up, so that the past students had an opportunity of refreshing their memories by again looking at the famous specimens and wax models for which the Guy's museum is so well known. Many microscope specimens were exhibited, and all who attended appeared to have had a very pleasant evening.

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Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Islington.—The population of St. Mary, Islington, may be taken at about 318,638, and in this the death-rate was 16·7 for 1885; this being the smallest death-rate on record. The birth-rate was 30·3 per 1000. Amongst the zymotic diseases small-pox was severely epidemic during the first six months of the year, measles was fatally epidemic, and the deaths from diphtheria, which had been rapidly increasing for some years past, amounted to 138. A large number of the sick were removed to the Metropolitan Asylums Board hospitals and to the Highgate Small-pox Hospital. Of the small-pox cases 42·9 per cent. died amongst the unvaccinated, whereas the rate was only 13·7 per cent. amongst the vaccinated. During the year the Vestry destroyed 421 articles which were infected, including 125 beds, and all these were replaced at the cost of the public, the amount thus spent reaching close upon £300. Dr. Meymott Tidy includes in his report tables as to the analysis of the New River Company's water, and as to the amount used per house; details are also given as to the licensing of slaughter-houses and cow-houses, as to summonses taken out under the Sanitary Acts, the renovation of certain of the dwellings of the poor, and action under the Sale of Food and Drugs Act. Having regard to the exigencies of public opinion and to the freer exercise of the right of complaint by the inhabitants, a large extension in the way of sanitary inspection became necessary in the parish, and besides other modifications four additional inspectors have been appointed, and regulations have been made defining more clearly the several duties of the inspectorial staff.

Surbiton Urban District.—During 1885 the death-rate for Surbiton was only 9·7 per 1000, and two deaths each from whooping-cough and diphtheria were the only ones due to zymotic diseases. The diphtheria cases are referred to as sporadic only. There is no description of the sanitary circumstances existing in the district, and apart from a list of nuisances dealt with, which is supplied by the inspector of nuisances, and a statement that the town is still without any hospital for infectious diseases, the wants of the district are not referred to. Perhaps, with a repeated low death-rate, the sanitary wants of the district are but few.

Huddersfield Urban District.—The general death-rate from all causes in 1885 was 20·1 per 1000 in Huddersfield, and that from the seven principal zymotic diseases 1·4, this latter being one of the lowest rates on record. In his report, Dr. Cameron draws attention to an excessive amount of death from "consumption" in the borough, and in this connexion he refers to density of population as facilitating the spread of a disease now admitted to be communicable. Thus, overcrowding becomes, from the point of view of this mortality, a vital one in the matter of public health, and anything tending to the undue aggregation of people, especially as regards their sleeping accommodation, needs to be specially dealt with where any tendency to excessive phthisis mortality is met with. During the year the authority's hospital has been in general use, and at one time the amount of accommodation was found to be insufficient. The site is, unfortunately, a restricted one for such a borough, although some of the accommodation it provides is very good. Scarlet fever was prevalent, and its spread is stated to have been in part due to unnotified cases. No such thing as intentional withholding of certificates on the part of medical men is suggested, but cases in which there was doubt as to diagnosis led to some difficulty in this respect. Where the notification was from the householder alone, there was tardiness, and Dr. Cameron thinks that some parents preferred wilfully to remain ignorant of the fact that their children had scarlet fever, so as to avoid the notification. But there has been no increasing antipathy to compulsory notification, and on the whole the Act is said to work well.

Wallasey Urban District.—As in so many other districts, the death-rate for Wallasey during 1885 was exceptionally low, the rate being 14·9 per 1000; the infantile death-rate and that from zymotic diseases were also low. In connexion with the general sanitary administration of the district, eighty soil-pipes were ventilated, several hundred drain-pipes were disconnected, houses were supplied with proper water-supply, and a large number of other improvements were effected. In 1884 a thorough systematic inspection of the district was made, and, as is usually the case, this was the forerunner of a large amount of detailed sanitary work, which must necessarily go to improve the healthiness of the town. Full details of this excellent work are given by Dr. Craigmile in the report under consideration.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 5539 births and 3592 deaths were registered during the week ending Oct. 2nd. The annual death-rate in these towns, which had been equal to 22·6 and 21·0 per 1000 in the preceding two weeks, further declined last week to 20·0. During the thirteen weeks ending last Saturday the death-rate in these towns averaged 20·4 per 1000, and was 0·8 below the mean rate in the corresponding periods of the ten years 1876-85. The lowest rates in these towns last week were 15·2 in Brighton, 16·9 in Bradford, 17·0 in London, and 18·2 in Derby. The rates in the other towns ranged upwards to 27·7 in Leeds, 27·7 in Bolton, 29·2 in Manchester, and 29·4 in Preston. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had been 1202, 1133, and 933 in the preceding three weeks, further declined last week to 746; they included 532 from diarrhœa, 61 from scarlet fever, 59 from "fever" (principally enteric), 33 from diphtheria, 32 from measles, 29 from whooping-cough, and not one from small-pox. The lowest death-rates from these zymotic diseases were recorded last week in London, Huddersfield, and Plymouth; and the highest in Norwich, Hull, Wolverhampton, and Preston. Diarrhœa caused the highest death-rates in Wolverhampton, Hull, and Preston; the mean rate in the twenty-eight towns being considerably above the average for the last week in September. The mortality from "fever" was greatest in Portsmouth, Bolton, Norwich, and Plymouth; from scarlet fever in Liverpool, Bristol, and Salford; from whooping-cough in Norwich and Wolverhampton; and from measles in Halifax. The 33 deaths from diphtheria included 20 in London, 4 in Liverpool, 2 in Leeds, and 2 in Cardiff. Small-pox caused no death in London and its outer ring, or in the twenty-seven large provincial towns; and only one small-pox case was under treatment on Saturday last in the metropolitan hospitals receiving cases of this disease. The deaths referred to diseases of the respiratory organs in London, which had been 110, 168, and 154 in the preceding three weeks, further rose last week to 187, but were 35 below the corrected average. The causes of 87, or 2·4 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Leeds, Blackburn, Wolverhampton, and Halifax. The largest proportions of uncertified deaths were registered in Huddersfield, Manchester, Oldham, and Nottingham.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 20·6, 18·8, and 16·8 per 1000 in the preceding three weeks rose again to 18·3 in the week ending Oct. 2nd; this rate was 2·3 below the mean rate during the same week in the twenty-eight English towns. The rates in the Scotch towns last week ranged from 9·8 and 13·0 in Perth and Paisley, to 19·9 in Aberdeen and 21·7 in Glasgow. The 452 deaths in the eight towns last week showed an increase of 37 upon the number in the previous week, and included 34 which were referred to diarrhœa, 14 to whooping-cough, 8 to scarlet fever, 4 to "fever" (typhus, enteric, or simple), 2 to diphtheria, 1 to measles, and not one to small-pox; in all, 63 deaths resulted from these principal zymotic diseases, against 93, 73, and 78 in the previous three weeks. These 63 deaths were equal to an annual rate of 2·6 per 1000, which was 1·7 below the mean rate from the same diseases in the twenty-eight English towns. The deaths referred to diarrhœa, which had been 57, 45, and 43 in the preceding three weeks, further declined last week to 34, of which 15 occurred in Glasgow, 6 in Dundee, 4 in Edinburgh, 4 in Aberdeen, and

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3 in Leith. The mean annual death-rate from diarrhœa in the Scotch towns last week was again considerably below that which prevailed in the large English towns. The fatal cases of whooping-cough, which had been 20, 11, and 18 in the previous three weeks, declined again to 14 last week, and included 10 in Glasgow and 3 in Edinburgh. The 8 deaths from scarlet fever, of which 7 occurred in Glasgow, were within one of the number in the preceding week. The 4 deaths referred to "fever" were below the average for the season, and corresponded with the number in the previous week. The fatal cases of diphtheria and measles were also below the average. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 65 in each of the preceding two weeks, were 67 last week, and exceeded the number in the corresponding week of last year by 9. The causes of 66, or nearly 15 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been 27·5 and 24·7 per 1000 in the preceding two weeks, further declined to 22·8 in the week ending Oct. 2nd. During the thirteen weeks of the quarter ending last Saturday the death-rate in the city averaged 22·1; the mean rate during the same period was 18·7 in London and 17·5 in Edinburgh. The 154 deaths in Dublin last week showed a decline of 13 from the number in the previous week, and included 23 which were referred to diarrhœa, 8 to scarlet fever, 2 to "fever," and not one either to small-pox, measles, diphtheria, or whooping-cough. Thus 33 deaths resulted from the principal zymotic diseases, against 39 and 30 in the preceding two weeks; they were equal to an annual rate of 4·9 per 1000, the rates from the same diseases last week being 2·4 in London and 1·6 in Edinburgh. The fatal cases of diarrhœa, which had been 29 and 25 in the previous two weeks, further declined last week to 23. The deaths referred to scarlet fever, which in the preceding two weeks had been 2 and 3, rose last week to 8, a higher number than in any week since the middle of last year. Five inquest cases and 4 deaths from violence were registered; and 38, or nearly one-fourth of the deaths, were recorded in public institutions. The deaths of infants showed a further decline from those returned in recent weeks, while those of elderly persons showed a slight excess. The causes of 23, or nearly 15 per cent., of the deaths registered during the week were not certified.

Correspondence.

"Audi alteram partem."

DR. GLOVER'S CANDIDATURE AND THE BIRMINGHAM COMMITTEE.

To the Editor of THE LANCET.

SIR,—The letter of Dr. Strange, the chairman of the Birmingham Committee, which you published on Oct. 2nd, and your own leader of that date, informed the profession that from regard to my place in the test-ballot by that committee they have now invited me to be their third candidate. The profession will naturally expect to hear the decision of my committee and my own opinion in regard to that invitation. I will ask you, with this view, kindly to publish my letter to Dr. Strange (which contains the resolution of my committee) in reply to his overtures, acting as chairman. In announcing this resolution, I wish to acknowledge with gratitude the courtesy of Dr. Strange and his colleagues. I am well aware of the value of organisation, but, at all hazards, we must preserve freedom.

Believe me, Sir, your obedient servant,

Highbury-place, N., Oct. 5th, 1886. JAMES GREY GLOVER.

"25, Highbury-place, Oct. 2nd, 1886.

"DEAR DR. STRANGE,—I lose no time in informing you of the result of the consideration by my committee of the proposal that I should stand as the third candidate of your nomination for the office of direct representative of the profession in the General Medical Council. The resolution of my committee is as follows:—

"'That this committee, having considered the letters written by Dr. Strange and Mr. Ker on behalf of the Birmingham Committee, in which Dr. Glover is informed that he has been adopted as the third candidate on their list, and in which, further, they express the desire that this committee, formed (two months since) to promote Dr. Glover's candidature, should amalgamate with the Birmingham Committee to promote the election of Messrs. Wheelhouse, Foster, and Glover—the three candidates now selected by the Birmingham committee as the most suitable to represent the profession in the General Medical Council,—do hereby resolve that the best thanks of the committee be given to the members of the Birmingham Committee for their proffered aid in advancing the election of Dr. Glover, and for the way in which they have mentioned his suitability for the post, as well as his claims on the profession; but, as many members of his committee have already promised their support to other candidates, and many other members decline to have their freedom of selection curtailed, it is impossible for the two committees to amalgamate to fulfil the objects of the Birmingham Committee.'

"I need not say how gratifying it is to me to stand well in the estimation of so many members of your committee; nor what a pleasure it would have been to me to co-operate with you, and to be associated in a joint candidature with Mr. Wheelhouse and Sir Walter Foster. But I am bound to say that I heartily concur with my committee. What we want above everything is to aid the free and spontaneous expression of the views and preferences of the medical profession, and to avoid mechanical ways of tying candidates and voters together. I shall still prize the support of the individual members of your committee, and trust to your kindness and courtesy, of which I have had not a little proof, to believe that, in electing to stand as an independent candidate, I am only doing what I feel to be right in the interest of the profession, which we all have at heart.

"Believe me, dear Dr. Strange, yours very truly,

——— "JAMES GREY GLOVER."

To the Editor of THE LANCET.

SIR,—I must say I am somewhat surprised to see how few of the candidates are what may be called typical general practitioners—i.e., men who hold union and club appointments, and have to face practice of all kinds and amongst all classes. I do not think the fact of a man's having once seen that kind of practice is sufficient proof of his sympathy with general practitioners. I should like to ask candidates—1. Are you now in *bonâ fide* general practice, with union and club appointments, and *do you intend to remain in your present position?* 2. Will you aim at raising the standard of general education to the level of that required in most foreign countries—say that of a B.A. degree at Oxford or Cambridge? I am, Sir, yours truly,

Woolwich, Oct. 4th, 1886. THEODORE MAXWELL, M.D.

To the Editor of THE LANCET.

SIR,—The circumstances that led to the formation of a committee whose object should be to endeavour, firstly, to find who would be likely to be the best representatives of the profession on the General Medical Council, and, secondly, to induce these to become candidates, are so obviously misunderstood that we venture to ask you for space for some words of explanation. Up to the date of the Brighton meeting there were, so far as was known, only seven gentlemen before the profession as candidates. Of these seven, five were heard to speak at that meeting in one capacity or another, so that many, if not most, of the members of that large assemblage had the opportunity of forming an opinion as to their fitness, in one important particular, for the honorable position to which they aspired. Two, Dr. Richardson and Dr. Glover, we believe, were not heard. Some at least of those who listened to the gentlemen in question, deemed that it was not inconsistent with the highest respect for them personally, to consider whether, from among the 17,000 practitioners of England and Wales, it might not be possible to induce a few to appeal to the suffrages of the profession who, if not better as men, should be better as representatives. No one else seemed inclined to come forward, and

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the time for action was very short. The only possible way of arriving at a conclusion on what all will admit to be a most important matter was to consult gentlemen from various parts of the kingdom concerning it. This led to the summoning of the first small conference at Brighton. If the majority of those who attended it had considered that it was unlikely that any better representatives could be found, nothing further would have been done. But thinking otherwise, they resolved to take into their counsel as many as could be reached in the very short time possible to them. The number ultimately obtained was 360, from 163 different places, and nothing but want of time prevented this number from being increased ten ro twenty times. But to call these 360 gentlemen (thus without any pressure or influenec uniting themselves from such various quarters) "a small clique," is surely to employ language in a very unusual sense. The committee exercises no function beyond that of honestly to select gentlemen who in its judgment would be thoroughly able representatives; and it expects from the profession nothing more than that unbiased consideration which such an honest endeavour should secure for it. It accepting the verdict of these 360 gentlemen, we do not claim that they represent the whole profession, but, considering the number of districts represented and the decided character of the vote, it may be fairly taken as an indication of the feeling of a large body of the profession. To speak of the action of the Birmingham meeting as the action of a caucus is, again to use language in a sense which a moment's reflection must show to be incorrect. A caucus has made up its mind beforehand, and meets but to save appearances; but the thirty-five who met in Birmingham could have no possible means of knowing beforehand what were the opinions of the 360 living in all parts of the country on the names to be submitted to them, and they would not have made the experiment of a poll unless they had been honestly anxious to find this; out and the committee submits what it has done, its reasons for doing it, and its methods, with great confidence to the impartial judgment of the profession.—We are, Sir, yours faithfully,

WILLIAM CARTER,
Oct. 5th, 1886. HUGH R. KER.

To the Editor of THE LANCET.

SIR,—In your article in THE LANCET of October 2nd on the Direct Representation of the Profession on the General Medical Council you couple my name with that of Dr. Jacob, and say we are officials of a corporation whose representation plays already a larger part in the Council than probably any of its members. To associate Dr. Kidd or Dr. Jacob with Professor Macnamara would, you say, be a work of supererogation, and you urge the election of a genuine general practitioner to the Council instead of either of us.

Now, Sir, I beg to say that, so far as I am concerned, I am not an official of any corporation. For many years the Fellows of the College of Surgeons have done me the honour of electing me, year after year, a member of their Council. I have thereby acquired a large experience in the management of students, the control of their education, and the conduct of examinations, and I have been enabled to initiate and assist in working out improvements in the systems of education and examination which are now, I believe, universally admitted to be of a most valuable and important character. The chief and most important work of the General Medical Council is to supervise and improve medical education and examination, and thereby elevate the status of the profession and make it more useful to society, and it is because of the experience I have gained in this work through my connexion with the College of Surgeons that I have ventured to ask my professional brethren to elect me as their representative. It is, I am sure, unnecessary to remind you that the duties of the General Medical Council are strictly defined by the Act of 1858, and that they can take no cognisance whatever of anything ontside the four corners of the Act, whether it be the privileges of army medical officers, Poor-law or dispensary officers, general practitioners, or others, and that their highest duty is the supervision of medical education.

I am, Sir, yours faithfully,
Dublin, Oct. 6th, 1886. GEORGE H. KIDD.

*** We cannot say that Dr. Kidd's letter in any degree changes our opinion. Dublin physicians and surgeons have hitherto monopolised the Irish seats of the Council. No less than five do so at the present moment. For another to gain the sixth seat will be hard indeed on the practitioners of Ireland.—ED. L.

PHARYNGEAL AND LARYNGEAL "NYSTAGMUS."

To the Editor of THE LANCET.

SIR,—I am indebted to Dr. Gowers for permission to publish the following observations I have made on a patient under his care at University College Hospital. The patient, a girl aged twelve, has a cerebral tumour, and presents the symptoms of reeling gait (with a tendency to fall backwards and to one side, usually the right), vertigo, intense occipital headache, constipation, vomiting, ocular nystagmus, but no optic neuritis. The pulse is usually 100. These symptoms have been present for the last fifteen months. The ocular nystagmus is vertical and horizontal, occurs at the rate of 180 to the minute, is slightly increased in frequency during accommodation for very near, or in looking at far distant, objects. On examining the throat, I noticed the superior constrictor of the pharynx to be in a state of constant rhythmical movement in a horizontal direction, as if the posterior pharyngeal curtain were being rapidly drawn together, the twitchings occurring at the same rate as the movement of the eyes, 180 to the minute. The movement does not affect the soft palate or pillars of the fauces, the faintest possible tremor only being transmitted to them from the action of the adjacent constrictor. By pressing the point of a quill pen against the pharynx and pivoting the quill on a pin held fixed against the upper teeth, I have been able to write with the feather-end a tracing of the movement on sphygmograph paper. The laryngeal muscles are similarly affected. The arytenoid cartilages are seen rapidly gliding to and from each other synchronously with the movement of the pharynx. When the patient is breathing quietly the main movement of widening of the glottis during inspiration is interrupted by slight twitches, and similarly the movement of respiration. When the patient stops breathing the cords gradually close with five or six contractions, till they finally lie parallel and close to each other; here they remain, undergoing only a slight tremor till the patient recommences to breathe. I have had this patient under observation for over two months, and the movement has been always present. There is now a slight alteration in the state of the larynx, in that the left cord twitches more than the right, and the cords do not so nearly close when the patient stops breathing. I am not aware that a movement of this kind has been previously described, and I am anxious that it should be looked for in cases of intracranial tumour, so that its localising value may be determined. It is possible it may throw some light on the etiology of ocular nystagmus, and it may be of value to the surgeon, perhaps, in showing pressure on the medulla, and so assist in the diagnosis of the position of a cerebellar tumour. As regards the term "nystagmus" applied to the pharynx and larynx, its association and synchronism with the ocular nystagmus, and the fact that movement of the eyes in a horizontal direction is called "nodding," would seem to warrant a slight departure from strict etymological accuracy.

I am, Sir, yours truly,
HERBERT R. SPENCER, M.B., B.S. Lond.,
Oct. 1886. House Phys. Univ. Coll. Hosp.

TREATMENT BY MASSAGE.

To the Editor of THE LANCET.

SIR,—It will be a surprise and a shock to many of your readers to learn from THE LANCET of this week that the practice of massage is not to be acquired under two years, and some may even venture to ask whence the extreme elaboration of detail which this lengthened apprenticeship implies derives its sanction. It seems incredible that any manipulation of the body which human ingenuity can devise should be learnt so slowly. Divide the frame into as many departments as you will, exclude those parts which are inaccessible to massage and those which it would not venture to approach, and there remains but a limited area to which Dr. Weir Mitchell's method is applicable. Let the modes of rubbing, stroking, pinching, and kneading be multiplied to the utmost, and far beyond the reach of

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language,—even then all possible contrivances will be exhausted before two years have run out. But if two years, why not ten? It may be confidently asserted that there is no digital use whatever needing two years for its acquirement that does not go on advancing towards perfection so long as the mind which informs the fingers retains its vigour. Massage takes rank with music and the Fine Arts.

To all this I venture to oppose the opinion that the manipulation of the body surface, which some call "massage," and which aims at supplying the place of voluntary muscular exercise, does not need two years to learn, nor two months, nor, with an apt scholar, two weeks. It is with massage as with other skilled exercise—as with fly-fishing and cricket and tennis. Some pick it up very readily, even from the mere observation of the skilled rubber. Some can never learn massage at all. Anyone not acquiring a fair skill after a month's training may begin to despair of ever acquiring it. It is a knack, and admits as many gradations of expertness as do the games just mentioned. But the fullest expertness is not a question of time but of natural adaptability. To suppose otherwise is to mistake both the object of massage and the nature of the faculty on the part of the teacher to which it makes appeal. These are no statements of mine, they are the substance of the teaching of many authorities, including Dr. Weir Mitchell, the original proposer of the treatment, and Dr. Playfair, who first introduced it into this country. One of the best operators at the Westminster Hospital Home for Nurses learnt it of Dr. Weir Mitchell "in a few lessons." He was so well satisfied of her expertnesss that he employed her on his own patients and wished her to remain in America. Her sister, whom I have just now seen, learnt of this other "in a week." Both of these sisters can quote a long list of successful cases, and their competence is attested by several well-known physicians, who have had proof of their skill. One of the earliest employers of massage in this country is the Lady Superintendent of the Home Hospital in Fitzroy-square. She has taught many; and patients needing the treatment are constantly under her supervision. The hospital has been visited by Dr. Weir Mitchell himself, who thoroughly approved of the system there in vogue. This lady believes that an apt learner can acquire massage in six lessons, while she repeats precisely what has been told me in other quarters, and especially by the matron of my own hospital (to whose kindness and interest in the matter I am much indebted) as to the wide difference between one nurse and another in picking up the trick of rubbing. From such practical testimony, let me turn to the voice of the profession. Next to Dr. Weir Mitchell, I suppose the authority of Dr. Playfair will be deemed the highest. He writes in terms which he allows me to quote, and which are sufficiently indicated by the following extracts:—"Massage is a very simple thing which has been made complex by the absurd way it has been written on abroad, and the divisions and names given to it." "Half-a-dozen lessons I consider quite enough if the learner has natural aptitude." The statement that two years are needed is manifestly absurd. "I am inclined to think that just now massage is very much overdone and often used in quite unsuitable cases." The fact is, I suspect, that massage, like other therapeutic agents that attract attention, like the hypophosphites and salicine and salicylates, is passing through its stages. First, the warm, and often indiscriminate, praise; next the statement, and doubtless the genuine belief, of some practitioners that in their own hands the new agent can be made to yield a virtue which others fail to extract from it; and, finally, the settling down of belief as to the real value of the treatment in question. And if it be so with drugs, how much more with a method of manipulation which confessedly needs skill, dexterity, and practice. Let us be content, then, to leave "massage" to make its own way like other remedies, in the full assurance that the settling day will come by and bye, when its precise value will be finally determined. And so, no doubt, in the main it will be; and in that persuasion I would gladly have spared myself a task of criticism which, in the circumstances, is exceedingly distasteful. But there are others to be considered, and it is but just that a word should be said on behalf of those to whom many of us are deeply indebted, and who may not speak for themselves. Massage is now largely resorted to: there is probably no hospital in London, and no nursing home of repute, which cannot furnish trained rubbers (as I still venture to call them) who are thoroughly competent, and whose ability is proved by the patients they have helped to cure. The time will soon come, it may be hoped, when the same may be said of every town in the kingdom. It is quite easy to disparage these quiet workers, who may be at least trusted to make no protest and no claim of their own. It is less easy to prove by results that the refinements which have been imported from the Continent add anything whatever to the virtue of Dr. Weir Mitchell's method. The treatment is still on its trial, but the facts in regard to it are in small compass and accessible to all. Massage may be so far popularised as to become a valuable help to practitioners in a class of cases heretofore singularly hopeless and pitiful, or it may ultimately fall into the hands of a few "professors," who will make of it a "speciality," or even a trade.

I am, Sir, yours obediently,

OCTAVIUS STURGES,

Oct. 4th, 1886. Senior Physician to Westminster Hospital.

"INFANT FEEDING."

To the Editor of THE LANCET.

SIR,—I regret I have not been able to reply to Dr. Marshall's letter earlier. I have received a great many communications in reference to my article on Infant Feeding, including one from the United States, showing the wide interest the subject excites in the profession.

Dr. Marshall says that "physiology and experience both negative" my plan. Surely this is putting the cart before the horse. Physiology, like other sciences, is constructed by drawing deductions from well-verified facts—it does not condemn asserted facts untested. If Dr. Marshall, and other men equally as well placed as he is, try the plan I advocate and find it fail, I will bow to their decision; but it is hard to be told that science is able to condemn it off-hand, seeing that a physiological writer has placed the average life of a physiological fact at three years! My article did not profess to treat fully the subject of milk-feeding pure and simple, so I did not give full details as to methods I have pursued in that direction. I am acquainted with "Frankland's Milk," but the process advised seems to me too complicated for universal use. Half milk and half water certainly gives a larger proportion of caseine than human milk (indeed, Dr. Meigs of Philadelphia, U.S., asserts, and to my mind proves, that the amount of caseine in human milk is certainly under 2 per cent.); but one part milk to two parts of water is, in my opinion, starvation in disguise; while adding cream and whey to water or to milk is not only a complicated process for poor ignorant people, but it involves keeping the milk for twelve hours before it is used. Considering that cow's milk has an acid reaction to begin with, while human milk is slightly alkaline, and considering how readily the milk of cows kept in sheds (and therefore fed on roots and grains) ferments, I do not think cow's milk twelve or probably fifteen hours old is likely to be as digestible as absolutely fresh milk. My own children were fed with milk from one cow; various proportions were tried of water, but all suffered severely from flatulent colic and curdy motions until the milk-and-water was thickened with a well-known food, which I believe contains bicarbonate of potash as well as malt and flour. After this the children improved in every way, and, I think, might now be shown as models of health. As regards the interval between the feedings, I have always recommended an hour and a half during the first week or two, to be gradually lengthened to two hours, whilst at some time during the night there ought to be an interval of at least four hours to give the digestive apparatus time to rest. I also always recommend that two or more bottles should be used, that at night a basin of water should be kept by the bedside, and that as soon as the child has sucked as much as it will, whatever is left is to be thrown away, and the bottle and tube placed separately in the basin of water. I still maintain that reducing the caseine "to digestible limits" is not the only problem in adapting cow's milk to infant digestions. I feel sure I am right in saying that, at all events, part of our problem is how to make the curd digestible. Mechanical effects do not seem to be sufficiently weighed, but they cannot be ignored. Take as an illustration the familiar laboratory experiment of making oxygen: black oxide of manganese helps the process, though not chemically. Again, I have read that certain savages of Patagonia of the lowest type, when severely pressed by

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famine, mix earth with their scanty food to add to its bulk. The mechanical effect of the earth must be to allay the pangs of hunger, or they would surely never resort to such an eccentric mode of feeding.

In conclusion, I again assert, and beg of your readers to test, verify, or reject, as the case may be, my assertions, (1) that thickening one or two bottles a day of the milk and water used is quite a different thing from feeding on farinaceous food; (2) that milk-and-water so thickened is more digestible than milk-and-water alone; (3) that a diet of milk-and-water with a teaspoonful or so of farinaceous food per diem will cause a greater increase of weight, with healthy look and firm muscles, than an equal quantity of milk reduced to cream-water and whey or curdled with rennet.

I am, Sir, yours faithfully,

Southborough, Tunbridge Wells. E. PAGET THURSTAN, M.D.

A NEW CULTURE MEDIUM FOR MICRO-ORGANISMS CAPABLE OF WITHSTANDING HIGH PRESSURE.

To the Editor of THE LANCET.

SIR,—Having found agar-agar, in addition to the difficulty of obtaining it, somewhat inconstant as a culture medium, I have for some little time been experimenting in the laboratory of Professor Chiene with a jelly derived from Irish moss. The jelly so obtained is much less opaque than agar, and evidently more nutritious in itself, in that some micrococci and sarcinæ are able to grow in it without the addition of any peptone or meat juice. The method of preparation is of the simplest. Two ounces of the finest selected Irish moss are macerated over night in eighteen ounces of water in a beaker; then in the morning it is placed in the steam steriliser, and kept at the boiling point of water for the period of an hour and a half, being well stirred up occasionally. At the end of this time it is strained through a flannel, or (preferably) felt bag, two or three times, when it is found to be fairly bright. As a considerable quantity of refuse matter remains in the bag, the quantity of material derived from the moss and represented in the jelly must be considerably smaller than the actual weight of moss used. The jelly so obtained will be found on cooling merely to gelatinise, and yet one finds it to withstand a temperature of 31° C. before liquefying, but if it be evaporated to ten ounces, it is found to be capable of being exposed to a temperature between 50° and 55° C. before liquefying. In this state, if a test-tube be filled with it, it is found to present the appearance of water with only a slight degree of haziness. In order to render this more nutritious, and so better fitted for the requirements of the growth of the generality of micro-organisms, I add to it the materials recommended by Dr. Klein—namely, beef peptone and ordinary cane sugar. If we add to the jelly 2 per cent. of the former and 1 per cent. of the latter, the result is a jelly almost as bright as nutrient gelatine and infinitely more so than agar, while the simple method of preparation and the price (Irish moss is about one shilling per pound) have much to recommend it.

I remain, Sir, your obedient servant,

ALEX. EDINGTON, M.B., C.M.,
Assistant to Prof. of Surgery, Edin. Univ.

Edinburgh, Sept. 28th, 1886.

GRANULOMA FUNGOIDES.

To the Editor of THE LANCET.

SIR,—As you refer in your number of Oct. 2nd to a case of this extraordinary affection described by me at the Pathological Society in May last and reported in THE LANCET, and as the disease has lately attracted a great deal of attention on the Continent, perhaps you will allow me to say a word on the most recent aspects of the subject.

The hypotheses of Drs. Hochsinger and Schiff that the disease is due to the presence of micrococci in the tissues, and that of Professor Rindfleisch, which refers it to cocci in the bloodvessels, though each has been put forward with great confidence, cannot either of them be regarded as proved. In a paper to appear in the forthcoming Transactions of the Pathological Society I have given reasons for thinking that the "cocci" of Hochsinger are not micro-organisms, but protoplasmic granules occurring in certain cells, and that the organism which Schiff cultivated from the tissues was in all probability the almost ubiquitous Staphylococcus pyogenes aureus, with which it appears entirely to agree. Professor Rindfleisch's observations are, as I have pointed out, equally open to question. There can be no doubt about their objective accuracy; but the cocci he describes would appear to be rather connected with a septicæmic process, of which his patient died, than with the original chronic disease. On the whole, then, I have ventured to conclude either that the disease is not bacterial, or that the right organism has not yet been found. My own observations (confirmed by those of several pathologists in this country) gave a negative result; and so did cultivation experiments made in the laboratory at St. Thomas's Hospital by Mr. Ballance.

I am induced to trouble you with these lines, more especially because two new memoirs have appeared on the subject since my paper was sent in. One is that of Hochsinger and Schiff, to which you refer, in which they undoubtedly describe more extensive culture experiments, but do not bring any further proof that their cultivated organisms caused the disease. The other is a paper by Professor Koebner of Berlin (*Fortschritte der Medizin*, Sept. 1st), where the bacterial theory of this disease is combated by arguments which are almost identical with those used by me in the Pathological Transactions, and are founded on observations entirely agreeing with ours in this country as regards the absence of micro-organisms. These views were, I have just heard, brought forward at the late Medical Congress at Berlin, and were substantially confirmed by Neisser. The Berlin observations were evidently as independent of mine as mine of them, so that their coincidence is a valuable mutual confirmation. The same, I cannot but expect, will be the result of the investigation of other cases of the same disease, which may from time to time occur, unless, indeed, some day the not-impossible bacillus should be detected. In the meantime the moral is that of the immortal cookery-book—"First catch your hare."

I am, Sir, your obedient servant,

Wimpole-street, Oct. 4th, 1886. J. F. PAYNE.

THE TREATMENT OF CASES OF OPERATION FOR CATARACT.

To the Editor of THE LANCET.

SIR,—Mr. Snell's paper on the treatment of cataract, published in your issue of the 18th inst., leads me to suppose that the following method of dressing, which I have used in nearly all my cataract operations and iridectomies for several years, may be new to some of your readers. Strips of salicylated isinglass plaster are cut two inches and a half long and rather more than an eighth of an inch wide. As soon as the operation is completed and the lids closed, a strip is damped by drawing it over a pad of Gamgee tissue dipped in warm water, and is then applied along the margin of the upper eyelid so as to reach from the bridge of the nose to beyond the outer canthus; another is applied parallel to the first along the edge of the lower lid, and a third at right angles to the other two, reaching from above the eyebrow to the cheek. Care must be taken to make this strip stick firmly to the other two, and this is easily managed if it is damped to the proper degree. The eye not operated on is secured in the same manner, or sometimes the strip on the lower lid is omitted. In a few minutes the plasters are dry, and no further dressing of any kind is needed. By this means the eyelids are kept immovable without any pressure; any swelling which may occur is at once visible; the discharge has free exit between the edges of the lids, and can be removed by a sponge or pad of wet cotton-wool without disturbing the dressings. The salicylic acid in the plaster acts to some extent as an antiseptic. I have never had any trouble from the plasters loosening by the discharge and allowing the eye to open. Occasionally the ends of the plasters curl up a little, but this is easily remedied by damping them down again. Usually about the fourth day the plaster is softened by laying a pad of wet Gamgee tissue over the eye for a few minutes, and then removed and a similar dressing applied. I know of no drawback to the method, and confidently recommend a trial of it by your readers.

I am, Sir, yours obediently,

York, Sept. 27th, 1886. TEMPEST ANDERSON, M.D.

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THE FIRST PROFESSIONAL EXAMINATION IN SCOTLAND.

To the Editor of THE LANCET.

SIR,—Will you permit me very briefly to reply to "M.D. Glasgow," who writes in your issue of the 2nd inst. regarding the first professional examination in Scotland? Your correspondent speaks of the student being confronted with chemistry, botany, and natural history (i.e., zoology) after passing his preliminary trial. He alludes to the "width" of these sciences, and, by implication, would have us believe that the medical student is forced to become little short of a specialist in each. I cannot speak either for Edinburgh or for Aberdeen, but as I have held the position of examiner in botany and zoology in the University of Glasgow for ten years past, I may be credited with a very fair knowledge of the amount of biological information the Glasgow student is required to possess for success in passing his first professional examination. Chemistry I leave out of consideration, for although "M.D. Glasgow" apparently includes this subject in his sweeping assertions, I do not think any sane person would dream of maintaining that a medical student should be otherwise than a fairly competent chemist. As regards botany and zoology I assert, without fear of any contradiction worthy the name, that at Glasgow University any student who shows a fair, and by no means necessarily minute, acquaintance with the broad facts of these sciences is certain to satisfy the examining board. We do not look for the *minutiæ* of biology from medical students, but we do expect them to possess what hundreds of students yearly do contrive to acquire—namely, a broad acquaintance with the fields of animal and plant life. I am at a loss to understand the mental calibre of the students your correspondent speaks of as having again and again been "plucked" in their first professional examination, save, indeed, on the theory that there are certainly a proportion of students who will not take the trouble to acquire even the reasonably limited knowledge needed to pass. My experience as an examiner—and I will add as a teacher of biology also—is that a certain class of students never will pass the first professional or any other examination whatever. These are the unhappy few who think themselves hardly used, because when, for example, they have informed examiners that a fern is a dicotyledon, or that a crab is a vertebrate animal, the said examiners refuse to credit them with the knowledge necessary to pass even the simplest of trials. Add to this that the intellectual demands made upon medical men nowadays are of very heavy character, and that the doctor is expected to be at least as intelligent a man as the schoolmaster or the clergyman; and I fancy "M.D. Glasgow" must admit that a knowledge of biology—possessing as it does intimate bearings on the nature and cure of disease—is by no means the least valuable of the mental furnishings of the modern physician. I am, Sir, yours obediently,

Edinburgh Medical School, Oct. 2nd, 1886. ANDREW WILSON.

THE MEETING OF GERMAN NATURALISTS AND MEDICAL MEN IN BERLIN.

(From a Correspondent.)

THE fifty-ninth meeting of the Society of German Naturalists and Physicians (corresponding to the combined British Association and British Medical Association), which has just taken place in Berlin, has been one of the most brilliant gatherings of the kind, both as regards the attendance and the scientific outcome. The scientific work at these meetings consists in the delivery of lectures of general interest before the whole assembly on days set apart for the purpose, in the reading of papers, and in demonstrations in the different sections.

As specialism exists in Germany to a greater degree than in England, the number of sections at these gatherings is very large, and this year there were thirty sections, of which twenty-one were more or less medical. In spite of the subdivision of the work (thus I noticed a section on pharmacology, one on pharmacy, one on general hygiene, one on military sanitary science, and one on medical geography, climatology, and hygiene in the tropics), all the sections were well attended, and some had as many as 400 members. The different hospitals, scientific institutes, and museums were also thrown open for inspection, and in some special demonstrations were given. There was also held in connexion with the Congress an exhibition of drugs and scientific instruments used in the different branches of medicine and the natural sciences.

Deferring for the present an account of the work done in the sections, and of the exhibition of instruments, I wish, to-day, briefly to notice some of the general addresses. At the first open meeting Professor Virchow gave the introductory address, in which he briefly sketched the origin of the Association, its aims and objects, and its immense development, and alluded to the scientific activity of the German race as a guarantee for the growth of the German nation. "In the severe struggle for existence only those nations will survive which succeed in unravelling the mysteries of nature in new directions, and in placing at the service of man the forces which we find spread out in the world in a profuse manner." He then alluded to the connexion of the natural sciences with medicine, which connexion was still kept up by the German Association, in contradistinction to its English sister Association, and dwelt at length on the new method, the mechanical method, of research (in the sense in which Leibnitz uses the words, "Omnia in corporibus mechaniæ explicari posse"), which, by replacing the so-called natural philosophy (*Naturphilosophie*) and speculative philosophy, remodelled the whole of biology, and gave the basis to all scientific inquiries. Darwin, in his famous work on the Origin of Species, tried to solve the question of descent, not in the sense of the old natural philosophy; he did not discuss general probabilities, but looked for the several practical cases; he did not search for special organic powers, but tried to find the mechanical effect of natural causes. The same method has been pursued ever since; and if in recent years rapid advances have been made, especially in the study of infectious diseases, the aim and the method have remained the same—the scope only of our investigations has been altered. "Our modern transactions are characterised by the spirit of empirical but methodical investigation, the spirit of practical synthesis, the spirit of brotherly co-operation in the several branches of the wide scientific field."

Dr. W. Siemens gave an able address on our Scientific Age, and was followed by Professor Bardeleben of Jena with a paper on "Hand and Foot," in which he compared the hand with the foot on the basis of comparative-anatomical and palæontological data. He then discussed the origin of the vertebrate limbs, and contrasted Gegenbaur's theory with the more recent one of Thacher, further developed by Mivart and the lamented Balfour, concluding with a number of aphorisms more suitable for the lay portion of the audience—such, for instance, as the adaptation of the terms "foot" and "hand" to such various purposes as standards of measurement, as the basis of our numerial system, and so on.

At the second general meeting Professor Cohn (Breslau) read a most fascinating paper on "Questions of Life" (*Lebensfragen*), which showed that the great problem is not yet solved, and that in the living organism there are forces which, though they must be mechanical, as they put bodies in motion, yet cannot be split up into components of atomic molecular forces. "The gulf which separates life from death, organic from inorganic bodies, is not closed, and none of our hypotheses will help us to bridge this gulf." He was followed by Dr. Schweinfurth with a paper on a geographical subject, and by Professor His on the "Development of the Zoological Station at Naples and the growing necessity for Scientific Central Stations." The lecturer dwelt on the advantages such institutions, if properly worked, would have for the study of many questions of physiology and embryology. In these institutions collective investigation on some subjects—as, for instance, the finer structure of the brain—could be carried out—work which could not be done by a single individual. They should form a sort of library or museum, accessible to all scientific inquirers.

Professor Stricker (Vienna) then gave a demonstration with his powerful electric microscope, and showed how useful the instrument is for lecture purposes.

At the third and last general meeting there were three addresses, only one of which, that of Professor Bergmann of Berlin, was of medical interest. Professor Bergmann spoke

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of the relations of modern surgery to internal medicine, the triumph of surgery due to the antiseptic method of Lister, and the scientific development of surgery. Wounds can now be made to heal so readily that surgery has invaded the territory of medicine, and serious operations on internal organs are performed, and often, also, operations merely for the purposes of diagnosis. Internal medicine, occupying itself largely with those disease-germs which are brought to the organism from without, tries to wage war against these germs in their native elements—the air, water, and soil,—and is becoming more and more preventive.

I propose in a future communication to allude to the work done in some of the sections, and to some other matters in connexion with the Congress.

LIVERPOOL.

(From our own Correspondent.)

OPENING OF THE LIVERPOOL UNIVERSITY COLLEGE.

The formal opening of the Winter Session of the University College, Liverpool, was held at St. George's Hall, on Saturday last, under the presidency of Lord Derby. In opening the proceedings, the noble chairman said he believed it was no exaggeration to say that "the record for the year just ended is satisfactory in nearly every respect. No previous session has shown so marked an increase either in the number of students or the amount of fees. The chief event of the year is the completion and opening of the new chemical laboratory, which was inaugurated by an address from Sir Lyon Playfair in March last. The Council since that date have had six months' experience of the working of the arrangements then completed, and no serious defect or oversight had been discovered, those who are best qualified to judge considering the laboratories as equal for completeness and efficiency to any now existing in the British islands. Another matter has engaged a good deal of public attention. Two years ago, acting on a strongly expressed public feeling, the Senate devised a two years' course of study suitable to young men who were training themselves for a business life. The scheme was discussed over and over again; many of the leading firms in Liverpool were consulted; it was adopted by the governors in the autumn of last year, and no pains have been spared to obtain for it the approval and support of the principal trade associations of the city, which support has been given in a simple and very practical form. Most of the leading banks and insurance companies and above 350 private firms have agreed to recognise the certificates granted by the College to those who pass creditably through the proposed course—not, of course, as an absolute claim to employment, but as a recommendation to which they attach importance; and in many cases they will lessen by one year the ordinary term of apprenticeship in favour of candidates who may be so qualified—which is a kind of help doubly valuable, both because it furnishes a practical inducement to young men to go through this course, and because it shows an amount of sympathy among business men with the work which the College is doing, which strengthens our hands in appealing to the public for further help. Mr. G. Holt, already a large donor, has very liberally presented to the College the sum of £2000 for the advancement of medical study, and that sum has been applied to the creation of two scholarships to be annually awarded to senior students of the medical school. And an entirely novel experiment has been tried in the establishment of ten very small scholarships for working men, yielding only £5 each, but involving, on the other hand, the necessity of attendance at two courses only of evening lectures. The object of them is to assist men not otherwise able to provide the cost of attending lectures and of the necessary materials for study. The Council is asked to do this, that, and the other, which is useful and desirable, and tries to meet the wants and wishes of the public; but does so, for the most part, at a heavy increase of expense. It is a good sign—a healthy sign—that the child should be outgrowing its clothes, but the parents must not complain if they have to pay for new ones. The College has grown very fast, and no men hereafter will ever venture to say again, what was said by many people a few years ago, that such an institution is not wanted or appreciated in Liverpool. 'Well begun is half done'; and the severest critics cannot deny that the beginning has been a good one." An introductory address was then delivered by Mr. Wm. Martin Conway, the Professor of Art, who selected as his subject "The Succession of Ideals." Lord Derby afterwards distributed the prizes to the successful candidates, and after votes of thanks had been proposed and carried to the lecturer and Lord Derby, both of whom briefly returned thanks, the proceedings terminated. The annual dinner was held the same evening in the Adelphi Hotel, under the presidency of Dr. Caton, at which a large number of medical practitioners were present.

"VIEWING" REMAINS.

Referring to the remarks in THE LANCET of last week under this heading, there is another phase of the subject which ought not to be ignored. A most experienced coroner's officer in this city, now retired, gave, among other experiences, this: that many a man dates the commencement of a career of intemperance to his first serving as a coroner's juror, and the effects upon him of "viewing" the body. In hot weather especially, the state of a body within twenty-four hours after death may be such as to try severely even those who are accustomed to such sights and odours—a condition which is intensified by the fact that the "viewing" cannot, as a rule, be until two or even three days after death, and frequently even longer than this. In Shanghai the coroner's jury comprises three persons; a county court jury in this country, five. If the coroner's jury is a desirable institution to perpetuate, might it not be reduced? And seeing what an utter farce the "viewing" is, it is high time it was dispensed with.

PREVENTION OF CRUELTY TO CHILDREN.

A summary of the work done during the month of September by the Society for the Prevention of Cruelty to Children amply justifies its formation. In that interval of thirty days the Society took up 58 new and 10 old cases, the former involving the welfare of 107 and the latter that of 12 children. Among the complaints were 2 of assault, 1 of excessive beating, 41 of general neglect, 2 of starvation; exposure, 21; sleeping out at night, 6; the remainder being cases of begging and of selling at night. In four cases the complaints were dismissed. Two children were committed to industrial schools, 36 were under the supervision of the School Board, 3 were placed in workhouse schools, 2 in hospitals, 3 with relations, and 22 with parents under visitation; 29 parents were cautioned; the remainder of the cases were disposed of in various ways.

HARVEST FESTIVAL AT THE ROYAL INFIRMARY CHAPEL.

On Sunday last the usual harvest festival was held in the chapel of the Royal Infirmary. The decorations, which were by the lady superintendents and their assistants, were very beautiful. The musical portion of the services was most ably rendered by the large staff of nurses and probationers, who, under the indefatigable organist, spare no effort in making the services every Sunday as cheerful as the surroundings of a hospital chapel will allow. The chapel was filled to overflowing, and Archdeacon Bardsley preached on behalf of the Samaritan Fund of the infirmary. This fund enables the chaplain (the Rev. W. Smith) not only to give some little help to poor patients, but also in many instances to alleviate the distress at a patient's house while the bread-winner is the inmate of a hospital ward. The offerings at the two services amounted to £7 9*s.* 1*d.*

UNIVERSITY COLLEGE, LIVERPOOL: MEDICAL FACULTY.

List of Scholarships, Exhibitions, Prizes, &c., 1885 to 1886: Scholarships and Prizes: Holt Tutorial Scholarships, A. W. Collins and J. E. Gemmel. Lyon Jones Scholarships, H. A. Burrowes, S. R. Knight (resigned), and A. J. Chalmers. Derby Exhibition: W. T. Thomas. Winter Session.—Third and fourth year subjects: Medicine: W. T. Thomas, silver medal. Surgery: W. T. Thomas, silver medal. Pathology: J. H. Abram, silver medal. Obstetrics: F. Kerans, silver medal. Second-year subjects: Advanced Anatomy and Physiology: E. Hale, Torr gold medal; J. Gould, bronze medal. First-year subjects: Elementary Anatomy and Physiology and Chemistry: R. H. Carlisle, Bligh gold medal; J. S. Sewill, bronze medal. Summer Session.—Materia Medica: J. Cunningham, silver medal. Botany: A. J. Chalmers, silver medal. Medical Jurisprudence and Toxicology: F. Kerans, silver medal. Practical Chemistry: A. C. Wilson, silver medal. Histology Prizes: First, Mr.

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Hale; second, Mr. Grimsdale. Students' Debating Society Prizes: First prize for essay, Mr. Sanderson; second, Mr. Livsey. First prize for debating, Mr. Capper; second, Mr. Fox-Parry. First prize for specimens, Mr. Garth; second, Mr. Buchanan. Prize for medical cases, Mr. Abram; for surgical cases, Mr. C. W. Graham; for venereal cases, Mr. Leigh.

MANCHESTER.

(From our own Correspondent.)

OWENS COLLEGE.

WORK is being resumed for the winter session in most of the departments during the present week. In the arts, science, and law departments the Professor of Mathematics delivers an "introductory," and in the evening classes department an introductory address will also be delivered on Monday next; but, in accordance with the now established custom, the medicals will have no such opportunity of giving vent to the exuberance of their animal spirits, but, in lieu thereof, a conversazione was held last night in the College, which was very largely attended, between 400 and 500 visitors being present. The whole of the buildings were thrown open, and various scientific apparatus, &c., were shown for the instruction and amusement of the guests. The Dean of the medical school (Professor Young) gave his report of the work of the past year, and afterwards delivered an address on the future prospects of the College and University. Later on, Dr. Dreschfeld discoursed to a large audience on Pasteur and his inoculation method for the prevention of hydrophobia. On Thursday evening the annual medical dinner of the College will take place at the Queen's Hotel, under the presidency of Sir William Roberts.

HOSPITAL EXTENSION.

With a view to assist in raising the funds required for the proposed extension or rebuilding of St. Mary's Hospital, which has for some time past been in contemplation, steps have been taken for holding a bazaar next month in the Gentlemen's Concert Hall. The additions to the Hospital for Consumption by the erection of a new and more suitable building for the out-patient department are rapidly approaching completion; it forms a very compact and well-adapted building for the purposes required, and will be a great improvement on the make-shift accommodation hitherto provided in John-street. Twelve months ago, the committee of the Northern Counties Hospital for Incurables appealed to the public for the means to extend their hospital at Mauldeth Hall, as it had become quite full and many applications for admission had to be refused. As the result of this, a most handsome gift was received from a lady, Miss Kay, in the shape of a large house and grounds near Bury. These, having been taken over and adapted by the committee, were recently formally opened by the Bishop of Manchester. The accommodation here will ultimately provide for some forty additional patients, and will, for the present at least, render the extension of the original building unnecessary.

MILK ADULTERATION.

Our municipal authorities are still very vigorous in the prosecution of offending milk-sellers. Scarcely a week passes but we hear of cases in the police-court; and letters have not been wanting in the columns of the daily press, complaining that the milkmen are in some cases scarcely treated with fairness, and a vigorous defence was made in a recent case by counsel, to show that a milk containing only 8·3 of non-fatty solids was not necessarily a sophisticated one; but the magistrates were not to be moved, and convicted the offenders of wilfully tampering with the quality of the milk.

SANITARY PROGRESS.

The large tract of land at Carrington Moss, which came into the possession of the Corporation for the purpose of being utilised as a means for disposal of the refuse and night soil of the southern part of the city, is being rapidly prepared for this purpose, and commendable activity has been shown by the health department in the progress of this work. Another useful step recently taken by the Parks Committee of the Corporation is the acquisition of a portion of the brick fields at Rusholme, for a public recreation ground. The Open Spaces Committee, so ably presided over by Mr. Herbert Philips, has had much to do with this desirable object being brought about.

Our medical societies have commenced their work again, and at a meeting of the Owens College Medical Society, it was resolved to discontinue the use of the central room, &c., which was last year provided in the centre of the city, in deference to the views of some of the members that the college rooms were too far away from the centre of the town. The experiment has, however, shown that members prefer to go to the library and reading-room at headquarters—the central room having scarcely been used at all.

Manchester, Oct. 6th.

NORTHERN COUNTIES NOTES.

(From our own Correspondent.)

BERWICK.

THE bazaar in aid of the Bethnal-green Free Hospital was opened in this ancient border town on Wednesday last by H.R.H. the Duchess of Teck. The ceremony was regarded in the light of "an event" at Berwick, and was well attended. The bazaar was kept open two days, closing on Thursday night, and the result was a gain of over £500 for the charity.

INFANTILE DIARRHŒA.

Dr. Renton, medical officer of health at Chester-le-street, Durham, in his report to the sanitary authority for the past month, thus refers to the prevalence of infantile diarrhœa in the district:—"I find that diarrhœa, always our anticipated scourge at this period of the year, has been the cause of fourteen deaths; the whole of these fourteen deaths have occurred in infancy or early childhood, and I have no doubt that improper feeding has been the initial factor in each instance. It is noticed that amongst the greater number of the working classes very crude notions exist as to the proper nursing of those of tender years, and, what is still more to be deplored, they will not be taught, or they turn a deaf ear to the warning of the doctor. Thus, either from ignorance or wanton carelessness, the death-roll is generally swelled in the autumn months."

THE NEW HOSPITAL FOR JARROW.

The foundation-stone of the new hospital at Jarrow was laid last week. The site was well chosen, with good drainage, and is at a considerable distance from any dwelling—a matter of importance in a hospital intended as this is for infectious diseases. A brick wall is to be built round the site 9 ft. high, with pillars about 14 ft. apart. The administrative department will be two storeys high. On the ground floor will be the doctor's and matron's rooms, the kitchen, and dispensary, with scullery and pantry in the rear; while on the first floor will be bedrooms and baths. The ward block is to be 118 ft. long, and will consist of four wards, two nurses' rooms, and two bath-rooms. There will be two wards for females, entered from the south side of the building, and with accommodation for seven beds. The men's wards will be entered from the north side, and will have accommodation for six beds, with nurse's room, bath-room, &c. The sanitary and disinfectant block will be situated at the east part of the site, and will be fitted with washing appliances for thirty-nine patients. The building will be of brick with stone facings, and is estimated to cost £3107. This does not include the cost of the site, which was £500.

DR. J. G. HOUSEMAN OF NEWCASTLE.

Dr. J. G. Houseman has resigned his appointments at the Children's Hospital, the Eye Infirmary, the Throat and Ear Hospital, &c. He has determined to travel for a lengthened period—proceeding, I believe, in the first instance to China. Dr. Houseman has many friends in Newcastle and the north of England, and he will carry with him in his travels their best wishes for his health and welfare.

DEATH FROM LEAD POISONING.

An inquest was held here this week on another of these unfortunate cases, sadly too frequent amongst female white-lead workers. She was a married woman, aged thirty-four, and up to the time of her commencing employment at the

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lead works had good health. In a very short time, however, she became subject to the poisonous influence of the lead, had convulsions and colic, followed by the usual train of symptoms, ending in death. The coroner, in summing up, said it would be a great advantage to the people employed at lead works if something could be invented to render their labour less dangerous. He was afraid, however, that the precautions which had been already brought into use were not resorted to as much as they ought to be by those who had to work in lead factories.

Newcastle-on-Tyne, Oct. 4th.

IRELAND.

(From our own Correspondent.)

QUEEN'S COLLEGE, CORK: THE MEDICAL SCHOOL.

The President, in his report just issued for the past session refers to his previous report, in which he dwelt upon the advisability of enlarging the scope of the teaching in the medical school, so as to enable it to perform efficiently the increased work imposed upon it, in consequence of the rapid growth of medical science, and the gradual enlargement of the medical curriculum of the Royal University. For this purpose he suggested the teaching of physiology, separated from that of anatomy, and the establishment of a special chair of physiology. He also recommended the establishment of two new chairs, one of human and comparative pathology, and the other of public health, including medical jurisprudence. The proposed enlargement of the scope of teaching in the Medical Faculty suggests the necessity of likewise improving the clinical teaching in the Cork hospitals, as any efforts to bring the teaching at the College up to the present level of medical science must remain almost fruitless without the thorough co-operation of the hospitals. The materials for practical teaching in the general and special hospitals, if the Union Hospital is included, which is now open to students, are very good, and the president suggests that the staffs of all the hospitals in Cork should unite for teaching purposes, classify the students who attend the Cork School of Medicine, and so arrange their clinical teaching that everyone might be able to get the full benefit of it. Under such an organisation the time of both teacher and student would be much economised; while better provision than now exists could be made for teaching junior students. At present these form part of the helpless crowd of young men, who, with a nucleus of real working students, follow the physician or surgeon from ward to ward, and who, lacking systematic preliminary knowledge of disease, are unable to benefit by the clinical teaching suited for the advanced students. Again, the staff of the larger hospitals should be increased by a number of assistant physicians and surgeons, who should conduct, under the direction of the senior members of the staff, a large part of the clinical teaching. In this way there would be formed a body of competent candidates accustomed to teach, and likely to keep themselves in the current of medical science, from whom to select persons to fill such vacancies as would from time to time occur in the staff. Clinical clerkships and dresserships also should be established, these important offices being given after a practical examination by examiners appointed by the associated hospital staffs, and a certificate given to each student at the end of his term of office.

ROYAL UNIVERSITY OF IRELAND.

Earl Dufferin has been selected to succeed the late Duke of Abercorn as Chancellor of this University. The election for a member of the Senate will take place towards the end of this month, when a very exciting contest may be expected.

NATIONAL ORTHOPÆDIC AND CHILDREN'S HOSPITAL, DUBLIN.

The committee of this hospital, having determined to move into larger and more commodious premises, have decided to issue an appeal for the necessary funds to enable them to secure a larger building and furnish the same up to all the modern requirements of a children's hospital. The institution is a deserving one, and it is sincerely to be hoped that the amount required may speedily be subscribed.

Dublin, Oct. 6th.

PARIS.

(From our own Correspondent.)

M. POLAILLON'S GASTROSTOMY CASE.

AT the meeting of the Academy of Medicine last week, M. Polaillon exhibited the patient on whom he had performed the operation of gastrostomy for the removal of a fork from the stomach, and to which you referred in an annotation in THE LANCET of September 25th. The operation has been most successful in all respects. The patient has remained quite well and hearty, and when presented he held in his hand the fork that he had swallowed. There was no symptom whatever of peritonitis, but immediately after the operation he was seized with jaundice, which lasted a few days. This was followed by a small abscess, which opened at the inferior part of the wound, but soon healed. No other untoward symptom occurred, and at the end of three weeks after the operation the man was able to get up and go about the garden of the hospital. There is evidently no adhesion between the incision of the stomach and that of the abdominal parietes, as that organ can be felt moving freely in the peritoneal cavity. The "suture perdue" was therefore a complete success, and reflects great credit on M. Polaillon, who performed the operation, and who was the first to employ this form of suture in such cases.

CYSTICERCI IN MUTTON.

M. Johannés Chatin, the newly-elected member and son of Professor Chatin, then ascended the tribune, and read a paper on "Ladrerie" in sheep. Up till now the flesh of sheep was considered, when eaten in a raw state, to be as dangerous as pork and beef, owing to the presence of cysticerci in the muscular tissue. According to M. Chatin, however, there is nothing to be apprehended in eating mutton raw, as, although the presence of cysticerci has been established in the flesh of sheep, they are never found in such numbers as to determine a veritable "ladrerie," and, as they do not attain the development of the cysticerci of pigs and oxen, there is no danger of their transmission to the human species. M. Chatin therefore concludes that mutton in its raw state may be safely prescribed whenever such a form of treatment is indicated.

ABNORMAL PNEUMONIA.

Dr. Netter of Nancy related a case at the Congress recently held at that town of an individual with a palustral diathesis, who was suddenly seized with pneumonia, most probably of the same origin, for instead of following its ordinary course the malady presented a certain intermittence. Sulphate of quinine was prescribed by way of trial, and a few days afterwards the patient was cured. The author thinks that in cases of abnormal pneumonia it would be useful to examine the patient, not only morning and evening, but several times during the day, as any slight remission might pass away unperceived. If Dr. Netter had not examined his patient during the febrile remission, he would not have recognised the particular nature of the affection.

Paris, Oct. 5th.

THE SERVICES.

ADMIRALTY. — The following appointments have been made:—Staff Surgeon James Dunlop, to the *Egeria;* Surgeon Alexander F. Harper, to the *Algerine;* Surgeon Howard J. C. Todd, to the *Ganges;* Surgeon A. S. Nance, to the *Swallow;* and Deputy Inspector-General Francis W. Davies, to Jamaica Hospital.

RIFLE VOLUNTEERS.—1st Wiltshire: The following Surgeons are granted the honorary rank of Surgeon-Major:—G.C. Taylor, M.B., and F. F. Lee.

SCARLET FEVER EPIDEMIC IN DUNDEE.—No less than 263 fresh cases of scarlet fever were reported to the sanitary authorities of Dundee during the month of September. They have occurred principally in the more crowded parts of the town, although no district has been entirely free of the epidemic.

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Obituary.

ENRICO MARZARI.

PADUA has suffered severely in these days, not only from cholera and small-pox, but from the loss of distinguished practitioners who have worn their lives out in combating the two epidemics. As if the death of the eminent surgeon and clinical teacher, Professor Francesco Marzolo, were not sufficient, she has now to mourn that of his favourite pupil, Dr. Enrico Marzari. After a highly creditable curriculum at the University of Padua, Marzari became Professor Marzolo's assistant, and under the rigidly scientific and largely benevolent auspices of that able consultant he made himself known and esteemed by the profession and the public. He then took his degree of "In Medicina Doctor," with special honours for practical as well as theoretical proficiency, and at once embarked on his professional career. He was making rapid progress, accelerated by the premature decease of his patron and teacher Marzolo, to whose *clientèle* he succeeded, when symptoms of cardiac mischief, hereditary in his family, began to show themselves. He struggled on, however, and for two years continued in his daily widening path, in spite of warnings that would have been final with a less intrepid nature. The epidemic of small-pox gave him much to do among the less-favoured classes, who never appealed to his benevolence in vain, and he was barely recovering from the effects of over-exertion thus induced when the cholera epidemic assumed alarming proportions. Again Marzari was at the front, but this time with sadly diminished strength. Spasmodic pain of an aggravated kind was rapidly making life a burden to him, when on the 30th ult. he almost suddenly expired. A Paduan correspondent writes: "He falls a victim to zeal and duty. The sad announcement was received as something personal, not only by a wide circle of friends and admirers, but by a still wider circle of the poor, to whom he was for years an unwearied benefactor. To his family he bequeathes no other wealth than that of a name honoured and cherished by all his fellow-citizens. His funeral was a touching spectacle; every rank and calling was represented at his grave; and the populations of San Leonardo and Savonarola, on whom most of his gratuitous attendance was lavished, closed their shops and draped their houses in black, as a token of their sense of loss."

JOHN PEARSON BELL, M.D.

DR. J. PEARSON BELL, whose death occurred on the 26th ult. at his residence in Hull, received his professional education at St. Thomas's Hospital and the University of Glasgow. In 1830 he became a licentiate of the Society of Apothecaries of London; in 1845 he obtained the degree of M.D. and C.M. at Glasgow University, and in 1860 the licence of the Royal College of Physicians of Edinburgh. At the time of his death the deceased was in his seventy-eighth year, and had for many years been connected with most of the public institutions, and taken part in the principal public movement in Hull. In 1875 he was appointed a magistrate of the borough, and for over fifty years he had a long and prominent career as a Freemason. In April last Dr. Bell's golden wedding was celebrated, when the Masonic brotherhood throughout the province showed their appreciation of his services by presenting to Mrs. Bell a marble bust of her husband. Dr. Bell was highly esteemed in Hull, and his death is much regretted by the inhabitants of that town.

THE PUBLIC HEALTH ACT IN SCOTLAND.—On the 21st ult. a man was fined five shillings at Greenock for removing by railway his daughter who was suffering from scarlet fever.—At Dundee, on the 23rd ult., a lodging-house keeper was fined half-a-guinea for neglecting to ascertain whether one of his lodgers was suffering from infectious disease.—On the 21st ult., at the same police-court, a woman who was charged with a similar offence was dismissed with a caution.

Medical News.

SOCIETY OF APOTHECARIES.—The following gentlemen passed their examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received certificates to practise, on Thursday, the 30th ult.:—

Barrett, Ernest, Elm-road, Dulwich.
Horner, Charles Julian, M.R.C.S., Fern-hill, Walthamstow.
Sibley, Walter Knowsley, Harley-street.
Stevenson, George, Edgware-road.

THE new building in connexion with the out-patient department at Westminster Hospital was opened on the 5th inst.

ON the 28th ult., a deputation from the Royal Commission for the Blind, Deaf and Dumb, Imbecile, &c., visited the Royal Albert Asylum.

DAVOS PLATZ.—This popular health-resort is to have the advantage of railway communication from Landquart. The line will be twenty-five miles in length, and will traverse Prättigau.

ENTERIC FEVER AT SWANSEA.—Enteric fever is again prevalent at Swansea, the outbreak being attributed to the access of farm refuse to a stream which runs into a reservoir which supplies the west end of the town.

MISS FLORENCE NIGHTINGALE has been compelled through illness to decline to unveil the statue of Sister Dora at Walsall on the 11th inst.; Mr. Gladstone also has expressed his regret at being unable to attend the ceremony.

AN inquest was held at Bangor in the north of Ireland on the 28th ult., on the bodies of two women whose death had been produced by irritant poisoning, caused by their having partaken of putrescent german sausage.

SCARLET FEVER IN OLDHAM.—At a special meeting of the Sanitary Committee of the borough of Oldham on the 4th inst., the medical officer reported that there had been within the last few days a large increase in the number of patients in Westhulme Infirmary. The cases are nearly all scarlet fever.

AT the meeting of the Liverpool City Council on the 6th inst., the medical officer of health recommended that, in consequence of the prevalence of scarlet fever in the city, additional hospital accommodation should be provided. After a lenghthened debate, the matter was referred to the Special Hospitals Committee.

SHEFFIELD MEDICAL SCHOOL.—The Mayor of Sheffield has announced his intention of calling a public meeting to promote the erection of a new School of Medicine in the town, the premises now occupied, and which were built in 1828, not being equal to the present requirements of the institution. A handsome sum of money has already been subscribed, but £2000 more is required. The Archbishop of York has consented to take part in the meeting, and Sir Andrew Clark has promised to visit Sheffield to speak at the gathering.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.—The following office-bearers have been elected for the ensuing session:—President: Dr. Alderson. Vice-Presidents: Mr. E. C. Barnes, Dr. Campbell Pope, Mr. Hemming, and Mr. Keetley. Council: Mr. Swinford Edwards, Dr. Hart Vinen, Mr. R. F. Benham, Dr. Owles, Dr. Thudichum, Dr. Bullock, Dr. Wells, Dr. Pickett, Mr. Gunton Alderton, Mr. Lloyd, Dr. Spicer, and Dr. Savill. Treasurer: Mr. F. Lawrance. Secretaries: Mr. H. Percy Dunn and Dr. Clippingdale. Auditors: Dr. Blenkinsop and Dr. Gloster.

WARNEFORD HOSPITAL.—At a special meeting of the governors of this institution held at Leamington on the 6th inst., it was proposed that, as at the Queen's Hospital, Birmingham, every out-patient should be required to pay a registration fee of one shilling. The honorary medical staff objected strenuously to the proposal, and it was urged that when all the attendant expenses had been defrayed the hospital would not benefit pecuniarily to the extent of £30. The plan was eventually rejected by an overwhelming majority, only three voting for it.

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Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

ANDERSON, JAMES, M.D., M.R.C.P., has been appointed Assistant Physician to the London Hospital.

BUTLER, W. HARRIS, M.R.C.S., L.R.C.P.Ed., has been appointed Medical Officer for East Woolwich.

COLLINGWOOD, FREDERICK W., L.R.C.P.Lond., M.R.C.S., has been appointed Assistant House-Surgeon to the Torbay Hospital, Torquay.

CUSSE, ERNEST, M.R.C.S., L.S.A., has been appointed Resident Medical Officer and Secretary to the Bournemouth Cottage Hospital and Dispensary, vice T. G. Parrott, M.R.C.S., L.R.C.P.Lond., resigned.

DOVE, AUGUSTUS CHARLES, M.B., M.R.C.S., has been appointed Junior House-Surgeon to the Cancer Hospital, Brompton.

GUTHRIE, LEONARD L., M.A., M.R.C.S., L.S.A., has been appointed House-Surgeon to Paddington-green Children's Hospital, vice Dr. George Parker.

HASLEWOOD, ALBERT, M.R.C.S., has been appointed Honorary Medical Officer to the Devonshire Hospital, vice W. H. Flint, L.R.C.P., resigned.

PARROTT, THOMAS GODFREY, M.R.C.S., L.R.C.P. Lond., has been appointed Resident Medical Officer to the National Sanatorium for Consumption and Diseases of the Chest, Bournemouth, vice Dr. Humby, resigned.

WELSFORD, GEORGE FREDERIC, M.B.Cantab., M.R.C.S., has been appointed Medical Officer for the Second District of the Woodstock Union.

Births, Marriages, and Deaths.

BIRTHS.

ARNOTT.—On the 3rd inst., at Burnswark, Malabar-hill, Bombay, the wife of Surgeon-Major James Arnott, M.D., of a son.

BATTYE.—On the 27th ult., at Denbigh-street, the wife of John Howard Battye, M.D., of a son.

COHEN.—On the 2nd inst., at Stranraer-place, Maida-vale, W., the wife of A. Cohen, M.A., M.D., of a daughter.

CONSTABLE.—On the 29th ult., at Kennington-park-road, the wife of Joseph J. Caffry Constable, M.D., of a daughter.

DALE.—On the 24th ult., at Park Lea, Scarborough, the wife of Frederic Dale, M.D.Cantab., F.R.C.S.Eng., of a son.

DUKES.—On the 1st inst., at Sunnyside, Rugby, the wife of Clement Dukes, M.D.Lond., of a son.

HEDLEY.—On the 29th ult., at Lawn-road, the wife of Brigade-Surgeon W. S. Hedley, M.D. (retired), of a son.

LITHGOW.—On the 2nd inst., the wife of T. G. Lithgow, F.R.C.S.Ed., L.R.C.P.Lond., of Stirling House, Farnborough, Hants, of a son.

MACLACHLAN.—On the 28th ult., at Fenwich, Thurlow-park-road, West Dulwich, the wife of Andrew MacLachlan, M.D., of a son.

ROBINS.—On the 4th inst., at Down Hall, Rippingale, Bourne, the wife of G. Norman Robins, L.R.C.P., M.R.C.S., of a daughter.

MARRIAGES.

BASS—BISHOP.—On the 29th ult., at St. John Baptist's, Crowthorne, Berks, Charles William Bass, M.R.C.S., of Langsett, Ilford, Essex, to Edith Mary, eldest daughter of George Bishop, of Wellington College, Berks.

BROWNE—GARRETT-SMITH.—On the 30th ult., at St. Mark's, Hamilton-terrace, James W. Browne, M.A., M.B., Fellow of Worcester College, Oxford, to Alice, younger daughter of J. W. Garrett-Smith, of Abercorn-place, N.W.

PAGE—GRACE.—On the 27th ult., at Downend, G. Shepley Page, L.R.C.P., L.R.C.S.E., to Katharine Fanny, second daughter of Henry Grace, of Kingswood-hill, Bristol.

SMALL—HALL.—On Aug. 17th, at St. Philip's Church, Sydney, N.S.W., John Small, L.R.C.S.Ed., L.R.C.P.Ed., of Geelong, Victoria, to Alice Maud, second daughter of the late Capt. R. Morgan Hall, of 48th and 13th Regiments, Bath, England.

WATSON—GREY.—On the 29th ult., at Newport, Isle of Wight, John Watson, M.D., of Royal Heath, Sandown, Isle of Wight, to the Lady Anna Tredger, youngest daughter of the late Rev. Harry Grey.

DEATHS.

ASHMEAD.—On the 4th inst., at Talbot House, Brierley-hill, Helen Wilhelmina Ashmead, the beloved wife of Geo. Ashmead, L.R.C.P.Ed., L.R.C.S.Ed., and youngest daughter of the late Captain Henry Walker, of Castle Stuart, Inverness-shire. Deeply regretted.

PEARCE.—On the 1st inst., at Eastbourne, George Pearce, M.D., of Leicester, aged 47.

SEATON.—On the 30th ult., at Hallifford House, Sunbury-on-Thames, Joseph Seaton, M.D., F.R.C.P., F.R.G.S.

SHIRREFF.—On the 28th ult., at Sowdon Lodge, Lympston, South Devon, James Hales Shirreff, M.D., aged 73.

WATSON.—On the 28th ult., John Ferra Watson, J.P., M.R.C.S., of Heigham Hall, Norwich, aged 69.

N.B.—*A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.*

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, October 7th, 1886.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Oct. 1	29·72	W.	59	57	107	77	56	...	Hazy
,, 2	29·90	W.	57	53	105	69	51	·03	Fine
,, 3	30·07	E.	58	55	95	68	51	...	Hazy
,, 4	29·98	E.	63	61	108	79	57	...	Hazy
,, 5	29·83	E.	63	61	99	77	60	...	Hazy
,, 6	29·79	W.	58	57	78	64	57	·03	Raining
,, 7	29·83	E.	59	57	73	64	56	·23	Overcast

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

We cannot undertake to return MSS. not used.

THE ELECTION OF DIRECT REPRESENTATIVES.

AT the moment of going to press we have received advertisements with reference to the approaching election of Direct Representatives from the President of the Medical Council, who, for this purpose, is the returning officer. All nomination papers must be forwarded on or before Nov. 9th to the Registrars of the Branch Council of England, Scotland, and Ireland respectively.

G.—We do not prescribe.

TONSILLITIS AND ITS RELATION TO SCARLATINA AND DIPHTHERIA.

To the Editor of THE LANCET.

SIR,—I am glad to find from Dr. Hingston Fox's letter that we are not so much at variance as at first sight appeared. That all cases of tonsillitis are not due to infection may, I think, be argued from the facts that some people are subject to constantly recurring attacks, and the severity of each is in no degree less severe than the preceding one. Then, too, there are some cases of tonsillitis accompanied with ulceration of the surface which, if treated with iron and quinine, go on from bad to worse, and yet rapidly improve under the effervescing citrate of potash. Now, were the ulceration due to septic poisoning, the very reverse of this would occur; and I therefore consider that the ulceration in these cases is dependent upon extreme distension of the surface of the gland tissue. Again, I may state that I and my family, though resident in different places, were at one time frequent sufferers from quinsy; and even now, were I to undergo excessive fatigue for a week or two and take my meals irregularly, I could easily bring on an attack. Never have I seen albuminuria or paralysis follow an uncomplicated case of quinsy, though one of the latter, it appears, was reported the other day by Dr. Prévost in the *Archives Médicales Belges*; and I have never known two cases to occur in the same house within three or four, and I think I may say with perfect correctness six, months of each other. In fact, I have never had a single case which could be said to arise from infection or contagion.

I am, Sir, your obedient servant,

Surbiton, Sept. 30th, 1886. F. P. ATKINSON.

P.S.—It appears to me that Dr. C. Haig-Brown has somewhat mixed up simple inflammation of the tonsils with the follicular type of the disease; though, in my opinion, they are entirely different as regards their origin. The former is generally accompanied with enlargement and tenderness of the submaxillary gland or glands, the latter with enlargement and tenderness of the lymphatics.

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A MONSTROSITY.

THE thirty-ninth number of the *Gazette Hebdomadaire des Sciences Médicales* contains two figures and descriptive text of a so-called cyclocephalic monster. The chief feature in the monster is the want of development of the nasal region, attended with the approachment of the two orbits, so that they have become partially fused. A further degree of this deformity leads to the complete fusion or want of differentiation between the two orbital regions, and there is then but one organ of vision. In the specimen in question there was a rudimentary nasal appendage which formed a kind of flap that partially concealed the abnormal orbital region.

A Twenty-five Years' Subscriber.—1. We consider our correspondent was not properly treated by the coroner if that gentleman made the remarks attributed to him with the knowledge that our correspondent had been ordered to discontinue his attendance upon the deceased.—2. The remarks no doubt have a tendency to damage our correspondent's practice; but they are, of course, not actionable. Moreover, our correspondent's reputation is quite good enough to warrant him in treating the matter as beneath further notice.—3. We would not advise petitioning the Secretary of State.

Berkshire.—Probably next week.

"A CASE OF GUINEA-WORM."

To the Editor of THE LANCET.

SIR,—Your correspondent, "Reader," who seeks advice as to the treatment of a case of guinea-worm in your last issue, should take a piece of sticking-plaster about an inch and a half wide, and roll it tightly up to about the calibre of a No. 6 catheter, allowing the free edge of the plaster after cutting to the proper size to remain unrolled for the width of about half an inch. The protruding end of the worm (head end) having been first wiped dry by a dab from a sponge or carbolised cotton over it, and the sore whence it issues, and the little roll of plaster above referred to having been placed transversely beneath the worm and over the healthy skin beyond the point of exit, is placed across in regard to the long axis of the little spindle, and between the free surface of the rolled up piece of plaster, which are then closed over it and all firmly secured together. The little spindle is then taken hold of tightly at both ends by the thumb and forefinger of both hands, and most gently turned round underhanded, strictly on its own axis, so as not to drag, till a coil of the worm is wound around it, and is then secured *in situ* by means of a few narrow pieces of strapping. No attempt must be made to extract the worm at one sitting, or failure is sure to follow, and a gentle continuous traction and tension on the worm is only admissible, on which entirely will depend the successful issue. Should any spasmodic or undue strain be put on the worm it may break, as it is often rather friable, giving exit to acrid exudations and infiltration into neighbouring tissues, followed by severe local inflammation and irritation. As the worm often attains the length of some feet, and always several inches, I need not say that it will take some days, or weeks, to effectually get rid of it. The spindle need not be changed throughout the whole process; but it, and the little sore, must be kept well cleansed at each daily sitting with a weak solution of carbolic acid. It is quite obvious that the plaster spindle is much more pliable than ivory or any other solid material, and adapts itself to any irregularities of surface from which the worm often issues, and can be kept firmly *in situ*, without unrolling, by a little strapping, and without causing any undue strain on the worm. The watchwords must be *gentleness*, *patience*, and *time*. The patient, of course, must be kept quiet during the treatment.

I am, Sir, yours faithfully,

Truro, Oct. 5th, 1886. D. W. WILLIAMS, M.D.

W. E. (Belfast).—Perhaps the fullest and best treatise on cremation is that recently published by Professor Carlo Cucca of Naples. Of the various kinds of "ustrina," or "crematoria" (as they are less accurately called), he compares those of Polli, of Gorini, and of Siemens, and pronounces in favour of the last-named as not only the best, but the cheapest. He declares that cremation, instead of being optional (*facoltativo*) should be made obligatory in Italy.

Mr. Startin.—Yes, in an early number.

FEES FOR NECROPSY IN THE ISLE OF MAN.

To the Editor of THE LANCET.

SIR,—I notice in your issue of Saturday, Sept. 25th, a paragraph to this effect: "The Governor of the Isle of Man, it is reported, has reduced the fee of £1 1*s.* for a post-mortem examination by order of the coroner to sixteen shillings." I am in a position to state that the report is incorrect. His Excellency has not reduced the fees, but rather increased them. Formerly the payment made for medical evidence before the coroner was 10*s.* 6*d.*, and the fee to which the medical man was entitled for a post-mortem examination and for the evidence arising therefrom, if such evidence were given, was £1 11*s.* 6*d.*; or in all, £2 2*s.* Now the payment is to be, for evidence before the coroner, 15*s.* 6*d.*, and for a post-mortem examination and evidence arising therefrom, £1 11*s.* 6*d.*; in all, £2 7*s.* I think it but right that these facts should be made public. I am, Sir, yours faithfully,

Douglas, Isle of Man, Oct. 4th, 1886. J. A. DEARDEN.

A DEFENCE OF TEA.

AN article which appeared in our columns some weeks ago condemning the excessive use of tea as injurious has come under the observation of the Chinese at Shanghai; and a recent copy of the *Shên Pao*, a local native paper, contains a leading article which is evidently founded upon a misconception of the tenour of our remarks. The writer states that for several hundred years no one has heard that the habit of tea drinking is an injurious one. Why should it suddenly become so to-day? Moreover, tea has been drunk in China for thousands of years without any apparent ill-effects. Our contemporary then proceeds gravely to discuss the various sources from which this imagined danger may arise. The water cannot, it argues, be injurious, for it has been boiled; and as adulteration of the leaves has practically ceased, how can the pure article be injurious when the adulterated article which was exported and consumed for years had no evil effects? Another reason for the appearance of the article condemning tea has been suggested to the contributor to our contemporary; and although in his opinion it is not deserving of immediate and implicit belief, yet, looking at all sides of the question, he would not venture positively to state that it is devoid of truth. "It is said that a foreign doctor discovered a spring of water possessing valuable medicinal properties, and that after mixing some kind of preparation with it he put it up in bottles, like the lemonade and soda-water used by foreigners here; that as the demand was not very brisk, he originated this story about the injurious properties of tea, with a view of increasing the sale of his preparation." Despite, however, such a low estimate of the honour of foreign medical men, the writer concludes with the expression of high admiration for their professional skill, which he contrasts with that possessed by the native faculty much to the latter's disadvantage.

M.B. will have to obtain leave to practise in Spain. This may be granted to an English graduate without examination, but cannot be claimed as a right. We are making further inquiries, and will endeavour to answer our correspondent's query more fully in a subsequent issue.

Mr. Greenwood (Stronafyne).—There are several institutions of the kind, for a list of which we must refer our correspondent to the Charities Register, published by Longmans.

A NEW METHOD OF ARTIFICIAL RESPIRATION IN CHILDREN.

To the Editor of THE LANCET.

SIR,—For several years I have adopted a very simple method of performing the artificial respiration that is sometimes required in new-born infants, and as it is devoid of the display usually attending the present plan, which is sometimes so exciting to nervously constituted mothers, perhaps it will commend itself to many of your readers.

The child is laid in the supine position; the palm of each hand of the operator is placed on each side of the chest, with the nipples underneath the hands and the fingers overlapping the ribs and partly covering the abdomen. For inspiration the fingers are bent so as to catch under the free edge of the ribs, in order to raise the chest wall outwards and upwards, whilst for expiration the fingers are extended and pressed together with the palms of the hands on the chest and abdomen. Trusting this explanation is sufficiently lucid,

Believe me, Sir, yours faithfully,

Bournemouth, Oct. 1st, 1886. F. W. CORY.

Medicus (Sunnyland) will be obliged to pass the examination for the State diploma in order to practise in Switzerland. His best plan will be to write to the Dean of the Faculty of Medicine at Geneva.

Volo.—Our correspondent has a legal claim. Such claims have been allowed. Whether in any given case they will be recognised, or it is worth while to spend money and worry over them, is a matter for grave consideration.

A Beginner.—Roscoe and Grainger Stewart.

SOMETHING WRONG AT THE "COLINDERIES."

To the Editor of THE LANCET.

SIR,—I have just been made aware of a disgraceful state of things at the Exhibition at South Kensington. One of the *employées* informs me that since it was opened they have had to pay for the use of the waiting-rooms. Do you not think this is a very cruel arrangement? The poor girls are at their duties twelve hours each day. Some come from a distance, so that fourteen hours per day is about the average they are absent from home. They are charged a halfpenny each time they visit the room. To be healthy and comfortable 3*d.* per day is needed—1*s.* 6*d.* deducted from 12*s.* per week! Naturally, economy is practised. Consequently much misery is endured, and no doubt in many cases the foundation laid for painful diseases.—I am, Sir, obediently yours,

Sept. 30th, 1886. E. M.

SEVERAL articles and communications have been crowded out of our present number; amongst them being an editorial on the introductory lectures delivered at the opening of the several medical schools, annotations on various subjects, letters from numerous correspondents, &c.

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COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Kidd, Dublin; Prof. Humphry, Cambridge; Mr. Weddell, Newcastle-on-Tyne; Dr. Williams, Truro; Dott. L. Vallardi, Naples; Dr. O. Sturges, London; Dr. H. R. Ker, Halesowen; Mr. R. Leigh, Liverpool; Dr. Porter, Sheffield; Sir Jas. Sawyer, Birmingham; Mr. Percy Dunn, London; Dr. Wadham, London; Mr. J. Black, London; Dr. A. Wilson, Edinburgh; Mr. M. G. Biggs, London; Mr. J. N. Tratman, Shanghai; Mr. H. Whates, London; Mr. A. G. P. Gipps; Mr. J. P. Hentsch, London; Mr. J. H. Pugh, London; Mr. A. D. Pithie, Greenock; Mr. Freeman, Pangbourne; Mr. A. J. H. Montague, London; Dr. Taaffe, Brighton; Mr. Kerr, Preston; Dr. Theodore Maxwell, Woolwich; Mr. Batterham, St. Leonards; Professor John Clay, Birmingham; Mr. Stretton, Kidderminster; Dr. J. F. Payne, London; Dr. Thurstan, Southborough; Mr. Fisher, Dundee; Mr. F. Treves, London; Mr. J. A. Dearden, Douglas; Messrs. Burroughs and Wellcome, London; Mr. F. P. Atkinson, Surbiton; Messrs. Brown and Son, Newcastle-on-Tyne; Mr. H. B. Hewetson, Leeds; Mr. F. W. Cory, Bournemouth; Mr. Hourigan, Freshford; Messrs. Wright and Co., Bristol; Dr. Lewers, London; Mr. Spurgin, Maryport; Mr. John King, Birmingham; Mr. Jas. Startin, London; Mr. A. E. Barker, London; Mr. T. Christy, London; Mr. Graham, Bristol; Mr. W. A. Dingle, London; Mr. Kenny, Buckhurst Hill; Mr. Phillips, Weston-super-Mare; Dr. Whitehead, Carlisle; Mr. Somerville, Edinburgh; Dr. Davies, Bridgend; Dr. Ward, Oxford; Mr. Manton; Messrs. Pratt and Co.; Mr. T. B. Browne, London; Mr. Wallace, Cardiff; Mr. Abbs, Dewsbury; Mr. Bingham, Grimsby; Dr. Whiteshap; Messrs. Lea and Co., Philadelphia; Dr. Braithwaite, Rickmar; Messrs. Kilner Bros., London; Mr. Garrard, Rotherham; Messrs. Boulton and Paul, Norwich; Mr. Groves, Dorchester; Mr. Rudkin; Messrs. Maw and Co., London; Dr. G. Harley, London; Messrs. Hopkinson and Co., Notts; Mr. Ewin, Leicester; Mr. Powell, Shifnal; Mr. Kershaw, London; Dr. Usher, Yeadon; Dr. King, Ilfracombe; Mr. Halliday, Bramley; Mr. Jones, St. Albans; Mr. Bigg, London; Mr. Rawlinson, Burnley; Miss Thomas, Liverpool; Mr. Elliot, Carlisle; Mr. Van Buren, London; Mr. George; Dr. Brailey, London; Dr. Radcliffe Crocker, London; A Beginner; W. L. M.; Tunbridgense, London; M.B.; Subscriber; Hopeful; Junius; Inquirer; B. M.; A Senior Student; A. R. C.; Vicar; M.D., Newcastle-on-Tyne; L. M. D.; One of Them; C. W., Brighton; M.D., London.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Heron, Glasgow; Dr. Williamson, Ventnor; Mr. Bowler, London; Mr. Gray, Bristol; Dr. Maclachlan, West Dulwich; Mr. Roberts; Messrs. Morgan and Scott; Mr. Chilcot, Ealing; Mr. Appleton, Beverley; Mr. Guest, Darlington; Miss Taylor, Clapham; Miss Jones, Derby; Mr. Green, Glamorgan; Mr. Hough, Derby; Dr. Morris, Spalding; Mr. Ellis, Bishop Auckland; Mr. Hoare, Bexhill-on-Sea; Dr. Aitken; Messrs. Lofts and Co., London; Dr. Wise, London; Mrs. Hitch; Messrs. Fraser and Sons, Arbroath; Mr. Ransdale, Patricroft; Mr. Hayward, Grantham; Mr. Bridge, Ambleside; Mr. Jessop, Great Grimsby; Mr. Barnasconi, Plymouth; Mr. Jones, Treherbert; Dr. Roberts, Sheffield; Mr. Mellin, Peckham; Dr. Braum; Mr. Draper, Huddersfield; Messrs. Krohne and Co., London; Mr. Roper, Peterboro'; Dr. Ashmead, Brierley Hill; Mr. Coldwell, Malvern; Accoucheur, London; Hakem; R. M.; Medicus, Wortley; M. L.; Dr. M.; X. Y. Z., Oldham; M.D., Notting Hill; Medicus, Wolverhampton; Socius; Surgeon, York; Medicus, Mottram; Bachelor; E. P.; Medicus, Wrexham; Seltzer, Tunbridge Wells; Doctor, Sale; Medicus, Blofield; X. L. T.; Nolans, Newcastle-on-Tyne; A. C., London; M.D., Manchester; Seaside; M.D., New Cross; Nator, Burnley; C. W., Brighton; Matron, Bedford; A. B. C.

Leeds Evening Express, Liverpool Courier, Lancaster Guardian, Liverpool Evening Express, West Cumberland Times, Georgetown Royal Gazette, Aris's Birmingham Gazette, Dundee Advertiser, &c., have been received.

Medical Diary for the ensuing Week.

Monday, October 11.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesdays, same hour.
CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2 P.M.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.
PARKES MUSEUM OF HYGIENE.—8 P.M. Mr. Gordon Smith: Sanitary Appliances.

Tuesday, October 12.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.
CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

Wednesday, October 13.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesdays and Thursdays, 1.30 P.M.
ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department, Tuesdays and Fridays, 9.30 A.M.
ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.
LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.
GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.
KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; and on Friday, 2 P.M.: and Saturday, 1 P.M.
ROYAL MICROSCOPICAL SOCIETY.—8 P.M. Mr. T. B. Rosseter: Trichodina as an Endoparasite; Desiccation of Rotifers; The Abbe-Zeiss New Objectives and Eyepieces.
HUNTERIAN SOCIETY.—8 P.M. Mr. Hutchinson: On the Value and Measuring of certain Symptoms.
PARKES MUSEUM OF HYGIENE.—8 P.M. Prof. F. De Chaumont: Ventilation, Measurement of Cubic Space, &c.
BRITISH GYNÆCOLOGICAL SOCIETY.—8.30 P.M. Dr. Meadows: Cæsarean Section.—Mr. Lawson Tait: Extra-peritoneal Cysts. Specimens will be shown by Dr. Edis, Dr. Fancourt Barnes, and others.

Thursday, October 14.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

Friday, October 15.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
SOCIETY OF MEDICAL OFFICERS OF HEALTH.—7.30 P.M. Dr. Alfred Hill (President): A Consideration of the Various Modes of House-refuse and Sewage Disposal.
PARKES MUSEUM OF HYGIENE.—8 P.M. Mr. Percy Boulnois: Scavenging and Disposal of Refuse.

Saturday, October 15.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.

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NOTICE.—Advertisers are requested to observe that it is contrary to the Postal Regulations to receive at Post-offices letters addressed to initials only.

An original and novel feature of "THE LANCET General Advertiser" is a special Index to Advertisements on page 2, which not only affords a ready means of finding any notice, but is in itself an *additional* advertisement.

Advertisements (to ensure insertion the same week) should be delivered at the Office not later than Wednesday, accompanied by a remittance.

Answers are now received at this Office, by special arrangement, to Advertisements appearing in THE LANCET.

Terms for Serial Insertions may be obtained of the Publisher, to whom all letters relating to Advertisements or Subscriptions should be addressed.

Advertisements are now received at all Messrs. W. H. Smith and Son's Railway Bookstalls throughout the United Kingdom and all other Advertising Agents.

Agent for the Advertising Department in France—J. ASTIER, 66, Rue Caumartin Paris.

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Introductory Address
ON
MYSTICISM, SCEPTICISM, AND MATERIALISM IN MEDICINE.

Delivered at St. Mary's Hospital, Oct. 1st, 1886,

BY MALCOLM MORRIS, F.R.C.S. ED.,
SURGEON TO THE SKIN DEPARTMENT.

GENTLEMEN,—The frequent and regular recurrence of events tends to produce indifference as to their nature and origin. As with the words of a language, so with the customs of a country—the original meaning is often lost in obscurity. Inaugural lectures form no exception to this result of time. So accustomed have we become to them, so gradual has been their development, so strong is their family likeness, that they are in some danger of becoming meaningless ceremonies. The introductory lecture is bequeathed to us by a bygone age. It comes to us as a curious academical heirloom, venerable with associations. In spite of a troubled past, it has retained much of its early peculiarity amid more than one revolution in the educational world. Little wonder that the initial purpose of this traditional form should have become obscure, and its original outline a little blurred.

It may, then, not be out of place to ask the purport of this now familiar ceremony? Its simple aim is to introduce the beginner to the study of medicine. In this sense it is clear such a lecture would be impossible at the present time. Its ambition would be beyond the scope of human capacity. One hour's discourse would hardly serve for the introduction of the student to a science that is one of the most complex and diffuse in the realm of learning. The ideal initiatory lecture was only possible at a time when that science was one of vague and narrow scope. In proportion as it has grown, the formulæ which once sufficed to introduce it have become dwarfed and inefficient. They have assumed the form of vehicles for advice, or have served to embody a few of the prevailing opinions of the time, or have been used to chronicle progress and to record experience, or to vaunt the all-importance of a particular school. Considered as the first of a series of technical dissertations they have ceased to exist. I feel, then, that I need not apologise for not attempting an impossible task; while, on the other hand, I must ask your indulgence for an effort that must needs be halting and imperfect. In the place of endeavouring to introduce the uninitiated to the entire science of medicine, I would venture to draw your attention this afternoon to certain historic phases of the modern art of healing that appear to me to demand consideration. A review of the aspects of medicine will serve, I hope, as an introduction rather to its environment than to its details. Instead of attempting a geological survey, so to speak, of the scientific planet itself, I will confine myself to an examination of the atmosphere in which it revolves. The first point to which I would direct your attention concerns the element of

MYSTICISM IN MEDICINE.

Could Lord Macaulay's New Zealander enter this assembly, he would be puzzled to recognise our business as that of the initiation of men into a knowledge of the processes of life and death. Medicine and mystery are with him interchangeable terms, and he would miss the incantation, the weird dance, and all the saturnalia that are for him the natural concomitants of the healing art. Noise, panic, and mystery are the three accessories of aboriginal medicine. The "medicine man" is a protoplasmic element in evolution—a primitive admixture of the charlatan, the fanatic, and the mountebank. He is, nevertheless, the germ from which, as a profession, we must acknowledge descent—our prototype in an age when science was but a slender figure arrayed in the too exuberant drapery of mysticism. Onward a century or so, we encounter this same germ developing into the physician of the middle ages—a gloomy compound of ignorance and superstition. He is still deeply mysterious, but there is in his art less of falsehood, more of truth, albeit he dabbles in spells and occult influences. He seeks to impress the common mind by means of mystic crucibles, and works hand-in-hand with the astrologer and the magician. But he is withal less of the quack, and more of the student of science. There is an earnestness in his unwearied search for the elixir of life, and some reality in his pursuit of the philosopher's stone. His room, exhaling the vapours of an unknown world, must have been a very den of terror. Yet to-day his grandest phenomena are eclipsed by the most unpretending conjuror. Still, this element of mystery was not wholly unproductive of good. It saved the life of science when threatened by a bitter fanaticism. Its spark was fanned by the love of greed when it had ceased to be maintained by the love of knowledge. At the risk of liberty and life the scientist toiled on in anxious seclusion, fearful himself and yet inspiring fear by reason of the exalted nature of the pretended objects of his researches. His was a position of great power, though the true spirit of scientific medicine was in the feebleness of infancy. Nearer to our own time is the period when with an increase of knowledge there came a decrease of mysticism. The supernatural was not quite abandoned, but a more tangible foundation for true learning was arising from the study of human anatomy. At this period was propounded the mystery of the humours of the body, the lymphatic, splenetic, and the like. The condition of the patient was said to be dependent on an admixture of these or the predominance of one of them, and it was the physician's work to endeavour to remove or to modify these humours. The belief in drugs was at its zenith; the examples of the old formulæ then employed that still survive are permanent evidences of human credulity.

Two questions naturally arise out of these considerations: First, How was the mystic element evolved? and, secondly, Has it entirely disappeared from the enlightened medicine of our own time? I think it will be found that the element of mysticism in medicine has been forced upon it by the public. It is the result of two opposing conditions—the absolute knowledge demanded by the laity on the one hand, and the more or less extensive ignorance of the professor of the healing art on the other. This ignorance, where it exists, he must not acknowledge. He is expected to be able to recognise disease and to know how to treat it. Yet no other professor is so "cribbed, cabined, and confined." The astronomer may admit want of knowledge. The chemist and the physicist may say, "*This* I know, *that* I do not know"; and the lawyer may, without loss of reputation, confess himself an agnostic in matters legal. But such an admission would be fatal from the lips of a medical man. With him nothing must be admitted that would disturb that most potent factor in therapeutics—absolute and implicit faith. Medicine, despite the strides it has made in modern times, is still extremely defective. This scanty lore must be supplemented by fiction. The public insists upon absolute knowledge. This cannot be obtained; it must therefore be invented. Had the public in the middle ages been content with the little learning the period afforded, the student would have been saved many volumes of nonsense, and the sick man a flood of obnoxious medicine. But they were insatiate, and would not be satisfied with a little. The phenomena of disease became associated with star influence, spirit agency and other dim powers. That in some directions this mysticism did much harm to science cannot be doubted, but happily its influence was not wholly paralysing. It gave at least a spurious dignity to the pursuit of knowledge at a time when the sum of human knowledge was by no means great. It offered attractions to aspiring men, whose imagination it stimulated; while it stifled in many ways the true spirit of scientific inquiry, it became a tempting lure to many in whose brains that spirit was quickening. It saved learning at a time when it was fast sinking into contempt, and it floated the little ark of science over a troubled and tempestuous sea.

And there is mysticism in the medicine of to-day. Athwart our paths may still be traced the track of the astrologer. There remains in the people a belief in the efficacy of drugs as drugs—a belief that as for every bane there must be an antidote, so for every disease there must be a curative leaf or root. Nature is distrusted; disease is still represented as some evil influence to be exorcised. In the popular mind disease walks the earth as a devouring fiend, and has a personality about it as of old. Our very phrases, "Stricken with disease," "Visitations," and "Seizures," are survivals of the conceptions of primitive times. There is still to-day a demand for

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perfect knowledge from all professors of the healing art, and, as of old, the gaps in medical science—which is far from having reached the category of the exact—have to be filled with fiction, though less, it is true, in amount, and less unwholesome also in character. The mysticism survives in the courtly phrase and the ambiguous language of the practitioner of modern times. When sorely pressed by the sick man, the physician's only armoury is equivocation, from which he draws such verbal weapons as "the state of the constitution," "the tone of the body," "the general health," "lowered vitality," and *id genus omne*—a vicious circle of ambiguous platitudes, diluted to vagueness by the admixture of scientific terms. Are not these in some sort a survival of the circle of the horoscope? This antagonism between the public and professional mind is deplorable. It cripples investigation; it places the medical man in a false position, in which his dealings become artificial and his utterances evasive. At no far distant day, however, there is hope that medicine will have shed for ever the last vestige of mysticism, and what will rid it of such unworthy disguise will be the influence of a more carefully educated public. A great step in this direction is already being accomplished by the introduction of the elements of physiology and the laws of health as essential features in scholastic training. This knowledge is precisely what is wanted to qualify an individual to form a true estimate of the relations that should exist between the medical man and the patient. With a mind cleared of the crude absurdities in which his forefathers blindly confided, he will be of all men best able to appreciate the difficulties of the doctor and to be tolerant of his deficiencies. He will understand how to be satisfied with the known, without vainly clamouring for the unknowable.

SCEPTICISM IN MEDICINE.

Let me now invite your attention to what I may term the element of scepticism in medicine, an influence which will probably have no small share in moulding the medical man of the future. Intellectual development has been the most prominent feature of the present age. Both in extent and variety the attainments of science and of art have been prodigious. Examples are not far to seek. Down to the commencement of the present century the advance made in so simple a branch of practical mechanics as locomotion was altogether trifling. The revolution effected by the introduction of steam as a motive power was a revolution indeed! The adaptation of steam to this end gave an impetus to inventive genius that enabled it at one bound to outstrip the puny efforts of past ages of the world. The scientific step from the primitive chariot of ancient times to the stage-coach was wholly insignificant by the side of the great advance which will for ever be associated with the name of Stephenson. This result was not the work of centuries. The whole of the vast revolution was conceived and perfected in the lifetime of an individual man. In the art of lighting, the process of development was hardly less startling and sudden. All that the knowledge of ages had done in that direction was but a trifle in comparison to the introduction of gas. Here, too, the entire change has been effected within the limits of one generation; indeed, within the recollection of, I daresay, more than one here present to day. And what a host of other marvels does this period include. Picture the world before the introduction of the telegraph. We can hardly realise the fact that there has been a period within the memory of living man when yet it was not. Its coming united humanity into one family. It was the one touch of science that made the whole world kin. Electric force is to-day one of the main bonds of our civilisation. It is difficult to imagine that these advances in science have been made since this century opened. In every direction we see indications of the same marvellous activity of thought. We see the various departments of science combining for mutual benefit, working harmoniously, and producing unexpected results. And even more stupendous have been the movements in the philosophical world. It is not too much to assert that the Darwinian theory invested our very existence with a new meaning. It was a revelation that startled the whole civilised world. It shed a light on the science of life that necessitated the re-writing of its history, destroying at a blow many previous systems of thought. Something of a like revolution took place in mental philosophy, in the study of the human intellect, and the analysis of the human emotions, on the introduction of the anatomical element. Before this our conception of mental movement was shadowy and unsubstantial. Anatomy lifted many obscure questions into the light of day. It has already given us the key to many mysteries of the mind, laid bare many secrets of the senses, and has provided a basis for the solution of matters that are still impenetrable.

Our age is one of tumultuous mental activity. Old forms of belief are on all sides being assailed; primeval faiths are crumbling to decay. The philosophy of the past is either dead or dying. Old things are passing away; a host of ancient prejudices are tottering to their fall; and such is the rapidity with which we are moving, that scarcely have they been levelled with the dust when new creeds spring vigorously from their ruins. Such are the times in which we live, and they are times in the highest degree favourable to scepticism. It is rampant among us at this moment. Speculation is rife, and it is a blemish which medicine has not escaped. Scepticism has infected medicine fully as much as it has religion. Where to-day is the implicit belief in drugs which was a dogma of the healing art in past times? Like many another faith venerable and unquestioned by our forefathers, it is losing or has lost its hold upon men's minds. The extreme sceptic boldly avows his entire disbelief in the potency of any drug whatever; others less dogmatic content themselves with acknowledging the value of a drug or two. The position is attained where scepticism, wrapped in its own self-confidence, once and for all repudiates all aids and accessories; briefly, it states its deliberate opinion that disease is infinitely better left to itself. The natural physiological energy of the body is the prime element in the healing process. This is neither more nor less than modern fatalism—waiting on events. Such a doctrine, if successful, would be fatal to medicine. Without doubt the element of interference has been far too prominent in the past. But there are absolutely no just grounds for rushing to the opposite extreme and forswearing the use of remedies merely because they have once been administered in gross excess. The remedy is as bad as the disease.

There is no use in blinking the fact: young men are and always will be naturally attracted by scepticism. There is about it a sensational fascination congenial to the developing and active mind. It is a bias, however, most vigorously to be withstood. Scepticism as such is too often adopted as the alternative to careful reasoning and the patient examination of facts. In training the intellect, the student will find it advantageous to cultivate that form of it which is the chief characteristic of the judicial mind. A judge's duty is twofold. It is not sufficient that he shall be able to arrive at a just decision upon the facts *presented* for his consideration; he has, in the first instance, also to decide what facts are admissible as evidence. On these and on these alone must his final judgment be based. The rules of evidence are known to every advocate, but, having the whole case to handle, he cannot devote so much attention to the question of the acceptance or rejection of this or that evidence as can the judge who is less hampered with details. Like the judge, we have not only to sift that which is given us, but to watch and to seek out whence it comes, and to look to it lest any who may have pet theories to support may find us so-called facts to fit them. Special pleaders are by no means monopolised by the bar.

Changes of belief irresistibly forced upon a man by the accumulation of facts and the weight of well-stored experience are worthy of all respect and consideration. But many forms of scepticism in modern medicine are rather to be deemed emotional and infective, and as such are apt to take possession of the learner, who will be tempted to accept his creed upon judgments other than his own. Whatever we profess, whatever we deny, let us see to it that we are able to give "a reason for the faith that is in us," and that reason is at least our very own.

So much for the elements of mysticism and scepticism. Let me now ask your patience a few moments while I refer to the third aspect of my subject.

MATERIALISM IN MEDICINE.

Materialism must be viewed as a useful and indispensable feature in the study of medicine. It was the absence of this element as a firm basis and starting-point that was mainly productive of the mischievous results we have considered under the head of mysticism. We have seen how medical science suffered at the hands of the alchemist and astrologer: can we be quite sure that it is in no like danger from the well-intentioned but too restricted efforts of the materialist? The mind requires a field neither too large nor too small. Formerly, the tiny light of science wasted all its

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rays in the vain attempt to illumine regions far beyond its ken. The result was mysticism. To-day materialism threatens to err almost as much in the opposite direction by throwing all the little light it can command upon a pin's point. The man of science in the middle ages lifted his rushlight to the skies, and, soaring, lost its glimmering aid. In our own time he stoops so low as practically to hide its light beneath a bushel. While we are minutely inspecting matter as matter, we are narrowing our vision, and shutting out the broad issues which must be read with it, if we would rightly comprehend those enigmas of life to which matter affords the only key. While we minutely analyse the details, our eyes are out of focus for the broad truths the sum of them should teach us. Medicine should attempt not only to acquire facts, to accurately record phenomena, to compare kindred appearances: but it must go a step further and strive to grasp their wider significance, their general bearing. Many questions have been practically shelved, because men have become absorbed in the process of grubbing over a few minute details. The mind has been led away from a right conception of the whole by a too minute consideration of the part. In saying this, I would not be understood to disparage the practice of fact accumulation. It is of incalculable value as a means to an end. All honour to those whose lives have been devoted to a work so arduous, so unattractive. But in modern medicine we are apt to make too much of a fact *per se*. Let us have a care that in moulding the medicine of the future the constructive power claims its due and proper share of our consideration. At present the process is one rather of disintegration. Disease is being studied almost exclusively in regard to its minutest issues. We happen at this moment to be greatly concerned in the microscopic investigation of disease, having traced its source, as is confidently asserted, to bacteria. The inquiry, which is undoubtedly a most valuable one, is absorbing the genius of the time. Time was when that fatal scourge, consumption, was attributed to certain humours in the blood. Further investigation led to the conclusion that it owed its origin to a small particle—the tubercle. And now, in our own time, scientific inquirers have pushed their inquiries to such an extent that the most minute living particle known is reputed to be the parent of this fell disease. There is something uncanny in the contemplation of this minute organism. It may be almost taken to represent the limit of philosophical inquiry. But wonderful as the discovery is, do we know any more concerning the disease itself? Do we save more lives than did our forefathers? This is the crucial question which should be the touchstone whereby to measure our success. In the examination of disease, it must not be supposed that all truth lies at the bottom of the microscope, any more than at the bottom of the proverbial well. While men were worshipping facts as facts, Darwin was busy constructing his great theory. Facts were the basis upon which he built his grand superstructure; but no amount of unreflective pursuit of mere detail, however persistent, would have given the world the Darwinian theory. I say, then, and I would urge it strongly, that pure materialism in medicine may be carried to an injurious extreme. In modern pathology, for example, as originated by the German school and taught by its apostles, while men are actively contesting as to the nature or formation of a certain cell—whether it be spindle-shaped, round, or ovoid; whether it be derived from this tissue or from that—they are likely to lose sight of the real bearings of the case. By all means respect facts, and you cannot better show respect for them than by using them. A medical inquirer is not a mere collector. Collect your facts, and then reason from the data you have established. A collection teaches nothing till it has been arranged. The tendency at present is, in the majority of instances, to collect everything and to arrange, and therefore to adduce nothing.

One last word—and I speak now as a student to students. I have done my best, in an imperfect way, to point out what I conceive to be some of the dangers that surround the study of medicine. I would warn you to avoid the mystic on the one hand, and the sceptic and materialist on the other. But while I have been suggesting what not to do, you must understand that progress cannot result from negations. There is one condition upon which your success will in the main depend. Without this your efforts must be abortive. I refer to the oft-quoted but little-heeded precept—"Work for work's sake." The days of *walking* the hospital are over; it is now *working in* the hospital. You have a hospital and school wherein to work of which you may justly be proud. And you have in our Dean an example of energy and perseverance which you may well imitate. It is to Mr. Field that we are chiefly indebted for our present position among the metropolitan schools. You are entering a serious and earnest profession. Medicine is a goddess that brooks no divided worship. She will have all your faculties or none. She demands an actual sacrifice—a complete devotion to duty without adequate reward. This is the true diploma of medicine, and without it we cannot consider ourselves to be qualified. Medicine is noble just so far as it is unselfish. Clearly understand that you are entering upon a career in which work is inadequately paid, honours are few, and the struggle for existence keen and constant. But, in spite of this, there is something in the contact with disease that stimulates even the most prosaic, and that something is best told in words uttered forty years ago on a similar occasion to the present by Sir James (then Mr.) Paget. "There is not," said he, "in this world a nobler spectacle than that of a rational being devoting himself with patient, earnest perseverance to the cultivation of his powers, that they may be employed in the discharge of duty. Knowing that a force within him is capable of unlimited expansion, and confessing in his inmost consciousness that its development and its exercise are duties of strongest obligation, he pauses not to ask whether outward reward will crown his work or not; much less, with scrupulous calculation, does he count the cost and gain. But, because he knows that the powers and opportunities he has received were given him for use, he resolves that not one of them shall run waste or wild: for him to be indolent were to be unthankful. And so, in toil, yet not in weariness, he pursues his way; sowing seed, of which he reckons not whether he shall reap the fruit; content, because he is in the path of duty; blest, if only he may see or think that he ministers to the welfare of his fellow-men." It is to this toil that we bid you welcome to-day.

There is on all sides a constant cry for rest. Let not this cry be heard during your few years of study. Remember well the solemn words of Arnauld—"Rest? rest? Shall I not have all Eternity to rest in?" The life you must look forward to is one that can only stimulate the imagination of the strong man. A vast multitude of the practitioners of medicine die in harness. They die as they have lived. They never attain to that oasis of rest to which their long labours give them so earnest a claim. They are debarred the very peace they have been instrumental in bestowing upon others. And in many and many an instance they only find the long-sought-for rest when that time is reached of which Browning speaks—a time

> "When something like a white wave of the sea
> Breaks o'er the brain and buries us in sleep."

THE CONNEXION BETWEEN PULMONARY PHTHISIS AND OVARIAN DISEASE.

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IN one of the most recent works upon the subject, the author[1] writes: "Of the causes of ovarian tumours nothing positive is known." But various observers have each adopted a pet theory to account for the production of these new growths. For example, Dr. Safford Lee[2] firmly believed that parturition created a tendency thereto. All the facts and figures, however, on which he based his belief would apply much more forcibly to prove that pregnancy was the active agency at work. While, on the other hand, it is most difficult to see how the mere emptying of the gravid uterus—an intrinsically natural process—could excite the slowly developing degenerative changes which more recent pathology has taught us takes place in these cases. Then Scanzoni taught that chlorosis, with its consequent amenorrhœa, was the great cause. But it is evident that this alone cannot possibly be the case, or the factory hands of London and our manufacturing centres would swell the numbers up to tens of thousands. Whereas, Sir Spencer Wells, in his classical work,[3] writes: "Calculations, based

[1] Peaslee on Ovarian Tumours, p. 86. [2] Ibid., p. 88.
[3] On Ovarian and Uterine Tumours, 1882, p. 244.

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upon the Registrar-General's report, make it appear that the female population of England and Wales comprises an average of 11,000 cases of ovarian disease, with an estimated duration of life of four years each." And the above argument of the comparative infrequency of these growths would equally apply against another theory, that profuse menstruation and its consequent anæmia is the *fons et origo mali*. One more theorist condemns marriage, and yet another the state of single blessedness. But statistics show very little in support of either view. Of Sir Spencer Wells's 1000 cases, 569 were married and 431 were single—a fact which, considering the normal numbers in each condition, does not exhibit any marked preference on the part of the disease. Finally comes the question of pregnancy or sterility. Dr. Peaslee gives his whole and valuable support to the latter theory. Believing that the ovary needs rest as much as any other organ, he says that it is never at peace except during gestation and lactation, and that the ovaries, therefore, of a woman who has borne even one child have had probably eighteen months' rest out of thirty years' hard labour, while the organs of a childless case have never ceased from work. So he sums up the matter thus:[4] "It is the non-gratification of the instinct for procreation, and not the disappointment of mere sexual desire or of affection, which determines the result apparently in these cases." But the whole of his argument seems built upon the other theory: that the ovary, to keep healthy, must needs have rest from work. For my own part, I must confess that I fail to see that this necessity is proved. The lungs do not cease to fill and to empty, or the heart to contract and expand, till life itself is ended. We do not expect, or altogether desire, them to take a moment's rest. Why, then, should the ovary require eighteen months'? Bearing in mind the intimate, nervous, and vascular connexions between the ovary, the uterus, and the breast, it is at least easily to be understood why an increased hyperæmia and functional activity of either or both of the latter two organs should involve a comparative anæmia and inertia of the first-named. But even then we must always remember that it is by no means absolutely certain that during gestation and lactation the ovary necessarily obtains functional rest. Indeed, many well-known clinical and pathological facts would rather tend to prove that it does not do so. When, however, we look at the facts and figures of the theory—none of which, by the way, are furnished at first hand by Dr. Peaslee himself—we find the argument weaker still. "M. Boinnet states that out of 500 cases *collected by himself* (the italics are mine) he found that 390 had never borne children"[5]—that is to say, only about one woman in five in this unique series had been pregnant. Far be it for me to question the authenticity of these figures. I would only note that, as I have said, the series is unique. Then "M. Carlier has made the observation that cows which do not calve have ovarian cysts." The utter vagueness of this generalisation is rather bewildering. But it may be pointed out that, whatever may happen to cows, human females have been known to conceive and bring forth children while known to be suffering from cystic disease of one or both ovaries, and that most families have at least one member who has never conceived and yet has not been attacked by the disease in question. Now these apparently are all the facts, all the figures, all the arguments which have been brought forward to prove the theory that sterility is an exciting cause of ovarian cystoma, or, if I may so put it, that a passive negative state can excite an active positive degeneration. But, on the other hand, out of the 150 cases upon which this paper is based eighty had borne one or more children, seven had had one or more premature confinements, and only sixty-three of the whole number had never conceived at all. And, as I shall shortly show, these form a series of perfectly typical and unselected cases, so that in all probability they will represent the ordinary proportions of childbearing and childless cases of the disease. And, finally, if sterility by itself played any part in the production of ovarian cystoma, it is evident that the disease would be much more common than it already is in England, and, secondly, that it would be much more common still in other countries where the marriage-rate is lower and the birth-rate greatly less than in these islands. For example, the most recent statistics show that the population of Great Britain is doubling itself every sixty years, that of Germany and Austria together in every 110 years, and that of France in 140 years. But the rough figures which are obtainable on the subject from other countries would seem to show that ovarian disease is even less frequent abroad than at home. So that, however fallacious these figures may be, at least we may conclude that it is not a more usual affection among other European nations than our own. Consequently, I am led strongly to believe that sterility by itself has but little or no influence in the causation of cystic diseases of the ovary. It only remains, therefore, to consider the question of the influence of gestation; and, in the first place, I would recall attention to the normal physiological process which takes place in the Graafian follicle when impregnation of the lately-contained ovum has taken place. We know that, instead of the clot being absorbed and the follicle obliterated in a month, the process is so gradual that it is prolonged through the nine months of pregnancy, and even perhaps for a month or two afterwards. Is it not evident, therefore, how much greater is the possibility of the degeneration and liquefaction of the follicular contents during this greatly prolonged process of absorption than during the active obliteration of the sac begun and ended in one intermenstrual period? Pathologically, therefore, the probabilities are in favour of the theory that gestation may be an exciting cause of ovarian disease.

I deeply regret that Sir Spencer Wells does not afford us, in his work on the subject, the clear light which he throws upon any question which he has investigated. For I believe I am correct in saying that he has not given any authoritative decision upon the point of the causation of this disease. But out of the 150 cases which I have referred to, 87, as I said before, had been once or more pregnant, and only 27 of the remaining married cases had never been so at all. These figures, I frankly admit, are too limited to prove much; still, I think they tend to show that gestation may be a factor in the production of the disease. Then I would lay some stress upon the fact that so many patients date their illness from their last or some previous labour—a fact which so strongly impressed Dr. Churchill that he endeavoured to found upon it the theory that pregnancy was an exciting cause of the cystic growth. But it is only when labour has emptied the uterus that the patient notices the swelling of the abdomen, and the discomfort or pain produced by the tumour itself. And all who have had anything to do with these cases will recall how frequently a patient says that her first intimation of her complaint was that after a confinement her abdomen did not regain its natural contour, but remained more or less large and distended. In no fewer than eleven cases out of my series of 150 this fact had so impressed the patient that she succeeded, I find, in so impressing the clinical assistant that he made a special note of it. Of course I do not regard this question as settled by any means. We must have a great many more, and a great many more accurate, facts before the theory can be regarded as definitely proved. Still, I venture to believe that I have shown good and sufficient cause for drawing attention to its probability at least, and to the need for further investigation of the question. For if it be proved beyond cavil or doubt that gestation is an exciting cause of ovarian cystoma, the practical lesson as to prevention is plain, and important beyond measure.

There is yet another possible exciting cause which I have not seen specially noted, but which I am inclined to think is, perchance, more frequently the *fons et origo mali* than we at all suspect. I mean some accident giving rise to sudden hyperæmia of the ovary, and perhaps, through the consequent disturbance of its rhythm, to the commencement of the cystic degenerative change. Every clinical observer knows how often a fall or a strain is followed by ovarian pain or by hæmorrhage from the uterus, and how very often cases of ovarian prolapse or of chronic or subacute ovaritis are referred by the patient to some such accident when we investigate the history. And of the present series I find three well-marked cases in which the woman attributed her illness to a like cause. One, a married woman, aged forty-one, enjoyed good health till she was thrown from a cart. Great pain and swelling of the abdomen followed, and the latter slowly and steadily increased for five years when she came under treatment, and had a large ovarian cyst removed. Another, a single woman, aged twenty-four, fell downstairs and at once experienced great pain in the side, followed shortly afterwards by swelling, which gradually increased for eighteen months, when she was operated on for ovariotomy. I have heard of other cases where tumbling off a ladder or lifting a heavy weight was followed at once by abdominal pain and the formation gradually of an ovarian cyst, so that I must

[4] Op. cit., p. 86. [5] Op. cit., p. 89.

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strongly express my belief that falls or severe strains may form an exciting cause of the disease. And now, briefly to review our progress so far, I have shown grounds for belief that gestation and accident may be potent exciting causes of cystic disease of the ovary, and that other theories which have been advanced do not bear rigid investigation.

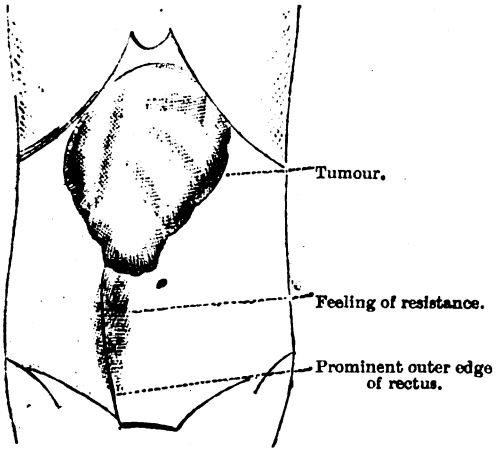
(To be concluded.)

SOME REMARKS ON THE OPERATIVE TREATMENT OF CHRONIC OBSTRUCTION OF THE SMALL INTESTINE.

BY R. L. KNAGGS, M.A., B.C. CANTAB., F.R.C.S. ENG.

(Concluded from page 668.)

CASE 1.—F. M——, aged fifteen, was one of a family of eight, six of whom died young. He himself had had scarlet fever, measles, whooping-cough, and croup; but on April 15th, 1885, was quite well. On that day he stayed in a swimming bath two hours. The same night he was seized with shivering, and the next day had severe pain in the abdomen, which was so tender that he cringed at the slightest touch. On April 23rd he was admitted into the Fever Hospital for typhoid (?). The main features of his illness were at that time as follows:—(1) The pyrexia—never high, the highest point being 102·6°—lasted three weeks from admission; (2) the abdomen was distended; (3) there were no spots; (4) the bowels were never moved, except by enemata, until solid food was given, when they were opened naturally; (5) the child remained so thin when convalescing as to give rise to a suspicion of tubercle, but of this there seemed to be no very definite evidence. The boy left the Fever Hospital on July 4th, and a fortnight later began to have attacks of abdominal pain about the umbilicus, which "bent him double." In another fortnight vomiting set in, and he



would sometimes vomit his food, and bring up at one time "all that he had taken" for several days. Then a tumour, accompanied with pain and nausea, appeared at intervals in the upper part of the abdomen. Formed motions were passed daily till a week before admission to the infirmary, when they became fluid. Three months previously a little blood had been found in his motions. He had had a solid diet, and had lost a stone in weight during the previous six months.

On Jan. 29th, 1886, the boy was admitted into the Huddersfield Infirmary under my father's care. He was very emaciated and had a hectic flush. There was a distinct fulness both to the touch and the eye in the umbilical, epigastric, and both hypochondriac regions. The iliac regions were hollowed out, the spines being very prominent. The abdomen was resonant all over. After short palpation a prominent tumour appeared in the upper part of the abdomen, and active peristalsis of the distended intestines was plainly seen. This was accompanied by considerable pain, nausea, and gurgling. The shape of the abdomen was quite altered by the tumour, which stood out to the extent of two or three inches and disappeared after lasting a minute; it occupied the position shown in the above diagram. Under chloroform a feeling of resistance that had been noticed running from the inferior limits of the tumour towards Poupart's ligament resolved itself into the sharp outer edge of the right rectus, beneath which was something that felt like a length or coil of intestine containing some doughy material. The rectum was quite empty, but considerable resistance was felt upwards and to the right. Specific gravity of urine 1020; no albumen. The following treatment was adopted:—A quarter of a grain of extract of belladonna, in form of pill, three times a day, belladonna ointment applied to the abdomen, and a diet of peptonised milk only.

Fluid motions continuing to pass, and the boy's condition remaining unaltered, it was decided, after consultation, to explore the abdomen. The diagnosis was chronic obstruction from matting of the small intestine, and the exploration was undertaken in the hope of removing the obstruction either by separation of adhesions or by enterectomy. On Feb. 17th Mr. Knaggs accordingly performed the following operation. A median incision, five inches long, was made, extending from an inch above the umbilicus. No layer with the usual characters of peritoneum was met with. A few adhesions between the parietes and the bowels were separated, and at the bottom of the wound were exposed loops of collapsed small intestine, closely agglutinated by adhesions, and containing a few scattered lumps of fæces. This collapsed intestine was thought to constitute part of the obstruction, and it was traced in one direction, its adhesion to the parietes and other portions of intestine being separated while doing so. Tracing some six or eight inches to the right showed the bowel to enter some structure at right angles—probably the cæcum—and so the tracing was reversed. After about another foot of intestine had been unravelled the finger was able to explore in the direction of the tumour, and felt what was probably distended intestine. Now, as the tracing went on, one or two knuckles of bowel were exposed, whose covering bore some resemblance to normal peritoneum, but still considerably altered by adhesions. It was evident that the portion of the bowel above the main obstruction was being approached, as these knuckles were full of fluid, though not greatly distended. But adhesions seemed universal, and the finger could not enter any definite cavity where the intestines were free from adhesions. A part of the bowel had now been reached which did not seem to have been much obstructed, and the intestine below it was beginning slowly to fill. The operator now began to divide the organised bands of lymph, which considerably contracted and distorted the collapsed coils. When this was done the coils were found to be decidedly fuller. The filling having taken place almost imperceptibly, and the operation having been very tedious and prolonged, it was deemed advisable, in the absence of any very clear indication, to bring it to a conclusion. The coils of intestine were returned into the abdominal cavity, a Keith's drainage-tube was placed in the recto-vesical pouch, and the incision closed. The dressings were so arranged that the tube could be emptied without interfering with the wound. The tube was nearly filled with boracic lotion and enclosed in other antiseptic dressings.

The patient was kept under the influence of morphia, given subcutaneously, and fed by nutrient suppositories and enemata. The temperature, which before the operation had run a normal course, was 102° on the night of the operation, but afterwards fell as low as 99°. The pulse varied from 120 to 140. The tube was dressed night and morning. At the first and every subsequent dressing a considerable quantity of purulent-looking discharge, having a decidedly fæcal odour, was taken away, the tube being on each occasion filled with boracic acid solution till it was perfectly clear. On Feb. 19th the material was a coagulated mass of lymph. On the 20th he had a copious motion, portions being formed; and during the night he was delirious and restless. On the 22nd, after another similar night, the bowels were again well opened, the motion being partly solid and partly fluid. The patient had become very exhausted, and died about 10.30 A.M., half an hour after the tube had been dressed.

The necropsy was made by Dr. L. P. Bevan, the abdomen only being examined. The incision was found to be imperfectly healed, and where unhealed it was unhealthy-looking. Fæcal matter filled the channel of the drainage-tube. On opening the wound the exposed coils were seen to be covered with greenish lymph, which was only superficial. The unravelled coils had formed fresh adhesions,

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but they were distended, as was also the large intestine. By taking a point two inches above the umbilicus, and drawing imaginary lines from it to the lower ends of the costal arch, a diamond-shaped space was formed. Below this space the peritoneal cavity was practically obliterated; in the space itself there were numerous adhesions and bands, many of them of great strength, but the intestines here still maintained some peritoneal lustre, and were somewhat freely movable; they were dilated and thickened. Scattered throughout the abdominal cavity were a number of light-coloured caseating masses, some of a semi-pultaceous appearance, others more solid, and shining through a layer of peritoneum or false membrane. Several were found in the mesentery, others apparently in the midst of adhesions. One was placed in the anterior wall of the bladder, and another close to the pylorus on the greater curvature of the stomach. One of these masses, in the right lumbar region, had partly broken down into pus. The intestines were soft, and more than once gave way as the adhesions were being separated. The mucous surface of the intestine showed a small circular ulcer, with raised thickened edges, at the upper part of the ileum; and in the large intestine, close to the cæcum, was a group of some five or six perforations, with rounded edges, of varying size, the largest being almost as big as a shilling; one or two had a well-marked fenestrated appearance. Externally there were the remains of adhesions. The rest of the large intestine was healthy, except for the lymph external to it.

CASE 2.—E. R——, aged forty-three, married, no children. She dated her illness from March 7th, 1885, when she was seized with pain in the abdomen, and the bowels, which had hitherto acted with great regularity, ceased to act well. For ten days she felt poorly, with anorexia and abdominal pain, but no tenderness, and the bowels continued to act in an insufficient and irregular manner. Then she began to vomit, and the state of the bowels got worse and worse, in spite of aperients. She vomited daily, sometimes three or four times, and would bring up at intervals as much as a couple of pints of greenish fluid, after which she was considerably relieved. When seen by my father on May 7th, he found her much emaciated and exhausted, and unable to retain anything on the stomach. A hard swelling was perceptible towards the left side of the abdomen, extending from near the umbilicus to the pelvis. There was also retroversion of the uterus, but this seemed to have no connexion with the malady. She was placed upon liquid peptonised food, and a quarter of a grain of extract of belladonna, in form of pill, was ordered to be taken three times a day, belladonna ointment being applied to the abdomen.

On May 11th, 1885, she was admitted into the Huddersfield Infirmary, and the same plan was continued. No satisfactory progress was made. The bowels were never opened, except by enemata, and then only a few small scybala were passed. The vomiting continued as frequent and as copious as before admission, and the weakness and emaciation increased. An exploratory operation was therefore decided upon, and on June 20th, after consultation, Mr. Knaggs opened the abdomen in the median line by an incision three inches long below the umbilicus. Cautious exploration was then made with the finger, and a growth, or succession of growths, solid, and of a yellowish-white appearance, was felt and seen, evidently embedded in the mesentery, and extending downwards from about the position of the upper part of the left kidney to the left side of the pelvis. The peritoneum was studded with an infinite number of small tubercles.

The case seemed so hopeless that nothing further was attempted. The wound was closed, and it healed by first intention. There was no interruption to recovery. The results of the operation were singular and most unexpected. The patient vomited once within the next twenty-four hours, and for the last time. The bowels in a few days began to act with regularity, and improvement has been steady though slow. The patient when I last saw her (April 30th, 1886) was in a fair state of health, and able to get up and do light things about the house. She was better than she had been at any time since she left the infirmary, and she was continuing slowly to gain flesh both in the face and body. She every now and then suffered considerable pain from flatulence, and very frequently loud gurgling could be heard all over the room. She had only vomited two or three times since leaving the infirmary, and then the vomit was small, and due to something that had disagreed with her. The bowels acted twice daily, and the belladonna had been discontinued. No sign of disease existed about the lungs. When the intestines were not distended with gas there was a resonant tumour of variable size reaching from the umbilicus to the pubes, and evidently a mass of matted intestines. There was a movable lump as big as a walnut in the left iliac fossa, which had not varied in size, and was probably a large gland or a tubercular mass. At the fundus of the uterus was a craggy mass, which was close to a puckering and thickening of the mucous membrane of the rectum—probably healed ulceration.

Dr. Fagge in his article on intestinal obstruction,[1] after noticing that the primary cause of "contractions" was generally a chronic peritonitis, adds: "It might therefore be thought that ordinary strumous peritonitis would be likely to give rise to similar effects. Such an occurrence must however be rare, for I have looked up all the fatal cases in our modern post-mortem records without having met with any one in which symptoms of obstruction are stated to have existed." He then narrates a case, to which there was no history, to show that strumous peritonitis may cause narrowing of the intestine to such a degree as to lead to dilatation and thickening of the bowel above the narrowed part. Dr. Fagge has since recorded a case in which the obstruction was due to this cause.[2] And Mr. Maunder[3] records a case of "intestinal occlusion dependent upon tubercular disease of the intestines," where the tubercular deposit was entirely "in the substance of the peritoneal covering."

The two cases here recorded, which occurred in the practice of one surgeon within eight months of one another, were brought almost to death's door from the results of intestinal obstruction, and in neither was tubercular peritonitis suspected as the cause until the operation showed it to be so in the one and the post-mortem examination in the other. That tubercular peritonitis does not necessarily contra-indicate or add very seriously to the risks of an operation is sufficiently proved by the result of the second case. There is hardly room for doubt that the operation has already prolonged the patient's life many months, and her continued improvement in health without regular medicinal treatment may fairly raise the thought that the incision itself may have exercised a salutary effect upon the course of the disease. This case may be considered in connexion with Sir Spencer Wells' classical case in which recovery seemed to date from a sharp attack of peritonitis that came on after the incision. Another remarkable case has recently been recorded by Mr. Lawson Tait.[4]

In the first case no operation would have been attempted had the real state of affairs been foreseen, but appearances were thought to point to a localised lesion, and the circumstantial history of typhoid, doubtful as it may now appear when critically examined by the light of subsequent events, tended to obscure the diagnosis. I have very little doubt that what was looked upon as typhoid was really a subacute commencement of peritonitis or an exacerbation of one previously existing; yet it was quite within the bounds of possibility—perhaps even of probability—that the typhoid condition should have originated a localised peritonitis, and the feeling of resistance leading to the right groin was in favour of that suggestion; whilst the perforations that were actually found so close to where typhoid perforations might be expected is of interest when we consider the history of the case. The group of perforations at the beginning of the large intestine is interesting. Perforation of a tubercular ulcer is a rare but still an occasional occurrence, and an interesting case is recorded by Dr. Hale White.[5] The present case is remarkable from the fact that a group of ulcers perforated. Before the perforations occurred the intestines must have been glued together, and a fatal peritonitis prevented. How far they may have owed their origin to the dragging of an adherent coil upon their floors, already softened by the results of inflammation, it is impossible to say, but this does not seem an unreasonable explanation. It is curious that during the operation so little should have been seen of the remarkable conditions that were really present. Except one or two suspicious circumstances, which investigation failed to clear up, no inkling of the true cause was gathered. The collapsed coils exposed by the incision were not inconsistent with a

[1] Guy's Hospital Reports, third series, vol. xiv.
[2] Path. Soc. Trans., vol. xxvii., p. 157.
[3] Medical Times and Gazette, 1876.
[4] Edinburgh Medical Review, May, 1886.
[5] Pathological Society's Transactions, 1885.

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localised matting; but it was not till after death that by continued unravelling the true state of affairs became apparent.

In the second case, it is difficult to understand what led to the removal of the obstruction. It is possible, but unlikely, that some accidental touch during the operation may have done all that was necessary; but I incline rather to the belief that the relief was afforded in the same way as it is sometimes by an enterotomy. I think that the very careful feeding after the operation, assisted possibly by the vomiting, so reduced the distension above the obstruction and prevented its reaccumulation that the natural passage was restored, and that the action of the belladonna, with the subsequent careful diet, were sufficient to keep it open.

Huddersfield.

WHAT CONSTITUTES MALIGNANCY?[1]

BY HERBERT SNOW, M.D. LOND.,
SURGEON TO THE CANCER HOSPITAL.

THOUGH we are by no means yet in a position to solve the great mystery which surrounds this question, it appears to me that by discarding some useless lumber in the shape of pathological over-refinements, and by taking as general a view as possible of the whole subject, we may yet do much to narrow the problem, and to place ourselves face to face with it in its simplest form, shorn of all irrelevant matter—surely a by no means inconsiderable advantage towards its successful solution.

Taking first for our consideration the large class of malignant diseases denominated "alveolar carcinoma," with its principal subdivisions—scirrhus and encephaloid,—we are told that this is due to the proliferation of glandular epithelium in the meshes of a fibrous stroma, such stroma being firmly organised and most abundant in scirrhus, and comparatively scanty in encephaloid. Here the character of this stroma, and the emphasis laid upon it in pathological instruction, seem to me to obscure from our mental vision the essential and vital characteristics of the new growth. Some authorities consider it merely the original connective tissue of the part; others an entirely new formation; the most recent make an equally balanced compromise between the two. But I think that the prevailing impression in the medical mind is that this alveolar stroma is altogether a neoplasm, a characteristic and typical feature of the cancerous tumours. Let us now examine the correctness of this view, taking scirrhus as the most typical form of alveolar carcinoma and the female breast as its most ordinary seat. If we take a thin section from the normal breast, we see the bands of white fibrous tissue variously interlaced, so as to form irregular meshes; at intervals the acini of the gland lined by epithelium; here and there collections of adipose tissue. When the organ becomes affected by scirrhus, we find the epithelial cells of the acinus transgressing their boundaries, depositing themselves in the interstices of the normal connective tissue wherever they can gain a foothold, here proliferating abundantly and stretching the developing fibres, till in time these become atrophied or absorbed. In the last stage, as a rule, the cells greatly predominate; we then encounter only friable cell-masses, many of which have undergone caseous or fatty degeneration, with but a mere skeleton of the original fibrous tissues remaining.[2] On examining a section of the scirrhosed breast, we notice an acinar or alveolar distribution of the cell-masses, corresponding precisely to the normal arrangement of the fibrous bands, and in no way differing from it. When the section is through a plane parallel to the fibres, we find the cells apparently arranged in long thin rolls; when transverse, the cells appear grouped in larger or smaller irregularly roundish or oval clusters. Here and there some of the original acini of the gland remain, adding to the alveolar appearance.

But in order to find the most typical alveoli and the representation of scirrhous cancer most commonly given in pathological manuals, we must study the development of the cancer cells in fatty tissue. We here see these cells travelling from the affected part along the fibres of the reticulum; they locate themselves at the angles formed by the crossing of the different fibres and proliferate, crumpling up before them the fat-cell which each mesh contains. When the process is complete, the place of the fat-cell is wholly occupied by the malignant cells, and the original fibres of the reticulum remaining unaltered, the appearance presented under the microscope is that of large roundish acini. Throughout all this we utterly fail to find any development of new fibrous tissue. It cannot be denied that there may occasionally take place (as in other conditions of chronic irritative inflammation) some hypertrophic increase of fibrous tissue in the vicinity of a cancerous tumour; the skin of a cancerous breast often *seems* thickened, even to a long distance from the seat of disease. But this phenomenon is by no means constant, is of an accidental nature, and has nothing whatever to do with the alveolar characteristics of the neoplasm. The most careful examination of numerous cases has entirely failed to indicate to me that there is any increase of fibrous tissue whatever in ordinary cases of scirrhus, whether hypertrophic or of new formation. The gist of the whole process of development in scirrhous cancer of the breast appears simply to be that the cells of the acini, under the influence of some law at present very mysterious to us, proliferate abnormally, diffuse themselves through the adjoining tissues by the agency of lymph currents (probably also by their own amœboid movements), and grow vigorously wherever they can find room; but that their distribution depends strictly on the anatomical structure of the part, and proceeds on lines previously laid down.

I will pause here a moment to make one or two further remarks respecting the relationship of the white fibrous tissue to scirrhus, which we have just been considering; because I believe that many or most people look upon the characteristic hardness of a scirrhous tumour as due to the superabundance of such tissue in and around it, and perhaps at the first glance will not be able otherwise to account for the very marked induration which we almost always find. The fallacy of such an idea will, however, be obvious when we consider that a tumour composed wholly of white fibrous tissue has no such feature; still more so when we remember the soft pulpy character (in ordinary situations) of the growth we term "round-celled sarcoma" (which in abdominal organs I have seen not a whit more solid to the touch than condensed milk), and then reflect that this material, when enveloped by a rigidly resisting capsule, as in the case of the testicle, feels to us of stony hardness. A still more striking example is afforded by lympho-sarcomatous tumours, which, usually not particularly remarkable for their hardness to the touch, when growing under dense fascia in the lower part of the neck are commonly mistaken at first for an exostosis, then for osteoid cancer. The truth is, that the sensation to our hand of hardness occasioned ordinarily by scirrhus, and extraordinarily by the tumours just mentioned, results from the tension of cell-masses growing under or among the meshes of resisting non-elastic tissue. A similar explanation will account for the puckering of the skin, for the retraction of the nipple, and general tendency to shrinking and contraction in the adjoining tissues, most marked in the case of scirrhus, though by no means confined to this; the growing cell-masses haul on the fibres, somewhat in the same way as a sailor hauls on a rope.[3]

Next as to encephaloid cancer. We hear little of this nowadays. There is a fashion in pathology, as in most things else; and the present custom is to designate tumours which would formerly have been classed under this heading as "round-celled sarcoma." I venture to think that this is a great mistake; and that the latter term, implying as it does a connective tissue origin, is employed far too frequently at the present day. In the case of the female breast, I cannot but assign an *epithelial* origin to the tumours commonly termed "sarcoma," together with a certain degree of alveolar structure proportionate to the stage of the tumour and to the amount of fibrous tissue still remaining; and I therefore prefer for these the old and unfashionable term

[1] This paper constitutes part of a lecture introductory to the course delivered by the staff of the Cancer Hospital from January to March, 1886.

[2] This description, of course, does not refer to those exceptional chronic adatrophic cases in which the fibrous tissue is not eroded; though even here I should hesitate to call it hypertrophied.

[3] A familiar example of the enormous energy exerted by proliferating cell-masses—often in themselves soft, pulpy, and friable—must occur to all who have noticed the power with which colonies of young fungi elevate heavy slabs or stones overlying their bed; and we know how the algæ, growing on the lees of wine which has issued from a small leak in a cask, may eventually lift the whole cask up many inches.

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"encephaloid."[4] These growths on section often remind one of pomegranate, the soft pulpy cell-masses being contained in coarse meshes of the connective tissue of the part, and their vascularity adds to the general resemblance. On inspecting a thin section of one of these, the brown bands of fibrous tissue will be seen in contrast with the dark-blue cell-masses. Under the microscope we find cells of pretty much the same character as the former; as a rule they are not quite so large or so well defined, but their growth appears to be far more exuberant. Instead of little detached knots of cells inserting themselves, as it were, painfully and with difficulty into the connective tissue meshes, we find huge masses; these are still contained in alveoli, only that the latter are now very large and coarse. The cell-masses at first keep within the bounds of the normal acinus of the gland—soon, however, transgressing this; they are evidently the results of proliferation of the epithelium appertaining to that acinus, and show no indications of any connective tissue origin.

The question now arises: If these two forms of cancer (scirrhous and encephaloid) both arise from the acinar epithelium, how is it that they are clinically so distinct—so that in the one case we find a tumour of stony hardness, in the other a growth comparatively soft, perhaps even fluctuating? The former is characterised by puckering and contraction, the latter by prominence and distension. I think we may find a plausible explanation of these peculiarities in the state of the white fibrous tissue of the individual patient. Those who have occasion to operate frequently on the female breast must have noticed, when proceeding to scoop out the contents of the axilla, the marked difference in the consistence of the normal tissues here situated—a difference by no means referable solely to age, but in great measure also plainly depending on natural habit of body: so that in one woman you may clean out the cavity with great ease; in another, not markedly distinguished from the former in age or general appearance, the fibrous tissues are exceedingly tough, and have to be divided by the knife or scissors. I would, then, refer the clinical and other differences between scirrhus and encephaloid cancer, as these affect the female breast, simply to differences in the resisting power of the white fibrous tissue in the individual who happens to suffer from the one or the other. In scirrhus, as a rule, the malignant cells force their way with difficulty, only gradually eroding their fibrous envelopes; in encephaloid, the cells prey, if I may so speak, on the surrounding fibrous tissue from the first, and there is no resistance, no pressure, no increase of tension, no feeling of hardness to the touch. I do not see how else to account for the facts, but I cannot venture, however, to offer the above hypothesis as more than provisional.

(To be concluded.)

[4] If carefully looked for, a typical scirrhous appearance may nearly always be found at some part of the section of these tumours, a point tending strongly to indicate an identical origin.

EPITHELIAL CANCER OF THE TONGUE LIP, AND UTERUS.

BY JOHN CLAY, M.D.,
PROFESSOR OF MIDWIFERY, QUEEN'S COLLEGE, BIRMINGHAM.

IT is now six years since I first communicated to THE LANCET (March, 1880) some observations, with illustrative cases, on the use of Chian Turpentine in the Treatment of Cancer. Much outspoken, not to say hostile, criticism of the remedy characterised the discussion which resulted from that communication. I have not troubled myself to enter upon this controversy, nor, with the space at my disposal, can I now venture to do so. I have been content to steadily pursue the treatment in the course of my own practice, and with such excellent results as to justify me in adhering to the statements I made in the paper above referred to. As the test of experience is the most conclusive reply that can be made to the criticisms and objections offered to my method of treatment, I now submit such evidence, in the form of brief notes on three cases of cancer, in different positions, each treated by Chian turpentine. I offer these, not as isolated examples, but as types of a number of successes obtained by similar treatment in cases alike as to their character and their situation. In the name of suffering humanity, I ask the medical profession to consider these cases without prejudice, and in the hope that the narration of them may lead to a more extensive and resolute trial of a remedy the high value of which I have tested and proved in my own practice.

CASE 1. *Epithelioma of the Tongue.*—On March 30th, 1885, I saw, in consultation with Mr. Bury of New Barnet, Mr. M—— of Shrewsbury, aged fifty-nine years, a gentleman retired from business. The medical gentleman in charge of the case informed me that the patient was suffering from epithelioma of the tongue, and that he had consulted two of the highest authorities in London, who had confirmed his diagnosis, and had pronounced the case to be unsuitable for operation. It was reported to me that one of the consultants confidentially expressed the opinion that the disease would probably prove fatal within two months. The disease was first noticed about four months previous to the above-named date. It commenced with soreness on the right side, at the junction of the root of the tongue with the floor of the mouth. There was some ulceration at this part, which was attributed to the irritation of a decayed tooth. The tooth was extracted, but the soreness and ulceration were not relieved, but gradually increased. The patient has never had syphilis. He has had caustics applied occasionally, and had taken sedatives to ease the pain. On examination, I found, in the situation above mentioned, an ulceration about the size of a sixpence, with a hardened and everted edge on the tongue side of it. There was a row of raised shot-like epithelial growths (not in a state of ulceration) proceeding from the ulcer on the lateral border of the tongue, and running forwards towards the tip for about three-quarters of an inch. The tissues around the ulceration and growths were thickened and hard from cancerous infiltration. There was an enlarged submaxillary gland about the size of a pullet's egg. The movements of the tongue were limited and painful. The patient was well nourished, but depressed and anxious. I gave an unfavourable prognosis, but thought it was a case in which Chian turpentine ought to be perseveringly tried, as that seemed to be the only alternative left to him. He was ordered the following mixture: eight ounces of Chian turpentine (Southall's) and two drachms of resorcin, two teaspoonfuls three times daily; and to have the ulcer and growths slightly painted on alternate days, respectively with chromic acid solution (ten grains to the ounce) and solution of perchloride of mercury (one grain to the ounce). On April 16th, 1885, Mr. Bury wrote to me thus: "There is no arrest of the glandular enlargement, which, if anything, is somewhat more marked. The ulcer in the tongue about as before. I presume we must not lose all heart because the remedies do not seem to have arrested the disease; possibly sufficient time has not elapsed since the commencement of the use of the medicines." On June 30th he again wrote to me, and in reference to this point stated that "about a week after your reply to me the enlargement of the glands began to disperse, and in about three weeks it was entirely gone. The ulcer of the tongue is, I believe, quite healed." I mention these facts, as it is a too common error on the part of medical men to imagine that the remedy is useless because its effects are not apparent in a few days. I did not see the patient again until July 10th, 1885, when I was surprised to find him looking so well. As I had heard nothing of him I feared that he had succumbed to the disease. On examination I found the enlarged gland had disappeared; the tongue could be moved freely and without pain; on the right side it looked and felt quite normal, as though it had never been affected. On the left side of the neck, however, I discovered an enlarged gland, and on the lateral border of the tongue on the same side I found an epithelial growth of the size of a hazel-nut in a sloughing condition. The remedies were ordered to be continued as before. I saw the patient about a month afterwards. The newly discovered growth had all but disappeared, and a month later I found the parts free from disease. The medicine was directed to be taken in diminished doses, and the local applications to be discontinued. I saw him in December of the same year, when he was quite well and proposed spending some weeks on the Continent. I quote the following remarks on the case from a letter from Mr. Bury, the medical gentleman already referred to: "You will be greatly pleased with the success of your remedies, which have restored to life, one may truly say, under God's blessing, one doomed to die in the course of a few months."

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CASE 2. *Epithelioma of the Upper Lip.*—Mrs. W——, aged fifty-two years. General health good; has had four children, but no miscarriages; never had syphilis; menopause about eight years previously. She consulted me on October 20th, 1883, at the Queen's Hospital, ostensibly for a vaginal discharge, but really for a growth occupying nearly the whole of the upper lip and involving the lower portion of the left ala nasi. She had been under the care of Mr. W. Freer, who had advised its removal. It presented a fungating raised appearance, and was irregular in outline. The surrounding tissue was hard to the touch, and the cancerous infiltration extended some distance around the nodule. A small portion was excised by scissors, and examined by the resident physician and resident obstetric surgeon under the microscope, in the fresh state, and well-marked "epithelial nests" reported. On account of the occasional hæmorrhages, the growth was painted over once with perchloride of iron solution, and afterwards dressed with vaseline. The *simple* Chian turpentine mixture was ordered to be taken three times daily, in two-teaspoonful doses. The patient presented herself regularly every fortnight at the hospital, and at the end of ten weeks the mass had shrunk considerably, and had a black appearance; the infiltration had disappeared, and she was now free from pain. In the twelfth week the mass felt loose, but it was not interfered with. Thirteen weeks from the commencement of the treatment, on getting up in the morning, the patient found that the mass had separated during the night. The lip was free from hardness, and movable. There was a white cicatrix about the size of a shilling, and a slight notch in the margin of the lip. I saw her on August 16th, 1886; she was quite well, and there had been no recurrence of the disease.

CASE 3. *Epithelioma of the Os and Cervix Uteri.*—Mrs. W——, aged fifty-four years. Very feeble and emaciated, and cachexia well marked. Could not walk a hundred yards even with assistance. Has had very profuse watery and sanguineous uterine discharges for several weeks. Mr. L. Tait, who had seen her previously, had, she stated, pronounced the case to be uterine cancer, and incurable, and that she could not live a fortnight. On examining the uterus, a mass of epitheliomatous cancer, about the size of a hen's egg, occupied the upper part of the vagina, but believed to be limited to the uterus; it bled freely from the examination. I ordered the Chian turpentine mixture with resorcin, and directed her to use vinegar-and-water injections. At the end of seven weeks the hæmorrhage and leucorrhœal discharges had nearly ceased, and the patient could now walk more than a mile twice weekly to see me. The growth had almost disappeared. At the end of five months she had increased 15 lb. in weight. About the seventh month she had an attack of facial paralysis affecting the right side, which probably arose from cold. She recovered almost completely. Now (a year and a half from the commencement of the treatment) she can attend to her household duties as well as she could before her illness. The growth has cicatrised completely. There is a small nodule, which appears to be healthy, and represents the os and the cervix of the uterus.

Birmingham.

TROPICAL ABSCESS OF THE LIVER.

BY SURGEON A. TOMES,
INDIAN MEDICAL SERVICE.

(*Concluded from page 669.*)

WITH regard to the treatment, there are two drugs which are eminently useful in the presuppurative stage of hepatitis—ipecacuanha and chloride of ammonium. The use of the former, advocated by Professor Maclean, in the same large doses as for acute dysentery, has proved of the utmost value in reducing sthenic hepatitis of Europeans. I prefer the latter for natives, in doses of from fifteen to twenty grains, combined with quinine and hydrochloric acid. Experience having taught us the immense risks to life that attend the plan of non-interference when an abscess has formed, and knowing also that the prospect of a cure by operative treatment depends largely upon the stage at which it is undertaken, our utmost attention must be paid to the early detection of pus. So soon as there is any suspicion of suppuration the liver must be explored; there is no need to wait for the abscess to declare itself. It is now a routine practice among surgeons in India to explore the liver with a long fine needle or trocar. The instrument, which may be attached to an aspirator, is plunged into the organ towards the suspected seat, and even when no pus is found no evil result has ever been known to follow. On the contrary, the acute symptoms are generally relieved by the procedure. I have heard of practitioners who puncture not merely for an exploratory purpose, but as a curative measure, in acute hepatitis.

In advanced cases there may be no difficulty of diagnosis. There will be a large, tense, fluctuating swelling occupying the hypochondrium. Actual pointing is rare, and in all cases where there is any doubt the aspirator should first be employed to determine the presence and position of the abscess. Supposing pus to be detected, the rule is to evacuate. Thirty years ago, heavy as the mortality from unrelieved ulcer was known to be, surgeons hesitated to interfere. They preferred to wait in hopes of a cure by natural processes. Results of operation were most unfavourable, because it was undertaken too late, and because entrance of unpurified air produced septic decomposition. They never operated unless the abscess came to the surface and distinctly fluctuated. With earlier detection, improved instruments, and antiseptic precautions, operation is followed by a greater measure of success in modern times. Still, the circumstances attending the formation of an abscess in the liver are such that the proportion of recoveries will always be small. The disease is the outcome of a constitutional affection; there is a tendency to complication by bowel complaint and to multiplicity. Effect of climate can be met by removal to Europe. Multiplicity cannot usually be detected during life. One abscess may be successfully opened and drained, while another, a deeper one, bursts internally and destroys life.

In the absence of a sufficiently extensive and complete series of cases, where all results are given, the failures as well as the successes, it is impossible to estimate accurately what greater degree of success attends operative interference at the present time. It appears that formerly the mortality was little, if at all, lessened by operation. In the 81 cases collected by Dr. Waring (1832-52), the cures were 15, or 18·5 per cent., but he distinctly admitted that the proportion was much overstated, the cases having been in a great measure selected for report. As far as I have been able to make out from a study of 136 unselected cases operated on in recent times, the recovery rate is now about 22 per cent. Taking small series, the results are very variable. In one series of 9 operated on in a Calcutta hospital, 1 only was cured. In another series of 14, 8 were cured. Surgeon-Major (now Brigade-Surgeon) Curran[1] collected 24 cases, with 4 recoveries. Of the 8 cases in "Murchison's Clinical Lectures," 3 were cured. In my own, 20, all natives, the recoveries were 5, or 25 per cent.

The diagnosis of an abscess having been confirmed, there are two methods of dealing with it—the open and the close. The close consists in emptying the sac by a single or several aspirations at intervals, until it becomes obliterated. The open method means the establishment either by the knife, or by an ordinary trocar, of a permanent opening, and draining off the contents until that same end is attained. Formerly there was no choice; the open method was the only one available. When the aspirator was invented some sixteen years ago, it was hoped this would mark the commencement of a new era in the history of the treatment of liver abscess: difficulties would now be overcome, all risks avoided, and evacuation effected with certain success. These expectations, alas! have not been realised in full. As an instrument for diagnosis the aspirator has proved invaluable. But it is found that only a certain number (the smaller proportion) of abscesses suitable for operation can be cured by aspiration alone. Cases occur over and over again where the cavity speedily refills as soon as emptied, and the open has to be substituted for the close method. Aspiration, by causing centripetal tension on the walls, appears to favour the refilling of the cavity. At least two-thirds of all cases that have been cured by operation have been treated on the open method. In my opinion a cure should always be attempted by aspiration, for this method is the more agreeable to the patient, while the risks of septicism are avoided.

[1] Indian Medical Gazette, 1880.

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Moreover, it is far more rapid. If the case is capable of cure at all by the close method, it is cured promptly after one or two tappings, while the open is always a tedious business.

Abscesses of small or medium size, and limited by a distinct wall or membrane, also quiescent abscesses, are those most likely to be cured by aspiration. Cures have resulted after a single aspiration of as much as 16 oz., 30 oz., and in one remarkable case 112 oz. of pus. This last would be scarcely credible were it not for the established reputation of the author, Professor McConnell, of Calcutta. The operation may need repeating a second or even a third time, but when it is necessary to tap oftener than that, my experience is that the establishment of a permanent drain is called for. In operating by this method, it is a question whether the abscess should be completely emptied or not. I am in favour of partial evacuation in any but small collections, to aspirate slowly, and to desist as soon as the fluid runs with difficulty. The liver cannot so contract upon a large cavity as it is emptied as to effect its obliteration. A vacuum results, to fill which there is a rapid reaccumulation of fluid (pus, broken-down tissue, and exudation from the vessels). A guide as to the advisability of persevering in the close treatment in any case will be afforded by the character and quantity of the contents, and by the temperature range. If the contents are proved to have become of the uniform yellow character of laudable pus, that indicates the cessation of the breaking-down process and the formation of a limiting membrane. In aspirating, it is best to use the largest-sized trocar, because liver pus is apt to be so thick, tenacious, and shreddy. Having discovered its presence by the fine explorer, that may be left *in situ* as a guide. The larger trocar is then fitted and introduced along it, having first incised the skin with a scalpel to facilitate its entrance, and to avoid an unpleasant or even dangerous jerk. The operation is not painful, except at first, when the skin is perforated, but it is one that patients usually very much dread. On one occasion the patient suddenly flinched before the instrument even touched him, with the result of internal rupture and death. Since reading that account I have been in the habit of giving chloroform. Local anæsthesia by cocaine might answer. For establishing a free opening some prefer the knife, but a large trocar is usually employed. The skin having been incised, the trocar is boldly slid along the exploring needle (Sir J. Fayrer's grooved needles offer great advantages for this purpose) to the required extent. If no guide is used, the cessation of resistance will indicate that the cavity has been reached. It is advisable to leave the cannula *in situ* for a few days, to allow of adhesions forming, otherwise the organ may shift its position on its removal, when the reintroduction of a tube will be difficult and free escape of pus prevented. Subsequently a drainage-tube is substituted for the cannula, and its end received into a bunch of absorbent dressings. Post-mortem examinations show that adhesions do not always exist, though they are generally found. The risk of extravasation has, however, been exaggerated, and the tendency of modern surgeons is to disregard the point in determining the period for operation. Where no adhesions exist at the time of operation, if a tube be left in the wound, lymph is very soon thrown out around it, shutting it off from the pleural or peritoneal cavity through which it passes. It has been found completely isolated by the second day. The drainage-tube should not have lateral perforations throughout its length—granulations from the walls of the sinus in which it lies are apt to sprout into them and prevent its extension in the process of contraction of the cavity. One or two large holes near the end are all that is necessary.

Which is the best site for opening an abscess? As a general principle, the puncture is to be made where pus can be most readily reached, as indicated by fluctuation or by exploration. But whenever a choice is permitted, it is advisable to open *below* the ribs, for these reasons: 1. An opening in the intercostal space is apt to become obliterated on the collapse of the liver by the falling together of the ribs; this may necessitate excision of a portion of one or more to preserve patency of channel. 2. If a soft rubber tube be left in, it is liable to be compressed by the approximation of the ribs, and escape of pus will be interfered with. 3. If a silver cannula be left in, it may, by its irritating pressure, excite periostitis, and even necrosis.

When recovery has followed the spontaneous external bursting of an abscess, the opening is nearly always below the ribs, generally in the epigastrium, in the neighbourhood of the ensiform cartilage. When an abscess bursts through the thoracic wall recovery is rare; death is preceded by necrosis of ribs and sloughing of integument (Maclean). Thus nature clearly indicates the best route for evacuation. Statistics also show that better results attend operation below the ribs. Out of ten abscesses tapped between the ribs eight died and two recovered, or at the rate of 20 per cent.; out of twenty-two tapped below the ribs twelve died and ten recovered, or at the rate of 45·4 per cent. For aspiration the same rule does not apply. It is dangerous to aspirate towards the extreme upper and lower borders of the enlarged organ, for on removal of the trocar (the largest is used) there probably will be nothing to prevent extravasation of pus or blood. The liver contracts and alters its relation to the parietes in those directions. Extreme limits should be avoided, but there is little risk if aspiration is performed in the region where the organ is in constant contact with the chest wall, and there is no fear of necrosis after aspiration through an interspace.

It is scarcely necessary to say that the most stringent antiseptic precautions must be observed. It is impossible to prevent the entrance of air under the open method, but it can be rendered harmless by filtration through an antiseptic medium. In any case the accident is less dangerous where there is a free exit for its escape than where the cavity is sealed up. A large abscess will discharge an enormous quantity of matter, and the dressings rapidly get soaked, so that it is a difficult thing to keep the patient clean, and the decomposition of the discharges in the dressings is a great source of danger, especially in the tropics. With regard to washing out the cavity, as long as the pus keeps sweet this is unnecessary. Irrigation does not diminish the amount of discharge, but rather tends to increase it by its irritating effects on the walls.

I especially recommend for adoption the excellent method of dealing with abscess of the liver on the open method devised by Dr. Patrick Manson of Amoy.[2] By his plan the risks of extravasation of pus or blood where no adhesions exist, and of septic infection from decomposing discharges or entrance of foul air, are avoided; while at the same time the cavity is perfectly and constantly drained, and the patient maintained in a condition of comfort and cleanliness throughout. Having employed it, I can testify to its great value and convenience. The apparatus consists of a large trocar and cannula; a piece of drainage-tubing eight or ten inches long, of a diameter rather larger than that of the cannula; six feet of indiarubber tubing, half an inch bore, one end being fitted with a silver tube two inches long, fixed in the centre of an antiseptic pad; and a piece of waterproof sheeting. The calibre of this silver tube is such that the end of the drainage-tube can be easily and accurately fitted into it; the other end of the six-foot tubing is fastened within a small wide-mouthed phial placed in a large wide-mouthed jar. The jar, phial, and tube are filled with antiseptic solution, and the tube is clamped at its ends. The abscess is tapped with the trocar, and while pus is flowing the drainage-tube, previously stretched on a staff to reduce its calibre, by tying its distal end over a cap or with a piece of catgut, drawing in its proximal end and fastening it with string to the eye of the staff, is then slipped through the cannula to the full depth of the cavity. The cannula is withdrawn over the stretched tube; the tube is then released by cutting the string, and immediately springs to its full diameter, thus completely filling up the openings in the liver and parietes, and bridging over any interval that may exist between them. The free end of the drainage-tube is inserted into the connecting silver ferrule. A flannel binder is applied around the chest above and below the tubes and the pads and waterproof, to keep the apparatus in place. The clamps are removed from the long tubing, and its syphoning action set going. The contents of the abscess pass into the small phial, which is kept submerged in the solution in the jar, and thus acts as a trap. The jar is placed on the floor at the bedside, and is emptied and refilled from time to time as occasion requires. The length of the tube allows full play to the movements of the patient. After a day or two, it is found that the drainage-tube is no longer firmly held; it will have dilated the opening by its presence, and will lie loosely; any discharge that may now escape at its side will be caught up in the antiseptic dressings under the waterproof. By this

[2] Medical Reports of the China Customs Gazette.

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time a wall of lymph will have formed around it, shutting it off from the visceral cavity.

Whenever an abscess is being drained, it is important to remember the necessity of shortening the tube from time to time as the cavity contracts. I have known an abscess close in around an unshortened tube until at last the latter came to lie in a mere sinus of a length corresponding to the depth of the original cavity. The walls of the sinus continued to secrete pus, and this led to a false impression as to the progress made, until lateral exploration with a probe at once revealed the true state of affairs.

Shepherd's-bush.

ON RECURRING VENOUS THROMBOSIS FOLLOWING CHRONIC PYELITIS OF GONORRHŒAL ORIGIN.

BY H. FRENCH BANHAM, M.A., M.D.,
PHYSICIAN TO THE ROYAL BERKSHIRE HOSPITAL.

W. G. —, aged thirty-four, was admitted into the Royal Berkshire Hospital, under my care, in October last, with symptoms indicative of chronic pyelitis. For the early history of the illness of this patient I am indebted to Mr. A. J. Moore. Coupling the facts given to me by him with those ascertained from the patient, there can be little doubt that in June of last year he had an attack of gonorrhœa, followed by inflammation of the prostate gland and retention of urine, necessitating the occasional passing of a catheter. Subseqently he had cystitis, with frequent and painful micturition; and some time afterwards he began to experience severe pain in the region of the right kidney. On his admission to the hospital all symptoms of cystitis and prostatitis had disappeared, but there was considerable pain and tenderness on pressure over the right kidney, and he was passing acid urine mixed with a large quantity of pus and a few oxalate-of-lime crystals and blood-corpuscles. Notwithstanding rest and careful dieting and the administration of certain remedies, the case underwent no material change until the beginning of January last, when he experienced some sharp pleuritic pains in the right side, and there were the accompanying physical signs of a localised dry pleurisy. These shortly disappeared. There was then great tenderness over the liver, which descended a little below the margin of the ribs. During the period of these additional symptoms there was some little pyrexia and constitutional disturbance. On Jan. 16th he had shivering, was seized with severe pain in his right leg, and when seen by me in the evening of the same day his temperature was nearly 103° F., his pulse was rapid, and he appeared to be exceedingly ill. The leg was then much swollen, and the whole of the long saphenous vein exquisitely tender and quite hard. The man was suffering so much that no further examination was made at this time than was necessary, with the view of affording him as much relief as possible. The next morning it was observed that there was tenderness extending quite up to Poupart's ligament, but no induration of the vein was noticed above the saphenous opening. After a few days the case began to assume a less serious aspect, but on the 25th there was a repetition of the symptoms that had set in on the 16th, the veins of the left leg being affected in the same way as those of the right had previously been. In this second seizure the pyrexia and pain were less. In the case of both legs the swelling and œdema affected the foot, leg, and thigh, almost up to the saphenous opening; but above this the integument appeared to be normal. The two attacks above recorded would have appeared entirely unconnected the one with the other but for the circumstance (ascertained on inquiry subsequently to the second seizure) that in the week intervening between the commencement of the two attacks there had been for a short time considerable enlargement of the penis and difficulty in micturition. For a week or two the patient continued in a most precarious condition, with a feeble and rapid pulse and general febrile symptoms. In a short time, however, his state became substantially the same as on admission, the urine having the same character, but the tenderness in the right flank had almost disappeared. The superficial epigastric, circumflex, iliac, and other superficial veins of the abdomen, as well as some of those in the leg, were now conspicuous by their distinctness, and the long saphenous vein, and even its tributaries on the dorsal and inner side of the foot, still remained hard and cord-like. He left the hospital in the beginning of March, and I have ascertained that for a time his general health continued to improve, but he was afterwards attacked by thrombosis of the veins of one arm, full details of which have not, however, come to my knowledge.

Some of the conditions in this case were not so closely observed as they should have been; it is possible, however, that under any circumstances there might have been some difficulty in interpreting them. The sequence of gonorrhœa, cystitis, prostatitis, and pyelitis no doubt actually occurred. In regard to the thrombosis and endophlebitis, it is not clear which was cause and which effect; both existed on the evening of Jan. 16th. Attention was chiefly directed to watching for its upward extension, and the sudden appearance of the same condition, or at least of thrombosis, on the left side was wholly unexpected. I am inclined to think that thrombosis of the right long saphenous vein first occurred; that it was soon accompanied by endophlebitis; that the thrombosis extended so as to involve the right common iliac vein; that the prostatic plexus was then implicated; and so the mischief passed to the other side. These, however, are matters of conjecture. But it is curious to observe the great tendency to thrombosis that seemed in this case to exist, and which occurred, apparently, not as the result of feebleness of circulation, for the pulse was good and the patient not greatly prostrated, but, as it were, from some special condition of the blood, perhaps caused by the long-continued deteriorating influence of a purulent discharge, reducing its albumen and leaving the coagulable element in comparative excess.

Reading.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. THOMAS'S HOSPITAL.

COMPOUND DEPRESSED FRACTURE OF THE OCCIPITAL BONE; TREPHINING; RECOVERY.

(Under the care of Mr. SYDNEY JONES.)

THE following is an example of that class of injury which has been extremely benefited by the application of the principles of antiseptic surgery to its treatment. There are few cases in which greater advance has been made than in these, as will be readily acknowledged by any surgeon with a knowledge of the results of practice in this department of surgery during the last twenty years. In injuries such as that recorded it is of course impossible to prepare the patient as carefully as before exploration of the brain for tumour, neither is it possible to make the incision as now recommended, whilst often the presence of foreign bodies introduced by the instrument which inflicted the damage is a serious source of danger. That it is, however, possible with care and skill to secure immunity from spreading inflammation of the meninges and other local complications is well proved by this as by other cases which we have published. For notes of the case we are indebted to Mr. Sansom, dresser.

J. N——, aged fifteen, a cabinet-maker, was admitted on June 18th, and left on Aug. 13th, 1886. The patient was brought in about a quarter of an hour after the accident. He was stooping down to pick up some money, when a swing boat struck him with much violence on the back of the head. He was knocked down and rendered insensible, and was bleeding from a cut on the back of the head when picked up.

When examined at the hospital the lad was found to be almost insensible, it being only possible to partially arouse

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him by shouting to him, when he would put out his tongue and make some unintelligible answer. The pupils were unequally dilated, the right being the larger; both acted to light. The conjunctivæ were sensitive. The surface of the body was pale and cold, and there was slight sweating. The pulse was rapid, somewhat feeble and irregular. There was no stertor. The limbs were flaccid. Soon after admission the patient began to move his head from side to side, moaning occasionally. He vomited at frequent intervals, but the vomit contained no blood, nor was there any from either nose or ear. There was a lacerated wound in the occipital region, to the left of and slightly above the external occipital protuberance, about an inch and a half from before backwards, and nearly parallel to the long axis of the head; and on the introduction of the finger into this an irregular depressed fracture of the bone could be felt. This measured three-quarters of an inch from before backwards, and half an inch from side to side. The edges were sharp and irregular, and the depressed bone could be felt at the bottom of it.

About two hours after the injury Mr. Sydney Jones trephined, the patient being under the influence of chloroform. Two trephine openings were required, and from these the splintered bone was elevated and removed. The internal table was found to have been splintered to the left and behind, and a sharp spicule of bone was found driven in between the dura mater and the bone, pressing on the dura mater, but not causing any wound. The wound was carefully closed with catgut sutures, a drainage-tube inserted, and the wound dressed with dry iodoform gauze, the head being carefully bandaged. Before the operation the head was shaved and washed with a 1 in 20 solution of carbolic acid, whilst during the operation the spray was employed. His temperature at midnight was 98°.

June 19th.—He was very restless during the night, never dozing for more than ten minutes together. Has to be constantly watched to keep him in bed. Vomited at 6·30 this morning after taking a teaspoonful of milk. He has not passed urine, nor have the bowels acted, although five grains of calomel were given last night. When spoken to he complains of headache, and has asked for the urinal, which he has not used. He always lies on the right side, with his eyes closed and the limbs flexed. Face flushed; eyes bright; pupils normal. Pulse rather full, 100; temperature normal. Some blood came through the first dressing, which was renewed at 2.30 A.M. Bowels acted freely in the afternoon.

21st.—He passed a restless night, but seems quieter this morning. He has vomited at times since the operation. Has retention of urine, which is relieved by the catheter.

22nd.—Complains of hunger, but is still only allowed to have milk. Pulse 80, fairly strong and regular. No sickness. Will now lie on either side.

23rd.—Was restless during the early part of the night. Pulse weak and dicrotous. Tongue moist and slightly furred. Wound dressed: very slight healthy discharge.

25th.—He has much improved; sleeps well at night, but requires the use of a catheter at regular intervals. Wound dressed and drainage-tube removed.

July 1st.—Since the last note the wound has been dressed daily, but is now almost healed, there being but slight discharge from a small aperture about a quarter of an inch in diameter. He is still restless both night and day, and cannot be left alone on account of his attempts to get out of bed. The left pupil is slightly the larger; he has no headache, and he eats ravenously.

On the 19th the temperature in the evening rose to 101·2°. It did not afterwards reach this, there being a rise of one or one and a half degrees above the morning temperature until the 25th, when it became normal both morning and evening.

A month later the patient left the hospital. The wound was quite healed, though the depression due to the removal of the bone was very evident. He was fitted with a leaden plate to protect this.

WOLVERHAMPTON GENERAL HOSPITAL.

TWO CASES OF ACUTE GLOSSITIS.

(Under the care of Dr. TOTHERICK.)

FOR the following cases we are indebted to Mr. W. H. Evans, M.B. Lond., house-physician.

CASE 1.—E. R——, aged twenty-one, was admitted on July 12th, 1886. Tongue covered with thick brown fur, hard, and immensely swollen, the tip projecting half an inch beyond the teeth; it lies immovably fixed in the mouth; causes great pain, and is very tender on pressure. Salivation profuse. Breath extremely offensive. There is very little swelling in the floor of the mouth, but considerable pain on pressure both here and at the angle of the jaw. Movements of head and neck are attended with slight pain. Articulation impossible. Deglutition very difficult. Patient complains of headache, and feels generally ill. Pulse slightly increased in frequency. Temperature 100·4°. Ordered milk and beef-tea, one ounce of saline aperient mixture three times a day, and a weak solution of permanganate of potash to wash out the mouth. The man can give no cause for his condition, but thinks he "caught cold."

July 13th.—Temperature normal; pain much less, but no apparent diminution in the size of the tongue.

14th.—Tongue much smaller; temperature normal; salivation less troublesome.

15th.—The tongue has almost gained its normal size. Patient feels much better.

He made complete recovery, and was discharged on July 17th, 1886.

CASE 2.—J. P.——, aged twenty-seven, was admitted on July 23rd, 1886. The patient was seized with sudden swelling of the tongue on the 21st, caused by "catching cold." Towards the same evening he complained of pain and swelling in the floor of the mouth, gums, and at the angle of the jaw. The pain has increased in intensity and the swelling in extent during the last forty-eight hours. He has been out of work several weeks, and denies any excessive indulgence in drink.

On admission the tongue was hard, and painful on pressure, covered with a thick fur, and protruded about three-quarters of an inch beyond the teeth. Salivation most profuse and distressing. Odour of breath not very offensive. Has great dysphagia, and can only swallow fluids, which have to be poured to the back of the throat. Articulation impossible. Respiration not impeded, although the dorsum of the tongue almost meets the roof of the mouth. Temperature 99·8°. Pulse 116. Urine: sp. gr. 1030; contains a trace of albumen. Ordered milk and beef-tea; also one ounce of saline aperient mixture three times a day, and a lotion of Condy's fluid for the mouth.

July 25th.—Temperature 102·2°. There is some superficial sloughing of the gums and under part of the tongue. Has had scarcely any sleep since admission. An incision about an inch and a half in length and a quarter of an inch in depth was made on each side of the median line of the tongue. Towards evening he felt much relieved, the temperature having fallen to 99·4°.

26th.—Swelling of tongue subsiding; has much less pain, and has slept fairly well since the incisions were made. Salivation still troublesome.

27th.—Tongue slightly swollen and indented by the teeth. Made a good recovery, and was discharged Aug. 1st, 1886.

Remarks by Mr. EVANS.—All observers admit this to be a rare disease. In his clinical lectures, Dr. Graves, referring to a case he had attended in his private practice, remarks as follows:—"True idiopathic glossitis is an extremely rare disease. J. P. Frank only saw one case during his whole life. Four cases of it have been observed of late years in different parts of Europe, one of which is given in a German journal on the authority of my friend, Dr. Gattel, of Elbing, a gentleman upon whose accuracy implicit confidence may be placed." After making a careful survey of the literature of the subject, I can only find sixteen cases, exclusive of the two above described, which are reported at any length. In the course of my reading I had come across descriptions of a few others, but of so fragmentary a character that it may fairly be questioned whether the cases to which they referred were undoubted examples of this disease. From a study of the cases lately admitted into this hospital, the onset of the disease is very sudden, enormous swelling of the tongue coming on in a few hours. There may be a little premonitory pain and stiffness about the angle of the jaw, with slight difficulty in mastication and occasionally pain in the occiput and neck, and then the swelling of the tongue follows with great rapidity. The organ may almost fill the cavity of the mouth, and in some cases project beyond the front teeth as much as "two inches." The tongue now lies motionless, is hard and painful on pressure, and coated more or less thickly with a brownish-white fur. Sometimes it is deeply indented by the teeth, especially on the inferior surface of the tip. Articulation is imperfect, and in some cases absolutely

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impossible. Salivation is generally a prominent symptom, and causes great distress; the saliva, constantly dribbling over the surface and along the sides of the tongue, becomes viscid and ropy unless immediately wiped away. In severe cases the salivation may be profuse, and it constitutes to my mind one of the most distressing symptoms. Swallowing becomes extremely difficult, and in many cases fluids have to be passed to the back of the throat; even then the attempt at deglutition may set up violent fits of coughing. The inflammatory process may be strictly limited to the tongue, but does occasionally spread downwards to the rima glottidis and larynx, causing such serious obstruction to respiration that tracheotomy offers the only chance of escape from asphyxia. The temperature is usually slightly raised, but seldom runs higher than 102°. If no active treatment has been adopted, the tongue, having remained in this enlarged and painful condition for a variable period, from a few hours to a few days, commences to subside; and this sometimes occurs with great rapidity, being reduced to half its bulk in twenty-four hours or less; but usually a more gradual resolution takes place, and seven or eight days may elapse before the tongue has attained its natural size. Although the natural tendency of the disease is towards resolution, this happy termination does not invariably occur. It may go on to chronic induration or end in chronic glossitis. Several cases of hemiglossitis resulting in imperfect resolution have been recorded, one half of the tongue, remaining perceptibly larger than the other; one such case is mentioned by Dr. Graves, who states that in spite of his deformity the patient was able to speak perfectly. I am not aware of any case in which the glossitis was bilateral that is said to have terminated in a permanently enlarged tongue, but surely it is not unlikely that such an event might occur. We should not easily perceive it, as the advantage derived from a comparison of the two sides of the tongue available in cases of hemiglossitis would of course be lost. Another termination of acute glossitis is in suppuration, which may be diffused or circumscribed; the former variety rarely occurs. However, one case, in which death occurred from laryngitis, was recorded by Mr. J. Z. Lawrence, where the hyoid muscles and root of the tongue were infiltrated with purulent material. But the circumscribed form seems to be more common. Three out of the above-mentioned sixteen cases were followed by a circumscribed accumulation of pus; in two cases it was situate towards the root of the tongue. Recovery quickly followed evacuation of the pent-up matter. Gangrene may take place, but this is an extremely rare occurrence. One case of sphacelus of the tongue is reported by Mr. A. Pritchard, but the evidence that this was preceded by acute inflammation does not seem to be sufficiently clear. The diagnosis presents no difficulty; the enlarged tongue, profuse salivation, and other symptoms of the disease are characteristic. Nevertheless, in a paper published in the *Practitioner* some months ago, Dr. S. Mackenzie described some conditions liable to be mistaken for it, amongst which were salivary calculus, acute ranula, and abscess in the floor of the mouth. Most writers consider acute glossitis to be a strictly catarrhal affection; Mr. Butlin, Dr. Mussy, and Sir Dyce Duckworth are quite agreed upon this point. In two of the above eighteen cases it succeeded a "pharyngo-laryngitis," in one it followed "erysipelas and sore-throat," and in another the patient was being treated at the time for acute rheumatism. In the majority of cases the patients attribute their illness to "catching cold." It occurs more often in men than women, and chiefly in young adults, although in one of the above-mentioned cases the patient was eighty years of age. It generally affects both sides of the tongue; out of the eighteen cases it occurred eleven times bilaterally and six times unilaterally (in four instances on the left and in two on the right side), and in one case it attacked each side of the tongue in succession, being first on the left and afterwards on the right side. In a case of hemiglossitis reported by Mr. Bellamy, in which both sides of the tip were affected, attention is drawn to the fact that the median septum is thick and strong posteriorly and mesially, but thin and delicate towards the tip, and it is suggested that in cases of hemiglossitis which become general the inflammatory process may probably extend from one side of the tongue to the other through the thin part of the septum at the tip. With regard to treatment little need be said; it is very simple. The less severe cases usually subside in a few days, no active interference being necessary. The diet should consist entirely of slops; a saline aperient is generally indicated; and the mouth may be washed out with a disinfectant lotion, a weak solution of permanganate of potash answering the purpose very well. In the more severe cases, it is the general opinion that incision of the substance of the tongue is the correct mode of treatment; it relieves tension, diminishes the risk of sloughing, and certainly alleviates the pain.

GREENOCK INFIRMARY.

A FEW NOTES ON THE SYMPTOMS AND TREATMENT OF THE VICTIMS OF THE DISASTER AT CRARAE.

(Under the care of Dr. FOX.)

FOR the following notes we are indebted to Mr. Alex. D. Pithie, assistant house-surgeon.

On Saturday, Sept. 25th, a large number of excursionists went by steamer to witness the explosion of seven tons of gunpowder at Crarae quarries, Lochfyne-side. These quarries are situated on the side of a hill, and form a large bowl with only a narrow entrance. After the explosion the excursionists landed and walked to the quarry, about a quarter of a mile off. No sooner had they entered the bowl of the quarry than they began to stagger and drop down in all directions. With difficulty they were brought out, when it was found that six were dead and a great number unconscious. Eventually all of them recovered under the treatment used by medical men on the spot, except seven, who were sent to this institution.

On admission, all but one were found to be comatose. This patient had been violent, but could now be induced to keep to bed by gentle coaxing. The general symptoms were as follows:—The breathing was slow, deep, and stertorous (in the fatal case it was short and shallow, with stertor). The faces were flushed, and the veins on the neck and forehead distended. The eyelids were closed, and the pupils in every case were dilated on admission (in the fatal case these contracted just before death), but responded to the stimulus of light. The extremities were cold. There had been involuntary evacuation of the bowels in every case. As to the bladder, it was impossible to come to any conclusion, but on passing the catheter only a few ounces of urine could be drawn off. There was a very strong odour from the breath of each patient, which might be described as sweet-feculent. The pulse in each case was slow, but full and regular. All the temperatures were at first subnormal. The patients were all unable to swallow.

When admitted, the sufferers were at once stripped and put to bed; sinapisms were applied to the extremities, nape of neck, and spine; hot bottles were placed between the legs and along the thighs and side, also to the feet; the catheter was passed, and the urine drawn off. The bowels were first cleared out by a purgative enema of castor oil and turpentine, and afterwards stimulant enemata of beef-tea and brandy administered at intervals of about three-quarters of an hour. Friction was applied to the extremities and body. In the fatal case, ether was given hypodermically when the pulse began to fail (which it frequently did), with the effect of temporarily restoring the heart's action. The tongue was drawn forwards, and strong friction used to the chest and sides. Ammonia vapour was tried, also galvanism along the spine. These means were, however, of no avail, as the patient died of syncope about 9 A.M. on the 26th. Just before death very strong reaction set in. There was very profuse perspiration, the pupil contracted, and the temperature rose to a little over 101°. The peculiar odour of the breath was noticeable in every case, also the involuntary evacuation and dilated pupils. As to the bladder, it was impossible to say anything about the involuntary micturition, inasmuch as, although their clothes were wet, this might be attributed to the very heavy rain which fell at the time. All the temperature being subnormal might or might not be also attributed to the inclement state of the weather, and perhaps also to the long journey in the steamer before they reached the hospital. This might also apply to the cold extremities.

After being put into bed, and the means described above used, the patients became bathed in a warm perspiration. In two cases the transition from coma to consciousness was accompanied by delirium. This in one case was so violent as to necessitate the use of a strait-jacket. After the full return of consciousness the patients felt very weak and much prostrated, and in one case (the longest unconscious there was slight frontal headache and giddiness on a

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mental exertion five days after the accident. In no case was there any secondary complication. The shortest time of return to consciousness in the hospital was twelve hours after the accident, and the longest about forty hours. The patients say they do not remember any peculiar feeling at the time of the accident, except one, who says he felt as though he were being suffocated by sulphur fumes. To sum up, it may be stated that all had the appearance of narcotic poisoning, and that the lines of treatment used were based on the management of such cases.

Medical Societies.

CLINICAL SOCIETY OF LONDON.

Congenital Malformation of Heart.—Undeveloped Sexual Organs and Congenital Defect of Tonsils.—Pulsating Tumour of the Head, with Raynaud's Disease.—Renal Lithotomy.

THE first meeting of the session of this Society was held on the 8th inst., Mr. Thomas Bryant, F.R.C.S., President, in the chair. The new volume of the Transactions of the Society was laid on the table for inspection.

Dr. CHARLEWOOD TURNER read a case of Congenital Malformation of the Heart, with Systolic and Prediastolic Basic Bruits, and made observations on the causation of bruits preceding the cardiac sounds. The case related was that of a cyanotic boy, aged six, under observation for four years with the same symptoms. A systolic bruit was audible over the pulmonary valve, followed by a well-defined "prediastolic" bruit running up to an accentuated second sound, and accompanied by a slight thrill. The bruit was conducted down the sternum. In regard to this case, it was pointed out: 1. That the character of the "prediastolic" bruit, and the associated phenomena prove its endocardial origin, and that a basic valvular bruit of this character can only be due to regurgitation arrested by delayed closure of rigid valvular curtains. 2. That with a rigid and defective but not incompetent valve there must be some reflex, which would, if of sufficient duration, produce a bruit with all the features of that heard, and the occurrence of such cases shows that the interval of the diastolic period preceding the second sound may be sufficiently prolonged for the production of a distinct bruit, while their rarity shows that this interval is appreciable under exceptional conditions only, as with a high degree of stenosis of the pulmonary orifice and hypertrophy of the right ventricle in the present instance. In regard to the bearing of such cases on the question of the causation of the "presystolic" bruit, it was pointed out: 1. That with a rigid and defectively acting, but not incompetent, mitral valve also, there must be reflux in the interval of the systolic period preceding the closure of the valve and first sound, which would, if of sufficient duration, produce a bruit with the distinctive features of the presystolic bruit, in these being referable to predominance of vibrations in the freely hanging curtains of the patent valve over fluid vibrations in the production of the bruit. 2. That the conditions are much more favourable to the production of a "presystolic" than of a "prediastolic" bruit by reflux: *(a)* The general expulsive ventricular systole which commences from a state of relaxation being slower than the impulsive action of the elastic resilience of the distended vessels; and *(b)* its commencement at the apex of the ventricle being separated by an interval from the first acts of the contraction of the cavity by the muscular fibres encircling the mitral orifice: this basal contraction, closing up and drawing aside the interpapillary space and propelling the blood into the apex and infundibulum, being preparatory to the general systole by which the blood is grasped and expelled, and seeming to represent the passage of vermicular contraction along the first limb of the vascular loop of which the heart is a development. Thus the occurrence of a "prediastolic" basic valvular bruit implies the more frequent occurrence of "presystolic" mitral bruits similarly produced. This fact seems thus to fully corroborate the views of the late Dr. Barclay as to the causation of this bruit, and at the same time to remove the basis on which the alternative auriculo-systolic hypothesis rests—the assumption, that is, that there can be no appreciable interval between the acme of auriculo-ventricular influx and the first sound. To this hypothesis it is directly objected that to refer a bruit running up with progressive intensification to an accentuated first sound supposes a forcible and impulsive ventricular contraction, of which there appears to be no evidence or probability, and is incompatible with the character of cardiographic tracings in such cases, which show a well-marked interval between the summit of the auriculo-systolic elevation and the ventricular systoles. Supposing these elevations to represent the force of influx into the ventricle, the tracings seem to be inconsistent with the hypothesis; but reasons are given for regarding them as indicative of the completion of the auricular systole—i.e., of the first act of ventricular contraction, and commencement of "presystolic" reflux where the valve is rigid. Reference is made to the occurrence of a "presystolic" bruit or modification of the first sound with that character in the absence of mitral stenosis, as another clinical observation according with Dr. Barclay's views, but not satisfactorily explicable on the alternative hypothesis. The conviction is expressed that Dr. Barclay's view of the causation of the "presystolic" bruit not only affords a sufficient explanation of the clinical facts, but the true interpretation of them.—Dr. CARRINGTON argued from a case of presystolic bruit, in which the left auricle had been filled with clot, that auricular contraction could not be the cause of the murmur.—Dr. COUPLAND said that the presystolic bruit was a definite one; it was of minor importance whether the bruit was due to blood flowing away from the ventricle or to blood flowing towards the ventricle. Clinically such distinctions were of little value.

Mr. A. PEARCE GOULD read a paper on a case of Undeveloped Sexual Organs, associated with Congenital Defect of the Tonsils. It was that of a male, aged twenty-seven, over 6 ft. high, slender, with fair, soft, smooth face, a boy's voice, and no hair on his face. The penis and both testicles were small, but the right epididymis was thickened, which Mr. Gould attributed to a blow on the part when the boy was eleven years of age. The prostate could scarcely be felt through the rectum, and the seminal vesicles could not be felt. The man had no sexual desire; the only sign of any sexual activity was occasional slight priapism. There was an oblique inguinal hernia on the right side. The pillars of the fauces were close together, and only very small tonsils could be seen or felt between them. Mr. Gould said the case raised the question whether there was any intimate connexion between the tonsils and the testicles. It was a popular notion that excision of the tonsils before puberty endangered virility, and Dr. Shorthouse, quoted by Dr. Ogle, was named as a writer who spoke of such an effect as a matter of common observation. The shrinking of enlarged tonsils, and the cessation of repeated attacks of tonsillitis at puberty, were adduced in support of the influence of sexual maturity upon these organs. On the other hand, in Zanzibar, where all boys have their tonsils excised, the testicles are well developed, and the operation now is so common that, were it liable to be followed by such a grave result as non-development of the sexual organs, abundant evidence of this fact would be forthcoming. The removal of an enlarged organ was different from its imperfect development, and might be attended with different results. Mr. Gould had seen two women with absent or undeveloped ovaries, and in whom the tonsils were of full size; and Dr. Langdon Down, who had seen many cases of imperfect sexual development, had not observed any associated change in the tonsils.—Mr. THOMAS BRYANT considered that there was no special relationship between the atrophy of the tonsil and testicle.—Dr. FELIX SEMON agreed with this opinion, and said that the size of the tonsil was very variable in the adult and appeared to have no relation to virility. There might well be a remote connexion between the tonsils and the testicles. Enlargements of adenoid tissue anywhere had a tendency to disappear after puberty. Authors had described cases of defective development of the tonsil associated with longitudinal slits in the anterior arches of the soft palate.—Mr. WARRINGTON HAWARD, speaking of the alleged connexion between the tonsil and testicle, said that in tonsillotomy removal of a portion of hypertrophied tonsil was all that was practised. What would happen to the testicle if the whole of the tonsil was removed could not be stated. In his opinion the man had as much tonsil as many virile individuals. That there was some connexion between the activity of the genital organs and of the tonsils he could not doubt; in many women the process of menstruation was attended with temporary swelling of the

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tonsils.—Dr. HINGSTON FOX thought the atrophy of the tonsils and that of the testicles were mere coincidences. The diminution in size of the tonsils at puberty was but part of a general diminution of organs composed of adenoid tissue, and might be attributed to a lessened demand for leucocytes. At the period of menstruation there was general slight temporary congestion of lymphatic tissues.—Mr. RICKMAN J. GODLEE asked whether the patient had had mumps.—Mr. PEARCE GOULD could not say for certain whether the man had had mumps; the past orchitis was believed to be due to a blow from a cricket-ball.

Mr. F. TREVES read notes of a case of Pulsating Tumour of the Head, with Raynaud's Disease, and produced the patient for examination. The patient, a lad aged seventeen, complained of severe frontal headache, vomiting, and vertigo. These symptoms had existed for twelve months. Both carotids were considerably enlarged, as were also the temporo-facial and internal jugular veins. Over the arteries a loud and harsh bruit was to be heard, and a thrill felt. There was no arterio-venous communication. Certain vessels of the scalp were dilated. The right side of the face was a little larger than the left, the right facial muscles also acted with greater vigour. The right side of the tongue was larger than the left. The right eye was more prominent than the left, and the right palpebral fissure was the larger. There were nystagmus and occasional diplopia. The left external rectus was weak. The patient was liable to "hot sweats." Over the left mastoid region was a cirsoid aneurysm of peculiar character. It was the seat of an intense bruit. The skull beneath the tumour was marked by a number of irregular channels. There was a second pulsating tumour over the occiput. It was venous, and communicated through a fissure on the skull with the superior longitudinal sinus. It was the seat of a certain pulsation, but presented neither thrill nor bruit. The tumour was readily reduced. The sphygmographic tracings of the two swellings revealed remarkable differences. In the venous tumour the respiratory curve was evident. The pulsation in this tumour was derived from the brain. The skull presented certain irregular gaps and fissures, which appear to have been caused by veins in a state of congenital dilatation.—Dr. HALE WHITE thought that an explanation of the case founded on the idea that the sympathetic system was at fault was but ill-founded. Exophthalmic goitre should be remembered in connexion with the case. As to Raynaud's disease, he could not but think that the terms defective circulation and venous congestion would explain the appearances.—Mr. TREVES, in reply, said that he had not attempted to explain the whole case, but only the origin of the venous tumour. Whatever the boy's state was, it was certainly not one of venous congestion.

Mr. BUTLIN read some further notes of a case of Renal Lithotomy published in the Transactions of the Society, vol. xv., p. 113, 1882. In a letter received on Feb. 3rd from the patient's father (a medical man), he says:—"About a fortnight ago he had a good deal of pain in the left loin, very much as he used to have in the right. I found he was passing small pieces of calculus soft and friable, and that the urine was alkaline. I kept him quiet for a few days and gave him nitro-hydrochloric acid. The wound is now entirely healed, the urine normal except a little mucus occasionally, the pain in the loin quite gone, and I am happy to say he is progressing most satisfactorily. In December, 1882, I had received a note from the patient himself to say that at the end of the year he was quite sound and in excellent health." Again on Sept. 15th of the present year he had received information that the patient was quite well, and enjoying himself in South Africa. It had, he said, been proposed that in cases similar to this one the entire kidney should be removed. If this had been done in the present instance, not only would the risk have been materially increased, but when the other kidney was attacked the danger would have been very great.

OBSTETRICAL SOCIETY OF LONDON.

A MEETING of this Society was held on Wednesday, Oct. 6th, Dr. J. B. Potter, President, in the chair.

THE following specimens were shown:—Dr. Malins: A Dermoid Ovarian Cyst. Dr. Lewers: (*a*) Microscopical Sections of a Uterus affected by Malignant Disease; (*b*) a Fœtus from a Ruptured Tubal Cyst, successfully removed through Douglas's pouch. Dr. J. Phillips showed an Ovum expelled thirty-four days after conception. Dr. R. Boxall exhibited the Thoracic Viscera of a woman who died in childbed with symptoms of pulmonary thrombosis due to dislocation of the heart into the left pleural cavity. Dr. W. Duncan and Mr. W. B. Sutton showed the Ovaries and Tubes from a case in which there was a hæmatocele due to rupture of the left ovary; also a pair of Ovaries removed for the cure of dysmenorrhœa.

Ruptured Uterus.—Dr. J. G. SWAYNE gave a description of four cases of ruptured uterus occurring in his practice—two complete and two incomplete. The first occurred about the middle of utero-gestation, and was not clearly traceable to any accident. The uterus appeared to have given way during the effort to expel a putrid five months' fœtus. The woman died undelivered, and a laceration was found in the anterior wall of the uterus, through which the child had passed, so that it lay between the uterus and bladder in a pouch formed by the peritoneum reflected from one to the other. In the second case labour had been induced at eight months, and the rupture had apparently arisen from a transverse presentation and the spontaneous expulsion of the fœtus, in a doubled state. In neither of these cases was the peritoneum torn. The third case was one of complete laceration, and the accident took place during the course of an ordinary labour at full term in a woman with slight pelvic deformity. She was delivered by craniotomy, but died on the fifth day after delivery. The fourth case was one of complete rupture, and occurred in a multipara during an ordinary labour. The child, which had partly escaped into the abdomen, was delivered by turning. Laparotomy was performed, the abdomen was thoroughly cleansed, and the wound in the uterus united by several sutures. Death took place within an hour afterwards.

Case of Rupture of the Uterus.—Dr. RICHARD COX gave the details of the following case. A multipara, aged thirty-eight, was taken in labour at 8 A.M. on May 2nd, and was attended by a midwife. Until 3 P.M. everything had appeared normal. The patient then suddenly screamed out, and became faint and sick. The expulsive pains ceased, but an agonising pain in the abdomen was complained of. Dr. Cox was sent for, and, being from home, arrived about 6.30 P.M. The patient was then moribund. After administering some stimulant, Dr. Cox passed his hand into the uterus, which was empty, and finding a rent of five inches in the anterior wall, he was able to seize a leg and bring the child back from the abdomen, together with the placenta, and to deliver them pretty quickly. There was some difficulty with the head, which was arrested at the brim by a slight contraction. The patient died shortly afterwards. She had had natural confinements previously.—Dr. BRAXTON HICKS said that so many points presented themselves that it was difficult to select, but he thought, when delivery had been effected and the uterus was found paralysed, when the rent was so large that a prolapse of the intestines occurred through the rent, that in such a case the best plan was to perform Porro's operation rather than to leave the case to its almost inevitable fate.—Dr. HORROCKS thought operations per vaginam difficult, if not impossible, to carry out, and that abdominal section seemed the only method offering any hope. The question between carefully stitching up the rent or removing the uterus should be decided after carefully examining the site and size of the rupture, and more particularly the condition of the torn parts. If the laceration were severe, as usually was the case, Porro's operation would be best. If the edges were clean cut, they might be carefully brought together by sutures.—Dr. ROUTH said that, while agreeing with Dr. Braxton Hicks, there was another rule not one whit less important. When the case was ascertained to be one of rupture of the uterus, it was an unnecessary piece of cruelty and malpraxis to attempt to extract the child per vaginam, irritating the bowels with your hand, and running the risk of enlarging the tear in the uterus or increasing hæmorrhage and shock. The rule should be to proceed at once to abdominal section. Whether in cases of the tear being very ragged Porro's operation were preferable to sewing up the uterus might admit of question, but in any case the child should be extracted without delay by abdominal section, and not per vaginam.—Dr. GALABIN thought that, notwithstanding the improvements in modern surgery, rupture of the uterus, involving the peritoneum, would always be a very fatal accident. He had no doubt that, in cases where the child had escaped

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through the rent, and the patient's condition permitted any interference, the operation should be abdominal section, and not removal of the child through the vagina. The empty and partially contracted uterus would occupy more of the pelvic diameter than when stretched over the fœtus, and extraction through the pelvis might be difficult, and increase the injury to the soft parts. He thought Porro's operation would be rarely advisable, as in all the cases he had met with the rent had commenced in the vagina or lower segment of the uterus, and in such cases it would be impossible to remove the whole rent by Porro's operation. When the rent was higher and ragged, this operation might be preferable. —Dr. CHAMPNEYS thought everyone must agree with Dr. Routh, that after the diagnosis of rupture of the uterus and escape of the fœtus is once made, no attempt should be made to extract the fœtus *per vias naturales*, nor should any second person examine per vaginam. He thought that Porro's operation (taking advantage as it did of all the latest antiseptic improvements) had been compared with the old-fashioned non-aseptic Cæsarean section, and to the advantage of Porro's operation. The recent improvements in the Cæsarian operation by Sänger, who uses numerous deep silver sutures and superficial silk ones, so as to leave no communication between the uterus and peritoneum, had shown that the comparison was fictitious. He doubted if Porro's operation should in any case be preferred, as part of the rent is so frequently below the line of amputation, not to mention the additional injury caused by it.

Papilloma of the Fallopian Tube and the relation of Hydroperitoneum to Tubal Disease.—Mr. ALBAN DORAN read a paper on this subject. Papilloma of the Fallopian tube is, he said, a rare disease, but may exist and produce marked symptoms. The papillary growth may represent not so much a true tumour as a product of inflammation. It is at least not malignant. In this disease a pelvic tumour, which may extend into the hypogastrium, always exists. Pain does not appear to be essential, and when present is possibly due to other disorders. Two cases, both under the author's observation, were described. In one case the affected tube was closed, the symptoms were entirely pelvic, and no hydroperitoneum was present. This case showed that papilloma of the tube may simulate hydrosalpinx. In the other case the ostium of the tube remained patent, and hydroperitoneum persisted till the diseased tube was removed. There was positive evidence that secretion escaped from the ostium. For reasons given at length in the paper, the latter case suggested that the disease described as hydroperitoneum, and understood to signify effusion into the cavity of the peritoneum due to disease of that serous membrane alone, may frequently, though not invariably, be due to mild chronic catarrh of an unobstructed Fallopian tube.—The discussion of this paper was deferred till the next meeting of the Society.

LEEDS AND WEST RIDING MEDICO-CHIRURGICAL SOCIETY.

THE first meeting of the session was held on October 8th, the President, Dr. C. S. Smith, in the chair.

The PRESIDENT, in his opening remarks, alluded to the recent lamented death of Dr. Chadwick, who had taken great interest in the formation of the Society, and was its first president. He congratulated the members on the present flourishing condition of the Society, which he attributed to the fact that they eschewed ethical questions, and that their discussions included the theory no less than the practice of medicine.

Reunion of Tendons.—Mr. JESSOP showed three patients, in whom divided digital tendons had been reunited by suture. In two cases the flexor, in one an extensor, tendon was affected. He remarked that the distal end of the tendon was in each case found at some distance from the wound, and required some force to bring it into position. The result in each instance was very good.

Trephining for Paralysis.—Mr. ROBSON showed a patient whom he had trephined over the left brachial centre for paralysis of the right arm, caused by a blow on the head a week previously. A small spicule of bone was removed. The operation was followed by complete recovery of movements of the arm.

Simultaneous Distal Ligature of the Right Carotid and Subclavian Arteries for an Aneurysm of the Innominate Artery.—Mr. HARTLEY showed a case in which he had performed this operation. The operation was performed on Sept. 1st, 1885, the patient being then almost *in extremis* from the pressure of the tumour on the larynx and œsophagus. She slowly recovered, and still remains in very fair health, but there is now a return of pulsation in the innominate region.—Mr. WHEELHOUSE suggested the employment of galvano-puncture.—Dr. CHURTON mentioned a case in which the patient died twenty minutes after galvano-puncture, due to the rupture of another part of the sac. The part operated on contained only a soft gelatinous clot, which he thought would prove rather a source of danger than relief.—Dr. BARRS thought galvano-puncture ought to be tried. He mentioned two cases in which benefit had been derived from it.—Mr. WARD mentioned three cases under the care of Mr. Jessop of distal ligature of the subclavian and carotid. In the first silk ligatures were used, and death ensued from secondary hæmorrhage on the forty-ninth day. In the second catgut ligatures were used, but the aneurysm was not cured and the patient was lost sight of. In the third silk ligatures were employed and secondary hæmorrhage occurred, which was stopped for two days by a ligature applied to the carotid, and, on a recurrence of the hæmorrhage, by galvano-puncture. He remarked on the advisability of using catgut ligatures.—Mr. MCGILL suggested the ligature of the vertebral artery.

Laparotomy.—Mr. LAWFORD KNAGGS read notes of two cases in which laparotomy had been performed for chronic obstruction of the small intestine. In both tubercular disease was found to be the cause by matting the intestines together. One case proved fatal; the other recovered from the obstruction, though the operation consisted only of an exploratory incision. He remarked on the satisfactory result in the second case, and discussed the possibility of the incision having exercised a good effect on the disease. He thought that a large proportion of cases of chronic obstruction of the small intestine might be relieved by operation, and that in all cases not obviously hopeless exploration should be undertaken. To the three methods hitherto adopted—viz., enterotomy, division of adhesions, and resection—he would add a fourth—viz., the union of the intestine above the obstruction to that below, in the same manner as had been adopted in the excision of the pylorus for cancer.—Mr. PRIDGIN TEALE mentioned a case where laparotomy was performed and cancer of the sigmoid flexure found, but, curiously, before colotomy could be performed, the patient's bowels were freely moved.—Mr. MAYO ROBSON said he had found, in two cases where he had opened the abdomen in tubercular disease, great relief ensuing to the general symptoms after the operation.

Case of Chronic Anterior Poliomyelitis and Paralysis of all kinds. Dr. CHURTON showed this patient, a woman aged twenty-six, who, after being paralysed for several months, had regained muscular movement and strength. The progressive atrophy began after her delivery of twins in January, 1884; the paralysis of limbs was almost complete in August, 1885. Sensation was perfect. Faradaism and tonics seemed useless; potassium iodide did harm. A hopeful prognosis was given, of course with reserve. She was subsequently well cared for in a healthy house in the country, but used neither drugs nor galvanism. In August, 1886, she could walk fairly well, now almost perfectly, and the deltoids and other muscles were now also normal. Dr. Churton thought this a striking example of the tendency of tissues originally tolerably sound, but damaged by temporary causes, to reassert themselves under favourable conditions.

MEDICAL INSPECTION IN BROOKLYN.—The Brooklyn Commissioner of Health, Dr. Andrew Otterson, has inaugurated in that city a system of medical inspection and relief in the tenement-house districts, with special reference to the diseases of infants during the heated season. Ten physicians have been appointed, each assigned to a special locality, who are instructed to search for sick children needing attention, and to care for them, furnishing medicine gratuitously where parents are unable to pay for it, and at a reduced price to those who can.

THE LATE DR. WELLS, OF READING.—The Town Council of Reading has approved a proposal to promote a memorial to the late Dr. Wells. Part of the amount to be raised is to be devoted to the providing of prizes for the students at the Reading Schools of Science and Art.

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Reviews and Notices of Books.

A Manual of Diseases of the Nervous System. By W. R. GOWERS, M.D., F.R.C.P. Vol. I. London: J. and A. Churchill. 1886.

IN the space at our disposal it is impossible to do justice to works like the one that lies before us. We must therefore confine ourselves to indicating the scope, matter, and manner of Dr. Gowers' book. This is the first volume of the manual, and deals with the diseases of the spinal cord and nerves. The student and practitioner will find in it a true friend, guide, and helper in his studies of the diseases of these parts of the nervous system. It is a most complete manual, presenting a thorough reflex of the present state of knowledge of the diseases of the spinal cord and nerves. The care and thought that have been bestowed on its production are evident on every page. In the presence of such ability, learning, and originality, criticism can only take a favourable direction. The style and manner are accurate, studied, and adequate—never diffuse. The illustrations call for special notice. They are numerous, new, and original. The author has largely pressed into his service the phototype processes of the Typographic Etching Company, and with good results. Some of the figures are truly excellent. The definition of Figs. 71, 82, 86, 88, 89, and 91 will bear witness to the truth of this assertion. The arrangement of the matter is simple and easy of reference.

Part I. opens with a consideration of the general symptomatology, including a description of the method of investigating symptoms. The chapter on the action and paralysis of muscles will prove of special value to the student when in the presence of cases of paralysis of individual muscles. Part II. treats of the diseases of the nerves, gives a careful account of nerve injury and degeneration, including therein the various changes in the electrical reactions of the nerves and muscles. The articles on multiple neuritis are some of the best in the book. Part III. commences with a complete account of the medical anatomy of the cord; it contains a diagram and description of "an element" of the motor path. This idea commands attention. An element of the motor path may be regarded, according to Dr. Gowers, as consisting of two similar segments, the upper and the lower. The upper segment consists of a large pyramidal cell, which communicates with the large spinal motor cell by means of a terminal ramification of nerve fibres, which is likened by the author to the terminal ramification at the distal end of the lower motor segment. We do not remember to have anywhere seen so clear a description of the mode of junction of the cerebral motor with the spino-muscular motor segment. In another part of the book Dr. Gowers points out that the nutrition and function of the terminal ramification of both motor segments are likely to be readily interfered with owing to the long distance of these termini from the source of trophic influence, which the author regards as the motor nerve cell itself; for the belief in the separate existence of trophic centres he sees no warrant. Curare paralyses the termination of the lower motor segment. It is asked whether there are not drugs and other causes which may annihilate the function of the terminus of the upper segment. This upper terminus is regarded as possibly of the nature of a local inhibitory centre, loss of the function of which would lead to "permitted hyperphysiological activity" of the spinal motor centres. The pathology of functional or hysterical paraplegia may be explained in accordance with these views. Suppose from any cause the motor centres of the cerebral cortex have their nutrition lowered, this lowering would tell most and first on the terminal ramification of the pyramidal fibres in the cord, and naturally on those fibres which had the longest course in the cord, consequently those of the leg. Taking this idea into consideration with what has been said anent local inhibitory centres, it will be seen how "functional" or "nutritive" spastic paraplegia may be accounted for.

In forty pages devoted to locomotor ataxy we think the student and practitioner will find, considering the small amount of space occupied, the most harmonious and full account of the disease in the English, German, or French language. The chapters on the varieties of muscular atrophy will be welcomed by all students, as conveying in a concise form all that is at present known of this complicated subject, whilst the discussion of the various forms of degeneration of the spinal cord is equally complete. The student and practitioner will be thankful also for the attention that the author has given to the treatment of diseases of the cord and nerves. Dr. Gowers has a good word in many places for massage, electricity, and other methods in vogue in the treatment especially of nervous diseases, but he also denounces the use of such remedies in other places, or at least asserts that in his experience in certain kinds of disease he has seen no good result to follow even carefully carried out courses of massage, &c.

Space exigencies forbid, or we should have liked to point out further excellences in Dr. Gowers' work. Whether we contemplate the erudition, meditate on the suggestiveness of the original matter, admire the illustrations, or think of the care that has been bestowed in apportioning the space to each subject according to its importance—from whatever point of view we regard this book, we must express the opinion that, judged by its first volume, no better manual on nervous diseases has been presented to the medical profession.

OUR LIBRARY TABLE.

Manual of Differential Medical Diagnosis. By CONDICT W. CUTLER, M.S., M.D. New York and London: G. P. Putnam's Sons. 1886.—Whilst admitting the general utility of such handy books of reference as the above, where in tabular form the reader finds presented the main features of difference between diseases that bear a superficial resemblance, yet we are sceptical as to their real educational value. To the student the advice should be to grasp the differences in clinical features by his own observation, and rather construct his own tables than rely on those already prepared for him by others. In saying this, we by no means desire to find fault with the way in which Dr. Cutler has planned and compiled his little book. We have given it a tolerably careful examination, and are pleased to find it accurate and intelligible. It is true, it would not be difficult to find fault with him for laying stress upon symptoms which are inconstant, or, at any rate, of such minor importance as to be of little service in differential diagnosis; but in the main he has succeeded in his endeavours to present to the student and practitioner a digest of symptomatology. The student must, however, guard against the mistake of allowing, for examination purposes, the information so choicely selected for him to replace the knowledge he personally would gain by diligent work in the wards.

Manual of Hygiene for Schools and Colleges. Prepared by the Provincial Board of Health. Pp. 293. Toronto: W. Briggs, 1886.—This book has been published under the authority of the Minister of Education in Canada "for use in all the schools under the control of the Education Department." It is intended to supply a want which has long been felt "of a work on hygiene, which would occupy an intermediate place between the elementary text-books for the use of children and the advanced treatises for practitioners of medicine, sanitary engineers, and other persons intending to become experts in sanitary science." It appears to be

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remarkably well adapted for the purpose for which it was prepared, and has evidently been drawn up by men well acquainted with the literature of the subject, and also possessing a thorough practical knowledge. A considerable amount of attention has been given to the subject of school hygiene, both as regards the furniture and fittings of the class-rooms, and the management of the pupils during the hours of study and recreation. The various influences likely to affect injuriously the vision of the children in schools are carefully discussed, and the subject of over-pressure has received a considerable amount of attention, and appears to be treated with sound judgment. The concluding chapter of the book contains the information usually given in the manuals on first aid to the wounded. As a whole, it is an excellent manual for the instruction of teachers in the important principles of sanitation, and in the measures necessary for the preservation of public health; and it has the advantage of a very copious index. It does the greatest credit to the Education Department of the Dominion of Canada, and to the members of the profession by whom it has been drawn up. A similar work for the use of our training schools, under the sanction of the Education Department, would be a valuable addition to our school literature.

Dr. Paul Boerner's Reichs Medicinal-Kalender, 1887. Herausgegeben von Dr. S. GUTTMANN. Theil I.: Geschäftliches Taschenbuch und Beiheft. Leipzig: G. Thieme. 1886.—The late Dr. Boerner in establishing this calendar did good service to his brother practitioners, and the favour with which it is received shows how that service was appreciated. The first part of the work consists in a substantial pocket-diary and almanac, with which is incorporated a vast amount of information—such as a table of the German Pharmacopœia and remedies outside its limits, with dosage and therapeutics, the table being compiled by Dr. Oscar Liebreich; lists of baths and mineral springs; hints for "first aid" in cases of sudden illness; symptoms and treatment of acute poisoning; a condensed list of diseases, &c. In the supplement we find sections on clinical thermometry and urinary analysis by Professor Jürgensen; on ophthalmological practice, with test-types, by Dr. Horstmann; otological, by Dr. Jacobson; and odontological, by Professor Miller. Anthropometrical tables, schemata for post-mortem examinations, and full directions for the bacteriological examination of sputum and intestinal evacuations, with illustrations of the comma bacillus, are also features of this little work, which comprises further sections upon the most important methods of hygienic research. It is a veritable *multum in parvo*, and we are not surprised at its popularity in the Fatherland.

Transactions of the College of Physicians of Philadelphia. Third series. Vol. VIII. Philadelphia: P. Blakiston, Son, and Co. 1886.—This handsomely printed volume contains many papers of considerable interest. Dr. H. C. Wood makes some remarks upon "Chronic Contracted Kidney with Normal Urine," in which he throws out the somewhat novel suggestion that in suspected cases a therapeutic test might be employed in the shape of cantharides or turpentine. "If on trial it should be found that a slight irritation would seriously affect the urine, the case should be looked upon with the greatest suspicion." Dr. A. V. Meigs reports on a "Case of Occlusion of the Vena Cava Superior," where a dissection displayed the course of collateral circulation by the internal mammary, intercostal, and azygos veins. Some cases of general anasarca and acute pulmonary œdema form the basis of a paper by Dr. E. T. Bruen on "Disturbance of the Normal Vaso-motor Tonus." Dr. Da Costa writes on the Hypodermic Use of Hydrochlorate of Cocaine (dose one-third to half a grain), in which mode its analgesic effect is, he states, not marked; but it acts distinctly as a cardiac stimulant. Dr. P. J. Mays gives the results of his inquiry into the Analgesic Effects of Theine, which he found to contrast with cocaine, but to be very efficacious. The same writer has an interesting experimental inquiry "On the Nutritive Value of Some Beef Extracts." Dr. H. Leffmann argues in favour of the prescription of pure alcohol in preference to ordinary fermented liquors. Amongst other papers worthy of notice are—"The Mechanism of Indirect Fractures of the Skull," by Dr. Dulles, copiously illustrated; "On the Anatomical Bearings of the Serous Covering of the Viscera," by Dr. Oscar Allis; "On Sunstroke and Heat Exhaustion," by Dr. Orville Horwitz; "On Photography of the Larynx," by Dr. T. R. French; "On the Basal Pathology of Chorea," by Dr. H. C. Wood; "On Raynaud's Disease," by Dr. J. H. Musser; and "On Constipation," by Dr. A. V. Meigs. The volume opens with obituary memoirs of Drs. John Light Atlee and George Hamilton, followed by an address by the retiring president, Dr. J. M. Da Costa.

Malarial Fever, as met with on the Gold Coast.—By C. H. EYLES. Printed for the Government of the Gold Coast Colony. London: Waterlow and Sons. 1886.—This is an interesting *brochure*, which bears evidence of considerable painstaking and scientific research on the part of its author. It is less of the nature of a clinical than of a pathological treatise, and is particularly valuable for the study it gives of the subjects of icterus and hæmoglobinuria in relation to remittent fevers. The writer's standpoint may be gathered from the following passage, in which he explains his subdivision of the phenomena of malarial fever into the essential and the secondary. "Under the essential I place the purely febrile phenomena—i.e., those met with in fevers generally—viz., elevation of temperature, with gastro-intestinal, circulatory, cerebral, urinary, and other disturbances, the distinguishing feature being that the fever is paroxysmal and periodic; so that in cases of remittent (single paroxysm) there will be diurnal variations of temperature, not necessarily at the times in which they occur in continued fevers, but determined by the time of onset of the paroxysm. And among the secondary phenomena I place those symptoms traceable to solution of hæmoglobin—viz., icterus and jaundice, hepatic and splenic complication, and hæmoglobinuria." He reprobates the introduction of the term "blackwater fever" to indicate the severe form of remittent, preferring the older term "bilious remittent." Sections are devoted to the etiology of malaria, and to treatment, which latter contains some useful hints as to the administration of quinine.

Hospital Reports; Middlesex Hospital.—This hospital is one of the few that publishes a fairly full report of the cases that have been under its care each year. The volume before us is for the year 1884, and contains the reports of the medical and surgical registrars, and also an account of the work done in the post-mortem theatre. For these reports the following gentlemen are respectively responsible: Dr. Pringle, Mr. Roger Williams, and Dr. Kingston Fowler. We have only the space to say in general terms that the volume is one that no registrar should be without, and one which any compiler of statistics would find replete with information of a certain order. There are special tables on enteric fever and malignant growths. The table of necropsies is very instructive.

Transactions of the American Ophthalmological Society: Twenty-first Annual Meeting. New London, Conn. 1885. Boston: Published by the Society. 1885.—In this part are several interesting papers. Dr. Bull records a case of abscess of both frontal sinuses. In this case an opening was made into the sinus, much fetid pus removed, and recovery resulted. Knapp recommends the use of the actual cautery in destructive corneal processes. Dr. Fryer gives a case of bony cystoid tumour of the orbit caused by and enclosing

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a piece of wood. Dr. Mathewson reports a case of epithelioma of the eyelid cured by applications of benzole and calomel. Dr. Dennett supplies a new form of test-type founded on correct principles, and Dr. Hasket Derby does good service in reporting two cases of penetration of the eyeball by scissors during the operation for strabismus. In these cases recovery took place, but if carelessly treated there would be much probability of loss of vision or of the eye, with a risk of sympathetic ophthalmia.

Studies from the Biological Laboratory of the Johns Hopkins University, Baltimore. Edited by H. NEWELL MARTIN and W. R. BROOKS. Vol. III., No. 5.—The present number is devoted to Embryology and Microscopy. Dr. H. Leslie Osborn gives a minute account of the development of the gill in Fasciolaria, accompanying the memoir with a plate in which the successive stages are clearly shown; and Dr. H. G. Beyer communicates a paper on the structure of Lingula (Glottidia) pyramidata, with four plates of illustrations.

Spasm in Chronic Nerve Disease. By SEYMOUR SHARKEY, M.B., F.R.C.P. London: J. and A. Churchill. 1886.—This book is a reprint of the Gulstonian Lectures, delivered by its author at the Royal College of Physicians of London in the spring of the year. We have already had occasion to speak in terms of much appreciation of these lectures. We need now only say that the profession will doubtless be thankful to the author for supplying them with his valuable facts and inferences on spasm in chronic nerve disease in a separate and easily procurable form.

REPORT OF THE MEDICAL OFFICER OF THE LOCAL GOVERNMENT BOARD.

[SECOND NOTICE.]

IN our former notice of this Cholera Report we referred to the attitude of the British delegates at the Rome Conference in resisting the imposition of a five days' quarantine on ships which an internationally appointed medical officer might choose to regard as infected, in the place of trusting to the system of sanitary administration which has been carried out in this country, where an average annual expenditure of some £8,000,000 is voluntarily sustained for this purpose. This attitude, which was consistently maintained by all the delegates from this country, evidently led to the break-up of the Conference, for, as Dr. Buchanan points out, after an adjournment it never met again. But it must not be thought that the labours of the Conference have been inconclusive. Referring again to Dr. Thorne Thorne's account of the proceedings of the Conference, we find that at the date when the delegates were originally intended to reassemble, the Italian Government, which in the meantime had had opportunity of considering the attitude of the majority of the Technical Commission, including their own delegates, in this matter, issued a *Mémoire*, which cannot fail, in the long run, to have an important influence on any future international gathering called together to deal with this subject. Summarising this *Mémoire*, Dr. Buchanan explains that it indicated that an international understanding on the sanitary *régime* of the Red Sea and the Suez Canal had become imperative; that the existing professions of control over isolation and disinfection were utterly vain for any sanitary purpose; that reforms of practice in the Red Sea and the Canal were imperative; and that it went on to declare that the adoption of the reforms indicated would allow of such free use being made of the canal as a highway, as England had contended for at the Conference, permitting the abolition of existing restrictions upon the movements of vessels, not only in the case of English shipping, but in the case of vessels of all nations. Such a document, emanating from the Government of the country which called the Conference together, must be regarded as of high value; and we, at least, are satisfied to find that it entirely endorses the contentions of our delegates.

In Dr. Thorne's account of the distribution of cholera in Europe, in 1884-86 we find that for each year there is a statement of the importations of the disease into this country. These importations were few in number, but none of them led to any extension of the disease. As to this the annual report makes no boast, but it with reason implies that English sanitary administration may claim some credit for the result, and it proceeds to detail the action taken in this country in view of the European epidemic. Under Dr. Buchanan's supervision, and with the aid of Dr. Ballard as a senior inspector of long experience, a staff of medical inspectors was employed in 1884 and 1885 in visiting the port, riparian, and inland sanitary districts; those districts being specially selected for inspection where the Local Government Board knew, from previous reports and visits, that conditions of soil, water, or air pollution had existed which indicated a state of unpreparedness to resist the infection of cholera. These inspections were followed by interviews with the sanitary authorities of the districts in question, who were urged to remedy such conditions as called for remedy and to provide themselves with means for isolating first cases of disease. The total action taken in this way is shown by means of special reports by Dr. Ballard on the survey generally, and by Dr. Blaxall, R.N., on the principal port and riparian districts, and the whole is summarised in a more or less tabular document covering over two hundred pages. At first sight such a report appears eminently uninteresting; but, for all this, it is perhaps that portion of Dr. Buchanan's report of which this country may well be most grateful and most proud. Where responsibility for sanitary duty was found to be wanting, the inspections, we are informed, often "conduced in valuable measure towards its development"; and where local authorities were desirous of performing their sanitary duties towards their own districts and the kingdom generally, they were "greatly aided by the inspectors' visits, and have been correspondingly grateful to the Board for the advantage thereby afforded them." Such work as this, extending as it has done all over the country, must materially have advanced the interests of the community in the matter of health, and we can well believe Dr. Buchanan when he states that the duty of caring for the public health is by such measures becoming "increasingly apprehended by English communities." So also the action taken by means of this survey goes far to show to European and other nations that the opposition shown at the Conference to quarantine *versus* sanitary administration was not based on any considerations of commercial interests or economy. Although this country has for years past devoted large sums of money to the improvement of public health, the moment a European danger appeared additional expense was incurred by the central authority on the advice of their Medical Officer, and increase of expenditure and of vigilance was pressed upon local authorities. By such means the country not only arms itself in the best known way against invasions of cholera, but, at the same time, it succeeds in reducing the amount of its sickness and death from all causes. But this tabular report has further advantages. It contains at one glance an indication of the sanitary state of a vast number of our sanitary districts. Thus, if a visit to the seaside is contemplated, and doubt exists as to whether Dover or Shoreham should be selected, the reader may turn to the volume and find that at Dover the town is sewered throughout, the ventilation and flushing being satisfactory; that the watercloset system is satisfactorily arranged; that refuse-removal is satisfactory; that the water-supply is one on the constant service system; that the work of the medical officer of health and inspector of nuisances is satisfactory; and that as regards other matters, progress is steadily arrived at. Turning next to New Shoreham, he will learn that the sewers are insufficiently ventilated, whilst private drainage is defective and a source of nuisance; that the waterclosets are mostly without flushing arrangements, and, as such, are a nuisance; that refuse-removal is not altogether satisfactory; that though the town has a public water service, local wells are liable to surface contamination, and that some houses have no supply; that though the work of the medical officer of health is "fair," that of the inspector of nuisances is unsatisfactory, and that sanitary administration is "lax." Had this report been issued earlier, perhaps some who suffered during the recent epidemic of typhoid fever in Shoreham might have escaped. Anyhow, this volume should be in the hands of every medical practitioner who has to advise his patients as to which localities they may visit with benefit, or which they should studiously avoid. The public also may well consult it in the same sense.

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THE LANCET.

LONDON: SATURDAY, OCTOBER 16, 1886.

THE Introductories have been duly delivered, and if half the good thoughts and good advice they contain are taken to heart by the students there will in a few years be a great gain to the profession. We believe, after all, in a good Introductory. The voyage on which a medical student enters in October, and which is to last for three or four years, is beset with dangers as well as duties. It may be made very pleasant or infinitely painful, and the burden of all the Introductories is the same. They aim at inspiring the love of truth, and encouraging its pursuit at all hazards. The history of discovery, or of individual men, whose fame has added lustre to their particular school, is in turn used by the lecturer, and used with such success that the student must blame himself if he enters on his great career with low aspirations and poor motives. We should advise each student to read all the addresses. There is much variety of conception and execution in them, and they will amply repay the time and trouble spent in their perusal. The thoughts of other teachers, and the history of other schools than his own, will save him from narrowness, and will supply him with arguments in variety for dutifulness and virtue. A very short experience will suffice to introduce a student in any school to men who affect to be wiser than their teachers, and who receive the loftiest thoughts with indifference or something worse. An Introductory Lecture to them is no gain. Nothing in it excites their admiration. They speak as if they had lived longer and seen more than their teachers, and as if it were a favour in them to be present, even if their object be to distract and disturb those who come to listen and to profit. Such men are in a minority, and it is very desirable the minority should be a still smaller one. Let any well-meaning student study the Introductories, and regard with some suspicion those who disparage them. It is impossible, and it would be somewhat invidious, to single out individual lectures for praise or blame. It would be useful for each student to put down on a piece of paper the great points in the Address of each lecturer and bear them in mind during his whole course of study. The character of medical students is well vindicated by Dr. WADHAM, and also by Dr. BISS in his lecture at the Middlesex Hospital. Dr. BISS showed that at Cambridge during the last eight years, while the number of medical students has increased from fifty to over three hundred, there has been an immense gain to order, decency, and morality. Dr. WADHAM argued with much ability against the necessity for providing home discipline and accommodation for medical students. The argument showed the complicated nature of the question, and the difficulty of giving to any Collegiate authority in London the powers enjoyed by the Universities of Oxford and Cambridge. Sir BENJAMIN BRODIE'S experience, that the ranks of medical students contain a large number of young men diligent in the pursuit of knowledge and decorous in their general conduct, is very valuable, and was certainly never more true than it is to-day. But no wise student would underrate the value of a home in which home virtues can be cultivated, and something like home authority used to promote regularity of habits and steady application to work. St. Thomas's Hospital was fortunate in having Dr. BRISTOWE to tell its history, and to pronounce the existing arrangements and prospects of the hospital worthy of its past, and much better than they might have been when some of the errors of the past are considered. Dr. GEORGE JOHNSON spoke with authority against all narrow specialism in medicine, and was very happy and forcible in his illustrations. His prophecies of the doom of those who despise vaccination will not immediately affect the fanatics of Leicester; but they will be realised some day by many who laugh at them now. JENNER'S association with vaccination is trite, but his association with the violin is not so well known, and it was a happy idea of Mr. BLACK, in urging the cultivation of music by medical students, to remind his hearers of the solace that JENNER derived from playing the violin and the flute when the cares of his great discovery weighed heavily upon him. One of the most thoughtful Introductory Addresses of the session is that of Mr. MALCOLM MORRIS, at St. Mary's, on Mysticism, Materialism, and Scepticism in Medicine. We insert Mr. MORRIS'S address in full this week, and have only now to say that it is a masterly and yet reverent exposure of some of the worst faults of medicine, ancient and modern, the study of which will make us all more safe against error, and more helpful in raising the reputation of medicine. For much of the affected mysticism and dogmatism of the professors of medicine in the past, Mr. MORRIS blames the public who loved to have it so. But the public and the profession, too, are both strong enough now to dispense with all such aids to authority, and to respect those advisers most who show the greatest desire to introduce simplicity and truth into medical treatment. Mr. BARKER'S Address at University College indicated the claims of medicine to more recognition by the public, and to more honour from the State. He was especially happy in showing how medical men, as a rule, steer clear, beyond most men, between errors of superstition on the one hand and a degrading materialism on the other. No doubt medical men are "lightly esteemed" as yet by the State. They have no place in the House of Lords. So much the worse for the House of Lords. The House of Lords would be much stronger to-day against attack, and in the respect and affections of the people, if it contained the eminent men of all professions, and especially of our own. For the welfare of the State the advice and counsel of the best of all its citizens are needed, and in the Second Chamber of the near future we may hope such citizens will not be conspicuous by their absence. But, after all, the chief reward of medical men must be of a different character from any that the State can give. It must be the approval of men of science generally. The peers of medical discoverers must themselves be men of science, and this recognition of medicine has already begun, and cannot fail to grow as the discoveries of medicine multiply and appeal to the admiration and gratitude of mankind.

THERE are probably few more lucrative departments of the healing art than "bone-setting." Unfortunately for the

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profession, and certainly also for the public, the procedure, as a "specialty," has been monopolised by, legally speaking, irregular operators. The cause of this is not far to seek: for, in the first place, the joints, with their complex anatomy, furnish a favourable field for the exhibition of the bone-setter's pretensions; and, in the second, they enable him still further to trade upon the credulity of his clients, since he is able at least to make some visible show of the means and mechanism adopted to effect the end indicated by his stereotyped assertion that this or that bone is out of its place.

Medical men might well view with complacency, and even with contempt, this counterfeit presentment of legitimate surgery, and the notoriety achieved by men who, whatever their dominant motive, are certainly none too scrupulous in making capital out of popular recognition, were it not for the fact that only too frequently the qualified practitioner is made the gauge whereby the alleged superior skill of his unlicensed competitor is measured. Nor does the unfairness of the comparison rest on popular grounds alone, for every now and then cases are met with in which our judicial authorities are found to weigh the credentials of surgeon and amateur on what, according to their lights, they consider a righteous balance, and find the former wanting. An instance of this we had occasion to comment upon in our last issue, where a County Court judge nonsuited a medical man, in the belief that he had failed to recognise the nature of an injury which a "bone-setter," who claimed hereditary talent in his calling had, as he said, diagnosed and summarily remedied. It has been truly said that the mind is more struck by positive than by negative evidence, and surely the subject matter of these remarks bears no exception to the general rule. As Sir JAMES PAGET has pointed out, those who consult bone-setters are sure to publish and laud his successes, whereas in the case of his failure they are too chagrined to parade themselves in public as the dupes and victims of mistaken confidence. Again, there is always a strong tendency to regard the works of intuitive handicraftsmen as veritable triumphs, whereas they are often enough merely the outcome of sheer operative audacity. "Adventures are to the Adventurers" applies as closely to the professed bone-setter as to "Ixion in Heaven." Where many chance shots are made some quarry will be killed, and equally where many stiffened joints are *wrenched* some will be loosened with advantage. And herein lies the talisman whereby the "bone-setter" commands a certain amount of success and reputation. Patients having dislocated tendons, displaced inter-articular fibro-cartilages, joint adhesions, and spastic contraction of muscles are not uncommonly benefited by movements, and that, too, perchance, by the application of rude, unwarrantable force. The following is a frequent sequence of events. A person receives a severe sprain of a joint—say the ankle. He submits for a time to the quiet ordered by his medical attendant. The inflammation subsides, but stiffness remains. Readily persuaded of the vaunted powers of a certain bone-setter the patient surreptitiously seeks the latter. His joint is handled with vigour, adhesions give way, and thus the medical man is deprived of the chance of completing a cure which it is certain he would not have neglected. But there is yet another side of the picture, and it is high time the public were made aware of its existence. If a bone-setter fails in his attempts, it must not be supposed that the failure is of mere negative moment, for it often implies that irreparable damage has been sustained through the application of force which no properly educated and qualified surgeon would have dreamt of using. Sir J. PAGET records a case where violent manipulation by a bone-setter was exercised upon a fractured limb. We ourselves know an instance in which a bone-setter, ignoring the diagnosis of an eminent surgeon, violently wrenched a shoulder for "stiffness," whereas the immobility was caused by a malignant tumour of the humerus. The natural result of such a procedure is not problematical. But, worse to relate, the patient, hesitating between the conflicting statements of the surgeon and the bone-setter, refused to have the limb amputated, and his life was sacrificed. The treatment of dislocations as practised by a legally qualified surgeon must not be confounded with the irregular operations of men whose knowledge of the subject, generally speaking, varies directly as the scruples of their consciences and inversely as the audacity of their actions.

THE treatment of various forms of the alcoholic habit by means of strychnine, which has been recommended from theoretical and clinical researches by LUTON, GIACOMINI, MAGNUS HUSS, MORBY, LECUYÉ, JAILLET, MINOZ, DUJARDIN-BEAUMETZ, and AMAGAT, has recently been tried by some Russian practitioners, and found to give gratifying results. Dr. POPOFF, writing in the *Vrach* (No. 10, 1886), after giving a *résumé* of the results obtained by the French and Italian observers above named, mentions some cases of dipsomania which he had successfully treated in the same way, and in the last number of the *Vrach* (No. 38) Dr. K. K. TOLVINSKI describes the case of a man, aged thirty-four, belonging to a neurotic family, very anæmic, but with no organic disease, who had drunk hard for many years, and with whom of late the outbreaks had been as frequent as two or three every month. He was treated with chloral, bromide of potassium, and opium, with but little success, his extreme distress, desire for drink, nausea, vomiting and unusual weakness being unaffected. On the last occasion, when he had been drinking for some days, Dr. TOLVINSKI decided to make trial of strychnine, and began with the sixtieth of a grain of the nitrate in pilules three times a day, and did not prohibit spirits. The next day the man felt better, and asked for wine; but the sleeplessness, the want of appetite, and nausea and vomiting still continued, though in a somewhat less severe degree. Four days after the commencement of the strychnine treatment the patient had greatly improved in every way, and was soon afterwards able to resume his work. He continued to take the sixtieth of a grain twice a day for six weeks, and during the four months which have elapsed since the attack he has had no inclination for drink. Upon this case the editor of the *Vrach*, Professor MANASSEIN, who holds the chair of Special Pathology and Therapeutics in the Imperial Military Academy at St. Petersburg, remarks: "There is no doubt that, with abundant materials at hand, observations on the effect of strychnine on different forms of alcoholism will in the immediate future be accumulated in considerable numbers. It may be desirable as a

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preliminary to distinguish the different classes of the affection. (1) Anæmic cases (literally "white fever)"; (2) actual drunkenness; (3) constant drinking without symptoms of chronic alcoholism; (4) chronic alcoholism. It is very possible that the effect of strychnine on these very dissimilar conditions may be different, and if all these forms are confounded together, as is done by many writers, it can only lead to confusion when the strychnine treatment is mentioned." Professor MANASSEIN goes on to relate the case of a cook, a very honest, respectable woman of forty-five, who was subject to attacks of insuperable craving for drink, which attacks were preceded by a depressed and highly irritable condition. They gradually increased in frequency, so that latterly they came on about every fortnight. Sulphate of strychnine was ordered in pills from the sixtieth to the thirtieth of a grain after breakfast and dinner. During four months of the strychnine treatment the patient continued in excellent health, not only having no outbursts, but not even experiencing any inclination for drink.

In another Russian medical journal, the *Meditsinskoe Obozrenie*, Dr. PARTSEVSKI gives an account of nine cases of acute and chronic alcoholism, treated by means of hypodermic injections of strychnine. Seven of the cases gave excellent results, but in the remaining two cases the strychnine had to be discontinued and chloral substituted. In the majority of cases the treatment began to take effect very quickly on the appetite, sleeplessness, and hallucinations. The trembling of the hands, too, entirely disappeared, and the general irritability subsided. The author says that under no other kind of treatment has he found patients recover so quickly from an attack. Even the blueness of the skin and the puffiness of the face and hands quickly disappeared, and the quantity of urine became notably increased. The dose given is not very clearly stated, but the number of injections required in the different cases was usually from four to eight. In one case only were fifteen necessary. They were given twice a day.

THE visit of Sir HENRY ACLAND to the Pharmaceutical Society and the address which he delivered to the students afford one amongst many illustrations of the good relations now subsisting between pharmacy and medicine. There is no reason why these relations should not continue to exist, and become even more cordial. Though medicine has grown into a science since the time referred to by Sir HENRY, when silkworms, grasshoppers, toads, kittens, &c., were contained in the Pharmacopœia, it has not grown out of the faith in drugs. More than ever it believes in the value of drugs, but more than ever it requires that drugs shall be prepared in a pure state and in an agreeable form. The very progress of medicine involves the progress and development of pharmacy. This progress should tend at the same time to a sharper line of demarcation between the two callings. If a man is to excel in the business of a pharmacist, he cannot dabble in the work of a medical practitioner. There is a fundamental difference in the two callings. The function of the one is to supply pure drugs; that of the other is to study disease and to cure it. In the higher ranks of both callings this distinction is well defined; in the lower there is a little overlapping. Sir HENRY ACLAND maintains that the education of the pharmacist does not tend to make him intrude into the domain of the medical man. We think Sir HENRY is, on the whole, right. No doubt there are many druggists who assume airs of more knowledge than it is possible for any medical man to have; but the more educated the pharmacist, the more conscious will he be of his inability to understand disease, and the more will he shrink from pretending to do so. Sir HENRY'S praise of the calling of a pharmacist was well deserved. There is no better servant of the public and no better friend of the medical profession than an educated and intelligent pharmacist. The best medical practitioner will learn much from him, and will be most ready to admit his obligations. He must be a rare physician who is not indebted occasionally to the suggestions of those intelligent pharmacists whom he may know and who dispense his prescriptions, and it is impossible to deny that therapeutics have been much advanced by the work of chemists and pharmacists. All this praise, of course, has no application to the druggist who is ignorant of the distinction between his calling and that of a medical man, and who is vain enough to think that a knowledge of medicines enables him to understand their action and their application. Sir HENRY ACLAND spoke of the steps which have been taken by the Medical Council to ensure the best methods of revision of the British Pharmacopœia—referring, doubtless, to the appointment of a committee of the Council, and the allowance of a small grant for this purpose. These are steps in the right direction. Frequent changes in the Pharmacopœia are undesirable, but the existence of many more or less rival publications is some proof that our Pharmacopœia, with all its good qualities, is not such a perfect guide as it might be to the hardworked members of the profession. And considering the responsibility of the Council for the Pharmacopœia, it is but reasonable to regret that it has not used its large funds (for which no very obvious use can be found) more freely in encouraging investigations in pharmacy and therapeutics.

Annotations.

"Ne quid nimis."

THE PUBLIC HEALTH DURING LAST SUMMER.

THE mean temperature at the Royal Observatory, Greenwich, during the three months ending September last was 61·2°, and exceeded the average temperature for this period in one hundred years by 1·6°, although it was 1·5° below the mean temperature for these three months in 1884, when the mean for each month of the quarter was higher than that recorded during last quarter. The rainfall last quarter was 4·9 inches, and 2½ inches below the average. The registered amount of bright sunshine during last quarter was considerably above the average (especially in September), and exceeded the amount recorded in the corresponding period of any of the nine years 1877-85. The Registrar-General's quarterly return will not be issued for a month or two, but a summary of the mortality statistics for the twenty-eight large English towns published from time to time in the weekly return affords a trustworthy indication of the effect of the meteorological conditions above referred to upon the public health. It appears that the annual death-rate in these twenty-eight large towns during the thirteen

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weeks of last quarter averaged 20·4 per 1000, and was 0·8 below the mean rate in these large towns in the corresponding periods of the ten years 1876-85. This rate was 1·6 above the rate that prevailed in the summer quarter of last year, but 2·4 below the rate in the far hotter summer quarter of 1884. The rate in London last quarter was 18·7, while in the twenty-seven large towns it averaged 21·8, and ranged from 16·7 in Derby, 17·0 in Bristol and Brighton, and 17·4 in Huddersfield, to 24·7 in Portsmouth and Salford, 24·9 in Manchester, 28·0 in Norwich, and 28·8 in Preston. Variations in diarrhœa mortality in great part explain the wide differences between the above-mentioned rates, the extreme variation being 12·1 per 1000 between the annual rates during last quarter recorded in Derby and Preston. In further explanation, however, of the high rates in some of the towns, it may be noted that in Portsmouth the "fever" rate was 2·03 and the measles rate was 0·82 per 1000; that in Salford the rate from scarlet fever was 1·18; that "fever" and whooping-cough showed fatal prevalence in Norwich; and that measles caused a rate of 2·38 in Preston.

THE INFLUENCE OF MUSIC ON THE CEREBRO-SPINAL SYSTEM.

IT has long been a familiar fact that susceptible, or perhaps we ought to say very impressionable, nervous centres, either of brain or cord, or both, may be influenced by music. Whether the influence exerted is not purely physical—perhaps mechanical and of the nature of vibratory movement, of a nature akin to that exemplified by the phenomena of sensitive and musical flames, and obeying the laws of concord or discord which Newton demonstrated as determining the chromatic and diatonic scales respectively, which Groves further illustrated in the induction of his doctrine of the correlation of forces, and which Tyndall has reduced to practice,—may be a moot question, but we cannot doubt that it will sooner or later be settled in the affirmative. However that may be, the fact remains that music does act powerfully on the majority of nervous systems, and there is reason to think that the brain is not alone affected. For example, the movements of the lower limbs both in dancing and in marching are distinctly influenced by music, independently of the consciousness. When the brain at first participates in the excitement produced, it may become engrossed with other matters, and rhythmical muscular movements of the extremities, and in a lesser degree of the trunk, will be continued automatically in harmony with the music. Direct impressions on the cerebral centres are probably transmitted through the auditory centre. Thus monotonous and slow music will exert a calming influence, provided that it be not too slow to be in harmony with the nerve habit of the individual, as in that case it may irritate. It is also essential to the success of any endeavour to bring the brain under the control of music that it should first arrest the attention either by its power or sweetness, and then gradually conduct the organism into harmony with itself. A measured cadence of the sort likely to calm the mind is more likely to augment than to allay irritation, unless it begin with a powerful appeal to the brain in a key which accords with that in which the cerebrum is at the moment itself working. This has not, perhaps, been sufficiently well understood in some attempts which have been made, experimentally, to use music as a remedial measure. So with endeavours to rouse the spirits by music, the opening needs to be plaintive and in the key of melancholy which harmonises with the brain state of the patient. The attention being arrested and the cerebrum reached through the auditory centre, the key must be gradually changed, and the time quickened in such manner as to change the brain state. No great progress will be made with the employment of sound, and form, and colour as remedial agents, powerful as these agents really are, until we dismiss the unscientific idea of "mind," and begin to regard the brain as an organ which, like all other parts of the body, obeys physical laws and performs its function by purely physical processes.

THE SUPPORT OF HOSPITALS.

SPEAKING at Manchester in aid of the extension of the Hospital for Consumption, Lord Derby discussed at considerable length the general question of the maintenance of hospitals. We observe with satisfaction that his lordship, while making due allowance for the particular requirements of so prevalent a disease as consumption, does not view with favour the establishment of too many special hospitals. He truly says that these unattached wards, as we may call them, tend to excessive multiplication, and, when founded on a very small scale, cause waste of funds. Of the various means of defraying the cost of hospital management apart from endowments, he justly attaches the greatest importance to public subscription. Most of our readers will agree with him that rated taxation cannot, with anything like the same acceptance, meet the several conditions of the case. Money can, no doubt, be raised in this way, but the moral effect of such contributions is impaired when the place of sympathy is thus occupied by a legal obligation; while, on the other hand, existing parochial burdens are sufficiently heavy to render their further increase undesirable. If, however, we prefer the method of voluntary giving, it is still very necessary to use some discretion in selecting the recipients of hospital relief. Charity should not be grudged when it is given, but, as Lord Derby says, it is only intended for the poor who need it. All who can, should pay in their measure for medical attention. Our saying this does not, however, imply an approval of the pay-hospital system recently introduced in some quarters, nor do we gather that it is countenanced in the speech before us. Hospital resources are not to be applied in treating the ordinary illnesses of such persons, particularly in the out-patients' department. Nevertheless, there may be times of emergency when no other alternative is possible. In view of this, but more as a matter of common justice and humanity, it behoves every citizen to give what he can afford in support of our public medical charities. Spontaneous action of this kind is a feature of healthy national character. Happily, it is one which is apparent amongst us, though as yet far from being fully developed. The steady, though somewhat tardy, growth of stated annual subscription lists is, in this connexion, a matter for grateful satisfaction. There is still, however, need of a more efficient system of what we may call voluntary taxation, which will bring home to everyone, rich or poor, his personal responsibility to give something, much or little, in aid of the hospital of his own district. This method is indeed partly effective at the present time, and if extensively carried out, would at once relieve the hospitals of much debt, and would preserve the attribute of charity, which so well befits them.

THE REDWOOD TESTIMONIAL.

IT is announced that the subscription list of the Redwood Testimonial Fund will be closed in December. The sum already received is not, we regret to learn, sufficient to carry out the object of the movement, which is the foundation of a scholarship. It is hoped that those who know and value Dr. Redwood's exertions for materia medica, and more especially in connexion with the British Pharmacopœia, wil subscribe to the fund. Donations should be sent to the hon. secretary, Professor Dunstan, of Bloomsbury-square, W.C.

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THE HOWARD ASSOCIATION.

THE Annual Report of the Howard Association for 1886 has been published, and, as usual, deals ably with the important question of the best methods for crime prevention and the treatment of prisoners. Speaking generally of British prisons, it observes that during the past year considerable official attention has been directed to promote the efficient operation of two essential objects—viz., a deterrent influence upon offenders in general, combined with efforts to reform criminals individually. The considerable proportion of prisoners, both male and female, inveterate misdemeanants, who revisit the prisons scores or even hundreds of times in succession, at excessive cost to the community, and who are neither deterred nor reformed, has long been a scandal, and shows that in this respect at least our present system is a failure. Officialism is slow to perceive and slower still to act, but we are pleased to find that at length a remedy may be sought in wiser legislation, and also in the further development of those moral and religious agencies which already have been established, but which require more active support and determined sympathy from the general public before they can make definite headway. A proper classification of prisoners and an intelligent discrimination in prison discipline is much to be desired, and would, if carefully systematised, strike at the root of the two evils mentioned. We have often insisted that, whilst prison discipline in England is hardly sufficiently severe on hardened criminals, it is much too hard on those who are committed for technical offences or breaches of order. This was a point on which the late Dr. Wakley felt strongly, and we are pleased to see in the present report a touching tribute to his action in this respect. Speaking last year with regard to the necessity of making some distinction between prisoners committed for political and religious offences and those sent to gaol for actual crime, THE LANCET went a step further and pointed out that even in the case of criminals the disproportion in the severity that exists between short sentences of fourteen days and those of three or four months is very great, the amount and quality of food and certain other points of prison discipline being much more severe in the case of the shorter sentence as regards its effect on the prisoners' health and power of endurance than in that of the longer sentence. So well, we believe, is this difference known among habitual criminals that we are informed they will "go" for an offence that brings the longer penalty. "If they escape, the greater the plunder; if caught, the better they are fed." The same want of classification that is experienced in prisons is felt to even a greater extent in reformatories; the mutinies we so frequently hear of as occurring in these establishments probably arise from this cause, and there is undoubtedly great need of separating the younger from the older youths in these establishments. The Report further deals with other interesting particulars concerning our prisoners and methods of crime prevention—such, for instance, as the scheme for the "Conditional Release of First Offenders," observations regarding the "Boarding-out, Emigration, Temperance, &c." in connexion with the question of juvenile pauperism, and an abstract of the correspondence and information obtained both at home and abroad on the subject of capital punishment. In conclusion, the Report, in summing up the losses to the Society during the year, speaks in feeling terms of the death of Mr. Samuel Morley, and also of the deaths of three other efficient and liberal supporters—Mr. Balfour of Liverpool, Mr. Hugh Mason of Ashton-under-Lyne, and Mr. Allen of Dublin. Owing to the continued depression of business the financial year of the Association closes with debt, and the income has now become so seriously diminished as to materially limit its operations and to cause grave anxiety as to its future. This should not be. The Howard Society stands between the criminal and the rigid officialism of a department, and until the representatives of the press have the right of visiting these institutions and reporting from time to time on their management, this Society acts as a wholesome check on the routine callousness of officialism, and brings to light any abuses that may arise.

PHARYNGEAL AND LARYNGEAL NYSTAGMUS.

IN our last issue we published some notes, in the form of a letter, on rapid rhythmic contractions of the pharyngeal and laryngeal muscles associated with rapid rhythmic contractions of the ocular muscles, in a case of cerebellar tumour in a girl aged twelve years. The importance of this nystagmus of the pharyngeal and laryngeal muscles lies partly in the interest attaching to the phenomenon and partly in its suggestiveness. In the case in question great attention was paid to the state of the rest of the nerves of the body, but nothing in the same nature as nystagmus of any other muscle was observed; nor, so far as we know, was there any rhythmical recurrence of sensation in any sensory district. The rate of the rhythm in the pharynx and larynx was perfectly synchronous with the rate of action of the muscles of the eyeball. The ocular nystagmus was of a mixed vertical and horizontal description. It is hardly likely that the symptom which Dr. H. R. Spencer discovered in this case of cerebellar tumour is of common occurrence either in tumours of the brain or in any other disease of the central or peripheral nervous system, but its present recognition will doubtless stimulate observation, and may lead to a still further extension of knowledge. The symptom is a genuine one, and evidently not dependent on a combination of conditions whose balance is easily upset, for the nystagmus has been in constant active operation for at least two months. The rate of the pharyngo-laryngeal contractions, like the synchronous nystagmus of the eyeball, is 180 per minute. It is worth while remembering the circumstance that the muscles which are the seat of the rapid nystagmus in this case are sometimes employed volitionally, and at other times automatically, or reflexly. Another feature of the case to which Dr. H. R. Spencer alludes is the rate of the pulse, which is unaccountably frequent, being 100 per minute. It may be that this is related in some way to the action of the pharyngo-laryngeal muscles, whose motor fibres in the vagus are derived, in part at least, from the spinal accessory nucleus, which is also believed to preside over the rate of action of the heart.

PAROCHIAL AID IN URGENT ILLNESS.

THE liability to incur bad debts is one of the grievances which are felt in a peculiar degree by members of our profession. Where the failure to pay expenses of treatment arises from deliberate neglect, the remedy is of course in the practitioner's hands, though as a matter of fact recovery of charges in a court of law is felt by many to consort badly with professional requirements. Where, again, the poor are attended in their homes, there is apt to be serious consumption of time without any chance of remuneration. It has been proposed to meet this latter difficulty in a somewhat novel manner. According to this plan first aid to the sick poor should be afforded by the police, who would on application procure the services of a neighbouring practitioner. The fee for a first attendance would be defrayed at the public cost, and the practitioner would therefore be to that extent ensured the reward of his labour. Medical men are not backward as a rule in placing their services at the disposal of their fellows in cases of emergency. To a considerable extent humanity requires that they should be ready to do

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this without prior stipulations as to fees. It must also be remembered, however, that parochial guardians are not free from responsibility as regards many of the poor in any given district. The ordinary method of application for medical assistance through a relieving officer is also in some case inconveniently tedious. While therefore we doubt if the plan of aid in emergencies, which has been referred to, could be made to work in its present shape, we can enter into the feeling of the proposer, and agree with him that the moral right to remuneration by the parish for attendance on the poor in sudden and urgent illness should find some legal expression.

ROME, IN RELATION TO CHOLERA IMPORTATIONS.

TOGETHER with news of a still further reduction of cholera in Italy and in Austro-Hungary, there comes intelligence of the appearance of a disease in Rome which, to say the least, is of a choleraic type, the occurrence taking place simultaneously with a migration of working-people from the country districts. One case has terminated fatally, but it is by no means clear whether the disease has been actual cholera, or whether it has simply been autumnal diarrhœa of a severe type. It would be singularly unfortunate if cholera made any headway in Rome. In 1884, although the disease gained access to the city, it failed to spread to any noteworthy extent, and this fact, associated as it was with the existence in Rome of sanitary circumstances so vastly superior to those prevailing in most Italian towns and cities, unquestionably gave an impetus to sanitary work in the peninsula generally. Rome has an excellent and abundant water service, and the old wells were bricked up and thus abolished on the first rumour of cholera two years ago; hence there is little to fear on the score of water. As to sewerage, Rome is making substantial progress. It is true that the new system of culverts now being carried through the city is not in every respect such as to secure from leading British engineers unqualified approval; but still the advance made is very great, and when the scheme with its outfall is completed, Rome will be in a better position than it ever has been before. But in the matter of house drainage there is room for vast improvement in the Eternal City. Disconnexion and through ventilation of house drains is hardly known of, and many of the drains are badly-constructed brick culverts, which allow of the deposit of contents. There is therefore room for some apprehension as regards cholera, but it is much to be hoped that the labours of the local authorities, which were so successful in 1884, will not be less so in 1886 if cholera has really found its way into the city. Rome has, with justice, been compared with other cities as to the effect of efficient sanitary administration in controlling the spread of cholera, and if she can, by continued sanitary progress, maintain her immunity from the disease, notwithstanding recurring importations, her example may be expected to have considerable influence on the immediate future of the health of Italian cities.

PULSATING TUMOUR OF THE HEAD.

THE living specimen shown by Mr. F. Treves at the Clinical Society last week attracted much notice from the members. There appeared to be at least two pulsating swellings about the head, and each of different natures. One of these, situated in the middle line in the occipital region, appeared from the evidence adduced by the author to be of a venous nature, and in direct communication with the superior longitudinal sinus,—whilst the swelling that pulsated in the mastoid situation gave the signs of a cirsoid aneurysm. The aspect of the face was rendered peculiar by an apparent protrusion of the eyeballs, and the odd look of the countenance was enhanced by a difference in the size of the two palpebral fissures, and still more by an asymmetry of the face, the combined effect of the smaller size of its left half and a want of power in the muscles of the same side. In ordinary demeanour the protruded globes of the eye were, at apparent rest, no obvious movement being perceptible; but in the act of looking to one or other side the globes were agitated by a side-to-side movement partaking of the characters of a moderately rapid nystagmus of the horizontal kind. In addition to these characters, the case was rendered more complicated by the presence of some degree of blueness of the hands, which felt cold—a double condition which Mr. Treves said was intensified by cold weather and, we believe, by the application of artificial cold. The patient in whom these features were observed was an intelligent lad who worked in a printer's office. In the upright posture the boy did not experience any subjective troubles, but on lying down he would be annoyed by the throbbing and rushing of the pulsating tumours, and sometimes his comfort was disturbed by headache, giddiness, and vomiting.

SUMMER DIARRHŒA MORTALITY IN 1886.

ALTHOUGH the mortality from infantile diarrhœa showed a marked and unusual excess in the first week of October, the mortality from this disease in the summer of 1886 will be measured by the recorded deaths from this cause in the thirteen weeks of the quarter ending with September. The mean annual death-rate from this cause during this period in the twenty-eight large English towns dealt with in the Registrar-General's weekly return was equal to 3·6 per 1000, against 2·1, 3·9, and 2·0 in the corresponding periods of the three years 1883-85. Diarrhœa mortality was relatively greater during the past summer than in the same period of 1884, if due allowance be made for the fact that in the summer of 1884 the temperature was considerably higher, and that considerably less rain fell than in the summer just ended. It cannot be assumed that the general sanitary condition of these towns was lower in the past summer than in the summer of 1884, and therefore it is evident that there are other factors than temperature and rainfall that govern the general fatal incidence of summer diarrhœa in our large urban population. The explanation of the wide variations in the death-rate from diarrhœa in different towns in the same summer season supplies a still more difficult problem, which has long been under investigation by the medical department of the Local Government Board. During the thirteen weeks of last quarter the death-rate from diarrhœa in London was 3·0, against 3·1 in 1884; while in the twenty-seven provincial towns the mean rate was 4·0, and was rather higher than the rate in these towns in the summer of 1884. Among these provincial towns the lowest diarrhœa rates were 1·1 in Bristol, 1·4 in Huddersfield, 1·5 in Halifax, 2·2 in Plymouth, and 2·5 in Portsmouth and in Derby; the highest rates were 5·4 in Salford, 5·5 in Preston, 6·2 in Leicester, and 8·2 in Norwich. All these four towns have habitually high diarrhœa rates, but compared with the rates in 1884, those recorded last summer showed a marked increase in Norwich, whereas they had considerably declined in Preston and Leicester. The low rates in Huddersfield and Halifax, both manufacturing towns, are in striking contrast with high rates in Leicester and Preston, also manufacturing towns. It may be noted, too, that the rate in Blackburn did not exceed 2·8, while in Preston, as above-mentioned, it was nearly double—5·5. What is the explanation of this wide variation between the diarrhœa rates in two neighbouring manufacturing towns of Lancashire during the same summer? It is for light upon these points, in connexion with the causation of infantile diarrhœa, that we look for the results of the Local Government Board investigation.

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DIRECT REPRESENTATION IN SCOTLAND AND IRELAND.

THE Medico-Chirurgical Society of Aberdeen, Professor Struthers presiding, have passed two resolutions on the subject of Direct Representation. The first highly approves such a change in the law and in the constitution of the Medical Council. The second is as follows:—"In view of the approaching election of a Direct Representative for Scotland on the Medical Council, the Society is strongly of opinion that, in view of the very full representation already accorded to the medical and surgical corporations and the universities, the Direct Representative for Scotland ought to be one who is unconnected with the governing body of any of the corporations, or with the professoriate of any of the universities." The Direct Representation principle in Scotland seems to have much better chance of success than in Ireland. Two representative general practitioners are in the field. A third, Dr. Morton, is the new president of the smallest medical corporation in Scotland, which is already represented by a special and able representative, Dr. McVail, who, in the unlikely case of an emergency to which he was unequal, might rely on the assistance of Dr. Fergus, who has just left the chair. This attempt to secure seats for three officials of the Glasgow Faculty ought not to succeed. It is almost as bad as the attempt of the Dublin magnates, who have hitherto monopolised the five Irish seats, to snatch the sixth from the practitioners of Ireland. It is gratifying to see Professor Struthers, representing one of the highly represented bodies, giving his countenance to the thorough application of the principle of Direct Representation.

THE HISTOLOGY OF STRIPED MUSCLE FIBRE.

MR. MELLAND, Platt Physiological Scholar in Owens College, publishes an essay, in the studies from the biological laboratories of the Owens College, upon the Histology of Striped Muscle Fibre, which contains several points of interest. Starting with the admission of the essential identity from a physiological point of view of all those tissues which in a special degree possess contractility, he notices the remarkable histological peculiarity of the voluntary muscle fibre, which is in reality a cell, in presenting a characteristic transverse striation. Yet he thinks that his own observations tend to prove that the striated muscle fibre agrees fundamentally with the other contractile tissue elements, in containing an intracellular network, which is specially differentiated and more regularly arranged. He has observed this network in the fibres of dytiscus, the bee, crayfish, lobster, frog, and rat, prepared by a special method of gold-staining, the network being the only part of the fibre stained with gold. It may also be specially stained by treating the fibre with acetic acid, and subsequently staining with hæmatoxylin. It may be demonstrated, though not so completely, in the living fibre, and in acetic and osmic acid preparations. The method of gold-staining he has adopted is as follows:—Decapitate a dytiscus, open the thorax, remove a portion of a leg muscle, and place into 1 per cent. acetic acid from five to fifteen seconds, then into gold chloride solution of the strength of 1 per cent. for forty-five minutes, and then leave in a solution of formic acid containing 25 per cent. for forty-eight hours in the dark. Finally tease and mount in glycerine. Mr. Melland, it may be said in passing, illustrates his paper by a carefully drawn plate on which are many figures of the muscles of the above-mentioned animals. His method of preparation has a great tendency to soften the fibre and to cause it to expand on compression by the coverslip, and it also renders the fibre apt to split into transverse discs. Careful examination has satisfied him that an intracellular network may be demonstrated in striated muscle. This is arranged in the form of a transverse network, which crosses the fibre, separating it into compartments, and united to the sarcolemma. Running longitudinally down each compartment, and joining the dots at the intersection of the fibres of the transverse network, are a series of fine rods. The network consists of an isotropous material, and is more highly refractile than the rest of the muscle substance, which is anisotropous. The matrix, or substance which occupies the interstices of the network, is of far greater bulk than the network. It is homogeneous throughout; nevertheless, it may be looked upon as being partially divided into columns or fibrils by the longitudinal bars of the network, and partially into discs, the contents of muscle compartments by the transverse network. By the action of spirit the matrix becomes split into fibrils, the sarcous substance shrinks, and the homogeneous mass now separates into fibrils along the lines of greatest weakness; that is, along the guide lines formed by the longitudinal bars of the network. Then fibres may again divide transversely at the horizontal networks, producing sarcous elements, which are thus, as described by Klein, a post-mortem phenomenon. Mr. Melland explains Cohnheim's areas as the appearances produced by coagulation and splitting of the matrix along the guide lines formed by the transverse network. They represent an end view of sarcous elements, and are also a post-mortem phenomenon.

CLINICAL FACTS IN NOVELS.

IN an interesting paper in the *Nineteenth Century* for October, Dr. Nestor Tirard discusses the subject of Diseases in Fiction, and, inferentially at least, pleads for greater realism or more accuracy in the use made by novelists of disease to kill off their characters. We are not quite sure that, if it were worth while to go into details, we should agree with the author in all his criticisms. For example, we think he is a little hard on Dickens, and we do not perceive the difficulty of understanding the illness of Dick Swiveller when nursed by the Marchioness. Nor are we prepared to endorse the suggestion that such maladies as locomotor ataxia, and neurasthenia as treated by the Weir-Mitchell process, might be further utilised by the writers of fiction. We fail to see the "picturesque side" of the antiseptic treatment, and we do not think "the prophylactic action of copper against cholera" promising material. These are, however, matters of detail, and doubtless it would be well for those who supply the reading public with materials for its amusement to be so far accurate as to point a moral and adorn a tale in such fashion as to avoid offending the intelligent susceptibilities of those who, knowing something of disease, find relief, if not delight, in the perusal of works of fiction. Meanwhile, it must be confessed that we are not of the number of those who yearn, above all things, for realism in the drama and romance. This is the age of "matter-of-fact" philosophy, and every question resolves itself into one of statistics. We venture to think that one department of Art, at least, might be kept free of the bonds of truth and realism. There are many ways of conveying instruction, and all we ask is that there shall not be a total suppression of the imaginative faculty. It is a positive relief sometimes to get out of the range of that exacting fusillade of facts—biological, medical, and sanitary—which the popularisation of science has developed to very formidable proportions. We are not sure that it is the sole mission of Art to copy Nature. In fiction, as in painting, a De Foe may emulate a Correggio, and by so doing fulfil a purpose in no sense less noble and elevating than that which animates the painfully precise artist who devotes a whole fortnight to the realistic elaboration of a picture of a broomstick. It really makes very little difference how the novelist kills off

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his characters, and, in no spirit of cynicism, may we venture to observe that a story is not always the less interesting because of its improbability. Nevertheless, there is much to be said on the side of the argument propounded by Dr. Nestor Tirard, and we do not doubt that the novelists generally, and a certain, probably a very large class, of their readers, will be greatly indebted to him for the attention he has bestowed on an interesting subject, and the prominence which his paper cannot fail to secure for it.

ANEURYSM OF THE ARTERY OF THE SYLVIAN FISSURE.

A CASE of aneurysm of the artery of the Sylvian fissure has been reported in a Norwegian medical journal by Dr. A. Linboe. The patient, a woman aged forty-nine, came to Gaustad Asylum with melancholia. She had had a cardiac affection for many years. Besides melancholia, she complained at times of pain in the head and a feeling of irritability. There was some distortion of the face, the angle of the mouth being drawn down. One afternoon the patient became suddenly ill, entirely losing consciousness. A puffiness of the cheeks was observed. The left pupil was dilated and did not react to light; the right pupil was also reactionless. There were slight convulsions, and the woman died at 11.45 P.M. The distortion of the face, which had disappeared, was again present immediately after death. Eleven hours afterwards a necropsy was made. The anterior portion of the right parietal convolution was covered with a thin layer of coagulated blood. Over the whole of the left hemisphere there was a more or less thick layer of blood, especially in the left Sylvian fissure, where it had a thickness of about five centimetres; in the interior of this, a nodular aneurysmal enlargement of the artery was found about three centimetres in diameter. There was but little atheroma in the trunk of the artery of the Sylvian fissure on the left side, but a considerable amount of it on the corresponding artery on the right side.

THE "GRAPHIC" ON MEDICAL STUDENTS AND MEDICAL STUDY.

A VERY interesting paper on Medical Students and their Work, with good illustrations, fitly found insertion in our contemporary, the *Graphic*, of Oct. 2nd. The hospital from which the writer drew most of his facts was St. Thomas's. He writes under the initials "W. H. S." We commend the paper to all medical students; not that we agree absolutely with all the statements of the author. Some are open to question. One, for example, in which he says that the medical profession is far from being overcrowded. We cannot but think that such an estimate is only possible to one who occupies a somewhat select place in the profession, or whose life is exceptionally serene. The run of men in the profession find its paths somewhat crowded, and competition keen, and occasionally undignified. In some quarters methods of obtaining practice are resorted to which can only be explained by great pressure of circumstances, and then cannot be excused. Besides what we may call painful evidence of overcrowding, we have some statistical facts of the same import. Thus the number added to the profession yearly exceeds by nearly 300 the number falling out of the Register by death &c.; and the number now annually entering the profession exceeds by over 300 the numbers which used to enter it nine or ten years since. The medical profession is still not a bad calling for those with a special talent for it, but it will be more and more a stern vocation for strong and serious natures only. The author's views on what he calls "the grandmotherly interference with liberty of students" are worth consideration; but he treats too lightly the risks of modern Babylon to the young and inexperienced student. The surfeit of confectionery is a very good cure for the confectioner's new apprentice, but all temptations are not to be treated on this principle without grievous consequences, and the collegiate care of youths in medical schools is a subject that deserves more attention than it has received. With a few such demurs as these the paper in the *Graphic* is to be much commended. Happy the school that has such an exponent of its claims, and the pupils that have such a guide. It will not be his fault if they fail of scholarships and hospital appointments, or if they fail to acquit themselves like men in the after-race of medicine.

EXHAUSTION FROM VOMITING.

AN inquest was held by Dr. Danford Thomas on the 13th inst. at the Crowndale Hall, St. Pancras, touching the death of James Betts, aged seventy-six. Deceased had suffered from a large rupture for many years. On the 5th inst. he complained of pain in the stomach, but slept through the night. On the following evening he was seized with vomiting, and being unable to return the bowel from the sac, he was taken to the North West London Hospital, where he vomited three times, and died from exhaustion eight hours after admission. The house-surgeon reduced the rupture without difficulty. At the post-mortem examination there was found to be extensive senile degeneration of the aorta and aortic valves. The prostate was enlarged; the stomach was congested, and showed a patch of capillary hæmorrhage, the result of the act of vomiting. About a foot and a half of the small intestine was strongly congested, and had evidently been nipped in the rupture, but the constriction had fallen short of that necessary to cause gangrene of the bowel; in fact, it was at first doubtful if there was not another cause of the vomiting, and so of the death; but on reflection it was decided that, considering the deceased's advanced age, and the readiness with which vomiting is excited by moderate nipping or twisting of a coil of intestine, the issue was due to partial strangulation of the hernia inducing fatal vomiting. These cases are of interest as well from a medico-legal as from a surgical standpoint. The onset of vomiting might be supposed to indicate the action of some irritant in the stomach, and so the theory of poisoning might arise. Such a supposition would gain a fictitious support from the fact that the stomach was congested. The mechanical effects of vomiting are not to be mistaken for the brighter and more diffused redness caused by chemical irritation of the mucous membrane. Whenever the condition of the stomach is at all of equivocal interpretation, the strictest search should be made for natural causes of death, and all antecedent pathological changes are causes in greater or less degree.

DREAMS AND THERAPEUTICS.

WHICH of us—the most philosophical of us—is proof against a good mysterious dream? Where Abercrombie and Brougham found so much to enchant and interest we may occasionally explore, even in these matter-of-fact days on which we have fallen. Those who wish to have their waning faith in dreams stimulated, and to enjoy a very curious story besides, will do well to read a paper in the October part of the *Leisure Hour*, entitled "A Mysterious Interposition," by J. L. Cotter, M.D., rector of Burmarsh, Hythe, Kent. This gentleman, at once a physician and a divine, vouches for the truth of his narrative, in which he records how, when in medical practice in Ireland, he dreamt three times that he was summoned to see an old gentleman extremely ill, and seemingly dying with dyspnœa; how he was so impressed with this vision as to take it for a

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sign and alter the round of his duties so as to be in the way of anything that might turn up; and finally, how he was actually summoned to a patient exactly corresponding in all his features, symptoms and environment, to the old man he had seen in his dream. This old gentleman suffered with acute pneumonia, from which he was recovered by a happy use of two apparently, but not necessarily, diverse remedies—port wine and phlebotomy. The reverend author takes occasion to vindicate the use of the lancet, and to say that he cannot understand the discredit into which it has fallen. We have certainly learnt to bring our patients through this disease more successfully than when phlebotomy was practised freely and indiscriminately; but there is nothing in this fact to detract from the extremely interesting narrative of Dr. Cotter.

A COLLECTION OF PINE LEAVES IN THE BRONCHI CAUSING REPEATED HÆMORRHAGE.

DR. AXEL KEY mentions in the *Hygeia* the case of a man, thirty-six years of age, who had suffered for seventeen years from violent hæmorrhage from the lungs. He died in the Serafim Hospital, Dec. 1st, 1885, after a short residence there. At the post-mortem examination the body was found to be robust, and not emaciated. In both of the larger bronchi there were a number of circumscribed blood coagula. The right lung was unaltered; in the left there was a slight enlargement of a smaller bronchus, with induration of the walls and immediately surrounding lung tissue. In the cavity of the dilatation there was a quantity of coagulum. Outside the cavity there were six pine leaves partly massed together, but with the points free; the leaves were of a brownish-grey faintly changing into green, stiff, and with sharp points. The marks of the points appeared on the mucous membrane, and were several millimetres long. The lung was in other respects healthy. The leaves were, in the opinion of Dr. Key, the cause of death, owing probably to the fact that latterly they had embedded themselves more deeply in the lung, or that their position had changed to a new and more dangerous place.

MEDICAL MEN AND DEATH CERTIFICATION.

WE are constantly warning medical men against the error of writing certificates of death in cases which they themselves have scarcely seen during life, but which have been attended by an unqualified assistant acting under their authority. Another case in point is reported: that of Mr. George Wadley, whose death was the subject of an inquest by Mr. A. Braxton Hicks. It appears that nine days before his death Wadley had gone to "Dr. Davenport" at the Dispensary in Peter-street, Westminster, who again saw him on the day of his death. When he was dying Mr. John Hopkins Pugh was also called in. When the certificate of death was wanted, Mr. Day of East Dulwich, and the proprietor of the Peter-street Dispensary, filled it up. He admitted he had made a mistake in doing so, but said that nearly all the practitioners of Dulwich had at times employed unqualified assistants. Mr. Davenport defended the certificate on the ground that it was usual for principals to regard the attendance of unqualified assistants as their own, and to certify on the strength of having seen the patient during the last illness, as was the case here. The coroner did not think so lightly of this practice; he considered there had been a violation of the Registration Act, and very properly determined to refer it to the Public Prosecutor. Mr. Davenport had the less excuse for being concerned in such a case, as he has had a previous experience of the sort. Mr. Day's attempt to defend his position in this case in letters to the papers is not very successful. He does not deny that the principal attendance was by Mr. Davenport, and that he is unqualified. One or two visits to a man so ill by the qualified principal do not meet the requirements of the case, or justify the signing of a certificate. To say that unqualified men must see cases does not excuse leaving them in principal charge in urgent circumstances.

The *Leeds Evening Express* of Oct. 4th contains an account of two inquests in which two children were attended by Mr. W. J. Garrett, not legally qualified, but acting as *locum tenens* of Dr. R. W. Henderson. The certificates were signed by Dr. Henderson, and from the report it would seem that before leaving for his holiday he had seen both these children and left signed certificates ready for use. Dr. Henderson defended this by saying they were mere matters of form, as the cases were incurable. But we concur with the coroner in his unwillingness to accept this argument as a sufficient defence. The system is not fair to the public or to the poor, who are misled by it. Nor is it fair to regular members of the profession, who acquire their qualifications with much labour and cost, and ought not to be opposed by unqualified persons.

VACCINATION CENSUS.

THE so-called vaccination census is progressing, and a number of villages have been asked to express their opinion as to the value of vaccination, and to record their experiences of its effects. The alleged results would be amusing were they not calculated to prepare more susceptible material for small-pox. The publication of a statement that five deaths, the loss of a limb, fits, sore eyes, and a large number of other ailments, occurred from vaccination in less than one thousand families thus questioned, will doubtless be accepted by unfortunate rustics as a reason for leaving their children susceptible to small-pox, and they will fail to see in this foolish story the hand of the fanatic, who is regardless of the terrible calamity to which he exposes those who listen to his teachings. If the sufferers from this folly were adults, who might more fairly be expected to submit to the penalties attendant upon their errors of judgment, there would be less reason for regret; but the victims are little children, who have no voice in the decision whether they shall be protected against a terrible scourge, and it is for these that every effort should be made to counteract the baneful teaching of those who publish such misleading information.

THE ALIENIST CONGRESS AT SIENA.

THIS fine old town—among the few unspoiled relics of mediæval Tuscany—was on the 19th ult. the scene of an interesting congress—that of the Italian alienists, who had assembled to the number of forty from all parts of the peninsula. The sittings were held in the Palazzo Municipale, or town hall, and concurrently an exposition of asylum industries and apparatus was on view in the University buildings. The president was Dr. Buonomo of Naples, and among the principal speakers were Professors Tenchini of Parma, Chiverny of Milan, Bianchi of Naples, Morselli and Tanzi of Turin, Ronciti of Siena, Sadem of Pisa, Corradi of Pavia, Lombroso of Turin, and Ferri, who holds the chair of penal law at Siena. The senator, G. B. Verga, read an elaborate paper on "Mania Moralis," and he was followed by Dr. Brajon with a note on a "Case of Moral Mania consequent on Mania Furiosa." An animated and most interesting discussion ensued on the legal bearings of the question, till an adjournment had to be imposed to admit of the other items of the programme being overtaken. Dr. Algeri's paper on the "Heirs of Crime, of Madness, and of Alcoholism" was heard with marked attention, as also was Dr. Frigerio's on "Cerebral Localisation" and Dr. Majorfi's on the "Curability of Puerperal Phrenosis." The

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contribution that commanded most interest was a very brilliant memoir by Dr. Vigna of Venice on "Music as an Element in the Psycho-therapeutics of the Insane," the publication of which will secure it many besides professional readers. A striking paper on "Mania Transitoria" elicited much applause for its author, Professor Venturi, and was followed by a discussion at the instance of Professor Lombroso, who, joining issue with Dr. Venturi, maintained transitory mania to be a variety of epilepsy, and then reopened the entire question of moral insanity considered with reference to education, responsibility, and crime. The proceedings, when published, will attest the interest and the study which this most fascinating problem commands among the alienists of Italy. The congress closed after a week's sittings, diversified with visits to the 'Esposione Freniatrica" and the local asylum, where the inmates gave a highly successful concert, vocal and instrumental. An ode of welcome to the congressists, composed by one of the convalescent patients and set to music by the Maestro Donatini, was very touching.

FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW.

THE statutory annual meeting for the election of office-bearers was held on the 4th inst. Dr. James Morton was elected president, Dr. Alexander Robertson visitor, and Dr. James Dunlop a member of the Council. For the Examinership for the Licence there were this year two contests. In the first Dr. James A. Adams succeeded in securing his reappointment as Examiner in Anatomy, his opponent being Mr. J. T. Carter, Lecturer on Anatomy in the Western Medical School; while in the second Dr. James M. Milne, Lecturer in Chemistry, replaced Dr. John Clark as Examiner on that subject. For the first time a special board was elected to examine for the Fellowship, the examination hitherto having been conducted by the Board for the Licence. On the Dental Board, Dr. John Dougall was elected an Examiner, in room of Dr. Alexander Lindsay, resigned. The system of nomination for office under the revised rules came into operation for the first time, with the result of considerably abbreviating the proceedings.

THE AFTER-DAMP OF GUNPOWDER.

THE recent serious disaster from the inspection of a quarry in which a large charge of gunpowder had just been fired has been the occasion of some erroneous criticism. Thanks to modern research, and above all to the labours of Sir Frederic Abel and his colleagues, we now know a great deal about the explosion of gunpowder under pressure, and it is very easy to explain the accident. The explosion is by no means so simple a chemical change as was formerly supposed. About 43 per cent. of the gunpowder passes at the moment of explosion into permanent gases, the remainder being converted into compounds which, although to a great extent volatilised by the intense heat, easily condense into the solid form. The average composition of the gases may be approximately stated as follows:—Carbonic acid 26·5, carbonic oxide 3·5, sulphuretted hydrogen 1·5, nitrogen with traces of other gases 11·5, making up the 43 per cent. The noxious character of this gaseous mixture, from which we omit the imperfectly condensed solids, is manifest. Carbonic acid is highly poisonous, but carbonic oxide and sulphuretted hydrogen are deadly, and no one can wonder that persons suddenly exposed to an atmosphere impregnated with them suffered severely. We can, indeed, only wonder that the reckless conduct described in the daily papers did not lead to a greater number of deaths.

PRESENTATION TO DR. ALFRED CARPENTER.

SOME of the leading inhabitants of Croydon assembled on Tuesday, the 5th inst., to do honour to their distinguished townsman, Dr. Alfred Carpenter. As President of the Literary Institution, Dr. Carpenter has now and again gratified his love of hospitality by entertaining its members at pleasant *soirées*, and on the third of the series of these local gatherings, it was determined to utilise the occasion by presenting the doctor with a worthy token of the esteem in which he is held and of the widely-felt sense of the value of his services as well to Croydon at large as to the institution over which he has presided for thirty years. The testimonial took the form of a marble bust and an illuminated address, to which were appended about 100 signatures, including the names of the Archbishop of Canterbury, the Mayor of Croydon, and other prominent gentlemen. The town has done itself honour by thus honouring one of its greatest benefactors.

CEPHALIC MENSURATION.

DETERMINATIONS of the shape and size of the skull with a view to ascertaining the degree of intellect are, in our opinion, of but little value. If the cranial cavity be very small or the head very large, some statement may be pretty safely hazarded as to the intellect of the owner of the micro- or macro-cephalon. But we are never free from discussions of the kind. And here is a new method of cephalic mensuration going the round of the French papers. M. Luys is the author of the method, though we do not perceive where the novelty lies. We are under the impression that the skull has been measured in its every diameter, and should have thought that it would have been a safe challenge to make that no one could be inventive enough to discover a new way to ascertain the cranial dimensions. Of course there are new instruments meant to measure directly the cephalic outlines. These instruments are adapted for taking antero-posterior, circular, and binauricular diameters. "The fronto-occipital cephalometer gives the antero-posterior diameter of the cranium, and the vertical and the oblique anterior and posterior diameters may also be taken, and thus enable the differences of the cerebral mass to be estimated"!

ATHLETICS AND WOMANHOOD.

IT has been suggested to us that the effect of the athletic exercises now common among girls, if these are really beneficial, should have begun to appear in the physique of women of the present day, and to show itself in greater fitness for the duties of maternity. Medical men in practice might, no doubt, throw some light upon this question. To our own mind there seems good reason to believe in the generally beneficial effect of all such means of educating muscular power, if they be used in moderation. Besides their intrinsic property of increasing vigour and agility, they necessitate a greater freedom from the rigid restraints of dress which were usual twenty years ago. They imply, moreover, a liberal allowance of fresh air, and, by encouraging vital changes throughout the body, combat that dislike to food which is so common among young girls of listless habits. Thus in various ways their tendency is to strengthen and stimulate the whole system. There can, we think, be little doubt that the woman who has grown up under this wholesome training is the fitter in consequence to bear the lot of her sex in married life. Her nerve will be stronger, her muscular power greater, and each natural function proportionately more active. It is indeed not very clear at first sight that such a contingency of childbirth as the use of instruments in delivery can be thus influenced. In such cases other factors

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must be considered, but there are doubtless some conditions of structure such as those dependent on spinal mischief which would be favourably affected by gymnastic movements and games of like character. One thing, however, must not be forgotten—namely, that moderation in amount and fitness as to times are essential to the success of all such training.

THE WEST LONDON HOSPITAL.

THE members of the staff of the West London Hospital, to the number of fifteen, dined together at the Holborn Restaurant on Tuesday last, Dr. Hood, the senior physician, being in the chair. The occasion was an auspicious one in the history of the hospital, inasmuch as it was the first upon which such a gathering had taken place; and the chairman, in proposing the toast of "Prosperity to the West London Hospital," remarked that it had been unanimously agreed to make the social meeting which was being inaugurated that night an annual one, to be held on the second Tuesday in each October. Messrs. Edwards and Dunn, the secretaries for the dinner, replied. Mr. Keetley proposed "The Health of the Chairman," and Dr. Hood briefly replied. Subsequently, upon the invitation of Mr. Bruce Clarke, the members adjourned to his residence, in order to take part in the presentation of a tray and tea-set to Mr. Keetley, which had been subscribed for by members of the staff, on the occasion of his marriage. The tray bore the following inscription:—"Presented to C. R. B. Keetley, F.R.C.S., by members of the staff of the West London Hospital, on the occasion of his marriage on August the 5th, 1886, in recognition of his zeal and enterprise as a surgeon, as of his good fellowship as a colleague."

INFLUENCE OF COLD AND TOBACCO-SMOKING ON THE RATE OF DIGESTION.

DR. CHUDNOVSKI publishes in the *Russkaya Meditsina* an account of a series of observations made on twelve soldiers in a military hospital, who were perfectly healthy with the exception of slight injuries, with the object of determining the effect of cold applications to the epigastrium upon the rapidity of digestion. The stomach-tube was of course freely used, and the completion of digestion was taken to be marked by the disappearance of solid particles in the gastric contents, as revealed by drawing them up through the tube. The author found that when ice-bladders were applied next the skin over the region of the stomach digestion was retarded in nine out of the twelve cases. Six of the men were smokers and six non-smokers. In the former the time required for digestion averaged seven hours, while in the case of the non-smokers the mean period of digestion was only six hours.

DENTAL EDUCATION.

THE address on dental education read at the last meeting of the British Dental Association by Mr. Morton Smale, the indefatigable and popular Dean of the Dental Hospital of London, should be not only perused but studied by all parents desirous of making their sons dental surgeons, and we only regret that we have not space to print it *in extenso*. Speaking of those who are ashamed of their vocation, because, forsooth, there are black sheep on the Register, he very truly remarks that they might with equal justice be ashamed of their humanity because there are members of it who habitually disgrace it; the best of mankind, however, "walk *not* on the other side," but endeavour by good example and providing education to raise the renegades to a higher standard of nobility and self-respect. Of the preliminary examinations, he strongly recommends the matriculation of the University of London as being the most all-round in its subjects, and the portal through which the student may pass into almost any department of medicine, science, or art, should he so wish, at any future time. The regulation now in force at the Royal College of Surgeons of England requiring an apprenticeship he hopes will never be rescinded, for it is impossible that a thorough practical experience in dental mechanics can be gained at a dental hospital. He then passes on to the question of the desirability of taking the M.R.C.S. and L.R.C.P. in addition to the dental diploma, giving many apt examples of the value derived therefrom, and shows how this can easily be done by the moderately hard-working student.

SCARLET FEVER AT NEWQUAY.

THE chairman and medical officer of health of Newquay have written to *The Times*, pointing out that much has been done in recent years to improve the sanitary condition of Newquay, as much as £13,000 having been expended in the provision of a water-supply and of a drainage system for a population of less than 1700 persons. There has not been a single case of typhoid fever for the past five years, and the number of deaths from zymotic disease has been small; while the highest general death-rate during this period has not exceeded 14 in the 1000. The lesson to be learnt is, then, that the reputation of a summer resort for healthiness may be seriously damaged by the action of some of its inhabitants, who have allowed their supposed personal interests to prevent them from having due regard for the welfare of other people. It has repeatedly been shown that personal and public interests are really inseparable, and the punishment of Newquay will have a beneficial influence in checking similar misconduct in all parts of the country.

OVER-PRESSURE IN GLASGOW SCHOOLS.

THE Glasgow School Board would do well to pay some attention to certain remarks made by Dr. Robert Perry in his last annual report regarding the Dunoon Convalescent Seaside Homes, for which he is medical examining officer. Dr. Perry says that "among the children who were applicants for admission there was an increasing number who, although not convalescent from any acute disease, had had their health seriously impaired by overwork in school." This is pretty much in accordance with the experience of general practitioners, who often have occasion to see children, especially girls, suffering in the way indicated. The matter is plainly one which the School Board ought to investigate.

EELS IN WATER MAINS.

THERE appears to be some conflict between the East London Waterworks Company and the sanitary officers of the West Ham Local Board concerning the effects of the presence of eels in the mains of the company. The medical officer of health complains strongly of injury which he believes has been inflicted on the health of some of the inhabitants of his district, through their water-supply becoming polluted by the putrid matter from dead eels. The Water Company are disposed to attribute this illness to insanitary surroundings, conditions which are denied by the officers of the sanitary authority. But whatever the facts may be, there is no question that the drinking of water polluted in this manner is a sufficient cause of ill-health; and although there may be some reason for thinking that a specific disease like enteric fever may not be caused by it, it is quite possible that symptoms may be produced which would not be easily distinguished from those of that disease. It is some satisfaction to learn that there had only been seven cases of stoppage of mains from eels in the course of a fortnight in the water-

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supply of over one million persons, but the action of the Company would inspire more confidence if they appeared to regard even this occurrence in a more serious light.

CHANGES AT THE LONDON HOSPITAL.

THE retirement of Sir Andrew Clark is an event for the London Hospital. It must bring to Sir Andrew much-needed time for the duties of his great practice, and so must have its conveniences. But those who best know Sir Andrew will be most ready to accord to him their sympathy in having to relinquish duties which have been so congenial and so faithfully discharged. Only a man of the rarest energy would have persisted so long in maintaining an appointment at the London Hospital while doing the work of such a large consulting practice as that enjoyed by Sir Andrew Clark. Mere strength does not explain such devotion. The enthusiasm of teaching and of learning is rather the explanation. We congratulate the hospital on having had such a physician, and we cannot doubt that it will still find means of retaining his interest and his services. We also congratulate the hospital on being able to fill up the vacancies caused by Sir Andrew's retirement. Dr. Stephen Mackenzie rises to the physicianship, and the assistant physicianship which he vacates is to be filled up by Dr. James Anderson, the present registrar of the hospital—two appointments which bode well for the future of the hospital, whether from the patients' or the pupils' point of view.

HYGIENE AND PUBLIC HEALTH.

THE University of Durham has resolved to grant a licence in Sanitary Science, and has thus recognised the increasing importance of this branch of medicine. Health officers have now to perform duties which require not only a knowledge of disease but of all the conditions which affect health, and they must, if these conditions are to be better understood, be trained to analyse the various circumstances which tend to shorten life. They must, moreover, in a manner, be lawyers, architects, and engineers, or, rather, they must be prepared to advise their authorities on the medical aspects of law, architecture, and engineering. For this purpose a special training is necessary, and the University of Durham has done well in following the example of other educational bodies in granting a certificate which bears witness to the fitness of the recipient to occupy responsible public health appointments. These qualifications are, we understand, in future to be registered.

SANITARY CONDITION OF WINDSOR.

DR. HUBERT AIRY, medical inspector, accompanied by Mr. Arnold Taylor, engineering inspector of the Local Government Board, opened an inquiry at Windsor on Tuesday last, into the sanitary condition of the Royal borough, the visit being made at the request of the local authorities.

SOLIDIFIED LINIMENTS.

ANYONE who has had to apply a liquid liniment to the chest, or any other part of the body in the upright position, will have experienced the difficulty in keeping the liniment in the palm of the hand until it is fairly brought in contact with the affected part. It is a matter of surprise that in the last edition of the Pharmacopœia liniments are retained in their liquid form. There is no difficulty in solidifying most liniments by the addition of some gelatinising material, so as to enable it to be smeared over the affected part with some approach to definitiveness of quantity and to the great convenience of the patient. Solidified liniments are not only more convenient of application, but are far more easy of transport. To the country practitioner this is a matter of considerable importance as well as to patients, for the introduction of the "parcel post" has transformed the means of transit of medicines; and to be enabled to send medicines in a solid rather than liquid form by post is a great advantage. Thus it is that pills for almost all forms of medicines are being purchased largely in place of draughts and mixtures, and solidified liniments, or, indeed, any forms of consolidated medicine, would be a real gain to both doctor and patient.

AN ELECTRIC SAFETY-LAMP FOR MINERS.

THE latest experiments with the electric light have resulted in the production by Mr. J. W. Swan of a portable miner's lamp, which is said to combine the light-giving and testing qualities which together constitute the essentials of a good safety-lamp for underground work. The light supplied by this instrument is of considerable brilliancy, and contrasts favourably in this respect with the comparatively dim flame of such oil lamps as are considered to be safe against explosions. The indicator used to detect the presence of fire-damp is sufficiently delicate to register the presence of a quarter to a half per cent. of this gas in the air of the mine. It is fixed to the lamp and consists in some cases of a coil of platinum wire, to which the electric current from the lamp battery is switched on as required, and which becomes hotter in a foul than a pure atmosphere. In other lamps the indicating wire is enclosed in a glass tube, and, when heated, decomposes the explosive gas in the form of watery vapour, the amount of which is the gauge of gaseous impurity.

TUBERCULAR INOCULATION IN A MAN.

DR. AXEL HOLST mentions the case of an attendant on the phthisical patients at a hospital who had suffered for a long time from atonic ulceration of the fingers, which had been treated with ointment, plaster, caustic, and scarification. No tubercle bacilli were to be observed with certainty in the sores. Later the man was affected with a tuberculous glandular swelling of considerable size in the axilla, which contained a considerable number of Koch's bacilli, and Dr. Axel Holst considers that it is highly probable the patient had received infection through the sores.

THE TYPHOID EPIDEMIC AT SWANSEA.

AT the meeting of the Swansea Town Council on Wednesday, the medical officer of health reported that during the past fortnight there had been 112 cases of enteric fever in the town. He called attention to the seriously defective condition of the drains, and said that the Camdon Kin reservoir had become polluted by the ingress of foul water from a neighbouring stream. The Council appointed a committee to undertake a thorough investigation. A proposal that the Local Government Board should be asked to hold an inquiry was negatived.

REGISTRATION FEES AT HOSPITALS.

AN attempt to impose a fee of one shilling on every out-patient at the Warneford Hospital has failed, though proposed by Lord Leigh and seconded by the Rev. Mr. Hallett. Much objection was raised to the proposal by the medical officers, Dr. Thursfield, ministers, and others. A letter from the Charity Organisation was read also objecting to the proposal, which was lost by a very large majority. The arguments against the proposal were that a registration officer would have to be paid, which would cost more than the registration fee would yield, and that by the proposal the charitable character of the institu-

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tion would be compromised. We concur in the objections. To charge a fee of one shilling at a hospital is to enter into a kind of commercial contract with patients, and a sort of commercial competition with practitioners. Let care be taken to exclude unfit recipients of hospital relief; but this done, let it be granted freely.

DR. FREDERIC FARRE.

WE are glad to learn that Dr. Farre, who has been suffering from pleurisy (not pneumonia, as stated in our issue of the 2nd inst.), is progressing towards recovery as favourably as can be expected, considering his great age—eighty-three.

THE nineteenth annual meeting of the Canadian Medical Association was held on the 18th and 19th of August, in Laval University, Quebec. The retiring president was Dr. Osler, of Philadelphia, who was unavoidably absent from the meeting. Dr. T. K. Holmes, of Chatham, Ontario, the new president, gave an address, in which he briefly reviewed the progress of medicine in modern times, and showed how future advances in the science must greatly depend on the kind and extent of the education imparted to the rising generation of medical men. A curious feature of this meeting, as of former assemblies of the Association, was, as our contemporary, the *Canadian Practitioner* remarks, the absence of the older men of the profession. Why is this?

A SOMEWHAT important communication was received by the Metropolitan Board of Works, at their last meeting, from the South Metropolitan Gas Company, calling attention to a danger to which the public are exposed, in consequence of builders removing subsoil from roadways and filling in the excavations with rubbish, with the result that settlements take place which cause injury to drains, gas and water-mains, &c. The letter was referred to a committee.

THE scarlet-fever epidemic at Wellingborough, which has prevailed since the last week in June, exhibits no sign of abatement. Mr. F. N. Heygate, medical officer of the Finedon District, in a letter to the *Wellingborough News*, expresses the opinion that, if due inquiry were made, it would be found that there were on the average three cases of the disease in each house.

THE President of the Medical Society of London, the first meeting of which will take place on Monday next, has issued a circular, in which he calls the attention of the Fellows to the "Clinical Evenings"—a recently introduced feature, to which it is intended to give effect on the last Monday of every month.

AT a meeting of the Executive Committee held at the Quebec Institute, Baker-street, W., on Wednesday last, to promote the candidature of Dr. B. W. Richardson for a seat on the Medical Council, Dr. Danford Thomas in the chair, it was announced that over 2000 members of the profession had already sent promises of support.

THE report of the sanitary condition of Linlithgow, as given by Mr. Falconer Stewart, inspector for the Board of Supervision, gives anything but a flattering account of the state of the burgh. The scavenging, drainage, and water-supply all come in for more or less severe condemnation.

THE Hygienic Museum, presided over by Dr. Koch, was opened at Berlin on Monday last. The collection is described as a very comprehensive one.

WE may direct attention to an advertisement in another column, in which the Secretaries of the Association of Members of the Royal College of Surgeons urge upon all Members of the College who have not yet signed the petition to Her Majesty in Council to do so without delay, and forward the copy thereof to the Secretaries, Western Dispensary, Westminster.

IT has been resolved to found a voluntary hospital for women who were formerly treated under the Contagious Diseases Acts. It is understood that, in the interest of soldiers and sailors, Government has determined to subscribe to the institution.

WE may remind our readers that the Harveian Oration will be delivered by Dr. Pavy on Monday next, at 4 P.M. The Oration will be published in our next issue.

THE measles epidemic at Bolton-by-Bolland is so extensive that it is stated there are but few children in the whole district who have escaped infection.

Pharmacology and Therapeutics.

JENSEN'S COD-LIVER OIL.

THE specimen which we have received of Jensen's medicinal cod-liver oil is of excellent quality. It is nearly colourless, has very little odour, and practically no taste. We are satisfied that exceptional care has been taken in its preparation, and that it will be found of much value in the treatment of phthisis and other wasting diseases.

HYPNOTIC PROPERTIES OF BOLDO-GLUCINE.

Dr. René Juranville of Paris has published as a graduation thesis an account of some experiments and observations on boldo-glucine, an aromatic substance of the nature of a glucoside, obtained by M. Chapoteaut from the leaves of the Pneumus boldus, or Boldo fragrans, a plant belonging to the Monimiaceæ, which has from time immemorial been employed by the natives of Bolivia, Chili, and Peru in hepatic diseases. The boldo-glucine used by M. Juranville is not the same substance as boldine, which is an alkaloid existing in very small quantity in the leaves, and which was isolated in 1874 by MM. Cl. Verne and Bourgoin. The observations were directed to the hypnotic action of the glucoside, and were conducted on both animals and human subjects. Dogs were sent to sleep by intravenous injections of boldo-glucine, in quantities of from two to seven grammes. Observations were taken and curves constructed, showing that during the sleep produced the cardiac beats increased in rapidity, while the amplitude of the pulsations diminished; the arterial pressure was not affected. M. Juranville also gathered from his observations that anæmia of the brain was produced. His therapeutic researches were conducted on insane patients, the doses given being from 22·5 grains to 2 drachms, the substance being enclosed in gelatine capsules or introduced by means of enemata. It was not found easy to administer it in the form of draughts on account of their powerful odour. It gave rise to no disagreeable symptoms, and, indeed, appeared to stimulate the appetite and the digestive functions. The hypnotic effect was very definite, ten patients on whom it was tried being all sent to sleep, and in some cases their hallucinations being removed; the effect was not, however, permanent, the sleeplessness and hallucinations returning on the cessation of the treatment. M. Juranville concludes that though boldo is not a perfect hypnotic, it is likely to prove valuable in cases of neurotic or maniacal insomnia when other drugs have been tried without effect. Further study of its action is, of course, required before any very decided opinion as to its efficacy can be expressed.

PYRIDINE IN ASTHMA.

Pyridine is, according to the *Union Médicale*, valuable as an anti-asthmatic, whether the affection is of cardiac origin or otherwise. About a drachm of the drug is placed on a

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plate in a small room, to which the patient pays periodical visits of from twenty to thirty minutes' duration three times a day. After two or three *séances* the râles in the chest disappear, the expectoration is more free, and sleep is obtained at night, or at all events relief from the asthmatic attacks. In some cases the improvement is permanent, in others it only lasts unimpaired for five or six days. Iodine treatment is then required, which is usually efficacious, but which cannot be borne by all patients.

QUININE AND OIL OF TURPENTINE IN MALIGNANT PUSTULE.

Dr. Don F. Rivas describes in *La Union de las Ciencias Médicas* some cases of malignant pustule which were rapidly cured by the application of a paste composed of quinine and oil of turpentine. One of the cases was that of a shepherd, in whose flock the disease had manifested itself. He was stung by a mosquito on the forehead, and two hours afterwards the head and neck were extremely œdematous. The paste was applied, and the pain and swelling shortly diminished. A couple of days later a large quantity of sanguinolent fluid was discharged, and by the fourth day the man was quite well. Another shepherd of the same flock, who was similarly affected, made use of some of his colleague's paste without consulting a doctor, and was also cured in four days. A third case was that of a woman who had a malignant pustule on the hand, which was unaffected by various remedies which were applied, but on the application of the quinine and turpentine paste the severe pain ceased almost immediately, and the œdema rapidly diminished, the patient being quite restored to health in four days' time.

LANTANINE.

Lantanine is an alkaloid discovered by M. Negrete, and extracted from Yerba sagrata of the family of verbenas. M. Buiza has observed that, like quinine, this alkaloid had some action on the circulation. It slows the nutrition, and at the same time lowers the temperature. The most delicate stomachs tolerate lantanine. Intermittent fevers that prove refractory to quinine have yielded to the influence of two grammes of lantanine. In order to produce antipyretic effects in febrile conditions the dose employed is from one to two grammes in twenty-four hours, given in pills of ten centigrammes. In intermittent fevers the drug is administered immediately after the paroxysm. Ninety-five times out of a hundred a further paroxysm will not appear. The tincture of latana cannot be employed owing to its intense bitterness, which cannot be masked by syrup or wine.

NAPHTHALINE IN URINARY DISEASES.

Naphthaline, which has been used to disinfect the stools, has also the property of retarding the putrefaction of the urine, and may therefore be administered for cases of urinary disorder in which the urine has a fetid odour. Daily doses of one gramme and a half of naphthaline in cases of pyelo-nephritis, cystitis, chronic prostatitis, and stricture with fistulæ, have rendered the urine sweet in from two to five days. The urine, from being turbid, purulent, and alkaline, becomes neutral or acid, and the quantity of pus is diminished. No disorder has been noted in the digestive processes. The drug does not augment the frequency of micturition.

IODOL IN EAR DISEASES.

Dr. Stretter, who has used iodol, the new inodorous substitute for iodoform, in a large number of cases of ear disease, finds that in acute purulent inflammatory affections iodol applications rapidly produce marked benefit, but that in chronic inflammations of the middle ear it is generally quite useless, or at best no better than other more common methods of treatment.

THE UNIVERSITIES OF OXFORD AND CAMBRIDGE.—A return moved for in the House of Commons by Mr. Thorold Rogers has just been issued, containing the following particulars with regard to the Universities of Oxford and Cambridge:—(*a*) With respect to each University Professorship, University Readership, and University Lectureship; (*b*) with respect to the Fellowships of each College; (*c*) with respect to the number of students in each University; (*d*) with respect to the College and University statutes; (*e*) the amount and application of the common University Fund.

THE METROPOLITAN ASYLUMS BOARD.

THE Managers of this Board, at their meeting on Saturday, had under consideration two subjects of some importance. The first related to the visits of individual members of the hospital committees, which were formerly made to the institutions at other times than when the committees met. The Local Government Board had recognised the injury which resulted from this practice, and had interdicted it. The General Purposes Committee now proposed that each committee should nominate two members to visit their asylum, and this recommendation, after a warm discussion, was by a narrow majority adopted, the new members of the board mostly opposing it. It is unnecessary to comment upon the irregularities to which the former practice gave rise; that they occurred was sufficiently shown during the Homerton inquiry. If the Local Government Board should permit the wishes of the General Purposes Committee to be carried into effect, it is to be hoped that some regulations may be made as to the conduct of the managers selected for this purpose. Their first duty should be to visit the officer who is now held to be responsible for the general management of the institution, and who should be permitted to accompany them in their journey of inspection. The managers would in this manner have no difficulty in learning all details concerning administration, and there does not appear to be any reason why their visits, if made in a proper spirit, should be prejudicial to discipline.

The second subject, which was introduced by Sir Edmund Hay Currie, referred to the fact that but fourteen of the metropolitan sanitary authorities had consented to contract with the managers for the reception into their asylums of persons who were not paupers, and the recommendation was made by the General Purposes Committee that it should be intimated to the Local Government Board that nothing more could be done in the matter by the managers until Parliament had made it compulsory on the local boards to discharge their duties. The advantage which would accrue to the metropolis from this contract is not quite obvious; the difficulty of deciding whether the sufferer is a pauper or not makes it of the greatest importance that the duty of giving orders for the admission of patients should be in the hands of one authority, otherwise delay might be occasioned by the desire of the one body to throw the burden of expense on the other. After all, the expense would fall upon the district from which the patient came, and an amicable arrangement between the local sanitary and Poor-law authorities, by which the latter assist the former, is probably the best arrangement that can be made, until the whole question of the removal of infectious cases ceases to be related to Poor-law administration.

UNIVERSITY OF DURHAM: FACULTY OF MEDICINE.

THE following notice has been issued by the Registrar of the University College of Medicine:—

The Senate has now instituted a new degree of Bachelor in Surgery (B.S.), the examination for which will be held together with that for the degree of Bachelor in Medicine, and will comprise, in addition to the surgical part of the examination for the degree of Bachelor in Medicine, a practical examination in Surgical Operations, and in the use of Surgical Instruments. Candidates must produce certificates of attendance on a course of Operative Surgery and on a course of Regional Anatomy, in addition to the certificates required for the degree of Bachelor in Medicine.

For the degree of Master in Surgery (M.S.) candidates must be of not less than twenty-four years of age, and must have obtained the degree of Bachelor in Surgery above named, and must have been engaged for a period of at least two years subsequently to the date of acquirement of that degree in attendance on the practice of a recognised hospital, or in the services or in medical or surgical practice. The subjects of examination will be Surgery, Surgical Pathology, Surgical Anatomy, Surgical Operations, and Clinical Surgery.

The Senate has also instituted a Licence in Sanitary Science (L.S.Sc.), for which every candidate at the date of examination must be a registered medical practitioner, and

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must produce certificates of attendance on certain courses of instruction during a year of professional study at the University of Durham College of Medicine. It is not necessary that this year of professional study should be distinct from that required in the case of a candidate for the degree of Bachelor of Medicine. The examination will comprise Sanitary Chemistry and Physics, Sanitary Legislation, Vital Statistics, Meteorology with Climatology &c., Sanitary Medicine, and Practical Hygiene, and will be divided into written, practical, and *viva-voce* parts.

The following regulations are now in force as applying to candidates for the degree of Bachelor in Medicine:—Candidates who have completed part of their curriculum elsewhere may pass the first and second examinations previously to entering at Newcastle-upon-Tyne, and are recommended to commence their year of residence at Newcastle-upon-Tyne at the beginning of the winter session. Candidates will be admitted to each of these examinations after duly certified attendance at a recognised medical school on courses of instruction in the various subjects of the examination, as set forth in the Schedules of Certificates issued by the University. These may be obtained on application to the Registrar of the University of Durham College of Medicine. Each examination must be passed before the next can be proceeded with, and each must be passed in its entirety, except the First Examination, which may be taken in two parts at different times, one part comprising Elementary Anatomy and Elementary Physiology, and the other part of Chemistry with Chemical Physics, and Botany with Medical Botany. Failure in one of the subjects comprised in either part of this examination will entail rejection in that part. A candidate who has passed the First Examination of the Conjoint Board in England of the Royal College of Physicians of London and the Royal College of Surgeons of England will be exempt from the First Examination of the University of Durham except in the subjects of Chemistry with Chemical Physics, and Botany with Medical Botany, in which he will be examined. A candidate who has passed the First and Second Examinations of the University will be exempt from the First and Second Examinations of the Conjoint Board in England, and will be entitled to present himself for the Final Examination of the Board on the completion of the necessary curriculum. Candidates who hold a qualification from a recognised licensing board in the United Kingdom at the date of entry for the First Examination for the degrees in Medicine are in every case required to pass in Chemistry with Chemical Physics; and are also required to pass in Botany with Medical Botany, if they have not previously passed in that subject at one or other of their examinations for qualification; but they are exempt from examination in Elementary Anatomy and Physiology. All candidates for the First Examination for the degrees in Medicine, whether exempt from a portion of it or not, are required to pay the full fee—£5.

The dates of the examinations will be as follows—viz.: The First Examination for the degree of Bachelor in Medicine will be commenced on April 18th, 1887, and again on Sept. 19th, 1887; the Second Examination will be commenced on April 25th, 1887, and again on Sept. 26th, 1887; the Third Examination will be commenced on Dec. 6th, 1886, and again on June 13th, 1887. The examination for the degree of Bachelor in Surgery will be commenced on the same date as the Third Examination for the degree of Bachelor in Medicine. The examination for the licence in Sanitary Science will be commenced on April 25th, 1887, and again on Sept. 26th, 1887.

THE NEW MEDICAL SESSION.

OWENS COLLEGE.

THE winter session of the medical department of Owens College was opened on the 4th inst. In place of the usual introductory lecture a conversazione was held in the medical school, Coupland-street, where the guests, who numbered about 400, were received by the Dean of the school, Professor A. H. Young. The whole of the rooms and departments of the school were thrown open, and visitors had an opportunity of inspecting the large and varied collection of objects in the medical museum. In the pharmacological laboratory Professor Leech gave demonstrations of the action of drugs on muscle; in the histological laboratory Professor Milnes-Marshall illustrated the methods of section-cutting and various forms of microtomes; and in the physiological lecture-room Professor Stirling dealt with the subject of models as aids in the teaching of physiology. Exhibitions and demonstrations of various kinds interesting to the medical student were given in other departments of the school, whilst excellent music was provided for the delectation of the company. In the course of the evening Professor Young read the annual report, from which it appeared that 323 students had attended the medical department during the session 1885-86—a number which exhibited a considerable increase over that of previous years, whilst the list of those who had been successful in passing the various professional examinations showed a corresponding extension. In the course of a subsequent address, the Professor, after reminding his hearers that the reputation of a medical school depended as much upon the character of its alumni as upon the quality of the teaching and the resources of the institution, referred to the amalgamation of the medical school with Owens College, and to the granting of a supplemental charter to the Victoria University, investing it with the right of conferring degrees in medicine and surgery. Experience alone, he said, could show them any weak points in their regulations for the granting of degrees, and perhaps modifications might be found necessary from time to time; but he thought he was justified in claiming for the College and the University the advantage of offering exceptional opportunities to medical students of acquiring a knowledge of their profession, and of obtaining the stamp of proficiency in the shape of a degree. He hoped also to see established before long a post-graduate course of instruction. After Professor Greenwood had offered a few observations to the students, Dr. Dreschfeld described the process of inoculation pursued by M. Pasteur as a protection against hydrophobia.

QUEEN'S COLLEGE, BIRMINGHAM.

SIR JAMES SAWYER distributed the prizes at this institution on the 1st inst., and at the conclusion of the ceremony remarked that in his opinion there were two distinct lines upon which the authorities of the institution must now look for advancement: one was upon the line of extension of external authority, and the other was upon the line of intrinsic development. He meant by the former that he should like to see facilities for graduation for the students of that school. He should like to see Queen's College associated with any other bodies with which it might act—to see it advancing to university standing. With regard to the other line of development, he thought, without waiting for this matter of university powers a single day, that they ought to set to work at once to make thier teaching as perfect as possible, and there was one way in which he believed this might be done. They ought, if possible, to develop the tutorial department of their teaching. Students who had some experience in medical education knew that a great deal hung upon this tutorial teaching as distinguished from the reading in their own rooms, or from professorial instruction. In every one of the subjects of the medical curriculum they had proper professorial teaching, but he should like to see both the tutorial and professorial combined, so that, for instance, they might have the professor of medicine and the tutor in medicine, and the same in surgery and midwifery.

ST. MARY'S PAST AND PRESENT STUDENTS' ANNUAL DINNER.

ON Friday evening the annual dinner of the past and present students of St. Mary's Hospital was held in the Royal Venetian Chamber, Holborn Restaurant. Mr. Edmund Owen, M.B., F.R.C.S., presided, and amongst his supporters were Sir Edward Sieveking, Col. Duncan, M.P., Surgeon-General Gordon, and Mr. G. P. Field, Dean of the Medical School, about 170 covers being laid.

After dinner the Chairman gave "The Queen" and "The Prince of Wales and the rest of the Royal Family," the toasts being accorded with musical honours. The Chairman also gave "The Army, Navy, and Reserve Forces," associating with the toast the names of Col. Duncan, R.A., C.B., M.P., Mr. J. Coleman Barr, and Surgeon-Commandant Cantlie, who responded in suitable terms. The Chairman next gave the toast of "Success to St. Mary's Hospital Medical School. To all St. Mary's men he would say that it

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would be wise to pay them a visit once a year, or at least once in two years, or they would find their old *alma mater* grown out of all recognition. They had "annexed" another house in Westbourne-terrace as an addition to their residential college, and he hoped they would go on annexing. The Natural Science Scholarships originated by the late Dean, Dr. Cheadle, had attracted many to the school, and he could confidently say that the staff was never more unanimous, never more united, never more determined to do what was right for those under their charge. They now enjoyed exceptionally pleasant time, and their future was never so prophetic of prosperity. He hoped, however, that their glowing successes would not be the presage of decay. The toast was drunk with enthusiasm.

Mr. A. J. Pepper gave "The Past and Present Students of St. Mary's Hospital," which was responded to by Mr. H. Bullock, on behalf of the "Past," and by Mr. H. A. Kidd for the "Present."

Surgeon-General Gordon proposed "The Medical Staff and Lecturers," which was responded to by Sir Edward Sieveking, who spoke of the thirty-six years that he had been associated with St. Mary's, and hoped that the medical staff and lecturers would always pull well together in the future as they had done in the past. This was one of the reasons of their success. They had worked together as a family ought to work and live together. They had trusted one another. What was now being done was putting on the climax to the work of their predecessors. They were doing everything to encourage the healing art in the strict sense of the term.

Dr. W. B. Cheadle proposed "The Dean of the School," who, in responding, spoke of the good fellowship that existed between past and present students, and amid loud cheers announced an entry of over seventy students.

Dr. Stamford Felce proposed the toast of "The Orator of the Day."

Mr. Malcolm Morris briefly responded, and the toast of "The Chairman," proposed by Dr. Alfred Meadows, J.P., was drunk with musical honours.

During the evening songs were given by Mr. Bertram Thornton, Mr. Little, Mr. Lane, Mr. Critchett, Surgeon-Commandant Cantlie, and others.

WILLS OF MEDICAL MEN.

THE Scotch confirmation, under seal of office of the Commissariot of Ayrshire, of the will of John Findlay Arthur, M.D., C.S.I., Surgeon-Major, retired list, Madras Army, of Lochside House, New Cumnock, who died on July 26th last, granted to Mr. William Arthur, the brother, Mr. Robert Shankland, and Mr. David Mitchell Arthur, the nephew, the accepting executors nominate, was resealed in London on the 20th ult., the value of the personal estate in England and Scotland amounting to upwards of £28,000.

The will of Mr. John Archer, surgeon, late of 9, Carpenter-road, Edgbaston, Birmingham, who died on March 8th last, was proved at the Birmingham District Registry on Aug. 14th by Mr. George Frederick Bolding and Mr. Charles Augustus Harrison, the executors, the value of the personal estate amounting to over £23,000. The testator bequeaths legacies to his son, daughter, executors, nephews, nieces, coachman, and servants; and the residue of his real and personal estate he leaves upon trust as to one half for his son, William Gammon Archer, and as to the other half for his daughter, Mary Ellen Archer.

The will of Alfred Parr, M.D., late of Ravenleigh, Betchworth, Surrey, who died on June 19th last, was proved on Aug. 21st, by Mr. Alfred Harry Parr Ewer, the nephew, one of the executors, the value of the personal estate amounting to over £16,000. The testator gives an annuity of £100 to his said nephew during the life or widowhood of his wife; and there are some other legacies. The income of his residuary estate he leaves to his wife for life or widowhood, and at her death or marriage again his residuary estate is to go to his said nephew.

The will of Walter Moxon, M.D., late of Northolme, Broadlands, Highgate, and of 6, Finsbury-circus, who died on July 21st last, was proved on Aug. 13th by Mrs. Selina Moxon, the widow, the value of the personal estate exceeding £11,000. The testator states, "My last will is that all I possess shall be at the disposal of my wife after my death."

The will of Thomas Ross Jameson, M.D., Inspector-General, Army Hospitals, late of Lympstone, Devon, who died on July 6th last, was proved on Aug. 23rd by Mrs. Sarah Margaret Jameson, the widow, the value of the personal estate amounting to upwards of £10,000. The testator bequeaths £100 and his furniture and effects to his wife; and the residue of his real and personal estate is to be held upon trust for her for life. At his wife's death he gives an annuity to his sister, and the remainder of the income of his property is to be paid to his aunt, Mrs. Jane Carmichael, for her life. At her death he leaves two-thirds of the ultimate residue upon trust for his brother and sister, William Werner Jameson and Jane Milne Jameson; and one-third upon trust for his sister-in-law, Mrs. Eliza Ross Jameson, and her daughter.

The will and codicil of Christopher Joseph Madden, M.D., L.R.C.S.I., late of 12, Northwick-terrace, Maida-vale, who died on Aug. 8th last, were proved on Sept. 4th by Mr. Alfred Ransford and Mr. Robert James Miller, the executors, the value of the personal estate amounting to over £7000. The testator, after bequeathing a few legacies, gives the residue of his property to the Benevolent Society of Saint Patrick, Stamford-street, Blackfriars.

The will of Robert James Mann, M.D., late of 5, Kingsdown Villas, Wandsworth-common, who died on Aug. 4th last, was proved on the 3rd ult., by Mrs. Charlotte Elizabeth Mann, the widow, and Mr. James Sewell Neville, the executors, the value of the personal estate amounting to over £2000. The testator devises and bequeaths all the real and personal estate to which he shall be entitled at the time of his death to his wife for her sole and separate use absolutely.

The will of John Wills, M.D., of Pembroke-terrace, St. Helier, Jersey, who died on July 21st last, was proved in London on the 20th ult. by Mrs. Harriet Catherine Wills, the widow, one of the executors, the value of the personal estate within the jurisdiction of the English Court being over £900. The testator leaves all his property upon trust for the use of his wife for life; at her death there are annuities to Florence Maryon Burley and Eugenie Villais, and the ultimate residue is to go to his daughter, Mrs. Emily Rose Penton.

The following legacies have recently been left to hospitals and other medical charities:—Mr. Richard Howard, of 2, Shirley Villas, Addiscombe-road, Croydon, £250 each to the Hospital for Sick Children, Great Ormond-street, the London Hospital, the Royal Hospital for Incurables, Putney, and the Croydon General Hospital.—The Rev. William Henry Edmeades, of Nurstead Court, Kent, £100 to the Gravesend Dispensary or Hospital; and £50 each to the Brompton Hospital for Consumption and the Hospital for Incurables.—Miss Mary Elizabeth Tanner, of Foulden Lodge, Upper Clapton, £3000 to the Hospital for Incurables, Putney, £500 to the German Hospital, Dalston, and £100 to the Dispensary at Stoke Newington.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 5691 births and 3369 deaths were registered during the week ending Oct. 9th. The annual death-rate in these towns, which had declined in the preceding four weeks from 22·6 to 20·6, further fell last week to 19·3. During the thirteen weeks of last quarter the death-rate in these towns averaged 20·4 per 1000, and was 0·8 below the mean rate in the corresponding periods of the ten years 1876-85. The lowest rates in these towns last week were 14·2 in Bristol, 15·7 in Brighton, 17·2 in London, and 17·5 in Birmingham. The rates in the other towns ranged upwards to 23·9 in Newcastle-upon-Tyne, 24·4 in Bolton, 25·4 in Liverpool, and 29·9 in Preston. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had declined in the preceding four weeks from 1202 to 746, further fell last week to 578; they included 324 from diarrhœa, 70 from "fever" (principally enteric), 70 from scarlet fever, 42 from measles, 42 from diphtheria, 30 from whooping-cough, and not one from small-pox. The lowest death-rates from these zymotic diseases were recorded last week in Huddersfield, Plymouth, and Cardiff; and the highest in Preston, Newcastle-upon-Tyne, and Wolver-

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hampton. Diarrhœa caused the highest death-rates in Norwich, Preston, Sunderland, and Wolverhampton; "fever" in Preston, Halifax, Norwich, Derby, and Portsmouth; scarlet fever in Liverpool and Salford; measles in Wolverhampton and Halifax; and whooping-cough in Preston. The 42 deaths from diphtheria included 28 in London, 4 in Portsmouth, 4 in Liverpool, and 2 in Leeds. Small-pox caused no death in London and its outer ring, or in the twenty-seven large provincial towns; and only one small-pox case was under treatment on Saturday last in the metropolitan hospitals receiving cases of this disease. The deaths referred to diseases of the respiratory organs in London, which had increased in the preceding four weeks from 110 to 187, further rose last week to 229, but were 26 below the corrected average. The causes of 72, or 2·1 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Bristol, Leeds, Leicester, and in seven other smaller towns. The largest proportions of uncertified deaths were registered in Halifax, Sheffield, and Oldham.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 16·8 and 18·3 per 1000 in the preceding two weeks, further rose to 19·8 in the week ending Oct. 9th; this rate was, however, 0·5 above the mean rate during the same week in the twenty-eight English towns. The rates in the Scotch towns last week ranged from 8·3 in Greenock and 13·5 in Aberdeen, to 24·6 in Perth and 27·8 in Paisley. The 489 deaths in the eight towns last week showed a further increase of 37 upon the numbers in the previous two weeks, and included 25 which were referred to whooping-cough, 22 to diarrhœa, 21 to scarlet fever, 6 to "fever" (typhus, enteric, or simple), 5 to diphtheria, 3 to measles, and not one to small-pox; in all, 82 deaths resulted from these principal zymotic diseases, against 78 and 63 in the previous two weeks. These 82 deaths were equal to an annual rate of 3·3 per 1000, which corresponded with the mean rate from the same diseases in the twenty-eight English towns. The deaths attributed to diarrhœa, which had declined in the previous four weeks from 57 to 34, further fell last week to 22, of which 8 occurred in Glasgow, 4 in Edinburgh, and 3 in Dundee. The mortality from diarrhœa in the Scotch towns last week was again considerably below that which prevailed in the English towns. The 25 fatal cases of whooping-cough showed a considerable increase upon the numbers in recent weeks, and included 20 in Glasgow and 3 in Paisley. The deaths from scarlet fever, which had been 9 and 8 in the previous two weeks, rose last week to 21, of which 14 occurred in Glasgow, 4 in Dundee, and 2 in Paisley. Of the 6 deaths referred to "fever," 2 were returned in Glasgow and 2 in Paisley. The 5 fatal cases of diphtheria included 3, and the 3 of measles 2, in Glasgow. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 65 and 67 in the previous two weeks, further rose last week to 93, and exceeded the number in the corresponding week of last year by 29. The causes of 73, or nearly 15 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had declined in the preceding three weeks from 27·5 to 22·8, was 23·1 in the week ending Oct. 9th. During the thirteen weeks of the last quarter the death-rate in the city averaged 22·1; the mean rate during the same period was 18·7 in London and 17·5 in Edinburgh. The 156 deaths in Dublin last week showed a decline of 2 from the number in the previous week, and included 17 which were referred to diarrhœa, 6 to scarlet fever, 4 to "fever," 1 to whooping-cough, and not one either to small-pox, measles, or diphtheria. Thus 28 deaths resulted from the principal zymotic diseases, against numbers ranging from 29 to 30 in the preceding four weeks; they were equal to an annual rate of 4·1 per 1000, the rates from the same diseases last week being 2·1 in London and 1·6 in Edinburgh. The fatal cases of diarrhœa, which had been 29, 25, and 23 in the preceding three weeks, further fell last week to 17. The 6 deaths from scarlet fever showed a decline of 2, while the 4 from "fever" exceeded the number in the previous week by 2. Six inquest cases and 7 deaths from violence were registered; and 31, or one-fifth of the deaths, were recorded in public institutions. The deaths both of infants and of elderly persons showed a decline from the numbers in recent weeks. The causes of 19, or more than 12 per cent., of the deaths registered during the week were not certified.

THE SERVICES.

ARMY MEDICAL STAFF.—Surgeon-Major E. Farrington Boult has retired upon temporary half-pay.

ADMIRALTY.—The undermentioned Surgeons have been promoted to the rank of Staff Surgeon in Her Majesty's Fleet:—Arthur Willoughby Russell and William Edward Breton.

The following appointments have been made:—Staff Surgeon A. W. Russell, to the *Hyacinth*, reappointed on promotion; Staff Surgeon W. E. Breton, to the *Kingfisher*, reappointed on promotion; and Surgeon W. Lindsay Chubb, to be Surgeon and Agent at Sandgate.

ARTILLERY VOLUNTEERS.—1st Cheshire and Carnarvonshire: Arthur John Jefferson, Gent., M.B., to be Acting Surgeon.

RIFLE VOLUNTEERS.—2nd Volunteer Battalion, the Royal Warwickshire Regiment: Acting Surgeon George Wilson resigns his appointment.

Correspondence.

"Audi alteram partem."

HOSPITAL FOR WOMEN, LIVERPOOL.

To the Editor of THE LANCET.

SIR,—I beg to enclose copy of correspondence between the honorary secretary of the Hospital for Women, Liverpool, and Sir Spencer Wells, Bart. With Sir Spencer's permission, I ask the favour of its insertion in your forthcoming number, as I think it will be of interest to your readers at the present time.

I am, Sir, yours truly,

Oct. 11th, 1886. THOMAS F. GRIMSDALE.

3, Upper Grosvenor-street, London, W., Oct. 4th, 1886.

DEAR DR. GRIMSDALE,—The honorary secretary of the hospital of which you are the consulting physician has sent me a letter which I think it right to forward to you, with a copy of my reply. I ought to have added that the inquiry I propose should include the question whether the operation was performed after consultation or not. I have only alluded in my letter to the honorary secretary to the 111 cases where abdominal section involved partial or complete "spaying." If I had included all the cases of abdominal section, there would have been 169 out of 347, adding greatly to the force of the argument in favour of a full inquiry. You are quite at liberty to make any use you please of this correspondence. Yours very truly,

T. SPENCER WELLS.

Hospital for Women, 107 and 109, Shaw-street, Liverpool, Sept. 24th, 1886.

SIR,—A question having been raised regarding the practice of our institution, my committee would thank you for an expression of opinion on the cases treated in 1885, a detailed account of which is contained in the annual report which I have taken the liberty of sending to you to-day. The question raised refers chiefly to the operations of removals of uterine appendages, of which there have been in 1885 96 total removals, and 15 partial removals. The opinion has been expressed here—probably not unbiased by specific local influences—that this was excessive. The committee, wishing to arrive at a perfectly impartial appreciation, would much value your opinion on the subject. The committee would call attention to Table II. on pages 16 and 17 of the report, and to Table III., pages 18 to 33, the former giving the summary of in-patients, the latter particularising each individual case; also to page 10, giving a statement of the total annual work of the hospital, from which you will see that the total number of patients, counting in- and out-patients, amounted in 1885 to 3858, of whom 347 were in-patients and 3511 dispensary patients. Now it would appear that out of so large a total as 3858 patients

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the number of 96 total removals of uterine appendages and 15 partial is *not* an excessive figure, but a very moderate one, bearing in mind that many cases of the worst kind were sent into hospital by practitioners outside, who have not the opportunity and facility of treating them found at our hospital. These 96 and 15 cases would therefore appear to be drawn not only from 3858 hospital patients proper, but from a much larger area, comprising the practice of many of the 300 medical men in Liverpool. Many patients also come from Wales and other towns in Lancashire, even from Canada; and a computation has been made by a medical man unconnected with our hospital that out of so large an area 600 annual cases of that kind would not be excessive. The 96 and 15 cases referred to would therefore appear to imply a very careful selection of the most urgent only for operation. It must be here stated that there are 33 beds at our hospital, and, besides these, there are none for the treatment of these cases in Liverpool, except the 17 beds in the Thornton ward of the Royal Infirmary, so that naturally the vast majority of cases aggregate at our hospital. The committeee beg to tender you their thanks for any expression of opinion which you may make on the subject, and which will be invaluable to them.

I remain, Sir, your most obedient servant,

F. C. A. MINOPRIO,

Hon. Sec., Hospital for Women, Shaw-street, Liverpool.

Sir T. Spencer Wells, Bart.,
Samaritan Hospital for Women, London.

Balnaboth, Kirriemuir, September 29th.

DEAR SIR,—Your letter of the 24th inst. has been forwarded to me here. In reply I feel bound to say that as the total number of in-patients in the Hospital in 1885 was only 347, the statement that of these 111 (or nearly one-third) were subjected to abdominal section is so shocking as to be almost incredible. If it is correct, in my opinion a most complete and searching inquiry should be made into the details of the case of every woman operated upon; the reasons why the operation was performed; whether it was done after full explanation of the danger and of the necessary results to the patient and her husband; and what has been gained or lost by each woman who has survived the operation.

I am, dear Sir, yours truly,

To the Hon. Secretary, Hospital for Women, Liverpool. T. SPENCER WELLS.

DIRECT REPRESENTATION OF THE PROFESSION ON THE GENERAL MEDICAL COUNCIL.

To the Editor of THE LANCET.

SIR,—It is not desirable that controversy on this subject should be further embittered. I, for one, will only ask you for a few lines in reply on *two* points only, and I trust to your courtesy and sense of fair play to give them insertion in your next issue. Indeed, the present crisis is too important, too pregnant with the well- or ill-being of our common profession, to make it a time for controversial recrimination. It is a time rather when all of us should unite in the single effort to secure three good men to represent us on the Medical Council. Whether these men be consultants or general practitioners, or both, or nominated by one or other committee, matters nothing; but it does matter that they should know the educational and other wants of the general practitioner, and be able to make those wants heard and respected at headquarters.

With this preface I will proceed to remark upon the two points to which I wish to call the attention of your readers. The first is the alleged want of *freedom of action* in this matter. Will anyone point out in what way the freedom of the electors is interfered with, or can be interfered with, by our committee? Each elector will sign his voting-paper in the privacy of his own consulting-room. It will be a ballot, in fact, no one except the returning-officer necessarily knowing how anyone has voted. In every election voters are plied with addresses, cards for promises, and all the artillery of persuasion. What of it? The ballot gives us full protection from any interference with our freedom, and each of us can afford to throw all those paper bullets of which we do not approve into the waste-paper basket. Then, as to pressure. Again I will ask, in what consists the difference between the pressure exerted by *one* committee for *one* man, and that of a committee which recommends three men? As to numbers, I find one candidate has a committee of not less than six hundred working for him; whilst ours has only four hundred. Surely the *pressure* here must be in the proportion of six to four! And this leads me to explain a point which is perplexing many as to the action of our committee. Our committee was instituted to select *three* fit and proper persons by what was, in effect, a ballot. It is by no means the desire of that committee to compel those who agree with their general principle to vote for all those three candidates *en bloc*. Many are pledged already to some other candidate, and all we ask is, that the profession at large will well consider the claims of Messrs. Wheelhouse, Foster, and Glover, and vote for such of them as they may feel at liberty to do.

Now to my second point: Although in Dr. Glover's courteous letter to me, which appears in the last number of THE LANCET, there is no mention of *caucus* or *clique*, these terms are still used by others in their addresses, and by the members of their committees, and they are applied to the "Birmingham" committee only. Now it has been already fully explained that our committee was formed *absolutely* without reference to any particular persons to be recommended. Over 1000 members of the profession were asked to form a committee, and of the 360 who responded nothing was known of their sentiments with regard to *any* candidate. Therefore, whichever three persons had obtained the largest number of votes, those three persons must have been adopted by the committee. Is this a *caucus?* and is it possible to call 360 gentlemen scattered all over the country, few of them having any personal knowledge of each other, a *clique?* So absurd do these accusations appear to us here that we consider it would be a waste of time to take further notice of them.

Before concluding, I would like to caution voters against forming too high an estimation of the powers conferred by the Medical Act upon our direct representatives. Too great expectations will, I fear, only lead to disappointment. From the numerous letters you have published, and from the tenour of the addresses of some candidates, we might be led to expect the regeneration of the profession itself from the efforts of these gentlemen. But it must be remembered that the General Medical Council has authority only over education and registration. It may raise the standard of education, it may look sharply after the licensing and examining boards, and it may punish criminal persons by removing their names from the Register; but I do not see how it can deal with club or union practice, or interfere with quacks or unlicensed persons. These points require further legislation.

I am, Sir, yours faithfully,

Worcester, Oct. 13th, 1886. WILLIAM STRANGE, M.D.

TREATMENT BY MASSAGE.

To the Editor of THE LANCET.

SIR,—The letter on Treatment by Massage by Dr. Sturges, senior physician to the Westminster Hospital, is of considerable interest, as affording an admirable example of the necessity which still exists for elementary instruction in the subject. Dr. Sturges falls into the curious error of confounding massage with the Weir Mitchell treatment. Everyone who has the slightest acquaintance with the literature of massage knows that Dr. Weir Mitchell was not its "original proposer," and I am sure that distinguished neurologist would be the first to repudiate any claim to be considered an authority on the subject. Dr. Weir Mitchell's paper on "Rest in the Treatment of Nervous Diseases" appeared originally, in 1875, in Seguin's Series of American Clinical Lectures long after the publication of Dr. Mezger's classical thesis, and the works of his pupils Berghman and Helleday, and of Phélippeaux, Gautier, Estradère, Laisné, and a host of other writers. In Weir Mitchell's "Gunshot Wounds and other Injuries of the Nerves" (1864), the word massage is not even mentioned, and there is but a passing reference to the value of shampooing; whilst in the first edition of "Fat and Blood" (1874), the author distinctly disclaims any thought of "putting forth anything very remarkable or original," and states explicitly and with commendable candour that the different procedures which, taken collectively, constitute his method have been employed individually, one and all, by other physicians. Dr. Douglas Graham of Boston, who, in the opinion of Dr. Benjamin Lee, unites in a greater degree than anyone in America the practical skill of an accomplished

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masseur with the theoretical knowledge of an intelligent educated physician, says: "Not a few of the profession applaud Dr. Mitchell and Professor Playfair in a manner that would lead us to infer that they are to be considered the original inventors of massage, and give their whole sole and exclusive attention to it and the cases in which it is useful. With equal propriety might they be regarded as experts in chemistry and materia medica because they use medicine as well as massage, or specialists in electricity because they have called largely on this medical agent to assist them." Shampooing or medical rubbing, which is very useful in its way, can readily be acquired by anyone "in a few lessons," but the true massage, as practised by Professor Von Mosengeil and others on the Continent, depending as it does on a knowledge of anatomy and physiology, certainly cannot be mastered in less than two years.

I am, Sir, your obedient servant,

Weymouth-street, W., Oct. 11th, 1886. WM. MURRELL, M.D.

To the Editor of THE LANCET.

SIR,—Having had some considerable experience in the practice of massage and manual treatment, I beg to protest against the statement by Dr. Sturges in last week's edition that the system can be acquired in a few lessons. The argument used by Dr. Sturges is curious. If it takes "two years" to learn, "why not ten"? he says. So one may ask, if it takes four years to make a surgeon, why not forty? Again, he says: "It may be confidently asserted that there is no digital use whatever needing two years for its acquirement that does not go on advancing towards perfection so long as the mind which informs the fingers retains its vigour." Grant all this. The masseur does become more perfect through years of work; but the point is, how soon is he able to practise the art with benefit to the patient? This question he answers by saying it is a knack, and is acquired, like lawn-tennis or cricket, "in a week." Now, doubtless many are quicker at acquiring it than others; but the benefit the patient can derive must be in proportion to the skill shown, and it seems utterly unreasonable that a method of treatment which requires delicate manipulations of different kinds, and a considerable knowledge of physiology and anatomy, can be sufficiently acquired in a week. Much harm undoubtedly is often done by inexperienced operators. I do not refer especially to the method employed by Dr. Weir Mitchell, and described in his little book entitled "Fat and Blood," but to the whole practice of mechanical treatment, which, though it has existed in rude form for ages, yet really came into prominence and assumed scientific form at the beginning of the present century, when Ling introduced his system at the University of Lund. The methods of Drs. Weir Mitchell and Playfair apply only to a limited range of cases, and consequently the manipulations are limited; yet, even in cases where those limited manipulations were to be applied, I, for my part, should prefer a nurse who had much more experience and practice than could be obtained in a week, precisely on the same ground as when Dr. Sturges administers a drug he would prefer a good one.

The whole system of massage or manual treatment is of very much wider area than that covered by Dr. Weir Mitchell's method. In Sweden, the home of the treatment, it has been employed for many years and for many diseases with admirable results. The Central-Gymnastik Institut (founded by Ling) still flourishes in Stockholm, and furnishes a thorough education in all the manipulations wrought out by Ling and improved upon by his successors. In addition to the practice of the manipulations, physiology and anatomy are carefully taught, and at the end of a two-years' course a diploma is granted by the Institut. Men from that institution are now practising all over Europe, and it is certain that in the struggle between the trained and the untrained there can be only one issue. Why should we not have a similar institute in London, where a system could be taught and properly equipped manipulators sent into the field? If the treatment is to be carried out at all, why not be thorough? If, as Dr. Sturges admits, it is a treatment which "confessedly needs skill, dexterity, and practice," can anyone believe that a few lessons can do this? No; if the "settling day" has to come "when its precise value will be finally determined," that can only be when we have careful observers and trained manipulators. Without these the settling day will be deferred for ages, or the practice itself will fall into the region of empiricism and quackery.

I am, Sir, yours truly,

Stranraer, N.B., Oct. 1886. THOMAS EASTON, M.A., M.B.

INDUCTION OF PREMATURE LABOUR IN CERTAIN SEVERE CASES OF ALBUMINURIA.

To the Editor of THE LANCET.

SIR,—The publication of Professor Cullingworth's case in last week's issue of the "successful induction of premature labour in an extreme case of albuminuria" induces me to place on record a similar case with somewhat similar treatment.

Mrs. S——, primipara, aged twenty-six, came under my care on Nov. 5th of last year. The case on examination proved to be one of pregnancy complicated with albuminuria. The confinement was expected about the middle of January of the present year, thus making her period of pregnancy somewhat less than seven months. The lower extremities were extremely anasarcous, the hands and face slightly so. The quantity of urine passed was much less than natural, was of high specific gravity, and highly albuminous, containing a large quantity of casts—hyaline and blood casts. The treatment consisted of diaphoretics, the hot-air bath, free purgation, and free leeching of the loins. Notwithstanding this, the urine gradually diminished and became more albuminous, until, on the 27th instant, the quantity passed in the previous twenty-four hours only reached between three and four ounces. Now came intense headache, impaired vision, vomiting, and a condition highly suggestive of uræmia. Under these circumstances, with no labour imminent, I considered the best treatment would be to induce premature labour. This I did in the usual manner with a gum-elastic catheter, and with the best results, as my patient was delivered within twenty-four hours from the introduction of the catheter of a living female child, apparently about seven months' gestation. The after progress was all that could be desired; the urine was passed in large quantities, and within one week was quite free from albumen.

I am Sir, yours truly,

Bolton, Sept. 1886. ROBERT PATRICK, M.D.

To the Editor of THE LANCET.

SIR,—It seems to me that Dr. Cullingworth's judicious treatment of his patient by hydragogue cathartics and hot-air baths played a more important part in the prevention of convulsions than did the cheerful disposition of the patient, and he has every reason to be satisfied with so favourable a termination of such a serious case; but I would submit that it is not fair to judge of the effect of pilocarpine in the albuminuria of pregnancy from the result of this case, for, to quote the words of the report, "it produced no result whatever," and therefore as the characteristic diaphoresis did not ensue, it is evident the pilocarpine was inert, and as it was given in a sufficiently large dose—a third of a grain—it is fair to assume it was the fault of the particular specimen used.

I am, Sir, yours &c.,

Sunderland, Sept. 18th, 1886. JAMES MURPHY.

"INFANT FEEDING."

To the Editor of THE LANCET.

SIR,—I hope space may be granted me for a short letter in answer to that of Dr. Thurstan, published in your issue of Oct. 9th.

I am quite unable to accept his interpretation of the value of a physiological basis for our actions in dietetics or, by inference, in any branch of medical treatment. Such knowledge has governed me in coming to the conclusions I have, and has made, I trust, my experience of ten years children's work of more value than it would have been without such help. The question that we are discussing is, I gather, that of *hand-rearing* of infants from *birth*, and not when affected by diarrhœa or some such ailment. My remarks, I would say, must be accepted as within this belief. My experience is entirely opposed to Dr. Thurstan's assertions, having been built up after duly testing methods such as he advocates. I am prepared to state that in conjunction with the general measures referred to in my

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note, and which want of space will not allow me to give in detail, a cow's-milk diet or some modification of it will succeed admirably. What I wished to convey by my first letter was that the question of "infant feeding" in his paper, as in very many others, is dealt with in a narrow and incomplete way. Failure with cow's milk, as before said (and this statement is based absolutely on personal experience both in hospital and private work), too often occurs from the manner of using it. Intolerance of it is acquired by too frequent feeding, too large meals, too rapid feeding, or too strong a mixture. Dr. Thurstan's letter makes clear to me that this aspect of the question has not sufficiently engaged his attention, hence his failure. In support of this statement, I would remind him that even in his letter the *times* of feeding are not very definitely stated, and the *quantity* for each meal is not given. Another practical point not referred to, I believe, in any handbook on the subject is that milk varies very much in strength at different times of the year. For instance, in May greater caution has to be used in increasing the strength of the meals than would be practised in October or later. The reasons for this will be obvious to most people. His precaution as to the care of the bottles and tubes is certainly not the best method. In the first place, tubes are not advisable, and in the second, water alone will not keep either the bottle or the tube chemically clean. For more on this head, and, indeed, for much useful, general, and special information, he will, I hope, permit me to refer him to my friend, Dr. Goodhart's "Student's Manual on Children." In this work he will find a suggestion of mine as to the value of a solution of salicylate of soda for keeping bottles, &c, pure. I must admit that with farinaceous feeding an increase in the bulk of the infant is speedily obtained, but I also know that health in the future is risked by this practice. Children fed in this way declare their weakness usually about the end of the first year. The oft-repeated advice that one cow's milk should be used is also endorsed by Dr. Thurstan. I would suggest that the milk from one *dairy* be used. By so doing a product is obtained the result of a method of feeding common to many cows, and in this way the disturbing influences of menstruation, which occurs regularly in this animal, even when giving milk, are avoided. Other possibly injurious factors are reduced in importance.

Sufficient has been said, I hope, in this letter, to show that my chief motive for writing has been to point out what I believe to be the much too common error of dealing with infant feeding, as if the selection of food alone was to give us all we want—viz., health and comfort to babies.

The interest which I take in the subject must be my excuse if I have appeared dogmatic.

I am, Sir, your obedient servant,

LEWIS W. MARSHALL, M.D.,

October, 1886. Hon. Surgeon, Children's Hosp., Nottingham.

NON-RECOGNITION OF PROFESSIONAL WORK IN THE ARMY MEDICAL DEPARTMENT.

To the Editor of THE LANCET.

SIR,—I venture to think that the article in THE LANCET of Sept. 25th, directing attention to the above as "a serious defect" in its administration, will strike a chord and throw a ray of light and hope in many a hard-working and willing, but disappointed, member of this branch of the public service. The main reason for the existence of the medical staff is unquestionably professional, and yet this is the one aspect of it that lacks encouragement from those in authority. We have in our ranks men who, by their contributions to service generally, and to medicine especially, by taking the higher degrees of the colleges to which they belong, by qualifying for sanitary degrees, by filling educational posts in the Netley School without pecuniary increase, by filling important posts in general and special hospitals requiring special talents, by work during epidemics and in the no less important but quieter paths of every-day duty, have proved beyond all doubt their capacity, love of work, willingness and desire to further as far as in them lies the good of the State they serve; and yet where is the man in the present Army List who has received the slightest recognition by advancement or reward as a stimulus to himself or others towards professional culture? Selection has been the keynote to several warrants, and one of the objects in instituting the examination for promotion to brigade rank was to furnish the means to this end. Yet even here, in no instance has the strict line of seniority been departed from; exclusion merely has been increased in frequency. We are all aware that the present scheme of the department is not acceptable to the military authorities who control promotion and rewards, equally as that to produce good work in it and progress requires the bringing to the front the most competent. Yet what more potent means can be devised to obstruct improvement and oppose the normal development, to produce a dead level of professional mediocrity, than the present system of advancement by length of service and rewards controlled by the military chief? If the State requires that the medical staff of its army should be a body capable of efficiently and thoroughly carrying out professional and sanitary work, both in the administrative and executive ranks, let it take care that warrants be not ignored, that selection be the rule, that wholesome stimulants to self-culture be forthcoming, and that the responsibility and source of advancement be centred in the man most capable of exercising it—the medical head. We are not "the sweepings of the schools," as stated in the House of Commons; we are fair representatives of the profession as a whole; while deprived of the competitive struggle and outside influences towards progress existent in civil life, we are very human, and respond to the stimulus of recompense or sink into lethargy through neglect, as other men. What we want as a body is to be freed from certain impediments to our work, and as individuals to find honourable recognition by promotion and rewards of honest labour and professional culture; and these granted we will give a good account of the power and duties entrusted to us by our employers.

I am, Sir, yours truly,

Sept. 4th, 1886. ONE OF THEM.

THE PROPOSED NEW MEDICAL DEGREE.

To the Editor of THE LANCET.

SIR,—I do not gather from the correspondence in the medical journals on the subject of the proposed new medical degree whether any provision is contemplated for the admission to the degree without further examination of men who are already Fellows of the Royal College of Surgeons of England or Members of the Royal College of Physicians of London; but I cannot help thinking that if this proposal were fairly considered it would receive the support of the "powers that be." It must be remembered that before the University of Durham made their present liberal provision for practitioners of fifteen years' standing, some men in practice, moved by a laudable desire to possess a higher qualification than that which they had obtained at the close of their career as students, passed the examination for one or other of the above-mentioned distinctions; and some have done so who, having been *less* than fifteen years in practice, were not at the time eligible for the Durham degree. Now, I think it will be admitted by all that a man who has obtained the *superior* qualification of either of the two London Colleges must be, from a professional point of view, more completely trained and educated than the ordinary run of men, and might therefore most appropriately be admitted at once to the new Doctorate, without being subjected to the annoyance of any further examinational test; perhaps even the University of Durham itself, if this matter were laid before the Senate in a proper light, might be willing to concede that the incorporation among their own graduates of the few men who might desire admission from among those to whom my remarks refer would not be likely in any way to damage the prestige of their degree, while those who were so incorporated could hardly fail to derive much gratification from being thus recognised by and connected with one of the great educational centres of the kingdom.

I am, sure, Sir, that the expression of your opinion on these points, and the assistance of your pen, would be very welcome to some of my professional brethren; and doubly so if it should be the means of bringing about a decision favourable to my suggestion. Hoping that others will take this question up, I am, Sir, yours obediently,

Sept. 27th, 1886. BETA.

NEW VICTORIA HOSPITAL.—On Wednesday this hospital, situated in Burnley, was opened by Prince Albert Victor, in the presence of a distinguished company.

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NORTHERN COUNTIES NOTES.

(From our own Correspondent.)

NEWCASTLE COLLEGE OF MEDICINE.

THE inaugural meeting in connexion with the re-opening of the College of Medicine here took place on Tuesday, Oct. 5th. In the absence of the President of the Council, Dr. Heath, Dr. Gibson took the chair. The preliminary proceedings were of the usual formal character, including the presentation of prizes to successful students, which office was gracefully undertaken by the Mayor of Newcastle, B. C. Browne, Esq. In his address to the students, the Mayor, in reference to preventive medicine, pointed out that the time might come when this would be the most important part of their work, and arrangement might be made for the payment of medical men out of the rates for this purpose. He thought also that, considering the shortness of human life, the active period of life might be prolonged and suffering abridged were medical men called in sooner and oftener in cases of illness. Altogether the Mayor's address was an advanced one, suggestive and pithy, and would have a good tendency as regards his hearers and the public.

SUNDERLAND HOSPITALS.

At a public meeting held last Tuesday, in Sunderland, to appoint a committee to carry out the proposed extension of the infirmary as a memorial to the late Alderman Hartley, it was mentioned that the proposal to amalgamate the Children's Hospital with the Sunderland Infirmary had been favourably considered by a committee of both institutions, and was now in a fair way of being accomplished. It was also stated that the proposed amalgamation had given satisfaction to all classes in the town, and that it would tend largely to the benefit of the sick poor. On Thursday last an election took place of a physician to fill the honorary post vacant by the resignation of Dr. Dixon, who has for many years acted as physician to the Sunderland Infirmary. Dr. A. B. Low was elected out of many candidates. This, I believe, is the first time that the new system of providing for such vacancies by an election committee chosen from the governors was adopted. The voting was by ballot, canvassing also having been abolished.

VACANCIES AND CHANGES IN NEWCASTLE HOSPITALS.

By the resignation of Dr. Houseman the post of physician to the Children's Hospital has become vacant; and in view of the prominent position likely to be taken by this charity amongst our institutions—the new building due to the munificence of Mr. Fleming being about to be erected—the post appears to be a desirable acquisition to our younger practitioners. The following gentlemen are already in the field: Drs. Beatley, Robertson, Baumgartner, and Blair. Owing to the resignation of Dr. Heath, a vacancy has taken place in the Newcastle Eye Infirmary in the office of surgeon in ordinary. Dr. Heath's services to the institution for many years have been invaluable, and it is to be hoped that the governors of this old and useful charity may be fortunate in finding a worthy successor. Dr. William Robertson has succeeded Dr. Houseman as assistant-surgeon at the Newcastle Throat and Ear Hospital.

NEWCASTLE INFIRMARY.

The *Evening Chronicle* refers to the critical financial position of the Newcastle Infirmary, and says that, as a result of a meeting held on Thursday last, a special appeal is about to be issued by the committee of the infirmary for increased pecuniary aid on behalf of the institution. The circular will intimate that unless the public will contribute more liberally, it will be necessary to close certain wards and adopt a policy of retrenchment. This would be a serious calamity to the town and neighbourhood, especially at the present season, when so much sickness is prevalent.

Newcastle-on-Tyne, Oct. 9th.

EDINBURGH.

(From our own Correspondent.)

POST-GRADUATE MEDICAL COURSE.

Now that the last week of this autumn session has arrived, a glance at the work accomplished in the special courses for medical men gives the impression that the experiment has proved an unqualified success. Both as regards the numbers attending—over 100 in all—and as regards the technical value of the demonstrations themselves, little is left to be desired. There has been throughout clear evidence of the keen interest felt by the graduates attending the course, and on the part of the teachers no less must be said, in looking to the comprehensive nature of the instruction they have given. There has been but little in the way of systematic or theoretical teaching, and that little has been strictly confined to commentaries upon cases exhibited; whilst the clinical and practical methods of demonstration have been fully developed; so that in returning to their homes our visitors will not so much be burdened with an added weight of abstract conclusions, as they will be impressed with the clearly defined salient features of a large number of representative cases. The work has been so organised that no overlapping in instruction has anywhere taken place, each of the clinical teachers taking up those special branches of his subject which a series of selected cases, under his charge at the time, was found most completely to illustrate. By this arrangement it has been possible, in the short space of three weeks, to illustrate the diagnosis and treatment of both medical and surgical diseases in all their branches, whilst such more specialised subjects as mental disease, syphilis, dermatology, ophthalmology, and aural surgery have received a thorough treatment at the hands of their various exponents. It is felt that a post-graduate system of medical training is now an accomplished fact in Edinburgh, and that its continuance and success in the future are fully assured.

ROYAL MATERNITY HOSPITAL.

On the 1st of next month Dr. Croom's quarterly term of office as physician to this institution will terminate, and he will be succeeded by Professor A. R. Simpson for the ensuing three months. Drs. Armitage and Littlejohn, the retiring house-physicians, will be succeeded in office by Drs. Tillie and Fraser and Mr. Scott.

THE ABERDEEN EXAMINERSHIP IN MEDICINE AND PATHOLOGY.

From a large number of applicants for this post, which was recently declared vacant, the Aberdeen University Court have elected Dr. R. W. Philip of Edinburgh as examiner. Dr. Philip is a graduate of Edinburgh University in Arts and in Medicine, and a member of the Royal College of Physicians, and for several years has acted as assistant to the Professor of Practice of Physic, a post in which he has gained special qualifications for the position to which he is now appointed, in having conducted large classes, and in his intimate experience in connexion with the examinations for class honours.

THE WINTER SESSION.

The winter session in the University and extra-academical schools is announced to commence this year on Oct. 20th, about a week earlier than is usually the case. This is a move decidedly in the right direction, since it causes the Christmas recess more nearly to bisect the long courses of lectures delivered during the winter, and, in bringing the session to an earlier termination, makes way for the spring examinations without too great an encroachment upon the period of the Easter recess.

Edinburgh, Oct. 12th.

IRELAND.

(From our own Correspondent.)

ACADEMY OF MEDICINE IN IRELAND.

THE fourth annual general meeting of the Academy of Medicine in Ireland will be held in the Royal College of Surgeons on Friday, the 29th inst., when the report will be read and the election of office-bearers will take place.

COLLEGE OF PHYSICIANS IN IRELAND.

A deputation from this College recently waited on his Excellency the Marquis of Londonderry, and presented him with the following address of welcome:—"May it please your Excellency, we, the President and Fellows of the King and Queen's College of Physicians in Ireland, beg to approach your Excellency with the expression of our devoted loyalty to Her Most Gracious Majesty the Queen, and our cordial welcome to your Excellency on your arrival in this country as Her Majesty's Viceroy. Our College, which derives its

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existence from charters granted by Her Majesty's Royal predecessors, King Charles II. and King William III. and Queen Mary, and which had additional powers conferred upon it by Her Gracious Majesty in 1878, has ever been mindful of the important trust committed to it, and has endeavoured to discharge its functions by furthering the advancement of medical science, and by securing a succession of educated physicians for the service of the State. The King and Queen's College of Physicians in Ireland has at various times rendered its aid and professional advice to Government in devising and carrying into effect measures dealing with the public health, and now, as at all times, the College will consider it to be its duty, as it is its anxious desire, to afford every assistance to Her Majesty's Government in all matters relating to both curative and preventive medicine." The Marquis made a suitable reply, and the deputation retired.

HEALTH OF DUBLIN FOR 1885.

During last year the births in the metropolitan area numbered 10,144, and the deaths 9784, or at the rate of 27·6 per 1000. The mortality was below the average for the previous decade. The most fatal zymotic disease during 1885 was measles, which caused 250 deaths; the victims of this disease being almost exclusively children of the poorest section of the population. Next in order of fatality was whooping-cough. In Dublin constitutional diseases always cause a large mortality. Out of a total of 7741 deaths, 1626 were ascribed to constitutional diseases, and 988 to phthisis. Diseases of the respiratory organs were fatal in 1691 instances. The death-rate from phthisis and bronchitis and lung complaints was 10·62, or more than one-third of the total death-rate.

MEATH HOSPITAL.

Matthew O'Reilly Dease, Esq., D.L., has given £100, and has promised a further donation towards the Dease Memorial, in memory of his late father and grandfather, who were both distinguished surgeons of this hospital. The Memorial, according to Mr. Dease's wish, will take the form of permanent improvements. Mr. Dease has been elected a life governor of the hospital.

CALLAN UNION.

The Local Government Board for Ireland have approved of the appointment of Dr. F. Walsh as second medical officer of the workhouse, at a salary of £25 per annum.

Dublin, Oct. 12th.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

AT a quarterly meeting of the Council of the College, held on Thursday, Oct. 14th, at which all the members were present, Dr. Goodhart was elected an Examiner in Medicine, and Drs. J. B. Potter and John Williams Examiners in Midwifery; Sir J. Lister, Bart., was re-elected a Member of the Committee of Management.

On the report of the Committee of Management, the Council adopted the recommendation that any candidate rejected at the Second and Third (or Final) Examination be requested to furnish certificates of having received, subsequently to the date of his reference, further study in the subject or subjects of the examination.

The President stated that he had chosen Mr. H. Power as the next Bradshawe Lecturer, the lecture to be delivered on Thursday, Dec. 2nd, at 4 P.M.

The Council approved of the report to be presented to the Fellows and Members at their meeting to be held on Thursday, the 4th of November next. This report may be had on application on and after Monday, the 18th inst.

A FORTUNATE UNIVERSITY.—Since 1879 (says an American contemporary) the University of Sidney has received donations exceeding a million of dollars. One bequest, known as the Challis bequest, is expected to realise £200,000. The Macleay Natural History Collection, another recent gift, is valued at £25,000; and a sum of £6000 has been promised for the endowment of a curatorship in connexion with it. For the purpose of founding a library, a donation of £30,000 was made.

Medical News.

UNIVERSITY OF CAMBRIDGE.—The following candidates have passed both parts of the examination, and become entitled to certificates in Sanitary Science:—

J. R. A. Clark, R. M. Craven, D. W. Currie, C. Forbes, W. H. Gregg, P. Hehir, H. Lingard, O. Scattergood, T. S. Short, J. R. Thomas, A. H. Twining.

ROYAL UNIVERSITY OF IRELAND.—The following have passed the Second Examination in Medicine of this University:—

UPPER PASS.—Robert Forsyth, Hugh T. Gill, *John Hall, *Robert Haslett, *James Jackson, *George Jenney, James McConnell, John Macpherson, *Allen Mahood, Alexander Morrison, Marcus Quarry, *Joseph Ryan, John Smith, Henry Smyth, William Taylor, *Robert Thompson, William Waddell, Robert Wilson, *John Wolfe. (Those marked with an asterisk will be admitted to the further examination for Honours.)

PASS.—Charles Beattie, Patrick Blewitt, James Buchanan, Andrew Burgess, James Campbell, Joseph Clarke, John Connor, Edward Cuffey, William Demery, Thomas Enright, Robert Erskine, Thomas Fisher, Barron Gass, Thomas Hickie, Stuart Irwin, Paul Jennings, Bertram Jordan, John Jordan, J. McCormick, Wm. McEldowney, Thomas MacMahon, William Macnaughton, William Morris, Thomas Obre, Matthew O'Regan, Samuel Parker, Samuel Tate, Richard Thornton, Francis Tweedie.

The following gentlemen passed in subjects necessary to complete the Second Examination in Medicine:—

Thomas Gorman and Henry Jamison.

SOCIETY OF APOTHECARIES.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on the 7th inst:

Day, Stewart Butler, Berners-street.
Fitz-Henry, George William, Charlwood-street.
Mason, Francis J. Gorringe, M.R.C.S., Rectory-place, Woolwich.
Nash, Charles, Burney-street, Greenwich.
Pettingill, Alfred Ernest Albert, Regent-street, Great Yarmouth.
Sparrow, J. Elliotson Pennington, Millman-street, Bedford-row.
White, Julian H., Clarendon-place, Hyde-park-gardens.

The following gentleman also on the same day passed his Primary Professional Examination:—

Henry Havilland Roe, King's College.

A HOSPITAL FOR ANIMALS has been established at Calcutta, and endowed with six lakhs of rupees.

BRISTOL HOSPITAL FOR SICK CHILDREN AND WOMEN.—An anonymous donor has given £500 towards the reduction of the debt on the building fund of the above charity.

MACCLESFIELD INFIRMARY.—The late Mr. U. Brocklehurst, of Hanbury Hall, near Macclesfield, has bequeathed £1000 to the endowment fund of the infirmary.

THE MEDICAL MISSION.—In connexion with the opening of the medical mission, an inaugural address was delivered on the 8th inst at St. Martin's Church, Trafalgar-square, by the Hon. and Rev. W. Talbot Rice.

CONSTANT WATER-SUPPLY.—The New River Company has been requested by the Local Government Board to provide a constant water-supply to the southern district of Clerkenwell.

ELECTRICITY UTILISED AS A MEANS OF PUNISHMENT. An ingenious Swiss is said to have devised an electrical whipping apparatus which will inflict the requisite amount of pain without causing unsightly and inconvenient wheals.

CORPORAL PUNISHMENT IN SCHOOLS.—The Birmingham School Board recently decided to dismiss two masters who had been proved to have inflicted corporal punishment on pupils, contrary to the rules of the board.

A NEW COTTAGE HOSPITAL.—A cottage hospital, erected on a site given by Lord Brownlow, and well endowed by Lord Kenyon, was opened on Saturday last, free of debt, at Whitchurch, Salop.

ST. BARTHOLOMEW'S HOSPITAL.—The Senior Open Scholarship in Science, competed for by medical students, has been awarded to Mr. E. Lloyd Jones, jun., B.A., Brooklands, Sale.

UNIVERSITY OF ABERDEEN.—The University Court of this University has appointed the following six gentlemen to be extra-professorial examiners in Medicine in the University:—Dr. J. Macdonald Brown, Edinburgh; Dr. W. D. Halliburton, London; Dr. A. D. Leith Napier, Dunbar; Dr. R. W. Philip, Edinburgh; Dr. Wm. Rob. Smith, London; Dr. Fras. Warner, London.

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THE Cairo correspondent of the "Daily News" reports that Dr. Ritchie, of the medical staff, when descending the Cheops Pyramid fell from an enormous height and was dashed to pieces at the base.

A WIDOW LADY named Mount, who has just died at Canterbury, has left by her will a sum of £40,000 to be divided between two of the principal hospitals for eye diseases in London and the county of Kent.

AT the quarterly meeting of the directors of the Naval Medical Supplemental Fund, held on the 12th inst., Sir W. R. E. Smart, K.C.B., M.D., Inspector-General, in the chair, the sum of £69 was distributed among the several applicants.

HOSPITAL SUNDAY.—Sir P. Cunliffe Owen has, at the request of the Prince of Wales, remitted to the Mansion House a further sum of £200, the amount received at the "Colinderies," by Dr. Aveling's "Mechanical Beggar," from July 10th to October 8th.

BURNING HOUSE REFUSE.—Furnaces for the disposal of house refuse by combustion have been erected by the Whitechapel Board of Works, and are now in full operation. The total cost of the works, includlng the purchase of the site, is about £13,000.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The Library of the College will be closed to-day (Friday), and on Tuesday, Wednesday, and Thursday, at four o'clock. The Museum will be closed on Tuesday and Wednesday, the 19th and 20th inst., for the purposes of the College Examinations.

DR. EDSON, medical officer of the Health Department of New York, has been making inquiry into the quality of the milk sold in that city, and finds that in some instances it was diluted with as much as 40 per cent. of water. This indicates a rather worse state of things, perhaps, than exists in London in regard to this important article of diet.

ST THOMAS'S HOSPITAL MEDICAL COLLEGE.—The following Open Scholarships in Natural Science have been awarded:—Charles Petre Lovell, Scholarship, £100. Medwin C. Clutterbuck, Scholarship, £60. The following obtained the number of marks qualifying for a scholarship: G. M. Winter (prox. acc.), W. B. Winston, P. C. Low, E. T. Whitehead.

ASSOCIATION OF PUBLIC SANITARY INSPECTORS.—The third annual meeting of this Association was held on the 9th inst. The report read on the occasion spoke favourably of the success of the Society, as shown by the increase in the number of members, and by the growing interest in the objects it has in view.

THE PROPOSED HOSPITAL AT WEST HAM. — The bazaar and exhibition held last week to aid in the promotion of the above-named object seem to have been decidedly successful. The total receipts for the five days are stated to have been above £900. Over 10,000 persons visited the exhibition. The sum required to erect the proposed hospital is estimated at £3000, of which two-thirds have already been subscribed or promised.

GUY'S HOSPITAL MEDICAL SCHOOL.—Mr. Frederic Hewlett Brown, of Magdalen College, Oxford, and Mr. George Marlow Pratt, of Dulwich College, were bracketed equal for the Entrance Scholarships of 125 guineas in Classics, Mathematics, and Modern Languages; and Mr. Bertram Whewell Hogarth, of Yorkshire College, Leeds, that of 125 guineas in Chemistry, Physics, Botany, and Zoology.

DISINFECTION OF CABS.—With a view of assisting the police in checking the spread of zymotic disease, the committee of the Seamen's Hospital have given instructions that the number of every cab which brings to the hospital a patient suffering from contagious or infectious disease should be communicated to the Commissioner of Police. The St. Giles's Board of Works have announced that hackney carriages which have been used for the conveyance of persons suffering from infectious disease will be disinfected by the Board free of charge, and that the driver may be supplied with a certificate of such disinfection by applying to the medical officer of health.

ALL the schools in Fleetwood under the jurisdiction of the School Board are now closed, owing to the prevalence of measles among the children.

SIR WILLIAM LEWIS, as founder of the South Wales Miners' Provident Society, was a few days ago presented with a cheque for £145 16*s.* 8*d.*, the whole of which was made up by subscriptions from 35,000 colliers, each of whom gave 1*d.* In reply, Sir William announced his intention of handing the cheque over to the Merthyr Tydvil Hospital.

PRESENTATION.—A testimonial has lately been presented to Dr. Walker, on his leaving Boulogne-sur-Mer, consisting of a sum of money in a purse, and a silver tea-tray, with the following inscription upon it:—"Presented to T. H. Walker, M.D., by his patients and friends, as a token of their affection and esteem, after a residence amongst them of fourteen years and six months. Boulogne-sur-Mer, France, 30th June, 1886."

STOCKPORT AND DISTRICT MEDICAL SOCIETY.—At the annual meeting of the Society, held at the Stockport Infirmary, on Thursday, the 7th inst., the following were elected officers for the ensuing year:—President: Dr. Higinbotham. Vice-President: Dr. Bride (Wilmslow). Treasurer: Dr. Maclean. Secretary: Dr. Bailey (Marple). Auditors: Drs. Godson (Cheadle) and Bain. Committee: Drs. Ball, Murray, and Jones (Chapel-en-le-Frith).

WEST KENT MEDICO-CHIRURGICAL SOCIETY.—The following office-bearers have been elected for the ensuing session:—President: Mr. F. B. Jessett. Vice-Presidents: Messrs. J. Brindley-James and C. H. Hartt. Council: Messrs. Hughes G. Cable and Thomas Moore; Drs. Ernest Clarke, W. Collingridge, Alexander Forsyth, P. Horrocks, and Fredk. Moon. Treasurer: Dr. Prior Purvis. Secretary: Mr. H. W. Roberts. Librarian: Dr. Alexander Forsyth.

THE BLIND, THE DEAF, AND THE DUMB.—The Royal Commission on the blind, the deaf, and the dumb, have just concluded a tour of visitation, which occupied sixteen days, to the principal institutions of the north of England and Scotland. The considerable amount of valuable information thus collected by the commissioners it is proposed to supplement by the oral testimony of persons connected with the institutions visited.

THE LATE SISTER DORA.—Walsall was on Monday last the scene of an interesting event, in connexion with the memory of the philanthropic work of the late Dorothy W. Pattison, better known as Sister Dora. More than three years ago, Miss Lonsdale had offered to defray the cost of a statue out of the profits of her biography of her deceased friend, and after some demur on the part of the Town Council of Walsall as to the appropriateness of the memorial, the offer was ultimately accepted. The statue, which is of white Cicilian marble, and stands on a pedestal of red granite, was unveiled on the above day, amidst much enthusiasm, by Councillor Beebee, the Mayor acknowledging the presentation on behalf of the town.

SOCIETY FOR THE STUDY AND CURE OF INEBRIETY.—The quarterly meeting was held on Tuesday last in the rooms of the Medical Society of London, the President, Dr. Norman Kerr, in the chair, who proposed a resolution of welcome to Dr. Simon Fitch, of Halifax, Nova Scotia, a member and councillor of the Society. The resolution contrasted the efficient legislation in the interests of the habitual drunkard in Nova Scotia with that in England, in the former colony there being power, by permanent Acts, to deal with inebriates unwilling to surrender their freedom of their own accord. Dr. Walter Dickson seconded the resolution. Dr. Fitch replied, and expressed much gratification at the honour done him, and his deep interest in the proceedings of the Association. A resolution of welcome was also accorded to Mr. Axel Gustafson, author of "The Foundation of Death," on his return from America, to which that gentleman responded. The President pointed to the recently published novel, "Disenchantment," by Mabel Robinson, as a proof that the intelligent English mind was gradually becoming more enlightened on the physically diseased state of the habitual inebriate, this fascinating tale having this teaching as its moral. Among those present were Sir Edwin Saunders, Lord Mount Temple, Dr. George Harley, Dr. Walter Dickson, Surgeon-Major Poole, Dr. George Robertson, Hon. and Rev. Canon Leigh, and Rev. Canon Barker.

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Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

BRUCE-AUSTIN, WILTSHIRE STANTON, L.R.C.P.Ed., L.F.P.S.Glas., has been appointed Medical Officer to the Barrow Water-Works.

CARR, J. W., M.B., B.S.Lond., has been appointed House-Surgeon to University College Hospital.

HALL, BEN., M.B.Lond., Second Assistant Medical Officer at Middlesex Asylum, Banstead, has been appointed Superintendent of The Brook Villa Private Asylum, Liverpool.

HALLIBURTON, W. D., M.D., B.Sc., M.R.C.P., has been appointed Examiner in Physiology, University of Aberdeen.

HARDING, CHARLES O'BRIEN, M.R.C.S., has been appointed Surgeon to the Holloway and North Islington Dispensary.

JONES, JOHN THOMAS, L.R.C.P., L.R.C.S.Ed., has been appointed Medical Officer to the Second Division of the Whitford District of the Holywell Union, vice Michell.

KEAY, JOHN, M.B., Assistant Physician to the Crichton Royal Institution, Dumfries, has been appointed Resident Medical Superintendent to Mavisbank Asylum, Edinburgh.

LAKE, W. WELLINGTON, M.R.C.S., L.S.A., has been appointed Surgeon to the Walthamstow and Leyton Children's Hospital, vice Mr. Henry Gould, retired.

LEWERS, ARTHUR H. N., M.D.Lond., &c., has been appointed Physician to the Out-patients at Queen Charlotte's Lying-in Hospital.

LOW, A. BRUCE, M.D., M.R.C.P.Ed., has been appointed Honorary Physician to the Sunderland and Bishopwearmouth Infirmary, vice W. H. Dixon, M.D., resigned.

MELLE, ARTHUR HENRY, M.B., Ch.B. Dub., has been appointed Government Medical Officer and Vaccinator for the District of Candelo, N.S.W.

PROWSE, WILLIAM, M.R.C.S., L.S.A., has been appointed Medical Officer to the Fourth District of the Axbridge Union, vice Furnivall.

SHIRLEY, MATTHEW B., L.R.C.P.Ed., M.R.C.S., has been appointed (*pro tem.*) Medical Officer for the Southill District of the Dewsbury Union, vice Stockwell, deceased.

WARREN, HENRY GUY SEYMOUR, L.R.C.P.L., M.R.C.S., has been appointed Visiting-Surgeon to the Gaol at Dubbo, N.S.W., vice Tennant, resigned.

WILKINSON, J., M.B., C.M.Ed., has been appointed Resident Medical Officer to the Eastern Dispensary, Bath, vice Irwin, resigned.

WILLIAMS, D. W., M.B.Lond., M.R.C.S., has been appointed Assistant Resident Medical Officer to the Bristol Royal Infirmary, vice Thurston, resigned.

WILLIAMS, EDWARD, L.R.C.P., L.R.C.S.Ed., L.S.A., has been appointed Medical Officer for the Mold District of the Holywell Union, vice W. Williams, M.D.

Births, Marriages, and Deaths.

BIRTHS.

EAGAR.—On the 6th inst., at Ballygrenane, Listowel, co. Kerry, Ireland, the wife of Oliver Stokes Eagar, Surgeon-Major, F.R.C.S.I., of a daughter.

GARMAN.—On the 7th inst., at The Bungalow, Slingsby, York, the wife of Dr. Vincent Garman, of a daughter.

GIBSON.—On the 1st inst., at Stanley House, Blackstock-road, Finsbury-park, N., the wife of Dr. J. C. Gibson, of a daughter.

HALL.—On the 9th inst., at Laurel Villa, Victoria-road, Surbiton, the wife of Edgar A. Hall, M.B., C.M.Edin., of a daughter.

WHEELER.—On the 12th inst., at Ruvigny-gardens, Putney, the wife of Frederic Wm. Wheeler, L.R.C.P., of a daughter.

MARRIAGES.

FOOKS—DODGSON.—On the 5th inst., at St. Saviour's, Paddington, George Ernest Fooks, Surgeon, of Her Majesty's Indian Medical Service, to Alexina Louisa, eldest daughter of J. C. Dodgson, Esq., late Bengal Civil Service.

KARKEEK—PATON.—On the 9th inst., at Northiam Parish Church, Sussex, by the Rev. J. W. Lord, Paul Q. Karkeek, M.R.C.S., &c., of Torquay, to Elise, daughter of the late A. A. Paton, H. M. British Consul at Ragusa.

SHEEHY—HAWES.—On the 9th inst., at Mapledurham Parish Church, near Reading, W. H. Patmore Sheehy, L.R.C.P.Lond., &c., of Claremont-square, London, son of the late W. H. Sheehy, L.R.C.P.Ed., to Myra, only daughter of the late George William Hawes, of Southfields, Wandsworth, and granddaughter of the late Major Hawes, of Spring-gardens.

WOODSON—SHOUT.—On the 6th inst., at Languville, Lincolnshire, Adolphus Arthur Woodson, M.R.C.S., L.R.C.P., &c., of Sheffield, to Clara Jane, daughter of W. P. Shout, Esq., of Boston.

DEATHS.

COCKELL.—On the 10th inst., at Forest-road, Dalston, Edgar Cockell, M.R.C.S., in his 72nd year.

HAY.—On the 4th inst., at Peterhead, Aberdeenshire, Francis Hay, M.A., M.B., C.M.Aber., aged 37.

STEDMAN.—On the 12th inst., at Great Bookham, Ernest Alan Stedman, lately a Student of St. Thomas's Hospital, third son of Arthur Stedman, Surgeon, in his 20th year.

WATERWORTH.—On the 7th inst., at Quay-street, Newport, I.W., Henry Waterworth, F.R.C.S., J.P., aged 78.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

Medical Diary for the ensuing Week.

Monday, October 18.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesdays, same hour.
CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2 P.M.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.
PARKES MUSEUM OF HYGIENE.—3 P.M. Mr. C. E. Cassal: Food, good and bad, Milk, Sale of Food and Drugs Act.
MEDICAL SOCIETY OF LONDON.—8.30 P.M. Opening Address by the President (Mr. R. Brudenell Carter).—Mr. Frederick Treves: Hernia of the Cæcum.

Tuesday, October 19.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.
CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
PATHOLOGICAL SOCIETY OF LONDON.—8.30 P.M. Mr. Eve: Hemiatropia Facialis.—Mr. Treves: Malignant Cysts of Neck.—Dr. T. D. Acland: Excavation of Lung simulating Pneumothorax.—Mr. Stoker: Cancer of Thyroid.—Mr. D'Arcy Power: Dermoid Cyst of Testis.—Mr. B. H. Fenwick: Carcinoma of Left Lobe of Prostate.—Dr. Savill: Meningeal Hæmorrhage.—Mr. S. Paget: Malignant Disease of Thyroid (card specimen).

Wednesday, October 20.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesdays and Thursdays, 1.30 P.M.
ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department, Mondays and Thursdays, 9.30 A.M.
ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.
LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.
GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.
KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; and on Friday, 2 P.M.; and Saturday, 1 P.M.
PARKES MUSEUM OF HYGIENE.—8 P.M. Dr. R. Thorne Thorne: Infectious Diseases and Methods of Disinfection.

Thursday, October 21.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.—8.30 P.M. Living and Card Specimens at 8 P.M. Dr. W. A. Brailey: Rapidly occurring Blindness, with Ptosis and Ophthalmoplegia Externa and Interna.—Messrs. Critchett and Juler: Case of Orbital Tumour.—Mr. W. Adams Frost: (1) Ophthalmoplegia Interna with absence of Knee-reflex, persisting over two years without other symptoms; (2) Pigmentary Retinitis, with a Layer of Pigment on Anterior Capsule.—Mr. W. Lang: Change in Yellow Spot Region.—Mr. Humphry Haines: New Instrument for Facilitating Retinoscopy. Papers:—Dr. Sidney Coupland: Ophthalmoplegia dependent upon Thrombosis of Cavernous Sinuses.—Messrs. Edmunds and Lawford: On the Condition of the Optic Nerves in Head Injuries.
HARVEIAN SOCIETY OF LONDON.—8.30 P.M. Dr. John Phillips: Hydramnios and its Relation to certain Fœtal Disorders.—Dr. A. Tucker Wise: Some Remarks on Alpine Winter Climate.

Friday, October 22.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
PARKES MUSEUM OF HYGIENE.—8 P.M. Mr. J. F. J. Sykes: General Powers and Duties of Inspectors of Nuisances; Method of Inspection.
CLINICAL SOCIETY OF LONDON.—8.30 P.M. Mr. Charters Symonds: A case of Removal of the Scapula for Osteo-sarcoma.—Mr. Thomas Smith: Ligature of the Common Iliac Artery with Kangaroo Tendon, yielding of the knot, ligature with silk, gangrene of the limb, death.—Mr. Butlin: A case of Axillary Aneurysm for which the Subclavian Artery was Ligatured in the Third Part of its Course, slipping of the ligature shortly after the operation, re-ligature, collapse, death.—Mr. Wainewright: A case of Vertical Fracture of the Head of the Radius complicated by Fracture of the Coronoid Process of the Ulna, and possibly a Split between the Condyles of the Humerus. Living Specimens:—Mr. S. Paget: Two cases of Congenital Abnormality of the Eyes—(1) Absence of Iris in Mother and Child; (2) Pigmentation of Conjunctivæ.
CHARING-CROSS HOSPITAL MEDICAL SOCIETY.—7.45 P.M. Mr. Rorri Fletcher: Pleuritic Effusions and Paracentesis.

Saturday, October 23.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.

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METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, October 14th, 1886.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Oct. 8	29·94	S.E.	57	56	...	60	55	·11	Foggy
,, 9	29·89	S.W.	54	53	85	63	53	...	Hazy
,, 10	29·77	N.E.	56	52	98	63	48	·11	Fine
,, 11	29·80	W.	54	51	94	63	48	...	Fine
,, 12	29·67	S.W.	58	57	71	61	53	...	Raining
,, 13	29·39	S.W.	52	50	91	59	49	·34	Fine
,, 14	29·67	W.	48	46	...	...	43	...	

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

We cannot undertake to return MSS. not used.

THE NON-RETURN OF PHOTOGRAPHS.

WE receive from time to time letters from medical assistants complaining that after replying to advertisements for assistants and enclosing photographs, the cartes are, contrary to custom, retained by principals. This is perhaps a small matter; but the breach of courtesy referred to—the result no doubt of thoughtlessness—is nevertheless often productive of considerable inconvenience, and of aggregate loss, to members of a useful class of workers in the profession.

Mr. Silas Mainville.—The question is undoubtedly one of the greatest importance, but our columns would not be a suitable place for its discussion.

Dr. Glynn.—In an early number.

USE OF COCAINE IN MIDWIFERY PRACTICE.

To the Editor of THE LANCET.

SIR,—Would Mr. Hartzhorne kindly describe a little more fully his preparation of cocaine as used by him in midwifery, and mentioned in his letter in your issue of June 12th, especially with reference to the strength of cocaine solution, as I presume he does use a solution. I should like to use cocaine in this class of work; but out here it is too expensive for country practitioners to experiment in making preparations. The following case is one on which an opinion is requested, as to whether it is one of prolonged gestation or missed menstruation. Mrs. S——, aged about thirty, called on me in January last to engage me for her fifth confinement, which was expected to be about March 20th, reckoning from June 13th, 1885, when she last (to use her own expression) saw anything. The period of quickening was not noticed—in fact, she never had noticed it with any of her previous children. She was not confined till May 9th, a period of 331 days since last menstruation. I have questioned her as to whether she had not made a mistake in her calculations; but she says there is no mistake at all, that morning sickness began early in August (about the sixth or seventh week), and that her feelings at about that period were exactly as with all her other children. Until I saw her in January she was a perfect stranger to me, so I have to take her word for it all; but I may say that when I first saw her I thought from her size that parturition would take place much sooner than she imagined. The child was a fine boy, but in no way remarkable for size.

I am, Sir, yours truly.

G. PEARCE BALDWIN, L.R.C.P. & S.

Murrumburrah, N.S.W., Aug. 23rd, 1886.

A "CURE" FOR HYDROPHOBIA.

The Independent Practitioner says: "In 1806, only eighty years ago, the Legislature of the State of New York passed a Bill, and Governor Morgan Lewis signed and approved it, to pay to a notorious Hessian quack $1000 for his secret remedy for hydrophobia. The remedy was to be published, and its efficacy assured before the money was paid; but the quack's name is found signed in receipt of the sum on the back of the comptroller's warrant."

"*Cure for the Bite of a Mad Dog.*—1. Take one ounce of the jawbone of a dog, burned, or pulverised, or pounded to fine dust. 2. Take the false tongue of a newly-foaled colt; let that be also dried and pulverised. 3. Take one scruple of verdigrease which is raised on the surface of old copper by laying in moist earth; the coppers of George I. or II. are the purest and best. Mix these ingredients together, and if the patient be an adult or full grown take one common teaspoonful a day, and so in proportion for a child, according to its age. In one hour after, take the filings of one half of a copper of the above kind, if to be had; if not, then a small increased quantity of any baser metal of the kind; this to be taken in a small quantity of water. The next morning, fasting or before eating, repeat the same as before. This, if complied with after the biting of the dog and before symptoms of madness, will effectually prevent any appearance of the disorder; but if after the symptoms shall appear, a physician must immediately be applied to to administer the following—viz., three drachms of the verdigrease of the kind before mentioned, mixed with half an ounce of calomel, to be taken at one dose. This quantity the physician need not fear to administer, as the reaction of the venom then diffused through the whole system of the patient neutralises considerably the powerful quality of the medicine; and, secondly, if in four hours thereafter the patient is not completely relieved, administer four grains of pure opium, or 120 drops of liquid laudanum. N.B.—The patient must be careful to avoid the use of milk for several days after taking any of the foregoing medicines.—JOHN M. CROUSE."

Mr. A. G. Taunton.—It might have been better to have used the word "individual," instead of "animal," in the sentence quoted; but as the remark applied to a class of individuals almost equal in number to the class from which it was differentiated, the more comprehensive term was selected. As specifically stated, the arrest of development is not in the nature of an arrest such as that supposed by our correspondent, which would result from an hereditary influence, but is a diversion of development, as we explained. Comparative anatomy makes the matter sufficiently clear. We cannot discuss the point in detail; but there is no hypothesis of difference in kind. It is simply a question of the process of organic development in the individual, and has nothing whatever to do with the type of racial development which determines species.

Probationer had better apply to one of the Nursing Associations.

GUINEA-WORM.

To the Editor of THE LANCET.

SIR,—If "Reader" (*vide* your issue of the 2nd inst.) will try the effects of the cold douche, using ice-cold water, two or three times daily, over the part where the guinea-worm burrows, he will find that the worm will soon appear above the surface. The after-treatment is that recommended by Dr. Williams in your last issue. I have adopted the above-described method in dealing with cases of guinea-worm for many years with good results.

I am, Sir, yours faithfully,

London, Oct. 11th, 1886. SURGEON-MAJOR, I.M.D.

To the Editor of THE LANCET.

SIR,—Two or three small errors of the printer exist in my communication in your last issue on "Guinea-worm," which perhaps, as they convey quite a different meaning, you will allow me to correct. At the eleventh line from the top it should read—"between the free surface *and* the rolled up piece of plaster;" and the last word, next line but one, should be *lightly* instead of "tightly." "Admissible," the first word in the twentieth line, should be followed by *and*.

I am, Sir, yours faithfully,

Truro, Oct. 12th, 1886. D. W. WILLIAMS, M.D.

Mr. R. Jones (Liverpool).—The paper has been received, and is marked for insertion.

Mr. C. B. Townshend is referred to an article in our present issue.

CAUTION TO GUY'S MEN.

To the Editor of THE LANCET.

SIR,—On the 4th inst. I had a visit from a person who informed me that he was a Guy's man of my year, and that he was just going into partnership with his father. He had had the misfortune to lose his purse in Shrewsbury the night before coming to me, and as he had an important engagement to meet his father and uncle in London the following morning he applied to me for the loan of sufficient money to pay his hotel bill and fare to town, the same to be returned the next day. It is perhaps obvious that the latter part of the contract has not been fulfilled.

I am, Sir, yours obediently,

Wem, Salop, Oct. 12th, 1886. B. FARADAY GILES, M.D.

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A CURIOUS WAGER.

THE following is extracted from the *Indian Medical Journal* for July. "Two Mahomedans in Hyderabad City made a curious wager the other day, which resulted in the death of one of them. The deceased accepted a challenge that he would stand facing the sun from 8 A.M. to 6 P.M. A certain day was appointed, when a large gathering assembled to witness the *tamasha*, as they styled it. The deceased took his stand, gazing at the sun from the agreed time up to 3 P.M., when suddenly he dropped, foaming from the mouth. Medical aid was soon summoned, but before assistance arrived life was extinct."

A District Medical Officer is obliged to extract the teeth of paupers if he receives the order from the relieving officer. If he receives an order from an overseer he must act upon it; but if it is not a case of urgency he can recover his fee from the overseer. Our correspondent is not bound to attend upon the order of a guardian.

Health will probably find the information he requires in Dr. C. D. F. Phillips' work on Materia Medica and Therapeutics—Inorganic Substances, 1882.

AVULSION OF A FINGER.

To the Editor of THE LANCET.

SIR,—In THE LANCET of Oct. 2nd there appears amongst the annotations a narrative of a case of forcible avulsion of a finger, occurring in the practice of M. Auché; and as supplementary to such I would like to instance a somewhat similar accident which came under my notice whilst I was in practice some years ago at Fort Augustus, in Inverness-shire.

Two crofters were proceeding in separate carts on their way to get a supply of herrings at the fishing in Loch Hourn. One of them had got into the foremost cart to sit beside his companion, and he had the rope reins of his horse in some way twisted round one of his fingers, in order to have a sure control of the animal which followed in the hindmost cart. For some inexplicable reason his horse came to a sudden standstill, with the result that a severe strain was thrown at once upon the reins entwined about his finger. The immediate consequence was that the finger was completely torn off at one of the joints, bringing along with it a long portion of one of the flexor tendons, which had evidently slipped away right from its insertion. The poor man was brought to my house, a long distance from where the accident happened, and when seen by me he was in a fainting condition, and complaining of intense pain along the course of the sheath of the tendon and up the arm. There had been very slight hæmorrhage from the stump, and I applied some simple dressing on lint and got him conveyed to the inn near by, where I saw him later in the day. He was still complaining of great pain, although warm fomentations, &c., had been assiduously applied to the painful parts. As his home was a long way off, and as he was most anxious to get back there, I advised him to remain for the night where he was, and then go on in preference to the Northern Infirmary, Inverness, as I feared that he might not be in a fit state to undertake a long journey by road to his home. Next day he was received into the Inverness Infirmary, I believe; and I understand that he made a good, although somewhat protracted, recovery. When he came to me on the day of the accident he produced from his pocket the finger rolled up in a piece of rag. I advised him to preserve it for the inspection of the gentleman connected with Inverness Infirmary.

That a tremendous amount of force had been expended in causing entire separation of the finger is self-evident from the suddenness with which avulsion had been effected in this case, and it serves to demonstrate to some extent the accuracy of M. Farabœuf's statement that a force of about 3 cwt. is required to effect separation. It has also appeared to me somewhat remarkable that symptoms of tetanus did not supervene as a result of such severe laceration and stretching of nerves, tendons, &c.

I am, Sir, your obedient servant,
JOHN COCHRANE, L.R.C.P. & S. Ed., &c.

Broadford, Skye, Oct. 8th, 1886.

T. A. D.—The College of Physicians issues no syllabus of books to be read for their certificate of hygiene; but the examination professes to be of the same standard as that at Cambridge, and anyone can purchase at the Cambridge Warehouse, 17, Paternoster-row, the papers given at the last examination, together with a syllabus of the books recommended. The worst of this syllabus is its extreme length; but after a selection has been made from it we would, having regard to the papers given at the College of Physicians, advise the candidate to study the recent reports of the Medical Officer of the Local Government Board, which may be regarded as containing the most recent information on medicine in its relation to public health.

M.B.—As a number of fresh regulations are now being made about medical matters in Spain, our correspondent will find it best to communicate with H.B.M. consul in Madrid.

APPLIANCE FOR BOWED LEGS.

To the Editor of THE LANCET.

SIR,—Can any of your readers inform me what is the best kind of splint or appliance to use for a young child just beginning to walk suffering from bowed legs?

I am, Sir, yours truly,
HOMO.

Oct. 6th, 1886.

ERRORIBUS.

Messrs. CHRISTY AND CO. have forwarded for our inspection a beautiful specimen of the pod of strophanthus. On opening this pod by unrolling its thick skin a number of the seeds, with their handsome plumose appendages, are seen. It has been found that since the publication of Prof. Fraser's experimental results the whole pod and seeds and other parts of the plant may be used to advantage in the preparation of the tincture.

A Hospital Nurse wishes to know if it is customary for the house-surgeon of a hospital to remain behind the screen when the sister of the ward is passing the catheter on a woman, the case being an ordinary one. The reply must be in the negative, and few house-surgeons would feel that their duty compelled them to be present. The large majority would much prefer that the necessary manipulation should be unembarrassed by their presence and that they should be made acquainted with the result, always providing that they are satisfied that the sister of the ward possesses the necessary skill. In many cases it is of the utmost importance that the catheter shall have been properly introduced and the condition of the bladder ascertained.

Bonanza.—We believe degrees obtained in other countries are not recognised in Italy. Holders of the M.D. of universities of high standing may, however, be admitted to the examinations for the grade to which they aspire. Exemption from examination can only be obtained by the favour of the Superior Council of Public Instruction.

H. D.—There is not much to choose between Kiel, Bonn, and Leipsic. A *thorough* knowledge of German is not absolutely necessary at either of the above universities.

THE CASE OF UNQUALIFIED ASSISTANTS.

To the Editor of THE LANCET.

SIR,—As the columns of THE LANCET are ever open to the humblest members when they have a grievance to lay before the profession, I beg for a little space to state the troubles of competent unqualified assistants, and, as one example among many, will give my own case.

I commenced my studies in 1881, by passing the preliminary examination of the College of Surgeons. I attended during two winter and two summer sessions one of our foremost schools of medicine, passing my class examinations at the end of each course of lectures. During the recess I attended a county hospital (seventy beds), under the instruction of the attendant physician and surgeon. Previously to the commencement of my third year my father met with pecuniary reverses, which compelled me to remain at home with the hope of being in a position to return to lectures at a subsequent session. During my enforced absence I carried on my studies at the infirmary. When the time came to resume my collegiate studies I was unable to do so, but was obliged to take an assistancy (at a very small salary). I have now been twenty-two years acting as assistant, four years of which I held the post of acting house-surgeon to a country hospital of thirty beds, nominally resident dispenser with entire charge. I have during eight years taken most of the duties of a union hospital, and occasionally had sole charge of a large practice for weeks together. I have attended over 600 cases of midwifery, I believe, successfully, and more than once, when promptitude made it a question of life or death, carried out successfully a serious operation. I have kept myself posted through your columns on medical and surgical subjects which are of interest to the profession; and although my testimonials are all of the highest class, yet I have never been able to obtain beyond £40 per annum for my services.

Now, I take my case as one of many. I consider myself quite as well up in the practical part of my profession as many who are legally qualified, yet my means will not allow me to complete my curriculum; and even if I were in a position to do so, I feel that at my age the difficulties of anatomy, physiology, &c., would be too great to reconquer sufficiently so as to pass a modern examination. I might ask what proportion of general practitioners of twenty years' standing could pass the necessary examination after one or even two years' study. I would pray therefore of the Medical Council to give a little consideration to our case, and in their legislation for the welfare of the future make a slight recognition of the rights of those who have given the best of their lives to the practical study of their profession under far greater difficulties and hardships than their more favoured masters. Surely, even a ten years' apprenticeship must bring some knowledge to a man of intelligence when he is interested in his work, as those of our profession must be. As for myself—if unqualified assistants are to be entirely debarred from work,—I am too old to learn a trade; so there is nothing before me but the workhouse.

I am, Sir, yours faithfully,
HOPEFUL.

October 11th, 1886.

QUEENSLAND AS A FIELD FOR MEDICAL PRACTICE.

A CORRESPONDENT, a *poitrinaire*, writes for information as to the prospects at present offered by Queensland as a field for medical practice.

Dr. Kühner (Frankfurt).—The matter has scarcely sufficient interest to demand notice.

W. Rawlinson should write to the Editor of "The Hospital," Sardinia-street, Lincoln's-inn-fields.

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TESTS FOR CANDIDATES.

A CORRESPONDENT suggests that candidates be subjected to examination as to their views on points of reform that have not yet been obtained, such as the size of the Council, the proportion of Direct Representatives, the introduction of a true one-portal system in each division of the kingdom, greater stringency of the penal clauses, the conditions upon which foreigners and colonial practitioners should be allowed to practise, &c.

Inquirer.—No doubt a *locum tenens* is legally bound to hand over to his principal all fees received from him for professional work done by him during the time of his engagement. But, on the other hand, there would appear to be prevailing a general custom by which a principal allows his representative one-half—in some cases even the whole—of fees derived from necropsies, evidence given before Law and Coroners' Courts, and the signing of lunacy certificates.

Mr. S. W. Thomas.—Though perhaps under no legal obligation to do so, a practitioner should attend a case if requested by a policeman.

"A NEW AND IMPROVED CLAMP FOR HÆMORRHOIDS."

To the Editor of THE LANCET.

SIR,—I am greatly obliged to Mr. Brett for his testimony in favour of my clamp, and regret that I did not see his letter last week. With regard to his suggestions, I do not quite understand how the instrument could be curved. I think he will find that, given an able assistant and the bowel well exposed, he will never have any trouble in applying the clamp. The instrument was made in various sizes, and the present form was selected after very careful consideration and experiment. The screw was purposely made slow, to gain the remarkable power which is characteristic of the clamp, and the few extra seconds occupied in operating are amply atoned for by the advantage obtained. I am, Sir, yours very faithfully,

Park-street, W., Oct. 12th, 1886. CHARLES J. SMITH.

Mr. H. Heriot-Hill.—Bruck's Australasian Medical Directory and Handbook (Baillière, Tindall, and Cox) will give the information desired.

"PHARYNGEAL AND LARYNGEAL 'NYSTAGMUS.'"

To the Editor of THE LANCET.

SIR,—In my note of last week under the above heading, page 702, the word "cerebral" in the fourth line should be *cerebellar*. I may add that I have just seen the autopsy of a patient (also under the care of Dr. Gowers for tumour in the middle lobe of the cerebellum) in whom a growth of the size of a walnut was found in that situation, causing some *general* pressure on the medulla. There was ocular nystagmus, but no clonus of pharyngeal or laryngeal muscles.

I am, Sir, yours truly,

Oct. 11th, 1886. HERBERT R. SPENCER, M.B., B.S. Lond.

ERRATUM.—In an annotation on "Medical Works and the Law of Copyright," published in our issue for Aug. 21st, the name of the journal referred to as having exposed the unfortunate state of that law was erroneously printed "American Medical Journal," instead of the *Journal of the American Medical Association*.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Percy Boulton, London; Mr. W. Curran, London; Mr. Silas Mainville, London; Dr. Strange, Worcester; Dr. Barnes, Carlisle; Mr. Nelson Hardy; Dr. Kühner, Frankfurt; Mr. C. J. Smith, London; Mr. A. B. Clarke, Shebbear; Mr. R. Cannon, Valparaiso; Mr. Pegler, London; Dr. Macnab, Whitehaven; Mr. H. Cane, London; Messrs. Christy and Co., London; Mr. H. Casson, Worksop; Dr. Mears, Newcastle-on-Tyne; Messrs. Blackwood, Edinburgh; Mr. Reed; Messrs. Baake and Co., Stratford; Brigade-Surgeon C. Macdowall, Bombay; Mr. S. W. Thomas, Liverpool; Mr. G. M. Edmond, Aberdeen; Messrs. Fannin and Co., Dublin; Mr. Taunton, Brighton; Miss Jones, Newark-on-Trent; Mr. W. T. Blankeney, Brisbane; Dr. Bailey, Marple; Mr. R. Chesshire, Birmingham; Dr. J. E. Squire, London; Dr. Roberts, Plas Eryr; Mr. Aitken, Bucks; Mr. Gilroy, Birmingham; Mr. Dobson, Exeter; Mr. Townshend London; Dr. Morton, Glasgow; Dr. Milner Fothergill, London; Mr. Cochrane, Skye; Mr. Hamilton, Lytham; Mr. L. G. Smith, Tottenham; Dr. Braund, Stratford; Messrs. Kilner Bros., London; Mr. Morse, London; Mr. Evans, Oswestry; Mr. Bone, Portsmouth; Dr. Taaffe, Brighton; Mr. Runmer; Messrs. Bowring and Co., Plymouth; Dr. E. C. Collingwood, Hampstead; Mr. Malcolm Morris, London; Mr. Thos. Easton, Stanraer; Messrs. Trübner and Co., London; Dr. Barry, Queenstown; Dr. Bruce, Dingwall: Mr. Jas. Miller, London; Dr. A. E. Harris, Sunderland; Dr. Marshall, Nottingham; Mrs. Thorne, London; Dr. B. F. Giles, Wem; Mr. Marcus Gunn, London; Mr. Blore, Leeds; Mr. Beach, London; Dr. Herbert Snow, London; Mr. Mackintosh, Downham; Dr. W. J. Collins, London; Dr. E. H. Jacob, Leeds; Mr. Wood, London; Messrs. Read and Son, Wick; Mr. Wheeler, Manchester; Messrs. Hopkinson and Co., London; Dr. Hall, Ulverstone; Mr. Webb, Bury; Mr. Crossdale, Colne; Mr. Twyford, Hanley; Mr. Cawthorn, Buxton; Dr. Allden, Shirley; Mr. Unsworth, Liverpool; Dr. Heron, Glasgow; Mr. Hill, London; Dr. Williamson, Ventnor; Dr. Diver, Kenley; Dr. Davies, Sherborne; Mr. Hobell; Mr. Ozzard; Mr. Bull, London; Mr. R. B. Marston; Mr. Batten, London; Mr. Vinrace, Lechlade; Mr. Blake, Dalton-in-Furness; Mr. C. A. Buehl, London; Messrs. Hopkin and Co., London; Mr. Gamgee, Birmingham; Mr. Anderson, Llandudno; Mr. H. C. Wells, London; Marcus; Juvenis; Tasman; Queensland; Health; Probationer; Bonanza; Iatros; Redivivus; H. D.; M.B.; F.R.C.S.; Cader Idris; I.M.D.; Inquirer; A Victim; B. C.; Viator; Alpha, Maidstone; S. B., London; C. T., Greenwich.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Wallace, Cardiff; Mr. Denham, Finsbury-park; Mr. Woodson; Mr. Rimsdale, Patricroft; Mr. Treves, London; Mr. Gayley, Borrisokane; Mr. Nobb, Newcastle-on-Tyne; Mr. Moore, Birmingham; Mr. Roberts, Kirkby Stephen; Mr. Dixon, Northampton; Mr. Saunders, Tunbridge Wells; Mr. Groves, Dorchester; Mr. Freeman, London; Messrs. Maw and Co., London; Mr. Abbot, Birmingham; Mr. Amos, Newcastle-on-Tyne; Miss Harris, Leeds; Miss Barber, Worthing; Dr. Slade King, Ilfracombe; Mr. Branthwaite, Rickmansworth; Messrs. Smith and Son, Manchester; Mr. Casey, Oldham; Mr. Jones; Dr. March, Rochdale; Mr. Cross, Manchester; Mr. Moss, Carlisle; Mr. Warman, Ramsgate; Dr. Torrance, Syria; Mr. Love, Dewsbury; Col. Savile, Braintree; Dr. Harris, Saltburn; Mr. Knox, Hull; Mr. Anderson, Llandudno; Miss Walker, Liverpool; Dr. Taylor, Sutton; Mrs. Lay, Northampton; Dr. Partridge, Walworth; Miss Gilbert, Leighton Buzzard; Dr. Thomas, Bridgend; Mr. Marsh, Wigan; Miss Jackson, Putney; Dr. Mackay, Eske; Mr. Logan, Glasgow; Mr. Knaggs, Huddersfield; Mr. Morgan, Islington; Mr. Morris; Mr. Sutherland, Fence Houses; B., Mansfield; Delta, Blackburn; E. J.; X. Y. Z., London; Medicus, Oakham; L. H., Hammersmith; T. P., Taunton; Volans, Newcastle-on-Tyne; H., Manchester; Medicus, Ramsbotham; A. B., West Brompton; A. C. K.

Babyhood, Orillia Packet, Leicester Daily Mercury, Croydon Guardian, Manchester Guardian, Literary Opinion, The Anti-Adulteration Journal, Port Elizabeth Telegraph, South Wales Daily News, &c., have been received.

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The Harveian Oration

DELIVERED AT THE

ROYAL COLLEGE OF PHYSICIANS

On Monday, Oct. 18th, 1886,

BY F. W. PAVY, M.D., F.R.S.

MR. PRESIDENT, COLLEAGUES, AND GENTLEMEN,—My instructions are explicit. "Once every year," said Harvey, in the deed of conveyance of his patrimonial estate as a gift to the College, "someone shall make an oration publickly in the College, wherein shall be a commemoration of all the benefactors of the said College by name, and what in particular they have done for the benefit of the said College, with an exhortation to others to imitate those benefactors and to contribute their endeavours for the advancement of the Society, according to the example of those benefactors, and with an exhortation to the Fellows and Members of the said College to search and study out the secrets of nature by way of experiment." Such are the directions, framed nearly two centuries and a half ago, which bring us together here to-day. Himself a munificent benefactor in various ways to the College, and an ardent explorer of nature, Harvey desired that others should be incited to follow in the path that he had trodden. He was not content to quit life without taking steps to encourage others in succeeding generations to pursue the objects which he so strove by his own endeavours to promote. By this Oration which he established, and which, notwithstanding the lapse of time that has occurred, may be said, I think, still to elicit as much reverential consideration within the College as at any period, an annual reminder is afforded that keeps his desire alive before us. Honoured by the invitation of our President this year to deliver the Oration, I am here to perform the task. Whilst highly appreciating the mark of distinction conferred, I must, however, confess, looking at the able hands through which the duty of orator has passed, and the eminence in the profession of many present, that I do not approach the undertaking without a deep sense of the responsibility attaching to it.

The first portion of the duty which has been marked out in such precise terms by the founder of this Oration to be performed is to commemorate the benefactions that have fallen into the possession of the College since the last Oration was delivered. It is gratifying to me to feel that I do not come empty-handed for the occasion before you.

A new benefaction, which promises to be as useful as it is munificent, has to be recorded, and it belongs to me to mention the manner in which the College has decided to dispose of a recently acquired increased income derivable from one of its ancient benefactions. My immediate predecessor alluded to the augmentation which the income from the endowment for the Croonian lectureship has recently undergone. Dr. Croone, a Fellow of our College in the seventeenth century, left behind him a plan for the establishment of a lectureship, but made no provision in his will for its support. His widow, who afterwards married Sir Edwin Sadlier, bequeathed property in the City of London for carrying out the plan that had been thus fruitlessly framed. It was a gracious act on the part of this lady, and one which showed a noble reverence for her first husband's wishes, to take upon herself in such a manner to give effect to his intention. Through the expiration of a ninety-nine years' building lease, the College has come into possession of an income from the Lady Sadlier bequest which raises the amount available for the Croonian lectureship from £10 to £200 per annum. Those present are aware that the consideration of how to turn this twenty-fold increase to best account to meet the objects of the trust, and at the same time secure the advancement of knowledge in a direction likely to produce beneficial results, has anxiously engaged the attention of the Fellows. After passing through the hands of a committee, the subject was discussed at three College meetings, at the last of which, the Comitia held in June, a resolution expressed in the following terms was passed: "That there shall be one or more Croonian lecturers appointed by the College, who shall be required to deliver lectures on one or more subjects in anatomy, physiology, and pathology, with a view to the prevention, control, and cure of disease; and that the College shall devote the funds derived from the Croonian Trust (1) to the payment of such lecturer or lecturers, and (2) to the contribution of such sums as the College may think fit towards the promotion of scientific investigation on the subject of the lectures." Thus has the College determined to dispose of the increased income that has fallen into its hands through the chance influence that has been wrought by time upon the value of the endowment. The sum to be annually appropriated from the Croonian Trust is now of considerable magnitude; and let it be hoped that the fruit yielded by its application may equal in usefulness what I am sure it is desired by the College it should do. Should this be attained, the benefits issuing from the benefaction will immeasurably surpass those that could have been anticipated either by Dr. Croone in planning his design for the lectureship, or Lady Sadlier, his noble-minded widow, in providing an endowment for giving to it a practical shape.

The new benefaction has come into the possession of the College since the commencement of the present year. Not quite recently, but at the same time not long ago, there was to be frequently seen at the College one who, though strikingly quiet and unostentatious in manner, made his presence strongly felt amongst us whenever matters were under consideration bearing on public health. Born and educated in Edinburgh, Gavin Milroy, to whom I refer, became a Fellow of this College in 1853. Never engaged in hospital or private practice, and his mind early drawn to the consideration of questions touching on the prevention of the extension of disease, he devoted himself to the hygienic part of our professional art, and became an authority of high repute on social matters affecting health. In such estimation, indeed, was his knowledge held that he was employed by Government for carrying out certain special inquiries, and afterwards was granted a life pension of £100 a year in recognition of the services he had rendered. He lived to the ripe age of eighty-one, and what I have said of his life bears upon his benefaction to the College. In his will he said: "I bequeath to the President and Council of the Royal College of Physicians in London for the time being the sum of £2000 (being a sum of £1743 which I received from the Colonial Office as remuneration for my services in 1871 and 1872, whilst engaged in my mission to the West Indies, with £257 which I have added thereto), for the purpose of founding and continuing a yearly lectureship of three or four lectures on State Medicine and Public Hygiene, and upon trust to invest the same in the public funds, or in such other investment as they shall in their absolute discretion think fit, and upon trust to pay the income thereof to a lecturer to be appointed from time to time." In another part of his will he directed that the sum bequeathed should be paid free of legacy duty, and further gave the silver inkstand which had been presented to him by the College in 1868 in acknowledgment of his services as honorary secretary to the Committee on Leprosy, and certain books specifically mentioned by him. A thorough master in the branch of study to whizh he devoted himself, no one was in a better position than Dr. Milroy for suggesting the direction in which the attention of those who may hereafter be appointed to carry out his beneficent design may most advantageously be given; and thoughtfully, and doubtless it will be found most usefully, he has left behind him an elaborate code of suggestions for the consideration of the Council of the College in its administration of the trust with which it has been charged. As a preface to these suggessions, he remarks: "I would take leave to record some thoughts that have occurred to my mind concerning the subject-matters which, as it seems to me, might be most profitable for investigation at the present time, and possibly for some years to come. I am far from seeking to limit, or in any measure to impede, the free decision of the Council in respect of the conduct and arrangement of the lectures themselves; my only desire being how most usefully to promote the advancement of medical science along with the interests of philanthropic benevolence and of social welfare." Could any wiser or more useful form of bequest than this of Dr. Milroy have been bestowed? The College is no longer itself in need of

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the aid required in former times, but funds placed at its disposal for promoting the acquirement of knowledge constitute a benefaction that confers upon it the power of doing good in a manner standing most in harmony with the wants of the present age. Further, it may be said, the kind of knowledge sought to be advanced by the terms of the Milroy endowment is just that which is most ripe for encouragement at the present moment, and that also which holds a foremost rank in promise of benefit of a wide nature being conferred by its improvement.

I have ventured to consider that such a benefaction as this which it has devolved upon me to commemorate is the best kind of benefaction the College could now receive. Probably Harvey had in his mind especially the encouragement of the bestowal of benefactions of a nature calculated in a more direct way to benefit the College. If we carry our thoughts—and, looking at the position in which the College stands at the present time, it requires a little effort to do so—I say, if we carry our thoughts to what the College was in Harvey's day, we realise that needs then existed which have now disappeared. We have no longer occasion to give ourselves concern about the corporate welfare of the College in the manner that was formerly called for. Founded "wtih a view to the improvement and more orderly exercise of the art of physic, and the repression of irregular, unlearned, and incompetent practitioners," the College for a long time possessed but very meagre accommodation. A gift by our founder and first president, Linacre, of the front portion of his private house, "comprising a parlour below and a chamber above, to be used as a council room and library," constituted for many years the only local habitation belonging to the College—a modest beginning indeed for the edifice in which we are now assembled. On the announcement towards the end of the sixteenth century by Dr. Caldwell and Lord Lumley of their intention to found a surgery lecture, and to endow it with £40 a year, the Fellows determined to appropriate £100 out of the common stock (and this was nearly all the money the College possessed) to enlarge the building and make it more ornamental and better suited for the meeting of their body and the celebration of the lectures. We next learn that just before Harvey entered upon his tenure of the Lumleian lectureship, contributions from its members and some others were forthcoming, which enabled the College to take more suitable premises, to which it removed. Subsequently, during the troubled times of the civil wars, the College was brought to the greatest straits. In consequence of the heavy taxes imposed and the other exactions made, it became unable for a time to pay its rent to the Dean and Chapter of St. Paul's. To add to its distress, its premises were now condemned, as part of the property of the Church, to be sold by public auction. One of our Fellows, Dr. Hamey, whose name deserves to be ever remembered, became, however, their purchaser, and afterwards gave them to his colleagues. Harvey himself contributed munificently to the substantial welfare of the College. A few years before his death, "the Fellows," we are told, "attended at the College when the doors were thrown open, and Harvey, receiving his assembled colleagues in the new museum, made over to them on the spot the title-deeds and his whole interest in the building," which, says Aubrey, was a noble building of Roman architecture, containing "a great parlour, a kind of convocation room for the Fellows to meet in below, and a library above." This gift preceded that of his patrimonial estate with which the establishment of this Oration is connected. From these particulars, drawn from that excellent work, the "College Roll," from the pen of our esteemed colleague, Dr. Munk, it is brought home to us how vastly altered the position of the College now is; and I think I shall stand in accord with the opinion of others when I say that I consider the best kind of benefaction that can be in the present age bestowed is such as I have had to commemorate to-day—one that confers upon the College the power of contributing towards making us, through the acquisition of increased knowledge, more efficient agents in the exercise of our calling.

The next part of my duty is to exhort the Fellows and Members of this College "to search and study out the secrets of nature by way of experiment." These are the directions I am to follow, and they give me a wide field to select a course of procedure from. The kind of exhortation I shall employ will consist in placing before you a view of the method of work which Harvey himself adopted, and then as an incentive to follow his example, I will display some of the fruit yielded by recent research conducted upon the lines of his procedure.

The object to be promoted is the acquirement of additional knowledge. It is an old but true saying that knowledge is power. We accept the doctrine, which comes to us in definite shape from no less ancient an authority than Aristotle, that there is no such thing as innate knowledge—that knowledge of every kind has to be acquired, and that it is based upon perceptions reaching the mind through the senses. Harvey thus epitomises what was said by Aristotle respecting the manner in which the knowledge appertaining to science is acquired: "The thing perceived by sense remains; from the permanence of the thing perceived results memory; from multiplied memory, experience; and from experience, universal reason, definitions, and maxims or common axioms." In its elementary form, knowledge consists of simple inferences drawn in a direct manner from impressions. A child once burnt afterwards shuns the fire. From the impression received an inference is framed which forms the foundation for future action. The same kind of operation determines the conduct of the lower animals. By mental action these simple inferences may be raised into or give rise to knowledge of a higher kind. This is what for science is required to be done. The exercise of the intellectual faculties must be brought into operation, in order that what we acquire through perception may be shaped into the knowledge that it is desired to obtain. The object in science is to discover the facts and laws of nature; and to apply the intellect advantageously for the purpose, there must be some systematic course, some method or art of reasoning, adopted. The system employed up to Harvey's time was the Aristotelian, or syllogistic—a system which, whilst being well adapted for affording proof upon any particular point, is ill adapted for promoting the advance of knowledge. When through the major and minor premisses of a syllogism I draw a conclusion, a point is proved, but no real addition is made to our stock of knowledge. For instance, when in accordance with the rules of the syllogistic art I say—"All men are mortal: Thomas is a man, therefore Thomas is mortal," I start with the general proposition in the major premiss that "all men are mortal," and arrive at the conclusion, through the minor premise, that a particular individual is mortal. A certain attribute—mortality—is asserted to be possessed by a class. A member of the class must also possess the attribute, and this is all the information that my syllogistic conclusion has given me—that the individual named Thomas possesses the attribute of mortality, which belongs as a general character to the group of individuals of which he is a member. The two premises of the syllogism already consist of established truths, and for a syllogism to be valid there must be nothing contained in the conclusion beyond what is asserted in the premisses. The train of reasoning, therefore, is not adapted to lead us to the acquirement of new knowledge. The essence, indeed, of the system consists in proceeding from generals to particulars. The major premiss, with which we start, is, in reality, a general proposition, containing knowledge which has been acquired—not, it is true, by the methodical application of induction, but nevertheless after the manner of induction—by observation repeated and confirmed until the thing has come to be accepted as an established truth.

Harvey was shrewd enough to perceive that such a system of reasoning, which had continued in use up to the period in which he lived, did not assist in the disclosure of the secrets of nature. He says: "The method of investigating truth commonly pursued at this time is to be held as erroneous and almost foolish, in which so many inquire what others have *said*, and omit to ask whether the things themselves be actually so or not; and single universal conclusions being deduced from several premises, and analogies being thence shaped out, we have frequently mere verisimilitudes handed down to us instead of positive truths." Men's minds must have evidently now become occupied with the new system of philosophy set forth by Lord Bacon, in his "Novum Organum," or "true directions concerning the interpretation of nature." One of the aphorisms of this work clearly exhibits the difference between the new system and the old: "There are and can be only two ways of searching into and discovering truth. The one flies from the senses and particulars to the most general axioms, and from these principles, the truth of which it takes for settled and immovable, proceeds to judgment and to the discovery of middle axioms. The other derives axioms from the senses and particulars, rising

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by a gradual and unbroken ascent, so that it arrives at the most general axioms last of all." Upon system, or plan of procedure, a great deal depends: look at any undertaking carried out under a good system and a bad. The ancients were a long time in learning the right system to adopt, but it was indeed a great day for science when the method of reasoning by induction was introduced. Starting with particulars or facts which are collected from nature by observation and experiment applied in every available way, it proceeds step by step in the process of generalising until the largest and widest propositions are obtained. From the proposition which has been formulated out of, it may be, only a few facts, advance is made with the aid of other facts to propositions of a more and more general character. The unknown is brought into the domain of the known, and as this domain increases, not only is the position acquired strengthened, but at the same time rendered more advantageous for the attainment of further extension. Thus the march onwards proceeds, and when some general law of nature—like, for instance, gravitation, the correlation of the physical forces, or, even, with a more limited bearing, reflex spinal action—is discovered, a gain is made which, through reflected influence, has the effect of at once immensely enlarging and perfecting the understanding. Truly, it may be said, the explorer by the inductive method does not know whither he may be led. He dedicates himself

"To unpathed waters—undreamed shores,"

and follows simply the direction indicated to be taken by what happens to be revealed. Guided entirely by the facts disclosed by observation and experiment, he brings the instrumental agency of the mind as a reasoning power to bear upon them, and draws from them that which adds to the store of knowledge already possessed. He seeks for facts and interprets their meaning as they come before him. This was the course pursued by Harvey. Instead of giving himself up, as others had done before him, to arguing out conclusions from accepted axioms, he struck out into the hitherto untrodden path of inquiry—that of induction—and sought knowledge by a direct appeal to nature through the medium of observation and experiment. "It were disgraceful," he says, "with this most spacious and admirable realm of nature before us, did we take the reports of others upon trust, and go on coining crude problems out of these, and on them hanging knotty and captious and petty disputations. Nature is herself to be addressed; the paths she shows us are to be boldly trodden."

In the discovery of the circulation Harvey applied the principles of induction and argued upon them in a strictly logical way. He showed himself to be a good and careful observer, judged even by the standard set forth in the following words of John Stuart Mill on the process of observing. "The observer," says Mill, "is not he who merely sees the thing which is before his eyes, but he who sees what parts that thing is composed of. To do this well is a rare talent. One person, from inattention, or attending only in the wrong place, overlooks half of what he sees. Another sets down much more than he sees, confounding it with what he imagines or with what he infers. Another takes note of the *kind* of all the circumstances, but, being inexpert in estimating their degree, leaves the quantity of each vague and uncertain. Another sees, indeed, the whole, but makes such an awkward division of it into parts, throwing things into one mass which require to be separated, and separating others which might more conveniently be considered as one, that the result is much the same, sometimes even worse than if no analysis had been attempted at all. It would be possible to point out what qualities of mind and modes of mental culture fit a person for being a good observer; that, however, is a question not of logic, but of the theory of education, in the most enlarged sense of the term."

The experiments which Harvey conducted on the arteries and veins to assist him in his inquiry were founded upon a well-devised plan. It may be said of experiment that it affords the means of varying the circumstances, and thus aids immensely the acquirement of knowledge by induction. In the application of the faculties to discovery the mind asks itself what facts are needed to assist in the establishment of a correct conclusion. The fact may be looked for amongst the varied instances presented by nature; or, by an artificial arrangement of circumstances, the required instance may be made—in other words, experiment may be had recourse to for supplying what is wanted. In the one case we get our fact by observation from the variations in the circumstances spontaneously furnished by nature; in the other we obtain it from experiment, which possesses the great advantage over observation not only of furnishing us with a much greater number of variations than is to be found naturally presented, but also of enabling us to produce the precise form of combination or variation which is needed for our purpose.

Harvey in a true sense adopted the Baconian system of interrogating nature by appeal to observation and experiment and drawing conclusions out of the facts presented, and yet it is evident that the "Novum Organum" was not published till after the discovery of the circulation was made. Bacon's new method of conducting research and discovering the truths of nature was placed before the public in 1620. Harvey's work on the circulation, "Exercitatio Anatomica de Motu Cordis et Sanguinis Animalibus," was not published till 1628, but it has been generally allowed that his discovery was made known in his first course of Lumleian lectures delivered at the College in 1616; and, thanks to the meritorious labours of a committee of the College, this has now been rendered open to verification by the very interesting volume just prepared and on the point of being issued, containing a reproduction in autotype form of his original lecture notes in his own handwriting. Harvey, then, must have been throughly in the van of progress taking place in his day; and, further, the contemporaries of Bacon must have been acquainted with the new system of philosophy before the "Novum Organum" was published.

Harvey's discovery established a new departure in physiology. Without a knowledge of the circulation nothing really could be known about the various operations taking place within us. It is hard, with the knowledge now possessed, to realise the state existing at the time the circulation was discovered. The passage of blood from the right to the left side of the heart had, it is true, already been recognised, but it was taught that the blood went to the lungs for their nutrition, and "to be elaborated and subtilised by the reception of a spirit from the air in inspiration and the exhalation of a fuliginous matter in expiration." The heart and arteries were supposed to be the seat of the vital spirit, and the liver to be the fountain from whence the body was supplied with blood through the veins, in which there was believed to be a to-and-fro current, a flux and reflux, that was compared to the ebb and flow of the tide in the classic straits of Euripus. Truly, indeed, may it be asserted that our ancestors stand in the twofold position of our parents with respect to age, our children with respect to knowledge.

It was not without opposition that Harvey's views were received; and the high position in his profession he had attained did not suffice to prevent his escape from the effect of the prejudice against innovation entertained by the multitude. Aubrey tells us he had "heard him say that after his book on the circulation of the blood came out he fell mightily in his practice; 'twas believed by the vulgar that he was crack-brained, and all the physicians were against him." Harvey lived, however, to see his doctrine generally accepted. But such are the vicissitudes of time that in our day an attempt has been made to deprive him of the title of discoverer of the circulation and give it to an Italian physician, Cesalpino, because it has been found that a few words of what he wrote can be construed into suggesting that a conception of the circulation existed in his mind. Most ably and successfully have my predecessors in the delivery of this oration, Sir Edward Sieveking and Dr. George Johnson, combated the claim that has been put forward on behalf of Cesalpino, and maintained the position of Harvey.

Science prepares the ground for the exercise of art. The one—science—is concerned with knowledge as knowledge; the other, with the application of it to a practical end. Our art—our *raison d'être* as members of the medical profession—is to apply the knowledge of medical science to the prevention of, cure or mitigation of, and alleviation of the sufferings from disease—to secure, in fact, for man as natural a passage through life as happens to be attainable. We cannot prevent death. Lord Bacon, in his essay "De Morte," said—

"Æque enim est naturale hominibus mori, ac nasci."

True, it is as natural to die as to be born; and nature's laws must be complied with. Our aim is to avert premature death. A certain power, given to us at starting upon our

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existence, carries us on, under exposure to the proper conditions or influences for keeping this power going. But, in the exercise of its action, although for a while it shows no signs of a failing tendency, yet assuredly it progresses towards exhaustion and ultimate extinction. Accompanying, and doubtless dependent on, the declining power, and assisting in leading to its becoming extinguished, there is an advancing deterioration of the material organism in which the power is manifested. Such is what is natural; but many circumstances contribute to avert the natural, the ordinary, course being run. The power given to start with may not be equal to the standard, and the issue of generation may in consequence present itself under a weak and ill-developed form, easily falling a victim to influences that there ought to be strength enough to resist. There may be a taint in the power derived by generation from the parents—something transmitted by inheritance which may give rise to a tendency to the development of some structural deviation from the natural state, or to the performance of one or other functional operation of life, in a manner that does not conform with what may be said to be strictly natural. It is a law of nature for the offspring more or less closely to assume the likeness of the parent, and likeness in the shape of what is wrong may be assumed as well as in the shape of what is right.

Quitting the quality of the power given to us to start with, we are next dependent upon the influences derived from the external or surrounding conditions to which we become exposed. Light, air, what we eat and drink, or what in any way gets into the system, temperature, exercise of mind and body—in short, the conditions under which we live—all exert their influence in favouring or otherwise a natural passage through life. Within us, operations forming a part of the operations of nature proceed, but these operations are influenced by—owe their activity, indeed—to the surrounding conditions, and thus it is that upon these surrounding conditions depends whether a natural course is run or not. Under the same law these surrounding conditions may exert a modifying influence in this or that particular direction upon the operations that are proceeding, and by long continuance in force may lead to the establishment of a more or less modified state as a part of our nature in accordance with the Darwinian principle of natural selection. This matter—the modifications for good or bad wrought in our nature by the influence of external conditions—embraces a wide field of study, and comprehends nothing less than the possession of a knowledge of the varied operations, with the laws determining them, going on around us, in order that we may understand the manner in which they are brought about. It is a vast subject, but the mind of man has already done much, and there is reason to think will do much more, towards penetrating it; and as with the amount of knowledge acquired power is possessed—that is, the power of arranging conditions or operations so as to render them subservient to the production of a desired effect, man stands in the position of an increasingly powerful agent in the realm of nature. Must not the mind itself, then, through which this is accomplished, be reckoned as a power—a great power amongst the powers of the universe? In our special department as medical practitioners, it falls to us to apply the power which knowledge gives us towards preventing unnatural conditions of the body from being allowed to become developed, and towards bringing the unnatural back into the natural state—in fact, towards aiding in carrying life on in a natural manner through its ordinary term of existence. In every branch of study relating to our art immense progress has in recent years been made. It is true, all gain in knowledge must be regarded as contributing to the improvement of our position, but at the same time it is not permitted to us to see in each gain a direct applicability to a useful end. I will, however, refer to one issue of research derived from the labours of the present day which has already yielded much good and useful fruit, and gives promise of yielding much more.

Belonging to the realm of living nature there are small organisms, the existence of which we must have remained unconscious of in the absence of the aid of the microscope. The organisms to which I refer are rod-like in form and of such minute dimensions as to require a good magnifying power to enable them to be brought into view, and some of them also, to be rendered visible, require to be stained with a colouring agent. These bodies are known by the name of bacteria or bacilli, and, whilst some difference of opinion has existed, it is generally thought that they are organisms belonging to the vegetable kingdom. There is nothing in their appearance to strike the observer that they possess any significance, and yet by recent research it has been found that they play a most important part as constituents of the living world. The character from which they mainly derive importance is the facility and rapidity with which they become developed. This contributes to their wide distribution and counterbalances their minuteness.

It is only recently that the life of these organisms has been known to produce effects of any particular interest to us. Some while ago they gave rise to a discussion upon the subject of spontaneous generation, which was carried on throughout several years, with at times a considerable amount of warmth. The fact had been observed that when a liquid containing organic matter was exposed to the air, it more or less quickly, according to the prevailing temperature, became tenanted with an immense number of these micro-organisms. The question arose whether they sprang into existence from the fortuitous concourse of disuniting atoms of the organic matter, or whether they were derived by parentage from pre-existing organisms. Spallanzani, who lived in the eighteenth century, performed the experiment of placing the organic liquid in a vessel, hermetically sealing it, and afterwards exposing it to a temperature sufficient to destroy the life of any living matter present, and found that under these circumstances no organisms became developed. It was suggested that the presence of air might be a necessary condition for the re-arrangement of the elements of the organic substance into living matter, and through this being excluded in Spallanzani's experiment it might be thereby rendered fallacious. Schulze and Schwann came upon the field just about fifty years ago, and devised an experiment which stands invested with historical renown. They placed the organic liquid in a flask and boiled it to effect the destruction of any life that might exist. The flask was closed, but provided with tubes through which air could be made to reach the interior, and, as the essential part of the experiment, the air thus made to enter was transmitted either through sulphuric acid or a heated tube for the purpose of killing anything of a living nature that might happen to be present. Thus circumstanced, and under the frequent renewal of air in contact with its surface, the liquid remained for any length of time free from living organisms; but when the mouth of the flask was unclosed and its contents were freely exposed to the air, they were soon found to be swarming with living beings. The natural conclusion to be drawn from such an experiment is that it goes far towards absolutely establishing that the air contains the germs of living organisms, and that it is these that constitute the source of the microscopic organisms found to become developed in the presence of organic matter, which some have contended take rise spontaneously. This view is supported by the researches of the present day, and nothing that would bear the scrutiny of strict investigation has ever been adduced against it. It stands at the foundation of our modern notions regarding the *rôle* played by bacilli, and thus occupies a position of weighty importance with reference to the matter.

Both upon dead and living organic matter these organisms exert an influence productive of wide and strikingly marked results. Although known to become developed in decaying animal and vegetable infusions, it was not until recently suspected that they stood in any other relation than as a simple growth in a suitable medium; certainly it was not suspected that they held the position that is now assigned to them. Whilst life exists in any particular being, there is a round of actions carried on, a round of changes occurring in a definite and fixed direction, giving rise to the phenomena that are observed. When death occurs another set of changes is seen to set in. The affinities and operations formerly in play, which held the elements together in specific combinations and led to the occurrence of a specific line of changes, ceasing to prevail, the conditions become free for new affinities to come into force and produce new combinations, and with this for a new line of changes to occur. Such was until recently looked upon as furnishing a representation enabling us to understand the *rationale* of the passage of a substance into a state of putrefaction. Instead, however, of regarding the elements of organic compounds as simply splitting asunder as a result of the removal of the influence of life to form others generated by new affinities starting into existence after death, we are brought by the evidence now before us to look upon putrefaction as

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the issue of the influence exerted by the living organisms to which our attention is being given. However much, viewed superficially, the process may appear to arise from spontaneous disintegration, no such disintegration takes place unless there is the necessary agency present to excite it, and this agency consists of living organisms comparable in the effect they produce to the living cells of yeast, which have the power of exciting the transformation of sugar by what is styled fermentation. It is only, then, in the presence of the organisms in question that putrefactive decomposition occurs. Exclude them in any way that may be chosen, and the organic product, whether milk or any other article, remains without undergoing change.

The step from the action exerted by bacteria as agents exciting the decomposition of organic products to that which brings them before us as a source of disease is not a great one. In the one case they lead to change which would not otherwise occur, and in the other they disturb the order of changes naturally taking place, and thus induce an abnormal state; and although there is nothing in their morphological characters to show the reason, different trains of phenomena—in other words, different diseases—are occasioned by different kinds of bacilli. It is in the group of disorders falling under the denomination of contagious or infectious febrile diseases—a form of disease, taken in its entirety, constituting one of the greatest scourges besetting the human race—that we are brought most manifestly into contact with bacilli. Very diverse views have been held at different times regarding the nature and mode of production of the affections belonging to the class in question, but by recent research it may be considered as having been rendered evident that they depend upon the introduction of bacilli into the system, to the growth and multiplication of which are due the phenomena that are observed. Opinion has for some time past been advancing to this point. Our countryman, Dr. William Budd, devoted special attention to cholera and typhoid fever, and in 1849 stood prominently forward in urging that a living microscopic organism constituted the source of the diseases of their kind. For awhile, however, fever germs were only talked about, without their reality being regarded as established. The discussion at the Pathological Society in 1875 on the germ theory of disease marks an epoch in the history of this subject, and shows that up to this time much progress had not been made towards settling the question; for, whilst some spoke in favour of the theory, no less an authority upon fevers than the late Dr. Murchison expressed himself strongly against it. Since then, knowledge has advanced in great strides; and now, not only has the fact been ascertained that different kinds of organism productive of different diseases exist, but through the indefatigable researches of Pasteur and others the distinguishing form and life history of certain of these organisms have been clearly made out. Placed under suitable conditions, it has been found that they can be reared or cultivated artificially, and one of the most marked and important characters belonging to them is the enormous extent of self-propagating power they possess. This accounts for the rapid spread that is observed to take place of an infectious disease, if allowed to progress without controlling measures being brought to bear upon it.

We have to deal, then, with something that lives and grows by virtue of a power pertaining to itself. Permit this living growth—this parasite, in fact—to become dispersed and to enter the system of a living person, and presuming it has lodged upon a soil supplying suitable conditions for its development, it will thrive and multiply and give rise to a series of phenomena which the physician has no power to arrest. Once the bacillus is implanted and the disease established, all that the physician can do is to see that the patient has fair play—that he is kept under the most favourable conditions for battling successfully against his enemy. What is to be philosophically aimed at, however, is to check the spread, to bar the transmission of the parasite from one person to another, by attacking it outside the body; and this, with the application of the proper measures of disinfection, can with facility be done, but naturally the facility of preventing extension stands in proportion to the degree of limitation at the time existing. The spark of fire is with the greatest ease extinguished, but let it kindle into flame, and in proportion as the flame spreads the difficulty becomes greater to get the conflagration under. This is one way in which the attack upon the bacillus may be made, and the ravages of disease restrained. Another way, by quite a different line of tactics, presents itself; and the knowledge of this is due to the researches that have been recently conducted. The vulnerable point to which I am alluding lies not in connexion with the bacillus itself, but with the condition of the medium upon which it may chance to fall. It has been found that the parasite requires virgin soil for its growth. This observation stands in harmony with the result of common experience as regards disposition to contract infectious disease. It has been from remote times generally known that a person who has passed through one attack of an infectious disorder is not liable to the same extent as before to become affected on exposure to contagion. An influence has been exerted giving rise to more or less protection being afforded against a recurrence of the disease. Now, it happens that by certain means the bacillus may be brought into such a weakened state as only to occasion, when introduced into the system of an animal, an effect of a mild nature, not dangerous to life, instead of the ordinary form of disease; but the effect produced—and this is the great point of practical importance—is as protective against subsequent attack as the fully developed disease.

There are two methods by which attenuation in virulence of the disease-producing organism may be brought about—by conducting their artificial cultivation in a particular way, and by transmission through the system of an animal differing in nature from that in which the disease naturally occurs. When the chain of discoveries reached the point of showing that bacilli could be reared outside the body in an artificial soil or cultivating medium, a great advance was made towards obtaining a full knowledge about them, as it placed the observer in a more favourable position for the successful prosecution of research by enabling him to vary and control his conditions in a manner that could not otherwise have been effected. Although much has been accomplished, it must be said much still remains to be done. In the case of a few bacilli the life history has been pretty clearly made out. Cultivated in a certain way they retain their virulence, no matter through how many successions they pass. The last product in a series of successive cultivations is as virulent as the parent stock. By modifying the conditions under which the cultivation is carried on, the successive products of descent may be gradually weakened until they become harmless. Such being the case, any desired degree of attenuation may be obtained, and by inoculation with a virus brought down to the proper strength the non-fatal affection may be occasioned which gives immunity from subsequent liability to take the disease under exposure to contagion. The knowledge thus acquired has been already practically turned to account upon a large scale for checking the ravages of that exceedingly fatal disease amongst cattle known as anthrax, or splenic fever, and through the success attained much sacrifice of life has been averted.

If this can be accomplished for one disease—and more than one can be mentioned,—is there not ground for believing that means will be found for placing others of the class in the same position? Attempts are being made in this direction. All eyes throughout the civilised world are, indeed, at the present moment fixed upon the work of Pasteur in Paris with respect to hydrophobia. It would be a great achievement for this frightful disease to be brought under subjection, and certainly the results that have been obtained appear to give hopes that an approach to something of this kind has been arrived at. Looking at the nature of the disease, there is nothing inconsistent with its being dependent upon a bacillus, or microbe, as Pasteur calls it. On the contrary, owing its origin as it does, when occurring naturally, to inoculation with the poisoned secretion of an affected animal, and taking into view the facts that have been learnt in connexion with its transmission by artificial inoculation, evidence points to such in reality being the case. If due to a bacillus, why may not this bacillus be open to attenuation in the same manner as that of anthrax? if thus open to attenuation, why not susceptible of producing a non-fatal form of affection? and if this condition has been produced and passed through, why should not protection be thereby given against the subsequent development of the disease as a result of the primary inoculation from the bite of the rabid animal? Such a train of reasoning is quite legitimate, and for the application of the principle of action to which it leads there is this advantage on the side of hydrophobia, that from the prolonged period usually taken for incubation after the introduction of the poison in the ordi-

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nary way, time is given for the artificial inoculations by subcutaneous injection to produce their effect and to render the system refractory to the further development of disease. I have been an eye-witness of Pasteur's work. It is from the nerve centre, the seat from which the symptoms of the disease start, that he obtains his virus. Employed for inoculation in a fresh state, it produces a fatal disease, and the disease has been transmitted successively on through a number of animals, with the result that the last affected animal yields as strong a virus as the first. Kept in a pure dry air, attenuation advances, and after a certain time the nerve centre loses its disease-producing power. Used for inoculation at a given period of preservation, it produces an effect which renders an animal resistant to the influence of inoculation with the virus in a fresh state, and Pasteur contends that it acts similarly when the virus has been introduced in the ordinary way. The treatment of persons bitten by rabid animals by inoculation with attenuated virus has now been on its trial a considerable time, and a large experience gained. Judgment, it must be stated, still stands in suspense; but it must also be said that the results obtained tell decidedly in favour of the view advanced.

The other method by which it has been recently experimentally found that the virulence of bacilli can be weakened is by transmission through an animal of a different nature from that in which the disease naturally occurs. This, in reality, represents the principle at the foundation of the system of vaccination discovered by Jenner at the close of the last century. It may now be regarded as an accepted conclusion that vaccine-lymph is the virus of small-pox modified by transmission through the cow. Jenner's discovery consisted in showing that the result of vaccination with the lymph of cow-pox affords as much protection against small-pox as an attack of small-pox itself. This was the fact he educed, but the knowledge possessed in his time did not permit of its being looked at in any further way than as a simple fact or truth of nature. Viewed, however, with the light that has been thrown upon it by the researches of the present day, we see not only the fact, but also its explanation—we see that the principle of action of the procedure proposed by Jenner, which has conferred such incalculable benefit upon mankind, is based upon the attenuating effect upon the small-pox virus of the human species by transmission through another animal, and knowing this the prospect is presented of its being rendered susceptible of application for the control of other diseases. Whether this should prove so or not, at all events advantage is gained by the knowledge acquired.

Need I say anything more to exhort you in accordance with the duty that has devolved upon me? Surely the acquirement of knowledge, giving us as it does greater power in the exercise of our calling, and thereby promoting the high and noble object of rendering our lives more useful to our fellow-creatures—surely this is a sufficient incentive, following the words of Harvey, "to search and study out the secrets of nature by way of experiment."

ON SOME CLINICAL RELATIONS OF FUNCTIONAL ALBUMINURIA.

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IN the present paper I shall endeavour to show that a relationship exists between those forms of albuminuria which for conciseness are called "functional" and hæmoglobinuria, and I shall also hope to go a step further and bring forward facts which will tend not only to prove that such a relationship exists, but that in all probability many forms of "functional albuminuria" are only minor manifestations of hæmoglobinuria, and that the two conditions may become merged one into the other.

Writers, under the terms "intermittent albuminuria," "albuminuria of digestion," "cyclical albuminuria," the "albuminuria of adolescents, &c., have described a condition in which, without any great disturbance of bodily health, and apart from any definite renal disease, albumen is found, more or less, continuously in the urine. Although the question, whether these forms of albuminuria, as the various terms applied would imply, are really in each instance distinct, or whether they are brought about by the same pathological factors, may still be considered by many an open one; yet I think there are many considerations which would make us decide entirely in favour of the latter supposition. In the first place, taking any one of the above forms of "albuminuria," we find that though it may occur in either sex and at any age, yet the largest proportion of recorded cases will always be among young adult males. Again, these forms of "albuminuria" are nearly always found occurring among individuals who are either suffering from some constitutional taint, inherited or acquired—such as gout, rheumatism, syphilis or malaria,—or in whom some disturbance of the vaso-motor system can be demonstrated. The intermittent character of the discharge of albumen is common to all forms; for though in some cases it may be continuous, still even then there are distinct *tides* observable, and the ebb and flow are distinctly regulated by some disturbing cause, which in many cases is merely the performance of some physiological act — such as the ingestion of food, rising from bed, cold bathing, or exercise. The urine, too, in all cases of functional albuminuria exhibiting these features, so far as they have come under my observation, presents two characteristic features—viz, increase of urea and an abnormal amount of urinary pigment; whilst, but as a less constant phenomenon, bile pigment can also usually be detected. My attention was first drawn to the fact that both urea and the urinary pigment are increased in the urines of functional albuminuria by a case brought me by Dr. Sedgwick Saunders. In this case the urine was abundant, the specific gravity high (1028), and the albumen pretty constant, but varying in quantity, being chiefly affected by food and exercise. With a view to watching the effect of diet and treatment, the patient was directed to send a sample of his twenty-four hours' urine to Dr. Saunders' laboratory twice a week for examination. At the end of the month that gentleman sent me his report, and in it he drew my attention to the fact that on the days when the albumen was most abundant the specific gravity was above the normal; whilst the ring of urates which formed just above the cold nitric acid on which the urine was floated was, when the albumen was most abundant, always intensely coloured by the oxidised pigment of the urine. In subsequent cases of functional albuminuria of the character described I have always looked for this phenomenon, and in no case when albumen has been present have I failed to observe an absolute increase of urea and an increased amount of urobilin in the urine. The significance of this phenomenon will be considered further on when discussing the pathological relations existing between functional albuminuria and hæmoglobinuria.

Having thus briefly referred to the relationship, if not the identity, of the various forms of albuminuria which are generally included in the term "functional," I will as briefly sum up the chief clinical points of similarity that exist between functional albuminuria and hæmoglobinuria. In the first place, like functional albuminuria, hæmoglobinuria is essentially a disease of young adult males; like it, it is nearly always associated with hereditary or acquired constitutional taint—as malaria, rheumatism, syphilis, &c. In both, although the patients may look well, and even have a florid appearance, owing to injected capillaries, there is always a degree of anæmia, marked not only by paleness of the mucous surfaces, but by actual deficiency of red blood-corpuscles, sufficient to be determined by the hæmocytometer. Hæmoglobinuria, moreover, is accompanied with a certain degree of jaundice and marked dyspeptic symptoms; and although the same symptoms are not so pronounced in cases of functional albuminuria, still patients from that disorder complain to us of frequent bilious attacks and of indigestion. Again, although in some cases of hæmoglobinuria the urine remains free from albumen between the paroxysms, still in the majority the albuminuria continues, and if this albuminuria be watched from day to day it will be found also to vary in degree at different times, just as we should expect in a case of true functional albuminuria. Moreover, apart from the presence of hæmoglobin in the urine, the character of this secretion in the two conditions is very similar; for in hæmoglobinuria an increased excretion of urea is also observable, whilst, when the colouring matter of the blood has disappeared, the urine is nearly always found deeply coloured from excess of urobilin, whilst not infrequently

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crystals of bilirubin may be observed in the urinary sediment. These considerations, I think, will be admitted to be strongly in favour of a relationship existing between hæmoglobinuria and functional albuminuria; whilst the three cases which I now bring forward will not only go to prove that view, but will also tend to show that "functional albuminuria" is often indeed only a minor manifestation of hæmoglobinuria, and that the two conditions may merge one into the other.

The first case was that of a gentleman who six years ago found he was suffering from albuminuria. By the advice of his medical attendant he consulted two London physicians, who told him he had Bright's disease, and that he must winter abroad. He did so, but it had no effect on the albuminuria. On returning to England he remained under observation for three years, the albumen continuing abundant, and the general health being little if at all impaired. About this time Dr. Oliver of Harrogate, who had also seen the case, began to have doubts as to the confidently expressed opinion of chronic nephritis, as there was neither loss of weight nor cardio-vascular changes, nor was there, or had there been, any œdema; whilst the secretion of urine was abundant and the specific gravity high. Dr. Oliver then consulted with me respecting the case. I found the daily average urinary secretion about sixty ounces, and the specific gravity about 1022; so that the solid matter daily eliminated by the kidneys, was about twenty-one grammes above the average of an adult of the same age and weight. This excess was almost entirely caused by the increased amount of urea. The urine gave a strong pigment reaction with nitric acid, and sometimes contained bile pigment. Albumen was very constantly present, but varied greatly in amount; no casts were observed, nor were there any of the usual symptoms of renal disease. The patient was healthy-looking, but somewhat pallid and sallow; he made no complaint, however, except that at times he was troubled with attacks of indigestion, and that after these he noticed he was more sallow than usual. My opinion coincided with that of Dr. Oliver, that the albuminuria was not caused by any organic disease of the kidney, but was probably functional. This was in the spring of 1883. He was placed on a strict dietary, and iron and arsenic given daily. His condition varied, but at last he began to improve, and one day in August, 1884, he called on me to say he had not seen any albumen for some weeks past. This statement was subsequently confirmed by Dr. Oliver, under whose observation he then was at Harrogate. In October of that year he took his wife abroad to winter in the south of France, he himself returning about the beginning of November. On the return journey he caught a chill. The day subsequently he passed a quantity of bloody urine. This I examined, and found no red corpuscles, and another sample sent to Dr. Oliver was also found free from them. The patient stated he had never noticed anything at all like it before, nor had he, to his knowledge, ever noticed any blood in his urine. He then had for five or six weeks distinct attacks of paroxysmal hæmoglobinuria. After two or three relapses he recovered, and for a time lost his albuminuria; but by degrees this returned, and was persisting when I saw him in the spring of the present year. His general health, however, remains good, he has gained in weight, and has not had any recurrence of hæmaturia.

In the second case the albuminuria was apparently ushered in with an attack of paroxysmal hæmoglobinuria. The patient was a young man brought to me by one of my colleagues. Four years previously, when studying on the Continent, he passed bloody urine; since then albumen has been more or less present in his urine. The sample I examined contained no casts, the specific gravity was 1028, and the quantity passed daily quite up to, if not above, normal limits. The pigment reaction with nitric acid was intense, and the urine yielded abundance of crystals of urea nitrate when treated with the same acid. The patient looked hearty and robust; there were no cardio-vascular changes; no evidence of dropsy at any period; whilst, according to the patient's statement, he had recently gained in weight. From the time he first noticed the bloody urine abroad four years ago none has passed since, although he has been on the look-out for it. His chief trouble is indigestion.

The third case is not so well marked as the preceding two; it, however, bears upon the point. A young man, aged twenty-one, consulted me in June, 1885. He had been rejected for life assurance on account of the presence of albumen in his urine. He did not know there was anything amiss, as he felt perfectly strong and well, and was only occasionally troubled with attacks of indigestion. He had never noticed his urine to be even of a dark colour, though he had seen red sand from time to time. The patient in this case was passing on an average fifty ounces of urine of an average specific gravity of 1030, having a considerable excess of urea and a strongly marked pigment reaction with nitric acid. No casts were to be found in the urine; he seemed in perfect health, was recently married, and able to perform his marital duties in a manner quite beyond the power of a victim to organic albuminuria. Under strict dietetic regulations and the use of arsenic and iron the albumen almost wholly disappeared from the urine, and after an absence for his holiday entirely so. In November, however, he got a chill coming out of church, felt very sick, and passed some dark-coloured urine. For some time after this the urine contained albumen, but no more blood passed. The albuminuria still recurs from time to time.

In these three cases, then, we have instances of an albuminuria complicated by an isolated attack of hæmoglobinuria. Of course it may be urged that the hæmoglobinuria was accidental in all three, and that it happened to occur in individuals already suffering from albuminuria. That it was not merely an accidental occurrence, but a transition of the one condition to the other, I now hope to show.

Clinical experience, as well as experimental observation, lead us to infer that hæmoglobinuria exists in two forms:—(1) A form in which the hæmoglobin is simply dissolved out of the blood-corpuscles; in this form the dissolution probably occurs in the course of the circulation, and is more usually local than general—that is to say, in parts exposed to cold or subject to vaso-motor disturbance, as in *asphyxie locale* or Raynaud's disease; (2) a more severe form, in which dissolution is general, and is probably attended with considerable destruction of red blood-corpuscles in the liver, and also in the spleen and kidneys. It is in these severe cases that the icteric tint is well marked, whilst, in addition to hæmoglobin, bile pigment and bilirubin crystals are found in the urine.

In health, as is now well known,[1] the effete red corpuscles are broken down in the liver, a great diminution occurring in the number of corpuscles found in the portal vein—a diminution which during active digestion is often as great as from 1,000,000 to 2,000,000. The effete hæmoglobin thus brought to the liver is, under ordinary circumstances, converted into pigment and urea; and as the recent experiments of Dr. Noel Paton[2] show, any increase of hæmolytic action results in an increased formation of urea and an increased amount of pigment in the urine.

In disease, or under the influence of powerful agents such as toluyendiamin or pyrogallic acid, the hæmolytic action is so increased that a very large quantity of the blood-colouring matter escapes conversion into bile pigment, and so passes off by the kidneys unaltered; at the same time there is undoubtedly an increased formation of bile pigment going on, which either appears unaltered in the urine, or is converted into urobilin, the ordinary urinary pigment. The albuminous element of the blood-corpuscles brought to the liver undergoes transformation into urea under ordinary circumstances; but when the destruction is considerable, and the process takes place under the influence of some sudden disturbance of the vaso-motor system, it is more than probable that, whilst there is an increased formation of urea, a large proportion of this effete albumen is at once got rid of by the kidneys.

Again, it has been observed that when certain hæmolytic agents are injected, a small dose in many instances will only cause albuminuria, whilst a larger dose is required to produce hæmoglobinuria. The same has been noticed with regard to animals; a dose of pyrogallic acid that in a cat will produce decided hæmoglobinuria, will when administered to a dog only cause an increase of bile pigment in the urine, together with some degree of albuminuria. It would thus seem that there are degrees of abnormal hæmolytic action. In the minor degree there is increased conversion of the blood-colouring matter into bilirubin and urobilin; the effete albuminous constituent passing off in part unchanged by the kidneys, in part undergoing conversion into urea. In the more severe form the number of blood-corpuscles de-

[1] Nicolaïdès: Archiv de Physiologie, t. x., p. 531, 1882.
[2] British Medical Journal, July 31st, 1886.

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stroyed are so great that the conversion of all the effete hæmoglobin into bilirubin cannot be effected, though the amount is undoubtedly increased, so that the undestroyed hæmoglobin appears in the urine. In this case there is also an excess of urea and of urinary pigment, together with the presence of albumen in the urine.

These gradations of hæmolytic action may be thus expressed:

Ordinary hæmolysis.	Urinary pigment, urea.	Normal urine.
Active hæmolysis.	Increase of urinary pigment, increase of urea.	Urine of digestion.
Increased hæmolysis.	Increase of urinary pigment, appearance of bile pigment, increase of urea, albumen in urine.	Functional albuminuria.
Extraordinary hæmolysis.	Hæmoglobin in urine, increase of urinary and bile pigment, increase of urea, albumen in urine.	Hæmoglobinuria.

With regard to the pathological conditions that induce this increased and extraordinary hæmolysis in functional albuminuria and hæmoglobinuria we are still in the dark, though it is probable they are of the same character, but differing in intensity. If asked to formulate an hypothesis, I would say that in both the essence of the disease consists in an increased irritability of the vaso-motor reflex centre, which causes increased hæmolysis in the liver; but, in addition to this, there is the formation, probably owing to disorder of the blood-forming organs, of corpuscles unable to withstand unusual disintegrating influences. The fact that individuals suffering from functional albuminuria, or hæmoglobinuria, have generally some taint, hereditary or acquired, such as gout, rheumatism, syphilis or malaria, accounts, no doubt, for the disorder of the blood-forming organs, and also possibly for the instability of the vaso-motor reflex centre. With regard to the treatment of the two conditions, the same may be pursued in both. The diet should be light and chiefly non-nitrogenous, care being taken not to prolong the intervals between meals too long, or to allow too much food to be taken at any one time, since from the experiments of Nicolaides it has been shown that the hæmolytic action of the liver is increased during active digestion or by the ingestion of too much food; whilst too much nitrogenous food undoubtedly increases the metabolic activity of the liver. Quinine and iron are essential, but when given with arsenic the best results are obtained. Arsenic appears to have the power of diminishing the hæmolytic action of the liver, as well as strengthening the resisting power of the red blood-corpuscles.

Queen Anne-street, W.

THE TREATMENT OF INTUSSUSCEPTION BY INFLATION AND MASSAGE.

By W. B. CHEADLE, M.D., F.R.C.P.,

SENIOR PHYSICIAN TO THE HOSPITAL FOR SICK CHILDREN, GREAT ORMOND-STREET, AND PHYSICIAN TO ST. MARK'S HOSPITAL.

In these days of the apotheosis of abdominal surgery, instances of the cure of intussusception by inflation and manipulation of the abdomen deserve to be recorded as a useful reminder of the value and efficacy of the milder method. Three consecutive cases have been successfully treated in this way at the Hospital for Sick Children during the past eighteen months: two under my own care, and a third under that of my colleague, Dr. Barlow.

The first case (for the history of which I am chiefly indebted to the registrar, Dr. Chaffey) is that of Ernest C——, aged five months, admitted July 12th, 1884, with constipation, frequent vomiting, and passage of blood from the rectum. The doctor who had been called in to see the child in the first instance diagnosed intussusception, and advised that he should be taken to the hospital without delay. The further history elicited from the mother was to the effect that the infant had been healthy previously, except for slight bronchitis and occasional constipation. One of these attacks of constipation commenced on the 4th (eight days before), and on the 7th, the bowels not having been open for three days, the mother administered a dose of "white magnesia." The following day (the 8th) the child had a natural stool. On the 9th half a Steedman's powder was administered, followed by two actions on the 10th. The other half of the powder was given, but the bowels were not moved again. On the next afternoon (the 11th, i.e., the day before admission) the child kicked and screamed so much after being put to the breast, as if he had pain in the abdomen, that the mother applied hot flannels. These seemed to give relief, and he slept for some time. In the evening, however, he became restless, and about midnight began to vomit, which he continued to do repeatedly. For the last hour the vomit was green and watery. At 5 A.M. a thin bloody discharge began to be passed from the bowel, and this recurred three or four times. The infant was seen by me almost immediately after it was admitted. It was fat, but somewhat pale and flabby; it did not appear distressed, although it had frequent hiccough. The temperature was subnormal. The abdomen was not greatly distended, but more resisting to palpation than usual, and the handling evidently caused discomfort. Passing from side to side, about an inch above the level of the umbilicus, an elongated sausage-like tumour could be distinctly felt. It extended into the left flank, and was there lost. It could not be felt in the right flank, although it commenced to the right of the middle line. It was smooth, could be moved upwards and downwards a little, and did not appear to be very tender. Examination by the rectum showed it to be empty. There were no fæces. The withdrawal of the finger was followed by the discharge of thin bloody fluid. An injection of warm water was at once given with an ordinary Higginson's syringe, but not more than two syringefuls could be passed in; it was forcibly returned at once, in spite of all attempts to prevent it. Injection of air was accordingly substituted; four syringefuls were introduced, and kept in by pressing the folds of the buttocks and the skin of the anus closely round the base of the nozzle of the syringe. At the same time the abdomen was kneaded externally. It was found that at least three persons were required to carry on these operations satisfactorily, viz., one to work the syringe, one to compress the anus and prevent the escape of air, and a third to manipulate the abdomen. After this process had been continued for some minutes the tumour was found to have disappeared. On careful re-examination a quarter of an hour later no tumour could be detected. When, however, the child was again examined by the house-surgeon, Dr. Thomson, some hours afterwards, a firm, sausage-like tumour was again distinctly felt in the right hypochondrium. Digital examination again showed the rectum absolutely empty except of sanious fluid, which followed the withdrawal of the finger as before. The injection of air and massage were accordingly repeated by Dr. Thomson under chloroform, which greatly facilitated the proper carrying out of the operation. This time ten syringefuls of air were injected, when the bowel was felt to become hyper-distended in the left flank. After a few minutes the air was allowed to escape, and it was then found that the characteristic tumour had again disappeared, although it was thought that the colon could be felt more rigid and thickened than normal. This would probably be its condition from the swelling of congestion. About four hours later the child passed a natural motion, and again took the breast readily; the bowels continued to act regularly, the tumour did not return, and after a few days the little patient was discharged well.

The second case (for the notes of which I am also largely indebted to the registrar) was that of James S——, aged five years and a half, admitted May 27th, 1885. On the 20th he had been suddenly seized with violent pain in the lower part of the abdomen, which recurred constantly day and night, with frequent vomiting. Slime and blood passed from the bowels for the first two days, but no fæcal matter. Subsequently, the bowels did not act until the 26th, when a little hard fæcal matter passed. After this the vomiting and pain were much less. A similar attack was said to have occurred three years ago. The present one was attributed to getting wet on walking home from a friend's house, where he had supped. On this occasion a fish-bone stuck in his throat, and the father gave him apple sauce to wash it down. These events happened on the 19th, the night before the pain and vomiting commenced. The patient being admitted late in the day, and there being no urgent symptoms, he was not minutely examined by the

house-physician until the evening. In the meantime he had once passed some blood and mucus, and afterwards blood alone. Examination showed the abdomen unduly distended, and a large sausage-like tumour could be felt, extending from the lower epigastric region to the left hypochondrium. It was almost identical in character and situation with that in the previous case. The rectum contained only some bloody fluid. Dr. Thomson at once communicated with me. On my arrival, finding that there was no doubt about the existence of intussusception, inflation was carried out as before by Higginson's syringe, under chloroform, and accompanied by massage. As the air began fully to distend the intestine, the tumour was felt to pass gradually from the left hypochondrium to the right flank, and finally disappear. After a few minutes the air was allowed to escape. No tumour could be found, but, to make assurance doubly sure, the inflation and massage were repeated, and continued for a longer period. At the close of this the abdomen was again examined. The only sign of the tumour which could be detected was some rigidity of the bowel in the region of the cæcum. This remained, and was followed by pain and tenderness there. Subsequently there was increased tympanites and general tenderness, with diarrhœa, but no marked rise of temperature. These symptoms abated very gradually and with many fluctuations, the resistance and tension in the right iliac fossa and the diarrhœa not finally subsiding for some weeks. At the beginning of August the boy went out well.

The third case, under the care of my colleague, Dr. Barlow, was closely analogous to the first case in the conditions found and in the result achieved. For the details of it I am indebted to the kindness of Dr. Swift, house-physician to the hospital at the time, who had the conduct of the case in the emergency. Amy McF——, aged six months, was admitted on June 7th, 1885, at 11.30 P.M. She had been for some time an out-patient on account of diarrhœa, and for the previous four days she had not been so well, having been without medicine. At 1 P.M. on the day of admission i.e., about ten hours before—she had suddenly begun to scream violently every few seconds, kicking and wriggling about, and vomiting frequently. She passed some bright-red blood and mucus, but no fæces. The screaming and vomiting continued during the whole of the afternoon and evening, until she was brought to the hospital. She was a healthy-looking child, but evidently in great pain, screaming and kicking continually. The right side of the abdomen felt empty, especially in the region of the cæcum; while on the left side there was a tumour, seemingly about two inches thick and some three inches and a half long, lying transversely from just above the umbilicus to the left hypochondrium, and there curving slightly downwards. It was freely movable and firm; no impression could be made upon it. Intussusception was diagnosed, and the child was forthwith placed fully under the influence of chloroform. The above position of the tumour was then verified. Nothing could be felt in the rectum, but a little blood escaped. The bowel was inflated, as in the previous cases, with a Higginson's syringe, and the abdomen kneaded by the hand. The tumour could be felt receding as inflation proceeded, until the abdomen was fully distended. When the air was allowed to escape, a slight thickening could still be felt in the region of the tumour. Dr. Swift accordingly again inflated the bowel, and this time the whole course of the large intestine could be clearly seen. On the air escaping once more, no tumour, thickening, or resistance could be found anywhere. A drop of laudanum was administered after the child had regained consciousness, but as she continued to scream chloroform was again administered lest the excitement should cause return of the intussusception; four hours' sleep followed. The next day the child was well, no thickening or tumour could be detected, and no further trouble followed.

The point chiefly worthy of remark in the first case is the return of the tumour after its disappearance on the first inflation. The explanation seems to be that the intussusception was only partially overcome in the first attempt. This explanation is rendered probable by the fact that *ten* syringefuls of air were introduced on the second occasion, instead of only *four*, as in the first, the bowel unfolding more easily under the distending pressure, and admitting at once a larger volume of air. If the tumour had merely been displaced by the first operation, it would have quickly returned when the pressure was relieved by the escape of the introduced air, and some trace of it would have been found at the examination a quarter of an hour later. The use of chloroform probably greatly aided in the success of the second inflation by preventing the resistant contraction of the abdominal muscles.

In the second case, the immediate and complete reduction of the invagination at the first attempt, and its failure to return, are deserving of note; and also the prolonged typhlocolitis which followed, partly due possibly to the more prolonged distension and massage, and partly to the greater congestion of the gut from longer strangulation. The history of pain and vomiting, probably indicating partial invagination, extended in this case over a week, in the others only twenty-four hours and ten hours and a half respectively. The successful use of inflation in an instance where the symptoms of intussusception had existed so long is very noteworthy. From the history of a previous attack of pain and vomiting, it seems probable that the boy had suffered from typhlitis before, and that the present intussusception had its origin in slight typhlitis. The valve orifice being thus rendered more rigid, the involution of the large bowel by the more active peristalsis of the small intestine would be greatly favoured.

The third case corresponds very closely with the first. The intussusception was recent; it was completely reduced, and no after consequences of any kind followed.

THE CONNEXION BETWEEN PULMONARY PHTHISIS AND OVARIAN DISEASE.

BY BEDFORD FENWICK, M.D., M.R.C.P.,

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(*Concluded from page 717.*)

I HAVE examined with some care the literature of the subject for the last half-century, and have failed to find that any observer has hitherto suggested or proved any family predisposition to any special disease in these cases. And this appears the more strange, not only when the large number of great clinicists and writers who have discussed the matter is remembered, but especially when the pathology of the disease is thoughtfully considered. For it is, I take it, generally accepted that most, if not all, the various forms of intra-ovarian cysts originate in a degeneration of one or more Graafian follicles.[1] We recognise that cancer in the parent may cause a similar disease in the offspring, that phthisis descends from generation to generation, that gout and many other diseases are distinctly hereditary. And phthisis, I venture to believe, really passes from the father or mother to the children, not because the spermatozoa or the ovum contains a baby bacillus, but because it bears in some wonderful way an impressed general tendency to early degenerative changes, *plus*, perhaps, a local tendency to pulmonary disease. Other hereditary diseases show their transmitted types in the later days of life; phthisis in its early effects. And so it certainly appears to me that a family tendency to early degenerative changes might, *primâ facie*, be suspected in a patient who develops the slow degeneration of the Graafian follicle, which culminates in the fully formed ovarian cyst. But, as I have said, I have failed to find anything relating to this matter in modern medical literature, and I have therefore had to content myself with a smaller number of facts culled from fewer sources than I could have wished. I think, however, that they will be sufficient to show the probability at least of what I desire chiefly to call attention to—viz., the theory *that ovarian cystic disease arises in many cases because the patient has an hereditary tendency to degenerative changes, or, in other words, belongs to a phthisical family.*

My facts, then, consist, firstly, of all the cases of ovariotomy performed or of ovarian cyst found post mortem at the Hospital for Women from the beginning of 1882 up to the present time—148 in number,—and of two cases occurring in intimate friends of my own, so as to make a series of 150 in all; secondly, of two family charts showing the cause of each death; and, thirdly, some isolated cases from

[1] Wilson Fox: Royal Medico-Chirurgical Society's Transactions, June, 1864. Harris and Doran: Journal of Anatomy and Physiology, July, 1881.

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different authors, which illustrate the various points I wish to prove.

Firstly, then, with reference to my series of cases. They consist, as I have said, of 150. And to begin with, it is, of course, necessary to show that they are fairly typical examples of the disease. To test this, it seemed to me that the best plan would be to get the average age of my cases, and compare it with that of Sir Spencer Wells's 1000 patients. He writes of them:[2] "The average age of the patients proves to be as nearly as possible 39 years." It is therefore interesting to note that the average age of my 150 cases was 39·43 years. And, moreover, as they were all that were verified by inspection during four years at one hospital, I think they may fairly be taken as typical examples of the disease. At the outset I have had a very serious difficulty in collating anything like accurate information as to the family history of these cases. And this is of course due to the natural fact that, as attention has not hitherto been called to the matter, the clinical assistant, in making the notes of the case, I find, has generally confined himself to asking if any of the patient's family had had any affection similar to her own. Consequently, I discover that of the 150 cases, in 90 there is no note made at all of the family history. But in the remaining 60, in many cases what is stated is often of the briefest description. To tabulate, however, the family history as given of these 60 cases: it is noted as "good" in 3 cases; as "unimportant" in 2 cases; that one or more members died of *cancer* in 5 cases; that the father died of bladder trouble in 1 case; that one or more members died of heart disease in 2 cases; that the parent died of old age in 2 cases; giving more or less varied histories therefore in 15 cases. But the family history is noted as strongly *phthisical* in 32 cases, and in 2 of these one or more other females of the family suffered from *ovarian disease*. A well-marked family tendency to ovarian disease besides the above existed in 3 cases; a family tendency to "asthma" or "chest complaints" in 9 cases; and both parents died very early, with "a doubtful history of lung disease," in 1 case; making, therefore, out of the 60 cases a total of 45 in which a more or less definite family tendency to ovarian disease or phthisis is well proved. The poorer classes so frequently, from various motives, call consumption "asthma," and phthisis is certainly the only "chest complaint" which exhibits an hereditary tendency, that the cases in which the family history was noted in the above vague terms I have no hesitation in classing with the others. We therefore find that out of 60 cases of ovarian cystic disease there is a marked family history of phthisis in 42, or exactly 70 per cent. Now that fact, did it stand quite alone, would be strong evidence, but the links of the chain are found to be stronger the more closely they are examined. The average age of the 32 cases in whose family history phthisis is noted as strongly marked is 39·27 years, or almost precisely the average age of the whole series. And on analysing these 32 cases, and the sex and numbers of each attacked by phthisis, it is found that in 9 the father was the only direct relative affected, and in only 2 cases was the mother the solitary sufferer from the disease, whereas in all the remaining cases one or more of the children or collateral relatives are also affected. But on grouping the families according to sex, it appeared that the male tendency to phthisis was almost exactly equal to the female predisposition. Now, though these may seem at first strange facts, they are easily explicable, for it is well known to specialists in thoracic diseases that if the father be phthisical the sons may escape the affection, and that if daughters inherit the tendency they develop the complaint in its most chronic condition, and show, as a recent writer[3] puts it, "an increased tendency to improve and a diminished tendency to get worse"; whereas, if the mother has phthisis, it is much more common to find the children also attacked—affected at early ages, and in a more acute degree. In other words, then, a phthisical father transmits to his daughters a tendency to just such chronic degenerative changes as we know take place in the production of ovarian cysts. The analogy between the two diseases in this respect therefore is very marked and important.

But, again, I would call attention to the well-known frequency in which the analogue of the ovary, the testis, is implicated in men affected by phthisis, either primarily or secondarily, the organ showing the typical tubercular change. And although Rokitansky denies that tubercle ever attacked the ovary, Wilson Fox and other observers have proved beyond doubt the existence of the typical growth in the organ in well-marked cases.[4] Then there is yet another important piece of collateral evidence which I believe has never been hitherto noted. It is an extremely common thing to find in a case of hereditary phthisis that many, and sometimes nearly all, of the teeth have become carious, and been lost at an early age. For example, out of twenty cases which I have specially examined in the last fortnight I found that eighteen had lost eleven or more teeth before the age of twenty-three, and I have frequently found the same condition of soft, eroded, crumbling teeth, or a more or less edentulous state in patients suffering from cystic ovarian tumour. And though I cannot at this moment give definite figures in support of the latter fact, I am perfectly convinced that were they forthcoming they would prove quite as conclusive in these latter cases as in those of pulmonary phthisis. Finally, in many cases of my series the patient had suffered from chest complaints, or we found post mortem old or recent phthisical changes in the lungs. Out of the first 300 cases of Sir Spencer Wells, he notes incidentally that three patients had died within two years after the operation of phthisis. Probably more deaths will be found to be due to this cause if special inquiry is made in future into this point.

I append to this paper the charts of two families. I have had so much trouble in compiling them, and verifying the causes of death, that I can quite understand the difficulty which will attend a similar research. Still, I would fain hope that future observers will make earnest attempts to obtain from their cases some such information. It will be observed that these show in the most marked and unequivocal manner the close connexion between phthisis and ovarian disease in each family. As an appendix to these charts, I may add that I saw only the other day a patient suffering from ovarian tumour whose father died at the age of thirty-seven of phthisis, and her only brother died at seventeen of the same disease. Finally, in five out of the forty-five cases of my series in which a more or less marked family history of phthisis was obtained, one or more of the female members, in addition to the patient herself, had suffered from ovarian dropsy, "water tumour in the stomach," and "dropsy in the stomach for years," as it was variously described.

And now having shown the close connexion which appears to exist between phthisis and ovarian cysts, and taking it for an acknowledged fact that phthisis is distinctly hereditary, in order to clinch and close my argument I wish briefly to point out the fact that ovarian cysts are frequently hereditary also. Dr. Lever[5] mentions a family in which five deaths occurred from ovarian disease. Dr. John Rose[6] cites the instance of two sisters who had ovarian dropsy, and whose mother's sister was similarly affected. In the first family chart it will be noticed that a lady has just recovered from ovariotomy; that her mother's sister and her mother's grandmother both died from the disease. In the second chart, the grandmother, the mother, and the eldest daughter all suffered from the same affection. Sir Spencer Wells[7] thus quotes his 200th case:. "The patient was a lady thirty-seven years of age, the mother of six children. I had previously removed an ovarian tumour from a daughter of her mother's sister, and have since done the same for another patient, the daughter of another sister of her mother; thus making a series of three cousins, children of three sisters, none of whom have ever shown any sign of the disease—a curious fact in relation to cystic pathology." I venture to think that I have explained the curious fact that in all probability, were the matter investigated, there would be found a history of phthisis or of ovarian disease in the grandmother's generation.

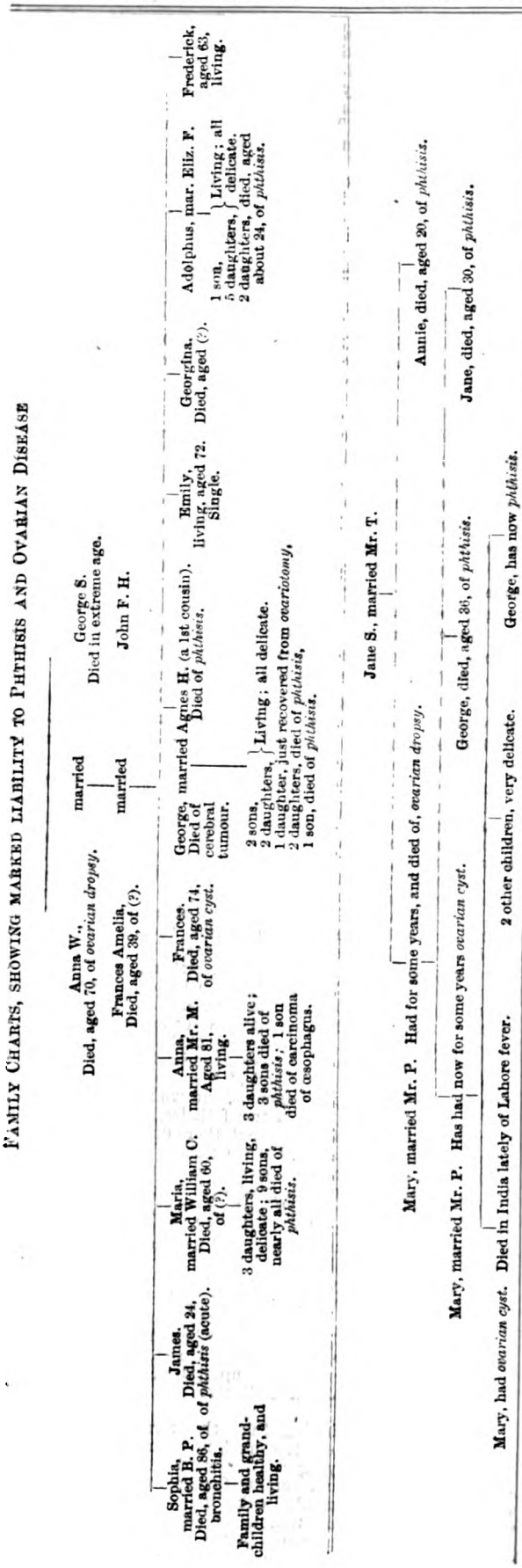
I would therefore sum up my conclusions thus:—1. Ovarian cystoma is caused in many cases by an inherited tendency on the part of the patient to degenerative changes. 2. This inherited tendency is due to a family predisposition to pulmonary phthisis. 3. Gestation and severe falls or strains are probably powerful exciting causes of the disease.

The practical lessons to be learnt from the facts I have given are great and varied, and, with increased investigation

[2] Op. cit., p. 256.
[3] Reginald Thompson: On Family Phthisis, 1884, p. 19.
[4] Wells: Ovarian and Uterine Tumours, p. 58.
[5] Guy's Hospital Reports, vol. i., 1855, p. 79.
[6] Pearlee, op. cit., p. 88.
[7] Op. cit., p. 67.

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FAMILY CHARTS, SHOWING MARKED LIABILITY TO PHTHISIS AND OVARIAN DISEASE



leading to further and wider knowledge, will certainly prove greater still. For example, we should already, perhaps, pronounce against a woman of marked phthisical tendency encountering the risks of married life. The intimation we now have gained of the other dangers she and any future daughters will be exposed to should strengthen our hands in more decided expression of opinion. We shall, I think, be able to show that sterility will not increase such a woman's tendency to be affected by ovarian disease, but that pregnancy may very probably do so. Then we can clearly understand how an ovary which is or may be subject to degenerative changes is more likely than a healthy one to evolve an ovum having within it the seeds of the same disease. So the practical rule would be—first, when an ovarian cyst is discovered, to insist that future conception must be prevented, and to remove the growth as soon as possible; and secondly, while performing ovariotomy, to extirpate the other ovary too. For I contend most strongly on every ground, moral and physical, that it is wrong to allow a patient who has already shown the clearest evidence of degenerated ovarian structure the opportunity of perpetuating in children yet unborn the same disease and suffering. And we have Mr. Lawson Tait's[8] high authority for believing "that it is in no way more risky to remove two ovaries for cystoma or anything else than to remove one." And, moreover, it is a well-known fact that in cases of an ovarian cyst, it is very rare for the other ovary to be perfectly healthy.

In conclusion, I venture to believe that I have shown the distinct probability that the great predisposing cause of ovarian disease is a family tendency to phthisis, and that gestation may be the exciting cause. But in view of the immense importance of the subject, both to the profession and the public alike, as regards questions of diagnosis and prognosis, and the still greater matter of prevention, I would earnestly appeal to all who in future have to treat cases of ovarian cystoma either to publish as complete as possible a family and previous history of each, or to favour me with the notes, which, of course, I would duly acknowledge. A thousand well-recorded histories would definitely settle the important points I have touched upon by the hard logic of manifold facts. I should not base implicit confidence upon a smaller series. Straws show how the wind blows, but mathematical precision can alone determine its force.

West-street, Finsbury-circus, E.C.

ON THE

TREATMENT OF VARICOSE VEINS BY THE INJECTION OF CARBOLIC ACID.

BY SURGEON-MAJOR W. F. STEVENSON,
MEDICAL STAFF.

IN the last paragraph of one of the chapters of Mr. Watson Cheyne's book on "Antiseptic Surgery" some short but very valuable instructions are given regarding the treatment for the radical cure of varicose veins by the injection of pure carbolic acid. I have treated within the last two years and a half eight cases (some of considerable severity) by the method Mr. Cheyne describes, with the most desirable results and with no ill-effect whatever. Under the circumstances it may, perhaps, be worth while to draw renewed attention to the very simple and effective means referred to for the removal of this troublesome complaint.

The treatment consists in the injection of one minim of pure carbolic acid at different situations into the enlarged veins, having previously cut off the circulation from the limb by means of an elastic bandage placed above the highest point of puncture. For the latter purpose the tube of an Esmarch's apparatus is best, but a Martin's bandage or two or three yards of elastic webbing will do excellently. Before operating the patient should be directed to stand erect or to sit on the edge of his bed with his heels on the floor for about two minutes in order to allow the veins to become distended. The Esmarch tube should then be passed round the thigh one and a half times, sufficiently tight to stop the

[8] British Medical Journal, vol. i., 1886, p. 924.

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superficial venous circulation, and a little time (about a minute) given for the vessels to become well filled below it, the remainder of the tube being then applied so as to cut off all circulation from the limb. Injections of pure carbolic acid, one minim each, are then made into the veins at about one inch and a half apart—as many as may be required for each case. A little pledget of absorbent carbolised cotton-wool is placed over each puncture as the needle is withdrawn, and well soaked with collodion; this is allowed to remain until, in the course of time, it falls off, when healing will usually be found completed. The elastic bandage cutting off the blood-supply should not be removed in less than fifteen minutes after the last injection has been made, and great care should then be taken not to remove it suddenly. The circulation should only be permitted to return by very slow degrees. For at least a week after the operation the patient should not assume the erect position or put his foot to the ground for any purpose whatever. The pain is very slight; besides that of the pricks of the needle, a burning sensation is felt at the seat of each puncture, lasting for ten minutes or less; and even this is not severe. Certainly no anæsthetic is required. Care should be taken that the subcutaneous injection syringe and needle are "surgically clean," and to ensure this they should have been placed in a 1 in 20 carbolic lotion for about twelve hours previously to use. I have done as many as eighteen injections in one case; and it seems to me advisable to begin with the injection next to the elastic bandage—that is, the one highest on the limb. Getting the point of the needle well into the vein is not quite so easy a matter as might at first appear; attempts to do so at right angles to it frequently fail, and the injection is thus made into the surrounding tissue. The best plan is to fix the skin over the vessel by means of the left thumb, close below the point selected for puncture, and to direct the needle through the skin and coats of the vein in the long axis of the latter. I should think that, in my cases, somewhere about 10 per cent. of the punctures caused suppuration, a little abscess about the size of a pea forming where this occurred; but this process, as the result of the caustic action of carbolic acid, was curiously slow and almost absolutely painless. Three of my cases were done to remove the cause of varicose ulcers of the leg, which had been healed over and over again by rest in bed and different means of local treatment, but which had broken out afresh on the patient's commencing to get about again. One of these, I know, was permanently cured by the operation, and so were the others, I believe. It sometimes happens that suppuration takes place at the seat of a puncture two or three weeks after the patient has been discharged from hospital, and some of the resulting indurations may continue tender on pressure for many months, but these trifling drawbacks of the operation are amply compensated for by the simplicity and safety of its performance, and the excellence of the results obtained from it.

To military surgeons a simple and efficacious operation for varicose veins, when devoid of danger, is especially valuable; a soldier who is unable to march being but a useless incumbrance to his regiment, and one with even a slight show of knots on his calf always having it in his power, if so inclined, of avoiding any duty he may dislike by "reporting sick." But though usually not very open to personation in the matter of operations, soldiers, in my experience, do not object to undergoing this one. The points to especially attend to are—(*a*) to have the circulation completely controlled and the vessels well distended; (*b*) to get the needle well into the vein in the direction of its long axis; (*c*) to allow the circulation to return to the limb very slowly; and (*d*) to carefully warn the patient against the extreme danger of putting the limb operated on to the ground at too early a day.

Mr. Farrant Fry, of the Swansea Hospital, recently advocated the excision of lengths of the diseased vessels between catgut ligatures with strict Listerian precautions; and Mr. Bryant recommends injections of the perchloride of iron between acupressure needles. But certainly Mr. Fry's is a much more serious undertaking than that suggested by Mr. Cheyne, and Mr. Bryant's includes the additional item of the use of acupressure needles; and these latter, in one case I saw operated on by their means, caused death by tetanus. As regards the durability of the cure, I have had opportunities of watching the cases for at least six months after the operation, and no return of the varicose condition had occurred in that time in the veins subjected to the treatment: but it has happened that some knotted points had escaped injection on the first occasion in those cases requiring many insertions of the needle, in consequence of the vessels having become empty, or nearly so, during the time occupied by the necessary manipulation, and so required a second sitting to be taken. My experience warrants me in strongly recommending this mode of treatment for the varicose condition of the veins of the leg whenever an attempt at radical cure is indicated, in consequence of the patient's capability of walking being interfered with, of the existence of intractable ulcers, of danger of hæmorrhage from threatened rupture, or of incapacity for the public services.

Punjab, India.

WHAT CONSTITUTES MALIGNANCY?

BY HERBERT SNOW, M.D. LOND.,
SURGEON TO THE CANCER HOSPITAL.

(*Concluded from page 720.*)

THERE is another clinical difference between scirrhus and encephaloid to which I have not alluded, but which is also susceptible of explanation on the same grounds. In scirrhus, as is known, the adjoining lymph glands are nearly always affected very early; in encephaloid of the site we are considering, remarkably late, especially when we remember the friable, loosely cohering nature of the growth. It appears to me that we may plausibly put these differences down simply to *differences in pressure*. In the one case we have cell growths under difficulties, as it were, and against highly resisting tissues; the young cells or their nuclei are speedily forced into the lymph channels, and so carried on to the corresponding glands. In the other, the cells are allowed to grow freely on their original site, without hindrance from the enveloping tissue; and the lymph-glands now long escape infection.

It follows, again, from what has been said, that the term "scirrhus," when applied to malignant growths elsewhere than in the female breast, is unscientific and misleading. When we so designate a breast tumour we know exactly what we mean, and in so speaking convey to others both the origin and general characteristics of the neoplasm; but in talking of scirrhous cancer in other situations we imply that the tumour is of a certain degree of hardness when cut by the knife, but we altogether blink the question of its origin. To take one noteworthy example, we used very commonly to hear of scirrhus of the rectum, until this was conclusively shown by Mr. Harrison Cripps to arise from the columnar epithelium of the part, and so to be really a cylindroma. So with other sites; so-called scirrhus of the pylorus originates in the mucous epithelium, judging from two or three specimens I have examined, either from the mucous lining of the lower end of the œsophagus (in which case the epithelium is squamous, and we find birds' nests), or from that lining the gastric follicles, whence results a cylindroma. In the former event there does not seem to be much appearance of acini, but what there is depends on the stage of the tumour and the condition of the fibrous tissue. And the same remark holds good with cancer in other parts of the intestinal canal. All such growths, be it remarked, are very hard, and involve much puckering and contraction of the adjoining tissues—a feature I have already explained. And it is very probable that here, under constant irritation, there results some hypertrophy of the fibrous tissues; but these phenomena do not constitute scirrhus. So that in my humble opinion the term scirrhus should be entirely restricted to breast tumours; elsewhere it is a misnomer, leading to erroneous pathological views. And this is, I think, a point of very great importance, especially when we endeavour to take a collective and general view of cancerous disease.

I cannot help thinking that the term "round-celled sarcoma" is a great deal too much in vogue at the present day, and that, implying as the word does a connective tissue origin, we should employ far greater caution in its use. We now commonly make use of it wherever we encounter a malignant tumour of soft pulpy consistence, whitish granular appearance to the naked eye, under the microscope found to be composed mainly of roundish cells.

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with large nuclei, and to contain very scanty remains of the original fibrous tissue of the part. Whence these cells spring must often be a mere matter of guesswork, and the amount of fibrous tissue within it is frequently only a question of the stage which the growth has attained. At any rate, many tumours which I have seen thus designated have been plainly referable, so far as I was able to make out, to the glandular epithelium (this has been particularly the case in the female breast); or, on the other hand, to the cells of lymphatic glands (I have noticed this in the axilla and abdomen). In the former case the term "encephaloid cancer" would surely be far more appropriate; in the latter the term "lympho-sarcoma." Of course I do not for a moment mean to assert that there are no true round-celled sarcomata arising from the nuclei and corpuscles of the connective tissue, but only that the word is often used very loosely and incorrectly.

I must now draw attention for a moment to the classification of malignant disease as represented in the following table, which I believe to be in accordance with the prevailing pathological views, although these tend not a little to vagueness and to over-refinement; witness, for example, the distinction which some pathologists draw between large and small round-celled sarcoma, and between large and small spindle-celled sarcoma:—

Classification of Malignant Diseases.

I. Alveolar carcinoma.
(Derived from glandular epithelium; usually described as characterised by locular structure.)
(*a*) Scirrhus.
(*b*) Encephaloid. Sub-variety: Colloid.

II. Sarcoma.
(Origin from connective-tissue corpuscles.)
(*a*) Round-celled. } Sub-varieties:
(*b*) Spindle-celled. } Osteoid, melanoid.
(*c*) Mixed-celled. }
(*d*) Glyoma.
(*e*) Myeloid.

III. Epithelioma.
(Proliferation of epithelium on skin or mucous membrane.)
(*a*) Scaly.
(*b*) Columnar.

IV. Lympho-sarcoma.
(Proliferation of lymphatic gland cells.)

It would, I think, be a very important and useful modification of this table if in place of the term "alveolar carcinoma" (with the stress therein laid upon locular structure) we were to coin a word expressive merely of proliferating glandular epithelium. With such an alteration a general survey of the whole kingdom of cancer will at once suggest the definition which I here propose to offer in answer to the query which is the title of this article. Reduced to its simplest form, *malignancy is a peculiar and abnormal proliferation of cell elements*, and by so regarding it I think we do much towards clearing up our intellectual horizon, and towards bringing ourselves face to face with the great problem we have still further to solve, "What is the cause of this abnormal proliferation?" To such a view the rarer sub-varieties of malignant disease (colloid, melanoid, and osteoid) present no difficulty, being merely examples either of degenerative processes or of subsequent attempts by nature at organisation, grafted on the primitive neoplasm.

Of the four great classes in my table, that of epithelioma is the one which seems to me most typical, as presenting the phenomena of malignancy in their simplest and most transparent form. We here see certain familiar cell elements acted upon for some length of time by a mechanical irritant, which we can in most cases accurately indicate. Under such an influence we find these cells greatly increase in vitality and in number; passing from their original site, they grow freely in the subjacent tissues, on which they prey; they quickly invade any adjacent lymphatic glands, which serve as fresh foci of the disease. The degree of vascularity, of succulence, and loose coherence among the adjoining tissues serves as a measure of the rapidity with which this progress is effected, it being very rapid indeed where all these factors coexist in a high degree, as about the tongue, but comparatively slow when they are absent, as on the skin of the extremities. Over and above all this, the cells thus affected seem to acquire an automatic independent existence of their own; they grow freely (like a grafted plant) at the expense of the whole organism, not merely in the sites to which they are conveyed and lodged by currents of blood or lymph, but also on the surface of mucous or serous membranes in distant spots, to which they have been brought accidentally. Thus, in epithelioma of the tongue, we constantly see, late in the disease, little islands of white epithelial deposit dotted about the mucous membrane of the palate and the inner surface of the cheeks. These, if the patient survive long enough, grow vigorously and ulcerate, exactly like the parent disease. The same phenomenon is observed, with less frequency, in the peritoneum, in certain forms of ovarian cancer; also in other tracts of the digestive or respiratory mucous membrane. This independent vitality of the cells is a very curious feature in malignant disease, and would indicate that the protoplasm has undergone some very important change, whose nature we are at present utterly unable to estimate.[1]

In the other varieties of cancer the process is much more obscure; we cannot see the irritant at work, and are often quite unable to trace the causation. Analogy, however, can hardly allow us to doubt that the chain of events, however modified by local or general influences, must be substantially the same—that *all cancer is the result of irritating influences upon protoplasm*. One point in this connexion to which I would particularly direct your attention is the remarkable frequency with which we find conditions of mental depression and worry immediately preceding the development of all malignant disease not referable to direct mechanical causation. Occasionally we find prolonged bodily illness a forerunner; very frequently hard work, want of sleep, insufficient food, pecuniary troubles, loss or illness of relatives, &c. Even cancer following a blow or fall might be referred to the locally lowered vitality induced by such injury (though this may appear rather far-fetched). At any rate, I am bold enough to say that, with sufficient knowledge of the patient's surroundings, we invariably find debilitating causes, local or general, immediately preceding the appearance of a cancerous tumour, of whatever nature, not due to obvious mechanical irritation; and that very frequently, under such circumstances, we are forced to regard them as the direct, and not merely as the predisposing, excitants.

Again, it appears to me highly suggestive that the sole drug to which we invariably have recourse, sooner or later, in the therapeutic treatment of cancer not amenable to surgical measures—I need hardly say that I allude to opium and its derivatives,—is a powerful sedative. We give this, not by any means merely to relieve pain, but with the well-grounded expectation that some amelioration in the patient's general condition will ensue. We also aim at securing, as far as possible, perfect tranquillity of mind and body (again addressing ourselves to the nervous system); and I may be allowed to say that in the Cancer Hospital one is often greatly surprised at the improvement which, in advanced and apparently hopeless cases, temporarily follows that method of treatment. Unfortunately such improvement does not, as a rule, continue; and too often the local disease does not exhibit any marked change for the better. In one very remarkable case, however, still under my care, the treatment was rewarded by such an alteration in both local and general conditions that I am almost tempted to dignify it by the name of a cure.

A lady operated upon for advanced scirrhus of the breast and axillary glands, in 1880, subsequently had recurrence under the cicatrix implication of the opposite breast by means of a chain of nodules in the skin, stretching across the back. The skin of the trunk, back and front, was thickly studded with flattened nodules, varying in size from a pin's head to about an inch and a half in diameter. There

[1] One characteristic and very familiar feature of scaly epithelioma (to which, as it may be thought to indicate some peculiar idiosyncrasy of the neoplasm in the same manner as the acini have been considered an idiosyncrasy of scirrhus, it would be well here to allude) is the "globes epidermiques" or "birds' nests." We have here to deal with cells whose natural function is to secret mucus, and the only rational way, to my mind, of regarding this phenomenon is to look upon the "globes epidermiques" as collections in pockets of the connective tissue of cells which have, so to speak, carried this function into "private life," which have not entirely lost their natural tendency to secrete mucus, the result being a mucoid degeneration of the whole group. I fail to see any reason for speaking of "endogenous cell-formation" in this connexion, and the phenomenon is best seen where the connective tissue stroma is loosely coherent with meshes very coarse, the whole tumour (epithelioma of the vulva) here consisting of little else than "birds' nests."

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were also numerous deposits on the face, scalp, and thighs, a pulse of 117, quick and embarrassed respiration, extreme prostration, anorexia, and vomiting; much reason to fear extensive implication of internal organs. Indeed, one would briefly have described the patient as "one mass of cancer from head to foot"; and at her worst point I myself did not expect her to live more than a month or six weeks. Yet, under the combined influences of rest, careful nursing, and morphia, all these immense skin deposits, together with that in the remaining breast, have almost entirely disappeared; there has been a corresponding improvement in the general condition; the morbid process seems completely arrested; and the lady, though still leading a passive and vegetative existence under the influence of morphia, is able fairly to enjoy her life.

I am quite unable to class this case with those atrophic forms of cancer we not unfrequently meet with, especially about the female breast. It is altogether on a different footing so far as regards the immense improvement, from any other that I have yet met with. The only explanation I can suggest is that, in the first place, the treatment was thoroughly adopted before ulceration had taken place; in the second, that I was able to place the patient under more favourable conditions, to secure a more purely vegetative existence, and more perfect immunity from worry and wear and tear than any other whom it has yet fallen to my lot to treat.

Another point, which (as I have not been able to work it out with hospital patients, and as there are many difficulties in the way of any scientific investigation) I offer only as a suggestion for those who may be in a better position for making such inquiries than myself, is this:—I have some slight reason to believe that the female breast is an organ of emotion; that depressing emotions, especially, are accompanied by corresponding mammary sensations (in some women at least), even when there is no question of pregnancy or of lactation. Of course, women vary very materially in degree of emotional excitability; and I need hardly point out the difficulties of obtaining reliable evidence in such a matter as this. But taken in conjunction with the well-known proneness of the female breast to cancer, and to the indubitable influence of mental depression in exciting this, I venture to think that the point is well worth bearing in mind, and of investigation, as occasion may serve.

One word as to a bacterial hypothesis to account for the phenomena of malignancy. I have already alluded to the fact that there is a fashion in medical opinion, and just now bacteria are extremely in fashion. Besides, it would be extremely convenient if we could call in the aid of a bacillus or micrococcus to account for the strange phenomena of proliferating protoplasm which we find in cancer. Yet, apart from the fact that no one has yet succeeded in discovering such (although no doubt carefully looked for in innumerable instances), there seems to me a very marked distinction between cancer on the one hand, and on the other all the diseases hitherto referred to bacterial agency. In the latter there has always been either evidence or else great suspicion of *contagion*, which evidence has of late years become much stronger. To leprosy I need hardly allude. To tuberculosis the suspicion of contagiousness has long attached, although by lapse of time the contagion is weak among Europeans; and it is not till the malady finds fresh and virgin soil, as among the savage tribes,[1] that we are able to recognise the phenomenon in its full vigour. By malignant disease, on the contrary, no suspicion of contagiousness has ever been incurred, unless it may be in a few extremely rare instances, which could hardly fail to occur as a mere matter of coincidence. This fact, to my mind, renders it highly improbable that we shall ever be able to refer the latter to any bacterial excitant.

Briefly to sum up what I have said, the phenomena of malignancy result from conditions which irritate normal protoplasm, cause it to proliferate abnormally, and to assume a quasi-independent parasitic vitality. These conditions may be mechanical; in a much larger proportion of cases they are neurotic. That is the furthest point we have yet reached; nor do I see how our knowledge of cancer can make much advance until we know far more than at present about the ultimate properties of protoplasm, and the manner in which this is influenced by states of the nervous system.

Bayswater, W.

[1] Vide *De Quatrefages*: 'The Human Race.'

CASE OF

FEMORAL ANEURYSM CURED AFTER ELEVEN HOURS' INTERMITTENT DIGITAL AND INSTRUMENTAL COMPRESSION.

By JUSTIN F. DONOVAN, M.D.,
SURGEON, ROYAL NAVY.

(Communicated by the Director-General of the Medical Department of the Navy.)

LORENZO B——, a Maltese, aged thirty-eight, stoker, a well-nourished though anæmic man of abstemious habits, was the subject of syphilis (chancre and non-suppurating bubo) before marriage; secondary eruption was not noticed. On the 16th of June, 1886, whilst coaling ship at Suakim, he experienced a sharp pain in the left groin; this was followed by a swelling, and on presenting himself to the medical officer of his ship, "a pulsating tumour in the left groin was detected, with a distinct bruit." On admission to the Naval Hospital at Malta, on the 19th of July, a pulsating tumour, about the size of a small lemon, was seen immediately below Poupart's ligament, and extending half an inch below it (proximal side); no bruit could be detected. The pulsation, which was very strong, could, however, be checked on making forcible compression on the external iliac artery. The patient complained of only slight pain at the seat of the tumour. He was put on low diet, confined to bed, and ordered to take an ounce of iodide of potassium mixture (ten grains to the ounce) three times a day. Pulse, 72; temperature, 98°; urine free from albumen. On the 26th the diet was reduced to one pint of chicken broth, one pint of milk, four ounces of bread, and ice to suck when thirsty. Iodide of potassium (fifteen grains to the ounce) to be taken as before. Digital pressure on the external iliac artery for an hour and a half was carried out, and was borne very well, the part compressed having been previously shaven and dusted over with oxide of zinc powder. On the 27th there appeared to be a slight diminution of the impulse. Pressure (digital, and a pad with a 7lb. conical-shaped weight suspended from a cross bar and resting on the pad) was kept up for two hours and a quarter, at the end of which time the patient became restless, and appeared to suffer a little from the pressure. Pulse 80; temperature normal. Iodide of potassium (one scruple to the ounce) to be continued. On the 28th, the pulsation in the tumour was markedly diminished. Temperature normal; pulse 84. A hypodermic injection of one-third of a grain of morphia having been administered, digital pressure (assisted by the weight) was applied for seven hours and a quarter unremittingly, and, at the expiration of that time no pulsation could be detected in the tumour. In the evening the patient felt very weak; pulse 90, feeble; the extremities were decidedly cold, especially the left foot and leg, although they were enveloped in cotton-wool and a flannel roller; no numbness or discomfort of any kind was complained of, though there was lividity of the toe-nails and diminution of the temperature of the limb for a few days. Pulsation in the left posterior tibial artery was not detected until August 4th, (seven days after the consolidation of the aneurysm). Up to the present (twenty-three days after consolidation of the sac) there has been no return of pulsation in the tumour, and the patient is now walking about, and complains only of very slight comparative weakness in the affected limb.

Royal Naval Hospital, Malta.

PROPOSED CONFEDERATION OF SPECIAL SOCIETIES IN THE UNITED STATES.—At a meeting of committees of various Medical Societies, which assembled at Washington on the 24th ult., the following resolution was proposed by Dr. Pepper and carried: "That it is desirable that the following Societies—the American Surgical Association, the American Ophthalmological Society, the American Otological Society, the American Neurological Association, the American Laryngological Association, the American Gynæcological Society, the American Dermatological Association, the American Climatological Association, and the Association of American Physicians and Pathologists—shall arrange for a conjoint meeting in the city of Washington in the month of September, 1888, and subsequently at intervals of three years, at the same time and place.

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A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, Hb. iv. Proœmium.

HOSPITAL FOR SICK CHILDREN, GREAT ORMOND-STREET.

TWO CASES OF LITHOTOMY IN CHILDREN; RECOVERY; REMARKS.

(Under the care of Mr. BERNARD PITTS.)

THE following two cases of lithotomy by the supra-pubic and the lateral operations are exceedingly good examples of the method of extracting stones entire, as now practised, from the bladder of male children. The remarks by Mr. Pitts are of importance, especially where he draws attention to a modification in the extraction of the stone after lateral lithotomy, by means of which no damage is caused to the neck of the bladder. Even with this modification, could we be certain of a result such as that obtained in the second case, the diminished risk, much more rapid recovery, and lessened inconvenience during convalescence, would induce the majority of surgeons to adopt the supra-pubic method.

CASE 1.—A boy, aged three years and a half, was admitted on August 17th, 1885. He was thin and pale, and had had some of the symptoms of stone for about a year. On examination Mr. Lewis, the house-surgeon, detected a stone with the sound. Shortly after admission Mr. Pitts made a rectal examination under chloroform and ascertained that the stone was of small size, movable, and shaped like a date-stone. On September 9th he made an incision as for ordinary lateral lithotomy, exposed the staff, and then passed a probe-pointed director through this limited opening into the bladder. The opening was slightly enlarged by means of a probe-pointed bistoury, so that the director moved easily in the bladder. The staff was now withdrawn, and by supra-pubic manipulation the stone was made to present at the opening, and was extracted without any special difficulty. The manipulation was very gentle, and by a little patience the stone was made to present in its proper axis. Neither finger nor forceps were introduced into the bladder. The bleeding was very slight, and the patient made a good recovery. He began to pass urine naturally after ten days, and left the hospital quite well some six weeks later. The stone proved to be of the size and shape of an ordinary date-stone, and consisted mainly of uric acid.

CASE 2.—A boy aged three years and seven months was admitted on September 1st, 1886, with symptoms of calculus, which had existed for six months. On sounding, a stone could be felt, but the ring was not very clear. On examination by rectum, a small round movable stone could be plainly felt. On September 8th, with the assistance of Mr. Hinds, the house-surgeon, Mr. Pitts performed supra-pubic lithotomy. A soft catheter was passed and retained by a rubber band tied round the penis. After washing out the bladder, two ounces of weak boracic solution were retained by a plug fixed in the end of the catheter. A square mattress-like indiarubber bag was then introduced into the rectum and inflated with air. The bag had been kindly lent by Mr. R. W. Parker, who had found by experience that this was the best shape. The bladder was now easily reached by a small incision just above the pubes, and a vertical opening of an inch in length was made into it. The stone was extracted by a pair of ordinary dressing forceps; it consisted of uric acid coated with phosphates, and was of the size and shape of a small marble. Five catgut sutures were passed across the opening in the bladder, avoiding the mucous membrane; and after carefully washing through the catheter, the sutures were drawn together and the external wound was closed by silk sutures, a small drain being placed at its lower angle. The rectal bag and catheter were withdrawn, and the wound dressed with iodoform. Three hours after operation the child passed urine without pain, and the catheter had never to be used. On September 11th the wound was dressed and the silk sutures and drain removed. The temperature had been normal since the operation, and the child free from pain, and passing urine quite naturally. On the 15th, one week after operation, the boy was allowed to get up. The wound was then completely healed, and he left the hospital on the 20th, quite well.

Remarks by Mr. PITTS.—The introduction of the finger and forceps into the bladder of a young child has always seemed a severe and unnecessary procedure when the stone is of small size. One was led, therefore, in the first case to modify the ordinary lateral operation, and thus avoid any stretching of the neck of the bladder. By rectal examination the exact size and shape of the stone had been ascertained, and it was also known that it could be easily moved to any part of the bladder. With the director as guide into the viscus, it would, in case of failure by manipulation to seize the stone, have been quite easy to enlarge the opening and introduce forceps. In the second case, there was the same certain information as to the size and shape of the stone, obtained by the rectal, or, as it might be termed, bimanual examination. The supra-pubic method of operation was selected, so that by suture of the opening one might shorten the period of recovery and avoid the disagreeable after-leakage of urine. The amount of fluid in the bladder at the time of operation was only two ounces, so that no extreme distension of the organ was made, and it would seem important not to overdistend if the after-use of the catheter is to be avoided. The opening in the bladder was made quite regardless of any projecting end of the catheter, and, in fact, this was not felt for. Confining oneself to the consideration of the treatment of small stones in male children, when the supra-pubic opening can be of limited extent and the operation can be done without any bruising of the cut edges, it would appear from this case, and from cases recorded by others, that supra-pubic lithotomy gives the quickest and safest recovery, and I can hardly believe that lithotrity in boys under five or six years of age will ever be generally adopted.

QUEEN CHARLOTTE'S LYING-IN HOSPITAL.

A CASE OF HERNIA INTO THE UMBILICAL CORD.

(Under the care of Dr. HOPE.)

FOR the following notes we are indebted to Mr. J. Frail Harries, who was acting as house-physician *pro tem.*

In the afternoon of Aug. 25th Mr. Harries was summoned to the Labour Ward to see a child just born, who, the nurse said, had a swelling at the umbilicus. The child was a healthy-looking boy who, with the exception of the rare congenital malformation described, was in every respect well developed, and weighed 7¼ lb. A hernial protrusion into the umbilical cord was found, about the size of a hen's egg. Upon examination Mr. Harries concluded that he had to deal with a partially reducible enterocele, with a sac, the neck of which was formed by the skin and the fundus by the coverings of the cord, and with the umbilical vessels spread out over the right side of it. In the absence of the visiting physician, Dr. Hope, he decided upon the following operation. Mindful of the inevitable results of separation of the cord and the exposure of the enclosed intestines, the child having been anæsthetised with chloroform, the sac was opened. The contents of the sac were both large and small intestine, of which five inches of the latter were adherent to the interior of the sac. The bowel beyond, being slightly congested, was quite healthy, and was dissected off without any great difficulty. What he believes to have been the vermiform appendix was so intimately fused with the tissues of the cord as to render dissecting it off impossible; it was therefore ligatured with fine carbolised catgut, and divided close to the sac. After slightly enlarging the hernial opening, the whole contents of the sac were returned into the abdominal cavity. The opening was then closed with a double ligature of thick catgut, in exactly the same way as a nævus is strangulated by Liston's method. The cord with the sac was then cut off about half an inch from the umbilicus. The operation was performed with every antiseptic precaution, and the wound dressed with corrosive sublimate gauze.

During the next fourteen days the wound was dressed twice, and each time looked quite healthy; at the end of that time the small remaining portion of the cord separated, and the ligature was removed, the opening being firmly closed. After the operation the bowels acted naturally, and

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the child took its nourishment freely, some slight sickness being the only trouble. During a rapid convalescence no symptoms of importance were manifested.

HOSPITAL FOR WOMEN, LIVERPOOL.

THREE CASES OF PYOSALPINX RECENTLY TREATED BY ABDOMINAL SECTION.

(Under the care of Dr. FRANCIS IMLACH.)

CASE 1.—A. C——, aged forty-two, admitted July 7th, 1886, with a history of constant pelvic pain and menorrhagia since the birth of her tenth child seven years ago. Abdomen swollen and tender, uterus retroverted, and pelvis blocked with a mass which is everywhere painful; pulse 125 per minute, temperature 100°. Diagnosis: pyosalpinx, with general peritonitis. On July 13th an abdominal section was made, Dr. Davies giving the anæsthetic, and Dr. Edis assisting. When an incision was made there was a quick and copious gush of thin sero-purulent fluid. What remained was soaked up with sponges, and a quantity of black fluid blood was removed from the pelvic cavity. Both tubes were considerably enlarged, and from each of them over an ounce and a half of pus was withdrawn by an ordinary rectum trocar. When their extensive adhesions had been separated, both tubes and ovaries were removed, and the whole abdominal cavity thoroughly washed with a plentiful supply of plain warm water. A drainage-tube was inserted, and the two-inch incision closed with silk sutures. The patient made an excellent recovery, her pulse only twice rising to 90, and on Sept. 6th she came to report herself as perfectly well. The specimens are now in the possession of the Inquiry Committee.

CASE 2. E. M——, aged thirty-five, sent in by Dr. A. Macdonnel on Aug. 17th. Married eighteen years; no child or miscarriage. Had an abdominal tumour as large as the pregnant uterus at the eighth month, which was first noticed twelve months since. On admission the temperature was 104° and the abdomen excessively tender; but a week previously she had been able to walk about, and before that had been on the dramatic stage as a professional singer. The mass extended far down into the pelvic cavity, and the slim uterine cervix could be felt in front of it. The abdominal tenderness prevented an accurate diagnosis; but as her condition became rapidly worse, and she was evidently sinking, she consented to laparotomy on Sept 1st. The tumour was found to be the left Fallopian tube. It was universally adherent to the abdominal wall in front and to coils of intestine. Its muscular wall was nearly an inch thick, and after it was cut open seven pints of thick yellow pus were removed from its cavity. There was also about an ounce of pus free in the peritoneal cavity, due to an escape from the tube in the left hypogastric region. It was while this portion of the abdominal cavity was being irrigated with warm water that the tumour was identified as an abscess of the left Fallopian tube. As it was impossible to remove the tube, it was stitched to the sides of the abdominal incision, and a glass drainage-tube was inserted into the peritoneal cavity where the rupture had taken place. Next day the temperature was 98·8°, and though it rose to 102° on the third day the pulse remained always good, and on Sept. 23rd she was almost ready to leave the hospital. Dr. Davies gave the anæsthetic, Dr. Edis assisted, and Dr. H. Samuel was present as a visitor.

CASE 3.—E. F——, aged twenty-three, was sent into hospital by Dr. Solomon on Aug. 4th. Since her marriage she had suffered from syphilitic psoriasis, and had had three miscarriages. Her chief complaint was of a constant pelvic pain. Per vaginam, the left tube was distinctly felt to be enlarged. After a month's rest in bed her pain was worse, and the tube, which contained fluid, larger. Though there was no elevation of temperature, her general health was evidently affected, and on Sept. 4th abdominal section was performed. The left tube was densely adherent, deep in the pelvis, and while the adhesions were being separated a quantity of pus escaped from it. After the tube and ovary had been removed the pelvic cavity was irrigated with warm water. The right tube and ovary, being perfectly healthy, were left untouched. No drainage-tube was inserted, and since the operation her pulse and temperature had remained normal. Though completely convalescent, she was kept in hospital until her menstrual period had recurred. Drs. Davies and Samuel were present at the operation, and the diseased tube is in the possession of the pathologist of the Royal Infirmary.

Remarks by Dr. IMLACH.—These are the most recent cases of chronic inflammatory disease of the uterine appendages which I have submitted to surgical treatment. The first of them is a good example of the late stage of pyosalpinx; the second is the largest example of this pathological condition I have yet met with; and the third is an ordinary example of its early stage.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

Complete Sections of Brain.—Hemiatrophia Facialis.—Malignant Cysts of Neck.—Excavation of Lung simulating Pneumothorax.—Cancer of Thyroid.—Dermoid Cyst of Testis.—Carcinoma of Prostate.

THE first ordinary meeting of the session of this Society was held on Tuesday last, Dr. J. S. Bristowe, F.R.S., President, in the chair. A copy of the new volume of the Transactions was placed on the table for inspection. There was a splendid display of complete horizontal, vertical, and transverse sections of normal and abnormal brains made by Dr. Hamilton of Aberdeen.

Dr. HAMILTON showed Complete Sections of a Brain in a case of tumour of the occipital lobe, probably secondary to carcinoma of the lung. The whole of the hemisphere was thickened by an enormous network of Deiter's cells, an overgrowth of the glia cells, which kind of process Meynert showed three years ago, before the German Neurological Congress, to be perhaps invariably associated with tumours of the brain. It was possible that this infiltration might account for descending optic neuritis, which was the frequent accompaniment of any kind of tumour of the brain. Endothelial cells were the chief components of the tumour of the occipital lobe. The second abnormal brain shown was taken from a woman, aged fifty-three, who was an imbecile of the lowest type. A cast of the brain was exhibited. The first and second frontal convolutions were absent on the right side; the internal capsule and island of Riel were destroyed on the left side. Dr. Hamilton then gave an account of his process of preparing complete sections of the brain. The vessels at the base should be cut sufficiently long to enable injection of the brain to be carried out. Müller's fluid was used, and the injection made by an apparatus for supplying continuous pressure so as to enable the artificial injection to be kept up for one week at least. At the end of this time the brain is cut into slices an inch thick, and in any desired direction. Each of these slices is then placed in a mixture of sugar and gum. Three mixtures of sugar and gum frozen at different temperatures may be used according to the delicacy of the tissues, some of which cut better at higher, others at lower temperatures. A microtome of gigantic dimensions is employed, and the sections are neatly thrown off the knife and floated in water on to a glass slide coated with gelatine; the section is next covered with a second layer of gelatine, and the whole specimen is dried. Embedded in the double casing of gelatine, it is next immersed in potash for two hours, and then placed in Müller's fluid. Under this treatment the preparation swells up, and the area of the section is much increased, the differentiation of structure thereby becoming very marked. The section is then submitted to a running stream of water for two hours. After this washing it is embedded in glycerine jelly treated with glycerine potash, and the narrow ring of carbonate that forms between the two layers of gelatine is removed by effervescence by acetic acid glycerine. The final stage is the cementing of the specimen, and this is a very difficult part of the process. It was found that asphalte was the best medium in which to cement the preparation.

Mr. F. S. EVE exhibited a living specimen of Right Hemiatrophia Facialis in a woman aged forty-two. The atrophy was limited to the region supplied by the third division of the fifth nerve, and involved the skin, subcutaneous tissues, and muscles, but not the bone. The masseter had almost completely disappeared, also the mylohyoid, and there was wasting (not very great) in the temporal fossa. The hair was thinner and greyer on the right side; the tongue and

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eye were unaffected. The atrophy began at the age of seventeen with severe neuralgia, and it continued for some years. The case was probably one of pure trophoneurosis. The left side of the face is usually affected in this disease.

Mr. F. TREVES read notes and showed microscopic specimens of three cases of Malignant Cysts of the Neck. The clinical course of all three cases was the same. The growths were regarded as cystic because they contained very little solid matter. In two the cystic contents were of mucinoid nature; the contents of the third was pure lymph. Two of the cysts were carcinomatous; the third epitheliomatous. A living specimen, probably epitheliomatous, was also exhibited. The first case was a cellarman, aged fifty-three. The tumour was situated in the left side of the neck; the skin over it was red and brawny. It commenced as a small solid mass, apparently beneath the sterno-mastoid muscle, and was regarded as a "chronic abscess" until an exploratory puncture gave exit to a clear glairy fluid which was pronounced by a chemist to be mucin. The cyst proved to be deeply attached. It discharged continuously, was treated with an injection of iodine, the discharge from it became muco-purulent, bleeding set in from the superior thyroid artery, and death ensued. The necropsy showed an imperfect cyst, whose walls were half an inch thick at most, and whose internal surface was thrown into ridges and bridges like the columnæ carneæ of the ventricles of the heart. It was merely suggested that the mucoid degeneration of the cancer cells in this case might be associated in some way with the atrophy of the thyroid gland (which was also an observed fact), regard being had to the alleged mucinogenous function of the thyroid. Streckheisen had written about accessory thyroid glands near to the hyoid bone. The diverticulum of epithelium from which thyroid tissue was developed was in direct communication with the foramen cæcum of the tongue; so there was enough epithelial tissue in this neighbourhood for the development of a carcinoma. The second cyst came from a woman aged fifty-two, in which the solid carcinoma formed one-sixth part of the whole mass. This cyst was removed during life; the internal jugular vein was cut, and the brachial plexus exposed; ten days later the woman died from exhaustion. The cyst was of exactly the same structure as in the first case. The third case was epitheliomatous. It occurred in a painter aged forty-three, who was operated on for epithelioma of the right side of the tongue in June, 1885. After ligaturing the lingual artery, the right side of the tongue was removed successfully. In August, 1886, the man, having been engaged in his work till this time, presented himself with a lump in the *left* side of the neck. The skin over it was red and brawny; puncture of the cyst yielded a clear fluid found chemically to be pure lymph. The further course was characterised by bleeding. After death the cyst wall was found to be not more than a quarter of an inch thick in any part. There were no secondary deposits. Mr. Treves then gave an exhaustive account of the modern and ancient literature of the subject. Cases were quoted from the Pathological Transactions, recorded by Sharkey, Godlee, and Morell Mackenzie.—Dr. HADDEN said that the mucinogenous function of the thyroid gland was not a settled question, and joined issue with Mr. Treves on the suggestion as to the origin of the mucin in the cancer cells of the first case related.—Mr. H. T. BUTLIN spoke of a cystic tumour of the neck in a man from whom he had previously removed an epithelioma of the tongue. What was apparently a secondary growth appeared in the neck on the same side as the disease of the tongue. Mr. Butlin was surprised that so large a gland had formed in so short a space of time; but it turned out to be largely cystic, and the contents of the cyst was lymph. He thought the lymph had been prevented from escaping along the efferent lymphatics, and hence the cystic accumulation in the gland.—Mr. MARMADUKE SHIELD referred to a case of cancer of the thigh, in which mucinoid changes had occurred and led to the formation of a complete cyst.—Mr. D'ARCY POWER also referred to a cyst of the neck, containing clot and glairy fluid, which was supposed to be in the right lobe of the thyroid; the cyst had exceedingly thin walls, and was probably of the same nature as those described by Mr. Treves.—Mr. A. QUARRY SILCOCK thought the microscopic structure of the first cases described was of epithelioid or endothelioid characters, arising in connexion with lymphatic endothelium, and not epithelial strictly. He suggested that the specimens be referred to the Morbid Growths Committee.—Dr. BRISTOWE mentioned a case of carcinoma of the pelvic organs, in which the secondary growth in the groin took on the character of a large cyst filled with limpid fluid. A second case was mentioned of sarcoma in the abdomen, in which a similar cystic change had occurred.—Mr. TREVES acquiesced in the suggestion that the specimens be referred to the Committee.

Mr. G. STOKER showed a specimen of Cancer of the Thyroid removed from a woman aged fifty-six. The thyroid gland was deeply fixed; both the vocal cords were paralysed. Tracheotomy was performed, and death followed from bronchitis. The left lobe of the thyroid was the larger, and the left recurrent laryngeal nerve was greatly atrophied; the right nerve less so; the corresponding laryngeal muscles were wasted. Microscopically none of the original structure of the gland could be detected. There were no symptoms of myxœdema.

Mr. STEPHEN PAGET showed a specimen of Sarcoma of the Left Lobe of the Thyroid. It had grown through the trachea and pressed on the œsophagus, and also involved the vagus and recurrent laryngeal nerves. The mechanical effects of the growth would, however, be sufficient to account for all the symptoms of dysphagia and dyspnœa.

Mr. D'ARCY POWER exhibited a Dermoid Cyst of the Testis. It was an example of this rare congenital tumour. Only ten cases had been placed on record in a period of 200 years. The tumour was removed from a child aged four years. It had an ovoid shape and contained no nodules, and involved the whole of the body of the testicle. It measured 2¼ in. by 1¼ in. Its contents were gelatinous. Small delicate hairs, fibrous tissue, and cartilage were discovered. The whole of the gland tissue had disappeared from the body of the testis. The wall of the cyst showed epithelial cuticle, rete Malpighii, and corium, with non-medullated hairs and sebaceous follicles.

Dr. T. ACLAND showed a specimen of Excavation of the Lung which simulated Pneumothorax during life. The cavity was the result of tubercular disease. The expectoration was very slight. He thought it was important, though difficult to distinguish the two kinds of cavity during life.—Dr. MITCHELL BRUCE had seen several cases in which the diagnosis was difficult. The situation of the apex beat was of value in determining the question when the left side was affected.—In reply to Dr. H. White, Dr. ACLAND said there was no respiratory movement on the affected side.

Mr. E. HURRY FENWICK showed a Cancer of the Right Lobe of the Prostate taken from a patient aged fifty-one. The first symptom was difficulty in defecation, observed six weeks before death. The tumour projected into and partially obstructed the rectum. It rapidly increased in size, and fungated. The bladder and urethra were not invaded, but were pressed upon so as to necessitate the use of the catheter. Profuse hæmorrhage and almost complete obstruction of the bowel supervened, and left lumbar colotomy was performed, with great relief to the patient. The great rapidity of growth, the absence of all pain until ulceration occurred, and the escape of the bladder and urethra, were the chief features of interest.

The following card specimens were exhibited:—Dr. Pasteur: Ulceration of Main Branch of Pulmonary Artery from a Cavity at Root of Lung in a child of four. Mr. Larder: Mediastinal Tumour involving Superior Vena Cava (recent specimen).

MEDICAL SOCIETY OF LONDON.

President's Address.—Hernia of the Cæcum.

THE first ordinary meeting of this Society was held on Monday last, Mr. R. Brudenell Carter, F.R.C.S., President, in the chair. A copy of the new volume of the Proceedings of the Society was placed on the table.

The PRESIDENT read an eloquent address. He alluded to the losses the Society had sustained by the decease of four of its Fellows—Mr. Francis Mason, Mr. H. R. Bell, Mr. Sampson Gamgee, and Dr. Seaton—during the past year. He claimed for the medical profession the very highest place among the forms of mental activity now practised by mankind. What other professions could be compared with it? Lawyers were mainly occupied in supporting the contentions of their respective clients—an exercise which may probably be conducive to acuteness of perception, but which has no appreciable tendency towards the discovery of truth or the administration of justice. Theologians of various

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creeds were mainly occupied in disputing about the interpretation of words—an occupation which, in the language of Dugald Stewart, produces a lively curiosity to know what is said, without any corresponding curiosity to know what is true. Politicians of all parties were chiefly occupied in tickling the ears of the uneducated by formulæ which are either deceptive or unmeaning, or in urging their followers to place confidence in some public man in whom they have long ceased to have confidence themselves. Mr. Carter was strongly of opinion that the time cannot be far distant when the medical profession will be generally cited as having shown the right path in the way of mental training, and when the members of other callings will begin to strive to profit by the example. The magnitude of an achievement is merely in proportion to its difficulty on the one hand, and to its usefulness on the other; and so when he contemplated each new step that is gained in medicine, and the results to the human race which may spring from it, he could not but think also of the mental attributes which such a step implies, of the patient labour, of the provisional acceptance and ultimate dismissal of many hypotheses, of the abandonment of even cherished errors, of the rejection of fallacies, of the steady pursuit of truth, and truth alone. The study of medical science was calculated to ennoble the intellectual as well as the moral being of man.

Mr. W. ADAMS and Dr. C. H. F. ROUTH respectively proposed and seconded the vote of thanks, which was carried by acclamation.

Mr. FREDERICK TREVES read a paper on Cæcal Hernia. He said that the hernia, though rare, was not uncommonly met with; it was most frequently umbilical in situation, but it was also to be found in the inguinal region, and less rarely in the femoral. It was most common in the congenital umbilical hernia. The text-books generally said it had no sac, and the French called it the "hernie akystique." Arnaud's was the first case on record, being one for which he performed resection in 1732, a permanent fæcal fistula being left. Mr. Treves maintained that in all cases there was a sac, which in the majority was perfect. He spoke of the anatomy of the cæcum, showing its mobility, the absence of so-called meso-cæcum, and its situation in 18 per cent. in the pelvis. Eleven times out of a hundred it could be turned up so as to touch the liver, and with the abdominal parietes removed it could be drawn down to the level of the trochanter. A careful description was given of the history of the statement that this hernia was sacless, commencing with Desault, who affirmed the point in 1796, passing on to Scarpa, who asserted that the peritoneum had the same arrangement in the sac as in the abdomen, in which belief he was succeeded by Pelletan, Hesselbach and Cloquet, Lawrence and Chelius. Lawrence's case of a sacless cæcal hernia was shown to be valueless. Mr. Treves next related his own experience. The first case was a potman, aged forty-one, in whom the rupture suddenly appeared fourteen years previously, and resulted in strangulation, for which he was operated on at St. Thomas's Hospital, the hernia having sloughed. He had no hernia after this for six years, when it appeared in the scrotum, and two years ago it "began to be double" and irreducible. Two tumours were found, with a pedicle seven inches long, at the operation, which was followed by complete radical cure. Another case occurred in a female, aged fifty-six, in the right femoral region; it had lasted two years, was reducible, and gave no trouble; it measured 4½ in. by 2½ in. There was a specimen in Guy's museum exactly like it. This acquired hernia was commonest in the inguinal region, in adult males, and on the right side. There were seven specimens in the museums and eight recent records; of these fifteen, twelve were provided with perfect sacs, two had imperfect sacs, and one was doubtful. Clinically the hernia was irreducible as the effect of its bulk, adhesions, and peritoneal connexions, and also from its liability to inflame (typhlitis) and to become obstructed, but rarely strangulated.—Mr. Lockwood, Mr. J. H. Morgan, and Mr. Sydney Jones joined in the discussion, and all admitted the justice of Mr. Treves' contention.

MEDICAL OFFICERS OF HEALTH SOCIETY

THE first meeting of this Society was held on the 15th inst., when the President, Dr. Alfred Hill, delivered an address, of which the following is an abstract.

Having thanked the members of the Society for the honour they had done him in electing him to the Presidential chair, Dr. Hill went on to treat of the various methods of sewage and house refuse disposal. His choice of subject, he said, had been influenced by two considerations: (1) that it had not, he believed, been dealt with by any former occupants of the chair; and (2) that at present many persons have not come to any definite conclusion on the matter. The term Sewage Disposal he took to embrace the disposal of excreta, whether it be intercepted from, or admitted into, the sewers. Among the former methods was that furnished by the midden privy—the most common receptacle in many towns,—the numerous evil effects of which, such as the pollution of the surrounding air, soil, and water, partly owing to the soakage of the filth into the adjoining ground, and sometimes even into dwellings, and the vile system of periodically emptying the putrescent contents into the streets, Dr. Hill graphically and fully described. The great dangers to health which attend the midden system led some years ago to the substitution for it of other systems free from its most glaring defects, and as in some towns a water-carriage system was not practicable, some form of interception was looked for, the principal object being to avoid contamination of the soil and to reduce as far as possible vitiation of the air. One, involving only a small departure from the old system, was adopted in Manchester, in which the old-fashioned cesspit was replaced by a small shallow one, with a special arrangement for the daily deposition of ashes on the excreta. Subsequently, movable receptacles of wood or metal, collected weekly, were substituted for the fixed ones; and this system, which is certainly superior to the midden, is now in use in Nottingham. In what is called the earth-closet we have as the absorbent dried earth instead of ashes. Theoretically this system, which is based on Nature's own method of deodorisation, is, Dr. Hill considered, absolutely perfect, but practically it is impossible to employ earth for deodorisation in large towns, for among other reasons it has been calculated that, with a population of 100,000, over 200 tons of suitable earth would be required per day. The speaker next referred to the "Goux" system, which he described as a modified form of the earth-closet, now in use in Halifax. Instead of dry earth, an encircling wall of lining material of a mixture composed of shoddy, sawdust, ashes, street sweepings, and other dry absorbent substances, is employed. In some towns no attempt has been made to add ashes or any other absorbent to the excreta in the pan, the object being to make from the contents a concentrated manure or *poudrette*, which shall be rich in ammonia, and consequently valuable. The advantages of this arrangement, when well carried out, were dwelt upon by Dr. Hill, who pointed out, however, that under the most favourable circumstances the Rochdale system, as it is called, has many drawbacks, among which he enumerated the following:—Pan-closets cannot be admitted into the interior of houses; they cannot safely be placed near to dwellings; their contents are liable to leakage by corrosion or to overflow, either by the carelessness of tenants in throwing into them bedroom and other slops, or from an unusual delay in emptying them. The men, too, are natually drawn from such a class that they too often perform their work in an improper manner; while the transport of the pans through the courts and streets cannot fail to lead to diffusion of offensive and noxious gases, and to the spilling of some of the liquid contents (which may possibly be specifically infected) along the route. The water-carriage system or sewage disposal was next reviewed. Dr. Hill reminded his coadjutors that within the memory of many living the introduction of human fæcal discharges into sewers was strictly prohibited; it afterwards was winked at, then freely permitted, and finally made compulsory, where sewers existed; so that now every town with a system of sewerage is already conveying a sewage essentially excremental in character, and, as is well known by those who have studied the question, the sewage of a town having no waterclosets is only slightly better than that of a watercloset town. Analytical results obtained by Dr. Frankland were given confirming this statement. Dr. Hill next dealt with the argument of those who hold that, owing to defective condition, sewers too often produce ill-health, showing that such an argument applies to any system when it is improperly carried out, while the frequent allegation of an insufficient supply of water was, he believed, often much exaggerated. The difficulty of obtaining land suitable for irrigation was, he considered, made far too much of, especially as experience had proved, as illustrated

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by experiments made by Dr. Frankland, that soils of the most different kinds are or may be made capable of effecting the purification of sewage. With regard to the area of land necessary for the purpose, Dr. Hill stated that the quantity provided by the Birmingham Tame and Rea District Drainage Board was one acre to every 500 persons. The mode of treatment which the Birmingham sewage undergoes was next explained, the speaker asserting that after years of experience it had neither proved a nuisance to the adjoining residents nor injurious to health, while it had not turned out altogether unprofitable, as shown by the large quantities of produce sold each year, over £20,000 being realised for the sale of stock and produce last year. The speaker then touched upon the question of the quality of the produce, maintaining that the dangers which the opponents of sewage farms had alleged to exist from the consumption of milk, butter, and vegetables from such a source had no foundation in fact. The crowning merit of the water-carriage system consists in the fact that fæcal matter is carried away instantly and readily by gravitation, and sent to its proper destination, the land; while the defect of all conservancy methods is that they retain what is offensive and injurious until it becomes still more so. Disposal of sewage by throwing it into a river or the sea was condemned as wasteful and pernicious, and the reader stated that if the sewage of the metropolis, instead of being discharged into the Thames, were utilised on land as at Birmingham, it would realise in vegetables, milk and meat, a sum of £200,000. All processes of utilisation by precipitation alone—that is, without application of the effluent to land—were regarded as wasteful in an agricultural, and unprofitable in a pecuniary, sense. The question of dry house refuse was finally touched upon, and the employment of destructor furnaces strongly recommended. As a result of the consideration of the various mode of sewage disposal the following conclusions were arrived at:—1. That all intercepting or conservancy methods are false in principle and, on a large scale, hurtful in practice. 2. That the system providing for the most complete absorption and deodorisation and the most frequent removal is the one to be preferred where water-carriage is impracticable. 3. That the water-carriage system is preferable to every other on the grounds of convenience, health, and economy.

Reviews and Notices of Books.

Puerperal Convalescence and the Diseases of the Puerperal Period. By JOSEPH KUCHER, M.D. Pp. 311. London: Trübner and Co. 1886.

WE have read this unpretending little work with much pleasure, bearing as it does the mark of knowledge and experience, gained principally during four years' service in the Vienna Lying-in Hospital, and supplemented by well-used experience of private practice in New York. The array of facts in this little book is certainly highly commendable, and puts it at once on a satisfactory footing.

It will perhaps be best to begin by criticising what we regard as defects, and we will at once say that the book is really a work on antiseptics in midwifery, and on the nature, prevention, and treatment of puerperal fever. Where the writer deals with this subject, he is strong, clear, and trenchant; while his other chapters, though meritorious, by no means come up to the same standard. Again, some subjects are included which do not properly belong to the title of the book, such as post-partum hæmorrhage, rupture of the uterus, inversion of the uterus, albuminuria (i.e., of pregnancy), eclampsia, &c. These we shall not criticise; they are certainly not better treated than in the best text-books on midwifery, and some of them are very imperfect. Did our author's modesty suggest to him that a book on antiseptics and puerperal fever would not be sufficient, and that other subjects should be included? Here, we think, was his error. In any subsequent edition we strongly advise him to omit the whole of the other subjects between page 24 and page 176, and to expand the remainder, to which we will now direct our attention.

The first chapter, on Antiseptics, is short, but strong, plain, and clear. The author has no patience with those who nowadays talk about infection as *one* of the causes of puerperal fever, or about antiseptics in midwifery as things without which women can get on very well. Such persons, especially if teachers or writers, are to him positively dangerous, and we quite share his feelings. We are, however, surprised to hear him class corrosive sublimate with thymol in a list of antiseptics, "none of which has shown such signal superiority over the others that it could be called the lotion *par excellence*"; indeed, on page 279 we read that "corrosive sublimate has been found so much more efficient that it has supplanted carbolic acid in most lying-in hospitals." There can, we think, be no doubt that for the disinfection of the hands &c. corrosive sublimate *is* the lotion *par excellence*. Dr. Kucher speaks the language of experience when he says (page 21) that no man can learn to practise antiseptics by reading of them; he must practise and study them, and suspect all his own methods. "Among the Austrian peasants it is a common belief that fresh wounds should not be touched with the nails, as this would produce suppuration." Sponges are decried for washing the genitals, and quite rightly; cotton-wool, used once and destroyed, is far better. This chapter, which is only seven pages long, would bear expansion. Methods should be minutely described. We know of no work where this has been satisfactorily done for midwifery.

We now jump to page 176, Chapter XIX., concerning Puerperal Fever. Here we have a discussion on its nature; the relation of other causes to it—such as (*a*) contused tissues; (*b*) clots and remains of placenta; (*c*) gonorrhœa, previous endometritis, and vaginitis; (*d*) atmospheric conditions. Our author concludes that contused tissues, clots, and pieces of placenta can only be predisposing causes; that gonorrhœa, previous endometritis, and vaginitis are not causes of puerperal fever. As regards atmospheric conditions, the author quotes the Vienna Hospital (page 200) where, amidst hygienic conditions inconceivably horrible, antiseptics now restrict the yearly mortality to from 1 to ½ per cent.

As to "auto-infection," the author, while not denying its possibility from the analogy of pyæmia from internal suppuration, has never seen it. "Epidemics" are rightly assigned to their proper cause—infection. On page 213 we find a sub-heading, "Semmelweiss's theory of puerperal fever the only correct one"; this is a bold heading, but to our mind quite correct. Then follows a short account of the work of Semmelweiss (the subject has recently been brought before our readers in an interesting paper from the pen of Dr. Duka). Dr. Kucher very truly remarks that tolerance of the opinions of others is out of place in matters of life and death: the truth is to be upheld and falsehood condemned. In this connexion our author takes occasion to rehearse the articles of his religious belief, or rather unbelief. While these are doubtless interesting to himself, they do not bear on puerperal fever, and would have been better omitted. In the next division other theories are discussed—(*a*) puerperal fever as an essential disease *sui generis*; (*b*) caused by zymotic disease, especially scarlatina; (*c*) caused by changes in the blood ("nervous and vascular tension," effete products, &c.); (*d*) overcrowding. All these are very properly rejected.

The chapters on the Prevention and Treatment of Puerperal fever are good, but capable of improvement in the way of amplification and filling in of details. It is impossible to be too explicit on all these subjects, and minute directions as to the mode of using the principal antiseptics would be a great addition; nothing should be taken for granted. The advice, however, that is given is thoroughly sound.

The chapters on the Classification and Pathology of Puer-

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peral Fevers are not quite satisfactory. The subject is, indeed, not yet unravelled, but it might be set forth more plainly; long quotations of pathological post-mortem details are out of place, and the main differences might be stated in a plainer manner.

The final chapter on Puerperal Mortality is based on the report of the Berlin Puerperal Fever Committee, and on Levi Meech's life insurance tables. These give appalling figures. No mention is made of Dr. Matthews Duncan's figures, based on the most careful inquiry yet made.

On the whole we heartily congratulate the author, and think that, with the alterations which we have indicated, his book may take far higher rank than he seems disposed to claim for it.

OUR LIBRARY TABLE.

Elements of the Comparative Anatomy of Vertebrates. Adapted from the German of ROBERT WEIDERSHEIM, of Freiburg-in-Baden, by W. NEWTON PARKER, of the University College of South Wales. 270 Woodcuts. Pp. 345. London: Macmillan and Co. 1886.—The original treatise of Professor Wiedersheim was published about two years ago, and was intended to constitute an introductory text-book for the student previously to his study of the author's larger Lehrbuch. The plan of the work is to consider the several organs, as the integumentary, skeletal, muscular, nervous, alimentary, respiratory, circulatory, and uro-genital systems, in the divisions of the vertebrata in succession, and to impress their chief characters on the student by means of clear and well-chosen diagrams. In this the author has thoroughly succeeded, always providing that the student possesses a certain amount of histological and zoological knowledge. Without this such a sentence as "In the Anoura, as well as in elasmobranchs, bony ganoids, and the higher vertebrata, the vertebræ are preformed in cartilage" would convey little meaning. The illustrations are extremely good, many appearing to be original, whilst others are drawn from recent memoirs. Mr. Parker, who has himself had a long and laborious training in biological science, has had the advantage of the large knowledge of his father, Professor K. Parker, in many points relating to the skeleton, and has rendered Professor Wiedersheim's rather difficult German into very readable English. The whole book may be read through with great advantage by any student desirous of acquiring a sound rudimentary knowledge of the comparative anatomy of the vertebrata, after he has worked for a year at histology and has familiarised himself with the names and principal features of the several groups of vertebrata.

The Journal of Anatomy and Physiology. Edited by Professors HUMPHRY, TURNER, and MCKENDRICK. Vol. XX. Parts 3 and 4.—This part contains the following articles: The Action of Infused Beverages on Peptic Digestion, by James Fraser, which is a continuation of a previous paper and shows the amount of peptones dialysed, estimated by the amount of organic nitrogen. It appears from these experiments that tea, coffee, and other infusions relaid the peptic digestion of most albuminoid food stuffs, probably owing to the action of the tannic acid they contain. 2. Mr. Arbuthnot Lane describes some Variations he has met with in the Human Skeleton. 3. Mr. Macdonnell gives a note on a case of Bicipital Rib. 4. R. W. Schufeldt gives in detail the Osteology of a species of Parrot named Conurus Carolinensis, and furnishes two plates, which are very carefully drawn. The same writer describes a Navajo Skull. 4. Bland Sutton contributes an article on the Origin of certain Cysts, Ovarian, Vaginal, Sacral, Lingual, and Tracheal; a subject that he has worked out in a very interesting manner. 5. John L. Gibson gives the result of an Experimental Research on Blood-forming Organs and Blood Formation. 6. Ernest Maddox records the results of his investigations into the Relation between Convergence and Accommodation of the Eye. 7. Dr. Noel Paton describes the Nature of the Relationship between Urea Formation and Bile Secretion. 8. D'Arcy Thompson has a Study of the Hind Limbs of Ichthyosaurus, and Sir W. Turner gives a short article on the Lumbar Curve of the Spinal Column in several races of man.—Part 4: The principal papers in this part are—1. Wesley Mill's on the Physiology of the Heart of the Alligator. 2. Hingston Fox on the Functions of the Tonsils. 3. Maddox: a continuation of his former paper, which is both original and valuable. 4. Prof. Humphry on Spina Bifida. 5. J. Cowper on Pentadactylon Foot in the Dorking Fowl. 6. W. Curran on the Vitality of Wild Animals under Fire. 7. MacAllum, the Alimentary Canal and Pancreas of Acipenser Anisa and Lepidosteus. 8. Cunningham on Neural Spines of the Cervical Vertebræ as a Race Character. 9. Brooks on Variations in Nerve-supply to Flexor Brevis Pollicis. 10. Morphology of the Intrinsic Muscles of the Little Finger, by the same author. 11. Noel Paton and Lockhart Gibson give continuations of their papers commenced in Part 3.

Klinik der Verdanungskrankheiten. Von Dr. C. A. EWALD. I. Die Lehre von der Verdauung. Zweite Auflage. Berlin: A. Hirschwald. 1886.—The physiology of the digestive processes is a subject which is always of interest, and the more it is studied the more complex and delicate are these processes found to be. The various forms under which dyspepsia is met with, and their differentiation, will only be satisfactorily explained when we have arrived at a thorough knowledge of the normal conditions of digestion. Amongst those who have contributed largely to extend our knowledge in this direction is Professor Ewald, the second edition of whose lectures upon Digestion is now before us. The first edition is well known to English readers in Dr. Saundby's Translation, and it proved to be well deserving of the cordial reception given to it. The work has been thoroughly revised and brought up to date, and it is one which should be carefully studied by the scientific physician.

Ueber das primäre Erysipel des Kehlkopp. Von Dr. Ferdinand Massei Uebersetzt von Dr. Vincenz Meyer. Berlin: A. Hirschwald. 1886.—This is a carefully compiled monograph upon a rare disease—primary erysipelas of the larynx—by a Neapolitan physician, who in 1884 had an opportunity of seeing several examples of it. He is assured that it is not so rare as is generally believed, and gives grounds for stating that several cases of œdema of the larynx are really erysipelatous in origin. Two forms are distinguished: in the one constitutional symptoms predominate; in the other the local phenomena are chief, or develop together with those of general infection. The lines of treatment in this very formidable affection are laid down with precision: first, the free and constant employment (internally and externally) of ice; and secondly, scarification; and these failing to relieve, whilst asphyxial symptoms develop, tracheotomy must be resorted to. It may be added that out of the fourteen cases of which the author gives details, only three terminated fatally.

General Hospital for Sick Children, Pendlebury, Manchester.—This volume of abstracts of some of the medical and surgical cases treated during the year 1885 has been carefully edited by Drs. Ashby and Hutton and Mr. Wright. Table II. gives an analysis of fifty-six cases of croupous pneumonia, by Mr. C. J. Macalister The table of analysis of fifty-five cases of chorea is by Mr. H. T. Bury. Table IV. shows the distribution of the lesions in the fatal cases of tuberculosis. The surgical report contains many valuable abstracts of miscellaneous cases of surgical interest: we notice congenital sacral tumour, macroglossia, neuroma of posterior tibial nerve, and myxolipoma of thigh. The sequels to abstracts in former volumes are scanty, but nevertheless indicate a step in the right direction.

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THE LANCET.

LONDON: SATURDAY, OCTOBER 23, 1886.

IN the selection of Dr. PAVY as the Harveian orator of the year the President of the College of Physicians made a wise choice. For HARVEY was pre-eminently a man of science—one of the pioneers who, as the College was reminded, preferred the path indicated by BACON to the older and well-trodden but far less satisfactory way of arriving at truth. "To search out and study nature by the way of experiment"—the maxim which HARVEY left to his successors, and which is so reverently taken as the text of each succeeding Harveian Oration—is the formula of the scientific investigator. We all know how the learned orator of the year has during his career as a physician acted up to the principles thus laid down by HARVEY; and it is not therefore surprising that, after the customary reference to the College benefactions and tribute to HARVEY'S own work, he should have chosen to dwell upon the progress which medical science is making in so rapid a manner by experiment. Ten years ago the topic in question—the influence of specific microbes in inducing disease—would hardly have been thought a secure one for such an address. We talked then, as for many years previously, of the germ *theory*, and many of the most enlightened and far-seeing physicians predicted that, like many another hypothesis, it would have its day, and cease to be entertained by any but a few enthusiasts. The mode in which the doctrine is now regarded is, however, far different from that. Thanks to the patient and skilful labours of many investigators, the facts accumulated concerning the life-history of pathogenic microbes have carried conviction to many a sceptical mind; and although, as may naturally be expected, much error has become mingled with fact, there is no question about the truth of the main principle, that the etiology of many so-called specific diseases is bound up with the presence in the human body of those microscopic parasites. The *imprimatur* of the Harveian orator reflects the conclusion to which the scientific mind has been irresistibly borne, and marks the revolution in our conception of disease which will probably be regarded in the future as one of the most important chapters in the history of medicine. But, as Dr. PAVY pointed out, the wider our knowledge of the sources of disease the more is it incumbent upon us to determine the methods of prevention and treatment. The aim of the physician is to dispel disease, and every new light thrown upon its nature should show him in what way this may most effectually be done. The remarkable facts of protective inoculation by means of attenuated virus are the direct outcome of experimentation, and whilst they serve to explain the theory of vaccination they point a way to further measures for dealing with infectious disorders. At the same time it may be hoped that in the case of most of such diseases the growth of knowledge concerning their etiology will lead to such measures of prophylaxis as may lessen the necessity for such a method of treatment. We are far from such a golden era at present, and must be thankful for the discovery of any methods which promise security from the ravages of infectious disease. Dr. PAVY illustrated this topic by a reference to Prof. PASTEUR'S inoculations for hydrophobia, and although he admitted that their efficacy was still open to question, he at the same time pointed out that they were based upon a knowledge of the facts of the malady. Yet there is one link wanting, which is present in the case of other diseases, such as anthrax, in which the practice of inoculation by attenuated virus has been proved of protective efficacy. The microbe of rabies has not yet been isolated and cultivated; for although a few months ago Mr. DOWDESWELL communicated its discovery in our columns, we are unaware of its having been confirmed. Moreover, it is curious that no sign of support or of refutation has come from the other leading bacteriologist, who shares with PASTEUR the merit of being one of the pioneers in this department. We are not aware that Prof. KOCH has undertaken any investigations into the question of hydrophobia; or, if he has, it does not appear that he has arrived at any definite results. It is a singular and not uninstructive state of affairs: on the one side, the enthusiastic scientist, who began life as a chemist, but whose researches led him to discoveries that in their turn suggested an explanation for morbific processes, is now throwing all his energy and time into one great experiment; and, on the other side, the whole civilised world is in an attitude of expectancy, watching for the result of that experiment. Our knowledge of hydrophobia and of its frequent long latency compels us to wait for the summing up of the results which shall test the value of the practice; whilst the certainty that many, perhaps the majority—of those who have flocked to Paris for inoculation were in no danger of hydrophobia at all, renders the correct estimation of results a work of great difficulty. We have lately witnessed in other parts of the world a similar resort to inoculation based upon the same principle of attenuation. In Spain Dr. FERRAN practised inoculations for cholera, and in Brazil Dr. DOMINGOS FREIRE has largely pursued the same line of treatment in yellow fever. Both claimed that their results were strikingly confirmatory of the value of the practice, and yet in neither instance has the scientific world been satisfied by their explanations, and in the case of one at least, the facts have been rejected by ample evidence. Is it not always so? The attainment of truth is difficult, and the way to it lies often enough through a maze of error; but we may be sure of this, that the methods of scientific induction rigorously applied cannot fail ultimately to lead us to it. Such, we think, is the lesson to be gained from the Harveian Oration, and from HARVEY himself.

THERE are evident signs that the interest in the forthcoming election of Members of the Medical Council is growing, and will continue to grow apace until the return of the voting papers to the registrars of the three divisions of the kingdom. It would be very disappointing if it were not so. The peculiar manner in which the Council has discharged some of its duties in years past, and the absence of all direct representation of the profession on it, have tended to lessen materially the interest with which the proceedings of this body have been watched. We have become too accustomed to long and fruitless discussions, to

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repeated modifications in the curriculum, and to the almost exclusive representation of the special interests of individual universities and corporations. All this, however, must not close our eyes to the fact that the Medical Council has very important powers and functions, the proper exercise of which has a great influence upon the well-being of the profession and the public. Its duties and powers with regard to medical education, to the Register, and to the Pharmacopœia are in themselves most important trusts, and their bearing upon the status and prosperity of the profession is most obvious. Hitherto the only influence that the great body of the profession could bring to bear upon the Council has been through the medical press. But Parliament has at length conceded the principle of direct representation, and has carried it out to a limited extent. Henceforth the entire profession will be able to make its voice heard at the Council Board, and we trust that all who glory in their calling, and who are jealous of its honour and welfare, will not only themselves take part in the election of representatives, but will seek to excite interest in it in the minds of their fellow-practitioners. The principle of direct representation is in a great degree at stake at this election. Success in this case does not depend upon the acknowledged leaders of the profession, or upon the class of consultants; it depends mainly upon the interest and activity of the rank and file of the profession, and it will be nothing short of a disaster if they do not rise to their responsibilities. No means should be neglected which will serve to stimulate and widen the interest of the entire profession, and from this point of view it is encouraging to note the number of candidates who have come forward for the limited number of seats to be filled, and the activity of the various committees of their supporters. For the most part these committees are interested in the return of single individuals, but this must not render anyone forgetful of the fact that every registered practitioner in England and Wales will have three votes, and that these cannot be given to one or divided among two candidates, but must be given to three candidates, or one vote recorded for one candidate. Each voter will have a voice in the election of three representatives, and he will seriously fail in his duty if he does not exercise his right to the full. We must have no plumping, but each voter must strive to be represented by his full complement at the discussions and votes of the Medical Council.

It is important, again, to point out and to lay stress upon the fact that it will be entirely the fault of the general practitioners of England and Wales if they are not represented by three members of their own order, who can speak for them with authoritative voice. They vastly outnumber the class of consultants and specialists, and those more directly connected with medical corporations, universities, and schools. If they rise in their strength and demand this, which is but their just right, they may be confident that they cannot be outvoted. The franchise is democratic. The "classes" of the profession have hitherto had it all their own way in the Medical Council, and even now they will have a preponderating influence there. But the "masses" at length have it in their power to make their voice heard and to have their needs attended to. They cannot have this right taken from them; they can only lose it by voluntary surrender, and this, we trust, they will never permit. So far as England and Wales is concerned, the choice of candidates is large; but among all who are seeking the support of their fellow-practitioners, it is gratifying to notice that there is no one who can be said to be at present intimately connected with any of the corporations or medical universities. It is true of each and all of them that they will, if elected, represent the profession at large; and having obtained a seat on the Council by the votes of the general practitioners, they are not likely then, by their voice or their vote, to support the interests of the corporations alone. Not that we think that the true and best interests of these bodies are opposed to those of the profession at large. But it is impossible to ignore the fact that a too close association with one body is apt to produce a narrowness or even a selfishness of opinion in regard to it.

If only all the electors would sufficiently realise the greatness of their opportunity and of their responsibility, we should have no fear that from among the candidates already in the field three will be selected who will not only speak with a fresh voice on the Council, but will add greatly to the strength and efficiency of that body.

AFTER a comparative lull of nearly two years, we regret to find that the number of cases of lead-poisoning is again on the increase. There can be no doubt that the outcry raised in 1884 did good, and that managers of white lead manufactories, for a time, have endeavoured to employ, and to enforce on their workpeople, those means of protection which, when rigidly insisted on, afford a positive assurance against plumbism in its various forms. But with immunity comes carelessness: the foremen become negligent in enforcing, and the workpeople disregard, the precautionary measures provided for their safety, and soon fatal cases of plumbism begin to be reported in the newspapers, whilst many hands are disabled from work by colic and lead-palsy. Time after time the same thing occurs: there is a great outcry in the press; the inspectors of factories send in bulky reports; the Board of Trade rouses itself for a brief moment to make a minute or to issue an instruction; the manufacturers give orders to the foremen on the works; the old machinery for protection is set going again; the workpeople are closely watched and made to adopt the protective measures; and then again all goes well—only to break down when the immediate panic is over. But how are these relapses to be prevented? We see no way except by exacting an adequate fine from the employer for every case of lead-poisoning occurring on his works; or, perhaps better still, by placing all operatives engaged in manufactures likely to prove injurious to health under the protection of the Employers' Liability Act, so that every man poisoned by the negligence of his master in not providing adequate means of protection, should be able to obtain compensation. This, perhaps, would work better than fining the employer for each case of plumbism; since, in the case of the operative having brought the mischief on himself by negligence, the master would escape, provided he could show that the means of protection were adequate, and that he rigidly insisted on their employment. A case in point illustrates how difficult it is, even with the best means of protection and rigid inspection, to prevent careless hands from becoming infected.

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During the visit of our Commission to Newcastle to inquire into the health of operatives engaged in chemical manufactories, one lead manufactory was visited the proprietor of which prided himself on the care and watchfulness exercised over his workpeople for their protection against plumbism. Yet, in spite of all his precautions, a certain class of his operatives were attacked. Strange to say, these were not engaged in the most dangerous part of the proceedings, but were young girls who carried the crude white lead in baskets to the grinding rooms. They had not to handle the lead, nor were they exposed to the fumes; the baskets from which any dust could come were carried on their heads, and this part was protected by means of a "hood." For a long time the cause of their infection remained a puzzle. The medical officer, however, having observed that the girls brought to him wore "fringes," he visited the factory one day during work-hours, and found the girls with their hoods on bearing baskets on their heads as usual, but, as he expected, nearly all had pulled their fringes from under their hoods, and these locks were found thickly encrusted with lead. But whatever further provision is made for the protection of workers in white lead manufactories should include all trades in which chemical agents likely to be injurious are used. How many and numerous they are, Mr. LAKEMAN, senior metropolitan inspector of factories, has told us in his interesting pamphlet, "Health in the Workshop." Lead is not only poisonous as white lead, but in all its forms, owing to its ready conversion into carbonate. Even shoemakers who cut strips of leather on lead plates frequently become subjects of lead palsy. Nor need we mention the well-known dangers of mercurial, phosphorus, and copper poisoning to those who work with these substances; whilst the investigations of our Commission at the chemical works in the north of England showed how great is the mortality amongst the operatives engaged in the chlorine chambers in the manufacture of hydrochloric acid.

THE address which Dr. ALFRED HILL delivered last week before the Society of Medical Officers of Health will undoubtedly serve a useful purpose. It places before the profession the result of many years' experience of different methods of dealing with excremental refuse, and discusses with much care the merits and disadvantages of each. It is now nearly twenty years since Dr. BUCHANAN and the late Mr. NETTEN RADCLIFFE visited many parts of England, and, comparing the various methods of refuse disposal which were in use, provided material which has since served to guide sanitary authorities in the modification of their own procedure or in the adoption of other means of removing the waste matter of life without production of nuisance. Dr. HILL'S "consideration of the various modes of house refuse and sewage disposal" is a fitting sequel to this report, for the large town of Birmingham, of which Dr. HILL is medical officer of health, has thought out the system which is most applicable to large communities, and, if we may judge from the opinion of its officer, has emphatically pronounced in favour of the London method of water carriage. There is undoubtedly a consensus of opinion which condemns the use of large receptacles for the retention of filth, of cesspools, and of middens. Towns which have adopted the pail system are able to show as a result a marked reduction in the general death-rate, but, as Dr. HILL points out, this is no matter for surprise, seeing that pails have replaced offensive middens, which no intelligent authority would desire to perpetuate. But the struggle between the pail and the water-carriage system cannot be said to have terminated. There are many who argue on economic grounds that the opportunities which the former afford for the fertilisation of the land and the avoidance of the cost which would be incurred in the provision of sewers and of water-supply give it a distinct advantage over the latter. Dr. HILL not unreasonably states that the preservation of health must take precedence of all other considerations, and then proceeds to show that an important return may be made by the adoption of a water-carriage system in its entirety, and this necessarily includes the utilisation of the sewage upon the land. Quoting the experience of Birmingham, he shows that the 1227 acres of land which receive the sewage of nearly 620,000 persons make a return of over £20,000 a year through the sale of stock and produce, and he argues that if London sewage could be utilised on land to the same extent as in Birmingham it would produce in vegetables, milk, and butcher's meat no less a sum than £200,000 per annum. Further, he combats the statements of those who urge that the produce is less agreeable and less wholesome than that obtained in the usual way, and that those resident near and upon a sewage farm are exposed to injury of health. The subject has received his close attention, and he speaks without the least hesitation upon these points.

The Royal Commission on Metropolitan Sewage Discharge estimate the annual value of London sewage to be £1,750,000, and express the opinion that the possibility of realising some of the value should be borne in mind in devising plans for its disposal, and only the necessity of freeing the Thames from pollution led them to advise that there should be no delay on this account in taking proceedings. But there is not much hope that London will enable further experience to be gained, for the Metropolitan Board of Works have recently surprised Londoners by their decision to ignore the recommendations of the Royal Commission. We commented but recently on the miserable substitute which they had provided for the more perfect scheme which was definitely recommended to them as the result of a detailed inquiry. For some unknown reason the Board cling to the position of the present outfalls, and are satisfied to attempt the precipitation of the sewage by chemical means, and to allow the effluents to pass directly into the river. The cost of their proceedings is already such as to condemn a method which has been definitely pronounced to be insufficient; and London is not even treated with the courtesy of being told the reasons which have led to the abandonment of the course which every reasonable person would expect them to follow after the Commission had presented its report. It is perhaps too much to expect that they will listen to further advice until the insufficiency of their own method has been brought home to them and to the public.

Probably that portion of Dr. HILL'S address which is most likely to bear fruit, and especially in those towns which

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have no need to use ashes for the deodorisation of excremental matter, is his plea for the destructor furnace, which has in some places already been found to be a valuable means for the disposal of house refuse. The necessity for early removal of the contents of the dustbin before decomposition can take place, and its complete destruction by fire at such times of the year when there is no demand for its utilisation in other directions, is becoming more and more obvious, and the ease with which this is effected in Birmingham teaches a lesson which other large towns might with advantage learn. The destruction of this matter does not imply its waste; the mortar and cement which are produced by its exposure to heat might well replace that upon which builders are now too prone to rely.

The teachings of Dr. HILL'S address are very simple. There are now ample means for removing entirely from all large communities matter, both animal and vegetable, which formerly was a potent cause of ill-health and of mortality. The improved appliances which year after year have been made available now give opportunities for this purpose which never before existed; and it only remains for those who have the administration of public affairs to learn that they will in the end save both life and money by adopting that system which long experience has shown to be the best.

THE action of the Council of the Royal College of Surgeons of England in removing Mr. EDWIN W. ALABONE from the list of its members will be approved unanimously by the profession, all the more so that it has not been taken in haste. The resolution to this effect was passed on Aug. 5th. The laws of the College require confirmation of such resolutions at the meeting subsequent to that at which they are passed. The incidence of the holidays has given the Council additional time for consideration, and after an interval of more than two months the motion has been confirmed. The action of the College was indeed very kind and deliberate. If we mistake not, the offender has been most tenderly treated. He has had remonstrance after remonstrance, but without effect; and nothing remained for the College but to sever a connexion by which it was dishonoured and degraded. It is not our intention to say anything that can add to the severity of this punishment. The College is not easily moved to the exercise of its judicial and punitive functions. The profession generally think it too apathetic and insensible to its great responsibilities in connexion with the misconduct of its Fellows and Members under Subsections 1 and 2 of Section 17 of its Bye-laws. The latter of these says that—

"No Fellow or Member of the College shall advertise or publish any matter or thing prejudicial to the interest or derogatory to the honour of the College or disgraceful to the profession of surgery; and any Fellow or Member who may in any manner offend herein shall be liable to removal, by resolution of the Council, from being a Fellow or a Member of the College."

Many a time and oft it has happened that Members of the College have violated this and the previous section without any proper effect on the mind of the Council or exciting its action. Generally, indeed, the misconduct has become a scandal, and has begun to strike even the public before the College can be persuaded to move. The present is a case in point. Mr. ALABONE'S advertisements in the papers—especially, we are sorry to say, in certain denominational papers—excited the notice and the remark of outsiders. And his membership of the College gave a certain authority to his advertisements, and this in turn involved the College itself in discredit. For long this went on without any effective attempt to stop it. The College has now cleared itself of complicity, and Mr. ALABONE will stand alone and on his own merits. He is still, indeed, on the Register, but as the diploma in virtue of which he is registered has been virtually withdrawn, his registration will probably cease.

Let no one suppose that a Medical College acts in this way merely in defence of its own honour and interests. It does so in the public interest. Any persons may advertise as they please as private individuals, but as members of a scientific and professional body they must be consistent with medical science and with the modesty proper to those who know its limits. It is painful to us to record the rebuke and deposition involved in this act of the College. But the act nevertheless has our highest approval, and we commend it to the consideration of other bodies.

There are more subtle forms of advertisement which are scarcely less culpable than those which we are denouncing, and which deceive persons of education and position of whom better things might be expected. Perhaps these are sufficiently met by more subtle indications of professional condemnation and contempt. But it is a question whether they too should not receive more consideration from the bodies whose degrees and diplomas give importance to the culprits

Annotations.

"Ne quid nimis."

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

THE Report from the Council, comprising a record of their transactions during the collegiate year from July 1885 to July 1886, to be presented to the Fellows and Members of the College at a meeting which is to be held at the College on Thursday, Nov. 4th, at 3 P.M., is an interesting and important document. Though the questions which have long been at issue between the Council and the Fellows and Members at large are still open and undecided, we would feign recognise, in a perusal of this Report, a desire on the part of the Council to see these questions amicably settled. As we have from time to time reported the meetings of the Council, and have critically reviewed the work done and the decisions arrived at, we need not enter into much detail on this occasion. It will be remembered that the Council, elected as they are at the present day by the Fellows alone, feel themselves unable to initiate any policy which may even seem to compromise the special privileges of the Fellows. They point out "that no detailed plan formulated by the two bodies mutually interested in the question—that is, the Fellows and Members,—by means of which a share of representation might be assigned to the latter, has yet been presented to the Council." At the same time, the Council promise to give "careful attention to any such jointly authorised plan" approved by a majority of each body. It is known that the Associations of Fellows and of Members are preparing some plan which will allow them to co-operate harmoniously with a view to take up the challenge thus thrown down by the Council. This line of action may be assumed to be a continuation and a reassertion of the policy previously advocated: that is to say—(1) that, under certain circumstances and with

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certain limitations, it will conduce to the welfare of the College if Members are empowered to vote for and be eligible to sit as members of Council; and (2) that no alteration be made in the constitution or relations of the College, or in any bye-laws, without the consent of the Fellows and Members. On the latter question, a perusal of the Report will show that the Council manifest a desire to concede something here also; for while still adhering to their previously expressed opinion "that it is unnecessary, and would as a rule be impracticable, to refer certain questions to the consideration of a general meeting," they will be glad to consult the Fellows and Members when "larger questions" arise. A good omen for the Members, all of whom presumably are in favour of the acquisition of corporate rights, is the absence of any organisation among the Fellows to resist this concession by the Council. Nor has there been any public protest against the two Associations or against the policy they have advocated. Hence it may be assumed that these Associations represent in the main the wishes and aspirations of the "two bodies mutually interested" in the questions in dispute, and it is to be hoped that the "detailed plan" which the Council desire to have laid before them will be shortly forthcoming. We sincerely trust that such is the case, and that the Council will themselves help in bringing about an amicable settlement of the just claims of the Members. The time for bickerings, quibblings, and raising technical objections is past, and it is to be hoped that the Council will now see that those who are working for these changes are neither revolutionists nor iconoclasts.

THE DEATH OF PROFESSOR PANUM.

THE last days of the great Danish physiologist present an interest apart from that which usually hangs around the deathbed of great men in that the disease from which he died is not one usually met with. We are indebted to Professor Trier, who was his medical attendant, for a history of his last disease, an account of which was given to the Medical Society of Copenhagen. Professor Panum was sixty-four years of age, and had lately been suffering from shortness of breath and bronchitis. On May 1st, between seven and eight o'clock in the evening, while returning from paying a visit, he found the shortness of breath worse than usual, and had to stop and support himself by the shop windows, when suddenly he felt a pain in his left side as if something had broken. This pain increased on his arrival home. At ten o'clock, on the visit of Dr. Trier, he was pale, with cool extremities, but no sweating; the pulse was small, frequent, and irregular. The patient was undressed and put to bed, but the pain continued, and spread down the left arm to the fingers, while an attack of vomiting set in. After an injection of morphia, towards midnight the pain decreased, a broken sleep came over the patient, and in the morning he was better, and with difficulty was persuaded to remain in bed. He explained to his son the result of a disturbance of the functions of the vagus and sympathetic, and half an hour afterwards, being alone, a cry was heard, and the professor was discovered cyanotic and senseless, and soon after breathed his last. At the examination of the previous evening no increase of the heart's dulness had been detected, but the heart's action was tumultuous, and accompanied with a double blowing sound. At the necropsy the pericardium was found filled with 250 cubic centimetres of clotted blood, and on taking out the heart blood was seen to ooze from a rent in the ventricle. A further examination disclosed the fact that there were present two rents, one five centimetres and the other a centimetre and a half in length, which ran parallel to the septum. The heart's substance was loaded with fat and quite soft. There was a thrombus in the coronary artery. It would seem that the pathological history is as follows:—The thrombus and consecutive degeneration took place in the last weeks of life, and showed their presence through increased shortness of breath; the actual rupture was felt at the moment when it occurred, but much blood was not at the time extravasated, so that no paralysis of the heart's action took place. This, however, occurred later, and led to the fatal result.

THE NEW ANATOMICAL INSTITUTE IN VIENNA.

ON Oct. 11th the new Anatomical Institute was opened in the presence of the Minister of Public Instruction and other members of the university. Those of our readers who have profited by the teaching of this justly-famed centre of medical learning will be glad to hear that the facilities for the study of anatomy are now brought into the same state of excellence as the other departments of medical knowledge, and that the building for the use of the coming generation is in every way worthy of the renown of the great university. The institute, which is situated in the Wälringer Strasse, about five minutes' walk from the General Hospital, combines all the advantages of modern sanitary construction, in the shape of electric lighting, lifts, and ventilation, with a proper regard to the æsthetic requirements, so that the gloomy half-lighted appearance which is too often associated with the study of anatomy is quite absent. On entering one finds oneself in a small entrance hall, from which a staircase, diverging right and left, leads up to two spacious lecture rooms, capable of seating 300 students, and furnished with electric lights. These, with the library and professors' rooms, form the central block, while the dissecting-rooms, four in number, occupy the two wings. Each dissecting-room is large and light, possesses twelve windows, reaching nearly from floor to ceiling, and ten dissecting-tables. The dissecting-tables are oval, made of marble, and mounted on a solid iron pedestal. Around the walls are eight taps for washing hands, &c., and at each end is a lift communicating with the underground rooms where the bodies are prepared and injected. In the passage, before coming to the dissecting-rooms, are the prosector's room and the students' cloak room. The electric light, with a special arrangement to prevent shadows, is in each dissecting-room. On the second storey, above the central block, is a room seventy-two metres long, facing the street, which is to serve as the museum, osteological specimens being placed round the walls, while the centre will be occupied by cases for preserved specimens. In the underground department is contained the machinery for heating and lighting, and the rooms for cleaning and preparing the bodies, as well as the dwelling-rooms for the *employés*.

LARYNGEAL VERTIGO.

IT is plain that the profession, as a whole, has no great objection to the use of etymologically unfit words. "Laryngeal vertigo" is one more specimen. The vertigo is not specially related to the larynx in what Charcot called "laryngeal vertigo." The vertigo in this case is the result of coughing. Giddiness and dizziness, with mental confusion and even loss of consciousness, as the effect of paroxysms of coughing, are symptoms of every-day occurrence; and yet Charcot and others are inclined to perceive in this phenomenon something of an extraordinary nature and worthy of a separate description and name. We cannot subscribe to the opinion that there is any necessity for a new name to designate such old symptoms. In order to understand as far as possible the principles concerned in this laryngeal vertigo, "laryngeal epilepsy" or "complete spasm of the glottis," as it has been called by different authors, we should state the matter thus: Every individual is liable to

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be attacked with loss of consciousness in the event of a sufficiently powerful existing cause, but the liability to this "epilepsy," if we may so call it, using the term in the catholic sense of Hughlings Jackson, varies immensely in different individuals, and in the same individual at different times. A slight fit of coughing in a subject of great nervous susceptibility might lead to a vertigo, whereas a prolonged attack of coughing of great severity might fail to affect the consciousness of an individual possessed of healthier nerves. The matter is largely one of degree of coughing and degree of nervous susceptibility. It does not necessarily follow that an epileptic person is the more prone to become unconscious with paroxysms of coughing; it is possible that some epileptics may have their nervous centres less liable to "explode" in the face of passive congestion resulting from expiratory efforts.

CARLYLE ON THE MEDICAL CALLING.

Honourably known as a metaphysician and as an able and effective participant in the protoplasmic controversy, Dr. Hutchison Stirling has always kept touch with pure literature, his latest contribution to which ("Thomas Carlyle's Counsels to a Young Literary Aspirant—a hitherto unpublished Letter of 1842,—and what came of them; with a Brief Estimate of the Man") is of interest to all professions, our own in particular. At the commencement of life Dr. Stirling was divided between the competing claims of literature and medicine, and in his dilemma he consulted the author of "Sartor Resartus" as to how far certain *tentamina* in prose and verse justified his embarking on the former as a career. Carlyle, with characteristic kindness, read the young man's attempts with care, and wrote to him that their publication could not be profitable financially, while for other reasons they ought not to see the light. Recognising "talent" and "generous warmth" in them, he found the former "in far too loose, crude, and unformed a condition," and the latter fraught with the danger that, "if ill-guided it can run up into miserablest waste and weeds." He counsels him to "learn the indispensable significance of hard, stern, long-continued labour," and of silence. "Be in no haste to speak yourself," he says. "Why be *porous*—incontinent? Nothing can ferment itself to clearness in a *colander*." Avoid literature, he continues, which, as a trade, is the "frightfullest, fatallest, and too generally despicablest of all trades now followed under the sun." On the other hand, "What profession is there equal in true nobleness to medicine? He that can abolish pain, relieve his fellow-mortal from sickness, he is indisputably usefullest of all men. Him savage and civilised will honour. He is in the right, be in the wrong who may. As a Lord Chancellor, under one's horse-hair wig, there might be misgivings; still more, perhaps, as a Lord Primate, under one's cauliflower: but if I could heal diseases I should say to all men and angels without fear, 'En! ecce!'" Further, says Carlyle, "if literature do unfold itself under shelter of such a profession, let literature be welcome; it will be safe, beneficial, and have a chance to be true under the circumstances. How many physicians have turned out to be true speakers or even singers? A man *can* first speak when he has got to *know* something." All this, down even to what Mr. Morley calls the "dialect," is to students of Carlyle delightfully characteristic—still more welcome as presenting the sage of Chelsea in a light very different from that in which many people have read him in Froude's publications. Dr. Hutchison Stirling's comments on the moral and intellectual worth of the man are superior to anything yet given on that *vexata quæstio*, and make us feel with Tyndall that "a bucket or so of water whipped up into cloud can obscure the noblest mountain top. But let the sun come out, and let the cloud has vanished, and the mountain stands forth all the clearer from its temporary eclipse." It is only poetical justice that the best vindication of Carlyle should have come from the profession to which he paid such manly homage.

A CASE OF POISONING BY IODIDE OF POTASSIUM.

In a recent number of the *Berliner Klin. Wochenschrift* is an account of a case recorded by Dr. Wolf of Goritz of poisoning by the medicinal administration of iodide of potassium, which is interesting as being a most remarkable instance of that individual peculiarity which we call idiosyncrasy. In this particular case the amount of the drug taken was no more than four tablespoonfuls of a 5 per cent. solution in about thirty-six hours, and the purity of the drug was shown by chemical analysis; but so great was the susceptibility of the individual that after about eight days a fatal issue set in, which there is every reason to attribute to the use of the medicament. The patient was suffering at the time from subacute kidney disease of about three months' standing and cardiac hypertrophy, which facts we must bear in mind in estimating the idiosyncrasy. After the administration of four tablespoonfuls of the above-named solution the face became swollen and covered with pustules, papules, and bullæ, and twenty-four hours after the mucous membrane of the mouth, pharynx, and alimentary canal became attacked in a similar manner. On the cessation of the drug no amelioration ensued, and in eight days the patient sank into a state of collapse and died. No necropsy was made. This is the second case of the kind recorded, Murray having published one in which the administration of the drug to a person suffering from renal and cardiac disease caused a pemphiginiform eruption, with similar symptoms and result.

CHURCH-BELL RINGING AND THE SICK.

Nothing is more inexplicable than the tenacity with which even sensible persons hold to the traditions of any system with which they have been associated by education and habit. A very striking example of this is the ringing of church bells, when those places of public worship stand in the very midst of populous districts, and when those who frequent them are perfectly well aware of the hours of service, and are not in the least degree dependent on the sound of the bells for the opportunity of attendance. In the old days, when parishioners lived a considerable distance from their church, when there were few clocks in private houses, and when the times of service were uncertain, there were valid reasons why bells should be rung to call together the worshippers, but not one of these reasons at present exists, and the ringing of church bells in cities and towns is a needless and vexatious ceremony. To the sound in health it may be an annoyance; while to the sick it is a very grave infliction, causing in many instances serious injury, and, we cannot hesitate to say in not a few cases actually aggravating disease and shortening life. The practice should undoubtedly be abandoned, or, if prejudice be too strong for voluntary action, it ought to be interdicted. It is intolerable that, for the sake of a mere sentiment which has no shadow of solemnity about it, which has nothing whatever to do with religion or belief, and which (outside a utilitarian purpose, which has no place in these days) is simply a superstition of the most stupid kind, annoyance and injury should be perpetrated. A case of flagrant violation of the ordinary rules of courtesy that has just occurred at Liverpool, placing the authorities of one church in a light wholly at variance with the spirit of common humanity, has raised this question in a manner which we trust will give it a practical shape. We would be the very

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last to offend the consciences of those who are striving to uphold the religion of the country, and we would not pen one word to wound the feelings of any sincere worshipper; but this matter of church-bell ringing has not the most remote connexion with religion or worship, and we protest against a practice which is an offence, and too frequently entails consequences altogether too terribly disastrous to be contemplated without indignation. Medical practitioners will do well to refuse certificates of the cause of death in cases in which they have reason to believe that the fatal issue has been hastened by the disturbance caused by this practice, and leave it to coroners' juries to give expression to the feeling which the grievance very justly creates.

ANNUAL MEETING OF THE BELGIAN MEDICAL FEDERATION.

THE Belgian Medical Federation has recently held its annual gathering at Brussels. Several burning questions were discussed, especially the change which has been made by the Government in the arrangements for the medical attendance of railway *employés*, according to which dispensaries are established which are attended by the medical officers in rotation, instead of the old system by which the men were allowed to choose their own medical attendant, he being paid according to the amount of attendance. The change has met with great disapprobation from all the Belgian medical societies, with the single exception of the Verviers Society. No vote of protest, as was suggested, was, however, taken, it being arranged that the committee should prepare a report, and that an extraordinary meeting should be convoked before the end of the year for the discussion of the matter. An animated discussion likewise took place on the subject of the sale of pharmaceutical preparations. A motion was also brought forward by Dr. Poirier of Ghent, "That it is desirable that instruction in forensic medicine in the universities should not be theoretical, but practical, and that a higher degree of importance should be attached to this branch of the art of healing in examinations; also that a special and thorough examination, comprising *vivâ voce*, written, and practical tests, should be instituted, which would confer the title of 'Medical Jurist': that the courts of law should as far as possible be compelled to have recourse to practitioners possessing this qualification, and that a superior council should be formed for the purpose of verifying the various reports addressed to the courts and judging of the capacity of the 'Medical Jurists.'" A long discussion ensued, but it was ultimately adjourned.

FEVER IN GENERAL HOSPITALS.

WE are glad to find that an effort will be made to arrange that hereafter fever cases shall be dealt with by the local authorities instead of being received into the Sussex County Hospital. Where medical schools are attached to hospitals it may be regarded as desirable to receive with due precautions cases of the infectious fevers for the purposes of instruction, but this cannot affect the question in the majority of provincial hospitals, and the first thing to aim at in such institutions is to secure that the patients who are admitted from non-infectious complaints should not run the risk of contracting infection. In the case both of Brighton and Hove, the sanitary authorities have provided hospital accommodation. It is true that at Brighton some of the buildings, erected during a small-pox emergency, are the reverse of attractive, but still some very useful ward accommodation is available, which should lead to the removal of fever cases from the interior of the borough. At Hove an excellent beginning of hospital provision has been made, and the Corporation had the advantage of building it maturely at a time when their district was free from infection. But it is rarely or never used, and this, in all probability, because fever cases are received into the county hospital. Efficient isolation is the thing to be aimed at in the case of the infectious fevers, and this can be better secured in the special hospitals provided by the sanitary authorities than in a general hospital.

THE ATMOSPHERE OF THE UNDERGROUND RAILWAY.

OUR readers will remember what happened years ago when attention was directed to the dangerously impure state of the atmosphere in the tunnels of the Underground Railway. The condition of matters has been considerably improved since then, but it is still far from being satisfactory. The complaints of travellers who suffer in various ways from the highly carbonised condition of the air are very numerous, and in some instances the effects produced have been serious. Surely the time must come when steps will be taken to effect a thorough reform. We have more than once urged that a proper trial should be made of Dr. Neale's "Chemical Lung." It is beyond question a very valuable agent for the purification of air, and we cannot doubt that if the trains were provided with this apparatus, there would be a great diminution of the evil to which we refer. Dr. Neale has, we understand, expressed his willingness to superintend experiments with a view to demonstrate the efficacy of his invention. We counsel the companies to embrace the opportunity before matters reach a pass which will revive the very damaging controversy of years ago, when a contemporary raised a storm which, while happily it blew away the worst of the foul gases, was found very difficult to quiet down.

THE CONSUMPTION OF ALCOHOL IN BELGIUM AND OTHER COUNTRIES.

ACCORDING to M. E. Laveleye, the consumption of ardent spirits in Belgium has nearly doubled in fourteen years, and is now surpassed only by that of Denmark and Russia. Everything is done to encourage it, as if drinking alcohol was a good thing, and one needing to be fostered by the State. The duty is only about 50 francs per litre, while even in France it is 200, and in England nearly 500. There is a place for the sale of drink to every forty-four inhabitants, or one to every ten families. What demon can be in possession of governments that leads them so to foster misery, crime, and poverty—to say nothing of disease. Such a licensed use of alcohol paralyses and mocks all legislation for the improvement of the people, all social efforts, and all progress in medical science. We are in neither the humour nor the position to boast over other countries in this matter. *The Times* of Wednesday records three brutal attacks on wives in one hour, in one town, Birmingham, by their husbands—two of these, at least, under drink.

"LONG RUNS" ON THE STAGE, AND MADNESS.

WE cannot understand how it has come to be thought that the fact of an actor or actress repeating the same part night after night for a lengthened period can be productive of *madness*. No one doubts that the repetition must be wearisome, and if there were no counterbalancing advantages it might be so irritating as to be mentally injurious; but players, like the rest of the world, are at heart matter-of-fact people, and, as Mr. W. S. Gilbert points out, the fact of a long engagement has the not inconsiderable merit of relieving anxiety. Moreover, the brain is spared the toil of frequent "study" for new parts. The day

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is left free; and if there be an irritating sameness about the evening's work, it cannot be a very terrible infliction, for even the most elaborate impersonations must come to be almost automatically performed after they have been so repeated as to lose their novelty. The public suffer for these "long runs" because there is "nothing new" to awaken interest; but if the actors suffer, they have their compensation, and we venture to think that, mentally, personally, and relatively, it is adequate.

THE MENTAL STATE OF THE KING OF BAVARIA.

WHY do the physicians reporting on the mental state of the Kings of Bavaria so persistently use the term paranoia or paranœa, which the newspapers print "paranola," as though it had any precise meaning? If it be intended simply to say that the sovereign is of unsound mind, this can be said in a manner less pedantic. As it is, the use of a term which looks as if it were intended to designate a particular form of mental disease, while it conveys no precise idea, does not produce a very satisfactory impression, or inspire confidence. It was irritating to read the reports of the state of the late King; but death put an end to that mystery. It is provoking to find the same unaccountable ambiguity about the official statements with reference to the present King. The physicians of Bavaria should at least make their bulletins intelligible to their brethren in other parts of the world. Of course nothing can compel publicity, but if there are to be reports, evidently issued for publication, they should not be rendered incomprehensible by the use of generic terms from which are deduced specific significations and indications.

FOOD-SUPPLIES FOR THE UNITED KINGDOM.

THE paper read on Saturday last by Mr. Daniel Tallerman before the Working Men's Association, in the Conference Hall of the Colonial and Indian Exhibition, was a very comprehensive and able exposition of the food-supplies of the United Kingdom. The most important point raised by Mr. Tallerman was that which related to the capacities of the United Kingdom to supply its inhabitants with food. Hitherto we have been led to believe that it is absolutely necessary for us to go to foreign countries for a certain amount of food. We have, it is said, over-populated our areas of production. Mr. Tallerman tells us this is not the fact. He affirms that the United Kingdom, aided by her own possessions, can, by proper management, supply all our wants, not in a niggardly form, but bounteously—we had almost said luxuriously. He points to the wonderful capacity of India for the production of wheat; and, bringing us nearer home, he cites what to many will be a novel fact -- namely, that Ireland supplies to England more live stock for food than all foreign resources put together. Yet such is the bad management in collection of stock at the farms, in transference to the markets for sale, in transference from the markets to the seaports, from the seaports to England, and from the English coasts to the centres to where the flesh is wanted, that a loss which is scarcely to be calculated is entailed on every carcase, from the sole fact of the exhaustion to which the wretched animal is subjected in its journey from its pasture-land to the shambles. This is only one topic treated upon by the reader of the thoughtful paper. The whole subject is one in which the members of the profession of medicine are bound to be deeply interested. We, of all men, know that if the body is not duly fed, it is a restless, unhappy, diseased, and dangerous body; and those of our fraternity who have time and ability for the work could not be better employed than in accumulating all that requires to be taught respecting food, and conveying the desired information in simple but plain language to all classes of the people. One of our fraternity has, it is well known, laboured earnestly on this matter; he has shown in a bold and outspoken manner how short our supplies often are in the great metropolis, and has indicated that in the culpable neglect which besets these periods of hovering starvation revolution stands out in alarming attitude. But of what avail is it for one man to speak, however boldly, however truthfully? It is a duty for all who can to follow in the same course to rouse the sleeping multitudes from an inertia which is as foolish as it is fatal.

THE CHURCH CONGRESS AND BURIAL REFORM.

THE subject of burial reform was discussed at considerable length in a paper by Mr. F. W. Lowndes, M.R.C.S., &c., which was read at the recent Church Congress. The author did not confine himself to a bare condemnation of the existing modes of interment, or to a general approval of the "earth-to-earth" principle. While advocating the latter as being at once a sanitary axiom and an almost statutory article of religious observance, he showed how it might be made to effect in a practical and inexpensive manner all the results which have been claimed for cremation. In order to attain this end, however, imperishable coffins of whatever kind, and all in burial that is akin to them, must be discarded. Shells made of compressed pulp, which forms the best known substitute for wood, were advised in preference. A suggestion that family vaults should be converted into burial plots is also well worthy of notice. As the author truly observed, a limited space might then, but only then, safely become the last resting-place of generations. We have seen it objected by supporters of other methods that the reformed system is unsuitable for cases of infectious disease. This objection, however, is not difficult to meet, for disinfectants are always available, and, if necessary, a further precaution may be provided by the use of a bier as a means of transfer between the place of death or the hearse and the grave. The opinions which we hold on this subject are not new to our readers. They were warmly espoused by the late much regretted Editor of this journal, and it is a proof of his fidelity to their principle that, after death, his remains were, in conformity with his own expressed wish, consigned to the earth in a perishable coffin.

"SWEATERS'" DENS AT DUNDEE.

SCARCELY a month elapses without, in one form or another, our being compelled to enter a protest against the dangers attendant on the tailoring trade. The "sweating" dens of the East-end of London have been denounced over and over again because they are overcrowded and insanitary, the clothes made therein are at times contaminated, and women, children, and men have to work more hours than is in keeping with the laws of health. But these grievances are not confined to London. The "sweating" system prevails in many provincial towns, and though (the population being smaller) there are not so many cases, the individual instances are often quite as injurious. In Dundee, for instance, a tailor himself has recently made an energetic complaint against the condition of his trade. Writing to the *Dundee Advertiser*, he suggests measures similar to those we have often brought forward in these columns. The "sweater's" den being frequently a private house, it escapes sanitary control. If fever breaks out, the tailoring continues as usual, for the "sweater" and his men cannot afford to cease work. Yet this correspondent urges that many families have, to his personal knowledge, suffered from infectious fevers very shortly

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after the receipt of new clothes. Attention might be advantageously employed in tracing the sources which supply clothes to the first victims of any new outbreak. The tailor who writes to the Dundee paper concludes, as we have so often urged, that all tailoring work should, without exception, be done in workshops properly supervised and especially built for the purpose. If infection breaks out in the family of a person working in such a shop he at once ceases work, and apparently the Dundee sanitary authorities would give him 15*s.* a week until all danger of infection was over. This is the proper way to deal with the matter, but we should imagine that in many instances the compensation, to be at all reasonable and fair, must amount to something more than 15*s.* a week. A worker should not be impoverished just at the moment when he has sickness in his home and sacrifices his means of livelihood in order to protect the public from a serious danger.

THE LATE MR. SAMPSON GAMGEE.

AN excellent bust of the late Mr. Gamgee has been executed by Mr. Clarke Staunton of Edinburgh, and it has been thought that some of the late distinguished surgeon's colleagues and professional friends might wish to secure the work of art for presentation to the authorities of the Queen's Hospital, or of the Medical Institute, as a permanent memorial of one who had rendered eminent services to each of these institutions. Funds of course will be required for this purpose, and these will doubtless be forthcoming in ample measure, not alone from professional sources, but from numerous other admirers of Mr. Gamgee's philanthropic and public spirit, as exhibited, amongst other things, in the inauguration of the Hospital Saturday movement, which by his energy and enterprise has become so important an auxiliary to the finances of hospital charities in Birmingham. We understand that a committee to receive subscriptions is in process of formation.

BRITISH GUIANA.

AN Ordinance has been recently enacted by his Excellency the Governor, Sir Henry Turner Irving, with the advice and consent of the Court of Policy, to establish a Government Medical Service and to enforce the registration of practitioners in medicine or surgery. The main provisions of this measure are said to give satisfaction to the profession. It creates a Government Medical Service, consisting of a surgeon-general, the medical inspector to be appointed under the Immigration Ordinance, 1873, and such medical officers as may be necessary. The duties of these officers are determined by the Ordinance and their salaries by the Combined Court. That of the surgeon-general is not to exceed £1200. That of medical officers is from £300 to £500 or more. The Ordinance gives power to the Governor and Court of Policy to create medical districts and to assign a medical district to any medical officer. The duties of the district medical officer are defined in Clause 21. He is to act as medical officer to the plantations on which there are immigrants and as medical attendant to the hospitals certified under the Immigration Ordinances. One section of the Ordinance gives power to the Governor and Court of Policy to make regulations "securing the rights of the public"—i.e., for determining the conditions under which any person may obtain the professional services of a Government medical officer, fixing the scale of fees to be charged by such officers in private practice, and determining when such an officer shall give his services without charge. These are large powers and will require to be used carefully. A Medical Board is created by the Ordinance to investigate questions relating to public health and to grant certificates to chemists, dispensers, midwives, &c. Only such persons are enabled to practise as are registered under the Acts of the Imperial Parliament, or such as at the passing of this Ordinance have been duly licensed in the colony to practise medicine and surgery, or medicine or surgery. Only registered persons will be able to receive fees or give valid certificates.

LANDRY'S PARALYSIS OR HYDROPHOBIA?

ON September 4th a laboratory attendant at the Brown Institution was bitten by a rabid cat. The wounds were treated at St. Thomas's Hospital, and subsequently he went to Paris to consult, and be inoculated by, M. Pasteur. On the 10th inst., whilst returning from Paris, the man got wet through, and remained thoroughly chilled for many hours. On his arrival in London he complained of general pains, and on the 13th had violent symptoms of colic, with pain over the cæcum, &c. On the 16th, feeling fairly well, he foolishly went out, and on the 17th he was seen by a practitioner residing in Lambeth, who diagnosed lumbago. On the following day he was visited by Mr. Victor Horsley, and he then complained of inability to move the legs (imperfect), breathlessness, and pain in head and back. Temperature, pulse, and urine were normal, and the breathing rather suspirious. A difficulty of swallowing existed, but there was no dread of fluid then or up to the time of his death. On the 19th, hearing that he was much worse, Mr. Horsley saw him again, and found that he exhibited all the signs of ascending paralysis. He was at once conveyed to St. Thomas's Hospital, and on his admission to that institution at midday complete paralysis of the legs and great loss of power in the arms were discovered. His respiration was laboured and his swallowing difficult. On the same evening he became comatose, and died at 9 A.M. on the following morning. The patient never had a symptom of hydrophobia, as it occurs in man, on which a tentative diagnosis even could be made. The post-mortem examination revealed the fact that death arose from asphyxia, the only noteworthy sign being congestion of the upper half of the spinal cord and marked congestion and œdema of the lungs. Mr. Victor Horsley has, we understand, inoculated four rabbits from the spinal cord, and in conjunction with Dr. Bristowe, under whose care the deceased was at St. Thomas's Hospital, will in due course report the case in detail. In the meantime judgment as to the nature of the illness must be reserved.

THE COMMON LODGING-HOUSES OF NEWCASTLE.

ACCORDING to lengthy details published in the *Staffordshire Sentinel*, the condition of the registered common lodging-houses at Newcastle is very inferior to that which exists in London. Such dwellings may swarm with vermin and be occasionally disfigured with much superficial dirt, but from a sanitary point of view they are altogether preferable to a very large number of the metropolitan houses of a much higher class. The common lodging-houses of Newcastle are represented as so unfit for habitation that six out of twenty-five have been condemned through the action of Dr. Barry, the medical officer of health. For these that remain we should suggest the application of the rules that are in force in London. The correspondent of the *Staffordshire Sentinel* complains of want of ventilation and bad odours, but the rule in London is that the bedroom windows must be kept open from nine in the morning till nine in the evening. Again, we find the description of a room licensed to hold six people, and yet measuring only 1040 cubic feet. There must be some error here. It is customary to insist on 300 or 350 cubic feet per person, and certainly not less than 250 feet could possibly be sanctioned. In one house, registered to hold fourteen lodgers, there was no through ventilation, and all the windows were closed and

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immovable, with one exception, and the frame of this window was so loose that it threatened to fall into the street. At another dwelling, the space allotted to six lodgers was only 970 cubic feet, while in several houses it was found that late in the afternoon the slops which had accumulated during the previous night had not yet been cleared away from the dormitories. Evidently the Act of 1851 remained a dead letter. We are glad to hear that these hovels are condemned. The fact that they have been allowed to remain in such a condition for so long a time is not creditable, and may naturally awaken doubts as to the state of the other common lodging-houses. We may therefore venture to suggest that care be taken to rigorously enforce the law and the bye-laws, which in this respect are stringent enough for all practical purposes.

THE CAUSE OF CIRCULAR GASTRIC ULCER.

DR. SILBERMANN of Breslau has lately made some experiments on dogs for the purpose of showing that the kind of anæmia characterised by deficiency of hæmoglobin in the red corpuscles of the blood is peculiarly favourable to the production and maintenance of circular ulcers of the stomach. Hæmoglobinæmia was produced by injection of various substances, and then either chromate of lead was introduced into a small gastric artery, or a ligature was applied to it, or the internal surface of the stomach was abraded by means of an œsophageal sound carrying a guarded point. All these animals were found to have contracted gastric ulcers, and it appeared to make no difference whether the hæmoglobinæmia was produced before or after the stomach was injured. With the microscope it was found that a number of the red corpuscles were of a very pale colour, and that the blood was less alkaline than normal, which is explained by the experiments of Preyer, A. Schmidt, and Rollet, who have shown that hæmoglobin is a weak acid. Dr. Silbermann considers that in the anæmia of hæmoglobinæmia all the conditions are present which are required by various theories for the production of gastric ulcer—namely, arterial anæmia (Klebs), venous hyperæmia of the gastric mucosa (Key), venous stasis in the hepatic vessels (Gunsberg), circumscribed hæmorrhages (Virchow), and, lastly, diminished alkalinity of the blood (Leube).

REFUSE DISPOSAL.

THE more active local sanitary authorities in London are devoting their attention to the study of the best method of disposal of refuse. Whitechapel, we understand, has determined to depend upon cremation. Newington depends upon another method, and last week their process was examined by a deputation from the Kensington vestry, which included the medical officer of health and the surveyor. The Newington process has as its object the utilisation to their fullest extent of all house dust and road sweepings: the ashes are screened, and the "breeze" subsequently used by brickmakers and builders; while the vegetable refuse and road sweepings are converted into a manure, known to Kentish farmers as Newington mixture. Cremation here is limited to the destruction of other matter for which no use can be found. This is essentially the usual practice in the London dust-yard, and no one can have witnessed the sight which these yards present without having feelings of sympathy aroused for the unfortunate people who are compelled by the necessity of obtaining a livelihood to engage in this occupation. Men and women stand with sieves in their hands, into which are thrown quantities of the outputs of dustbins; the fine dust rapidly passes through the sieve, forming a heap which eventually reaches the waists of the workers, while the larger matter which remains in the sieve is sorted and distributed on other heaps. It is said that the cost of removal is lessened to an important extent by the money paid for the manure and breeze; the sum, should, indeed, be large to compensate for the degradation of the human beings who are compelled to follow such an occupation. It is expected that the Kensington vestry will issue a report upon the whole question of dusting and slopping. It will be interesting to note the view they take of these proceedings.

M. PASTEUR.

THE statistics brought forward by Dr. de Chautemps at the Sorbonne last week were said to show that M. Pasteur had saved the lives of at least 145 Frenchmen. Of 1500 patients subjected to the prophylactic treatment only ten had died, and two of these deaths could be accounted for without supposing the treatment to have been inefficacious. Taking merely the cases that had been under treatment before August 1st, in order to allow of the lapse of sufficient time to ascertain the result of the inoculation, it was shown that the number of cases was 1276. At least 80 per cent. of these cases received bites from undoubtedly rabid animals; so that 973 individuals were bitten. It is computed that 155 of this number would have died if they had been left to themselves; and yet there had been but ten deaths. Hence the claim of Dr. de Chautemps that M. Pasteur had saved the lives of 145 of his countrymen.

CHOLERA INTELLIGENCE.

CHOLERA seems to be showing some renewed activity in Pesth, and according to the several reports received, eighty-four fatal attacks occurred there during the first four days of the present week. One death has taken place in Vienna, but it cannot in any way be attributed to the capital, the case being that of Dr. Emmanuel Schmidt, a prominent physician in the service of the State railway, who died a few hours after returning from Pesth. Considerable precautions have been taken in Vienna, and all householders and lodgers are required under penalty to report immediately any case of suspicion to the public authorities. In Trieste occasional attacks and deaths still occur from day to day. As we have before pointed out, the most serious feature of the present cholera prevalence lies in its bearing upon the prospects for the coming year. And the persistent continuance of the disease in the heart of the Austro-Hungarian empire at this season of the year gives but little hope that the epidemic will close with 1886.

THE FULHAM TRAGEDY.

THE inquest on the bodies of the three children found drowned in the Thames at Broomhouse Dock on Saturday and Sunday has brought to light evidence of an unusually mysterious and horrible character. It is supposed—although there is some doubt about the matter—that the mother, Frances Leader, has committed suicide, after having drowned her three boys. Repulsive as this crime must appear to the community, it is yet one of much interest from a psychological point of view. As yet no definite proofs of the insanity of this unfortunate woman have been brought forward. But it may be reasonably supposed, when we hear of a history of great anxiety, of the birth of a child a month previous to the commission of the act, of intense jealousy of other women, and evidence adduced of alcoholic excess, that the mind of the mother must have been at the time in question at least temporarily unhinged. The absence, too, of any ill-feeling towards the children, the deliberate manner in which the act was carried out, and the exaggerated state of wrath against the husband, are all points which coincide with the

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history of most other cases of impulsive insanity. Still, as we have said, there are no direct proofs of mental aberration to account for this supposed quadruple murder and probable suicide. Time alone can clear up this mystery. Meanwhile, far be it from us to speculate upon the probable verdict which an intelligent jury will be called upon to give should Mrs. Leader be found hereafter to have survived her unfortunate victims.

THE DRAINAGE AND SEWERAGE OF THE CITY OF HOBART.

A VERY complete report has been submitted to the Central Board of Health of Tasmania, by Mr. A. Mault, on the present state of the city of Hobart as to its sewerage and on the improvements needed. In so far as a proper system of sewerage is concerned, Hobart has none; and the description of the town as to cesspools, pit-privies, and surface disposal of liquid refuse, &c., shows how urgently a proper system is needed. The subject is fully discussed in the report in its different aspects. The various dry-closet systems and the pail-closets are discarded, and this mainly on the ground that English experience has shown that such systems do not materially diminish the difficulty of dealing with slop-water and liquid refuse generally. Hence a complete system of underground sewers is advocated, and the extension of the watercloset system with trough-closets for the poorer classes is advocated. As far as practicable, it is proposed to keep the rain-water and the sewage apart; this action being the more necessary because of the tropical rains which are experienced. No attempt is proposed to deal with the sewage at the outfall, whether by irrigation or by chemical treatment, it being felt that the sewage can flow into the estuary of the Derwent, and this without risk of injury. How far this latter view is correct we will not pretend to say; but we hope that Hobart will succeed in its proposed sewerage works better than many English towns have done, which decided, in the first instance, not to deal efficiently with the sewage before allowing it to reach the river. So far as situation is concerned, Hobart is likened to Liverpool. If the comparison be a correct one, the sewage should, at least, be taken some distance beyond the city before being discharged into the estuary.

DISSEMINATION OF DISEASE.

AT a meeting of the Tavistock Sanitary Authority, held last week, Mr. F. M. Williams, the medical officer of health, adduced the following instances of recklessness in regard to the spread of scarlet fever in the district under his charge: (1) A case of scarlet fever in a house where the business of secondhand clothes dealing was carried on by the mother of the patient, who nursed the child; (2) a scarlet fever patient having a sister, a dressmaker, who went to her work daily; (3) case not reported until the peeling stage had arrived, other children of the same family being allowed to go to school, and the whole family occupying two rooms.

A FATAL BATH.

A CASE of fatal syncope which occurred a few days ago, and was apparently induced by a warm bath, is not without its lesson. The robust may learn something from it, and those to whom this practice is a therapeutic aid have better reason to regard its teaching. The utility of vapour, hot-water, and Turkish baths is admittedly considerable; and it follows naturally that care in the selection of subjects for their use becomes all the more a matter of mere necessity. The diaphoretic effect of such baths entails a certain caution. While it is precisely the fact which renders them so valuable to the chronic rheumatic, the gouty, and the sufferer from renal disease, it must obviously, by depressing vascular tension, forbid their use to all but those whose cardiac tone and action are unimpaired. For a similar reason, the time chosen for bathing should, even in the case of the healthy, be such that the risk of exhaustion beforehand is as far as possible avoided. When hunger or toil has exercised its influence during the greater part of a working day, even the strong heart may be for the time rendered inefficient. The hour may differ, indeed, with different persons, but there should be some guarantee that it is for each the fittest hour in point of bodily vigour. In the case to which we have referred, it is probable that neither of the above conditions was satisfied. The bath was entered in the early evening, and the heart of its unfortunate occupant was found after death to be extensively diseased.

THE PRACTICAL STUDY OF SYPHILITIC DISEASES.

ALTHOUGH the examination-papers in surgery at most of the examining bodies contain occasionally a question on syphilitic or gonorrhœal diseases and their complications, it must be admitted that their practical study is very much neglected. This arises from various causes: one is that the attendance of students on the practice of lock hospitals and lock wards is not compulsory; another is the dearth of both of these latter institutions, which, even in such a city as London, are few and far between. Consequently many students complete their curriculum with no more practical knowledge of how to diagnose and treat venereal diseases than the smattering they may have picked up in the out-patient department, and from the lectures on surgery, which generally include a few on these diseases. The surgeons of the Liverpool Lock Hospital, Messrs. F. W. Lowndes and A. Bernard, being anxious to encourage students to avail themselves of the excellent opportunities afforded in the male wards, where clinical demonstrations are given every Saturday during the winter and summer sessions, have resolved to give an annual prize of two guineas for the best report of cases delivered during the winter session of the Liverpool Students' Debating Society.

THE EARTHQUAKE AND THE CHARLESTON MEDICAL COLLEGE.

THE Dean of this College gives a lamentable account of the injury it has sustained by the earthquake, rendering it unfit for lecturing and other purposes. It has neither mortgageable property or funds. The American papers report very generous subscriptions from the Philadelphia County Medical Society, from Dr. Weir Mitchell, Dr. J. M. Da Costa, and Messrs. Lea Brothers and Co.

SCARLATINA IN LIVERPOOL.

AN increase of scarlatina in Liverpool has to a large extent done away with the difficulty which attached to the use of the Netherfield-road Hospital. And now that the public, medical practitioners, and public officials have of their own accord demanded the use of the hospital, we trust that arrangements will be made for continuously utilising the beds which are there available. Liverpool is badly enough off as regards hospital accommodation for fevers, and it cannot afford to see empty beds awaiting patients who may be sources of infection outside. Even now, according to the report of the proceedings of the Health Committee of the Corporation, there seems to be a feeling against filling the hospital. But there is no worse policy for a sanitary authority than to allow such a disease as scarlet fever to spread merely in order to retain a number of empty beds in readiness for some other fever which may never appear

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And, after all, scarlet fever is the most fatal of our infectious fevers, and the one that calls for the most energetic action on the part of sanitary authorities entrusted with the isolation of infection.

THE TRANSACTIONS OF THE COPENHAGEN CONGRESS.

WE have received a copy of the Transactions of the Eighth International Medical Congress (D. Nutt) held in Copenhagen in 1884. Like those of the London meeting these Transactions are contained in four volumes, not so bulky, but full of important matter. The French language is used for the accounts of the general meetings and the discussions there delivered, with the exception of those of Sir W. Gull and Professor Virchow. Besides these addresses, the first volume contains the proceedings of the sections of Anatomy, Physiology, and Pathology; the second, those of Medicine, Surgery, Obstetric Medicine, and Gynæcology; the third, that of Ophthalmology, Diseases of Children, Dermatology, and Neurology; and the fourth, those of Laryngology, Otology, Hygiene, and Military Medicine. We hope to refer more fully to the contents of the volumes on another occasion. Meanwhile we may congratulate the Secretary-General, Professor Lange, upon the completion of his labours, and sympathise with him in the loss of those eminent *confrères* to whose memory he appropriately dedicates the work—viz., Professor Panam, President of the Congress; Dr. Holmer, President-elect of the Section of Surgery; and Dr. Salomon, President of the Section of Military Medicine. We may add that the papers and discussions are printed as in the London volume, with the improvement of the titles of each paper being written in the three official languages—English, French, and German; but without, we regret to say, any index to the volumes, which formed so useful an addition to the Transactions collected by Sir W. Mac Cormac.

LUNG OR LIVER?

THE great difficulty in diagnosis that the physician has to contend with in the region that contains the right lower lobe of the lung and the liver is one of the most patent facts of clinical medicine. And yet hardly a week passes that does not afford some illustration of the difficulty of surmounting even a well-recognised obstacle. M. Guyot has published a case of hydatid cyst of the liver, which he mistook for a pleurisy of the diaphragm associated with pulmonary tuberculosis. It is said that all the physicians who saw the case were of M. Guyot's opinion. The hydatid cyst had suppurated, and the friction sound was the result of spread of the inflammation to the serous surfaces. The rule laid down by many physicians that the liver should be thoroughly explored in the presence of friction sounds in the hepatic region, when there are the ordinary signs of suppuration, cannot be too strongly insisted upon.

A LEGAL VIEW OF SERVICES BY AN UNQUALIFIED ASSISTANT.

A DISPUTE was lately raised in the St. Helens County Court over a charge on account of the late Dr. Griffiths for services rendered by an unqualified assistant. The judge had previously adjourned the case, having doubt as to whether a registered medical practitioner could recover for services rendered by such an agent. The attorney for the plaintiff, however, soon satisfied his Honour. He had, during the adjournment, looked up authorities, and referred his Honour to the case of Turner and Smyth *v.* Reynall, heard before Chief Justice Earle and other judges in 1863, when the Chief Justice said, "How can it matter to the patient whether a registered practitioner is assisted by a partner who is not on the Register, or, as was the case, by an unregistered assistant who was in partnership?" His Honour remarked that that was conclusive in favour of the right of the plaintiff to recover, although Mr. Wilson (his assistant) was unqualified. The attendance was then proved by Mr. Wilson, and his Honour gave judgment for the plaintiff for £4 1*s.* 6*d.* It seems curious that while coroners are condemning attendance by unqualified assistants, judges are sanctioning it as a ground of claim. This anomaly deserves attention.

THE NEW ENTRIES.

THE following is a list of the numbers of new students for the current session at the various medical schools from which returns have been received:—

	Full course.	Occasional students.	Total.
St. Bartholomew's	125	13*	138
St. Thomas's	88	43	131
University College	74	72†	146
Guy's	69	32‡	101
London Hospital	64	44	108
St. Mary's	60	23	83
Charing-cross	52	38	90
Middlesex	42	32	74
King's College	41	26	67
St. George's	20	5	25
Westminster	14	1	15
Owens College	60	50§	110
Newcastle-on-Tyne	36	42	78
Yorkshire College	38	6‖	44
Univ. Coll., Liverpool	28	5	33
London School of Dental Surgery	22	—	22

* Students attending London University classes only are not included in this return, as they are not counted as students of the hospital.
† Including 60 for Preliminary Scientific Examination.
‡ Including 19 candidates for the Preliminary Scientific Examination.
§ Including 26 for Preliminary Scientific Examination.
‖ Including 1 for Preliminary Scientific Examination.

ANÆSTHESIA DURING LITHOTRITY.

DR. VDORIKOVSKI, writing in a Russian surgical journal on the subject of anæsthesia during lithotrity, comes to the conclusion that when the stone is small, and can be removed with about half an hour's manipulation, local cocaine anæsthesia answers very well. In the case of large stones requiring a prolonged sitting for their removal he uses chloroform; and when the bladder contracts so as to make the operation particularly difficult, he combines the two methods—that is, he employs local anæsthesia by cocaine and general anæsthesia by chloroform simultaneously.

OUTBREAK OF DIPHTHERIA IN CAMBERLEY, SURREY.

THERE has been a severe outbreak of diphtheria in the neighbourhood of Camberley, Yorktown, Sandhurst, and Frimley. As far as we can gather, there have been between sixty and seventy cases, ten or eleven of these being fatal. Of the nature of the disease there can be no doubt. Drs. Broadbent and Cayley have been called in consultation to some of the cases. The spread of the disease is generally attributed to milk as a vehicle of infection, but further investigation is needed to decide this question, and in such investigation it will be necessary to take into account as a possible factor the operations now being carried out with the object of cleansing the Blackwater, to which we referred in our issue of September 18th last. The disease prevails amongst the better class of houses in the district inhabited by the civil and military population. Up to the present time, as we learn, no cases of diphtheria have occurred in either of the two military institutions of Sandhurst—viz., the Royal Military Academy or the Staff College, and, of course, every precaution has been taken to guard against the introduction of the disease into those establish-

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ments. Cases of diphtheria have of late been cropping up in the neighbourhood all along the valley, and have, as our readers are aware, been the subject of investigation. Isolated cases of scarlet fever have also appeared in the vicinity.

THE BOARDING OUT OF PAUPER CHILDREN.

IT was decided a few days ago by the Holborn Board of Guardians to send out six more children to board. A strong objection was made by Mr. Hopkins on the ground that much expense had been incurred in erecting adequate establishments for the children, and that a committee of inquiry had reported very badly of the plight of one poor little fellow boarded out with a labourer, with eleven children, the last twins, and whose house was poverty-stricken. The chairman said matters had improved since the report, and the decision was carried by 13 to 11 votes. This is an unpleasant aspect of the boarding-out system, but let us hope it is exceptional.

CANCER OF THE STOMACH.

THE supra-clavicular lymphatic glands may be the seat of enlargement when there is a new growth in the lung, pleura, or œsophagus, and also when the stomach is the seat of a malignant tumour. M. Troisier has paid attention to this circumstance, and is of opinion that in some cases the presence of enlarged glands above the clavicle may confirm the diagnosis of cancer of the stomach. The occurrence of such enlargement is well known to English physicians, but we should not have thought the discovery of swollen glands in this region would have helped the diagnosis in a case in which the *locale* of the new growth was a matter of doubt.

FOREIGN PROFESSORIAL APPOINTMENTS.

Besançon.—M. Druhen has been appointed Professor of Midwifery and Gynæcology.

Dorpat.—The three names submitted for the Professorship of Clinical Medicine are Drs. Schultze of Heidelberg, Stintzing of Munich, and Dehio of Dorpat.

Giessen.—Professor Eckhard has been appointed *Geheim Medicinalrath* (medical privy councillor).

Gratz.—Dr. W. Czermak has been appointed Docent in Ophthalmology.

Liège.—Dr. Firquet has been appointed Extraordinary Professor of Pathological Anatomy.

Prague (German University).—Dr. Habermann has been appointed Docent in Otology.

THE members of the School Board of Anstruther, Fifeshire, would seem themselves to need a little instruction, at least in what is demanded of them as a body in whom is vested the discharge of certain important public duties. The medical officer of health having advised the temporary closure of the schools on account of the existence in the district of a rather severe epidemic of scarlet fever and diphtheria, the sapient board have resolved to disregard this proper sanitary precaution, and thus to show to the world their superiority to such trifling considerations as public health and safety.

DR. OVILO, who has gone to Tangiers officially charged with making arrangements for the establishment of a medical school, has been fortunate enough to have succeeded in restoring to health one of the Sultan's ministers, who was considered to be in a very critical condition, and this has produced a most favourable impression on the Tangiers public.

THE lectures in the Hospital and learned Societies of Vienna began this week. The new Professor of Midwifery and Gynæcology, Breisky, gave his inaugural address on the 18th inst. Privat-docent Pawlik will teach Gynæcology in place of Professor Bandl; and Dr. Maydl, lately assistant to Professor Albert, will teach Surgery at the Vienna Poliklinik, in the room of Professor Woelflers.

WE regret to have to record the death, on the 7th inst. at Newport, Isle of Wight, of Mr. Henry Waterworth, F.R.C.S.Eng., at the age of seventy-eight. Mr. Waterworth was Justice of the Peace for the borough, of which in 1859 he was elected alderman. For many years he held a commission as surgeon in the Isle of Wight militia.

A CASE in Northwich having been reported in which cheese-making was being carried on in a room occupied by a patient suffering from scarlet fever, the Rural Sanitary Authority have passed a bye-law, under the Milk-shops and Dairies Regulation Act, making compulsory the notification of infectious disease.

AN order has been issued in Lower Austria forbidding manufacturers and tradesmen to sell nickel-plated vessels for cooking. It is stated that vinegar and other substances dissolve nickel, and that this in doses of the seventh of a grain produces vomiting, and is generally more poisonous than copper.

IN reply to a request on the part of the Sanitary Assurance Association, Dr. Farquharson, M.P., has consented to bring in again next session the Sanitary Registration of Buildings Bill. In this action Dr. Farquharson will have the co-operation of the members for South Manchester, Central Hackney, and Glasgow.

AT a meeting of the Driffield Rural Sanitary Authority last week, it was stated that scarcely one out of thirty villages in the Union had escaped an attack of measles. The disease seems to have spread by the Sunday schools, which remained open while most of the day schools were closed.

SIR GUYER HUNTER has been elected a member of the London School Board, to represent Westminster, in place of the late Mr. James Ross.

DR. W. H. DICKINSON has been elected Hon. Fellow of Gonville and Caius College, Cambridge.

FIFTEENTH ANNUAL REPORT OF THE LOCAL GOVERNMENT BOARD.

THIS report deals at more or less length with all the multitudinous matters which come within the jurisdiction of the Local Government Board; Poor-law questions taking, as usually, precedence. During the parochial year 1884-85 the mean number of paupers of all classes was smaller, in proportion to the population, than in any previous parochial year for which statistics are available; but the mean number of adult able-bodied paupers bore the same proportion to the estimated population as in the preceding year. The expenditure incurred in this respect represented an average charge of six shillings and threepence per head on the estimated population, and in only five of the past twenty years has this charge been less. The largest increase in expenditure during the year took place in Durham, owing to the maintained depression in the Cleveland and Durham coal and iron trades, and in shipbuilding on the Tyne, the Tees, and the Wear. There is a steady increase in the number of lunatics who are relieved at the cost of the

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poor-rates, the number on Jan. 1st, 1885, being 69,700, as compared with 54,571 on the corresponding day in 1875. In the metropolis the adjusted cost of relief has risen from a little over a million and a half in 1875, to nearly two millions and a half in 1885; but owing to the increase in the rateable value there has been no corresponding increase in the rate in the £ required to provide such expenditure. Referring to the action of the Metropolitan Asylums Board during the small-pox epidemic of 1884-85, the report speaks of the manner in which the removal of patients to the hospital-ships at Long Reach has been perfected, and it is stated that of the many thousands of patients conveyed down the river at all seasons of the year, no instance has been discovered in which the journey has appeared to affect the patient prejudicially. So, also, as to the camp established on the Gore Farm Estate, it is said that the treatment of convalescent patients under canvas during the winter presented but few difficulties, although wooden huts afford better protection against storms and are on other grounds to be preferred.

Turning next to the subject of Local Government and Public Health, we find that since the constitution of the Board in 1871 nearly thirty-four millions and a half have been raised by way of loan with the sanction of the Board, twenty-nine millions going to urban districts, two millions and a quarter to rural districts, the same amount to improvements under the Artisans' Dwellings Acts, and nearly a million to joint boards for sewerage and hospital purposes. But, in addition to these amounts, sanitary authorities have since 1873 raised nearly forty-two millions and a quarter by local Acts without any need for sanction by the Board. In 1146 districts medical officers of health have been so appointed as to secure repayment from the parliamentary grant of a moiety of the salaries; and in 1052 districts a similar arrangement holds good as to the inspectors of nuisances; the sums so paid out of the grant amounting in the year ending March 25th, 1885, to £71,422.

Passing over the record of a multitude of matters with which the Board have concern, we come to the subject of defaulting authorities, and we find that, notwithstanding all that has passed, Cheshunt has managed, by its promises and by entering upon proposals which the central authority could not approve of, to keep its district without a proper system of sewerage up to the present time. A new proposal is now under consideration. Other authorities have either submitted proper proposals, or have taken definite action; and on the whole substantial benefit appears to result from such action as the Board are empowered to take under Section 299 of the Public Health Act. The state of the river Lea still remains very unsatisfactory. At first, a loan of £13,360 was sanctioned, and this not being sufficient, it was decided, after local inquiry, to sanction a further expenditure of £2000; but proper progress was still wanting, and recently the Tottenham Local Board, whose sewage outfall works are mainly at fault, decided to ask for a further sum of £7740 for the construction of additional precipitating tanks. A Bill, entitled the Lea River Purification Bill, was deposited last December to deal with the subject.

In dealing with the Sale of Food and Drugs Act, 1875, the report states that the number of analyses in 1885 was 23,230, or about 300 more than in 1884; but this only amounts to one sample analysed for every 1184 persons in England and Wales. In the counties of Berkshire and Montgomery no samples were submitted, and the proportion differs widely in different portions of the kingdom, and even of the metropolis. Of the articles submitted to analysis, 13·2 per cent. were found adulterated; the highest rates being—spirits, 23·1; butter, 18·9; coffee, 16·4; mustard, 15·4; and milk, 14·7. This result is contrasted in the report with that which was obtained by THE LANCET Commission in 1854-56, when considerably more than half the samples analysed were reported against. In 1875 the rate was 19·2, and the average for the five years 1877-81 was 16·2. The returns for 1885 may therefore be viewed with a certain amount of satisfaction. A substantial improvement is also noted as regards milk; but it may well be added that it is still highly unsatisfactory to find that even now more than one-seventh of the samples fail to reach the standards of genuineness usually adopted by analysts, and this the more so because it is known that these standards are low to meet the case of extremely poor but natural milk, which it is so difficult to distinguish from watered milk. As regards butter, it is noteworthy that the sale of "butterine" is steadily on the increase. There is no reason to believe it to be injurious to health, but when sold as butter it is a fraud and an injury to the dairy trade, which will doubtless before long attract some parliamentary attention. Of 447 samples of drugs, 13 per cent. were reported against; nitrous ether being often found to be below the proper strength. An interesting inquiry was made by Dr. Seaton, medical officer of health for Chelsea. During its course 50 prescriptions were sent to various druggists and stores, and in 17 of them there was an error of more than 10 per cent. in the quantity of the chief drug ordered; in 8 cases the error exceeded 20 per cent. In the case of mercury and hyoscyamus pills, the quantity ordered was exceeded by no less than 29 per cent. In this case imperfect mixing was probably the cause of the error, but others were evidently the result of negligence. The subject is one of grave importance, and it is to be hoped that further inquiry into it will be made. Other matters in the report must stand over for further comment.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns 5617 births and 3287 deaths were registered during the week ending Oct. 16th. The annual death-rate in these towns, which had declined in the preceding five weeks from 22·6 to 19·3, further fell last week to 18·9. During the thirteen weeks of last quarter the death-rate in these towns averaged 20·4 per 1000, and was 0·8 below the mean rate in the corresponding periods of the ten years 1876-85. The lowest rates in these towns last week were 13·9 in Bristol, 14·2 in Birkenhead, 16·0 in London, and 16·6 in Brighton. The rates in the other towns ranged upwards to 25·9 in Hull, 26·1 in Wolverhampton, 27·3 in Blackburn, and 34·5 in Preston. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had declined in the preceding five weeks from 1202 to 578, further fell last week to 540; they included 271 from diarrhœa, 79 from "fever" (principally enteric), 75 from scarlet fever, 51 to measles, 34 to diphtheria, 30 to whooping-cough, and not one to small-pox. The lowest death-rates from these zymotic diseases were recorded last week in Brighton, Huddersfield, and London; and the highest in Salford, Hull, and Preston. Diarrhœa caused the highest death-rates in Blackburn, Preston, and Hull; "fever" in Norwich, Derby, Leeds, Halifax, Portsmouth, Plymouth, and Preston; scarlet fever in Salford, Liverpool, and Bradford; measles in Wolverhampton; and whooping-cough in Hull. The 34 deaths from diphtheria in the twenty-eight towns included 18 in London, 4 in Liverpool, 3 in Manchester, 2 in Birmingham, and 2 in Huddersfield. Small-pox caused no death in London and its outer ring, or in the twenty-seven large provincial towns. Only 2 cases of small-pox were under treatment on Saturday last in the metropolitan hospitals receiving cases of this disease. The deaths referred to diseases of the respiratory organs in London, which had increased in the preceding five weeks from 110 to 229, declined again last week to 223, and were 66 below the corrected average. The causes of 66, or 2·0 per cent., of the deaths in the twenty-eight towns last week were not certified, either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Leicester, Newcastle-upon-Tyne, Portsmouth, Preston, and in four other smaller towns. The largest proportion of uncertified deaths were registered in Birmingham, Liverpool, and Bolton.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 16·8, 18·3, and 19·8 per 1000 in the preceding three weeks, was 19·5 in the week ending Oct. 16th; this rate exceeded by 0·6 the mean rate during the same week in the twenty-eight English towns. The rates in the Scotch towns last week ranged from 11·1 in Greenock and 15·1 in Edinburgh, to 20·7 in Aberdeen and 23·8 in Glasgow. The 482 deaths in the eight towns last week showed a decline of 7 from the numbers in the previous week, and included 46 which were referred to diarrhœa, 21 to whooping-cough, 12 to scarlet fever, 6 to "fever" (typhus, enteric, or simple), 3 to diphtheria, and not one either to small-pox or measles; in all, 88 deaths resulted from these principal zymotic diseases, against 65 and 82 in the previous two weeks. These 88 deaths were

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equal to an annual rate of 3·4 per 1000, which was 0·3 above the mean rate from the same diseases in the twenty-eight English towns. The deaths attributed to diarrhœa, which had declined in the previous five weeks from 57 to 22, rose again last week to 46, of which 16 occurred in Glasgow, 9 in Edinburgh, 7 in Dundee, and 6 in Aberdeen. Diarrhœa mortality in the Scotch towns last week was somewhat higher than that which prevailed in the large English towns. The 21 fatal cases of whooping-cough showed a decline of 4 from the number in the previous week, and included 15 in Glasgow and 3 in Edinburgh. The 12 deaths from scarlet fever also showed a decline; 7 occurred in Glasgow and 3 in Aberdeen. The 6 deaths referred to "fever," corresponded with she number in the previous week, and included 2 in Glasgow and 2 in Edinburgh. Two of the 3 fatal cases of diphtheria occurred in Glasgow. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 65, 67, and 93 in the previous three weeks, further rose last week to 98, and exceeded the number in the corresponding week of last year by 5. The causes of 72, or nearly 15 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been 22·8 and 23·1 per 1000 in the preceding two weeks, declined again to 22·5 in the week ending Oct. 16th. During the thirteen weeks of last quarter the death-rate in the city averaged 22·1; the mean rate during the same period was 18·7 in London and 17·5 in Edinburgh. The 161 deaths in Dublin last week showed a decline of 4 from the number in the previous week, and included 11 which were referred to diarrhœa, 2 to scarlet fever, 2 to "fever" (typhus, enteric, or simple), 1 to whooping-cough, and not one either to small-pox, measles, or diphtheria. Thus the deaths resulting from the principal zymotic diseases, which had declined in the previous four weeks from 39 to 28, further fell last week to 16; they were equal to an annual rate of 2·4 per 1000, the rates from the same diseases last week being 2·0 in London and 2·9 in Edinburgh. The fatal cases of diarrhœa, which had decreased in the previous four weeks from 29 to 17, further declined last week to 11. The deaths referred to scarlet fever and "fever" also showed a decline from the numbers in the previous week. Two inquest cases and 2 deaths from violence were registered; and 46, or more than one-quarter of the deaths, were recorded in public institutions. The deaths both of infants and of elderly persons exceeded the numbers in the previous week. The causes of 22, or more than 14 per cent., of the deaths registered during the week were not certified.

THE SERVICES.

Sir Thomas Crawford, K.C.B., M.D., Director-General, Army Medical Department, has been appointed Honorary Surgeon to the Queen, vice Inspector-General A. Gordon, M.D., C.B., deceased.

WAR OFFICE.—Army Medical Staff: The undermentioned Surgeons to be Surgeons-Major:—Barnard William Wellings; Robert Smith, M.B.; Francis Wollaston Trevor, M.B.; Henry Archibald Fogerty, M.D.; Harvie Scott, M.B.; Robert Henry Gardner, M.B.; James McGann; James Powell; Sidney Herbert Carter, M.B.; William Allan May; George Deane Bourke; Hamilton Geo. Gardner, M.B.; and John Hoysted.

INDIA OFFICE.—The Queen has approved of the following promotion made by the Government in India:—Surgeon-Major Charles Peter Costello, of the Bengal Medical Establishment, to be Brigade Surgeon.

ADMIRALTY. — The following appointments have been made:—Deputy Inspector-General Belgrave Ninnis, to the Jamaica Hospital; Deputy Inspector-General Duncan Hilston, to Chatham Hospital; Staff Surgeon Charles C. Godding, to the *Britannia;* Staff Surgeon Alexander Flood, to the *Scout;* Surgeon J. T. W. S. Kellard, to the *Shannon;* Surgeon J. J. Walsh, to the *Bann;* Surgeon Alfred H. Miller, to the Ascension Hospital; Surgeon John Dawson, to the *Wye;* Surgeon Ludlow T. Colthurst, to the *Royal Adelaide;* Surgeon Edward B. Townshend, to the *Pembroke*, additional; Surgeon Henry B. Beatty, to the *Duke of Wellington*, additional; Surgeon Alexander W. McLeod, to the *Seahorse*, additional; and Surgeon Michael Augustus Lyden to be Surgeon and Agent at Costello Bay and Spidal.

RIFLE VOLUNTEERS.—1st Cumberland: Acting Surgeon T. D. Sanderson resigns his appointment.

Correspondence.

"Audi alteram partem."

DIRECT REPRESENTATION OF THE PROFESSION ON THE GENERAL MEDICAL COUNCIL.

To the Editor of THE LANCET.

SIR,—In your issue of the 16th inst., under the above title, there is a short article containing statements which are not only inaccurate, but very misleading, and consequently likely to be injurious to our Glasgow candidate, Dr. Morton, and to these I desire to reply.

The statement is that an attempt is being made to secure three seats for three officials of the Faculty, and that the attempt ought not to succeed. Another statement is that there are two representative general practitioners in the field Dr. Morton, of course, not being one of the two, the inference being that he is not a general practitioner, but a something else. In the first place, I have to state, for the information of your readers, not only in Scotland, but in England as well, and especially for the information of the writer of the paragraph, that Dr. Fergus was not a representative of the Medical Faculty in Glasgow. He was not sent to the General Medical Council by the Fellows of the Faculty. To his credit be it said that, unsolicited by him, and unknown at the time to the corporation, he was nominated to the office which he now holds by the Crown. Dr. Fergus represents Her Majesty on the General Medical Council, not the Glasgow Faculty of Physicians and Surgeons. We have pleasure in admitting that the "smallest medical corporation in Scotland" has been highly honoured in having one of its Members or Fellows made a Crown representative. I may add, further, that Dr. Fergus is not now "an official" of the Faculty. He is simply an honoured private member. Our only representative is Dr. M'Vail, who has succeeded the late Dr. Scott Orr.

In the second place, I have to state that the movement to promote Dr. Morton to a seat in the General Medical Council has not arisen in the Faculty or amongst its Fellows. It has had its origin among the general practitioners of the city and suburbs. No one who knows anything of the profession in Glasgow and the west of Scotland will for a moment believe that Dr. Morton is being put forward by the Faculty to represent that corporation. It is not the official Fellows or Members more or less intimately connected with the University who are upon Dr. Morton's committee, giving him their hearty support. The committee now consists of between four and five hundred general practitioners, who desire to do Dr. Morton honour by electing him, as they hope to do, to be their representative in the Council. The Faculty of Physicians and Surgeons also wished to do Dr. Morton honour, and they at their last annual meeting unanimously elected him for a year as their president, and that, too, in spite of the fact that he was a candidate for a seat in the General Medical Council.

I may mention that the committee feel that Dr. Morton, well known in the profession, is one of themselves. We know that he has been all his professional life a general practitioner. It is therefore a mistake to say that there are only two representative general practitioners in the field. It would have been more accurate had it been stated that there were three.

I hope I may be permitted to add here that the committee consider Dr. Morton to be a man of firm and independent mind, who has risen from the ranks by his own unaided ability. While able to think for himself and to express his views with clearness and precision, he has a very practical business turn, and is not given to much speaking. Dr. Morton will, in our opinion, make a good representative, and we wish him success.

I am, Sir, yours truly,

JAS. DUNLOP, M.D.,
Chairman of Committee.

Glasgow, Oct. 18th, 1886.

*** We gladly insert Dr. Dunlop's letter, and are happy to agree with him in all his praise of Dr. Morton. But we are "of the same opinion still." To elect the President of one of the Scotch corporations, and that the least of them, will be to do that which is superfluous and to stultify the demand made by the great body of the profession for representation of the unofficial section of the profession. We are well aware that Dr. Fergus represents the Crown for Scotland in the

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Medical Council, and that he does so worthily. But our correspondent will not deny that he was lately President of the Faculty, and that the Faculty knows that it has in him a friend. Neither will he deny that Dr. M'Vail is an able and sufficient representative of the Faculty. Our contention is irresistible, that to put in its new President will be to throw away the seat and to stifle the free representation of Scotland. If such an attempt succeeds, we shall, however, blame not Dr. Morton, but the general practitioners of Scotland, who have two excellent alternatives, and who, for the first time, have a chance of showing what stuff they are made of when out of the shadow of schools and corporations.—ED. L.

To the Editor of THE LANCET.

SIR,—While in England practitioners generally seem to be alive to their interests in the election of their three members of the General Medical Council, we in Scotland (long-headed and sagacious though we get the credit of being) are in considerable danger of being thwarted and denied even the single representative we believed we had secured. Most certainly, if the successful candidate be intimately connected with any of the corporations or teaching bodies, the object of our struggles for direct representation during these past years will not have been attained—our end will for the time have been frustrated. Holding the opinion that the Scottish seat in the Council should be occupied by a general practitioner, Sir Douglas Maclagan has declined to be nominated as a candidate. There is no honour he himself would value which the profession in Scotland would not willingly pay Sir Douglas, but this compliment would have been so inapt and incongruous that I more than ever admire and respect him for the consideration and decision which have prompted him to act as he has done.

But surely, Sir, it would be a much more unsuitable appointment still if the President of the Faculty of Physicians and Surgeons of Glasgow were chosen for this seat. Dr. Morton holds this office, and therefore by his election that corporation would be doubly represented in the Council, and besides, Glasgow would absolutely gain two seats, the University at this time sending one of its own members. Personally, I have no doubt whatever that Dr. Morton would make an excellent representative, but it is absurd to speak of him as a *bond-fide* representative of the general practitioner. Questions are coming up which will affect the relative positions of the corporations, the profession, and the public, and it would be puerile to take for granted that on any test question the interests of the corporation would not be preferred by the president to the general interests. When we have it in our power, let us have a man of unprejudiced mind, whose concerns are ours, who from experience knows our difficulties and has the ability to give expression to our wants and wishes. We have such men in Dr. Bruce and Dr. Sinclair, both of whom are ready to undertake the representation on our behalf. For myself, I intend to vote for Dr. Bruce, on the ground that he is the senior, has had greater variety of practice, has longer taken a deep interest in medical politics and education, and is, in all respects, a typical representative of the general medical practitioner. But, in any case, let us not stultify ourselves by the choice of one not of ourselves.

I am, Sir, yours truly,

Oct. 1886. M.D. EDIN. IN GENERAL PRACTICE.

To the Editor of THE LANCET.

SIR,—There are a few very material circumstances connected with the formation and action of the Birmingham committee not mentioned in the joint letter of Dr. Carter and Mr. Ker, but which seem to me essential in order to enable your readers to judge how far its voice can have any claim to be considered the voice of the profession. In the first place it should be remembered that it was the refusal of the British Medical Association in public meeting assembled to adopt a resolution brought forward by Dr. Carter and Mr. Ker (and of which notice had been previously given), authorising the Council of the Association to select three names of gentlemen suitable for election, that "led to the summoning of the first small conference at Brighton." Next we have it on the authority of Dr. Strange, who presided at the Birmingham meeting, that out of 1100 circulars which had been sent out only about 300 had been responded to at the date of the meeting—a victory if you will, but one so uncommonly like a defeat that had the whole 300 met together he would have been a bold man who would have claimed for them the right to speak in the name of the medical profession of England and Wales. Instead of 300, however, thirty-five gentlemen met at Birmingham, and unanimously resolved—"That this meeting, fully impressed with the extreme importance of the present crisis, &c., deems it expedient to proceed at once to deliberate on the merits of the various candidates, and to solicit by requisition three fit and proper persons to undertake the office." No doubt the thirty-five felt themselves as competent as the 300 would have been to speak in the name of the profession, but somehow when the numbers present had dwindled down to fourteen, it was felt, I suppose, that a line must be drawn somewhere, and by a majority of 11 to 3 it was determined not to do what the 35 had resolved to do, but to take the opinion of the 300 by post-card, and that the three who received the highest number of votes should be the adopted candidates of the committee. Power was given to the chairman and secretaries to count the votes and declare the result, but no further power, according to the published reports. These three gentlemen, for each and all of whom personally I have the highest respect and regard, constitute, I presume, the sub-committee, in whose name the chairman, Dr. Strange, writes that they have resolved to substitute Dr. Glover, whose name stood fourth on the list, for Mr. Ernest Hart, who was third, though the number of those voting for each is not given. We are thus reduced in successive steps from 1100 to 300, from 300 to 35, from 35 to 14, from 14 to 3, and we are asked to accept the final decision of the three as the voice of the profession.

I am, Sir, your obedient servant,

October, 1886. H. NELSON HARDY.

THE IRISH BRANCH COUNCIL AND THE APPROACHING MEDICAL ELECTION.

To the Editor of THE LANCET.

SIR,—Some time since I wrote to you pointing out the dangerous powers allowed those councils in connexion with the approaching election, and suggesting as the only possible safeguard the presence of legal agents of each candidate at the scrutinies. My fears as to the competence (putting their *bona fides* for the moment out of the question) of the officers of these councils have been somewhat prematurely verified. A nomination paper was sent to me a few days since from the Irish Branch Council, which would have disqualified me had not a flaw in it been discovered just in time. This flaw escaped myself, but was detected by Dr. Doyle, of Mount-street, Dublin, to whose astuteness I desire to render public acknowledgment. I may as well tell English candidates that if the votes are counted in the dark no man will be safe.

I am, Sir, yours truly,

Oct. 12th, 1886. THOMAS LAFFAN.

TREATMENT BY MASSAGE.

To the Editor of THE LANCET.

SIR,—I have read with interest and some amusement the correspondence which has been going on in your columns on the above subject. When some years ago I first attempted the systematic treatment of certain forms of functional neurosis on the lines laid down by Dr. Weir Mitchell, there was, so far as I knew, no such thing as a "masseuse" in this country. I then had to instruct a nurse, with much trouble, from the few and imperfect descriptions of the process I could lay my hands on, but with results that were thoroughly satisfactory. She taught another, in a few lessons only, and from this origin I have obtained a staff of competent masseuses sufficient for my own purposes. When I published in 1881 my original paper on the systematic treatment of a class of disease hitherto practically abandoned as hopeless, I had to undergo an amount of obloquy which was quite surprising. Some of my professional friends did not hesitate to tell me that I had descended to the level of a charlatan, and other criticisms were made on me which would have been amusing had they not been painful. Fortunately, I held the theory that the first duty of a

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physician is to cure his patient, and that it does not matter what means he employs for this purpose, provided they are such as he can adopt with clean hands and a clear conscience. Now, *nous avons changé tout cela*; no newspaper appears without half-a-dozen advertisements about massage, schools for massage have been started, every hospital has one or two nurses or sisters who practise it, and massage threatens to become the prevailing medical fashion, if not the prevailing medical folly, of the day. No morning passes but some deserving woman leaves her card at my door with "Professional Masseuse" beautifully printed upon it; and a new "El Dorado" seems to have been discovered for women in want of employment. Large works have been written on massage, and a perfectly simple matter has been rendered complex by such terms as "pétrissage," "effleurage," and the like—terms which I had never heard of when I first worked at this subject, and of which I am sure not one of the nurses I employ to this day understands the meaning. Lastly, we are now told that it takes two years at least for a woman to become a competent masseuse. Now, I have taken some pains to ascertain how many lessons the women who work for me have had, and I find that none of them ever had more than a half-a-dozen, although, of course, they have vastly improved by subsequent practice; and I will venture to say that no one who cannot learn the knack of massage sufficiently to start with in six lessons will learn it in two years or twenty, since the thing requires a natural aptitude which very few possess. The plain truth, stripped of verbiage, is, that massage is nothing more than a vicarious way of giving exercise to patients who cannot take it themselves, and if the operator does not produce sufficient waste of tissue to enable the patient (possibly bedridden for years) to eat and assimilate without trouble as much food as I choose to order, and steadily to gain in nutrition, she knows very well that I consider the fault hers, and that she will not be allowed to continue her work. Whether this is done by "pétrissage," or "effleurage," or anything else, is a matter of indifference to me. "By their fruits ye shall know them" is a text thoroughly applicable to this subject, and practically I have myself never seen massage employed and do not care how it is done; and yet I will venture to say that the results I have obtained are quite equal to those secured by anyone else.

That massage is capable of doing much good in conditions other than those for which I have employed it is perfectly likely; personally, I have only used it in the regular and systematic treatment of grave functional neuroses, being anxious to avoid the imputation of riding a hobby too hard. Moreover, I have taken pains to show that this is not by any means the most important agent, the striking results being quite as much, if not more, due to removal from unwholesome domestic surroundings, and to personal moral influence brought to bear on the patient. And yet, perhaps because massage is a striking thing, people will insist on calling this a massage treatment, whereas massage is a mere remedial agent, and only one out of many brought to bear on the case. If I may judge by numerous instances I have lately seen, massage now runs the risk of being employed in cases for which it is perfectly unsuitable, and in which it can do nothing but harm. As a means of depriving rest, voluntary or enforced, of its evils it is invaluable; as a panacea for all the ills which flesh is heir to, like all such panaceæ, it is sure to lead to failure and disappointment. As I feel that I am unwittingly in some degree responsible for this epidemic of massage, perhaps you will permit me to sound this note of warning.

I am, Sir, yours &c.,

W. S. PLAYFAIR.

George-street, Hanover-square, W., Oct. 16th, 1886.

To the Editor of THE LANCET.

SIR,—I should be content to leave Dr. Murrell's remarks in THE LANCET of October 16th unanswered were they not calculated, under cover of a rebuke addressed to myself, to confuse a very simple issue.

In my letter to you I did not, as Dr. Murrell supposes, confound massage with the Weir Mitchell treatment, but, on the contrary, alluded to the refinements which had been imported from the Continent, and quoted Dr. Playfair's opinion that "massage had been made complex by the absurd way it had been written on abroad, and the divisions and names given in." Had it been to my purpose, I could, with but little additional trouble, have got together a number of foreign names, "Philippeaux, Gautier, Estradère, and a host of others." But it so happens (and herein is the gist of the whole matter) that, in spite of this host, there is no other form of massage whatever which has taken root or is commonly practised in this country, save and except that which Dr. Weir Mitchell describes. For years that method, and that method only, has been largely employed in our hospitals and nursing establishments, and always under the name of massage—not out of any love of that word or its associations, but to avoid confusion with the old and useless "medical rubbing." And so, when it was said in THE LANCET of Oct. 2nd that the art of massage required a long education, I venture to think that there was no reader of your journal who did not suppose that reference was made to a process which is now becoming familiar, and of the good effects of which in suitable cases there is unquestionable evidence. To say of this process that it needed two years to learn seemed to me a misleading and injurious statement, to which the wide circulation of THE LANCET would give general currency. Hence my letter in which I ventured to suggest that weeks should be substituted for years.

As for "the *true* massage, as practised by Professor von Mosengeil, and others on the Continent," I should never presume to meddle with it; and I feel some confidence that any statement in regard to that practice, whether as to the time it takes to learn or the class of patients it seeks to cure, would be received with but languid interest in Great Britain, where there are so few medical men who feel themselves qualified by their own observation either to confirm or deny any assertion whatever upon the subject.

Let me add that I have no wish to interpose between Dr. Murrell and his readers. In writing on behalf of those I am bound to defend—my own hospital sisters and nurses—it was to the statement of THE LANCET that I took exception, avoiding all reference to a book I have neither read nor seen, and which it is not for me to criticise.

I am, Sir, your obedient servant,

October, 1886. OCTAVIUS STURGES.

AN IODISED HYDROGEN WATER FOR USE IN THE URIC ACID DIATHESIS.

To the Editor of THE LANCET.

SIR,—The need of a simple water which may be taken freely by persons suffering from uric acid accumulations, with the effect of washing out the acid and its salts, has been long felt. For myself, I believe the value of "waters," generally, depends much more on their capacity for taking up and washing out excrementitious matter while passing through the blood and the extra-vascular fluids of the organism than upon the specific effect of anything they introduce into the system. I have now to suggest that an excellent and potable water may be made by very slightly iodising distilled water, or dissolving in it a minute quantity of hydriodic acid—not enough of either to render the taste disagreeable,—and then passing well-washed hydrogen gas through it. Water will only dissolve about 2 per cent., by measure, of hydrogen gas, but this is by no means an inconsiderable proportion as compared with that existing in many of the natural waters of high repute; and beyond question it greatly increases the capacity of the water for holding solids in solution. I venture to think the profession will find the use of a simple non-effervescing water of this description of great value, and it can readily be prepared by any competent chemist. It is the measure of the hydrogen, and not the weight, which must by regarded; 100 cubic inches only weigh 2·25 grains. I am, Sir, yours obediently,

Hanover-square, Oct. 16th, 1886. J. MORTIMER GRANVILLE.

"MEDICAL MEN AND DEATH CERTIFICATION."

To the Editor of THE LANCET.

SIR,—An annotation appears in your issue of October 16th commenting on an inquest which was held by Mr. Braxton Hicks on October 2nd, which is founded on a misconception of the real facts of the case. In justice to the parties concerned in the case, I must appeal to you as an impartial medical tribunal to insert the following correction. The deceased, George Wadley, who was well known to me, was seen and prescribed for by me on September 27th. On the

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29th I was sent for to see him, and my assistant, Mr. Davenport, went. Seeing that the patient was very bad, he came down to Dulwich, where I was at the time, to ask me to see him. During his absence, a neighbouring practitioner was called in, and found the patient dying. This practitioner felt it incumbent on him to write to the registrar and state that deceased had not been attended by a qualified man, and that his friends were dissatisfied at the treatment. All this was disproved at the inquest. On Friday evening, Oct. 15th, a message came to my surgery in Vincent-square for me to go and see a baby which had been born early that morning, and which had since died. On inquiry, I found that the mother of this child had been attended by a student of the Westminster Hospital, who lives in Vincent-square, and that the child had died without having been attended by a qualified man. I should like to ask, through the medium of your columns—1. If Mr. Bond, the assistant-surgeon of the Westminster Hospital, is still of the same opinion that he was at the inquest on George Wadley—viz., that "students never, under any circumstances, do the work of qualified men either in or out of hospital"? 2. If an inquest is necessary in the public interest on a man who has been seen by a qualified practitioner within two days of his death, is it not still more necessary in the case of a new-born baby which has not been seen by a qualified man at all? 3. Which is the most competent to act as attendant on the sick and lying-in—a man who has had sixteen years' practical experience of the profession, and has passed the Final Examination of the Royal College of Surgeons of England in medicine and surgery, or a student who has in all probability passed nothing but the Primary?

I am, Sir, your obedient servant,

WALTER H. H. DAY, M.B. Toronto, &c.,

East Dulwich and Vincent-sq., S.W., Oct. 1886.

HOSPITAL FOR WOMEN, LIVERPOOL.

To the Editor of THE LANCET.

SIR,—The opinion expressed by Sir Spencer Wells on this institution is amazing. He says that to subject 111 patients out of 347 (or 32 per cent) to abdominal section "is so shocking as to be almost incredible." But I find from the records of the London Samaritan Hospital that Sir Spencer Wells used to subject 40 per cent. of his patients to abdominal section; and from the enormous numbers of "tappings" (with a high mortality) this 40 per cent ought to have been much higher.—I am, Sir, yours &c.,

October, 1886. LAWSON TAIT.

"FRACTURE THROUGH THE UPPER EPIPHYSIAL LINE OF THE RADIUS."

To the Editor of THE LANCET.

SIR,—In THE LANCET of October 2nd a case is reported in which the above lesion is said to have occurred. May I be permitted, through the medium of your columns, to inquire on what symptoms or physical signs the diagnosis was founded? The occurrence of such a rare lesion requires to be substantiated by further evidence than is brought forward by Mr. Foulerton. The facts before us—viz., the age of the patient (nineteen months), the nature of the accident (forcible traction in the long axis of the forearm), and the only recorded symptom (the arm hanging helplessly)—tend to establish the diagnosis of subluxation of the orbicular ligament, a condition which has been described by Mr. J. Hutchinson, jun. ("Annals of Surgery," Aug. 1885), as the ordinary solution of those obscure injuries of the elbow so commonly met with in young children, and which are usually the result of an accident such as that narrated by Mr. Foulerton. In such cases spurious crepitus is often elicited by alternate pronatory and supinatory movements of the radius, which might lead one to suspect fracture (or separation of epiphysis) were it not for the fact that by careful manipulation the head of the radius may in most cases be ascertained to rotate with the shaft. Even when this rotation is not apparent, the free mobility of the joint and speedy relief from pain which soon follow reduction of the displacement, together with the fact that in a few days no symptom of the injury remains, forbid us to entertain the idea of fracture. Fracture of the neck of the radius is, to say the least of it, very rare (a case is reported in THE LANCET of March 21st, 1885), and can only be conceived as occurring under certain conditions of direct violence. It is still more difficult to conceive the mechanism by which separation of the upper epiphysis could be effected (Treves's "Surgical Applied Anatomy," p. 225), especially in such an accident as is stated to have produced it, unless, perchance, the line of union of epiphysis with the shaft were, at the time of the accident, the seat of disease.

I remain, Sir, yours truly,

J. W. BATTERHAM, M.B., F.R.C.S.

St. Leonards, Oct. 2nd, 1886.

MANCHESTER.

(From our own Correspondent.)

DIRECT REPRESENTATION IN THE GENERAL COUNCIL.

ALTHOUGH no such vigorous and organised steps have been taken here in connexion with the approaching elections to the Medical Council as at some other places, the subject has nevertheless received some attention, not merely by individual members of the profession, but to some extent by the profession collectively. A meeting was held last week at the Town Hall under the presidency of Dr. Walmsley, at which there was a good attendance, more especially of the general practitioners of the district, the representatives of the higher ranks of the profession, such as the staff of the infirmary and the teachers in the College, taking but little active part in it. The object of the meeting was to discuss the claims of Dr. Dolan, of Halifax, as a candidate for election. Dr. Dolan laid his views of medical politics before the meeting, and, other gentlemen having spoken, it was resolved to support the candidature of Dr. Dolan as a fit and proper person to represent the general practitioners in the Council.

THE NEW SESSION.

Although nominally no introductory address was delivered at the opening of the medical department for the present session, practically the students have had more than one such address; for, in addition to the speech-making at the *soirée* reported in this column, Dr. Stirling, in opening the class of Physiology, gave a very interesting lecture of a more or less general character. He also stated that arrangements have been made for the delivery of a course of physiological lectures, more especially in relation to health, under the auspices of the Combe trustees, which will be free to all students of the College.

OUR MUNICIPAL ELECTIONS

are beginning to attract some attention now, and it is rumoured that amongst the possible aspirants to municipal honours may be one of our leading medical men—one, too, who has taken much practical interest in matters relating to sanitation and other measures for improving the health and lives of the masses of the people. It is now some years since a member of the medical profession had a seat upon the City Council, and one who can devote the necessary time to the work will find ample scope for his powers, and will be able to render much assistance to such active sanitarians as Mr. Councillor Southern and others who, like him, are striving to educate the poorer classes in the elementary principles of hygiene and health. A lecture, lately delivered by Mr. Southern under the auspices of the Ancoats Recreation Committee, is a commendable effort in this direction.

WORKHOUSE DIETARIES.

Amongst other public utterances recently delivered by gentlemen holding public office, may be mentioned a paper read by Dr. Rhodes, of the Chorlton Board of Guardians, at the late Poor-law Conference held in Liverpool (presided over by the Right Hon. J. T. Hibbert) upon workhouse dietaries, in which he showed the anomalies at present existing, and strongly urged a more uniform character in the diets of our different unions. Another paper by Mr. Rorke, of the Manchester Board of Guardians, upon the abuse of lying-in wards and lock wards in workhouse infirmaries, deserves attention by all members of the profession who take an interest in the administration of our Poor-law system.

AN UNNATURAL MOTHER.

Visitors to the Weirtz Gallery at Brussels will remember, among the weird and strange creations of that artist's

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brain, a horrible picture of a woman sitting over a fire and cutting a young infant up into pieces; what seems almost a realisation of this in every-day life appears to have taken place in Ancoats, one of the poor and crowded parts of the city. A woman was taken to the Ancoats Hospital who from her condition was suspected to have been recently delivered of a child, and upon search being made at her house, the charred remains of a new-born infant were discovered in the fireplace.

Manchester, Oct. 19th.

EDINBURGH.

(*From our own Correspondent.*)

THE LATE DR. DUNSMURE.

EDINBURGH and its Medical School have sustained a great loss in the death of Dr. Dunsmure, who has been for many years a well-known figure in the city and a leading and honoured member of its medical circles. Throughout his long professional career, which dates from 1835, when he graduated in the University and in the College of Surgeons of Edinburgh, Dr. Dunsmure has held a series of important posts in connexion with the Edinburgh School. Prior to his graduation he had been apprenticed to the celebrated Mr. Liston, and had been closely associated with and carefully trained by that surgeon; and upon obtaining his degree he held consecutively important posts in the Royal Infirmary under the leading teachers of that day. After a period of study on the Continent, he returned to Edinburgh as assistant to Lizars, and subsequently became surgeon to the infirmary. This appointment was held by him till 1856, when he resigned the office in which he had long and arduously laboured, receiving upon his resignation the post of consulting surgeon to the infirmary, a post which he occupied up to the time of his death. In 1866-67 he was president of the Royal College of Surgeons of Edinburgh, for many years he was on the examining board of that College, and latterly he was examiner in Clinical Surgery in the University. He was a Fellow of the Royal Society of Edinburgh, and was connected with many other scientific bodies. His contributions to medical literature are for the most part papers dealing with practical questions in surgical treatment, the outcome of his extensive experience as a hospital surgeon and successful practitioner. Dr. Dunsmure was remarkably active physically as well as mentally; he was a member of Her Majesty's body-guard of Archers, and an enthusiastic and successful bowman, securing the Queen's prize at three of the annual archery competitions. Dr. Dunsmure was warmly interested in philanthropic efforts, and in questions affecting the welfare of the community at large. His death will be mourned by a much wider circle than that of his professional brethren and the large *clientèle* of patients, amongst whom he enjoyed the greatest popularity.

THE WINTER SESSION.

The winter session of the University was opened on Tuesday, the 19th, by Sir William Muir, Principal of the University, who delivered the customary inaugural address. In reviewing the chief events of the academic year just completed, he mentioned the increase which has steadily and continuously taken place in the number of students, and which this year has raised the total to 3563, the increase being chiefly in the Faculties of Arts and Medicine. He was in a position to announce publicly, what has for some time been a matter of more or less confident rumour, that, through the munificence of a fellow-citizen, the University buildings are shortly to be completed, and a hall provided for graduation and other University ceremonials. After alluding to the new degrees conferred by the University in Music, Agriculture, and Theory of Education, Sir William gave his hearers sound and practical advice as to the conduct of their studies, and wished them all success in the session thus inaugurated.

THE LORD-RECTORSHIP.

Owing to the withdrawal of Professor Freeman's candidature, the contest for the Lord-Rectorship will be fought out on party grounds, as has been the case in many former elections. The electorate consists of all students matriculated in the University at the date of the election; and the candidates now in the field are Sir Lyon Playfair (Liberal) and Lord Iddesleigh, the present Lord-Rector (Conservative). Party feeling is already running high amongst the undergraduates, although the polling will not take place for some weeks.

THE POST-GRADUATE COURSE.

Prior to the conclusion of this series of demonstrations a meeting of the graduates was convened, and a resolution was unanimously adopted thanking those who had conducted the classes for the care and trouble they had taken. A copy of the resolution was forwarded to each of the lecturers who took part in the course.

Edinburgh, Oct. 20th.

ABERDEEN.

(*From our own Correspondent.*)

THE UNIVERSITY.

AT a meeting of the General Council of the Aberdeen University, held on the 13th inst., the following motion was proposed by Professor Struthers, and carried unanimously: "That the council respectfully represent to the University Court the importance of the court using its influence (1) to obtain from the Government without delay a special grant for the extension of the buildings of the University; and (2) to secure that the Universities (Scotland) Bill, which the Government have announced their intention of introducing into Parliament in the approaching session, do not contain those parts of the Bill (especially Clauses 23 and 24) which implied, or rendered possible under the Bill, the termination of the connexion of the universities with the State." Some time ago the Senatus had under consideration the grouping of subjects in the "professional" examinations, and it was resolved (Professors Struthers and Ogston dissenting) to ask the University Court to sanction the following changes:—"(1) To have only one examination in Anatomy (instead of two as at present), and that at the end of the second winter session; (2) to transfer Surgery from the second to the final examination; and (3) to make Pathology one of the subjects in the 'second professional.' The University Court to sanction the following changes:—(1) To have only one examination in Anatomy (instead of two as at present), and to hold it at the end of the second winter session; (2) to transfer Surgery from the second to the final examination; and (3) Pathology to form one of the group of subjects in the second." If these changes are carried out Dr. Ogston will suffer a considerable financial loss for the first year after they come in force, and it is said that he intends claiming compensation from the University funds. This is a matter that is likely to give the University authorities a good deal of trouble. The winter session opens to-morrow (Wednesday). The preliminary examinations began on Monday, and are being continued to-day; there are 120 candidates. The number of bursaries for medical students is, thanks to the persistency with which Dr. Struthers keeps the subject before the public, slowly but satisfactorily increasing. A sum of £500 has just been left to the Aberdeen Medico-Chirurgical Society to found a bursary or bursaries "to be given to students of medicine showing the greatest efficiency." The conditions upon which the bursary is to be awarded are vague, but details are left to the Society to settle.

DIRECT REPRESENTATION ON THE MEDICAL COUNCIL.

At a special meeting of the Medico-Chirurgical Society called to consider what steps, if any, should be taken to procure a suitable representative on the Medical Council, the following resolutions were unanimously agreed to:—"1. The Society views with satisfaction that the long-urged claim of the general body of the profession to be represented directly on the Medical Council has at last been granted by the Medical Act of 1886. 2. In view of the approaching election of a direct representative for Scotland on the Medical Council, the Society is strongly of opinion that, in view of the very full representation already accorded to the medical and surgical corporations and the universities, the direct representative for Scotland ought to be one who is unconnected with the governing body of any of the corporations, or with the professoriate of any of the universities." At the same time the members of the Society expressed themselves as strongly in favour of the candidature of Dr. Bruce of Dingwall, who will receive the almost unanimous support

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of the profession in and north of Aberdeen. Dr. Sinclair of Dundee is carrying on an active canvass through his large and energetic committee, and it is said that he and Dr. Bruce have come to an understanding that when it can be ascertained which of the two is to receive the greater number of votes, the other will retire in his favour. This arrangement meets with the approval of their supporters, and thus it is expected to defeat Dr. Morton of Glasgow, whose coming forward is resented by the general practitioners because of his connexion with the corporations in Glasgow, which are already represented on the Council.

HEALTH OF THE CITY.

The medical officer's report for last month shows that the death-rate was equal to the annual rate of 18·22 per 1000, while for September of last year it was only 14·2 per 1000. Scarlet fever has become epidemic, so much so that it was found necessary to appoint an extra assistant to the sanitary inspector. During the month 107 cases of scarlet fever were reported, 10 cases of typhoid fever, and a considerable number of cases of measles. There are more than 80 patients in the city hospital, almost all suffering from scarlet fever. The committee have spent £423 in providing for the better heating of the wards, hot water being circulated throughout all the pavilions of the hospital. They have also resolved to procure a Washington Lyon's patent disinfecting machine, which is estimated to cost about £300.

Aberdeen, Oct. 19th.

GLASGOW.

(From our own Correspondent.)

PURIFICATION OF THE RIVER CLYDE.

THE perennial Clyde purification question was discussed at a public meeting in Glasgow a short time ago. On this occasion the question was raised and the meeting called together at the instance of a non-official sanitary reformer who has taken the river Clyde under his special care. After a lively interchange of views, those present at the meeting negatived a proposal to the effect that "an association be formed to promote a Bill in next session of Parliament to authorise the formation of a board or boards having power to construct the necessary works," and declined to take the matter out of the hands of the Town Council, under whose consideration it has been for many years. This decision reflects pretty accurately the feeling of the citizens of Glasgow. Doubtless the state of the river is exceedingly bad; indeed, it could scarcely be much worse. For miles it is little better than a long open sewer, the contents of which, especially when simmering under a summer sun or when stirred up by the paddles or propeller of a passing steamer, give forth a most offensive odour. But this offence to the nostrils seems to be about the worst that can be said of the nuisance. There is nothing to show that it has at any time had any evil effect on the health of the city in general, or on that of the riverside population in particular. The fact seems to be that such gases as are evolved are dangerous only when pent up in sewers in such a way as to gain entrance into dwelling-houses, but that as soon as they reach the open air and are dissipated by the free winds of heaven they become harmless—partly perhaps from mere dilution, more probably from oxidation. Notwithstanding all this, the filthy condition of the Clyde is a reproach to the city, and perhaps the resolution adopted at the recent public meeting, urging the Council to push the matter on, and to make representations to the present Government concerning it, may lead to the adoption of more energetic measures, and the bringing about of an improvement in the state of the river. Many schemes for effecting this end have been put before the public from time to time, committees have discussed the question, reports have been published, and so on; but the city has always shrunk from resolutely dealing with the matter—partly from the feeling that, after all, the urgency is not so very great, as danger to health has not been demonstrated; partly on account of the vast expense—one scheme considered in 1866 by Messrs. Bateman and Bazalgette involved the construction of intercepting sewers to carry the sewage to some point on the coast and the expenditure of £3,000,000; partly on account of the reluctance of many landed proprietors to countenance any such great undertaking, and the refusal of most of the burghs concerned in the pollution of the river to co-operate with Glasgow in removing the nuisance. Plainly the affair is not one in which Glasgow can embark alone or lightly, and energetic Government intervention in the case of the Clyde and several other rivers in Britain may be required.

Scarlet fever is still very prevalent in Glasgow. Of the 411 cases in Belvidere Fever Hospital at the present time, no fewer than 315 are due to that disease. The death-rate for the past week was 24 per 1000 per annum.

IRELAND.

(From our own Correspondent.)

COLLEGE OF PHYSICIANS IN IRELAND.

AT the annual stated meeting of the College, held on St. Luke's day, the 18th inst., Dr. James Little was appointed President for the ensuing year. At the same meeting Dr. Aquilla Smith was, as usual, re-elected representative of the College on the General Medical Council. The following gentlemen were appointed members of the Committee of Management under the Conjoint Examination Scheme—viz., Drs. Lombe Atthill, Samuel Gordon, and T. W. Grimshaw. Dr. C. E. Fitzgerald and Dr. W. C. Neville were duly elected to the Fellowship of the College.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

Last week the following address was presented to the Lord-Lieutenant by the President and Council of this College:—"May it please your Excellency,—We, the President, Vice-President, and Councillors of the Royal College of Surgeons in Ireland, desire to approach your Excellency with the object of tendering you our heartfelt greetings upon your arrival in this country as the representative of our beloved and Most Gracious Queen, to whom we avail ourselves of this opportunity to present, through your Excellency, our respectful congratulations on the completion of the fiftieth year of her glorious reign. This College, founded more than one hundred years ago, with the object, as expressed in our Charter, 'of improving surgical education in this part of Her Majesty's dominions, thereby promoting the welfare of the nation at large, and of providing a sufficient number of properly educated surgeons, as well for the service of the public in general as for that of our army and navy,' has not neglected in the education of its pupils the sister branches of medicine, and has thereby secured on the part of its licentiates a complete knowledge of surgery, medicine, and midwifery. We feel ourselves justified in stating that from the foundation of the College up to the present moment, the authorities to whom the administration of its affairs has been from time to time entrusted have never relaxed their efforts faithfully and loyally to carry out these views. These principles have commended themselves to the favourable consideration of the Government, and have been embodied in the Medical Act of 1886, wherein it is provided that no person shall be registered under the Medical Acts unless he has passed a qualifying examination in medicine, surgery, and midwifery. In conclusion, we would fain hope that your Excellency would extend your favour to our institution, and by an early personal inspection satisfy yourself that, uninfluenced by sectarian or political bias, we steadily keep as the objects in view the advancement of the honour, dignity, and reputation of our profession and the promotion of the welfare of the public at large."

BARRINGTON'S HOSPITAL, LIMERICK.

A meeting of the governors was held last week for the purpose of considering the financial condition of this hospital. It appears that a debt of £885 is due, and after a considerable discussion it was resolved to appoint a committee to report as to the general condition and working of the institution.

HOSPITAL FOR INCURABLES.

On Monday last her Excellency the Marchioness of Londonderry visited this institution, the viceregal party being conducted over the entire hospital, where they spent a considerable time. The Marchioness, with thoughtful consideration, distributed to each inmate choice fruit and flowers, which had been previously sent in from the vice-regal gardens.

Dublin, Oct. 19th.

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PARIS.

(From our own Correspondent.)

THE FRENCH SURGICAL CONGRESS.

THE French Congress of Surgery inaugurated its second annual meeting last Monday. The president for the year is M. Ollier. After thanking the President of the Senate (M. Le Royer) and the Rector of the Academy of Paris, who represented the Minister of Public Instruction, on the platform, M. Ollier complimented the members on the flourishing condition of the young association, as shown by the large number of their adherents, both in France and abroad, and pointed out the advantage of a Congress, where the value of the work would not be lessened by the difficulties arising out of a diversity of languages. He concluded by insisting on the necessity of a division of labour in scientific medicine, but which, whilst creating specialities, should re-concentrate the work of all in co-operation. The Secretary-General (M. Pozzi) then gave an account of the financial situation of the Congress, which is most satisfactory. M. Reverdin of Geneva read the first communication, on the "After-effects of Extirpation of the Thyroid." In eleven cases observed by M. Augustus Reverdin and himself, the operation was followed by "cachexia strumipriva," or "operative myxœdema," in five instances. This agrees with the results published by Kocher, in which sixteen of eighteen and twenty-four of thirty patients subjected to thyrodectomy developed symptoms of myxœdema. It must be noted that Billroth, whose experience in the matter was very great, had never seen the so-called cachexia strumipriva, neither had Manz, nor Bardeleben. Bottini, in fifty-two cases, had not observed any of the kind. M. Reverdin alluded to the experiments of Horsley, which prove that myxœdema can be induced in the monkey by ablation of the thyroid, and concluded his paper as follows:—The symptoms consecutive to extirpation of the thyroid in man present the same general character as those known as myxœdema or pachydermic cachexia, and the term "operative myxœdema," as proposed in 1883, appears justified. The total extirpation of the thyroid in man is not invariably followed by myxœdema. Operative myxœdema presents several varieties, progressive—with and without remissions, and attenuated kinds capable of improvement or even cure, &c. Partial removal of the thyroid may be followed by myxœdema of an abortive form. M. Thiriar of Brussels quoted a number of cases showing the importance of a quantitative analysis of the urine in abdominal surgery. In tumours of a malignant nature the quantity of urea excreted in the twenty-four hours never reaches 12 grammes, whereas this amount is always exceeded when the growth is benign. M. Guyon discussed the indications and contra-indications of rapid lithotrity. "Large calculi make lithotrity difficult, as do also multiple calculi, or painful contraction of the bladder. But are these cases, without which the statistics of lithotrity would be irreproachable, successfully treated by cutting"? In the opinion of Professor Guyon the contra-indications of rapid lithotrity are to be looked for rather in the bladder itself than in the size or number of the calculi, and the chief object of the surgeon should be to secure perfect antisepsis.

Yesterday the proceedings of the Society opened by a discussion on the Nature, Pathology, and Treatment of Tetanus. M. Vaslin of Angers maintained that tetanus was a neurosis, and should be treated as such—above all, by isolation in a dark room—a method adopted for their patients with great success by veterinary practitioners. M. Vaslin advises coincidently the use of chloral "to saturation," and morphia until the cessation of convulsive spasms. M. Balestreri of Genoa also looks on tetanus as a neurosis, but does not agree with M. Vaslin as regards treatment. In seventeen cases collected by him and treated by chloral there were eleven deaths. Mr. Balestreri gives his preference to tartar emetic, and states that in three cases so treated by him recovery took place in each instance. The dose was progressive from five to eight grains a day. M. Thiriar is a supporter of the parasitical nature of tetanus, and spoke of a recent epidemic in the neighbourhood of Brussels. Professor Verneuil pointed out that tetanus was certainly infectious in the horse, and according to him in man also. The contagion from horse to man is also probable, for the following reasons:—1. It is a common thing to hear of men living in contact with horses suffering from tetanus, and dying of the disease. 2. Tetanus in man results oftenest from injuries caused by horses. 3. Horse-dealers, grooms, and stable-men are more often than others the subjects of this malady. 4. Wounds in contact with a soil contaminated by the dejections of horses are more often followed by tetanus than others. Dr. Blanc of Bombay, recognised the equine origin of tetanus, but did not think any solution of continuity necessary for the introduction of the poison. In India, as is the case in cholera, the poison is absorbed with water, and in the hot season, those who drink from the contaminated wells imbibe tetanus. As to remedies, some, as the bromide of potassium, are dangerous, others are useless. Rest and quiet, and perhaps a little chloral, are indicated. The Hindoo doctors pay great attention to the bowels and treat their cases with purgatives, and, it is said, successfully. M. Poncet of Lyons related a case of bone-grafting, which establishes the facts that the grafts may be taken with security from a healthy dead child. In this instance, the grafts were taken from a stillborn infant. M. Terrillon has met with torsion of the pedicle in four per cent. of his cases of ovariotomy. This may give rise to hæmorrhage in the parietes or in the cyst, œdema, or rupture of the cyst into the peritoneum. When the torsion is complete, the interference with the circulation may lead to mortification. What surgical treatment should be adopted? M. Terrillon thinks that ovariotomy should be hastened. The most acute peritonitis is no counter-indication, for it is precisely in this case that laparotomy and washing out the peritoneal cavity are most justifiable.

Paris, Oct. 19th.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted Members of the College on the 18th inst.:—

Barlow, Arthur Edward, M.B. Edin., Rothwell, Northampton.
Barrett, Ernest, L.S.A., Dulwich.
Bramwell, Hugh Ransom, M.B. Edin., Carrington, Notts.
Buchanan, John, M.D. Glas., Wigan.
Holroyd, George Abraham, L.K.Q.C.P.I., Scarborough.
Mollison, Crawford Henry, M.B. Melb., Melbourne.
Nash, Charles, L.S.A., Greenwich.
Röhrsmann, Matthias Christian, L.R.C.P.L., Sydney, N.S.W.
Sawell, Frank Leslie Pownall, L.S.A., Holland-park.
Stevenson, George, L.S.A., Edgware-road.
Wilson, Foden, Liverpool.
Wonteraz, George Justin, L.R.C.P. Lond., Torrington-square.

Admitted on the 19th inst.:—

Barrett, Sidney Edward, L.R.C.P. Lond., Stepney.
Blakeney, John Henry, L.R.C.P. Lond., St. Helier's, Jersey.
Braide, George Frederick William, M.D. Vict., Warrington.
Cole, John Martin Coates, L.K.Q.C.P.I., Peel, Isle of Man.
Fitz-Henry, George William, L.S.A., Forest-hill.
Gardner, Frank Gower, L.S.A., Bromsgrove.
Kent, Charles George, M.B. Melb., Melbourne.
Melland, Brian, L.S.A., Manchester.
Orton, Francis Joseph Johnson, L.S.A., Longford, near Coventry.
Pettingill, Alfred Ernest Albert, L.S.A., Great Yarmouth.
Roxburgh, David, M.B. Glasg., Douglas, Isle of Man.
Shields, Charles James, M.B. Melb., Melbourne.
Sibley, Walter Knowsley, L.S.A., Harley-street.
Wallace, David, M.B. Ed., Edinburgh.

Admitted on the 20th inst.:—

Ackland, William Robert, Exeter.
Ashley, John, Leeds.
Barling, Arthur Stanley, Leeds.
Blamey, John Henwood, Penryn.
Bradford, John Rose, Blomfield-road.
Bulstrode, Herbert Timbrell, Ipswich.
Cheale, Montague, Great Ormond-street.
Clarke, James Jackson, Lincoln.
Cosens, Charles Hyde Champion, Dudley.
Fitz Gerald, Gerald Eustace, Westbourne-park.
Glanville, Mark, South Kensington.
Green, Charles, Birmingham.
Kelly, Thomas William, Apperley-bridge.
Lawson, Hugh, Dorset-square.
Leigh, Randle, Liverpool.
Lys, Henry Grabham, Bere Regis, Dorset.
Martland, Thomas, Standish, near Wigan.
Moore, James, Jersey.
Pearse, Arthur William, L.R.C.P. Lond.
Roe, Henry Havilland, Poyntington, Somerset.
Seagrove, Herbert Aylward, Haverstock-hill.
Smith, Hugh, Bow-road.
Tucker, Robert Frank Wrentmore, Clifton, Bristol.

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Valpy, Charles Edward, Hampstead.
Way, Lewis, L.R.C.P. Lond.
Wickham, Onslow Arthur, Arundel-square.
Woolicombe, Walter Ley, L.R.C.P. Lond.

UNIVERSITY OF CAMBRIDGE.—At a congregation held on the 15th inst., the degree of M.B. was conferred on

Herbert Lund, Trinity.

ROYAL COLLEGE OF PHYSICIANS IN IRELAND.—The following office-bearers have been elected for the ensuing year:—President: James Little. Vice-President: J. M. Finny. Censors: J. H. Benson, J. M. Finny, S. M. MacSwiney, W. J. Smyly. Examiners in Midwifery: A. J. Horne, J. R. Kirkpatrick. Additional Examiners: G. F. Duffey, A. W. Foot, C. Nixon, J. M. Purser, W. G. Smith. Professor of Medical Jurisprudence: Robert Travers. Registrar: J. W. Moore. Treasurer: Aquilla Smith. Representative on the General Medical Council: A. Smith.

At the October examinations the following obtained the licences in Medicine and Midwifery of the College:—

MEDICINE.—Francis J. Cruise, Benjamin Adams Daniell, Herbert Davison, Kildare Dixon Dobbs, George A. Holroyd, Robert L. Island, Francis P. James, John Lagan, Victor E. Ludlow, Joseph Moloney, John J. Myers, Leonie Vau-Onerbeke, William J. Scott, John Thomas, Frederick W. Stokes, John Toppin, C. L. Warke, Charles S. Woodwright, William H. E. Woodwright.

MIDWIFERY.—Joseph Moloney, William T. Mullally, John J. Myers, Leonie Vau-Onerbeke, William J. Scott, John Toppin, Charles S. Woodwright, William H. E. Woodwright.

The undernamed have been admitted Members:—

Alfred Asbury, Army Medical Department; Charles E. Macnamara, Government Medical Service, British Guiana; Kevin I. O'Doherty.

The following have been granted the certificate in Sanitary Science:—

Charles Edward Macnamara. | William Thomas Mullally.

SOCIETY OF APOTHECARIES.—The following gentlemen passed their examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received certificates to practise, on Thursday, the 14th inst.:—

Gardner, Frank Gower, Tatnall Hall, Broomsgrove.
Macintyre, Æneas Donald Mackay, Ebchester, co. Durham.
Morse, Frederick Batho, Bastein-park-road, Shepherd's-bush.
Nason, Edward, Sparkhill, Warwick-road.
Ramsay, Frank Wilson, Wickham-road, Brockley.
Sequeira, George William, Waltham Lodge, Tulse-hill.

MR. ALFRED BOLTON, L.R.C.P. Lond., has been appointed Justice of the Peace for the district of Port Nolloth, Cape of Good Hope.

BAD MEAT.—The manager of a co-operative society at Long Eaton was last week fined in a heavy amount for selling pork in a state unfit for human food.

BEQUESTS.—The late Mr. James Harrison, of Monkstown, has left £200 to St. Michael's Hospital, Kingstown, and £100 to St. Vincent's Hospital, Dublin.

SUPERANNUATION.—Mr. F. Rawle, M.R.C.S., late medical officer of the Titchfield district of the Farnham Union, has been granted a superannuation allowance of £26 for one year.

THE RIVER LEA.—According to the report of Dr. Tripe to the Hackney Board of Works, the condition of the River Lea is still far from satisfactory, and the attention of the Tottenham Local Board is to be called to the matter.

THE YORK HEALTH EXHIBITION.—The York Hospital and Dispensary Fund has been enriched to the extent of £92 as the result of the hospital fête in connexion with the above exhibition.

UTILISATION OF SEWAGE.—The Epsom Local Board has authorised the taking of the steps necessary to secure the purchase of land for the purpose of utilising the sewage for irrigation.

OWENS COLLEGE.—The Dauntesey Entrance Medical Scholarship (£100 for one year) has been awarded to Herbert Horrocks, and the Robert Platt Physiological Scholarship (£50 per annum for two years) to A. E. Giles.

THE NORTHERN INFIRMARY, INVERNESS.—In the report of General Fasson on the constitution and management of this infirmary, various changes are suggested with the view of promoting order and enabling the nurses and others to attend with greater convenience to patients under their charge. It is, moreover, proposed that the medical staff should consist of four medical gentlemen and a house-surgeon.

THE LIVERPOOL INTERNATIONAL EXHIBITION.—We understand that the gold medal has been awarded to Dr. R. A. Mowll's Folding Ambulance Chair for use in ships of war, troop-ships, &c., which was described in our pages a few months ago.

PUBLIC MORTUARIES.—The absolute necessity for the provision of one at least of these accessories in every parish in the metropolitan area is not yet, it appears, practically acknowledged by the authorities of some London districts—Kilburn amongst others.

THE NEW SEWAGE WORKS AT HOCKEN were formally opened on Monday last by the Mayor, Corporation, and sanitary authority of Bolton. The treatment adopted is precipitation, and the daily amount of sewage to be dealt with is about 4,000,000 gallons. The cost of the works is £30,000.

ST. JOHN AMBULANCE ASSOCIATION.—A meeting was held at Frome on the 14th inst., at which, after an address by Captain Tucker, a resolution was carried to the effect that a centre of the Association be formed at Frome. About a hundred persons gave in their names as willing to become members.

THE MANCHESTER VOLUNTEER MEDICAL STAFF.—Under the direction of Acting Surgeons Crockwell and Coates, the above corps, which has been formed within the last few months, went through their drill in the presence of Col. Morley, who complimented the men on their efficiency and the surgeons on the result of the training which they had carried out.

ABERDEEN ROYAL INFIRMARY.—The plans for the proposed improvements of the infirmary sent in to the Committee of Management, have been remitted to the sub-committee with instructions to obtain the opinion of the medical staff and lady superintendent thereon, and to submit them to the architects, so that the committee may be in a favourable position to decide on the question.

SOUTH-EASTERN HOSPITAL.—By Dr. McCrombie's annual report of this institution it appears that during the past year 348 patients were treated in the fever wards, and 580 small-pox cases were admitted. Of the former (chiefly scarlet fever), 275 were discharged recovered and 30 died, 43 remaining at the end of the year. Three officers of the hospital contracted fever, but all recovered. Of the small-pox patients 184 died, a mortality of a little over 31 per cent.

THE DRAINAGE OF RICHMOND.—The Local Government Board are about to hold an inquiry at Richmond respecting the joint application of the vestry and rural sanitary authority for power to borrow £100,000 for the construction of works of main drainage for the parishes of Richmond, Barnes, Mortlake, Kew, and Petersham. It is intended to convey the sewage by gravitation to a site on the banks of the Thames at Mortlake, and treat it by precipitation.

MANCHESTER PATHOLOGICAL SOCIETY.—At the annual meeting of this Society, which was held at Owens College on the 13th inst., the following were appointed as officers for the ensuing year:—President: Dr. Dreschfeld. Vice-Presidents: Mr. A. W. Stocks and Dr. Dixon Mann. Treasurer: Dr. Judson S. Bury. Secretary: Dr. A. H. Young. Committee: Drs. H. Ashby, H. R. Hutton, T. C. Railton, T. W. Rhodes, T. Harris, and Mr. J. Broadbent. Auditors: Drs. S. H. Owen and W. Thorburn.

SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.—On October 13th a quarterly Court of the Society was held at 53, Berners-street, the President, Sir James Paget, in the chair. One new member was elected, and the death of one reported. The treasurer announced the receipt of the legacy of £300 from the late Dr. Harvey K. Owen, a vice-president. It was resolved that, owing to the numerous fresh applications for grants made during the year, a Christmas present, such as had been made the last few years, could not be made this year to the widows and orphans on the books. Applications for relief were read from sixty-three widows, six orphans, and three orphans on the Copeland Fund, and a sum of £1313 was recommended to be granted at the next Court. One fresh application for relief was read from a widow, and a grant made. A grant towards the self-maintenance of an orphan was also made. Four orphans were reported as having ceased through age to be eligible for further grants.

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AN UNSUSPECTED PERIL.—A gentleman living in the parish of Hornsey, who had complained repeatedly to the local board of bad smells in his house, had the unwelcome discovery revealed to him by the sanitary inspector that he and his family had been living for years over three large cesspools, one 25 feet deep, full of sewage. A striking though perhaps not astonishing fact in connexion with the matter is that the tenant of the house had frequently employed builders specially to supervise the drainage of the premises.

GLASGOW SOUTHERN MEDICAL SOCIETY.—At the business meeting of this Society, held on the 14th inst., the following gentlemen were elected office-bearers for the session 1886-87:—President: F. A. Freer, L.F.P.S.G. Vice-President: Edward M'Millan, L.R.C.S.Ed. Treasurer: T. J. Gilmour, L.R.C.P.E. Secretary: James Hamilton, M.B. Editorial Secretary: J. Erskine, M.A., M.B. Seal-keeper: W. J. Shaw, M.B. Court-Medical: Wm. Carr, M.B. (convener), J. Morton, M.D., R. W. Forrest, M.D., Alex. Napier, M.D., and J. Barras, M.D. Extra Councillors: D. N. Knox, M.A., M.B., Alex. Rankin, M.D., and Archd. Johnston, M.B.

MANCHESTER CENTRAL MEDICAL SOCIETY.—The annual meeting of this Society was held on the 19th inst., and the following office-bearers were elected:—President: Mr. F. H. Walmsley. Vice-Presidents: Dr. Leslie H. Jones and Dr. Sam. Woodcock. Treasurer: Dr. C. H. Braddon. Librarian: Dr. A. Wahltuch. Members of Committee: Dr. B. Addy, Mr. Wm. Armstrong, Mr. Wm. Bain, Dr. Wm. H. Barlow, Dr. H. W. Boddy, Dr. G. Bowman, Dr. S. Buckley, Mr. J. Ferguson, Mr. C. F. H. Kitchen, Dr. W. N. Maccall, Dr. F. M. Pierce, Dr. W. J. Sinclair, Mr. A. W. Stocks, Dr. Wm. Walter, and Mr. J. Westmorland. Auditors: Dr. A. Samelson and Dr. Thos. Smith. Secretaries: Dr. C. T. Railton and Dr. S. H. Owen.

CHARING-CROSS HOSPITAL STUDENTS' ANNUAL DINNER. On Friday, the 15th inst., the past and present students of Charing-cross Hospital held their annual dinner in the Venetian Saloon of the Holborn Restaurant. A hundred and fifty sat down to dinner, including the staff of the hospital school, past and present students, and visitors. Amongst the latter were Dr. Frederick Roberts, Mr. Cowell, Mr. Juler, Mr. Morton Smale, Dr. Ostlere, Walter Goodall (Bey), Mr. Scudamore, of *The Times* staff, and Dr. W. R. Smith. Mr. H. Corbould occupied the chair. Sir Guyer Hunter, M.P., K.C.M.G., in replying for the Army, Navy, and Reserve Forces, stated that a great many Charing-cross students had gone into the military services, and risen to the highest position, but especially had Charing-cross come lately to the front as being the birthplace of the new branch of the Volunteer Medical Staff Corps; a corps now 400 strong, all of whom are efficients. Dr. Bruce, the Dean of the School, stated that as long ago as three years active steps were taken by some members of the staff to promote residential chambers for students. He believed that the meetings then held were the initiation of the present acute phase concerning the subject. He commented also upon the fact that in the meantime a new operating theatre, an accident ward, and a new wing were being added to the hospital. Some excellent songs were given during the evening by Dr. Roberts, Dr. Mott, Dr. Ostlere, Mr. Reid, and Mr. Clavering Power. The social gathering proved most hearty and congenial.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

AUSTIN, THOMAS MEIN, L.R.C.P., L.R.C.S.Ed., has been appointed Health Officer for the Shire of East Loddon, Victoria.

BARTLETT, R. POPE, M.R.C.S., L.S.A., has been appointed Medical Officer for the Second Division of the Mere Union, vice Francis, resigned.

DEANE, EDWIN, L.F.P.S.Glas., L.S.A., has been appointed Assistant House-Surgeon to the Royal Berks Hospital, vice Barton, resigned.

HAWKES, L. A., M.B., M.Ch.Edin., has been appointed Assistant Resident Medical Officer to the Children's Hospital, Birmingham, vice Powell, resigned.

HILL, G. WM., M.B., B.Sc.Lond., has been appointed Registrar and Pathologist to the Central London Throat and Ear Hospital.

JONES, H. C. W., B.A., M.B.Camb., M.R.C.S., L.S.A., has been appointed Senior Medical Officer to the Miller Hospital and Royal Kent Dispensary, vice Dr. J. B. Saundry, resigned.

LLOYD, DAVID, M.R.C.S., has been appointed Medical Officer of Health for the Shanklin Urban Sanitary District, vice Dabbs, resigned.

MORRIS, GEORGE, M.D., has been appointed Medical Officer for the Parish of Fenwick, Ayr.

NICHOLSON, H. GILBERT, M.R.C.S., L.S.A., late House-Surgeon to the Middlesex Hospital, has been appointed House-Surgeon to the Hereford General Infirmary, vice M. D'O. Gillies, resigned.

POWELL, G. W., M.B., B.Ch., has been appointed Resident Medical Officer to the Children's Hospital, Birmingham, vice Payne, resigned.

RENDALL, PERCY, M.D., M.R.C.S., has been appointed Resident Medical Officer to the St. George's, Hanover-square, Dispensary, Little Grosvenor-street, W., vice Dr. Humphreys, resigned.

SIMPSON, DONALD, M.B., M.Ch.Glas., has been appointed Health Officer for the Shire of Oakleigh, Victoria.

STAVELEY, W. H. C., L.R.C.P., M.R.C.S., has been appointed Assistant House-Surgeon to St. Thomas's Hospital.

WALSH, JOHN THOS., L.K.Q.C.P.I., L.R.C.S.I., has been appointed Assistant Master to the National Lying-in Hospital.

WELLER, CHARLES JOSEPH, L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer for the Frampton District of the Wheatenhurst Union, vice Watts.

YOUNG, EDWARD H., M.B.Dur., L.R.C.P.Lond., has been appointed Junior Medical Officer to the Miller Hospital and Royal Kent Dispensary.

Births, Marriages, and Deaths.

BIRTHS.

BUSS.—On the 19th inst., at 9, Broad-street, Leominster, Herefordshire, the wife of Howard D. Buss, M.R.C.S., L.S.A., of a daughter.

DUNSMURE.—On the 16th inst., at Queen-street, Edinburgh, the wife of Jas. Dunsmure, jun., M.D., of a daughter.

GANDY.—On the 15th inst., the wife of Wm. Gandy, M.R.C.S., L.S.A., of a daughter (stillborn).

GROUND.—On the 16th inst., at Gabriel's-hill, Maidstone, the wife of Edward Ground, M.D., of a son.

LAST-SMITH.—On the 17th inst., at Mayfield, Torquay, the wife of Edward Last-Smith, L.R.C.P.E., L.R.C.S.E., of a son.

RYLE.—On the 18th inst., at Doughty-street, W.C., the wife of R. J. Ryle, M.B.Oxon., M.R.C.S., of a daughter.

TAYLOR.—On the 16th inst., at Kennington-park-road, S.E., the wife of Herbert Taylor, M.B., of a son.

WISE.—On the 16th inst., at Walthamstow, Essex, the wife of C. H. Wise, M.D., of a son.

MARRIAGES.

BEATER—CUNNINGHAM.—On the 13th inst., at All Saints' Church, Eastbourne, Orlando P. Beater, M.D., LL.B., to Miss E. L. Cunningham, daughter of Surgeon Superintendent C. L. Cunningham, THE LANCET's late Special War Correspondent in the Soudan.

BINDLOSS—KELL.—On the 13th inst., at St. George's, Tufnell-park, Edmund F. Bindloss, M.R.C.S., L.R.C.P.Lond., of Hatcham, S.E., to Jessie M., youngest daughter of Thomas Kell, of Holmleigh, Tufnell-park, N.

BURDON—ENGLISH.—On the 9th inst., at Hope-street Church, John Burdon, L.R.C.P., L.R.C.S.Ed., of Newcastle-on-Tyne, to Rebecca, second daughter of Charles J. English.

CARTER—CARTWRIGHT.—On the 14th inst., at the Parish Church, Weston-super-Mare, by the Rev. F. E. Carter, Canon of Truro, assisted by the Rev. Prebendary Buckle and the Rev. G. Herbert West, Frederick Heales Carter, F.R.C.S.Eng., of Putney-hill, S.W., to Isabella Mary, eldest daughter of the late Henry Durancé Cartwright.

MALPAS—SHEPHERD.—On the 19th inst., Douglas Dent Malpas, M.D., of Biarritz, France, to Sarah Georgina Culme Shepherd, youngest daughter of the late R. W. M. Shepherd.

OZANNE—CATHCART.—On the 19th inst., at St. Mary's Church, West Kensington, by the Rev. P. F. Eliot, M.A., Canon of Windsor, cousin of the bride, assisted by the Rev. H. J. Alcock, M.A., Vicar, Frederic Newell Ozanne, L.R.C.P.Lond., M.R.C.S.Eng., of Harrowgate, son of the Rev. Thomas D. Ozanne, M.A., of Guernsey, to Fanny Lydia, daughter of the Rev. N. Cathcart, M.A., Vicar of Holy Trinity, Guernsey.

DEATHS.

CHARLTON.—On the 12th inst., at Brabourne, Ashford, Kent, Alfred Charlton, M.R.C.S., L.S.A., aged 43.

DENNETT JONES.—On Aug. 14th, at The Hall, Croydon, New South Wales, Robert Dennett Jones, L.R.C.P.Lond., M.R.C.S.Eng., of Bowral, N.S.W., aged 29.

DUNSMURE.—On the 16th inst., at Queen-street, Edinburgh, James Dunsmure, M.D., F.R.S., F.R.C.S.E.

EDWARDS.—On the 15th inst., at 98, Gloucester-crescent, Hyde-park, W., Mary Ann, the much loved wife of Thomas E. Edwards, L.R.C.P.Lond., M.R.C.S.Eng., L.M., aged 62.

HESK.—On the 3rd inst., Thomas Galland Charris Hesk, L.R.C.P., L.R.C.S., &c., late of Bradford, fourth son of the Rev. Thompson Hesk, aged 32. Interred at St. Martin's Church, Jersey.

SANDERS.—On the 17th inst., at the Haylands, Chigwell, Essex, Charles Sanders, M.D., in his 61st year.

N.B.—*A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.*

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METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, October 21st, 1886.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Oct. 15	29·10	S.W.	58	57	...	59	46	·10	Raining
,, 16	28·62	S.	52	50	...	55	50	·15	Dull
,, 17	29·05	W.	50	49	...	55	48	·33	Cloudy
,, 18	29·40	N.	51	50	...	57	45	...	Foggy
,, 19	29·58	N.E.	53	52	...	57	50	·03	Overcast
,, 20	29·65	E.	54	53	...	59	51	...	Hazy
,, 21	29·89	W.	48	47	...	51	47	·02	Foggy

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

We cannot undertake to return MSS. not used.

ANTIPYRIN IN PYREXIA.

BRIGADE-SURGEON J. B. HAMILTON, Medical Staff, Lucknow, communicates to the *Indian Medical Gazette* a paper on the above subject. His conclusions are that antipyrin is decidedly beneficial in reducing the temperature in cases of enteric fever, pneumonia, and insolatio. In a few cases the drug was given subcutaneously. In no case did it produce skin eruption or vomiting. It acts well in children; but he would hesitate to give it to debilitated patients.

Inquirer (Bucks).—1. No College of Surgeons admit a candidate to examination on the terms stated.—2. The licence is not accepted anywhere for the purpose named.

Una Sposa Inquieta should consult her medical attendant. We do not prescribe.

"HEREDITY IN LOWER ANIMALS."

To the Editor of THE LANCET.

SIR,—In your issue of Sept. 25th you had a communication on the above subject from Mr. George A. Hawkins-Ambler; and as I can record a similar instance in the case of an animal still lower in point of intelligence than the dog, it may be interesting.

A kitten of only a few weeks old found its way through the garden into my house, and we gave it a home. When it was apparently about three months old it commenced spontaneously to sit up and beg for food at the table. If no notice were taken, it would rise fully up on its hind feet, touching, but not supporting itself by, the arm of someone from whom it expected food. As it had never been taught, we supposed the trick to be the result of heredity. It was much more explicable, and infinitely more amusing, when our foundling had a small family, which, at the age of about two months, ranged themselves alongside of her at the side of the table in her comical attitude.

I am, Sir, yours faithfully,

Newcastle-on-Tyne, Oct. 6th, 1886. G. WEDDELL.

A CAUTION.

A CORRESPONDENT writes:—"A man apparently between forty and fifty, of good address, speaks French fluently, has an Anglo-American aspect and accent, and says he hails from Paris, has been disposing of instruments which have evidently been stolen from London hospitals, and possibly from private practitioners. Any information regarding him will be thankfully received at Scotland Yard."

E. C.—Messrs. Coxeter sell a call-bell worked by a dry silver-chloride element which would probably meet our correspondent's views.

W. H. (Strand).—Grateful patients are not always prudent.

Prof. G. Buchanan.—Yes.

BRITISH NORTH BORNEO.

A WRITER in *Medical Missions at Home and Abroad* for October, speaking of British North Borneo as an unoccupied mission field, says:—

"If no single branch of the Church is ready to adopt this field, surely there are individual Christians who might well devote themselves to it, and to whom it would be a special attraction that they would find in it a virgin field for their labours. The natives are Dyaks, Malays, and Chinese. A friend who knows Borneo suggests that mission work might be commenced at Sandakan, where the British merchants reside, and that itinerations by boat and overland might be made to Kudat, Gaya-Papar, Kimanis, down to Labuan. Two men of good constitution, able and willing to endure hardships for Christ's sake, would find noble work ready for them. One of them should be a medical missionary. The Malay language, with a few local idioms, is in ordinary use. The Chinese, as yet, are confined to the coast-line. The interior is accessible by boat for long distances. The climate is said to be excellent. Sandakan is free from fever, and has many of the comforts of life; so that there would be no disadvantage, but the contrary, in one or both of the missionaries being married."

Mr. A. B. Clarke.—We have examined the "tasteless" comfits; they only merit the adjective if swallowed whole. We have no experience of their therapeutic or dietetic value, but should be inclined to think that they would be inferior to gelatine capsules containing a drachm or half a drachm of the oil each.

Mr. J. S. Belcher.—The address has unfortunately been mislaid.

Mr. J. B. Clibborn's paper is marked for insertion.

Dr. Josiah Williams.—Yes, if not suitable.

CASE OF SUICIDE IN SHEFFIELD.

To the Editor of THE LANCET.

SIR,—Will you oblige me by inserting in your journal the following statement, with reference to a report circulated in Sheffield detrimental to my own reputation and that of the gentleman whose *locum tenens* I was.

On September 2nd I was called early, while acting for Dr. A., to see Mr. B., living in the west-end of Sheffield. I found him suffering from extreme nervous irritability, together with some depression; his pulse being 140 and his manner very irritable and restless. I injected in his arm one-twentieth of a grain of sulphate of hyoscyamus, and wrote a prescription containing bromide of ammonia, &c., and left the patient in the dining-room and went to Mrs. B. in the drawing-room, and advised that the patient should be induced to go to bed, an ice-bag applied to the head, light, unstimulating diet only to be taken, and urged the attendance of a trained nurse. A lady friend who was there pooh-poohed the idea of a nurse. I asked Mrs. B. to return to her husband and I would give directions to her friend. Mrs. B. returned to the dining-room and immediately screamed loudly. I ran into the room and found Mr. B. cutting his throat with a champagne-knife. I closed with him, and a desperate struggle ensued for the possession of the weapon, and also in the attempt to throw down the patient, a powerful man of about forty years of age. The struggle lasted some three or four minutes, when I succeeded in tripping him. I then called for assistance, saying, "Send some men. Don't you see I cannot hold him?" Two grooms arrived and secured him, and tied his hands and feet. I then said, "Send for my pocket surgical case and bring another surgeon." The latter arrived, in the person of Mr. C., who commenced by saying we must send for his own medical man. I said, "I am his medical man, or am acting for Dr. A., who is." Mr. C. answered, "Oh no he is not, Dr. D. is." I replied, "While you are talking the patient may be dying;" and then, upon his wishing to take the principal place, I said, "I am quite capable of attending a cut-throat; I only wish you to tie the bloodvessels as I pick them up." Mr. C., having rendered the necessary assistance, left the room and gave orders for a bed to be prepared upstairs. But as the patient lost a good deal of blood, having cut from just below the right ear to an inch to the left of the median line, I told him I thought I was the person to give orders, and certainly should not allow him to be carried up a steep staircase and round an awkward corner, which would probably cause fainting to ensue, but would, for the present, have a bed made in the dining-room. I then went to assure Mrs. B. of my belief in her husband's ultimate recovery. Mr. C. volunteered to send me a nurse, as I was a stranger in Sheffield, and then left. I tried to clean the blood from my clothing, and then desired a servant to ask Mrs. B. if I could speak to her before leaving. The servant informed me Mr. C. would carry on the case, and when Mrs. B. appeared she said as Dr. A. was away and they did not wish to again change the surgeon, Mr. C. would continue the treatment, and asked would I meet him. I replied, "No, I will not." I did not wish to act second where I had been principal. I then left, having been in the house nearly three hours, and went home to take my breakfast and see patients. I find a report has been circulated that Dr. A., when called in, fainted, and was utterly useless, and therefore Mr. C. was sent for. But as Dr. A. was at Pitlochrie in Scotland, this, of course, was utterly untrue, and allow me, for myself, to give it an unqualified denial.

The case is worth noting as the wound was done with the right hand, commencing just below the ear (right), and was carried across the median line to the left, and was not, as one would have expected from the character of the wound, done with the left hand.

Believe me, Sir, faithfully yours,

Oct. 11th, 1886. VIATOR.

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THE PATENT MEDICINE MONOPOLY.

THE *Anti-adulteration Journal* (Philadelphia) makes the following statement:—"An Eastern patent medicine firm has just contracted for $300,000 worth of printing for this year. This will be used in the papers to inflame the public mind and cause the masses to doctor simple and imaginary ills. Deluded people will be forced to pay many times this $300,000. Many will not only pay with money, but health, and even life."

Mr. H. B. Collins.—We think the representation should be made to the editor of the paper in which the article appeared.

ALLEGED ABUSE OF HOSPITALS.

To the Editor of THE LANCET.

SIR,—Now that the general practitioners have at last a prospect of their interests being looked after, I think everyone who intends to vote at the coming election (London practitioners in particular) should insist on their representative faithfully promising to use his best endeavours to put a check upon the enormous amount of gratuitous advice and medicine given at the various London hospitals to people who are perfectly well able to pay the moderate fees charged by most practitioners in the metropolis. No discrimination seems to be made, but aid is given to all comers; and I venture to say I am not far wrong in stating that two-thirds of the applicants have no business at the hospital at all. In my own neighbourhood—that of Chelsea—we are surrounded by hospitals of all denominations, and it is a daily occurrence to find one's patients flocking off to one of these institutions, where they obtain advice and medicine free; and so the practitioner is cheated out of his fee, with the result that his books show a balance on the wrong side at the end of the year. Two or three of the hospitals make a practice of selling tickets for 6*d.* or 1*s.* each—competing, in fact, with the bogus dispensaries with which London is inundated. This state of things ought not to be. If hospitals professing to be supported by voluntary contributions exact a paltry payment from patients, and set an example for the existence of so-called "provident dispensaries," to the discredit of the profession and the detriment of the public, the sooner the subscribers are made acquainted with the fact the better. Working up a practice has always been a difficult and a tedious task; but it is now trebly so to the young and struggling practitioner, who finds hospitals in all directions eager to receive his patients at a rate a counter prescribing chemist would scorn. The cause of want of funds is not far to seek. Let the authorities of the various hospitals make careful inquiry into the position and means of every applicant for relief, and they will find their expenses for drugs, &c., very much reduced at the end of the year. I can instance several well-to-do tradespeople who regularly attend the hospitals in this neighbourhood, and thus defraud the practitioners around of their just dues. I trust all London practitioners will make a determined stand against this gross injustice, and do their utmost to remedy the evil. This is an age of co-operation; and now is a most fitting time for us to pull together.

I remain, Sir, yours faithfully,

Oct. 12th, 1886. JUVENIS.

*** The views of our correspondent deserve publicity, even if they are somewhat open to doubt. He is under some delusion in thinking that any power resides in the Medical Council to control the amount of gratuitous advice given at hospitals. Even the Direct Representatives, of whom many impossible things are expected, will not be able to bring the correction of hospital abuse within their functions as prescribed by Act of Parliament. The existence or otherwise of such abuse is a most important question. So also is the system of charging small sums for hospital or dispensary letters. This was meant really to check the abuse of the out-patient system; but it is liable to be misunderstood and to be abused. The important question, and one which is constantly being raised, is, What is the amount of such abuse? Our correspondent says that two-thirds of the applicants (out-patients, we presume) have no business at the hospital at all. What is wanted is a severe investigation of fitness of cases at the hospital itself. For people with any means it is really a very wasteful way of getting medical attention. The time spent—often, as we know, five or six hours,—the unselect company, the risk of infectious disease, &c., would make any sensible person with a shilling or two to spare think twice before preferring the out-patient room of a hospital to the waiting-room of a private practitioner. Then it is known that very little of the money of hospitals goes to the out-patient department. In a time of depression it must be allowed that some decent people with long and chronic complaints have more or less excuse for seeking the aid of a charitable institution, which, *if properly used*, does neither disable nor disincline a person to pay and employ his own individual adviser.—ED. L.

"SISTER DORA."

IN reference to a paragraph headed as above, published in our last number, a correspondent writes to say that the Town Council of Walsall did not ultimately accept the offer of Miss Lonsdale.

Dr. A. W. Dowding.—The two titles seem fairly to attach to the qualifications mentioned.

ALCOHOL IN HOSPITALS.

Vigilans.—We have read our correspondent's letter with attention. He strongly thinks that in view of the state of medical opinion on alcohol, and the non-necessity for it in healthy persons, the use of it in hospitals, at least by the staff, should be discountenanced; and he ends his letter by the suggestion of an excuse for charitable persons declining to subscribe to hospitals where such use of alcohol is permitted. The writer is too benevolent in name and fame to have any fear of his motives in so writing; though some people, we confess, are rather too clever in finding reasons for neglecting the obvious duty of liberal subscriptions to hospitals. We regret that the question of the use or non-use of alcohol for the staff of hospitals should be made an argument for or against hospital support. Teetotalers do not conciliate moderate men by such tactics. There is a strong tendency towards disallowance of alcoholic drinks in all kinds of service. Nurses and hospital officials should be left to the responsible authorities of hospitals in this matter, and the latter have every inducement to keep the expenditure on alcohol down. They have the authority of the best physicians and surgeons for using it sparingly; but it will be magnanimous in teetotalers not to worry them and not to give the public excuses for withholding subscriptions. They have their own special hospital in which to demonstrate the possibility of curing disease without alcohol. Let them have a little more faith in this quiet influence, and try to make the demonstration more complete.

Inquirer.—The registered practitioner who without a surgical qualification got a surgical appointment with salary attached is in a false position. The claim to his salary cannot be enforced in a court of law, and he is liable to prosecution should he use the title not implied in his qualification. One of the uses of general practitioners in the General Medical Council will be to stir up the Council to more diligent employment of its powers, or to stimulate the licensing bodies to defend from misuse the titles they confer. Our correspondent is aware that under the new Act no qualifications will be granted which do not cover all branches of practice.

Mr. H. C. Fox.—"Vital Statistics," by Dr. William Farr, F.R.S., was published by subscription by the Sanitary Institute at 74A, Margaret-street, W. The subscription price was one guinea.

A. W. B.—Barley water.

FALSE TESTIMONIALS.

To the Editor of THE LANCET.

SIR,—In the interest of the public, and especially of those responsible for the management of medical and surgical charities, I think it right to caution your readers against a woman, about thirty years of age, who has recently applied to the matron of the Gravesend Hospital for a nurse's situation. She produced what purported to be a copy of a flattering testimonial given to her by me, in which it was stated that she had been twelve months in this institution. As a matter of fact, she was in this hospital for three months only, and was then dismissed without a testimonial. The ease with which false testimonials can be manufactured renders it imperatively necessary in all cases to verify the applicant's statements by inquiry from the persons by whom testimonials are professedly signed.—I am, Sir, yours faithfully,

EMILY GRIFFITHS, Matron.

Southport Infirmary and Local Dispensary, Virginia-street, Oct. 20th, 1886.

THE ANTI-VACCINATIONISTS AND SIR JAMES PAGET.

Cantab. complains that in the neighbourhood of Colchester they are troubled with an anti-vaccinationist who prejudices people against vaccination by quoting isolated expressions from the works of Sir James Paget and others. The following expression is quoted as giving the opinion of Sir James on vaccination:—"That vaccination produces a continued unhealthy condition of the blood." Probably the person who quotes this expression knows that in doing so he is giving an incorrect impression of Sir James Paget's opinion. But anti-vaccinationism would die to-morrow if it were not kept alive by garbled and distorted statements. The expression quoted is taken from a lecture on dissection-poisons in the "Clinical Lectures and Essays." The misuse of it by anti-vaccination fanatics has fortunately been noticed by Sir James Paget himself. Our correspondent will find in the second edition of the "Clinical Lectures and Essays" the following note to the sentence:—"Some opponents of vaccination have used this and similar expressions in my lectures on pathology as if they implied a mischief in vaccination. None but a silly or dishonest person could so use them; but, with a very few strange exceptions, it is only by such persons as these that vaccination is opposed." *Cantab.* will know how to use this note. But do not let him be too sanguine of any result on anti-vaccinationists. Mr. Pepper is not, any more than Sir James Paget, an opponent of vaccination.

A Seeker after Knowledge.—1. We never heard of reference being made to the husband in such a case.—2. In the British Isles the life of the mother is made the first consideration.

Dr. Lewers.—In an early number.

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COMMUNICATIONS, LETTERS, &c., have been received from—Mr. Edmund Owen, London; Dr. Pavy, London; Dr. Steele, London; Dr. Martin Oxley, Liverpool; Dr. A. Robertson, Glasgow; Dr. Alfred Carpenter, Croydon; Dr. Collingridge, London; Mr. Cantlie, London; Mr. H. B. Hewetson, Leeds; Mr. Bury, New Barnet; Messrs. Calvert and Co.; Mr. H. B. Collins, Vienna; Dr. Illingworth, Clayton; Mr. Lawson Tait, Birmingham; Mr. H. Bramwell, Newcastle-on-Tyne; Mr. Noble Smith, London; Dr. R. Drury, Birmingham; Dr. W. S. Playfair, London; Dr. Collins, Nottingham; Mr. J. C. Snowden; Mr. Percy Dunn, London; Mr. L. Humphry, Cambridge; Dr. J. F. Edwards, Philadelphia; Mr. W. Tallack, London; Dr. Dunlop, Glasgow; Mr. F. Dolman, Scarborough; Prof. Frankland, London; Dr. Shuttleworth, Lancaster; Dr. Fairbank, Doncaster; Mr. Grimsdale; Dr. Josiah William, Sheffield; Messrs. E. & S. Livingstone, Edinburgh; Mr. R. Moss, London; Mr. Spurgin, Maryport; Dr. Dowding, Bournemouth; Dr. Paterson, Boston; Mr. J. G. Barford, Wokingham; Mr. Thos. Walker, Wakefield; Mr. Bourne, Llandudno; Messrs. Maclachlan and Co., Edinburgh; Mr. Holder, Manchester; Dr. A. T. Thomson, Glasgow; Mr. W. T. Grant, London; Mr. Patterson; Messrs. Davis and Co., Aberdare; Mr. J. W. Hope, Fremantle, W.A.; Mr. Vickers, London; Mrs. Wells, Lincoln; Mr. Burdett, London; Dr. S. King, Ilfracombe; Mr. Hawkes, Northampton; Mrs. Saunders, Tunbridge Wells; Mr. Moss, Exeter; Mr. Campbell, London; Messrs. Robertson and Scott, Edinburgh; Mr. Forster, Worcester; Mr. McDonald, New Abbey; Mr. Dylen, Fareham; Mrs. Pullock, Bath; Messrs. Benjamin and Sons, London; Dr. Jackson, Carnforth; Messrs. Smith, Elder, and Co., London; Dr. Taaffe, Brighton; Mr. Bradshaw, Notts; Mr. A. Haviland, London; Mr. Blackett, London; Messrs. S. M. Minasian and Co., Galata; Dr. Drummond, Newcastle-on-Tyne; Messrs. Mason and Co., Chelsea; Mr. Hawkins-Ambler, Kirkburton; Mr. Knowsley Thornton, London; Mr. E. Cotterell, Bicester; Messrs. Richardson and Co., Leicester; Mr. J. R. Keele, Chichester; Messrs. Asher and Co., Guildford; Mr. Laffan, Cashel; Dr. Horrocks, London; Mr. John Brown, Burnley; Mrs. E. Griffiths, Southport; Messrs. Goddard and Co., Nottingham; Mr. Balgarine, London; Dr. Young, Manchester; Mr. Wheeler, Manchester; Mr. Godfrey, Northampton; Mr. Simeon Snell, Sheffield; Mr. Webb, Bury; Mr. Birchall, London; Mr. Reginald Harrison, Liverpool; Messrs. Wright and Co., Bristol; Dr. J. W. Taylor, Scarborough; Mr. A. J. Harvey; Secretary, Dulwich; A Young Practitioner; A Seeker after Knowledge; Traditus; L., London; H. A., Barnes; M.D., Gower-street; One of the Number; The Melton Chemical Company.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Murray, Cork; Dr. Creed, Greenwich; Mr. Swainson, Bolton; Dr. Campbell, Alfreton; Dr. Moullin, London; Dr. Merlin, Sutton; Dr. Edwards, Hyde-park; Mr. Crowsdale; Dr. Benton, London; Messrs. Steel and Jones, London; Messrs. Lee and Martin, Birmingham; Mr. Brodie, Bucklyvie; Dr. Wise, Walthamstow; Mr. Allsop, Shipley; Dr. Buss, Leominster; Mr. Harding, Loughboro'; Mr. Laskey, Hambrook; Mr. Willmore, Walsall; Miss Galloway, Denny; Messrs. Kuhner and Co., London; Dr. Harding, Whittlesea; Mr. Raftes, Bootle; Mr. Yates, Halifax; Mr. Lovelist, Stockbridge; Mrs. Wells, Bailgate; Dr. Heelas, Bonchurch; Mrs. Gentel, Edinburgh; Miss Turner, Bournemouth; J. W. C., Bristol; M.D., Montgomery; Yorkshire; M. V. M.; Ace, Edinburgh; Medicus, Swinton; A. C. K.; Alpha; J. C., Wye; F. B., Lincoln; A. A. H.; Robertus, Edinburgh; Nero; J. A. G.; M. C. S., St. John's Wood; O. F., London; M.D., Manchester; J. A. N., Nottingham; M.A., Cambridge; D. M.; H. R. M.; M.B.Lond., Nottinghill; Alpha, Reading; B. S. C.; Alpha, Carnforth; Gemini; Eagle's House, Tottenham; Nemo, Seaforth; T. P. S.; A.B.; Medicus, Salford.

Waterford Chronicle, The Journalist, Somerset and Wilts Journal, Isle of Wight County Press, Liverpool Courier, Maryport News, West Cumberland Times, Burnley Express, &c., have been received.

Medical Diary for the ensuing Week.

Monday, October 25.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesdays, same hour.
CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2 P.M.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.
PARKES MUSEUM OF HYGIENE.—8 P.M. Mr. J. F. J. Sykes: Nature of Nuisances, including Nuisances the Abatement of which is Difficult.
MEDICAL SOCIETY OF LONDON.—8.30 P.M. Clinical Evening. Dr. C. T. Williams: (1) A case of Partially-cured Aneurysm; (2) Abnormal Condition of the Subclavian Artery.—Mr. E. Hurry Fenwick: Pouch of Penile Urethra.—Mr. William Adams: Couch for Treatment of Lateral Curvature; and other cases.

Tuesday, October 26

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.
CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8.30 P.M. Dr. Gervis: A case of Extra-uterine Gestation.—Mr. Knowsley Thornton: On Three Hundred additional cases of Complete Ovariotomy and Twenty cases of Exploratory Operation.

Wednesday, October 27.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesdays and Thursdays, 1.30 P.M.
ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department, Mondays and Thursdays, 9.30 A.M.
ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.
LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.
GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.
KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; and on Friday, 2 P.M.; and Saturday, 1 P.M.
HUNTERIAN SOCIETY.—8 P.M. Dr. Lewers: On the Advantage of Preliminary Dilatation of the Urethra in certain cases of Supra-vaginal Amputation of the Cervix Uteri.—Dr. Turner: Specimen of Cerebral Tumour.
PARKES MUSEUM OF HYGIENE.—8 P.M. Dr. Charles Kelly: Sanitary Law—General Enactments, Public Health Act, 1875, Model Bye-laws.
BRITISH GYNÆCOLOGICAL SOCIETY.—8.30 P.M. Specimens will be shown by Dr. Fancourt Barnes, Dr. Bantock, Dr. Mansell Moullin, and others.—Mr. Lawson Tait: Extra-peritoneal Cysts.

Thursday, October 28.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

Friday, October 29.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
PARKES MUSEUM OF HYGIENE.—8 P.M. Mr. A. Wynter Blyth: Metropolitan Acts, Bye-laws of Metropolitan Board of Works.

Saturday, October 30.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.

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Ingleby Lecture,

ON

PELVIC HÆMATOCELE,

Delivered at Queen's College, Birmingham, Sept. 3rd, 1886,

BY LAWSON TAIT, F.R.C.S., M.D. (HON.), &c.

GENTLEMEN,—A trial which has recently taken place in Liverpool has given a special interest to the subject of hæmatocele, and that alone would justify me in taking up a considerable part of your time in discussing this extremely interesting subject; but, in addition to this, I desire to draw the attention of my professional brethren to this particular lesion, because it seems to me that the confusion which exists about it becomes deeper and deeper, and not only is there no justification for any confusion at all, but it may be very easily corrected. Our attention was drawn to the subject—in fact, it may be almost said that the question of hæmatocele was introduced to professional notice—by the appearance of a treatise on Diseases of Women by Drs. Bernutz and Goupil, translated by Dr. Alfred Meadows, and published by the New Sydenham Society in its English form in 1866. It appears to me that a more careful study on the part of writers of text-books on gynæcology of this very admirable treatise would have prevented very largely the confusion of which I have to complain. For instance, if we take one of the most recent text-books on gynæcology—that by Dr. Emmet of New York—we see that throughout the chapter on this subject this confusion is remarkably prevalent. It begins with the definition that hæmatocele is "an accidental collection of blood in the pelvis, either in the peritoneal cavity or outside the peritoneum, or within the connective tissue of the pelvis." The definition is faulty to begin with, because the second and the third varieties must of course be classed together, and to class under the same name—the common name of hæmatocele—two conditions which must be so absolutely apart as hæmorrhage within the peritoneal cavity and hæmorrhage outside it, is the very fountain and origin of all the confusion which has arisen. Dr. Emmet quotes Nélaton as having given the first accurate description of the pathology of the lesion; but, in reality, Nélaton's views, from the very words he coined to express them, are very largely answerable for the confusion. M. Nélaton regarded the origin of hæmatocele as being from the rupture of a Graafian follicle, the bleeding naturally gravitating from the surface of the ovary to the bottom of Douglas's cul-de-sac, the most dependent point, and for this the term he invented was "retro-uterine hæmatocele." On page 228 Dr. Emmet gives a diagram labelled a "retro-uterine hæmatocele," in which the section of the blood-clot is clearly enough placed behind the uterus; but a glance at it will show that such clot never could possibly arise from an ovary, so that either Dr. Emmet is wrong in his notions of the pathology or he has altogether misunderstood M. Nélaton. On p. 231 he gives a diagram which is really the diagram intended by Nélaton, but in which the blood-clot is peri-uterine, and not merely retro-uterine; and therefore the case in the second instance comes under the definition and title which we owe to Simpson.

Between the appearance of the first real essay on the subject by Bernutz in 1848 and the translation of his larger work in 1866 a great many contributions to the literature of this subject appeared, each of which advanced some peculiar theory on the subject, and to all of these there may be urged the objection that they were too exclusive, and they did not in any instance, as it appears to me, grasp the whole pith of the case. The word "hæmatocele" is a convenient though not very accurate term, and so long as it is limited to the idea of an effusion of blood it may be taken as the basis of our consideration. The moment, however, such terms as *true* hæmatocele and *false* hæmatocele were introduced confusion reigned supreme. Bernutz held that true hæmatocele consisted of an effusion of blood within the peritoneal cavity, whilst Simpson argued that it could never be an intra-peritoneal effusion. What I am inclined to advise, and for reasons that will be given immediately, is that the phrase "pelvic hæmatocele" ought to be retained to cover all effusions of blood which have their origin in the pelvis. This I advise because it would cover the vast majority of cases of effusion of blood into the peritoneal cavity, for if we exclude the results of traumatic lesion there are very few effusions of blood into the peritoneal cavity which have not a pelvic origin—a fact which is at once indicated by the extreme rarity of the occurrence in men. With this simplification we can look over the great bulk of the literature on this subject with a certainty of arriving at more logical conclusions than if we did not accept the limitation. Bernutz and all other writers agree in recognising the fact that any effusion of blood must be regarded rather as a symptom than a disease of itself, and this is true enough if we are discussing merely the etiology of the condition; but if we regard the condition in itself as an entity we certainly cannot accept this as a limitation, for, whatever the origin of the effusion may be, the moment the effusion is in existence it becomes in itself a disease, and sometimes an extremely severe one. But in the two great classes into which I am about to divide hæmatocele this is far more true about the first class than it is about the second, and this is the first indication that we get of the differences which are found to exist between the two classes. This difference is created *ab initio* by differences in the anatomical relations of the effusion.

In the pelvis—indeed we may take the whole abdomen, and say in the abdomen—an effusion of blood must be either within the peritoneum or outside it. And let us just speak for a moment on what the primary, what the initial result is in any effusion of blood under these two different circumstances. Let us take an imaginary case of rupture of a bloodvessel in the neighbourhood of the kidney by reason of a blow or other injury. Effusion of blood in that neighbourhood must of necessity be extra-peritoneal; it would travel through the cellular tissue, and by reason of the very fact that it had so to travel, provided there was no rupture of a vessel into the pelvis of the kidney, the effusion would be limited, the interstices of the cellular tissue would form the very best of all known hæmostatics, and I find it difficult to imagine that an effusion of blood—let us call it a hæmatocele—in the neighbourhood of the kidney could be so extensive as to be fatal, always supposing it was not a main trunk which had been wounded. But, on the other hand, if we imagine, from some cause or other, a bloodvessel of the kidney bursting into the cavity of the peritoneum, there would then be no natural hæmostatic to assist in the arrest of the hæmorrhage; the bleeding would go on indefinitely, and unless some means could be secured to assist nature in arresting that hæmorrhage, the patient would almost with certainty die.

Let us now take another illustration. Suppose that a small vein on the posterior peritoneal surface of the uterus were to rupture and to bleed into the peritoneal cavity, there the blood would of course naturally tend to coagulate, but not in the same way as when extravasated into the connective tissue. All of us who have experience in abdominal surgery know that when blood flows in quantity into the peritoneal cavity, probably by reason of its dilution by the lymph always present there and easily excited into excessive flow by any abnormal condition, it does not show much tendency to coagulate, save in a very fitful and fragmentary way. One of the most remarkable proofs of this is the influence of the drainage-tube in arresting hæmorrhage. If the cavity is kept dry by frequent withdrawal of the blood oozing from torn pelvic adhesions, the bleeding will soon stop; but if drainage is not kept up the bleeding will probably prove fatal. Supposing, on the other hand, that a small vein ruptured in the tissue and between the folds of the broad ligament, we should again have exactly the same condition as I have imagined to exist about the kidney; in fact, you would have it still more marked, for, in the first place, the cellular tissue through which the bleeding could permeate is much more limited in quantity than it is in the neighbourhood of the kidney. Again, we have a space between the folds of the broad ligament which is not capable of rapid distension to an indefinite extent; the broad ligament, when distended, forms a limited cavity, and we shall then have two processes by which the tendency to excessive hæmorrhage is arrested; the first is the natural tendency on the part of the interstices

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of the broad ligament to limit the bleeding; and, again, the pressure of the broad ligament itself, as a membrane distended and resisting further distension, exercises pressure upon the bleeding point, and becomes a powerful natural hæmostatic.

These anatomical considerations alone, were they supported by no other facts at all, would be enough to persuade us into an acceptance of the division, which has often been described but never precisely laid down by writers on this subject, of pelvic hæmatocele into the two classes of extra-peritoneal and intra-peritoneal, the former corrected and checked by two powerful agencies which are absent in the latter, whilst the hæmorrhage in intra-peritoneal hæmatocele is actually favoured by the dilution of the blood as it passes out of the bleeding vessels. The confusion which has arisen from the want of a recognition of the two classes of cases of intra- and extra-peritoneal may be seen by taking up any text-books on the subject and turning to the allusions which are made as to the frequency of the occurrence of hæmatocele or to its differential diagnosis, and still more to its treatment. Thus Dr. Emmet says: "If we limit the acceptation of the term 'hæmatocele' to an accumulation of blood passing into the peritoneal cavity, the accident is comparatively a rare one; but if it is held to embrace all blood accumulations in the pelvis, the occurrence is certainly a far more common one than the profession at large have any conception." If we accept the first sentence of this passage as alluding to intra-peritoneal hæmatocele, the statement is relatively correct; and if we accept the second sentence as referring to extra-peritoneal hæmatocele, the statement is absolutely exact; but if we go a few pages further on in Dr. Emmet's book, we find him attempting to make a differential diagnosis between hæmatocele—of which he has given no precise definition either for extra- or for intra-peritoneal effusion—and tubal pregnancy, and the confusion becomes positively amazing; for it will be seen as we proceed that for intra-peritoneal hæmatocele by far the most common cause is the tubal pregnancy, for which Dr. Emmet desires to find a differential diagnosis. This is what he says upon treatment: "Surgical interference has been advocated by many in its practice, and been urged as the necessary procedure at an early stage. Unquestionably cases must occur when the surgeon would be wanting in sense of duty if he did not assume the responsibility and puncture the mass. But with a large majority of cases such interference would be criminal, as it needlessly places the life of the patient in jeopardy." Here, again, what Dr. Emmet says is absolutely true about extra-peritoneal hæmatocele, and it is absolutely untrue about intra-peritoneal effusion. I only desire to say I have taken up Dr. Emmet as an example of this confusion in English writings because his work happened to be the first text-book on gynæcology which caught my eye on my book-shelf as I started to write this lecture. If we accept the anatomical and physical facts before alluded to as a basis, we shall find that it is not a difficult matter to reconcile a very large number of discordant facts and many discrepancies in the views of various authorities; in fact, the whole story of hæmatocele may be reduced from confusion into order. We shall find also that the two varieties of hæmatocele are different in their relative frequency, in their causation, in their history and course, particularly in their relative fatality—different in their symptoms and in the signs by which they may be diagnosed, and, finally, in their demand for surgical interference.

Dr. Bernutz has expressed an opinion, to which I have already alluded, that "the bloody tumour which is left as the remains of a hæmorrhage has no right to be regarded as a specific disease, apart from what has caused it." This is true, I hold, of intra-peritoneal hæmatocele, but not of the extra-peritoneal variety. When hæmorrhage into the broad ligament occurs, the arrest of the hæmorrhage has been brought about by nature's own methods almost before the accident has been diagnosed, and therefore all we have to do with is the thrombus, and in the great bulk of cases that may be, and generally is, let alone. But cases do arise, as I shall tell you by-and-by, when it becomes a serious disease. But if the sac of the broad ligament bursts out into the peritoneal cavity, the hæmostatic pressure is relieved, the bleeding goes on, the two forms of the lesion coexist, and the patient bleeds to death. I have seen no such case, but more than one is faithfully recorded by Bernutz. Such a case is recorded by Goupil, and is a perfect example of what I can fully believe to be possible, though I have never seen it, therefore I quote it at length.

S——, aged thirty-two, from a delay in menstruation, thought herself pregnant, and regarded a metrorrhagia which occurred as an abortion, though she had seen no trace of an ovum. On admission, the abdomen was distended and very tender on pressure, and it was resonant on percussion. The cervix was open, and the uterus was pushed somewhat to the left and forwards by an enormous swelling which was behind it. The posterior cul-de-sac was occupied by a fluctuating tumour, which was felt filling up the pelvis entirely, and the fluctuation was very distinct. The diagnosis was (and I regard it as one of the most brilliant on record) intra- and extra-peritoneal blood-tumour, probably accompanied by extra-uterine gestation. She gradually grew worse, and died on the third day after admission. She died because, in 1855, M. Nonat, under whose care she was, had not been infected by the restless spirit of surgery let loose since 1878, which has done so much to save cases such as this.

The post-mortem record of this case, however, is a perfectly peculiar record of facts. In the peritoneal cavity about twenty-five ounces of black fluid blood and clot were found, constituting the intra-peritoneal hæmatocele, the cause of the patient's death. When that was removed an ovoid tumour was observed covered by the peritoneum of the broad ligament. It seemed to be formed by a mass of blood. This was the extra-peritoneal hæmatocele. At the bottom of the left recto-uterine cul-de-sac, the peritoneum forming the posterior layer of the broad ligament presented a perforation with a communication between the recto-vaginal cul-de-sac and the cellular tissue, separating the peritoneal layers of the left broad ligament. On making an incision into the ovoid tumour, a small fœtus was discovered.

The importance of this record cannot be over-estimated, for it shows, as I shall tell you afterwards, how some cases of broad-ligament hæmatocele arise. It shows that broad-ligament hæmatocele may occasionally be fatal by becoming intra-peritoneal hæmatocele, and it shows us (this case has shown me) how twenty-four out of twenty-five of such cases may be saved from death. Further, it proves, what is perhaps not very pertinent to the present discussion, that the views I have advanced about the tubal origin of all extra-uterine pregnancies are correct. The only other case of this kind familiar to me is one very imperfectly narrated by Duverney as having occurred in 1712. These two cases are all the records I have found of the coincidence of intra- and extra-peritoneal hæmatocele, and the combination was due in both instances to rupture of a broad-ligament pregnancy with hæmorrhage into the peritoneum. Both cases ended fatally by reason of the hæmorrhage into the peritoneum. I have seen dozens of cases of broad-ligament hæmatocele, and have never met with a fatal one. I have seen over fifty cases of intra-peritoneal hæmatocele, all resulting in death, save those (with one exception) in which I have performed abdominal section for the purpose of obviating death; so that we find a very wide difference in the results of the two classes of cases in my experience. It will also be found that when the real difference between the varieties is understood, it will explain all the discrepancies in the views held by various authors, and all the confusion will cease.

I propose to deal first of all with the extra-peritoneal hæmatocele, and to give first in detail a case which proves in every way its character and relations, and which illustrates also one of the exceptional instances in which it requires to be interfered with.

C. T——, aged twenty-six, was placed under my care in December, 1883, by Dr. Faussett of Tamworth, on account of a large ovarian tumour. I operated on Jan. 3rd, 1884, and removed a cystoma of the left ovary weighing about 14 lb. There were no adhesions, the pedicle was long and thin, and the operation was as easy as possible. A metrostaxis appeared about twenty-four hours after the operation, as is usual after such operations, the only peculiarity in this instance being that the loss was very abundant. It suddenly ceased after being present for about twelve hours, and immediately the patient was in great pain. From having seen the same accident under similar circumstances very frequently, I knew at once what had happened. I examined and found, as I suspected, a large hæmatocele of the left broad ligament. The hæmatocele increased slowly in size until a tumour could be felt above the brim of the pelvis, and the patient suffered greatly. I also found that the rectum was completely blocked, as I had seen it often before, by a stricture caused by the effused blood dissecting round the

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rectum outside the peritoneum. This is one of the signs of broad-ligament hæmatocele which has not yet been noted by any writer with whose work I am acquainted, and it is of great importance. It does not—indeed, it cannot—occur in an intra-peritoneal effusion. In the case of C. T——, I tapped the hæmatocele from the vagina and drew off a large quantity of tarry blood; but in fourteen or fifteen hours the sac had filled again and the patient had become exsanguine. I therefore reopened the abdomen, opened the distended cavity of the broad ligament, emptied out the blood fluid and clots, sponged it out with vinegar-and-water, fastened the edges in the aperture to the edges of the parietal wound, and placed in a drainage-tube. The patient then made a rapid recovery. I only want you to note that this second operation made it absolutely certain that the effusion was in the cavity of the broad ligament and not in the peritoneal cavity, for the peritoneal covering of the blood mass was perfectly free from adhesions, and its entire relations could be made out with the greatest ease, quite as easily as if it had been a post-mortem instead of an ante-mortem examination.

Speaking of a series of cases by Nonat, M. Bernutz says, very quaintly, that there should have been at least one necropsy, in order to demonstrate the legitimacy of the different diagnoses—that is, between what he calls true (intra-peritoneal) and spurious (extra-peritoneal) hæmatocele. But these five cases recorded by M. Nonat are precisely in point in the present discussion, for four of them were diagnosed by that eminent gynæcologist as being the subjects of extra-peritoneal effusion, and they all recovered, whilst the patient in whom he diagnosed intra-peritoneal hæmorrhage died, and M. Bernutz was gratified by an accurate post-mortem record. Nothing could prove more satisfactorily than this what I contend for, that it is the anatomical relations of the two kinds of hæmorrhage which make all their differences; and now that we examine them carefully before death, and by that very examination prevent death by curing them, we get the first corroboration of all that M. Bernutz has said.

Of extra-peritoneal hæmatocele there are only two causes known to me, one very common and one very rare. The first is sudden arrest of a metrostaxis, which may either be normal menstruation or the pseudo-menstruation which occurs so constantly after abdominal operations. The case I have just detailed is a typical example of what occurs very often after any operation on the broad ligament, and to the inexperienced surgeon is a fertile source of worry. The accident is always indicated by the sudden access of pain, and often an alarming feeling of faintness. The pulse always rises, and sometimes the temperature does so too. On examination the uterus will be found to be fixed on one side, sometimes on both, and this occurs with a suddenness that puts inflammatory effusion out of the question altogether. In the majority of cases the effusion is not extensive enough to be felt above the brim of the pelvis, but in severe cases it is, and then it forms a rounded and distinctly limited tumour, with a feeling of distinct fluctuation. I cannot form any exact estimate of how many cases of these operative hæmatoceles I have seen, but it certainly is not less than fifty, and is more likely to be seventy or eighty, and I have been induced to meddle only with the one I have narrated. In every case in which I have diagnosed the condition the patient has recovered, and in the necropsies which have been made upon cases operated upon by me no record of the incident occurs, so that I conclude it is an accident very nearly if not quite devoid of mortality. Its only drawback is that it delays convalescence for ten or fourteen days, and otherwise I believe it to be of no account at all.

Extra-peritoneal effusion of blood is also very common apart from cases of operation, but by reason of the same sudden arrest of a metrostaxis. Its symptoms in such cases are very much what I have described—sudden pain, a feeling of faintness in severe cases, with a rise of pulse. On examination, the uterus is felt fixed and generally pushed forwards, with a boggy swelling behind or on one side of the uterus, and, if the effusion be large, the mass is felt distinctly limited by the distended broad ligament above the pelvis, this latter condition being the essential diagnostic difference between the two varieties of hæmatocele. An intra-peritoneal hæmorrhage unlimited in quantity or by membrane has never yet been felt by me as a defined tumour above the brim, and I have now had a large experience of such cases, confirmed by operation or post-mortem examination.

Cases of effusion of blood into the broad ligament by sudden arrest, or at least associated with sudden arrest of menstruation, are very common, and I am sure that large numbers of these occur without the patients thinking it worth while to ask for medical assistance, and they get quite well without it. It is, as I have said, a condition probably almost free from primary mortality, and has only a remote secondary mortality when the thrombus breaks down and suppurates, and brings about the tedious condition of pelvic abscess.

Effusion of blood into the broad ligament occurs from another cause, much more rare and probably much more fatal, certainly much more serious—I mean rupture of a tubal pregnancy about the twelfth week of its existence. It is now pretty well admitted that the scheme of the pathology of extra-uterine pregnancy which I advanced some ten years ago covers and explains all the facts of that curious condition, and now it is capable of being used to help us to understand pelvic hæmatocele. Briefly, this view is that impregnation under normal conditions can and does occur only in the uterus. So long as the ciliated epithelium is in action in the tubes, spermatozoa cannot enter them, and the ovules cannot adhere to their walls. But the moment an ovule reaches the cleansed and fresh endometrium infiltrated with spermatozoa, its adhesion occurs. Destruction of the ciliated epithelium of the tubes by desquamative salpingitis reduces the internal tubal surface to the condition of the endometrium, and then entrance of the spermatozoa, impregnation, and adhesion of the ovum are possible, and we have the occurrence of tubal pregnancy. The tube is distended by the growing ovum, and, as it is not capable of indefinite distension, it ruptures, and the seat of rupture seems to be determined by the site of the placenta, where the sinuses have so channelled the walls as to weaken them greatly. A glance at a section of a Fallopian tube will show at once that there are two areas in that section which will severally give very different results, as one or other of them is the site of the rupture. One is much the smaller of the two, and is situated between the layers of the broad ligament, forming, as it were, an ideal roof to the cavity of that space. Rupture here of course means that hæmorrhage occurs into the cavity of the broad ligament, and that an extra-peritoneal hæmatocele results. Such a case may, as I have already proved from Bernutz, become fatal by a further rupture of the broad-ligament cysts and hæmorrhage into the peritoneal cavity. But I feel sure that the great majority of these cases end then and there by the natural cure as mere extra-peritoneal hæmatoceles; the ovum dies and everything is absorbed. I am quite sure I have watched several cases of this kind. In rare exceptions the ovum is not killed, but develops into a broad-ligament pregnancy, formerly known as the "sous-peritoneo-pelvienne" variety of Dezeimeris. I have had seven cases of this kind which I have operated upon, saving six of the mothers and three of the children. Every one of the cases of extra-uterine pregnancy operated upon at or after the full time with which I am familiar comes easily within this explanation, and it makes what is an otherwise wholly unintelligible jumble in physiology as well as pathology quite simple.

The conclusions therefore are that, save under three sets of circumstances, extra-peritoneal hæmatocele is an accident perfectly free from danger. These are—(*a*) when a secondary rupture of the cyst occurs with continued bleeding into the peritoneum; (*b*) when it is merely a stage in the growth of an extra-uterine pregnancy; (*c*) when it goes on to suppuration. I have now to speak of this third condition.

I do not think that suppuration of a broad-ligament hæmatocele is very common, and yet I have met with quite a large number of cases. Of course by the ordinary methods of proceeding, and those which certainly ought to be adopted in the milder cases, it would be very difficult indeed, if not impossible, to make anything like an exact differential diagnosis between a suppurating hæmatocele of the broad ligament and several other conditions which I need not specifically allude to, and therefore any assertions concerning them, after dealing with them as they used to be, and as I say they ought to be dealt with in the majority of instances, by tapping from the vagina, may easily be met by the criticism adopted by M. Bernutz against M. Nonat, that at least one necropsy ought to be in existence to prove the assertions. I have, however, already pointed out that an abdominal section performed before death is for such a purpose as this quite as satisfactory as a post-mortem

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examination. In the 63rd volume of the Transactions of the Royal Medical and Chirurgical Society, I published a series of six cases in which I had adopted, for reasons of extreme seriousness, an abdominal section for dealing with pelvic abscesses which otherwise would have opened out in the usual disastrous ways. I say there that "these six cases have all been, so far as I could discover, cases of suppuration occurring in pelvic hæmatoceles," and I may at once dismiss this question with saying briefly that this depended upon the fact that in clearing out the cavity of the abscesses I removed a considerable quantity of laminated, broken-down old clot. Of these cases I select only one as a characteristic example, to illustrate alike the pathology and the treatment of these cases. Anyone who desires to obtain further information on the subject will find it at page 344 of the last edition of my book on Diseases of the Ovaries.

The patient in this case was sent to me by Dr. Flynn of Birchills. She was forty-five years of age, and had never been pregnant, save one doubtful miscarriage soon after marriage, nineteen years before. Symptoms resembling those of hæmatocele had occurred eight months before I saw her, and since that time she had been losing flesh, had lost her appetite, was troubled by constant thirst and night sweats, and had a rising night temperature. The uterus was fixed in a mass of effusion occupying the left broad ligament, and partly the right one also, and the mass on the left side encircled the rectum, forming a pronounced stricture, as hæmatoceles of the left broad ligament frequently do. No point of fluctuation could be felt in the pelvis, but the symptoms pointed clearly to the presence of pus. I therefore determined to open the abdomen, and readily obtained the consent of my colleague to this proceeding. On reaching the peritoneum the two layers were found to be adherent, so that the cavity was not opened. A large abscess was opened just behind the base of the bladder, between which and the uterus it principally lay, but stretching round behind the rectum. The floor and posterior wall of the abscess were found to consist of organised blood clot, so that its origin had been in a blood effusion into the broad ligament. A glass drainage-tube was inserted, and this was changed for one of Chassaignac's wire tubes on the eleventh day after the operation. She sat up on the twenty-first day, and the tube was finally removed on the twenty-sixth. She went home on the thirtieth day, perfectly well, and has remained so ever since, now nearly six years.

About thirty of such cases have been operated on by me, and all have recovered. I say about thirty, because I could not be sure that all these cases of pelvic abscess originated in suppurating hæmatocele, though the facts prove that the majority of them did so; and therefore I conclude that extra-peritoneal hæmatocele, though rarely fatal, has serious consequences in a fairly large proportion of cases.

How different it is with intra-peritoneal hæmatocele you shall shortly hear. My first experience of it was one of the saddest things I have ever known. A young married lady, one of the most charming and brilliant of women, the daughter of an author known wherever the English language is spoken, the wife of one of the most brilliant of surgeons, died after a few hours' illness, and on post-mortem examination a ruptured tubal pregnancy was found to be the cause of an enormous intra-peritoneal hæmatocele.

Another case I shall give in detail, because it was the cause of a complete revolution in my mind concerning the treatment of such cases, and because it may serve as an epitome of nearly all that could be told concerning these cases up to the time of its occurrence.

In the summer of 1881 I was asked by Mr. Hallwright to see with him in consultation a patient who had arrived by train from London in a condition of serious illness, that illness having been diagnosed by Mr. Hallwright as probably hæmorrhage into the peritoneal cavity from a ruptured tubal pregnancy. The patient was blanched and collapsed, the uterus was fixed by a doughy mass in the pelvis, and there was clearly a considerable amount of effusion in the peritoneum, but no distinct tumour could be felt above, and I agreed with Mr. Hallwright as to the nature of the lesion. This gentleman made the bold suggestion that I should open the abdomen and remove the ruptured tube. The suggestion staggered me, and I am ashamed to have to say I did not receive it favourably. I saw the patient again in consultation with Mr. Hallwright and Dr. James Johnson, and again I declined to act upon Mr. Hallwright's request, and a further access of hæmorrhage killed the patient. A post-mortem examination revealed the perfect accuracy of the diagnosis. I carefully injected the specimen which was removed, and I found that if I had tied the broad ligament and removed the ruptured tube I should have completely arrested the hæmorrhage, and I now believe that had I done this the patient's life would have been saved.

During the twenty years which had elapsed between this case and the first I have mentioned I had seen at least twenty-three other cases of a similar kind, and therefore I can entirely confirm what M. Goupil says of these cases to this effect: "So frequent is the occurrence of intra-pelvic" (and by this he means the true or intra-peritoneal) "hæmatocele, that I have made an analysis of forty-two of my cases which are irrefutable as to their diagnosis." He gives as the causes of these cases: 1. Hæmorrhage caused by the rupture of dilated utero-ovarian veins. 2. Hæmorrhage from rupture of the ovary. 3. Hæmorrhage caused by rupture of the Fallopian tube. 4. Hæmorrhage from the fœtal cyst itself having ruptured; and he says, "the largest number of cases fell under the last head." 5. Hæmorrhage within the fœtal cyst. Probably now M. Goupil would group the last three causes under one head—at least, I certainly should. At another place he says that ruptured tubal pregnancies are very common; for, according to Nonat, Baudelocque saw five examples in three months, and I know that anyone who makes a research in our serial literature will find them in abundance. The final argument as to their not being so rare as our text-books seem to assert is the fact that between January, 1883, and July, 1886, I operated upon twenty-five cases, and succeeded in saving twenty-four of them—a very striking contrast to the old plan of letting them alone to die. I have never seen a case of suspected rupture, or one in which we suspected extra-peritoneal effusion of blood, recover. As to the causes of intra-peritoneal hæmorrhage, I can only speak of two from personal experience; the first, and by far the more common, being ruptured tubal pregnancy. The second is hæmorrhage from some torn adhesions or badly tied vessel after an abdominal section. Thus I tied the pedicle of one ovarian tumour with catgut, and the patient died on the fourth day after the operation. I found a large intra-peritoneal hæmatocele due to the digestion and loosening of the ligature. In searching the literature of this question, I have found one case due to the rupture of an aneurysm of the cœliac axis, and a large number of cases having a traumatic origin, chiefly from rupture of the liver. Bernutz and Goupil have collected a few instances due to rupture of dilated uterine and ovarian veins, not connected with pregnancy; also two cases of rupture of the ovary in pregnancy. But everywhere the evidence is overwhelming that the most fertile source of this most fatal accident is rupture of a Fallopian tube dilated by a fertilised ovum. In very many of these cases a feature of great interest is the fact that the first attack of hæmorrhage is not fatal, and that the records yield incontestable evidence that it may require the repeated occurrence of bleeding to bring about the fatal issue. In some these attacks of hæmorrhage seem to have been separated by long intervals. Thus one case recorded as having occurred in the Maison d'Accouchement in 1816, where the history makes it evident that the tubal rupture occurred at the usual time, in the third month; the fatal hæmorrhage did not occur till the sixth month of extra-uterine gestation. In this case the fœtus was found, so that there could be no doubt as to the nature of the case.

But in some of the instances recorded by Bernutz and Goupil themselves—and I prefer their facts to all others, being, as they are, so carefully sifted and so free from any effort to theorise—it seems to me that the history was that of tubal rupture, repeated hæmorrhage, absorption of the gelatinous fœtus, and final death from hæmorrhage; so that when the post-mortem was made, the absence of a fœtus, which the authors note, blinded them to the real nature of the case. That the fœtus may disappear by absorption is made certain by my own experience. I have removed it only twice in my twenty-five cases, though I have found the placenta in every one. Thus Case 32 in the work of Bernutz and Goupil is an instance of fatal intra-peritoneal hæmatocele due to a ruptured Fallopian tube, which was distended by a tumour the size of a pigeon's egg. I have no doubt that a microscopic examination of that tumour would have shown it to have been a placenta. I think that this explanation applied to many of the carefully recorded cases of these distinguished French authors, in which the details given would incline us to characterise them as

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being identical with that which was the subject of the recent trial at Liverpool There are half-a-dozen cases in Bernutz's book which are identical with that case, except that they were all fatal, whereas the Liverpool case was successful. That woman's peritoneum was occupied by a quantity of blood-clot and blood-serum so great that it could be recognised by palpation before the operation. One of the Fallopian tubes was the source of the hæmorrhage, because it had a quantity of blood and blood-clot in it when removed. Here is a case almost identical, taken originally from THE LANCET of 1848: "A woman aged twenty-eight was suffering from rheumatism, when she was suddenly seized with nausea, vomiting, and pain in the right side of the abdomen; her face became anxious and pallid, the pulse imperceptible, the extremities cold, and the respiration oppressed; in short, collapse was complete, and she died in twenty-four hours, evidently from internal hæmorrhage. On opening the abdomen a quantity of blood was seen, but no rupture of any of the viscera could be detected. In the pelvis a clot was found in the left Fallopian tube. On separating the uterus, its cavity was filled with muco-sanguineous fluid and lined with a decidual membrane. The left tube contained a clot of blood the size of an almond. About an inch from the uterus at the upper part of this tumour was a rent, and within a small sac, so compressed and deformed by the clot that it was impossible to say whether or not it was an ovum. The left ovary was the size of an apple, filled with blood and ruptured."

Another case, on the authority of Dr. Tilt, is given by Bernutz at page 196:—"A multipara, aged thirty-seven, was seized with lumbar pain; the menses were four days late; the left hypogastric region became tender, and soon tympanites and vomiting followed. She succumbed in ten days. On post-mortem examination there was general peritonitis; a large clot of blood filled the left iliac fossa and pelvic cavity; the uterus was normal in size and the appendages on the right side healthy; the left half of the uterus and its appendages were larger and more distended than the right; the Fallopian tube midway was the size of a nut; a probe introduced at the fimbriated extremity passed into a cavity in the centre of the clot, which dilated that portion of the tube."

Another, on page 197, is to the same effect:—"On post-mortem examination all the abdominal organs were observed to be quite healthy, but very bloodless. In the pelvis a large quantity of blood was discovered, clotty and fluid. After careful examination of the principal bloodvessels, arterial and venous, without discovering anything abnormal, the uterus was examined, together with its appendages, and the source of the hæmorrhage was soon apparent, a small rupture of the right Fallopian tube being discovered at about half an inch from its distal extremity; blood was oozing from it, and it was evident that this was the seat of the bleeding; the tube itself was also a good deal enlarged."

Dr. Goodell also gives a fatal case where a death occurred from about eight pounds of blood being lost from the Fallopian tube, though there was no evidence of a tubal pregnancy.

Case 11, given by Bernutz (p. 208), is extremely instructive, because it is a fatal case of hæmorrhage from the Fallopian tube in a young woman aged twenty-two, due apparently to measles. "On post-mortem examination hæmorrhage was found to have proceeded from the left Fallopian tube, which was distended to the size of the index finger, and containing about two ounces of blood, partly fluid, partly coagulated, and through the abdominal orifice as much as sixteen ounces of blood had escaped into the pelvis. These samples of hæmatocele, occurring in rubeola, scarlatina, and variola, demonstrate that this accident may occur in any severe fever."

Finally, I wish to refer you to a case originally contributed to the *London and Edinburgh Monthly Journal* for 1841, because it establishes beyond all doubt that fatal hæmorrhage can occur from the Fallopian tube into the peritoneum under circumstances when the occurrence of rupture of the tube by an ovum is out of the question. An illustration of the tube is given. "A large quantity of blood was effused into the abdomen and pelvis, mostly coagulated but partly fluid. At first it was impossible to say whence all this blood came, but on examining the pelvic viscera solid coagula was observed protruding from the open orifices of the Fallopian tubes. The tubes themselves were filled with blood and distended at a short distance from the uterus up to the distal extremity. The condition of the parts is very well shown in the accompanying sketch, which represents the serious state of one of the tubes and the appearance of the clot attached; the latter has a sort of lobulated appearance, produced by the constrictions exerted upon it in its passage along the tube. The other tube was the same. The greater part of the blood found in the pelvis escaped from the tubes no doubt in a fluid state, but that which was attached to the tubes was coagulated before it left the canal, as is evident from its shape."

Concerning the prognosis of such cases Goupil says: "It is but too true, I fear, that we are authorised in saying that all the cases of intra-peritoneal hæmorrhage arising from extra-uterine pregnancy end in death—in fact, all the cases that I have quoted have terminated in death; generally it has taken place in a few hours or days, and though death has been delayed for six months (as in the case already quoted) it is wholly exceptional." This was absolutely true in my own experience, till I was emboldened—shall I say till I was shamed by Dr. Hallwright's cases?—to open the abdomen and save their lives.

We come, then, to the following conclusions: That in the great majority of cases of extra-peritoneal hæmatocele the disease may be left alone, being rarely fatal, and that it is to be interfered with only when suppuration has occurred. That, on the contrary, intra-peritoneal hæmatocele is fatal with such almost uniform certainty that so soon as it is suspected the abdomen must be opened and the hæmorrhage arrested. In the overwhelming majority of cases the source of the hæmatocele will be found in the broad ligament, and then it can be dealt with, and with every prospect of success. If anyone objects to this, I appeal again to the canon of surgery, which is of uniform application. For surgical hæmorrhage cut down and tie the bleeding point; if a big branch of the femoral artery were bleeding, my colleagues who deal in such cases would cut down and tie it. Why should Poupart's ligament be a line of demarcation within which this surgical writ will not run? Why should my friend Dr. —— be allowed to do to the external iliac artery what I am prohibited from doing to the internal iliac division? Indeed, at page 202 of Bernutz and Goupil's work they assert this principle: "The indication in such a case is plain—we must stop the hæmorrhage."

MASKED HEART DISEASE.[1]

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"MEN observe when things hit, and not when they miss," says Bacon; and medical men are no exception to the rule. Much, however, may be learnt by the leisurely reconsideration of errors in bedside investigation. With this view I propose to take for my text certain cases of heart disease, in which necropsies have subsequently shown the imperfections of the clinical diagnoses. With our present aids to the proper investigation of disease, the various lesions of the heart which are commonly met with in practice can be in most instances differentiated with considerable accuracy. There will nevertheless remain cases that, from causes I shall hereafter recapitulate, may be overlooked or mistaken by the most careful observer.

Heart disease may be masked in a patient by one of the following reasons:—1. The conventional signs of disease of the organ may be altogether absent. 2. The auscultatory or other evidences of cardiac disorder may point to lesions other than those actually present. 3. Finally, the signs of heart disease may be so masked or obliterated by urgent local symptoms developed elsewhere as to be overlooked during the life of the patient. I shall not attempt to assign too closely under any one of these headings the causes of a faulty diagnosis in the cases I shall hereafter mention. In practice, two or more of these reasons will generally be found to operate conjointly in the production of the error. Whilst classifying the cases under one or other of the above divisions, let it therefore be understood that I have

[1] Read before the Brighton Medico-Chirurgical Society, Feb. 1886.

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only selected the most prominent cause of the oversight in each instance.

Pathologists and physicians generally admit that there are many serious cardiac lesions which with our present lights must remain conjectural during the patient's life. According to Dr. Fagge,[2] in cases of cerebral hæmorrhage enormous *hypertrophy of the heart* may occur without any clinical evidences of such a condition. The organ seems to bury itself within the hollow of the left lung, and the area of dulness is consequently not increased. I have met with several cases of considerable enlargement of the heart which were unnoticed at the bedside, and I shall refer to some of them subsequently. It seems probable that several causes may operate to mask this enlargement during life. *Fibroid disease of the heart* is also frequently unaccompanied by any distinguishable signs of cardiac incapacity. The same author states that in three of the twenty-seven cases he had collected the patient died of some other cause. *Aneurysm of the heart* is seldom diagnosed clinically; and the symptoms of true *fatty degeneration* are very obscure.[3] It may be doubtless assumed that a patient who suffers from faintness, dyspnœa, and lividity, who has a weak, irregular pulse, and in whom there is an indistinctness of the first cardiac sound, may have this lesion. There will nevertheless remain a large percentage of sudden deaths from fatty degeneration of the heart wherein the cardiac changes were unsuspected until they were revealed at the necropsy. Finally, *adherent pericardium* may exist without being detected by any definite physical signs.[4] I shall here narrate a case under my care:—

S. W—— became an in-patient in 1883. He then suffered from orthopnœa and sickness. His pulse was extremely rapid and irregular. On examining the chest the area of cardiac dulness was found to be greatly increased downwards and to the left. A blowing systolic murmur was heard at the apex, and a loud clanging sound at the base over the aortic valves. There was a history of three attacks of acute rheumatism. A fortnight after admission he died. A post-mortem examination showed numerous old adhesions in the pleural cavities, especially the right; and a thin firmly adherent pericardium over the anterior and lateral walls of the heart. There was an enormous heart, weighing 30 oz. All its cavities were dilated, particularly the left, which were also hypertrophied. The mitral and aortic valves were thickened and flexible, but there was no vegetations. Both the calibre of the aorta and that of the pulmonary artery were greater than natural. The semilunar valves of the former, however, were apparently adequately enlarged, and it was doubtful whether there had been any incompetence during life. In this case, I acknowledge that my diagnosis was in many respects at fault. The pericardial adhesions were quite unsuspected by me whilst the sufferer was alive. Upon carefully reconsidering the symptoms of the case by the after-light cast upon them at the necropsy, I think the adherent pericardium was really the starting-point of all my patient's subsequent cardiac troubles. The heart, hampered in its action by being glued, as it were, to the anterior walls of the chest, at a time when it is probable that its walls were weakened by the existence of some myocarditis, was unable to carry on the work of the circulation as it had previously done; dilatation and compensatory hypertrophy accordingly followed closely upon the first lesion. These muscular changes were, I take it, a consequence of the pericardial adhesions, and not of any valvular deficiency, for the latter structures were flexible and smooth, and could not have offered any great impediment to the proper circulation of the blood through the various orifices. Towards the end of life there was probably regurgitation through the mitral orifice, but the aortic cusps seemed to be competent at the time of death.

Many authorities on heart disease (of whom Dr. Balfour is one) hold that pericardial adhesions do not produce hypertrophy—that when hypertrophy arises in such cases it is due to other, probably valvular, causes. In the case to which I have briefly alluded, it would seem to be a distortion of fact to fit a preconceived theory, if we are to believe that the great cardiac enlargement was due to the comparatively trifling valve disease observable. The frequency with which inflammation of the visceral layers of the pericardium are associated with a superficial myocarditis, and a consequent degeneration of the muscular substance of the heart may assist, as I before stated, in weakening the walls of the organ, and in paving the way to their future dilatation. I will narrate a second case:—

E. D——, a laundress, aged twenty-two, was admitted on September 4th, 1885, suffering from the effects of chill during convalescence from an attack of acute rheumatism two months previously. On the day following admission, the area of cardiac dulness was considerably increased, and for a few hours a rough friction sound was heard over the aortic valves, where the endocardial sounds were indistinctly audible. There was also evidence of fluid in both pleural cavities, and a blowing systolic murmur was heard over the scapular regions. Eight days afterwards the area of cardiac dulness was normal; the friction sound had disappeared, and the heart sounds were heard loudly over the front of the chest. The systolic murmur remained unchanged. It was now impossible to diagnose from the physical signs the previous pericardial inflammation. The patient, however, did not improve in health; the dyspnœa from which she had been suffering became more urgent, and she died two days subsequently. At the necropsy, besides pulmonary and pleural lesions, to which I need not here allude, both surfaces of the pericardium were everywhere coated with soft, rough lymph, which stripped off readily, leaving the serous membrane smooth and injected. There were also a few fibrous vegetations on the free edges of the mitral and aortic valves. The heart was not enlarged. In this case a universal pericarditis was present, and for two days before death there were absolutely no physical signs by which such a pathological condition could be diagnosed. The sudden disappearance of the abnormal sound over the præcordia was, I suppose, due to the more or less close agglutination of the two roughened surfaces of the pericardial sac during the last days of life, although the softness and slight consistency of the false membranes could only admit of a feeble cohesion between them.

The conventional evidences of one form of heart disorder are occasionally replaced by others associated usually with pathological changes of a different nature. Sietz[5] first noticed that the movements of an enlarged heart are sometimes attended with "to-and-fro" sounds simulating the rub of pericarditis, and this observation of his has been confirmed by Walshe and Fagge. I have not met with a case of this kind. It is, however, worth while to remember that these abnormal rubbing sounds may exist without inflammation of the serous membrane. I shall allude to the possible etiology of this phenomenon hereafter. Amongst the cases of which I have notes there are two I shall briefly notice in connexion with this division of my paper. They are both cases of mitral stenosis of the so-called "button-hole" lesion.

E. R——, aged thirty-three, a single woman, was an in-patient suffering from jaundice due to impacted gall-stones. There was also a history of old heart disease. On admission, nineteen days before her death, the heart's apex was three-quarters of an inch inside left nipple vertical. Action rapid and irregular. No murmur. These signs continued the same until death. At the necropsy the heart weighed 18 oz. The left cavities were especially dilated and hypertrophied. The mitral orifice was greatly contracted, and the valves thickened with soft easily detached vegetations along the free edges. The aortic valves were competent. A tuft of vegetations was attached to the ventricular surface of each corpus Arantii. No ulcerations of the walls of the ventricles or of the cusps. The valves were not thickened. Muscular tissue somewhat soft.

The other case was that of a woman about fifty, who was admitted with right hemiplegia. The heart's action was extremely irregular and rapid. There were no murmurs, and no definite signs of enlargement. The necropsy, a few days afterwards, showed hæmorrhage into the basal ganglia, and a well-marked "button-hole" mitral valve: the opening in its midst scarcely admitted a finger-tip. I have unfortunately mislaid the notes of this case, and I can only speak from memory. The facts, as far as they go, may, however, be accepted as true.

In both cases great stenosis of the mitral orifice existed without this condition of the valves giving rise to any præsystolic or other murmur. The only symptom of importance common to the two cases was the rapid and irregular action of the heart. The condition of the patients, who were both extremely feeble at the time of admission, may have assisted in modifying the physical signs.

[2] Principles and Practice of Medicine, vol. ii., p. 24.
[3] Ibid., p. 39.
[4] Ibid., p. 41.
[5] Deut. Arch., xi., xii.

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It often happens in practice that the clinical evidences of heart disease are masked or hidden by the conspicuous break-down of some neighbouring organs. The lungs are the organs which most frequently produce this complication. I have notes of three cases of hypertrophy and dilatation of the left cavities, in which no definite signs of such a condition were noticed during life.[6] This so far agrees with what Dr. Fagge *(vide supra)* has written on the subject. The only symptom I can find common to them all was dyspnœa—suffocating attacks of shortness of breath,—which came on with varying frequency for several days before death. In all the cases there was a considerable quantity of fluid in the pleural cavities, and the lung tissue was collapsed to a greater or less extent. (In one case a portion of the right lung was "carnified.")

The generally accepted doctrine as to the etiology of dyspnœa in such cases is ably expounded by the late Dr. Fagge.[7] In enlargement of the left heart slight excitement or exertion on the part of the patient will produce an altogether disproportionate increase in the rate of the pulse, with at the same time a sensation of dyspnœa. Dr. Fagge explains these peculiarities as follows:—"In spite of its augmented frequency, the heart, after all, fails to forward the blood through its left chambers with needful rapidity; there is therefore an accumulation in the pulmonary vessels, and the right ventricle has to make increased efforts to propel its contents onwards. And as the result is a state of the pulmonary circulation identical with that which is produced in other cases by a deficient supply of air to the lungs, it is not surprising that the same feeling of shortness of breath is experienced." This explanation implies that the dyspnœa in these cases is associated with engorgement of the pulmonary vessels. I must take exception to this view, as one which is not applicable to two of the three cases I am here considering.

Physiologists assume, in calculating the work done by the heart, that in the healthy man the ventricles empty themselves of blood at each systole. We may probably accept their conclusions founded on this assumption when they deal with an organ of normal capacity. These data are, I think, erroneous when applied to an enlarged heart, especially when the enlargement is associated (as is mostly the case) with dilatation of the left ventricle. The solid contents of spheres vary directly as the cubes of their radii. If we take a distended heart cavity to roughly represent a sphere (the actual shape of the cavity does not greatly affect the result), we can readily understand how a very slight augmentation of its mean diameter will largely increase its capacity. For example, a ventricle with the capacity equal to the volume of a sphere of one-inch radius will contain, when distended, about four cubic inches of blood. If we now take a ventricle having a capacity equal to the volume of a sphere of two inches' radius, the contents of such a chamber would be upwards of thirty-three cubic inches; that is to say, the heart, if it emptied itself at each systole, in the former case would propel only one-eighth the quantity of blood that it would do under the latter circumstances. It must be within the experience of most of us to have frequently examined hearts the mean diameters of whose chambers, if not double their normal size, were at all events greatly increased. Now the carrying capacity of such dilating hearts increases at a far more rapid rate probably than their propelling power—that is, than any compensatory hypertrophy of the muscular walls would be capable of adequately dealing with. The overtaxed ventricles of such enlarged hearts never quite empty themselves. There follows a condition of engorgement, not of the lungs in the first place, but of the heart itself. If, as mostly happens, the left ventricle is the one smitten by disease, in spite of its thickened walls and its enlarged chamber, a less volume of blood would be probably driven through the aorta and systemic vessels than in health, and an anæmic condition of the body would be the result. In some instances I have no doubt there is regurgitation through the mitral orifice and pulmonary congestion; but I desire it to be understood that this is an accidental and not a necessary sequence. In two of the three cases of cardiac enlargement I have just alluded to the lungs were pale and bloodless; yet the patients both suffered dyspnœa before their deaths—a condition exaggerated by the presence of a considerable quantity of fluid in the pleural cavities, although we must possibly seek for its origin in the engorgement of the heart and the consequent withdrawal of so much blood from the general circulation. It is this chronic distension of the dilated heart in a normally-sized pericardial sac which is doubtless accountable for the pseudo-friction sound occasionally heard in such cases.

Brighton.

[6] One patient died of hæmorrhage into the pons Varolii and atheroma of the cerebral arteries; another, whose heart weighed 22 oz., had sarcoma of the left kidney; the third had contracted granular kidneys, with a heart weighing 20 oz.

[7] Principles and Practice of Medicine, vol. ii., pp. 29, 30.

TREATMENT OF UTERINE FIBRO-MYOMA.[1]

BY J. KNOWSLEY THORNTON, M.B., C.M.,
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BEFORE proceeding to the consideration of the surgical treatment of this common disease, I will say a few words about the medical and dietetic treatment, because, seeing as I do a large number of cases in consultation with my medical brethren, and of cases who come to me from them, for an opinion as to whether any active treatment is necessary or advisable, I am much impressed with the fact that a great many of the patients, who might lead comfortable lives if they were wisely guided as to their diet and general method of life, are allowed or advised to follow a course which makes them worse instead of better, and tends to bring them into the hands of the surgeon.

When a patient presents herself with a small or moderate sized tumour I always begin by asking the following questions: 1. Are you getting so much larger that you have to alter your clothes? 2. Do you suffer any inconvenience from your increased size? 3. Do you suffer pain generally or at the monthly periods? 4. Are the monthly periods regular as to time, and are they prolonged or excessive? 5. Is the action of the bowels or that of the kidneys or bladder interfered with; and are there pressure symptoms, such as swelling of the legs and feet? When these questions have been answered, I ask for a sketch of the usual diet and the habit as to stimulants, and then as to the amount of rest taken at the onset of the period and during the flow. Finally, I inquire whether any special medical treatment has been adopted. If the first three questions are answered in the negative, as they are in the great majority of cases, the chances are that, with a little good direction as to medicine, food, and drink, there will be little need to take into consideration any surgical treatment. Now, I find that in the great majority of cases the patient has been told that she must live well, and take plenty of wine, beer, or spirit, to make up for the free periods and support her strength. There cannot be a greater mistake. The disease, in its early stages always, and in its later stages generally, is found in patients who have a tendency to make flesh and blood fast, and if their alvine and urinary evacuations are carefully regulated, and they are advised to take red or butcher's meat sparingly, and live chiefly on fish, white meat, eggs, milk, and vegetables, and practically wear the "blue ribbon," or only take the smallest quantity of wine or weak spirit-and-water, when their digestion is aided by so doing, the disease will stand still, and their tumours give them little or no inconvenience. They should also be encouraged to take regular walking exercise in the intervals between the periods, but to remain if possible at perfect rest when they occur, and more especially during the congestion which precedes the flow. It is also a common practice to give ergot during the menstrual flow, and I believe it is a great error. The growth cannot then be starved by contraction of the uterine muscle, for it is by its physiological nerve stimulation abundantly supplied with blood, and at the most the flow is checked, which is nature's natural outlet for the increased blood-supply, and thus is increased the congestion upon which the growth feeds. The ergot should be given with some nux vomica, which aids its action, and with other vegetable bitters, which prevent it from disagreeing with the stomach, in the intervals between the periods, and a tonic contraction is kept up in the uterine muscular fibres which starves the growth. Then, again, it is a common practice to give these patients iron, because they are often anæmic from loss of blood. I believe this is just as harmful as giving them red meat and wine. Anyone who has watched and studied

[1] Read before the Cambridge Medical Society, June 5th, 1886.

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many of these cases will see that iron, red meat, and wine are the things upon which fibro-myomata grow, flourish, and bleed most. It would occupy too much time to inquire thoroughly into the life-history of these growths, but I am convinced that the ovarian nerve stimulus, which finds its natural outlets in regular menstruation, married life, and maternity, are their great enemies; and if we argue back from these, it is easy to see why iron and meat, the blood-givers, and wine, the great stimulator of the circulation, feed and stimulate the nerve forces, which in the majority of these patients have not and cannot have their natural outlet, and so, like all forces which are excited only to waste, run riot in disease. I do not mean to say that all cases can be prevented from growing by such simple measures, but I do unhesitatingly say that all patients will be made more comfortable by strictly adhering to them, and the large majority will find that they can so effectually check the progress of the growths that they will elect rather thus to regulate their lives than face the serious risks of surgery. I frequently see a patient with a tumour growing fast with all sorts of pelvic pains and discomforts, and with hæmorrhage which threatens to become exhausting. I sketch out a line of treatment, especially dwelling upon the importance of avoiding stimulants and the excessive use of red meat, and advise her to see me again in a few months, saying that it will then be time enough to talk about surgery. When the time comes for the second consultation, the patient comes, not to talk about surgery, but to say how much better she is, and to ask for some further and perhaps more stringent and definite rules as to diet, or for some variation in the aperient or tonic.

In passing now to the surgical treatment of those cases which have gone beyond milder measures, when they first seek special advice, or which the milder measures have failed in, I propose to take as my text three cases which I have recently operated upon, because it is quite impossible to deal with the whole subject in one short paper, and these three cases illustrate in a remarkable manner some of the practical difficulties of diagnosis, and some of the most important pathological considerations.

The first case is one of a very rare class, in which sub-peritoneal and pedunculate tumours grow so fast as to cause marked emaciation, and clearly such cases are only amenable to surgical treatment, and that of the most prompt and radical kind. I have selected this and the other two cases about to be related because they equally illustrate the impossibility of always making an accurate diagnosis between uterine and ovarian tumour, and because I hold that when such cases are met with immediate surgical treatment is the only proper course.

CASE I.—H. F——, single, aged thirty-six, was admitted into the Samaritan Free Hospital, under my care, on March 21st, 1886. She was markedly emaciated, especially about the face and bust, and said that she was losing flesh fast. For the last twelve months she had suffered from frequent attacks of bilious vomiting, with much flatulence and persistent constipation. She had never had any serious illness, and the lungs, heart, and kidneys were healthy. Her father died of phthisis at forty-one, and her only sister at twenty-one. Her mother, aged sixty-eight, was alive. One of her mother's brothers also died of phthisis. With the exception of the attacks of sickness, she had been in her usual health till two months before admission, when she noticed a lump in her abdomen, which fell over from side to side when she turned in bed. It increased rapidly in size after she first noticed it, and another similar lump soon appeared and also grew fast. Menstruation began at eleven and was always very free and accompanied by much pain till six or seven years back, when the pain and quantity both decreased, but the periods continued to be sufficiently copious and quite regular. On examining the abdomen, I found two large solid tumours: one lying rather to the right and in the lower abdomen; the other above it, entirely in the left side, and passing up under the ribs. Between the two, and somewhat to the left of the median line, there was a third small hard body of irregular outline, which I believed to be the uterus, and the use of the sound verified this opinion. The cervix was found by vaginal examination to be small and soft and high up on the left side. The pouch of Douglas was occupied by a hard rounded mass, which was evidently the lower part of the tumour in the right side of the abdomen. Looking to the position of the two tumours, their relations to the uterine body, the menstrual history, and their rapid growth, which was coincident with emaciation, I came to the conclusion that they were solid ovarian tumours. On March 24th I made the usual median incision and found that the two large growths were pedunculated fibro-myomata, that there was a third similar growth between them, and that the body of the uterus was covered with other small growths. Both ovaries were large, but fairly healthy. I at once decided to perform hysterectomy, as I could include the whole mass in the wire of Koeberlé's serré-nœud, leaving no tied stumps in the peritoneum; and when this can be done complete supra-vaginal hysterectomy is an easier and safer operation than the removal of outgrowths with vascular pedicles, which have to be ligatured and returned, together with the stumps of the ovaries and tubes, which it is necessary to remove in a case of the kind in order to stop the growth of the smaller tumours on the uterine body. The mass when removed weighed just under 7 lb. The patient, who was a nervous and excitable woman, had a temperature of 103°, with a pulse of 108, at the morning visit on the day after the operation, but it fell at once when some pounded ice was applied to the head in a piece of mackintosh, and she made an uninterrupted recovery.

In this case I am certain that an absolute diagnosis was impossible until the abdomen was opened; and though I did not exclude from my diagnosis the possibility of the tumours being fibro-myomata, their general characters, positions, and rapid growth made it more probable that they were solid ovarian sarcomata. This leads me into a short digression from the proper subject of my paper for the purpose of discussing a most important practical point. I have long been in doubt whether it is right to operate upon solid ovarian sarcoma, because, if the operation is immediately successful, the patient is nearly certain to die with recurrent sarcomata in the glands and in various parts of the body in from twelve to fifteen months. Of course it is impossible to say whether life would be more prolonged if the original tumour were left alone; but I fancy not, and that, on the whole, the suffering would be greater with this enormous abdominal mass present. It was not this consideration, however, which turned the balance in the case just narrated in favour of operation, but the fact that, among many recurrent cases (which can be consulted in my published ovariotomy tables), I have one signal success in the case of a young married lady, who was almost in a dying state when I operated, and from whom I removed a large brain-like sarcoma of one ovary, separating extensive adhesions which involved the other ovary. She had two girls before the operation, a third within two years, and quite recently, on the sixth anniversary of the operation, she sent me the photograph of a fine baby boy, who is the only male heir to his father's name, and whose advent had long been keenly desired; one such success makes up for many sad failures, and now the instance I have recorded is another encouragement to operate in these cases, for it would have been a terrible thing had I left this poor woman to perish, believing the tumours were ovarian sarcomata, when they were simple fibro-myomata and radically curable.

The second case which I am about to record is another example of the impossibility of certain diagnosis in some cases, and it again carries me beyond my subject; but the lessons it teaches are so bound up with it that I feel that no apology is necessary for relating it.

CASE 2.—E. A. J——, aged forty-five, married, and mother of one child twenty-four years of age, was admitted into the Samaritan Hospital, under my care, on April 3rd, 1886. She was not emaciated, but had a very sallow, unhealthy appearance. She had suffered for some years from sickness, flatulence, constipation, and pain after food. The heart and lungs were healthy, but the kidneys were daily secreting from twenty to thirty ounces of pale, highly albuminous urine, with a specific gravity of 1010, and she had for the last three years been unable to empty the bladder without the aid of manual pressure over the lower abdomen. She had married at the age of nineteen, and had one child; then had been a widow from twenty-one to twenty-nine; subsequently she married again, and had a miscarriage. She was regular after this till two years before admission, when coloured discharge became almost constant, and so continued. The father's family was phthisical; the mother was living, aged seventy-seven; and six of her own brothers and sisters had died, many of them of phthisis. She had had a lump in her abdomen for fourteen years; it was small and hard at first, and to the right of the median line; its growth had been very irregular—fits of rapid increase, followed by complete arrest. When growing fast it caused

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much pain, and she had often been laid up for months at a time with the pain. Nine years ago she consulted one of the most distinguished authorities, and was told to wait for the menopause; and in October, 1885, she again consulted him, and the same advice was given. She was keenly anxious for operation, because of the attacks of pain and the increasing renal and bladder trouble. I found the abdomen occupied by a large irregularly-lobed tumour, with the bladder drawn up on its anterior surface; the tumour evidently contained a large quantity of fluid. Vaginal examination revealed a large soft fluctuant swelling pressing down between the bladder and cervix, so as to almost obliterate the latter, and a harder mass behind the os. The sound passed a little over three inches, and apparently into the centre of the mass, for the slightest touch on the abdominal swelling at once moved its handle. Looking to the long history, the evident opinion of the authority mentioned above, and the vaginal relations, I came to the conclusion that it was an old fibro-myoma which had become cystic; and as these tumours usually then grow very rapidly, and are quite as dangerous to life as the ovarian cysts, I had no hesitation in assenting to her wish that it should be removed, though I was fully prepared for a serious operation, and was very anxious as to the behaviour of the evidently damaged kidneys. I operated upon the 7th of April, and, after working hard for three hours and a half, succeeded in removing the greater part of what I have no doubt was a papillomatous cyst of the right ovary embedded in the broad ligament, as they so often are, and united by firm fibrous tissue to all the neighbouring organs, the adhesions having become denser and denser with the repeated attacks of pain (? peritonitis), and the uterus and bladder having been drawn out over the tumour, so that I had to remove the former and peel back the latter. In the course of the operation I tied both uterine arteries (the first time I have ever knowingly ligatured them), and exposed several inches of the right ureter, distended with urine. I was unable entirely to remove the cyst growing between the bladder and cervix, and this brought about a fatal result, for it filled gradually with ovarian fluid and blood; the mixture putrefied, and just when I thought she had got over her dangers, it was suddenly discharged into the peritoneum during the first action of the bowels on the sixth day, and she collapsed and died within an hour.

Here, again, we have a case evidently difficult to distinguish from a fibro-myoma in its early growth, and I am sure quite impossible to distinguish from a fibro-cyst of the uterus at the time it came under my care. I have operated upon many of these cases of ovarian or other cysts embedded in the broad ligament and without a pedicle, and though their enucleation requires care and is tedious, they usually recover well if only they are taken in time—i.e., while their connexions are mere loose cellular tissue; and I have no doubt that this poor woman might have been saved many years of misery, ending in a sudden death, and I the misfortune of an unsuccessful case, if only she had been lucky enough to fall into the hands of someone courageous enough to attack a somewhat doubtful case. The kidneys threatened to cease secreting for the first few days after the operation, and then, as if rejoicing in the unaccustomed freedom from obstruction, poured out an abundance of fairly healthy urine with a much-increased specific gravity; and while I was welcoming this new feature of hope the final catastrophe occurred. It is a combination of hysterectomy with incomplete ovariotomy, and, like a good many operations in the present practice of abdominal surgery, very difficult to classify for statistical purposes. It should be borne in mind that cases like this, though they may not kill the patient by rapid and excessive growth, may be slowly and surely doing so by pressing on and obstructing the ureters, and that the same pathological condition is brought about by many a large solid fibro-myoma, which gives apparently little inconvenience, and certainly neither causes severe pain nor danger from its size or from hæmorrhage—the three symptoms in these cases which have been over and over again insisted on as the only justification for operative interference.

(To be concluded.)

AT an inquest held at Burton on the 15th inst. on the body of James Sproule Smythe, a surgeon, who for some time had been in practice in the town, and whose death occurred on the previous day from prussic acid, the jury returned a verdict of "Death from misadventure."

ON VICARIOUS BLEEDING FROM THE UNDER LIP,

WITH CASES, AND REMARKS ON THE MODERN TREATMENT OF HÆMORRHOIDS.

By ALEXANDER HARKIN, M.D., F.R.C.S.,
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CASE 1.—Mrs. M——, aged thirty-eight years, of bilious temperament, sallow complexion, dark hair and eyes, the mother of six children, called on me early in March, 1885. Before her marriage she had suffered from hæmorrhoids, and during her first and subsequent pregnancies from hepatic congestion and occasional hæmorrhage from the bowels, which frequently gave me some anxiety on her account. Among other troubles, in 1880 she was prostrated with profuse hæmorrhage from a cluster of varicose veins connected with the left femoral vein and close to the knee-joint. On this occasion she presented every sign of debility and anæmia: blanched cheeks and lips, sunken features, compressible and feeble pulse, undue palpitation of the heart on the slightest exertion, continuous headache, and frequent vertigo. She attributed her exhaustion to a profuse bleeding from the left under lip, occurring at every meal, and generally continuing for ten minutes each time. On examination I found a slight abrasion at the junction of the epidermis with the lining membrane of the lip, about half the size of a threepenny coin, from which the flood flowed freely. Mrs. M—— had removed from my neighbourhood two years previously, and, as the hæmorrhage from the piles had again become troublesome, acting on the advice of a physician of experience, she entered the Royal Hospital, Belfast, in February, 1883, where soon after the offending growths were deligated by one of the attending surgeons to that institution. After her return home in April, she experienced complete relief for a short time only, irritation about the anus occurring occasionally, and now and then a slight discharge of blood from the nostrils; but in the following June her left lip became painful, and blood began to ooze from it once or twice in the week; the intervals then became gradually shorter, the drain occurring every day, and for many weeks before her visit to me the discharge reappeared at every meal, or when accidentally the lip was hurt. Having from previous lengthened experience acquired a thorough knowledge of the patient's constitution and requirements, I did not hesitate in adopting a plan of treatment. I ordered the immediate application of a blister, 8 in. by 4 in., for eight hours over the region of the liver, to be followed by cotton-wool dressing. On visiting Mrs. M—— next day, I was informed that from the moment free vesication was established all labial hæmorrhage had ceased, and a return of health began to be felt. I then prescribed the use of chlorate of potash and iron in liberal doses; her colour and bodily strength soon reappeared, her headache and vertigo troubled her no more, and, with the exception of an occasional feeling of pain at the seat of discharge in the lower lip, she has not had a recurrence of any of her former ailments. In January last she gave birth to a male child without any unusual trouble, and up to the present date (a period of two years and seven months) there has not been even the slightest sign of the hæmorrhage.

CASE 2.—Mrs. McD——, aged thirty-six years, mother of six children, sent for me on March 8th, 1886. I found her confined to bed, pallid and exhausted from a profuse discharge of blood from the rectum, which had continued for several days, having delayed from motives of delicacy to send for medical advice; the blood accompanied every evacuation, and frequently after feeling a desire the motion consisted of blood alone, often to the amount of three or four ounces. On examination I found a fringe of external piles surrounding the aperture of the rectum, and inside the sphincter a number of knotty tubercles, from one of which red arterial blood flowed freely. In this, as in the former case, I immediately applied a blister over the region of the liver, and ordered as an adjuvant a mixture of tincture of perchloride of iron and chlorate of potash solution. The relief was immediate, and the patient very soon recovered her natural colour and strength, and was able to take out-door exercise. At the end of a fortnight, however, I was again called to the

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case, and found that the bleeding had returned as freely as ever, with great mental and bodily depression. The relapse was due to the patient having unwisely stood behind a counter to assist her husband for ten hours on a previous day. As her friends had now become anxious on her behalf, I requested Dr. Walton Browne to see the patient with me. After recognising the nature of the ailment, we agreed to continue the hæmostatic medicine, and gave her a sedative enema at intervals. These remedies only gave her partial relief, and as the drain was still continuous and severe, at the request of the patient I reapplied the blister to the same place on March 28th. The remedy was again successful; all bleeding ceased, and has not made any reappearance up to the present date.

As bearing upon the etiology of these discharges, I wish to append the history of three recent cases in growing youths, very similar in character and cure.

On May 13th, 1885, I was asked to visit J. B——, a counter hand in a spirit store. He had been subject to free bleeding from the right nostril at short intervals for many weeks; he also suffered from severe headaches and constipated bowels; no history of piles. On examining the region of the liver, I found the organ tender on pressure and somewhat enlarged. I then applied the liquor epispasticus freely over the hepatic region, telling the young man that after five hours the hæmorrhage would permanently cease. I ordered some cholagogue medicine, at the same time giving him general directions as to diet. As I predicted, the hæmorrhage ceased, and now after the interval of more than a year it has not returned.

On the same day (May 13th), a young man, apprenticed to a chemist, was brought to me by his father, who stated that his son had suffered very much from indigestion and vertigo, and that he had been bleeding from the right nostril for many days. I had formerly treated his father for congestion of the liver due to excessive drinking. On looking at the abdominal region, I found an enlarged liver, with congested cutaneous veins traversing the abdominal surface over that organ. I applied the fluid blister, with the usual result—an immediate cessation of the epistaxis. The young man has since emigrated, but until the day of his departure, six months after, the cure had been complete.

On May 25th, 1885, J. S——, an in-door servant, suffering from profuse epistaxis from the left nostril, sought my advice. The bleeding had continued for six weeks, at intervals; it had first appeared at 6 A.M. and 9 A.M. daily, but latterly it observed no limits, coming on six or seven times in the twenty-four hours. On examination, I found a large and torpid liver; the patient had, besides, many of the subjective signs of the disease—disturbed sleep, headache, irritable temper, borborygmi, hardened fæces, high-coloured urine, depressed spirits, inability to rise in the morning, and drowsiness during the day. I applied the counter-irritant over the site of the disease, and with the result that the epistaxis yielded at once as well as the other objective and subjective symptoms of hepatic disorder. After an interval of more than a year he has continued well.

It is freely acknowledged by all writers on the pathology of hæmorrhoids that these adventitious bodies owe their existence chiefly to the congestion of a distant organ—the liver,—or to obstruction, from various causes, of the great portal vein, through which the venous blood from the abdominal viscera passes into the liver. Van Buren[1] has called attention to the fact "that these veins, including the hæmorrhoidal, are unprovided with valves, and that consequently, whenever the abdominal circulation is sluggish or obstructed, as by an overloaded colon, abdominal tumour, or congested liver, there is a strong tendency to stagnation in its lowermost tributary—the hæmorrhoidal vein. When a mass of dilated veins is thus frequently subjected to bruising in the act of defecation, it is liable to an attack of inflammation, the connecting tissues surrounding the veins becomes infiltrated with exudation, and the morbid anatomy of the hæmorrhoidal tumour is thus explained." With such a history of the genesis of piles, does it not appear strange that to a great extent the remedy is sought for, not in the removal or mitigation of their primary cause, but in their mechanical obliteration by ligature, by the actual cautery, or by the clamp? Yet such, unhappily, is too often the case; and what but serious injury must be the result, when this line of treatment is adopted in men with enlarged and indurated livers, with persistent engorgement of the portal system, and the circulation through the abdominal viscera almost completely obstructed? The fault, if such there be, is chargeable to the medical adviser, who, instead of proceeding upon physiological grounds and labouring to cure the disease by removing its cause, too often turns over his patients to the operating surgeon, and considers his responsibility at an end, when these erectile tumours, whether internal or external to the sphincter, are deligated in a scientific manner.

My first case clearly exemplifies the failure of merely surgical appliances in the absence of constitutional treatment, and the mistake of regarding a prominent symptom as the primary factor in the cycle of morbid phenomena. The violent suppression of a salutary discharge was soon followed by its re-establishment at the superior outlet of the digestive tract; and had similar methods been applied to its extinction on the labial outlet, we should doubtless have found that the nasal organ would in due course have protested, acccording to its wont, by profuse epistaxis, against the mere mechanical treatment of a systemic lesion. Would the doctrine of deligation be permissible in the latter case? The second example illustrates the advantage of counter-irritant and derivative treatment in immediately controlling and finally suppressing the hæmorrhoidal flux, and in this manner superseding the necessity for operative procedure, with its attendant dangers and discomforts.

The frequent occurrence of epistaxis in youth is evidently due to the excitement and hyperæmic condition of the liver and digestive organs during the period of active growth and the constant demands on its functional activity. The liver at this stage closely approximates to the condition in after-life, which is the causal factor in the development of piles, and as such is equally amenable to treatment in accordance with etiological principles; the derivative that cures the hæmorrhoidal flux as certainly puts an end to the epistaxis, the outcome of hepatic congestion. The cases related are but the types of many others in a lengthened experience. I have chosen them as being of recent occurrence, and as sufficiently removed from the date of treatment to test the validity and permanence of their cure.

My object in this paper is to enter my protest against the unsound principles upon which hæmorrhoids are so frequently treated, and the routine procedure adopted in the sudden suppression of a habitual discharge without sufficient attention to its remote cause.

Belfast.

[1] Diseases of the Rectum, p. 18.

AORTIC ANEURYSMAL DILATATION, RUPTURE, CAUSE, AND NECROPSY.

BY W. A. HOLMES, M.D., &c.

THE following is an account of a young man cut off in the prime of life through a defect, but aided by a sudden effort in spurts whilst rowing. His age was twenty-three years; he was apparently strong, healthy, and well built. He assisted his father in business, was not called upon to do sudden or heavy work, and was fond of rowing.

The following description of how the calamity occurred is culled chiefly from the coxwain's narrative of events:—In the evening, while practising for a rowing competition in a crew of four oarsmen and coxswain, they rowed for about half a mile at an ordinary pace, the deceased being No. 3 in the boat. They then had a sharp spin for 300 yards down the stream; shortly after this another for 200 yards; they then stopped, but for no alleged reason, for a few minutes, and then rowed leisurely. Again they put on another short spurt, and finally gently rowed to the boat-house. All this occupied about half an hour. During this period the unfortunate young fellow never showed any signs of fatigue or embarrassment, but when stepping from the boat he exhibited signs of fatigue, made apparent by his not helping to take the boat in as usual. He walked with the others into the dressing-room, but did not return at the time they did. This caused the coxswain to look for him, and he found him partaking of some brandy he had sent for. At the same time he complained of a bad attack of indigestion. The coxswain remarked to him, after he had finished dressing and come out of the room, "You don't look at all yourself," as he looked very heated and red in the face; the reverse was the case generally after exertion, when he looked white. He now got into a boat and was rowed home by the coxswain.

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At the foot of the garden he got out of the boat and carried his bag into the house, changed his coat, returned to the boat, and sat in it while his friend took him for a row. When they had gone about a quarter of a mile, he remarked, "I feel just as if I had broken a bloodvessel inside," at the same time putting his hands by his side; then, almost instantly, without warning or without saying a word, he threw up his arms and fell to one side, partly leaning over the side of the boat. His friend replaced him in the boat, loosened the attire about the neck, and rowed him home. Apparently he had died at this time. Prior to the boating spree he had complained of indigestion, and he had not for some months partaken of any supper after a walk in consequence of the uncomfortable feeling he experienced during the attack of the said indigestion.

Necropsy.—Body well nourished and muscular. Arms from elbow to tips of fingers black, and lower extremities from knees to tips of toes of a similar colour. Post-mortem lividity in depending parts very marked. A frothy, black-looking, offensive fluid oozing from nostrils and mouth. No external marks of injury. Pupils equal, and widely dilated. After removing the sternum and cartilages of of the ribs, the pericardial sac was found much distended, and the prolongation of the parietal layer on to the aorta was visible, apparently pushing the superior vena cava to the right side. The pericardial bag and that part on the aorta was filled with a black congealed clot of blood and a small quantity of black fluid blood. The heart was entirely encircled with a clot about half an inch in thickness, the right auricle being much distended. The aorta was very much dilated; the measurement in circumference a little way about the base was 5¼ in., at the junction of the ascending and transverse parts 6¼ in., and at the middle of the transverse part 3¾ in. The aneurysmal dilatation was more marked posteriorly and on the right lateral surface of the ascending part; on the anterior surface in the same part, a little remote from the bend and passing up to the junction of the transverse part, was a curvilinear tear, ⅝ in. in extent, with a zigzag margin ⅜ in. from the base of the aorta. Another tear in the outer muscular coat was situate a little higher, but more to the right, it being an incomplete tear. The right auricle and pulmonary artery were filled with black fluid blood. The other chambers of the heart and aorta throughout were empty. Left ventricle very muscular. The stomach was much dilated, containing half a pint of green half-digested food, with much mucus (the colour due to spinach). Lungs, liver, spleen, and kidneys were black on section; very black fluid blood oozed out.

Remarks.—From the time the deceased gave up the rowing until the time he threw up his arms would be about three-quarters of an hour. The point of interest in this case is, When did the rupture occur? Did it occur during one of the spurts, or subsequent to one of them, permitting of rowing in another spurt, and finally to leisurely row in? He appeared to be fatigued when he first got out of the boat, felt what he called a bad attack of indigestion, was very red in the face, which was unusual for him, all of which tend to show that the rupture had occurred. But why such a large rupture in the aorta as ⅝ in. did not cause sudden death is a marvel. The brandy, through its stimulating effects on the endocardium, would cause more blood to be thrown forcibly into the aorta, and consequently more into the pericardial sac. Now, if this young man had not taken the brandy, but lain down and kept himself quiet, there might have been a possibility of his recovery, as I have seen a specimen where the aorta ruptured and the patient recovered and lived for months after, but died from a subsequent rupture; and other cases are on record. Another question is, Was death due to the coagulation of blood on the heart or to the impediment of the heart's action?

Barrow-in-Furness.

RED CROSS SOCIETY.—The National Society for Aid to the Sick and Wounded in War (British Red Cross Society) has received decorations of the Red Cross from H. H. the Prince Alexander, as President of the Bulgarian Red Cross Society, in favour of the Society's agents, Doctors Charles Fetherstonhaugh and Richard Lake, and Sister Henrietta Stewart (sent out by command of the Queen), in the late Servo-Bulgarian War, in recognition of their services to the sick and wounded in Bulgaria. A notification has also been received from the Foreign Office by each recipient that Her Majesty has been graciously pleased to grant them permission to accept and wear the decoration.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

DIPHTHERIA: ITS TREATMENT.

By JAMES MERCES, M.R.C.S., L.R.C.P. Lond.

AT a time when so much is being written about outbreaks of diphtheria in the south, with its undue severity, it will be interesting to know the health in other parts of the metropolis. During the past twelve months it has been my share to treat no less than thirteen cases of diphtheria, with one death. No originality is claimed in the plan adopted by me, though it may somewhat startle a few at the large and frequent doses of certain drugs ordered. Briefly, my cases were treated, with the exception of very young children, by (1) internal treatment, (2) by emetics, (3) by gargles, and (4) hygienically.

1. Where the depression is marked, though there may only be the slightest indication of a certain questionable grey slough, with a moderate amount of elevation of temperature and glandular enlargement, a mixture (preceded by a gentle aperient) of the following should be ordered: solution of perchloride of iron, six drachms; dilute nitric acid, two drachms; glycerine, one ounce; water to six ounces; an ounce to be taken every two hours. After the lapse of a few hours patches may be noticed extending in certain directions, while the original patch or patches will appear somewhat shrivelled, the temperature and glandular enlargements probably increasing.

2. An emetic may now be used. Apomorphia acts in these cases most satisfactorily, from three to five minims promptly producing emesis in from one to three minutes. If now the ejected contents be examined portions of slough may be detected. The patient, though rather prostrate, will be much relieved of urgent dyspnœa. It is rarely necessary to repeat the apomorphia. The iron mixture is to be continued every second hour.

3. If the patient be intelligent and able to use a gargle, the following will be found most beneficial, establishing a healthy condition to the surface from those portions of the fauces and tonsils where the patches have been recently bared of membrane in the efforts of sickness produced by the apomorphia. The gargle should be made in this fashion:—In a six-ounce bottle place a drachm of chlorate of potash, add to it half a drachm of pure hydrochloric acid, and while the nascent chlorine gas is being generated fill the bottle with water, and direct that an ounce of the gargle should be used (the head being well thrown back) every third hour.

4. The patient's strength should be maintained by small and frequent quantities of milk and clear beef-tea unflavoured with pepper, salt, &c. Alcohol is urgently demanded, and may be given with a free hand and with much benefit should prostration be marked. It is absolutely imperative that the temperature should be uniform—say, 70° F., with a current of fresh air.

Drayton-park, N.

TWIN LABOUR COMPLICATED WITH RUPTURE OF LARGE VARICOSED LABIAL VEINS.

By AMBROSE ATKINSON, M.R.C.S.

SOME little time ago I attended Mrs. F——, aged thirty-nine, in her eighth confinement. Labour commenced about 8 P.M., though she had been poorly for over twenty-four hours. On examination a breech presentation was made out. After waiting some little time it came well down into the pelvis, and when near the outlet the right labium began to swell. The delivery was easy, but whilst separation was being effected the patient was seized with another very strong pain. On examination, made with difficulty, a second group of membranes could be felt, which I ruptured, and the patient obtained ease. This procedure, however, did not affect the tumour, which steadily increased to an alarming size. Another pain coming on, the tumour suddenly burst on its inner side, deluging the bed &c. Not caring to take the whole responsibility of the case, I sent for Mr. Holmes

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of Burmantofts, requesting him to bring the forceps, with the hope of seizing the presenting head. In the meantime, as hæmorrhage was freely going on, I made a firm pad of a napkin and held it to the parts, so as to effectually stop the bleeding. On Mr. Holmes's arrival he slipped the short forceps on to the second head, when the child was suddenly expelled, the injured part being at the same time firmly compressed. The placentæ were then easily disposed of. On examining the damage, it was found that the inner side of the labium was so torn that four fingers could be passed into the opening, which led to a cavity sufficiently large to hold the whole hand. The bleeding had now abated, so the cavity was filled with strips of lint well dusted with iodoform. Pressure being applied by means of a firm spica, the patient was left for the night. On the following morning opium was administered and the plugs were removed, very little bleeding occurring. The vagina was syringed out with perchloride lotion (1 in 3000), and an iodoform suppository placed well up into it; the wound was then dusted with iodoform. This was done twice a day for a week, the patient making a very good recovery. A piece of vein about three-quarters of an inch long, which lay across the wound, sloughed off about the fifth day, a little bleeding taking place. On questioning the patient about the vein, she told me, after all was over, that she had had a lump there for some time, which got larger towards night, but she did not think it worth noticing. The question is, supposing I had known about it before delivery, could anything have been done to save rupture?

Burmantofts.

AN INDIARUBBER CATHETER IN THE MALE BLADDER: SUCCESSFUL REMOVAL.

By HENRY O'NEILL, M.D., M.Ch.,
SURGEON TO THE BELFAST ROYAL HOSPITAL.

WM. M——, aged sixty-three years, farmer, near Belfast, suffered for the past three years from retention of urine due to enlargement of the prostate gland, which required him to use an indiarubber catheter. Whilst passing the catheter on the evening of June 6th, 1886, it accidentally slipped into the bladder. Being called in consultation with Drs. Clugston and McNinch, I found the patient had been suffering from complete retention of urine for thirteen hours and a half. Having placed the patient on his back and administered methylene from Junker's apparatus, I introduced into the bladder a small Thompson's lithotrite, and after searching carefully for some time, I succeeded in extracting the catheter, which was about nine inches long and in size about a No. 12. After its extraction, on drawing off the urine a small amount of blood was mixed with it. The bladder was carefully washed out with warm water, using Clover's suction-syringe. The patient was given one-tenth of a grain of morphia, and the next day a gentle saline aperient was administered. He had the urine drawn off regularly and the bladder washed out with solution of sulphocarbolate of soda (half a grain to the ounce) twice a day. A poultice of linseed-meal was applied over the hypogastrium and kept on for two days. Three days after the operation he was reported as improving, with no bad symptom, and at the end of nine days was going about his usual duties.

Belfast.

NOTE ON COCAINE.

By GEORGE ELDER, M.D., C.M. Glas.

COCAINE is now so extensively used in minor surgery, and usually with such happy results, that an experience like one I had the other day will come upon most of us as a disagreeable surprise.

Preliminary to opening a superficial abscess, twelve minims of a freshly prepared 10 per cent. solution were injected under the skin; and three or four minutes afterwards syncope supervened, followed by twitchings of the face, falling of the jaw, coldness of the body, clammy perspiration, lividity of the face—in fact, all the appearances of imminent death. The patient was several minutes in recovering consciousness, and during the remainder of the day felt very prostrate. Several similar occurrences have been noted in ocular surgery from time to time, showing that cocaine is not so innocuous as has been generally supposed.

Nottingham.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. GEORGE'S HOSPITAL.

SUICIDAL PENETRATING WOUND OF THE NECK; RECOVERY; REMARKS.

(Under the care of Mr. PICK.)

WOUNDS of the front of the neck are the commonest of those met with in this region, and attended with so many dangers that it would take too much space to even enumerate them. In the following case the treatment adopted was most successful, the application of a stout silk ligature on each side being sufficient to keep in apposition the parts divided until firm union had taken place; this was no doubt much aided by the operation of laryngotomy. All danger of suffocation from the extension of local complications was thus prevented, and the patient enabled to breathe pure air. The introduction of a catheter into the œsophagus saved much difficulty in feeding the patient, more nutriment being introduced in this way than could otherwise have been given without great pain and considerable disturbance of the parts. In the majority of wounds of the anterior part of the neck it is not advisable to introduce sutures so as to close the wound; but in a case such as the one which we record, where a certain amount of antiseptic treatment can be applied and the smallest amount of disturbance of the parts is permitted, the introduction of sutures hastens the healing, and is certainly to be advised. For the following notes we are indebted to Mr. W. Bull, surgical registrar.

J. T——, aged forty, a night porter, had been a heavy drinker of beer for many years. There was gout on the father's side of the family, but no history of insanity. Latterly he had been much depressed, owing to having lost the securities for some money lent to a friend. He was found in a watercloset with his throat cut, lying in a pool of blood.

On admission, there was a wound four inches long, which commenced on the left side of the neck over the carotid sheath, and, passing across to the right side through the thyro-hyoid membrane, terminated close to the right carotid vessels. The incision passed through the epiglottis, the larger part of which was left attached to the base of the tongue, and, having completely divided the middle constrictor of the pharynx, had laid bare at one spot the vertebral column, so that the upper part of the pharynx was severed from the lower, and the larynx and trachea had receded towards the chest for fully an inch and a half. There was no hæmorrhage except some slight venous oozing. The house-surgeon, Mr. Page, brought together the divided edges of the middle constrictor with fine catgut sutures, having first passed a gum catheter through the mouth into the œsophagus. On temporary closure of the skin wound, intense dyspnœa came on, so as to endanger the man's life. A stout silk ligature was now passed on each side through the upper border of the thyroid cartilage below and the tissues surrounding the hyoid bone above, and then by gradually drawing them tight the larynx was raised to its proper position. The ends of the ligatures were left long, and were brought out at the corners of the skin wound. Laryngotomy was performed, and a silver tube introduced. The skin wound was united with silver sutures and dressed with carbolised gauze. The patient was placed in a tent, the air of which was kept moist by a eucalyptus steam spray. The man was fed every four hours through the catheter. He passed a quiet night, but was a little restless next day. Owing to his attempting to bite through the catheter, it was thought advisable to remove it, and introduce one through the nose; this was more comfortable, and for twelve days he was fed entirely

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through the nose. On the twelfth day the stout silk ligatures came away, and sufficient union had taken place to retain the larynx in its normal position. The power of deglutition returned, and the nasal tube was removed. Afterwards there was no trouble in swallowing. In a few more days the tracheotomy tube was removed, the original wound having nearly healed, the tent and spray were dispensed with, and the man was allowed to get up. For several days rapid improvement followed, but on the tenth day after the removal of the tracheotomy tube there was difficulty in breathing, which culminated in an attack of spasmodic dyspnœa. Fortunately this was not fatal, but it was deemed necessary to reintroduce the tube through the crico-thyroid space. After wearing this for a week he was able to leave it off for several hours at a time, being trained to this by closure of the tube with a cork, respiration taking place through an aperture in the upper convex surface of the tube. On June 26th he was made an out-patient, wearing a silver tube, and came up daily to be watched while it was removed. At the end of August he left the hospital, being able to breathe freely in the normal way. The only change noticeable was a slight huskiness in the voice.

Remarks by Mr. PICK.—It is seldom that the tissues of the neck are divided, with sufficient freedom to allow the weight of the lungs to cause retraction of the lower end of the air-tube towards the thorax. Dr. Gairdner (*Edin. Med. and Surg. Journ.*, vol. xvi. p. 353) has recorded a case in which, after division of the larynx and œsophagus through the crico-thyroid space, the cut extremities retracted from each other to the distance of at least three inches. Attempts to procure union of the divided larynx failed. The man recovered, and for the remainder of his life had a large fistulous opening through which he breathed, and took food by passing a tube into the lower end of the œsophagus. In subcutaneous rupture of the trachea a similar recession is met with. In the present case it will be seen that the larynx dropped an inch and a half towards the chest. The case is also of interest in the success which attended the attempt to procure union of the thyroid cartilage to the tissues around the hyoid bone, and the ultimate perfect recovery of the power of deglutition and normal respiration.

TOTTENHAM HOSPITAL.

STONE IN THE BLADDER; SUPRA-PUBIC LITHOTOMY; RECOVERY.

(Under the care of Dr. LICHTENBERG.)

FOR the following notes we are indebted to Mr. Lloyd G. Smith, M.B., house-surgeon.

Thomas A——, aged fifteen years, errand-boy, was admitted on October 29th, 1885, complaining of loss of flesh, frequent and painful micturition, with the passage of gravel and occasionally blood, nycturia, and prolapsus ani. He has always had some amount of pain on micturition as long as he can remember, with pain at the end of the penis, which was relieved by pressure at that part. Three months previously he passed blood in the urine for the first time; and severe straining, with increase of pain on micturition, supervened. He had been treated at a dispensary for "debility," and he thinks the medicine prescribed relieved the pain for a time. Since then he has been in a union infirmary, where he was told he had a stone, but no treatment or examination of the bladder was attempted. The family history is good, and there is no history of any other illness. His surroundings at home have been uncomfortable, as, owing to the large family, the supply of food has frequently been insufficient—so much so that he at one time left home and attempted out-door work on a farm, and then went on the tramp, when he became so ill as to necessitate his removal to the union infirmary, as above mentioned, whence he returned home.

On admission he was in an emaciated condition; micturition was frequent and painful, and only accomplished in the erect attitude; the urine contained glairy strings of mucus and gravel, was alkaline, and passed involuntarily during sleep. On passing a sound, it at once struck a stone, and per rectum a calculus, apparently about an inch and a half long, was felt. The anus was prolapsed, but easily reducible.

On Nov. 5th chloroform was administered, and an incision three inches long made above the pubes in the middle line. After the bladder had been moderately distended with warm boric lotion, retained by means of an elastic ligature around the penis, the tissues were dissected aside down to the peritoneum, which was pushed up and held by the finger, and the bladder found lying somewhat deeply. An incision was made through its walls, and the stone seized, but found to be friable, and could not be removed until the incision in the bladder had been enlarged and the calculus pushed up by an assistant's finger in the rectum; it was then easily removed by means of dressing-forceps; some fragments and débris were also removed. The bladder wound was left open, and a T tube placed in the bladder, with a long end to pass into a vessel at the side of the patient. The abdominal wound was sutured with carbolised silk and a drainage-tube in its lower edge. The patient was laid on his side in bed with the end of the T tube projecting into a vessel, and his thighs &c. were well smeared with "pasta urinæ" to prevent excoriation from urine. The diet ordered was milk and beef-tea; the patient's position to be changed at intervals. The calculus removed was the shape of a kidney potato, consisted of uric acid in layers covered externally by a coating of mucus, and weighed seven drachms.

Nov. 6th.—The bladder was irrigated with warm boric lotion. He had slept after the administration of a quarter of a grain of morphia, in the form of a suppository. Urine passed freely, but not so much by the T tube as by the drainage-tube in the lower part of the wound. Glairy mucus passed with it.

8th.—The lower sutures in the abdominal wound were removed, and it was found united. The bladder was irrigated every day with warm boric lotion. Solids were added to the diet.

12th.—The T tube was removed from the bladder, when there was slight swelling and some tenderness around the wound. The temperature had since admission kept fluctuating, at times rising as high as 101° in the evening.

15th.—The remainder of the sutures in the abdominal wound were removed, and the diet was further increased.

19th.—The temperature rose to 103°, and in the evening he had a rigor. The tenderness and swelling around the wound had increased. A boric compress was applied to the wound, and frequently changed. The swelling gradually subsided after extending into the scrotum, and by the 21st the temperature had become normal, which continued until convalescence. Constipation occurred at times, which was treated by mild aperients and enemata. Since the operation the prolapsus ani had steadily diminished. Salicylate of soda in doses of ten grains was administered thrice daily to correct alkalinity of urine, and with some success.

On Dec. 3rd urine was passed per urethram, but continued to escape by the abdominal wound as well until the 12th, when the wound was healed throughout; the urine was then faintly acid. Subsequently a small sinus formed and became a fistula, through which drops of urine and mucus were discharged. This did not close until January, when he was discharged greatly improved in health, having gained in flesh to a surprising extent.

TORBAY HOSPITAL, TORQUAY.

TWO CASES OF LUPUS TREATED SUCCESSFULLY WITH IODOFORM; REMARKS.

FOR the following notes we are indebted to Mr. Guy Tyrrell, house-surgeon.

CASE 1.—Alfred R——, aged sixteen, was admitted to the hospital on Feb. 4th, 1884, suffering from lupus of the nose and lip. The disease had existed for eighteen months, and had already destroyed the lower half of the alæ of the nose and almost the whole of the upper lip. The patient was ordered cod-liver oil, and the sore was dressed with an ointment consisting of one drachm of iodoform to one ounce of vaseline, plugs of lint covered with the ointment being inserted into each nostril. The sore immediately began to assume a healthy appearance and healed slowly but uninterruptedly, and the patient was discharged cured on July 29th.

CASE 2.—William V——, aged sixteen, was admitted on March 13th, 1886. The disease had existed for two years, and extended over nearly the same area, but the lip was not so deeply involved. The same treatment was adopted, and with an equally good result. The patient was discharged cured on August 3rd.

Remarks by Mr. TYRRELL.—I am induced to publish these cases as I do not know that this remedy has been tried before, not having seen it mentioned in any books; but the

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results in these two cases were certainly most striking, and I think it worthy of a further trial, as it is certainly a less painful method than scraping or cauterisation.

Medical Societies.

ROYAL MEDICAL & CHIRURGICAL SOCIETY.

Extra-uterine Gestation.—Three Hundred complete Cases of Ovariotomy.

THE first ordinary meeting of the session of this Society was held on Tuesday last, Mr. G. D. Pollock, F.R.C.S., President, in the chair. A very valuable statistical paper by Mr. Knowsley Thornton occupied the greater part of the evening.

Dr. HENRY GERVIS read a case of Extra-uterine Gestation. It was that of a woman aged thirty-five, who was admitted into St. Thomas's Hospital on Nov. 19th, 1885. The patient ceased to menstruate on May 9th, and her pregnancy proceeded without incident until July, when she experienced severe pain in the abdomen, which continued until admission. In September she passed per vaginam a pint of "thick greenish fluid"; similar discharges continued at intervals until she came under observation. There had been no uterine hæmorrhage, but a piece of "skin" was said to have come away with the discharge on one occasion. On admission an ill-defined swelling was noticed in the hypogastric region, extending towards the right of the middle line; the lower segment of the uterus appeared expanded and fixed. A large quantity of offensive discharge, yellow in colour, was issuing from the vagina through the os uteri; this discharge was found to consist of broken-down muscular fibre and vegetable tissue. On December 14th she passed per vaginam the shaft of a fœtal tibia. On exploration the decomposing body of a small fœtus was found lying, as it were, transversely in the uterine cavity. It was tightly fixed in its position, and all attempts to extract it were in vain; slight hæmorrhage occurred during the operation, and the patient died on the following day. The details of the post-mortem were narrated. The great omentum and the intestines were adherent to the brim of the pelvis, and under this mass the remains of a partially disintegrated fœtus were found in the posterior half of the pelvis. Almost the whole of the posterior wall of the uterus had sloughed away. The author concluded with remarks on the case, and pointed out that he was unable to find any similar case of extra-uterine gestation occupying Douglas's pouch, communicating both with the uterine cavity and the small intestine.—Dr. C. H. F. ROUTH thought the diagnosis might have been made out more accurately earlier in the case. In cases of extra-uterine pregnancy the menstruation ceased from the very first, and returned after a few months, when pieces of decidua usually came away. A growing tumour not in the uterus coming on under such circumstances could only have been due to an extra-uterine pregnancy.—Dr. GERVIS said that the tumour was not a growing one when the case came into St. Thomas's Hospital. It was, as Dr. Routh suggested, a matter of opinion what means were employed for dilatation of the cervix uteri, but in this unique case the necropsy showed that the method of dilatation would not have affected the result.

Mr. KNOWSLEY THORNTON read a paper on Three Hundred additional Cases of complete Ovariotomy and Twenty Cases of Exploratory Operation. After a brief reference to 188 ovariotomies and 22 other cases of abdominal section previously brought before the Society, the author referred to certain alterations in the arrangement of the tables in the present series. A brief description was given of the treatment adopted in ordinary cases, and of the method of drainage in cases requiring it. Cases of hysterectomy, oöphorectomy, nephrectomy, splenectomy, hepatotomy, &c., were not included, as being better dealt with in separate papers. All the operations had been performed with full antiseptic precautions, but this question was not specially discussed. Septicæmia had not been quite banished, but much had been done in this direction, as shown by one consecutive series of 100 ovariotomies performed at the Samaritan Hospital without a death from septicæmia. A progressive decrease in mortality was shown, and a comparison given of the results obtained in this series with those published by some other leading operators. Adhesions, place of operation, age and condition of patient, removal of one or both ovaries, and weight of tumour as influencing mortality were discussed. The temperature and pulse columns were carefully examined and important facts noted, reference being made to Wunderlich's standard temperatures. The benefit of cold applications to the head and in the form of partial or complete wet packs was demonstrated. The influence of the onset of metrostaxis and of the appearance of "sweat rash" were referred to. Drainage was discussed. The speedy recurrence in cases in which solid sarcomata had been removed was pointed out, and also the serious after-mortality from malignant disease of peritoneum, &c. Avoidance of tapping and performance of early ovariotomy were strongly advocated in this latter connexion. The effects of the removal of both ovaries on menstruation were clearly demonstrated in the tables. Brief details of each fatal case were given. Full tables of all the cases, especially full in the exploratory series, and an analysis of the temperature columns, completed the paper.—Sir SPENCER WELLS said there were many remarkably interesting features in the paper. He observed that of the 320 cases there were only nine in which the Fallopian tubes were diseased. It was supposed that disease of these tubes was of extreme frequency. In his experience it was of rare occurrence. The fact that the mortality decreased as time went on should be borne in mind. In his own practice the mortality went down steadily from 30 in the early part of his practice to 10 per cent. in later years. Antiseptics had proved of great service. He had not used a drainage-tube primarily in ovariotomy since 1878. The tapping of simple cysts was, in his opinion, a safe procedure. They were not malignant. He had observed that tetanus tended to occur epidemically. It seemed at times as though "waves" of tetanus passed over the country in some particular direction. He congratulated Mr. Thornton on his magnificent success.—Mr. ALBAN DORAN referred to the tapping of broad-ligament cysts. His pathological experience supported Mr. Thornton's clinical contention, that tapping even apparently simple cysts was not a safe procedure. Perhaps one case in nine of apparent simple cysts was of papillomatous and malignant nature. Dr. Coblenz showed in Virchow's *Archiv* of 1880 that these papillomatous cysts were very frequent. Exploratory incision was less dangerous than tapping.—Dr. HEYWOOD SMITH spoke of the value of the drainage-tube in certain cases where oozing of a grumous fluid occurs.—DR. W. S. PLAYFAIR said that the "spray" was not a necessary adjunct to antiseptic ovariotomy. He considered until the antiseptic system came into use that it was not safe to operate on cases of ovariotomy in general hospitals. In his belief the "spray" involved the complete and minute carrying out of antiseptic precautions. Hence its value. The free washing out of the peritoneum with water was a valuable procedure, and less irritating than the employment of sponges.—Dr. GERVIS said that the plan of washing out the peritoneum with water originated with the Americans, who even anticipated the Germans.—Dr. K. THORNTON, in reply, said that the employment of the ice cap and cold sponging for keeping the temperature within bounds was of great value, but antiseptics had greatly diminished their need. Drainage-tubes saved lives, and prevented discomfort and fever. But the tube should not be left in too long, lest it irritate the peritoneum, with the result that a chronic effusion is brought on that may cause flooding of the dressings. He was a great unbeliever in the value of tapping simple cysts. He doubted whether there was a large number of cures by this method. And the post-mortem records did not yield any evidence of the existence of cysts that had been so cured. He had never found the reopening of a wound with the insertion of a drainage-tube to be successful. He objected to the use of fanciful terms, as "grumous fluid," which could hardly mean anything more than a mixture of blood and serum. He was not a bigot in the matter of the spray, but it was a useful element; it kept everything about the wound constantly moist with an antiseptic material. He was prepared to admit that washing the wound out with water was very valuable. In cases of pyo-salpinx, where little particles of matter were lodged in various crevices and corners, the hot water broke up the particles into atoms that were easily absorbed or dispersed.

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CLINICAL SOCIETY OF LONDON.

Removal of Scapula for Osteo-sarcoma.—Ligature of Large Arteries.

AN ordinary meeting of this Society was held on the 22nd inst., Mr. Sidney Jones, F.R.C.S., Vice-president, in the chair.

Mr. CHARTERS SYMONDS read a paper on a case of Removal of Entire Scapula for Osteo-sarcoma, in a man aged thirty-four, who remained well, and was shown at the Society, two years having elapsed since the operation. Six months before admission he fell and bruised his shoulder, attending for a month at the Croydon Hospital, where he was told he had ruptured a muscle. One month after the accident a swelling appeared, and from that time steadily advanced without pain. The inconvenience was due entirely to its size, the man being unable to do heavy work. When admitted he was healthy in other respects. To the dorsum of the scapula was attached a tumour measuring from nine to ten inches, and projecting five inches from the surface. It moved with the scapula, and did not appear quite to reach the glenoid cavity. The spine of the scapula could just be traced. On April 1st, 1884, the whole bone was removed except the acromion and coracoid processes. The usual transverse and vertical incisions were made, one flap only being reflected at a time. First the minor flap was dissected off, and the posterior border of the bone freed. Next the inferior angle was isolated, and then the anterior flap was reflected and the axillary border freed, the various muscles being divided. The deltoid and trapezius muscles were divided close to the spine of the scapula, and the superior border was freed. The growth was found to extend to the glenoid cavity, so after sawing off the acromion and coracoid processes, the capsule and the muscles covering it were severed. The whole mass was then raised from the chest, and the serratus magnus divided. The subclavian was compressed during the operation, and all the large vessels seized by two pairs of forceps before being divided. In this way little blood was lost. The same evening the man had an unexplained attack of dyspnœa which lasted twenty-four hours, and interfered with sleep. The temperature rose quickly, reaching its highest point—103·6°—on the fourth day, but instead of falling it passed into a hectic fever, which lasted till May 9th, and then suddenly ceased on the removal of the cause of suppuration—viz., the head of the humerus. Rapid recovery ensued. Another clinical feature of interest was œdema of the arm without redness, and with no special fever. This was attributed to thrombosis of the axillary vein, but as it disappeared within a few days of the removal of the head of the bone, some other explanation seemed called for. Mr. Symonds drew attention to the fact that the continued suppuration appeared to be due entirely to the cartilage covering the head of the humerus. This structure was found in a suppurating state, and was being thrown off by granulating tissue, and the moment the entire surface was removed recovery began, and was so rapid that within a few days the patient was up and the parts healed, the man gaining flesh within three weeks. The complication was attributed previously to traumatic fever, which determined suppuration in the wound, and that this, involving the joint structures, the cartilage acting like a foreign body, maintained the suppuration. Mr. Symonds said he now always carefully removed all cartilage in operations involving joints. The man was shown to the Society two years and a half after the operation and had a useful arm. He could do much of the lighter work of his trade, that of a carpenter, being able to drive nails and screws and use a plane. The rhomboid muscle acted well, having obtained a partial attachment, so that both shoulders could be thrown back. He could rotate the shoulder and carry it backwards and forwards, but was unable to raise it from the side. The tumour was a hard osteo-sarcoma, having a basis composed largely of fibrous tissue.—Mr. R. W. PARKER thought that in the majority of cases of malignant tumours it would be better to remove the entire bone. He had removed the scapula twice in children for sarcoma; but the growth recurred. In a child aged thirteen years the right patella was the seat of a sarcoma; no recurrence had taken place after the lapse of nine months. This was the most successful result that he had had in the surgical treatment of sarcomata of bone in children. The success was attributed to its being possible to remove the whole bone.—Mr. CHARTERS SYMONDS explained, in answer to Mr. S. Jones, that the tumour was one of the less malignant forms of sarcoma.—Mr. H. T. BUTLIN referred to a paper on Removal of the Scapula contributed by M. Poinsot to the *Revue de Chirurgie*. Altogether forty cases were collected, some of caries and necrosis, but the majority of tumours. Only two of the patients died as the direct result of the operation. In not a single instance was the operation successful when it was performed for pure sarcoma. The only thoroughly successful case was one of very doubtful nature. He considered that it would be a very inadvisable procedure to remove the entire scapula if the growth were limited to the inferior angle of the scapula. An American author had collected forty or fifty cases of operation on the scapula, and came to the conclusion that removal of a portion of the bone was more dangerous than removal of the entire bone; this might, however, be a mere accident of statistics.—Mr. SIDNEY JONES agreed that the retention of the scapular processes when the tumour of the scapula was of the more innocent kind was advisable.

Mr. THOMAS SMITH read a paper on a case of Ligature of the Common Iliac Artery for Inguinal Aneurysm, with slipping of the Ligature, followed by Gangrene of the Limb and Death. The patient was a discharged soldier, aged fifty-two years, who had served in India, and had had syphilis. For two years he was aware that something had been wrong in his groin, and for two or three months the right lower limb had been much swollen. He had an aneurysm reaching from below Poupart's ligament up to a point midway between the crural arch and the umbilicus; there was a strong pulsation, but no bruit; in other respects he seemed a healthy man. The artery was tied above the aneurysm on Oct. 22nd with a carbolised kangaroo tendon; the pulsation was at once arrested, but the next day the pulsation returned in full force. The artery was again exposed; the ligature was found *in situ* with no appearance of loosening, but the point of an aneurysm needle could be inserted between the vessel and the ligature; it was therefore removed, and two carbolised silk ligatures were placed on the artery, one above and one below the site of the first ligature; pulsation ceased at once. In forty-eight hours the pulsation returned, and continued until the day before death. The limb becoming gangrenous, amputation was performed, but the patient died three days afterwards, and twelve days from the date of the first operation. The post-mortem examination showed that the common iliac had been tied just above its bifurcation; it was closed by clot for half an inch above the upper ligature. The external iliac was dilated in its upper third; its lower two-thirds formed a large fusiform aneurysm, extending beneath Poupart's ligament, and involving the common femoral. The internal iliac was closed by clot for one inch below the ligature; the common femoral was filled with dark adherent clot, as also was the superficial femoral and the profunda. No veins had been injured in the operation: the external iliac vein was normal; the common femoral and its tributaries were filled with clot, the vein being compressed by the aneurysm beneath Poupart's ligament. There was no general peritonitis, but some matting of the intestines in the immediate neighbourhood of the ligature. The aneurysm was filled with a firm clot, a large part of which was laminated. The fatal issue of the case was primarily due to pressure on the main vein causing gangrene of the limb, one of the most common causes of death in aneurysms in this situation. Mr. Smith attributed the yielding of the ligature to the slippery nature of the material used; the wound being very deep, it was probable that the first loop of the knot slipped to some extent before the second knot could be tied, and though for a time it controlled the pulsation, it probably yielded to a small extent afterwards; the artery being very large, the knot was subjected to a considerable strain. He called attention to the defects in the method of applying ligatures to large arteries in their continuity by the single thread fastened by a reef knot. The object of the ligature being to constrict the vessel evenly at all points of its circumference, so that no one part of the vessel is pressed upon more than another, he maintained that the ordinary ligature did not fulfil these conditions; but that the knot dinted in the arterial coat where it lay over the vessel, and that when the ligature divided the artery it was the knot that first penetrated the canal of the vessel; he also pointed out that where secondary hæmorrhage occurred, it was usually at the site of the knot. As a remedy for this he recommended that the

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ligature should be passed twice round the vessel as a clove hitch, and the opposite ends be pulled firmly across the artery; this ligature, having no knot, compresses the artery evenly at all points of its circumference, and is very firm and tenacious. He believed it to be quite trustworthy. Notwithstanding the accidents that occurred in the case related, Mr. Smith still believed the aseptic kangaroo tendon was the best material we possessed for the ligature of large arteries in their continuity, and that there was no fear of its slipping if the manner of securing it was adopted which he advocated. But if this method was not considered secure enough, the ends of the clove hitch could be tied in a single knot after pulling the clove hitch tight; this, he believed, to be superfluous; but if it were done, the knot would not be in contact with the arterial walls and could do no harm. The views he entertained, he believed, derived additional importance from the publication of Dr. Edmunds and Mr. Ballance's paper, as they had proved that it was not necessary or desirable to injure the coats of an artery in order to secure a permanent obliteration of its canal.

Mr. BUTLIN read a paper on a case of Axillary Aneurysm, for which the subclavian artery was ligatured in the third part of its course, in which slipping of the ligature occurred shortly after the operation, and after re-ligature was followed by collapse and death. The subclavian artery was tied in the third part of its course by Mr. Butlin for an aneurysm of the axillary artery in the axilla. The artery was large at the seat of ligature and was slightly adherent to its sheath, but no difficulty was experienced in performing the operation. A slightly flattened kangaroo tendon was used. The artery was tied in two places with an interval of about two-thirds of an inch between the two ligatures, and the vessel was divided. Half an hour after the operation violent hæmorrhage occurred, and was controlled with difficulty by means of pressure. It was found that the ligature had slipped off the proximal end of the divided artery. A silk ligature was applied, but not before a large quantity of blood had been lost. The patient died the same night. The knot of the kangaroo ligature had not slipped, but the ligature had slipped over the end of the retracted artery, probably from being drawn up against the outer border of the scalenus anticus muscle. The hæmorrhage was immediately preceded by a violent fit of coughing. It was not possible to ascertain, either during the application of the second ligature or at the post-mortem examination, whether the kangaroo tendon had divided the middle and internal coats of the vessel, but the sensation communicated to the operator was that they were not divided. The case is related to show that it is not safe to employ a ligature such as kangaroo tendon in the tying of a large artery when the vessel is divided. Even if such an incident as that which has been related had not occurred, the knots tied in these ligatures are apt to slip. The case cannot be employed as an argument against either the kangaroo tendon or against the division of the artery between two ligatures; but may be used against the combination of the two methods.—Mr. CROFT inquired the condition of the artery within the grip of the ligature in Mr. Smith's case, and whether the internal and middle coats were divided. In April, 1881, he had used flat kangaroo tendon to the external iliac artery for aneurysm of that artery. He had made a second knot in this case because the material seemed slippery and elastic; it was intended that the middle and internal coats of the artery should be divided, but whether this happened or not he could not say, as the man made a perfect recovery. His bias was in favour of double ligature with division of the vessel between. He had used this method but once, and this in ligature of the common carotid artery. In ligature of an artery for a fusiform aneurysm recurrence of pulsation was not perhaps surprising, and this without supposing that the ligature had slipped.—Mr. CHARLES BALLANCE said that in the ligature of large arteries in their continuity in horses, donkeys, and sheep kangaroo tendon was perfectly efficient, and caused perfect occlusion of the vessel without risk of ulceration and without rupturing the internal coats. Kangaroo tendon loses its glistening appearance, and becomes opalescent and somewhat rough, if placed for a short time in a solution of corrosive sublimate. He had seen kangaroo tendon used to ligature the femoral artery in a case of popliteal aneurysm, and with complete success. In another case the same kind of ligature was used for hæmorrhage, the femoral also being the artery tied. The boy died, but the vessel was found to be occluded without rupture of the coats. He considered that the reef knot was a very good one, and could be employed without damage to the arterial coats. He hoped to have the opportunity, however, of trying Mr. Smith's clove hitch. In Mr. Butlin's case he would not have divided the vessel, but would have trusted simply to the kangaroo ligature.—Mr. BARWELL commented on the return of the pulsation in twenty-four hours in Mr. Smith's case, and thought this could not have been the result of slipping of the knot. In his opinion the recurrence of pulsation should be attributed to the setting up of an unusual collateral circulation. Knots of kangaroo tendon or ox-aorta ligatures do not "eat" or "cut" into the coat of the vessel like the knots of smaller ligatures. In a case of ovarian tumour, where the pedicle was tied with a thick piece of catgut in a perfect reef knot, Mr. Barwell thought there was evidence at the necropsy that the length of the ligature within the knot had increased. He could not concur in the opinion that the clove hitch would prove of service in ligature of arteries in their continuity.—Mr. SIDNEY JONES related his experience of ligature of the vertebral artery. In one case there was severe hæmorrhage, doubtless due to ulceration of the vessel. If he should have to ligature an artery so tightly stretched as the vertebral artery again, he would apply two ligatures and divide the vessel between. Reference was made to a case of deligation of the subclavian artery for axillary aneurysm; the artery lacerated whilst the aneurysm needle was being passed. Fortunately he was able to apply chromicised catgut ligatures above and below the rent in the artery, and so stopped the hæmorrhage. No further serious symptoms occurred, and the wound healed naturally.—Mr. HENRY MORRIS said that the knot could cause an injury to the wall of the vessel; in one case, in which chromicised catgut was used to the femoral artery for popliteal aneurysm, the artery ruptured; it had to be ligatured above and below and the artery divided between the ligatures. In deligation of arteries in their continuity, he advocated the use of kangaroo tendon and division of the artery between the ligatures. The degree of pressure which could be exerted by kangaroo tendon was very much less than that produced by catgut or silk. In his opinion the ligature had been applied sufficiently tightly in Mr. Smith's case. It was not an uncommon circumstance for pulsation to reappear in twenty-four hours, and it often subsided later on of its own accord.—Mr. SMITH, in reply, said he could not state certainly whether the internal coats were divided by the kangaroo ligature, but he thought not. In the practice of applying two ligatures and dividing the artery between, he was but following the method of Celsus, Galen, Ambrose Paré, and Paulus Ægineta. The tendon had a glistening appearance, though it had not been kept in carbolic oil, but in a watery solution of carbolic acid. In Mr. Ballance and Dr. Edmunds' experiments, it was found that the knot region of the outer tunic had given way; he agreed that this risk was less with kangaroo ligatures than with others. As he would be happy to show Mr. Barwell, the clove hitch could make a very firm knot.—Mr. BUTLIN said that he had no doubt of the slipping of the ligature in Mr. Smith's case; the pulsation in the aneurysm was as forcible as ever twenty-four hours after the deligation. If the return of pulsation was due to the establishment of collateral circulation, he asked how it was that the application of fresh ligatures with division between could be followed by the cessation of pulsation for a period of forty-eight hours, as was actually the case. A kangaroo tendon was liable to slip, and he ventured to think that, if silk had been used in his own case, the event would have been very different.

The following living specimens were shown:—Mr. Stephen Paget: (1) A mother with two children, all three presenting Congenital Absence of the Irides; (2) Pigmentation of Conjunctivæ. Mr. Keetley: Erasion of the Condyles of the Femur for Strumous Disease, there being no shortening of the limb, as there would have been had excision been performed.

MEDICAL SOCIETY OF LONDON.

Paralysis Agitans.—Aneurysm of Aorta.—Pouch of Penile Urethra.—Tubercular Disease of Ankle-joint.—Carcinoma of Prostate.

A CLINICAL MEETING of this Society was held on Monday last, Mr. R. Brudenell Carter, F.R.C.S., President, in the chair.

Dr. SAMUEL WEST read a case of Paralysis Agitans of ten years' duration, which began immediately after the receipt

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of an injury inflicted by the pole of a waggon. The patient, a cabman, aged fifty, was seen at St. Bartholomew's Hospital ten minutes after the accident, and there was then rapid tremor of the right hand and arm. The temperature in the right axilla was a degree higher than that of the left. There was some loss of sensation in the right arm. The leg was the seat of a few tremors. An abscess formed over the sacrum, but healed in a week. The patient was under observation for some months from the time of the accident. At the end of six months the left side had become affected with tremors. The case has progressed but slowly for the last eight years. The cardinal symptoms were well marked.

Dr. THEODORE WILLIAMS exhibited a case of partially consolidated Aneurysm of the Transverse Portion of the Arch of the Aorta. The patient, a man (who was shown), aged forty-two, a waiter, with a history of rheumatic fever, had complained for one year of pain in the chest, cough, and more recently of short breath and slight dysphagia. He was admitted into the Brompton Hospital in July, 1885, and the diagnosis was aneurysm of the transverse portion of the aortic arch pointing in front, pulsation being visible in the upper three intercostal spaces on the left side. Under treatment by rest and iodide of potassium the patient greatly improved; the dysphagia ceased, and the pulsation became less visible, but irregularity of the size of the pupils was noted before he left the hospital, which he did four months later. He resumed his occupation to a limited extent, but, being attacked with fainting fits, was readmitted in October, 1886, with stridulous breathing, dysphagia, and some dyspnœa, unequal pulses and pupils, the left pupil being widely dilated. Dr. Williams found the aneurysm still tolerably solid in front; it had extended backwards, and involved the recurrent laryngeal nerve, giving rise to fixation of the left vocal cord and great stridor of breath. There was also evidence that the trachea was pressed on. The points of interest in the case were—1. The rapid consolidation of the sac in front, and the cessation of the dysphagia during the patient's residence in hospital. 2. The stability of the clot, even under the unfavourable circumstances of his occupation. 3. The rapid extension of the aneurysm posteriorly at a later date.—Dr. SYMES THOMPSON referred to treatment other than iodide of potassium: complete rest in the recumbent posture and very low diet.—Dr. A. MONEY asked what the position of the vocal cords was.—Mr. JAMES BLACK inquired for the presence of cough in this case.—The PRESIDENT referred to the works of Tufnell, who advocated measures calculated to give the body the most complete rest.—Dr. WILLIAMS, in reply, said that the left vocal cord was in the cadaveric position. The patient had a cough of laryngeal quality.

Mr. E. HURRY FENWICK showed a case of Pouch of the Penile Urethra in a patient aged fifty-seven, who had suffered from stricture for the last eighteen years. The difficulty of micturition culminated in extravasation of urine a year and a half ago. Perineal incision was performed, and a large sac with several small facetted stones and one large one were removed. Urethral fever followed, but the man ultimately recovered. The pouch was probably due to distension of the canal behind an anterior stricture. It was proposed to pare the edges of the antescrotal sac at the same time that the bladder was drained through the perineum.—Mr. J. H. MORGAN considered that Mr. Fenwick's explanation of the nature of the pouch was correct. Instead of performing any cutting operation, he would be inclined to employ steel sounds with a view to dilating the strictures, and trust to the mechanical stimulus to improve the tone of the muscular coat.—Mr. BRUCE CLARKE thought something more than sounds and catheters would be required: excision of a portion of the urethra and joining together the cut ends.

Mr. E. HURRY FENWICK also showed a case of Strumous Disease of the Tibia and Ankle-joint. Amputation was considered necessary; but on making the requisite incision it was thought that arthrectomia synovialis would prove more successful than having recourse to amputation. The lower end of the medulla of the tibia was scraped away with the curette.—Mr. KEETLEY confirmed the statement that removal of the diseased medulla was a perfectly safe procedure, and indeed to be desired, as likely to make the case more successful. It did not prevent perfect healing of the bone.—Mr. W. ADAMS spoke of the success of the case, which was mainly due to free incisions.—Mr. FENWICK, in reply, said that Mr. Keetley's suggestion to scrape out the medulla even in cases of acute osteomyelitis was a most valuable one.

Mr. E. HURRY FENWICK also brought forward a case of large Inguinal Hernia, which had developed for the most part during the last six months, apparently as the result of straining; there was found to be carcinoma of the prostate.—The PRESIDENT asked whether there were deposits of cancer elsewhere in the body. He had seen a case in which double optic neuritis led to the belief that there was an intracranial tumour.—Mr. B. JESSETT had seen two cases of carcinoma of the prostate. Was there any cystitis?—Mr. BRUCE CLARKE mentioned cases in which there were secondary deposits in many organs.—Dr. S. WEST mentioned a case of very rapid growth in a young man aged about twenty.—Mr. FENWICK had seen secondary growths in the liver.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.

The President's Address.

A MEETING of the above Society was held on Friday, Oct. 8th, Dr. F. H. Alderson, President, in the chair.

Dr. Alderson selected for the subject of his inaugural address "The Wants of the General Practitioners of the day." He considered as perhaps the greatest and most general want was that of a larger income. Amongst the causes of diminished medical incomes, Dr. Alderson mentioned the crowded state of the profession, giving some statistics to verify what he considered might be accepted as an axiom, but asked, "Has it not become a question for our direct medical representatives *in futuro* whether some steps should not be taken by our somewhat torpid Medical Council to reduce this excess and to bring our too easily made doctors more within the requirements of the public and profession? for excess in numbers means poverty in quality." Dr. Alderson suggested that the arts examination of the medical student should not be passed before the age of eighteen or nineteen; that the first class second division of the College of Preceptors should be the lowest standard for acceptance for registration by the Medical Council; that some knowledge of Greek should be required of every aspirant to medicine; and that one or two years should be spent either as an assistant to a medical man, or as house-surgeon, house-physician, or resident obstetric assistant at a hospital, after the usual hospital curriculum was completed, before commencing independent practice. Other important causes of reduced incomes were the improved health of our cities and towns, and for this reason he advocated the principle of "health assurance"—i.e., the practice of paying medical men annually, ill or well, a certain fixed payment, which, if universal, need not be large. Amongst the propositions suggested for the expansion of medical incomes was that of the appointment of pathologists in every district, and likewise of school visitors and of School Board examiners, from the ranks of medicine. Death certificates ought to be paid for; they would then become more valuable, because perhaps they would then be more accurately and less hastily written. Dr. Alderson thought all hospital appointments should be paid for; more time and thought could then be given to hospital patients. A great grievance under which general practitioners laboured was the rule by which many hospitals exclude everyone in general practice from being eligible for either the post of physician or surgeon. By such a regulation he considered surgical skill was limited and surgical knowledge narrowed. By Dr. Alderson's suggestion of every man in general practice who desired it becoming a public vaccinator he believed the compulsory nature of the Act would appear to be considerably lessened, the supply of lymph would be much greater, vaccination would be more efficiently performed, and the Act become much more popular. In respect to the ethics of consultations, the speaker thought consultants should more frequently, and indeed perhaps always, follow the practice of certain leading physicians, who invariably send their prescriptions, accompanied by a courteous letter to him, even when his patient had applied to them *sponte sua*, and even without his knowledge. Home, fever, and private hospitals and dispensaries were regarded by the President as antagonistic to the interests of the general practitioner. The recent passing of the Medical Act Amendment Bill was

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alluded to. Dr. Alderson considered there was much that was wanting, but he thought by a wise selection of our direct medical representatives the Act might become both powerful and effective. The Lunacy Act Amendment Bill was still waiting completion, and medical men hesitated to sign certificates, yet he believed that the time was not far off when (if the profession be not relieved of this duty) every medical man who in good faith signs a lunacy certificate would be secured from vexatious actions on the part of the assumed or recovered lunatic or his friends. He would institute mental sanatoria for cases of temporary insanity where no patient could remain longer than one calendar month, which he believed would in many cases be sufficient for the recovery of the patient, and by this great distinction from asylums would do much to lessen or obliterate the stigma which is now so unfortunately attached to even a temporary abeyance of intellectual function of many a promising and incompleted life. The address concluded with an urgent appeal to every member of the Society to assist in the discussion of subjects brought forward at its meetings.

On the proposition of Dr. THUDICHUM, seconded by Mr. LAWRANCE, a hearty vote of thanks was accorded Dr. Alderson for his able and comprehensive address. Upwards of fifty members were present.

OPHTHALMOLOGICAL SOCIETY.

Orbital Tumour. — Ophthalmoplegia Interna. — Retinitis Pigmentosa. — Optic Nerves in Head Injury. — Ophthalmoplegia dependent on Thrombosis of Cavernous Sinuses. — Hypertrophy of Lacrymal Glands. — Penetrating Wounds treated by Suture. — Complete Ophthalmoplegia with Ptosis and Blindness (? hysteria).

THE first ordinary meeting of this Society was held on the 21st inst., Dr. George Johnson, Vice-President, in the chair.

Dr. JOHNSON made some remarks on the chronic latency of Renal Disease, which was sometimes first diagnosed by the ophthalmic surgeon discovering albuminuric retinitis, the foundation of kidney disease having been laid in scarlet fever or diphtheria many years previously. The urine should be examined in all cases of illness.

Messrs. CRITCHETT and H. E. JULER showed a living specimen of Proptosis of the Left Eyeball, associated with swelling in the zygomatic region. The disease began as a chemosis of the outer canthus; protrusion of the eyeball followed and the zygomatic region began to bulge. These swellings increased, including the chemosis; the tissues at the outer canthus had a deep blue aspect. At first, and for some time after, there was no diplopia. The proptosis, which began in August, 1885, had increased for twelve months. The movements of the eyeball were greatly limited. Diplopia occurred on looking to the left. The cause of the disease was unknown. Iodide of potassium in ten-grain doses three times a day was the only remedy used, but the tumour only began to subside in August, 1886. The patient was a ballet-dancer. In reply to Mr. Nettleship, it was said that the iodide was begun early; and in reply to Mr. Power, that there was no pulsation.—Mr. GROSS mentioned a somewhat similar case in a man in which the growth gradually subsided, but not apparently as the result of the administration of iodide of potassium.

Mr. ADAMS FROST showed a case of Ophthalmoplegia Interna of the Right Eye. Near vision of the eye had been defective for three or four months. The right pupil measured 3·5 mm. and was always immobile. There was complete loss of knee-jerks, but no other signs of locomotor ataxy or other nervous disease. He had not had syphilis.—Dr. SANSOM asked for lightning pains; Dr. ORMEROD for a history of diphtheria; Dr. BEEVOR whether the optic nerve was atrophied. A negative reply was given to these questions.

Mr. ADAMS FROST exhibited a living specimen of Retinitis Pigmentosa, with deposit of pigment on the anterior surface of the lens, in a man aged thirty-five, who had had "night blindness" for years. He had had iritis in 1879.

Mr. STANFORD MORTON showed a modification of his Ophthalmoscope, which allowed of rapid changing of the mirror without risk of accident.

Messrs. EDMUNDS and LAWFORD read a communication on Optic Neuritis in Head Injuries. This was based on the examination (ophthalmoscopic or microscopic) of the optic nerves in twenty-four cases. The microscopic evidence of neuritis is a considerable increase of staining corpuscles in the sheath-space and in the nerve. The cases were divided into three groups. 1. Those fatal directly from the severity of the injuries. 2. Those fatal indirectly from complications. 3. Those in which recovery took place. The neuritis was thought to be due to an extension of inflammation from the seat of injury to the optic nerves, which extension might be conceived to take place either along brain tissue (cerebritis) or along the meninges (meningitis). The authors contended that the latter path was that along which the inflammation spread, because an analysis of the cases proved that optic neuritis occurred far more frequently in those cases in which the base of the brain or skull was involved than in those in which the lesions were confined to the convexity. This fact was especially evident in the cases of Group 2 (four in number). Two of these were cases of punctured wound of the convexity of the brain followed by cerebral abscess necessitating trephining; hernia cerebri occurred, and finally death. In neither was there optic neuritis. The other two were cases of severe compound fractures of skull, with injury to the base by contrecoup, and post-mortem lesions at the base were found. In both of these there was optic neuritis. The microscopical appearances of inflamed optic nerves were shown by diagrams.—Dr. BRAILEY inquired what explanation Dr. Edmunds gave of the different histological appearances in different cases of optic neuritis; in some the sheath was more affected, in others the trabeculæ of the optic nerve itself.—Mr. A. QUARRY SILCOCK asked whether there was any meningitis in the cases without optic neuritis due to injury of the convexity of the brain.—Dr. EDMUNDS, in reply, said there was meningitis about the convexity, but not at the base. The different histological appearances were probably to be attributed to the different stage of the disease in different cases.

Dr. SIDNEY COUPLAND read a paper on a case of Ophthalmoplegia dependent upon Thrombosis of the Cavernous Sinuses. It occurred in an unmarried woman, forty-three years of age, who was admitted into the Middlesex Hospital under his care on March 10th, 1886, suffering from cerebral symptoms, including bilateral ophthalmoplegia. Her previous health had always been good, and, beyond the fact that her father and one of her brothers were said to have died of consumption, there was an absence of any inherited taint in her history. There was no evidence of syphilis. It was ascertained that in the months of January and February she had attended Moorfields Hospital, under the care of Mr. Hulke. From notes kindly furnished by Mr. W. Gay, her condition during this period may be summed up as "proptosis and more or less complete ophthalmoplegia externa of the left eye, following great supra-orbital pain, succeeded by proptosis of the right eye, with ophthalmoplegia externa and (?) interna, but with no distinct ophthalmoscopic changes." The symptoms had commenced with headache and deafness of the left ear four months before any ocular trouble; iridiplegia and strabismus, and then left ptosis, supervened. When admitted into the Middlesex Hospital she was in a drowsy condition, but pointed to the right side of the forehead when questioned as to pain. The face was dusky; but there was no enlargement of veins around the orbits or elsewhere, and no œdema of lids; marked proptosis of each eyeball; complete ptosis of right lid, partial of left. Right eye absolutely immobile in any direction, and the left only retained a slight power of movement inwards. Both pupils were large, the right more dilated than the left; total reflex iridiplegia. No optic neuritis, or other notable ophthalmoscopic change; veins not dilated; ocular conjunctiva, especially of left eye, injected; on each side it was quite insensitive. Cutaneous sensibility of left side of face impaired, as compared with right, but not wholly abolished. No facial paralysis. Deafness, but degree could not be ascertained. No otorrhœa; some dysphagia. Tongue protruded straight; arms semiflexed; slight rigidity. Legs flaccid, but movements controlled by patient. No plantar reflex on right side, and but slight on left. Abdominal and epigastric reflexes absent on both sides. Knee-jerks absent on both sides; no ankle-clonus. Cutaneous sensibility impaired over lower limbs and trunk; loss of voluntary control over bladder. Next day, the patient lay with her head turned to the left, and cried out with pain if it were moved. This symptom remained till death, which occurred on March 12th, in coma. Towards the close, the left conjunctiva became chemosed.

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At the post-mortem examination, there was found basic meningitis (both arachnitis and leptomeningitis) of recent date; no tubercle. The pituitary body was enlarged. The cavernous sinuses were plugged with old caseo-purulent and colourless thrombi; and so were the circular and transverse sinuses. The petrosal sinuses were empty. No disease of cranial bones or of internal ear could be detected. The cerebral ventricles were distended with fluid. No lesions in brain; broncho-pneumonia of recent date in left lower lobe; slightly granular kidneys. Thus no cause of the thrombosis was discovered, and the clinical course, as well as the character of the exudation, proved that the meningitis was far more recent in origin than, and probably secondary to, the thrombosis. The ophthalmoplegia, at first unilateral and then bilateral, is explained by the complete obliteration of both sinuses, the thrombosis starting in the left sinus. The absence of "choked disc" accords with general experience, being attributable to the free inosculation of the facial and orbital veins; and to the same anatomical conditions may be ascribed the absence of œdema of the eyelids. Nor was the degree of proptosis much, if at all, more than might be ascribed to the ophthalmoplegia. The abolition of many of the spinal reflexes was not explained; nor was the symptom of deafness, which occurred early in the case. The paper concluded with a review of the causes and symptoms of thrombosis of the cavernous sinuses, with especial reference to the symptom of ophthalmoplegia. In reply to Mr. Nettleship, Dr. Coupland said there was one other case on record pretty much like his own.—Mr. LANG spoke of a case of thrombosis of the cavernous sinus in an elderly man; there was marked proptosis; the patient had muttering delirium, and died comatose. The cavernous sinus on the right side was thrombosed; the ophthalmic vein was not plugged; there was no disease of the bones.

Mr. HENRY POWER exhibited a boy, aged fourteen, in whom both lacrymal glands were enlarged. Enlargement of this gland was a rare condition, especially when symmetrical. The inunction of mercurial ointment and the application of tincture of iodine to the skin effected no reduction in the size of the glands. Tears began to flow from the left eye, and much discomfort was experienced, and so about two weeks ago the gland on the left side was removed through the skin, not the conjunctiva or external canthus, as some had recommended. The operation was completely successful; no trouble was experienced in regard to moisture of the cornea and conjunctiva. No cause was known. The lacrymal gland was probably only of service for emotional purposes.—Mr. MCHARDY mentioned the case of a solicitor of advanced age, in whom swelling of the gland occurred as the result of sudden emotion; it subsided slowly without special treatment. He had observed collections of tears, in cases of removal of the gland for injury, due to portions of gland left behind.

Mr. CROSS of Bristol showed two cases of Penetrating Wound of the Eyeball, with escape of vitreous, resulting, after suture of the sclerotic, in recovery with useful vision. The success in these cases seemed to prove that ophthalmic surgeons ought to be conservative in their treatment of large wounds of the eyeball, especially if the ciliary region be not implicated.—Dr. W. A. BRAILEY mentioned a case of severe penetrating wound of the eyeball with protrusion of vitreous, in which the conjunctiva only was sutured over the gaping wound. To his surprise and pleasure, the wound healed with fair vision, and the tension was nearly normal, though the edges of the rent in the sclerotic had not united. —Dr. P. H. MULES mentioned two cases of foreign body in the eyeball in which he incised the sclerotic, and extracted the steel with the aid of a magnet. He thought early operation was one of the chief elements on which success was dependent.

Dr. W. A. BRAILEY read a case of rapidly occurring Blindness and complete Ophthalmoplegia on one side. The patient was a single woman, aged fifty, who complained of pain round the left orbit and numbness of the left side of the head three months ago. One month later she came to Guy's Hospital stating that she had also pain in the left eyeball, which was always much more severe about 4 A.M. Distant vision, after the correction of some hypermetropic astigmatism, was perfect. The right eye was totally blind, as the result of a blow with the cork of a soda-water bottle some twenty years ago. The movements, and those of the lids, were, and have since remained, perfect, except that the internal rectus seems weak; its pupil is occluded and the iris bulged. Tension normal. No other morbid condition can be found. Patient's manner is very quiet and rather constrained. Again, three weeks later (five weeks ago), her friends noticed that the left upper eyelid drooped, and she complained of the sight being gradually worse till two and a half weeks ago, when it deteriorated very rapidly. Three days later (Oct. 8th) she was led into the out-patient room totally blind. The right eye and lid moved as before, but the left lid drooped. The eye was immovable, and the pupil was three parts dilated and fixed. The conjunctiva and skin appeared even more sensitive than normal. The fundus was normal. She was admitted as an in-patient and blistered that evening. The next day (Oct. 9th) the outward movement of the eye and that of the pupil was still absent, but the other movement had come back. There was still no perception of light. She was treated with iodide of potassium and perchloride of mercury and the vision slowly returned, but there was still considerable defect. She can count fingers, but does not seem to see a light, or at least replies in uncertain fashion. There was no definite evidence of syphilis, but, though single, she had had two children. Dr. Brailey had, like others, seen many cases of blindness of one eye, and many cases of ptosis. He had observed also two cases of one inferior rectus which from the appearances and after-history appeared to be hysterical, but never a case of complete ophthalmoplegia externa or interna. Simulation appeared to him to be out of the question, though many points in her answers to the test of vision were unsatisfactory. The case was, however, at present incomplete.—Dr. SHARKEY referred to a curious case reported by Dr. Bristowe; there was ophthalmoplegia and profuse hæmorrhage from the ears, and the necropsy failed to reveal any sign of disease in any part of the nervous system.—Mr. ADAMS FROST inquired as to the precise state of the field of vision.—Dr. BRAILEY, in reply, said that it was impossible to ascertain the exact state of the field of vision owing to ambiguity in the replies of the patient.

READING PATHOLOGICAL SOCIETY.

AT a late meeting of this Society Mr. BARFORD, of Wokingham, read a paper on Infant Mortality in the Borough of Reading. The inhabitants of the borough of Reading, he said, may be fairly congratulated on their public spirit, and the right appreciation of their responsibilities, as displayed in an improved system of sewerage, at a cost of £320,000 sterling, and therefrom an appreciable lessened death-rate. The mortality stood for the twenty years between 1850 and 1870 at 22 per 1000, having previously been as high as 24 per 1000; while during the ten years between 1870 and 1880 it has been reduced to an average of 19 per 1000, and since then in one year it reached a death-rate as low as 14 per 1000. Such a result should be a sufficient satisfaction to the inhabitants of the borough for their large expenditure and consequent heavy rating. It represents the saving each year of more than 100 human lives, for, as the mean population of Reading during the period under consideration averaged 38,000, a reduction of the death-rate by 3 in the 1000 gives the result mentioned. A comparison of the death-rate of Reading with two other registration districts in the county, Wallingford and Abingdon, is favourable to Reading, though both these towns are far less populous. This Society may fairly look to any of its members who practise in or around Wallingford and Abingdon for information, which they above all others must possess, which may afford a clue to the cause of this higher death-rate in Wallingford and Abingdon. Yet, with a higher general mortality, both these towns have a lesser infant mortality than Reading. But while Reading compares favourably in the general death-rate with two other registration districts in the county, it compares unfavourably with nine others. The general death-rate in Reading is higher than in the districts of Newbury, Hungerford, Farringdon, Cookham, Easthampstead, Bradfield, Wantage, Wokingham, and Windsor. The infant mortality is very much in excess of these. Taking the two registration districts adjacent to Reading—that is, Wokingham and Bradfield—the annual mortality in these is in one instance 15 per 1000, and in the other 16 per 1000, while Reading for the same period stands at 19 per 1000. As originally the death-rate in Reading was 24 per 1000, and has now been reduced to 19, the question may fairly be asked of members of this Society, Can any further reduc-

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tion be effected to make the death-rate of Reading approach still nearer the lower death-rates of the adjacent districts of Bradfield and Wokingham? Cannot this be aided by lessening the large infant mortality in Reading? I anticipate that one answer to the questions will be, that Reading is a thickly-populated town, while the other districts are more or less rural. This leads me to a comparison between Reading and Bedford, which resembles it more than any other town I am acquainted with. The population of the registration district of Bedford is 42,000, that of Reading district 38,000. Thus, a comparison should be a little in favour of Reading. Both towns have points of resemblance, though they differ in size; they are the centres of considerable, but not unhealthy, manufacturing industries; there are large schools attracting pupils from all parts; both have streams running through them; both are thriving, well-to-do towns, in which poverty should be reduced to a minimum; in each there is a county hospital. Why, then, is it that in Reading from thirty-eight to forty human lives are sacrificed every year over and above what takes place in Bedford? Is it not a fitting labour for this Society to sift out the causes of this higher mortality? Already, I think, one of our junior members has given a clue to one cause, in his reference to the high infant mortality in Reading—fed, as he assured us some infants are, on pap and gin. If the infant mortality in Reading be traced, it will be found to be higher than any other district of the county. Out of 1000 infants born in Reading, no less than 139 die during the first year of their existence, while in an adjacent district only 99 die out of every 1000. Here, then, is one source of a higher death-rate in Reading and a sad reflection on maternal care. The marriage-rate in Reading is a high one, for it amounts to 19 per 1000 persons living, as compared with 11, 12, and 13 in other districts of the county. This is held to be a fair indication that the people are well occupied and well-to-do, and therefore able to afford nurture for their offspring. The birth-rate in Reading is low compared with the marriage-rate. Some explanation may be afforded by this Society of the low birth-rate compared with the high marriage-rate. Why should fewer children be born in Reading, as compared with the number of marriages, than elsewhere in the county? Why should a larger proportion of children born die in the first year of their existence? What are the barriers to conception?—are they natural or artificial? This Society can answer those questions. Here is subject matter for thought, for the moralist and philanthropist, for the clergy, for right-minded matrons, as well as for doctors. Are the mothers of infants drawn off from their domestic duties to the factories? If so, could not the crêche system be established in Reading? There is a benevolent Mayor of the town, deeply interested in all movements for the public good. The chiefs of the manufactories are benevolent also. Do their works attract mothers through a love of gain, or through necessity, to the neglect and death of their infants? If so, a committee formed of the borough member, the Mayor, and some of the larger employers of female labour, of a few of the clergy and medical men of the town, would be sufficient to deal with this subject, and remove the slur of an excessive infant mortality from the town of Reading. The lives of at least forty infants might be saved every year. Each life has a distinct commercial value to the State. Thus upon the lower grounds of finance these lives are worth preserving. Each premature death is a reflection on us as a profession; it is therefore our duty to contend with the cause. Is sufficient care taken in giving certificates of the cause of death? Are investigations by inquest evaded? The greatest safeguard against an excessive infant mortality is a full and impartial inquiry into the cause of uncertified death. It is clearly the duty of all the members of this Society practising in Reading to exercise the greatest vigilance in all matters affecting infant mortality. Cannot these facts be represented to the coroner? There are forty lives to be saved each year within the borough among children under one year old. Here, then, is work enough for a time, apart from what I propose on a subsequent occasion to consider under the head of "Special Disease Tendencies." The borough is watched over by a medical officer of health in whom we all have confidence. Cannot this Society aid him in his efforts to lessen the death-rate by some action outside his legitimate sphere? To this end it may be asked, Why should the connubial disposition be above the average? Why should procreation be below the average? Why should maternal care be inadequate to the average preservation of offspring? These questions the Pathological Society of Reading can answer. It may be the means of saving many a life now sacrificed.

New Inventions.

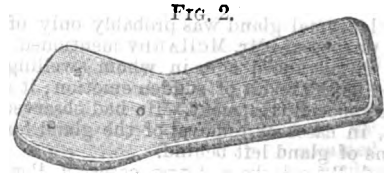
A NEW SPLINT FOR COLLES' FRACTURE.

As a general rule, the more methods of treatment advocated in any surgical injury, the more proof it is that none meet all the requirements of the case. So it is with Colles' fracture. We have the pistol splint, Carr's splint, Gordon's splint, and many other varieties, all recommended more or less by different surgeons, but none seem to give universal satisfaction. This it is that has led me to recommend yet another form of splint, which I have found extremely efficient. The requirements of a good splint are simplicity, lightness, ease of application, and maintenance of the bones in position by counteracting the distorting forces. I think the splint I recommend combines these qualities. In Colles' fracture we have a triple displacement. The lower fragment, the hand with it, is displaced upwards and inwards; the lower end of the upper fragment is thrown forward on to the front of the wrist, chiefly by the action of the pronators. These displacements must all be remedied; consequently the pistol splint was made with a curve to the ulnar side, and Gordon's splint has an antero-posterior curve, each tending to overcome individual displacements. The accompanying woodcuts will show that the splint recommended has a double curve, antero-posteriorly

FIG. 1.



FIG. 2.



and to the ulnar side, and the hollow for the ball of the thumb allows the hand to be maintained in complete pronation without injurious pressure on that part. It is easier to pronate the hand to meet the shaft of the radius than to supinate the shaft to meet the lower fragment.

Fig. 1 represents a front view of the splint, and shows the antero-posterior curve; Fig. 2 represents a back view, and shows the lateral curve. In applying the splint, the displacement is reduced and the hand laid on the splint, so that the ball of the thumb fits into the hollow, and the fingers grasp the end so that it lies across the line of the carpo-phalangeal joints; a small pad of lint may be placed on the dorsum of the lower fragment of the radius, and a bandage applied over the whole. After the fourth or fifth day the fingers may be loosened, and a bandage applied from the back of the hand upwards, so that the fingers may be regularly moved without disturbing the fracture. The lower surface of the splint consists of a thin sheet of metal, the upper surface of a layer of cork, which can be cut to the required extent for the ball of the thumb. It is easily and cheaply made, Messrs. Aitken and Co., of York, making them at the small cost of 15*s.* 6*d.* per set of six pairs.

HERBERT BRAMWELL, M.B. CH.,
House-Surgeon, Newcastle-on-Tyne Infirmary

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THE LANCET.

LONDON: SATURDAY, OCTOBER 30, 1886.

IN a sense medicine is something different from sanitation, because the cure of disease, popularly at least, appears to be a matter by no means identical with its prevention. This is, however, only so far as appearances are concerned. In truth and fact, the cure of disease is a part of sanitation, and as further progress is made in the science and art of healing it will be demonstrated that the only real cure for disease is the re-establishment of health. Disease is not an entity. It is not a thing apart from the organic life and function of the body affected, but a state or condition, either structural or functional, which is incompatible with the orderly processes of life. And it is in the change of this state or condition, so as to place matters on a footing of health, that "cure" must consist or amelioration be accomplished. In short, the physician is a minister of health to the sick, by abrogating what is unhealthy and re-establishing health. The old notion of fighting "disease" as an antagonistic force has been superseded, in the progress of science, by one of repairing or readjusting that which is injured or out of order. This change of method in connexion with the treatment of disease has necessitated a reconstruction of the whole system of medicine, and it is on this that the scientific revolution which has been proceeding during the last fifty years has been based. The change is even greater than many of those who have been the subjects of its influence adequately realise. We have, so to say, been carried from north to south, the direction of our progress being almost completely reversed, but so gradually that not only has there been no revulsion of feeling, but we have scarcely been conscious of the change. One of the most remarkable and yet unappreciated effects of the change of front accomplished has been to convert the army arrayed against disease into a pacific body bent mainly on the prevention of that very war in which our predecessors gloried. To the interests of the population at large the consequent gain has been enormous, but it cannot be disguised that upon the profession there has been entailed a loss of both prestige and recompense, which is only just beginning to be realised. The policy of the day—in Physic at least, for Surgery in great part stands on another footing—is one of self-effacement. If only that policy could be thoroughly carried out, the issue would be to abolish disease, and thereby, as it would seem, to put an end to the need of doctors. In proportion as it is possible to give effect to the policy adopted will disease be minimised.

In an address delivered on the 5th inst., before the American Health Association, by Dr. NATHAN ALLEN, one, and the most prominent, view of this question is discussed as follows:—

"It is just to state here that the claims of the sick poor have been most liberally responded to by physicians, and that no other profession or class of men do so much for the poor as the medical profession. But this work of charity has its equivalents—it secures to the physician a stronger hold on the affection and confidence of the people, and, in different ways, tends to increase his business. But to engage actively in means to prevent disease, not simply in one instance, but in case of great numbers, this is very different—it cuts off directly the support of the physician. Such action is based upon a love of humanity—of philanthropy—a higher range of motive than that of giving services to the sick poor. It appeals to the very highest class of motives—not simply to save expense and relieve suffering, or improve health and prolong life, but to elevate mankind, and increase, physically, mentally, and morally, the sum of human happiness. Such are the legitimate fruits of sanitary science. Considering the powerful pecuniary interests of the profession, and the disinterested motives requisite to engage in sanitation work, it is rather surprising that so many members of the profession have from time to time engaged heartily in advancing sanitary science. The main object must have been the promotion of health, the diffusion of useful knowledge, and the enlightenment of mankind generally in respect to the laws of health and life. In some few instances, it might have been prompted by pecuniary considerations — the individual holding some official position, or seeking one. But these are exceptional cases."

In the main, there can be no "ulterior motive"—as the cynical phrase goes—in this policy of general enlightenment and the prevention of disease to which the medical profession, not only in this but in other countries, has committed itself. It is as though the lawyers should suddenly devote themselves to the propagation of useful knowledge, having for its object the putting an end to all difficulties in the transaction of business, and the general conduct of commercial and social and personal affairs, so as to render every man in a really practical sense his own lawyer. We are making the public the guardians of their own health, and showing them how to do without that advice the giving of which constitutes the bulk of our professional business. It is well to look this fact in the face. Why do we act thus suicidally? Is it that we are either wholly oblivious to our own interests, or so shortsighted as not to know what we are are doing? Neither of these propositions is the true one. It is in virtue of that complete change of front in the treatment of disease, not less than in its prevention, which has come over our scientific policy during the last half-century, and which each year is being strengthened, that this change in our relations with the public has been effected. We cannot either lay claim to exceptional virtue or confess to more than the ordinary amount of obtusity. There has never been any inscrutable mystery about the treatment of disease. Charlatans have tried to cloke their ignorance with pretence, but the true professors of the healing art have in all ages and countries rather erred on the side of loquacity as to their views and principles of procedure, than hidden or disguised them. Whilst it was believed that disease was something like an entity to combat and struggle against, using drugs and the appliances of art as weapons, this theory found ample expression in the works and utterances of the doctors. Now that it is felt that the re-establishment of health is the true method of procedure, that view is expounded with equal liberality; and as it goes without saying that if what will prevent or correct departures from the line of health-preservation must be better than cure, so by a perfectly natural process, without any exceptional philan-

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thropy or shortsightedness on the part of the medical profession, physic comes to be a matter of sanitation. This we take to be the true explanation of "The Relation between Sanitary Science and the Medical Profession," which formed the subject of Dr. NATHAN ALLEN'S address of the Health Association.

The point to state plainly and to enforce with emphasis is the fact that the principles of the most advanced method of medical practice are the rectification of errors of function and the obviation of faults and errors in structure in such way as to restore that order of life on which health depends. The nomenclature of disease is regarded more as a means of intercommunication between medical men than as of value in itself. We treat the *patient* rather than the disease, and, in so far as the disease occupies us, it is in its character as a departure from the formula of physiological order rather than as a thing of itself. This is what the profession should bear in mind, and the public ought to understand.

WE drew attention in a recent issue to the *rationale* of the high altitude treatment of phthisis. We were able to point out that this method of treatment, however novel and opposed to medical tradition, is theoretically defensible on the lines of ascertained knowledge, and that its efficacy in phthisis is deducible from admitted principles of climatology. We propose now to consider briefly the varieties of phthisis to which it is applicable, and, as in our former article, we shall proceed deductively rather than inductively.

The three chief characteristics of the climate of high altitudes were shown to be purity of the air, aerial rarefaction, and cold. Purity of the air being equally essential in all types and stages of phthisis, we cannot derive from this factor any help in the selection of cases for the mountain treatment, but the due consideration of the remaining two is capable of affording valuable instruction and guidance. The atmospheric rarefaction throws a greatly increased strain upon the circulatory apparatus; hence, we conclude that valvular disease of the heart or feeble circulatory power is a strong contra-indication against the adoption of the high altitude treatment. For a similar reason this method of treatment is inapplicable to persons of advanced age, in whom the arteries are likely to have undergone more or less senile degeneration. The rarefaction of the air increases the number and depth of the respirations, and promotes the elimination of carbonic acid from the pulmonary epithelium. Hence it presses hardly upon those who do not possess a sufficient remnant of functionally competent lung to react to the increased strain thus thrown on the breathing apparatus. Cases, therefore, in which there is extensive destruction of lung tissue are unlikely to profit by the high altitude treatment.

It was long thought that hæmoptysis was a contra-indication to having recourse to the mountains—an idea founded no doubt on a mistaken analogy drawn from the experience of mountaineers, who not uncommonly suffer from epistaxis or melæna during their expeditions. Now, no fact in connexion with this question is better established than that hæmorrhage is rare at high altitudes, even in patients who suffered repeatedly from it while resident on the plains. A little reflection will show that there is no real discrepancy between these apparently divergent phenomena. The conditions of blood-pressure at the orifices of the body and in the lungs are not only not identical, but are actually reversed. Anæmia or congestion at the surface of the body implies an opposite condition of the viscera, and among them of the lungs; hence the fact that epistaxis occurs at high elevations, so far from warranting a dread of hæmoptysis, is rather a ground of security against its occurrence.

The prevalence of cold at high altitudes leads us to conclude that cases of phthisis complicated by renal or rheumatic affections are unlikely to benefit by this line of treatment. We infer, also, that sufficient constitutional vigour to resist the depressing influence of low temperatures is a *sine quâ non* of a successful result; but it must be borne in mind that, while the shade temperature at Davos may be many degrees below, the thermometer in the sun often registers as much as 100° of heat. This sharp contrast between the sun and shade temperatures is one of the apparent drawbacks to the climate at high altitudes, but the risk of chill is to a very large extent obviated by the extreme dryness of the atmosphere.

The combination of cold, dryness, and rarefaction constitutes a climate of a highly stimulating type; hence we should expect to find that phthisical patients of the neurotic temperament would be unduly excited by it, while the torpid and phlegmatic might be expected to profit from such stimulation. Organic nervous disease, marked functional nervous excitement, especially hysteria, and persistent sleeplessness, are on similar grounds likely to prove strong contra-indications to the adoption of the high altitude treatment. The nature of the response of the organism to disease may afford us valuable guidance in this connexion. Where high temperature, rapid emaciation, and much prostration indicate profound constitutional disturbance, we may conclude that the mountain treatment is inapplicable, the probability being that it would tend to aggravate the inflammatory processes and precipitate the fatal issue, which is but too certain to ensue in such cases, whatever line of practice be adopted. On the other hand, cases of chronic and stationary phthisis, with slight constitutional disturbance, are likely to react favourably to the stimulating properties of the climate of high altitudes.

The foregoing conclusions, which are fairly deducible from a due consideration of the conditions of the case, are verified by practical experience. The cases that do best at high altitudes are those of simple phthisis in patients who are free from cardiac, renal, or rheumatic complications, and who exhibit a torpid reaction to the disease.

Many cases of respiratory disease, other than phthisis, benefit strikingly by the high altitude treatment, notably cases of delayed convalescence from pneumonia and fibroid pleurisy. Here the explanation is not far to seek. Such cases need before all things a stimulation of the vital powers to enable the affected organs to rid themselves of morbid deposits and resume their normal functional activity, and this stimulation is precisely the most essential physiological effect of the mountain climate. The only precaution necessary in such cases is to guard against a premature adoption of the high altitude treatment. In early convalescence, where there is still some lingering pyrexia with feeble digestive power, such a line of practice would run the

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risk of promoting a recrudescence of disease, but at a somewhat later stage its value is alike theoretically evident and demonstrated by experience.

THE Farnham registration district has for years suffered from an exceptional prevalence of diphtheria, the death-rate from this disease being three or four times as great as that of the whole of England. Last year a thorough investigation was made for the Local Government Board into its sanitary circumstances, and the report of Mr. R. D. R. SWEETING, the inspector entrusted with this duty, is before us. It is unnecessary for our purpose to do more than to consider a portion of the area which is included in the sub-registration district of Frimley, for our attention has been directed solely to Frimley proper and to Camberley and York Town adjacent. When Mr. SWEETING visited this neighbourhood in 1885, he found no other provision for water-supply existing than wells scattered throughout it, and which varied in depth from ten to thirty-five feet; in Camberley and York Town a main drainage scheme had been recently completed, but in Frimley proper the excrement was mostly deposited in privy cesspits. Refuse was generally thrown on the ground or made into heaps, a few of the better houses alone being provided with ashpits. The pollution of the soil must have been matter of common occurrence, and the pollution of surface wells must have taken place as the result. Fatal throat affections have been prevalent alike in Frimley and in Camberley and York Town, registered mostly as croup and laryngitis. There can be but little doubt that some of these were of diphtheritic nature; indeed, in one family a death certified as due to cynanche tonsillaris was followed shortly afterwards by another death in the same family, the disease being then described as diphtheria. For the prevention of the extension of this malady, the authorities appear to have depended entirely upon the occasional closing of schools, and upon disinfection. No system of notification of infectious disease existed, and no hospital provision, either locally or elsewhere, was available for the isolation of such cases.

It might have been anticipated that the presentation of a report stating in detail the sanitary wants of the district would have roused the sanitary authority to take active steps to improve the conditions under which the inhabitants live, and to give facilities for the isolation of any persons suffering from disease which exposed the neighbourhood to danger. To state that they have neglected this obvious duty is no exaggeration. The only water-supply which is procurable by some five thousand people is that from surface wells, which at the best of times are liable to pollution; no hospital has been erected, and Frimley is still without any system of drainage. Even the arrangements for flushing the drainage of Camberley and York Town are defective, for no sufficient water-supply exists for this purpose. No wonder the inspector reported that "the rural sanitary authority does not appear to be alive to its important health functions, no steps of any moment having been taken to improve the hygienic condition of the large district committed to its charge, and no means adopted to check the serious epidemic of diphtheria which has ravaged it."

Recently the district has been again inspected by Mr. GEORGE TURNER on behalf of the Local Government Board, but while his report is in preparation Camberley and York Town are again smitten with diphtheria. In the course of about a fortnight persons to the number of seventy-six have been stricken with this disease, and thirteen deaths have taken place. This time the disease is not limited to the poor, but has invaded the houses of the more wealthy inhabitants of the district. There is great probability that the origin of the outbreak is in some way connected with a milk-supply. The acting medical officer of health has clearly indicated this; and it certainly appears to be the fact that most, if not all, of the cases had partaken of this particular supply, whilst others obtaining their milk from other sources, although living in the same neighbourhood, escaped. Assuming, however, that milk was the vehicle, the source and nature of the infection of that fluid has not yet been traced. The action of the sanitary authority is characteristic. They have limited their proceedings to considering certificates, on the one hand, that the water supplied to the farm and the milk it produced were of proper chemical constitution, and, on the other, that the health of the cows was satisfactory, and have apparently shut their eyes to the large physiological experiment which has been conducted in their midst. A notice has been issued recommending the boiling of milk, but this is all that has been done to prevent the consumption of an article of food which, it is likely enough, may still retain the power of inflicting loss of life. In the meantime the sanitary authority ask the help of the Local Government Board, as if it were the business of this Board to supply the wants created by local incapacity. That such help will be given we sincerely hope, for other reasons than those which relate to the rendering of assistance to an indolent local authority make it desirable that milk outbreaks should be investigated. The time for instituting such inquiry is perhaps opportune, for the inspector's visit to the district will bring to the knowledge of the Local Government Board the filthy condition of the Blackwater river, which runs through the district and forms the boundary of the farm from which the infected milk is said to have come. Men are now engaged in digging out the black sewage which comes from the Aldershot camp, and which checked the flow of water by its accumulation. It will be interesting to see whether the sanitary authority can be roused by this recent calamity to exercise its powers more efficiently than heretofore.

THE influence on the progeny of marriages of consanguinity will be always of interest to the philosopher, to the medical statistician, and to the public at large. Whether we agree with Dr. CLOUSTON that "there seems to be a special tendency for members of *neurotic* families to intermarry, and an affective affinity amongst such that tends towards love and marriage," or with Mr. GRANT ALLEN that "what we each fall in love with individually is our moral, mental, and physical complement: not our like, not our counterpart; quite the contrary; within healthy limits, our unlike and our opposite,"—the question of intermarriage remains a debatable subject. If we were to be led to an opinion by popular prejudice or by the influence of earlier writers in France or America, we should become very positive that the

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intermarriage of relatives was an unmitigated wrong, and that nothing but evil could arise from consanguineous unions by virtue of the consanguinity.

In a paper read in the Psychological section of the British Medical Association at Brighton Dr. SHUTTLEWORTH renews an inquiry into this ever-interesting topic, and brings fresh statistics to bear on the subject. The tenour of his remarks is confirmatory in its general scope of the conclusions of others who, like himself, derived their information from the extensive field of observation provided by our idiot institutions, or from the scattered idiots who in Scotland have come under the observation of Dr. ARTHUR MITCHELL, C.B. The great difficulty in arriving at positively accurate results is the want of a uniform basis for comparison. We want to know how many healthy, self-relying men and women are the progeny of consanguineous unions in England, and it is a matter for great regret that this had not been furnished by the last census returns in accordance with the proposal of Sir JOHN LUBBOCK. Seeing that Mr. GEORGE DARWIN, by a somewhat elaborate inquiry based upon the number of "same-name" marriages, establishes as a basis of first-cousin marriages 1¼ per cent. in London and 2¾ per cent. in rural districts for all classes of society, and Dr. ARTHUR MITCHELL makes his basis for Scotland 1·5 per cent., while Dr. LANGDON DOWN, on an investigation among the out-patients of the London Hospital, makes his basis ·5 per cent. only, it is obvious how greatly a more definite standard for comparison is needed.

In an investigation as to the number of imbecile children who are the products of consanguineous unions, Dr. SHUTTLEWORTH finds at the Royal Albert Asylum that 5·1 per cent. are the children of consanguineous marriages, and 2·9 per cent. of first-cousin marriages; Dr. GRABHAM found that at Earlswood 6 per cent. were the children of consanguineous unions, and 3·8 per cent. of first-cousin marriages; while Dr. LANGDON DOWN gives as his experience that, out of 852 cases of known parentage, 7 per cent. were the children of consanguineous marriages, and 5·4 per cent. were children of first cousins. Having regard to these figures alone, we can have no difficulty in agreeing with Dr. SHUTTLEWORTH that "*first-cousin* marriages (at any rate) are to some extent favourable to the production of idiot children," in spite of the arguments to the contrary based on Mr. GEO. DARWIN'S statistics. Dr. SHUTTLEWORTH, looking beyond the bald relation of numbers, and interrogating the life-history of the progenitors, corroborates in great measure what was remarked by Dr. LANGDON DOWN, that in the great bulk of the cases causes of idiocy could be discovered in addition to or independently of the consanguinity of parents. This is in harmony with the views published last year in America by Dr. CHARLES F. WITHINGTON, upholding the doctrine that morbid inheritance rather than specific degenerative tendency will account for all the infirmities met with in the offspring of cousins. It must, therefore, be that the great danger in the intermarriage of cousins lies in the circumstance that where there is a neurotic inheritance there are two certain morbid factors to contend with rather than a possible *one*. It is in this direction that the danger of consanguineous unions is to be sought. The experience of breeders of cattle teaches them that the greatest possible care is needed in the selection of animals where in-breeding is practised. Mr. GRANT ALLEN points out that "in narrow communities, where breeding in-and-in becomes almost inevitable, natural selection has to exert itself upon a crowd of cretins and other hapless incapables; but in wide and open champaign countries, where individual choice has free room for exercise, men and women as a rule marry for love, and marry on the whole their natural complements." On the whole, the balance of evidence would appear to be in favour of the conclusion that where a close scrutiny fails to discover any heritable weakness, neurotic or otherwise, consanguineous marriage *per se* is not necessarily a thing to be prohibited.

Is a large community the better for the existence within it of an efficient medical school? That it is so has been very eloquently maintained by the Archbishop of YORK and by Sir ANDREW CLARK at Sheffield. A church, a high-class school, a technical school, a public library, a university are unmistakable advantages. But a medical school? Might we not leave that to a few chief centres of intellectual activity—to the larger and metropolitan towns of each division of the kingdom? In these days of cheap and easy travelling why take medical teaching to the very door and home of students? When we find great metropolitan physicians and teachers like Sir ANDREW advocating the making of provincial schools great and effective, as he did last year at Dundee, and as he has just done again at Sheffield, we must believe that there is something to be said for the multiplication of provincial schools. The arguments deserve consideration. They resolve themselves mainly into two classes. Firstly, it was maintained that cultivated young men might be educated medically much cheaper at their own doors. This was the Master Cutler's great argument. Callings were wanted for young men, and they could be put into the medical profession more cheaply by the way of a good local school than by sending them to London. This is a fair argument, but not a very high one. Sir ANDREW CLARK maintained that a high-class school would be for the benefit of the community in which it was placed, and that the development of the various branches of medical knowledge and art was now so advanced that they could not be taught but in highly efficient and highly organised schools, and that it was out of all reason to expect medical men to provide and pay for these schools. We are disposed to agree with Sir ANDREW in the main. We cannot doubt that communities like Sheffield should have medical schools in which the science and art of medicine ought to be advanced by special opportunities of study and practice. English medical practice would be poorer if such lights as Leeds, Liverpool, Newcastle-on-Tyne, Manchester, and Birmingham were put out. Some provincial schools are in certain special branches inadequate. So are some of the schools in London and in other parts of the United Kingdom. There is wealth enough in all the above-named towns, as there is in London, to make the plant and apparatus of the schools complete. How is the money to be procured for these purposes? This is a question of some difficulty and delicacy. Clearly money, and teaching power, and apparatus may be wasted by too great a multiplication of schools. On the other hand, a certain amount of competition in schools is

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highly advantageous. The hospitals in all our great manufacturing and industrial centres might easily be made efficient for clinical teaching—and good clinical teachers abound therein—but the great difficulty is to find well-trained anatomists, biologists, physiologists, pathologists, and chemists, who should be so well endowed as to be able to give sufficient time to teaching in a small school, and in providing them with suitable laboratories and material for the illustration of their lectures and for the practical work and instruction of their pupils. Unless this idea is held firmly in the foreground and practically insisted on, a proper medical curriculum can never be thoroughly carried out, and a medical school can only exist in name. The best schools in the provinces which have grasped the necessity of fully satisfying these requirements have increased in numbers. Leeds, Manchester, and even London are too near Sheffield for its existence as a centre of medical education, unless it puts itself in a position to compete with, or even surpass, these in the completeness of its scientific arrangements and work. Sheffield, like other places, wants some man like Mr. OWENS of Manchester, or JOSIAH MASON of Birmingham, to endow teachers and found laboratories for its medical schools. Our own great aristocratic and commercial leaders have only to reflect on the human importance of medical science to deal generously with hospitals and medical schools. The State itself might do more in assisting the costly and less immediately profitable parts of medical investigation and research. Finally, our examining authorities should be more severe in their estimate of what constitutes a medical school, and should withhold their recognition from institutions where teaching power or apparatus is deficient. In this way the number of our medical schools would be kept in check, whilst they would be fortified and improved in character. The Medical Council has committed itself to some inquiry into the efficiency of medical schools, of which we may expect to hear something at the approaching meeting fixed for Nov. 16th.

Annotations.

"Ne quid nimis."

THE GENERAL MEETING AT THE COLLEGE OF SURGEONS.

AT the general meeting of the Fellows and Members of the College of Surgeons, to be held in the College on Thursday next at 3.0 P.M., it is intended to move the following three resolutions—namely: 1. That in the opinion of this meeting, it would conduce to the welfare of the Royal College of Surgeons, and tend to promote the interests of medical polity and education, first, if Members of the College were empowered to take part (separately or conjointly with the Fellows) in the election of the Council; second, if Members of the College were eligible to sit in the Council, provided (*a*) that no Member of the College shall be entitled to vote till he have been such member for a period of ten years, (*b*) that no Member of the College shall be eligible to sit in the Council till he have been such member for a period of twenty years, and (*c*) that not more than one-fourth of the Council shall consist of Members of the College who are not also Fellows. 2. That, with a view to give effect to the recommendations in the foregoing resolution, the Council be hereby respectfully requested to empower certain members of its body to meet and confer with the representatives of the Association of Fellows and of the Association of Members, together with, if necessary, an equal number of Fellows and Members who may not belong to either of the Associations, to be selected in any manner satisfactory to the Council. 3. That, in the opinion of this meeting, the method recommended by the Council for widening the basis upon which the Fellowship is obtained tends to lower the academic status of that diploma, and in the interest of surgical education is not advisable.

We are requested to state that Fellows or Members desirous of proposing resolutions at the meeting on Nov. 4th should furnish copies thereof to the Secretary of the College of Surgeons two days before the meeting.

THE ENTERIC FEVER EPIDEMIC AT SWANSEA.

HAVING completed his investigations into the circumstances of this epidemic, Mr. Ebenezer Davies, the borough medical officer of health, has now issued a report on the subject. Since the commencement of the outbreak 112 attacks and seven deaths had taken place at the date of the report. Last year a similar epidemic occurred, and during a corresponding period 277 deaths took place. But in that case the disease was distributed somewhat generally over the town, whereas this year it is limited to only two of the several divisions of the borough, and it was this limited incidence that originally led to a suspicion that the water-supply was affected, and that the mischief had been brought about by the use of a water from a special reservoir which had only been used for the supply of the districts in question. Although the actual source of the specific infection of this special water has not been discovered, yet a spring flowing into the reservoir was open to contaminating matter from a farm or farm-houses on either side of it, and from privies and pigstyes; and chemical analysis has shown it to be greatly polluted and to contain forty times the amount of albuminoid ammonia that is contained in the water supplied to other portions of the borough. The medical officer of health asserts that he not only had no acquaintance with the existence of this contaminated spring, which is almost entirely hidden along its course, but he had been told, in answer to inquiries, that the reservoir implicated was solely supplied from another source. Mr. Davies was, however, by no means satisfied that the pollution of this water was the sole cause of the distribution of the disease, and hence examination was made of the local circumstances of some of the streets which were most severely affected. The results show unventilated sewers, and arrangements as to house-drains and closets which can only be effectually remedied by applying to them the same action as is now required under the modern bye-laws with respect to all new drains and closets. In short, we imagine that the house-drains and appliances are so contrived as to facilitate the entrance into dwellings of infected sewer air from unventilated sewers receiving enteric fever discharges. Fortunately remedies are being applied, and there is every reason to believe that the epidemic is rapidly abating.

THE BRADFORD FEVER HOSPITAL.

THE Bradford Town Council have determined to adopt the recommendation of their Sanitary Committee that application should be made for Parliamentary powers to enable them to take over the local Fever Hospital; but a correspondent, writing to a local newspaper, points out that some difficulty will be encountered in carrying out the proposal to acquire the hospital. This institution, it appears, was erected years ago by the charitable people of Bradford, and the committee who have the control of it have not been asked whether they approve the scheme of the Cor-

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poration. It has for years served to afford accommodation for all classes of patients, but those sent to it by the sanitary authority constitute the greater number; consequently, it has occurred to the Corporation that, seeing they have no voice in its management, they might as well acquire the power they desire by taking possession of the whole institution. Another reason seems to have led to the same conclusion: the Corporation were desirous that the Hospital Committee should provide a special wing for small-pox, but their request was declined, and this has doubtless necessitated the town authority taking some steps to obtain accommodation for this disease. The main fault in the proceedings appears to be the complete forgetfulness of the fact that the committee, as trustees of the funds that have been collected, are bound to see that they are properly applied, and their consent to the proposed change should therefore have been obtained in the first instance. Nevertheless, we shall be glad to hear that the transference has been effected. The primary use of hospitals for infectious cases is the limitation of infectious disease. London particularly has suffered much from this fact being overlooked. Upon the management of such institutions is dependent the question whether good or harm shall come from their existence, and their control should therefore be entirely in the hands of the authority responsible for the safeguarding of the public health.

CHEMICO-BIOLOGY OF MICRO-ORGANISMS AND PTOMAINES.

PROFESSOR POEHL of St. Petersburgh, believing that ptomaines are usually due to the action of micro-organisms in decomposing the albuminoid constituents of the body, and knowing that they themselves are of the nature of reduction products, has made a number of observations on various micro-organisms for the purpose of determining their capacity for reduction, and thus estimating their power of producing ptomaines. The substance employed for the purpose of his investigations was Koch's nutritive gelatine, to which was added a minute quantity, 0·05 per cent., of perchloride of iron and ferro-cyanide of potassium. This admixture did not, he found, interfere at all with the development of the micro-organisms. The substance was placed in a test-tube with the usual precautions, and the inoculation made with a platinum needle thrust into it. In some of these cultures a distinct formation of prussian blue from the reduction due to the development of the micro-organisms was observed along the track of the needle within from twelve to twenty-four hours. In others the blue colour was later in making its appearance, while in some no blue was visible, even after the whole of the mass had become liquefied. It was remarkable that generally the blue colour was not formed in the track within from four to eight millimetres from the surface, thus showing that the oxygen of the air is prejudicial to the reduction process. After the track of the needle had become coloured, the blue appearance began gradually to spread around it in the substance of the gelatine, but even after a week an uncoloured superficial layer was always present of from four to eight millimetres in thickness. The chemical formation of prussian blue requires the presence of a slightly acid condition, and as some of the micro-organisms refuse to develop except in a slightly alkaline medium, the difficulty had to be overcome by waiting until the development had taken place in the slightly alkaline gelatine, and then adding nitric acid, when, if reduction had taken place, prussian blue was formed. Comma bacilli, typhus bacilli, streptococci, many of the micro-organisms of the fæces and the sputa, and of those existing in the Neva and waterworks water, set up a considerable degree of reduction, while some, including Bacillus subtilis, showed no signs of doing so even after a week had elapsed. In the case of cholera and other bacilli in alkaline media, Dr. Poehl observed that the addition of hydrochloric acid to the culture in process of development gave rise to a red pigment of the same tint as acetate of iron, in addition to the formation of prussian blue. A similar pigment was formed by itself in control experiments made with the same bacilli and nutrient gelatine containing no iron or ferro-cyanide, and is probably, according to Dr. Poehl, identical with the scatol derivative found by Brieger in pathological urines. The bacilli of Prior and Finckler found in cholera nostras appear to require much less oxygen for development than the comma bacilli, which are in a high degree aerobic. It would seem that in true cholera oxidising medicines, as peroxide of hydrogen and peroxide of manganese enclosed in keratin, so as to act specially on the small intestine, might be expected to act both in destroying ptomaines and in preventing their formation. Dr. Poehl thinks that much practical information is to be obtained by chemico-biological investigations on comma bacilli and pathological micro-organisms generally.

THE EASTERN HOSPITAL.

DR. COLLIE'S annual report for the year 1885 gives an interesting account of the work of the hospital during that period. Altogether 1038 patients were under treatment, 843 of whom were admitted during the year. Of these, scarlet fever contributed 614 cases, and enteric fever 112 cases, the mortality per cent. of these diseases being 12 for the former and 19 for the latter; typhus fever had a mortality of 46 per cent. In the small-pox wards 618 patients were admitted, of whom 425 were vaccinated; in 91 the vaccination was doubtful, and 102 were confessedly unvaccinated, the general mortality per cent. being 22·6 for this disease. Dr. Collie observes that the number of admissions of cases of enteric fever was less than in any year since the opening of the hospital in 1871. It is interesting to note that two nurses contracted enteric fever. It will be recollected that Dr. Collie some years ago contributed a series of valuable papers on the communicability of this disease, and argued against the belief that any insanitary condition of the hospital was responsible for the infection of the nurses which from time to time took place. Since these papers were published, the drainage and sanitary arrangements have been entirely reconstructed under the supervision of Mr. Keith Young, and may now be considered to be as perfect as they can be made. That the nurses have still continued to suffer from enteric fever is strong evidence of the correctness of Dr. Collie's view, that the youth of the nurses employed in the institution is an important element in rendering them susceptible to this disease.

NO MEDICAL EVIDENCE.

ON September 28th an inquest was held by Mr. F. S. Hawthorn, deputy coroner, on the body of George Ridley, aged thirty-seven. Deceased was found in an insensible condition on the Midland Railway with a scalp wound in the right occipital region and a small compound depressed fracture of the skull. He was removed to the Burton-on-Trent Infirmary, where trephining was performed. Death ensued, however, without deceased having recovered consciousness. No medical evidence was called. The jury returned a verdict of "Accidental death while trespassing on the railway." We entirely demur to the course taken in the investigation of the above-mentioned case, and to the verdict which followed the evidence. It seems to us a matter of doubt whether the death was accidental, suicidal, or homicidal. Except for the fact that the man was in a place of danger to life and limb there was nothing to show how the

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injuries were received, for "the railway officials had been unable to trace the train by which the deceased was struck." A careful search ought certainly to have decided the latter question. The means by which any further light could reasonably be expected to be thrown on the matter—viz., a post-mortem examination—was not employed. We are decidedly of opinion that wherever the cause of death is equivocal, and especially where the liberty of another person may be imperilled by suspicion of foul play, it is the bounden duty of the authorities to secure the best attainable evidence, and this can only be got in cases like the one under consideration by a carefully conducted necropsy.

THE VENOM OF POISONOUS SNAKES.

THE investigation of the poison which in the form of snake-bites kills nearly 50,000 human beings per annum in India alone, cannot fail to present many points of interest, and has just been undertaken by Dr. R. Norris Wolfenden, whose results are published in the last part of the *Journal of Physiology*. The poisons with which he experimented were obtained from the Indian cobra, the scientific name of which is Naja tripudians, and the Indian viper, named the Daboia Russellii. In the report of the last Snake Commission, Dr. Wolfenden tells us, Mr. Pedler, one of the commissioners, sums up the results of his chemical examination into the nature of the poison with the remark that it is quite impossible to draw any deductions as to its nature, and he thought it was more than possible that the poison was a mixture of albuminous principles with some specific poison. Sir Joseph Fayrer and Dr. Lauder Brunton compared the action of cobra poison to the alkaloid conia. Blyth thought that the poison could be separated from the proteids in the venom, and that it was not thrown down with the albumens on the addition of alcohol. Walls, however, with whom Dr. Wolfenden agrees, ascertained that this is an error, and attributable to the circumstance that the alcohol used was not sufficiently pure. If to a solution of cobra poison absolute alcohol be added, a white precipitate is thrown down. After the precipitate has been thoroughly washed with alcohol, it can be redissolved in water, and the solution produces all the effects of cobra poison. Moreover if dried cobra poison in a state of fine powder be added to absolute alcohol, and the mixture be frequently agitated, the alcohol will derive no poisonous property from the cobra venom; but if rectified spirit be employed, the water in the rectified spirit is capable of taking up a certain amount of the poison. This is just what might be expected of an albuminous fluid, and tells in favour of the view that the cobra venom is of a proteid nature. The observations and experiments of Weir Mitchell and Reichert upon the venoms of several American snakes tend to prove that the poisonous principle is resident in the proteid constituents. Dr. Wolfenden finds the venom is generally acid when quite fresh, but that it may become neutral when it has been kept for a few hours. Experiment showed that dialysates of the venom, free from proteid, were quite harmless; but that if they contained any proteid they became toxic. The activity of the venom, though reduced, is not entirely abolished by the exposure to a boiling temperature. It is rendered innocuous by the permanganate of potash outside the body, as well as by tannic acid, metallic salts, and other agents which precipitate albumen. The albumens which Dr. Wolfenden finds are present in the venom of the cobra are: First, a globulin, which is always present, and probably kills by interference with the respiratory mechanism—that is, by asphyxia, and without paralysis, causing local inflammation, but not of great intensity. Secondly, an albumen resembling acid albumen, which is precipitated, together with globulin, by saturation, and which is in some degree dialysable; this proteid probably acts on the respiratory apparatus chiefly like the globulin, but less intensely. Thirdly, an albumen which is precipitated sodium sulphate out of the magnesia filtrate, and appears to be serum-albumen; this is also toxic, and produces a kind of ascending paralysis, with fatal termination by suppression of the respiratory function due to paralysis of the respiratory muscles. Lastly, he found some traces of hemi-albumose and of peptone. Similar compounds were found in the venom of daboia.

THE RIVER LEA.

DR. TRIPE, the medical officer of health of Hackney, is wisely exercising watchfulness over the river Lea. Public interest in any subject cannot be maintained for any length of time, and officers are often powerless to procure remedies for great evils except when popular feeling is aroused. We make no excuse, therefore, for again directing attention to the condition of this river, and to Dr. Tripe's statement that it has "gone back almost to its former state." Up to the end of September the Tottenham Local Board had been permitted by the Metropolitan Board of Works to discharge the Tottenham sewage through a new sewer into the metropolitan system, but this privilege has now ceased, and we learn from a report which Dr. Tripe has presented to his authority that he found a scum on the water near the Tottenham outfall, and many dead fish. Within fifty yards from this outfall there was as much ammonia and organic matter in the water as to equal a mixture of one-third of sewage and two-thirds of distilled water, and on one particular day the effluent contained as much of these constituents as did sewage taken from the sewer in Mare-street, Hackney, and it smelt worse. A member of the Hackney vestry, who is also a member of the Metropolitan Board of Works, expressed the opinion that further assistance from the latter Board could not be expected, and that the only remedy was in the hands of the Tottenham authority, who must deal more effectually with their sewage before discharging it into the Lea. Finally, Dr. Tripe's recommendation was adopted, that the attention of the Tottenham Local Board and the Lea Conservancy Board be called to the unsatisfactory condition of the Lea, since the effluent has again been discharged into that river.

INTRA-CRANIAL HÆMORRHAGE.

AT a meeting of the Pathological Society of Philadelphia, Dr. H. A. Formad read a paper upon Intra-cranial Hæmorrhage (*Boston Medical and Surgical Journal*, Sept. 30th), based upon an analysis of 143 cases occurring in medico-legal practice. He divided them into eight classes, and arrived at the following practical conclusions:—1. Hæmorrhages exclusively above the pia mater and above the dura mater—that is, on the outside of the brain—are always due to *traumatism* or to *sunstroke*, provided a cerebral source for hæmorrhage be excluded, and the cerebral vessels and membranes be not diseased. 2. Hæmorrhage in the floor of the fourth ventricle is always traumatic, provided there be no blood clots in the lateral ventricles or any other part of the cerebral substance. 3. Hæmorrhage exclusively below the pia mater, or in any part of the brain substance, or in the ventricles (except the fourth), is always idiopathic—that is, due to disease. 5. There must be a diseased condition of the cerebral vessels or substance for hæmorrhage to be a result of disease. There must be traumatism (a fall or violence) to account for a hæmorrhage in a normal brain. 5. The blood clot in concussion of the brain is not found at the point of application of violence, but always somewhere about the opposite side of the brain, and always within the arachnoid—that is, between the pia and dura mater. 6. The blood clot in fracture

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of the skull is always found at the point of application of violence immediately below and always between the dura mater and the fractured part of the skull itself. 7. A blood clot found within the cranial vault is more favourable to the patient if due to fractured skull than if due to a mere concussion. 8. Only clotted blood and infiltration of blood corpuscles into tissues indicate an ante-mortem hæmorrhage. Liquid blood is due to post-mortem oozing, and stains, but does not infiltrate, tissues. 9. Severe bruises and cuts of the scalp may be seen in cases of idiopathic apoplexy, when a sudden cerebral hæmorrhage causes a person to fall. 10. In some cases it is impossible to decide by medical examination alone as to whether a head injury and the resulting hæmorrhage is due to a fall or violence. 11. External marks of violence may be invisible to the unaided eye in some cases of injury to the head or other parts, but are easily detected and distinguished from post-mortem spots by means of the microscope. 12. The bulk of an intracranial hæmorrhage stands usually in inverse proportion to that of the external scalp hæmorrhage.

HYDROPHOBIA IN CALIFORNIA.

THE San Francisco *News Letter* is publishing the replies which have been received from members of the medical profession in regard to the non-appearance of rabies in California or on the Pacific Coast. The two questions to which answers were solicited were as follows: (1) Has any case of rabies, either in man or animal, come under your personal notice, in this State or on this coast? If so, please give particulars. (2) Have you any theory as to the cause of the absence of this disease from our midst, and have you any facts to sustain your theory? The replies appear to prove pretty conclusively the non-existence of the disease in the district respecting which inquiry is made. One correspondent during a residence of twenty-nine years has seen but one case; the others unanimously answer the first query in the negative. With regard to the second question there is not such a similarity of opinion. One attributes California's immunity to its climate, while another gives as his opinion that the absence of rabies does not seem to be accounted for on the basis of climatic conditions. One alludes vaguely to the intervention between the east and the west of vast arid plains, lofty ranges of mountains, and great rivers, which he surmises present insuperable obstacles to infection by the direct transportation of infected animals; whilst another gravely states that the only theory that presents itself to him "is that, however hot the days may be in California, the nights are always cooler." Whatever may be the cause, however, California is to be congratulated on the effect, and will, we hope, continue to remain free from the scourge which has within the last few months so severely afflicted our own country.

DEATH FROM EATING HAW-BERRIES.

AN inquest was held by Mr. E. A. Carttar on Oct. 16th touching the death of Emma Ponton, aged seven years. Deceased had eaten a quantity of haws—the fruit of the whitethorn (*Cratægus oxyacantha*). On the following day she became very ill and vomited. A medical man was called in, but despite his efforts the girl died two days later. Dr. M'Mahon attributed the death to "suffocation arising from inflammation of the stomach and bowels caused by excessive nervous irritation, brought on by the swallowing of the seeds of berries which were not poisonous." As the coroner observed, it was a remarkable death. Apart from the suffocation induced as alleged, however, we can quite understand that the haws may have caused death. In the first place they are astringent and somewhat acrid, and are not unlikely, when eaten in quantity, to set up vomiting and gastro-intestinal irritation. Further, the dense outer skin and the "stones" may excite digestive disturbances by their mechanical action. Accumulations of such bodies may lead to fæcal impaction, or a single stone may readily be lodged in the vermiform appendix, and lead to ulcerative perforation, with retro-peritoneal abscess and peritonitis as sequelæ. From the evidence it does not seem certain that deceased may not have swallowed other "berries" of a poisonous nature in mistake for haws—e.g., the fruit of the bryony plant, which when ripe is found in scarlet clusters, one of the most beautiful ornaments of our hedgerows; or of the woody nightshade (*Solanum dulcamara*). The unfortunate event shows the necessity for instruction to the young of the danger that lurks in the ingestion of wild "berries," whether reputed to be poisonous or harmless.

METROPOLITAN ASYLUMS BOARD.

AT the fortnightly meeting of the Managers of the Metropoltan Asylums District, which was held on Saturday last, the Board considered a letter from the Local Government Board asking what steps were being taken to remedy the defective drainage of the Western Hospital, and it was decided to refer back to the committee of the hospital their report recommending that a firm of architects be employed to carry out the work, and that the committee be empowered to consult a sanitary engineer if they considered it necessary to do so. The returns of those under treatment showed a total of 622 patients, of whom 520 were suffering from scarlet fever, 99 from enteric fever, and 3 from small-pox. Scarlet fever and enteric fever showed a slight tendency to increase, but the metropolis continued almost free from small-pox. The committee for the Western Hospital reported that they were of opinion that the practice of disinfecting the Board's ambulances at the hospital should be discontinued, while the Northern Hospital committee reported in an opposite sense. The arrangements for the lighting of the hospital ships by electricity are now completed.

THE BIARRITZ CONGRESS ON CLIMATOLOGY.

MORE than a thousand adherents were secured by the organisers of the above Congress. Several Governments sent representatives, and the presence during the month of October of so many distinguished guests at Biarritz, helped to enliven this fashionable watering-place. There are few seaside resorts in France better situated than Biarritz, and under the Third Empire it was often frequented by the Court and the highest functionaries of the State. In the intermediary seasons, during the late autumn and the early spring, Biarritz is an invigorating "half-way house" between the north and the south. It does not, therefore, compete with the Riviera, but helps rather to supplement the climatic advantages found on the shores of the Mediterranean. Indeed, a whiff from the Atlantic is always welcome to patients from the north, and this can be safely enjoyed at Biarritz at a season when it might prove fatal nearer to England. As if in acknowledgment of the alliance between Biarritz and the Riviera, Dr. Colignon, chief physician of the Hôtel Dieu at Monaco, was elected by the Congress secretary for the principal section—namely, that dealing with scientific and medical climatology. Effectively the principality of Monaco occupies the most enviable site on the Riviera. The shelter enjoyed from the northern winds is not surpassed anywhere. Further, a certain portion of the principality—that stretching towards the Eastern frontier, and known as the Quartier des Moulins, where the lemon trees blossom all the year round—is not only marvellously sheltered, but does not suffer from stagnant atmosphere. Situated on the ledge of a high mountain, dominating the sea,

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it is sufficiently elevated to enjoy a constant breeze without losing its advantages of temperature. Dr. Colignon doubtless made a good point of these qualifications, and we are informed that his statistics concerning the cures effected at the Monaco Hospital were considered very conclusive by the Congress. Full reports of the proceedings have not yet been published, but we can nevertheless congratulate the town of Biarritz on the initiative it has taken. The climatic treatment of disease is yearly becoming more general, and all efforts to collect and scientifically compare the results attained will render this mode of dealing with a numerous class of patients easier to follow, without incurring the dangers that spring from insufficient knowledge of local peculiarities.

PURPURA HÆMORRHAGICA IN ST. PETERSBURG AND HAMBURG.

DR. E. MASING compares (*St. Petersburger Medicinische Wochenschrift*, Nos. 39 and 40) a case of purpura hæmorrhagica of his own, together with 13 cases culled from the case-books of the Mary Magdalen Hospital in St. Petersburg, with the 73 cases collected by Dr. Scheby-Buch, from the records of the Hamburg General Hospital. Of the 14 Russian cases, 10 were complicated with pyrexia and 8 with diarrhœa. Eight presented painful and swollen joints and muscles, whereas in the 73 Hamburg cases only 27 are reported as having had rheumatic symptoms. Hæmorrhage from the nasal and other cavities of the body occurred in 6 cases—i.e., in about the same proportion as in Hamburg. Urticaria was not observed at all, though it was frequently present in the Hamburg series. Youth is the most common time for the disease to occur, 9 cases being under twenty-five years of age. The disease would appear to be even more rare in St. Petersburg than in Hamburg, for there were only 13 cases found in the Mary Magdalen Hospital Reports for the last twenty years, during which time the total number of patients was over 82,000; while the 73 Hamburg Hospital cases occurred in the space of forty-one years out of a total of 100,000 patients. The mortality was greater than in Hamburg, 4 out of 14 being fatal in St. Petersburg and only 10 out of 73 in Hamburg. One of the former series, however, died of phthisis. The author is quite unable to throw any light on the etiology of hæmorrhagic purpura, but he expresses the hope that bacteriological research may help to clear it up.

ERGOTISM IN COWS.

SOME discussion has been taking place lately with regard to ergoted grasses producing abortion in cows, and the question does not yet appear to be answered as to whether and to what extent the accident is due to the Claviceps purpurea, which in some seasons is a very common parasite on the herbage of pastures. By some authorities it is believed that ergot is the cause of the widespread epizootics of abortion which are sometimes reported as occurring among cattle, and which cause heavy loss to stock-breeders. By others this effect of ergot is doubted, and these doubts would appear to be justified by very conclusive evidence of an experimental kind. It has been given in large and repeated doses to cows, bitches, cats, swine, and rabbits in all stages of pregnancy, but its ecbolic action has not been observed in them, and the conclusion arrived at was that amongst the lower animals ergot, whether given by the mouth or rectum, in single large doses, or for some time continuously, has no tendency to expel the contents of the uterus at any period of gestation. Abortion in cattle is undoubtedly due to many causes. When sporadic, it may follow injury or disease; but when it occurs in a herd of pregnant cows, all or nearly all aborting after the first case, then the occurrence looks mysterious, and is popularly believed to be owing to "sympathy" among the cows, a kind of imitative action brought about by the animals' imagination. This notion has, of course, no foundation in fact, and multiple cases of abortion can be truthfully accounted for by infection conveyed from one cow which has aborted to others which are in calf. Veterinary surgeons had long, from observation, come to the conclusion that septic infection, possibly through the genital organs, was the principal if not the sole cause; and some years ago Franck, of the Munich Veterinary School, made some interesting experiments on pregnant cows, which demonstrated that abortion could readily be brought about by introducing a very small quantity of matter obtained from the vagina or afterbirth of a cow that had slipped its calf into the vagina of a pregnant one. This matter was found on examination to teem with micrococci. In order to prevent outbreaks of abortion, viewing it as an infectious disease, cattle-breeders should be thoroughly aware of the premonitory signs, which are usually well marked, and at once separate the animal which shows them from its fellows. When the accident has happened in a cowshed, then measures of a sanitary kind should be speedily adopted, as if dealing with a most infectious malady. By acting in this way, the heavy losses which are so frequently reported as the sequel of "warping" would be no longer heard of.

THE SUCCI FAST.

THE "fast of Succi" is commented on with unsparing sarcasm by M. Loye in the pages of our contemporary, *Le Progrès Médical* (Oct. 16th). He has been surprised to see that the physicians who had the control of the "experiment" allowing Succi to receive visits, to take rides, baths, &c., and, in fact, to have a measure of freedom which would have discredited the researches of Chossat and Voit, or Bidder and Schmidt, had they allowed it to the animals on whom they studied the effects of inanition. The whole affair seems to him to be a juggling trick, aimed to mystify *messieurs les savants*. But what, he asks, was the object in view? Was it to demonstrate the absolute possibility of living without nourishment—to do work without any source of force? That would have been a new search after perpetual motion, and he would not insult his readers by discussing it. Was it to show that certain individuals can do without food for some days? That is a common physiological fact, of which there are numerous instances, from the germinating grain to the hibernating marmot. Was it due to the faculty of simulation, which has too often upset the most clever *savants?* M. Loye hints even that such suspicion may reasonably attach to the Italian fasting man, who had formerly suffered from mental alienation. The results of the fast confirm these latter suspicions, for, apart from loss of weight and diminution in urea, he showed no symptoms of inanition; there was no loss of muscular energy; the respiratory movements and cardiac pulsations were as frequent as at the commencement. The physicians in charge do not appear to have measured the work done—a grave omission, which if supplied would have enabled one to determine whether or not there had been any introduction of food. The experiment thereby loses all scientific value. He only lost in weight 441 grammes per diem, and can it (the writer asks) be seriously maintained that this amount could suffice to maintain life and produce so much work? Bidder and Schmidt's animals lost $\frac{1}{37}$th of their weight daily with hardly any work; Succi only lost $\frac{1}{138}$th of his body weight, and yet took long walks, swam, conversed, and performed all manner of work. Finally, M. Loye discredits the famous liquor which Succi took to assuage his hunger, for the sensation is central, and not to be masked by anæsthesia of the stomach. He

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regrets that his Italian *confrères* should have accepted the office of detecting a trick, which is the business of conjurors and not of doctors; and he concludes by trusting, for the honour of French science, that the further challenge be not accepted.

THE SCOTCH AND IRISH ELECTIONS.

WE think the merits of the Scotch candidates are now well understood. Dr. Morton's personal qualifications are unexceptionable, but no ingenuity will get rid of the argument that he is disqualified to represent the free practitioners of Scotland by the mere fact that he is the President of one of its corporations, already strongly represented in the Council. It is an open secret that several distinguished physicians—notably, Sir Douglas Maclagan and Professor Gairdner—have been mentioned as gentlemen who would have had a large support as honoured members of the profession in Scotland. It is understood, too, that either of these gentlemen would have regarded it as an honour to be elected direct representative for the northern division of the kingdom. But they judged that, strictly speaking, the seat was meant for men representing the rank and file of the profession, and so judging, they decided not to complicate the election by allowing their names to be put forward. We venture to say that by this decision they have done great honour both to themselves and the general practitioners of Scotland, who are now free to elect one of their own number. Two such gentlemen are before the constituency, and we look confidently forward to the election of one of them. Dr. Sinclair of Dundee or Dr. Bruce of Dingwall would worthily represent the practitioners of Scotland. It speaks well for the public spirit of this section of the profession that men in busy practice can be procured ready to make the necessary sacrifice of time and convenience. The case of Ireland is to be regarded with more anxiety. Dublin threatens to seize the new seat as she has appropriated all the rest since there was a Council, and general practice in Ireland, which has so many wants of its own, appears likely to go as unrepresented as if direct representation had not been granted. Let us hope that even yet the official and consultant and Dublin candidates will leave the seat for those who sorely need it. But this "sublime repression" of themselves is not to be relied on too much, and, as in Scotland, the blame will ultimately rest on the general practitioners if they do not elect one of their own order.

PERNICIOUS ANÆMIA AND INTESTINAL PARASITES.

THAT the condition produced on the system by the ravages of the blood-sucking parasite, Anchylostomum duodenale, resembles in every particular the progressive anæmia which so often proves fatal, and is, so far as knowledge goes, at once idiopathic and pernicious, is now a well-established fact. It has remained, however, for the past few months to see statements made and proofs advanced that other intestinal parasites may be the means of inducing this grave anæmia. We lately cited the paper of Dr. Reni on the relation of Tricocephalus dispar to Beri-beri, which was intended to point to this connexion; and a paper was lately published by Dr. Reyher to prove that in some cases the cestoid worm, Bothriocephalus latus, is the cause of a "pernicious anæmia." (An abstract of this paper will be found in the *International Journal of the Medical Sciences* for October, p. 531.) Dr. Runeberg, of Helsingfors, read a paper at the Berlin Congress of Naturalists and Physicians in confirmation of Reyher's view. (*Berl. Klin. Wochensch.*, Oct. 4th.) He averred that under certain circumstances the presence of bothriocephali in the intestine might lead to true pernicious anæmia; he had observed this connexion in twelve out of nineteen cases, and was able to cure his patients by the free use of anthelmintics together with arsenic and iron. In the debate that ensued, Professor Biermer doubted if Dr. Runeberg's cases really came under that category, not presenting all its typical phenomena. He had never himself met with any such connexion with intestinal worms. Professors Quincke, Immermann, and Heller all spoke in the same sense, the last-named pointing out that bothriocephalus was a common parasite, and often met with in great abundance without inducing any general symptoms.

THE CHOLERA EPIDEMIC.

THE past week has exhibited a further decline in the extent to which cholera has prevailed in localities which have already been referred to as suffering from the epidemic. Trieste and Pesth are now the only two places from which regular daily returns are received. As regards Trieste, the daily mortality during the past week has varied from 4 to 1; and at Pesth it has varied from 18 to 10. But, quite apart from these towns, it is evident that cholera is still somewhat widely diffused over various parts of Austro-Hungary, and recent information is to the effect that in Croatia an average of 12 attacks and 6 deaths, and in Szegedin an average of 13 attacks and 7 deaths, still occur daily. Fresh occurrences of cholera are also reported from Raab, Theriosopol, and the village of Csebza in Southern Hungary. During the seven weeks ending Oct. 24th the cholera deaths in Pesth had amounted to 393, and it is estimated that the attacks had exceeded 1000.

"AEROBIC" AND "ANAEROBIC."

A SUGGESTIVE idea, which has not yet led to any definite results, has been taken up by M. Arloing, and concerns an attempt to learn more of the nature of infective diseases by the aid of chemical physiology. The aerobic microbe, it is believed, would live at the expense of the oxygen of the blood, and we should consequently expect that this would show itself in the form of alterations in the quantity and quality of the chemical substances discharged from the body. It has been found that the amount of carbonic acid discharged from the lungs in cases of charbon and gangrenous septicæmia diminishes during the whole course of the fever, and especially towards its termination. This diminution in the discharged carbonic acid appears to have begun soon after the inoculation of the poison in the case of charbon; whilst in the case of gangrenous septicæmia, for some hours after the inoculation the quantity of carbonic acid exhaled was increased. It is believed that this difference in the amounts of carbonic acid discharged during the hours immediately following inoculation is to be attributed to the difference between aerobic and anaerobic organisms.

THE ADVANCE OF TEMPERANCE.

MOST of our readers will be pleased to see that, under the action of healthy public discussion, temperance is becoming more and more a custom with our countrymen. Alcoholic drinks, which once were classed with daily bread in very many households, rich and poor alike, are now luxuries less common than tea, and have, indeed, in an ever-widening range of popular opinion, come to be no more than the stimulant accessories of impaired nutrition. They certainly should not, as a rule, be taken apart from food, and neglect of this precaution has probably much to do with the formation of the drinking habit. We have heard it suggested, in conformity with this view, that licensed houses should be required to supply food as well as intoxicant liquor, and it is possible that in that case the consumption of the latter would be less than it is. Every means of restraining drunkenness is helpful to the

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cause of temperance, therefore we willingly note the suggestion. At the same time, it should be remembered that there is not for those whose health is good much help, if any, in alcohol, that it rather hinders than assists their energies, and that non-stimulant restoratives and food can best recruit them after toil; while thirst, the want of water, is best allayed by merely making good that want.

LIGATURE OF ARTERIES.

PROBABLY few subjects have afforded more occupation to the surgical mind than that of the ligature of arteries, and there seems a probability that it will continue to exercise the ingenuity of surgeons for many years to come. The discussion at the last meeting of the Clinical Society, though it did not elicit the opinions of many surgeons, yielded at least a great variety of opinions, for no two speakers appeared to agree in all particulars. The material of which the ligature should be composed, the kind of knot to be used, whether the arterial coats should be divided, whether two ligatures should be employed and the artery divided when deligation is practised in the continuity of an artery—are all moot points. Mr. Thomas Smith advocated the employment of the clove hitch, as being less liable to slip or to cause ulceration of the artery than the ordinary reef-knot, which has been in almost universal use of late years. The absence of any necessity for division of the internal coats of the artery seemed to be proved by the experimental researches of Messrs. Ballance and Edmunds. Kangaroo tendon does not yet seem to have established its reputation as a ligature to be relied upon in all cases.

THE INDISCRIMINATE SALE OF FIREARMS.

ON Thursday last Dr. Danford Thomas held an inquest on Edgar Wilkins Hanley, aged thirty-one, an artist, who shot himself on the previous Monday. Mr. Sylvanus Hanley, the father of the deceased, stated that for several years his son had been under medical care for a series of nervous disorders, and he had an idea that he would die an idiot. Last February he was strangely affected by the suicide of the late Lord Shaftesbury. He was attended by his landlady, and also an attendant. At four o'clock on Monday the deceased shot himself, a revolver being found afterwards by the bedside. Since Christmas last, a friend had intercepted letters from the deceased to various London gunsmiths asking to be furnished with firearms and ammunition. One gunsmith insisted on complying with the order, whereupon witness threatened to put the matter into the hands of Sir Charles Warren. A juryman remarked that greater care ought to be exercised in the sale of firearms to invalids. They should not be sent in this manner indiscriminately by post. The coroner said, "All the gunsmiths want is the money. They will evidently send revolvers by post to anyone." A verdict of "Suicide whilst of unsound mind" was returned. We must express our approbation of the remarks above quoted. Any infant, any lunatic at large, in fact any irresponsible person, can, as the law at present stands, furnish himself with a weapon by which he can in a moment deprive himself or others of life. Such a state of things surely ought to be remedied. We would suggest that no person should, under any circumstances, be allowed to purchase firearms of any description except on a personal application to the gunsmith, accompanied by a written statement concerning the purpose for which such weapons were required; and that, moreover, such statement should be accompanied by a guarantee from a householder, or some responsible person, that he believes the weapon in question is to be used solely and *bonâ fide* for the purpose stated. Within a few years back we can recall to memory cases of a boy who killed another with a pistol, of a girl playing with a friend's revolver who shot herself through the heart, of a man who shot a woman through the chest, of a nobleman who shot himself in a cab, and many similar cases. These facts speak for themselves, and the mere mention of them ought to be sufficient to awaken the minds of the authorities to the necessity for legislation on so important a subject.

PUBLIC HEALTH IN THE KINGDOM OF HAWAII.

FEW things are more significant of the progress which is going on all over the world than the establishment in countries not long removed from a state of barbarism of boards of health and of organisations for securing efficient sanitary administration, such as were all but unknown even in the most civilised communities during the past century. The kingdom of Hawaii is eminently a case in point, and we are glad to find that, as the result of the efforts going on there, a manifest decline in the death-rate is in progress, and that the Hawaiian people are gradually being awakened to an apprecation of the laws of health in many ways. The President of the Board of Health, in his report for 1885, the thirteenth year of the reign of his Majesty Kalakaua, speaks in the most hopeful terms of the future of the kingdom, and he expresses the conviction that a race so vigorous in its rude uncultivated state, so healthy and prolific in its aboriginal condition, will not be overcome by the vicious conditions connected with the radical change in habits of life and manners which is being brought about by the transition from a simple natural life to that of the more artificial one of civilisation. Great improvements are in progress as to the treatment and care of lepers. It has been deemed necessary to separate from others the children of lepers, although not yet attacked with the disease. But latterly it has been admitted that it is little short of an outrage that children, only suspected of being tainted on the ground of heredity and yet giving no sign of the disease, should be doomed to lose all their opportunities in life and to associate only with lepers. The result is that a special school for girls has been opened by the queen, and a hope is expressed that a similar institution may be erected and opened by the king for the boys. The water-supply for some principal towns has been largely improved; the question of hospital construction generally is being considered; and it is urged that means of isolation in cheerful breezy spots should be provided for infectious diseases, and that the question of drainage should be attended to. As to the importation of infection, a form of quarantine detention is largely trusted to, and the accommodation available seems to be more complete than that existing in some European communities where profession of trust in the same expedient has long existed; thus it was tested last year when 940 Japanese immigrants suffering from small-pox were landed; and no Chinese are allowed to come ashore except after a quarantine detention.

NEURITIS AND NEUROSES.

THE growing conception of "neuritis" as an entity and a frequent cause of disease is leading to the explanation of several functional derangements which hitherto have been classed under the wide but meaningless term of "neuroses." Dr. Max Meyer adduces evidence to show that even when "multiple neuritis" is exhausted to explain alcoholic and toxic paralyses, there remains the large group of peripheral neuralgiæ which may have their starting-point in a neuritis; and that motor spasms, tic douloureux, migraine, and even epileptic attacks may sometimes be referred to the same source. (*Berlin. Klin. Wochenschrift*, No. 43.) He illustrates his thesis by cases of sciatica, occipital neuralgia, migraine, epilepsy, and tic douloureux, in which there was distinct evi-

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dence of neuritis; and we need hardly adduce the well-known fact of tender points in many neuralgiæ which bear this out. Granting this inflammatory origin, it points, he thinks, to therapeutic measures—in rigid antiphlogosis (i.e. leeching) at the outset, whereby may be avoided relapses or secondary degeneration of the affected nerve. If the acute stage have passed, he considered that the best measure for promoting absorption of the inflammatory condition is galvanism, with which may be combined massage; and that, lastly, nerve-stretching is of value in cases where there is old exudation in the nerve sheath and its vicinity in spots which are not accessible to galvanism.

PROFESSOR RUTHERFORD ON THE SENSE OF HEARING.

IN the introductory address at the Edinburgh University on the Sense of Hearing, Professor Rutherford discussed at considerable length the theory of sound sensation which was advanced by Helmholtz, and the theory of the cause of concord between tones of the same pitch. According to Helmholtz, a compound vibration is analysed in the cochlea. If the blending of each sensation in a compound sound eventually takes place in the centre of perception, why, Professor Rutherford asks, is there any need to have the complex vibration analysed in the cochlea? Those of our readers who are interested in this matter we must refer to Professor Rutherford's suggestive address.

VISCERAL TABES.

IF one were asked the meaning of "visceral tabes," the reply would probably be given, without suspicion of being wrong, to the effect that the term implied a wasting of the internal organs of the body. But, alas, visceral tabes has no such meaning. The origin of the designation may be thus sketched: locomotor ataxy is called tabes dorsalis, and sometimes plain "tabes"; visceral crises are remarkable symptoms of tabes dorsalis; a case of locomotor ataxy in which the chief features are the occurrence of visceral crises, is termed visceral tabes. Bronchorrhœa, gastrorrhœa, and entorrhœa are the visceral symptoms most marked in a case of "visceral tabes," recorded in No. 117 of *La France Médicale* by M. Seglas. In addition to the "runnings" from the bronchi, stomach, and intestines, the patient was the victim of profuse perspirations and copious discharges of urine. The patient is a female, aged fifty, whose father died from disease of the spinal cord, and whose two sisters and one brother also succumbed to paralysis. The knee-jerk is lost only on the right side. The ataxy of gait is not marked, but there is inability to walk well in the dark.

PERLÈCHE: AN AFFECTION OF SCHOOL CHILDREN.

AN affection which is common among school children in parts of France, and which is known by the names of *perlèche* and *bridou*, has recently been investigated by Dr. Justin Lemaistre, professor in the Limoges School of Medicine, and found to be of parasitic origin. The parts affected are the angles of the mouth and the skin immediately adjacent to them. The epithelium first becomes whitish, sodden, and easily detached; the skin then becomes involved, but as a rule only the superficial layers of the epidermis peel off, the corium not being quite denuded. Sometimes small fissures make their appearance, radiating from the angle of the mouth, which occasion some pain and bleed slightly when the mouth is widely opened. The appearance is not unlike that of the mucous patches and rhagades seen in the same situation in syphilitic children. The average duration of the affection is not more than a fortnight, but children are often affected several times a year, so that no protection is afforded against subsequent attacks. Of course it is only of a slight nature at any time. M. Lemaistre finds that it is contracted through the vessels from which the children drink. He examined the epithelium and found a new microbe belonging to the sphero-bacteria or cocci of the Schizomycetes group. Cultivations in bouillon produced a mass which gave the appearance of an immense number of chains intertwined; consequently M. Lemaistre proposes the name Streptococcus plicatilis. He succeeded also in cultivating the same from the water of a fountain. The wooden drinking bowl in use amongst the poor plays, he thinks, an important part in the etiology of the disease. He explains the situation of the affection by supposing that the Streptococcus plicatilis is anærobic, and that it finds in the commissures of the lips suitable moisture and sufficient protection. Fortunately it does not multiply very rapidly, and consequently the affection it produces is not of a serious nature. Of the 5500 children in the thirty-two primary schools in Limoges, 312, or one in every 17, are affected with perlèche. The best treatment is by means of copper and alum applications, boracic acid appearing not to be efficacious. The prophylaxis consists in cleaning the drinking vessels and fountains. Though no attempts at inoculation seem to have been made, the researches of M. Lemaistre leave but little doubt of the parasitic nature of this essentially school affection, which very probably is common enough, and may usefully be looked for by rural practitioners in this country as well as in France.

THE CARDIAC GANGLIA.

DR. LUDWIG EISENLOHR, assistant at the Munich Pathological Institute, has recently described the nerves and ganglia of the human heart (Abstr. in *Münchener Med. Woch.*, No. 39). He describes ganglia cells occurring isolated and in groups, mainly in the auricular wall, more rarely in the auriculo-ventricular groove. They lie embedded in the subpericardial connective and adipose tissue. In the muscle the medullated nerve fibres lack ganglia cells. The sheath of the nerve fibres, on or between which the cells and ganglia lie, is prolonged over the surface of the latter. Isolated cells show the following structure: A central protoplasmic cell body with vesicular nucleus and nucleoli, mostly excentric, invested by a capsule of nucleated connective tissue. From the cell proceeds a process which cannot usually be traced. Certain ganglia cells give rise to medullated fibres; bi-nucleated cells are often met with, and most of the cells contain pigment. In every ganglion occur twisted and looped fibres, which unite to form the nerve trunk leaving the ganglion, and break up into smaller trunks. Some fibres do not enter the ganglia, but join the others in their course. No positive conclusions could be arrived at as to the nerve endings in the muscle cells.

LEAD-POISONING AND HOME-MADE WINES.

THE *Wiltshire Telegraph* of October 23rd contains the report of a very important and instructive investigation by Dr. Campbell, Medical Officer of Health for Calne, into the cause of a certain outbreak of cases of lead-poisoning in the months of August, September, and October, which had puzzled him for a long time. The cases occurred chiefly, almost entirely, in men, and coincided roughly with harvest work. Examinations of drinking-water, beer, tea, coffee, bread, and various cooking utensils gave no light. The occurrence of seven acute cases about three weeks since, two almost fatal, led to the discovery of the real source of mischief. The wife of one of the men explained that her husband had drunk some home-made rhubarb wine. She was sure "it could not contain poison of any sort, as she was very careful in selecting and cleaning her rhubarb, and as for the

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sugar and barm, they were all right. *Besides, the vessel was a beautifully clean glazed earthenware pan*, in which she steeped it for a fortnight or three weeks to ferment." Here was the source of the poison, as Dr. Campbell says: "As is well known, this glaze contains 60 per cent. of white or red lead, and during the process of fermentation the acids of the fruit used, with the acetic acid or vinegar generated, act on the glaze and dissolve the lead, forming acetate or sugar of lead, a powerful irritant poison even in small quantities." Not only rhubarb, but red and black currants, sloes, and damsons are so used, and some thrifty wives have been able to supply their husbands with gallons for use in the harvest time. Dr. Campbell says that the same vessels are used for making bread, and that in one case there were slight indications of lead-poisoning in a teetotaler apparently from eating the bread. He recommends the wine to be made in wooden vessels. Dr. Campbell's careful report should lead to much more care in the use of glazed vessels, in culinary operations, as many contain lead in easily soluble forms. His work is an admirable illustration of the uses of an officer of health.

CHAIR OF MATERIA MEDICA IN ABERDEEN UNIVERSITY.

AMONGST the candidates for the chair of Materia Medica in the University of Aberdeen is Dr. Alexander Napier, one of the editors of the *Glasgow Medical Journal*, and assistant to the chair of Materia Medica in the Glasgow University, Dr. Gibson of Edinburgh, and Dr. Macgregor Robertson of Glasgow, are also spoken of as probable applicants. The patronage of the chair is in the hands of the Secretary of State for Scotland.

CAUSATION OF PNEUMONIA.

MR. HENRY BAKER of Lansing, Mich., contributes a note to *Science* (Aug. 27th) in confutation of Dr. Siebert's conclusion that pneumonia most prevails in such atmospheric conditions as are marked by a low temperature and excessive humidity. Mr. Baker points out that the absolute humidity of the air varies with the temperature, and that when the air is coldest it is then absolutely driest. He showed at a late meeting of the American Climatological Association that pneumonia, in any given place, wherever studied, is quantitatively proportional to the coldness and dryness of the atmosphere. He rather ingeniously accounts for this by such a condition requiring a greater exhalation of watery vapour, whereby the non-volatile chloride of sodium is left behind in the air cells, its presence favouring the osmosis of fibrine elements from the blood into the pulmonary parenchyma. Thus would be explained the known excess of this salt in the pneumonic lung, and its diminution in or disappearance from the urine.

SPONTANEOUS SHEDDING OF NAILS IN HYSTERIA.

DR. T. FALCONE of Naples records a case of hysteria, prolonged and aggravated, in the course of which there was spontaneous shedding of the finger- and toe-nails (*Deutsch. Med. Woch*, Oct. 14th). The patient was fifty years of age and since 1870 had, after a mental shock, been subject to hemicrania and other nerve symptoms, including paraplegia, hyperæsthesia, globus, &c. She recovered, but after remaining well for six years the symptoms returned on the occasion of her first visit to the grave of her son, whose death had in the first instance been the exciting cause of her attacks. The affection of the nails was preceded by tingling in the fingers and toes, especially the thumbs and great toes, followed by suppuration in the bed of the nail. It was noted that on the right thumb the new nail was formed directly from the bed of the nail by proliferation of epithelium, which assumed a horny character; but on all the other affected fingers and toes the repair took place in the usual way—viz., by growth from the matrix. The condition altogether was regarded as a dystrophic one due to disordered nerve function.

OPENING OF THE SESSION AT BRUSSELS.

THE public opening of the winter session in the University of Brussels seems to have been attended with more disturbance on the part of the students than is usually the case with this ceremony, the differences amongst the professorial staff during the past academical year having given occasion for the display of some feeling. One of the orators gave considerable offence by omitting all reference to three professors—MM. de Roubaix, Thiry, and Crocq, who have been superseded. M. Crocq's entrance after the speech referred to was a signal for prolonged cheering. The students also manifested their approbation whenever the name of the outgoing rector, M. Rousseau, was mentioned, and subsequently met together to arrange a "manifestation" in his honour.

THE TERM "RHEUMATISM."

IN the course of a paper on Rheumatism, read at the recent Berlin Congress of Naturalists and Physicians, Professor Senator, who adduced evidence to prove that rheumatism is a specific disease, made some remarks upon the popular acceptation of exposure to cold being a cause of disease. (*Deutsch. Med. Woch.*, No. 41.) He said that undoubtedly many painful affections of the locomotor system, many neuralgiæ and paralyses—e.g., facial,—arise from sudden exposure to cold, especially if the surface be heated and bathed in sweat. But the term "cold" should only be applied to cases where the history of such exposure was quite clear, and the diseases produced thereby should be termed "refrigerant" rather than "rheumatic." The use of the words "rheumatism" and "rheumatic" should then be reserved for such cases of disease as are not due to mere cold, but to a special kind of miasmatic infection, like that which excites acute rheumatism—the prototype of rheumatic disease,—and are amenable to specific treatment. Although this may be merely a matter of words, yet, as he truly remarked, correct nomenclature implies correct conceptions of the conditions named.

UNUSUAL COINCIDENCE.

ON the 18th of this month a man and his wife were admitted into St. Thomas's Hospital suffering from acute pneumonia of respectively three and four days' duration. Each was aged thirty-two years. The disease ran an acute course, being little influenced by treatment, and they died at the end of four days within a few hours of each other. At the post-mortem examinations, which were made on the same day, acute inflammation of the right lung was found in each; this had attacked chiefly the base in the case of the man, and the apex in the woman. It would appear that they had left their house, and moved into lodgings only two or three days before the commencement of the disease, on account of the bad smells, making it probable that the disease was of septic origin.

MICROBES OF THE SOIL.

THE value of the action of microbes in the soil would not be questioned by anyone who had given the matter sufficient thought. But to establish a conclusion by means of experiment always commends itself to the scientific mind. M. Laurent has made a series of comparative experiments in order to ascertain the influence of the microbes on vegetable life. Seeds of buckwheat were sown in four different kinds of

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mould. In the first flowerpot natural mould was employed, in the second the same earth sterilised and then inoculated with bacteria of the soil, in the third simply sterilised mould, and in the fourth sterilised mould with the addition of chemical manure. Precautions were taken to prevent contamination of the four receptacles (*Journal de Pharmacie et de Chemie*, No. 7). The production of wheat in each of the pots respectively was in the proportion of 94, 96, 23, 66. In all the experiments the third series was inferior to the others. The value of microbes in soil rich in organic detritus seems thereby to be proved.

THE MEDICAL COUNCIL.

THE Medical Council is summoned to meet on Nov. 16th, in its present imperfect form. The direct representatives will not come into office before January, 1887, though the election may be expected to take place about the end of November.

CHOLERA ON BOARD A BRITISH TROOPSHIP.

ON the 24th instant telegraphic information was received from the island of Perim, at the mouth of the Red Sea, to the effect that four deaths from cholera had occurred on board the troopship *Euphrates* since that vessel left Bombay. The *Euphrates* was reported to reach Suez on the 30th, and information as to the action which may have been taken there with regard to the ship and those on board has not yet arrived.

BOWMAN LECTURE.

THE Executive Council of the Ophthalmological Society are to be congratulated on their enterprise in having secured the services and talents of Professor Zehender of Rostock, who will deliver the Bowman Lecture this year at the rooms of the Medical Society, Chandos-street, on Friday, Nov. 12th, at 9 P.M.

NEW ENTRIES.

The following returns arrived too late for publication in our last issue:—

Cambridge University.—116 freshmen, a number which will be increased when the lists of the previous examination are published.

Bristol Medical School.—First year's students, 18; occasional, 1.

FOREIGN UNIVERSITY INTELLIGENCE.

THE following *agrégés* (assistant professors) have been appointed to lecture on their respective subjects in the different French Faculties of Medicine:—*Bordeaux:* M. Moussous, Medical Pathology. M. Pousson, Surgery. M. Ferré, Anatomy and Physiology. M. Nabias, Natural History. *Lille:* MM. Lemoine and Chuffard, Medical Pathology. M. de Lapersonne, Surgery. M. Assaky, Anatomy and Physiology, M. Barrois, Natural History. MM. Lambling and Morelle, Chemistry. M. Thibault, Pharmacy. *Lyons:* M. Weil, Medical Pathology. MM. Rodet and Jaboulay, Anatomy and Physiology. M. Hugonneng, Chemistry. M. Didelot, Physics. M. Florence, Pharmacy. *Montpellier:* MM. Forgue and Truc, Surgery. M. Gerband, Midwifery. M. Gilis, Anatomy and Physiology. M. Malosse, Physics. *Nancy:* M. Vautrian, Surgery. MM. René and Nicholas, Anatomy and Physiology. M. Guérin, Chemistry. *Paris:* M. Quenu, Anatomy and Physiology. M. Villejean, Chemistry.

Brussels.—The death is announced, at the age of eighty-four, of Dr. E. Lequime, who was for many years Honorary Professor of Clinical Medicine in the University. He edited the *Archives Médicales Belges*, and afterwards *La Belgique Médicale*, and wrote a good deal, especially on cholera. He was officer of the Order of Leopold, and, notwithstanding his advanced age, attended regularly the meetings of the Academy until quite recently.

Dorpat.—Dr. Julius Kennel of Wurzburg has been appointed Professor of Zoology.

Valencia.—Dr. Don Enrique Ferrer y Viñerta, Rector of the University and Professor in the Medical Faculty, has received the Grand Cross of Isabel the Catholic.

The editorship of the *Wiener Medicinische Presse*, which is being given up by Professor Schnitzler, will, at the commencement of the new year, be taken over by Dr. Anton Bum.

A CIRCULAR has been issued by the Local Government Board to all urban and rural sanitary authorities in the kingdom, drawing attention to the provisions of the Contagious Diseases (Animals) Act, 1886, which transfers to that Board the powers hitherto exercised by the Privy Council for making regulations concerning cowkeepers, dairymen, and purveyors of milk, and transfers to the sanitary authorities the duties of making regulations under and enforcing the provisions of the Dairies, Cowsheds, and Milkshops Order of 1885 issued by the Privy Council. The circular reminds the authorities that they are required to register all persons who may carry on the trade of cowkeepers, dairymen, or purveyors of milk, and to look after the lighting, ventilation, cleansing, drainage, and water-supply of dairies.

THE St. Giles's District Board of Works have issued notices to the tenants of some twenty-eight houses in a street off Shaftesbury-avenue, the new thoroughfare recently formed by the Metropolitan Board of Works, requiring them, within seven days from the 23rd inst., to yield up possession of the premises for the purpose of closing the same. This action has been taken by the Board in consequence of the owner of the property, Sir T. H. Brinckman, Bart., having failed to comply with an order issued by the Board to execute certain sanitary works and to make structural alterations in the whole of the premises, to render them fit for human habitation. The order involves the removal of about 500 persons, but the clerk of the Board explains that as soon as the work ordered has been completed the houses may be reoccupied.

FROM the report of the examination made by Colonel Sir Francis Bolton of the water supplied by the several metropolitan water companies during the month of September, it appears that the Thames water sent out by the Chelsea, West Middlesex, Southwark, Grand Junction, and Lambeth Companies still maintained the character of the July and August samples, the proportion of organic matter present being again, for river water, exceptionally small. The water drawn from the Lea and distributed by the New River and East London Companies contained even less organic matter than the Thames waters. All the waters were clear and bright on delivery.

PROFESSOR BROWN-SEQUARD brings forward a number of pathological and experimental facts to show that it is an error to suppose that cadaveric rigidity is due to a coagulation of the albuminous principle of muscle. The chief, and sometimes the only, cause of rigor mortis resides in a true muscular contracture, which is a vital phenomenon, although occurring post mortem.

AN Act has received the Royal Assent by which a company is incorporated to take over the existing partial system of waterworks at Sidmouth, and by the construction of further works to give the town and neighbourhood a proper and sufficient system.

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IT will be of interest to those engaged in chemical research to learn that the French Senate has adopted a *projet de loi* to institute a prize for the discovery of simple and practical means of determining the presence and quantity in spirituous liquors of other substances than ethylic alcohol, and the proposition now lies with the Chamber of Deputies. The subject of wine adulteration is also under discussion at the Academy of Medicine, which has been officially requested to advise upon the question by the Government.

ON the 22nd inst., Dr. Alexander Dyce-Davidson, Professor of Materia Medica in Aberdeen University, died suddenly in his class-room. The bursting of a bloodvessel in the head was the cause of death. The deceased was a native of Aberdeen, and was forty-one years of age. He was appointed Professor of Materia Medica in 1878.

DR. THOMAS SLEEMAN REED, of Pool, near Camborne, died on the 22nd inst., after a short illness, the immediate cause of death being blood-poisoning, contracted during the performance of an operation on the foot of a miner. The deceased was well known and highly respected throughout the district in which he resided.

THE *London Gazette* of the 22nd inst. contained an announcement that the date of the general order of the Local Government Board prohibiting the importation of rags from Italy, in consequence of the prevalence of cholera in several parts of that country, has been extended from the 1st prox. to April 1st, 1887.

DR. STIRLING, Professor of Physiology in Owens College, commenced on the 26th inst. to deliver a course of eight lectures on the Physiology of Food, Digestion, and Respiration in connexion with the Combe Trust. This is the first time that the Combe Lectures have been delivered in England.

ARGUMENTS signed by Messrs. P. F. Coghlan, J. J. Jackman, and J. B. N. Cane, in favour of increasing the fees of union medical officers for inspecting the buildings to be erected under the Labourers' Cottages Act, have recently appeared in the *Waterford Times*.

A GERMAN Anatomical Society has been founded, with Prof. Kölliker as President and Prof. Bardeleben as Secretary.

THE FELLOWS, MEMBERS, AND COUNCIL OF THE ROYAL COLLEGE OF SURGEONS.

HISTORY AND INFERENCE.

FOR many years before his death Mr. J. F. South was known to be engaged in collecting materials preparatory to writing a history of the College of Surgeons, but he did not live even to arrange the mass of facts and papers which he had gathered together. His manuscripts, having been sent to the College of Surgeons, have been edited by Mr. D'Arcy Power, and were published a few months ago under the title of "Memorials of the Craft of Surgery in England," with an introduction by Sir James Paget. It is not our intention at present to criticise either Mr. South's collection or Mr. Power's editing, or to consider to what extent these "Memorials" contribute to the history of surgery in England. What we wish now to do is to make use of some of the data scattered about the pages of these "Memorials," to elucidate some of the questions that have lately been exercising the minds of the Council, the Fellows, and the Members, and which are likely to come prominently to the front again at the general meeting of Fellows and Members of the College, to be held next Thursday. In another column we publish some resolutions which it is intended to move at this meeting, and it will be seen that they refer to the corporate rights of the Members, the academic status of the Fellows, and to the claim of the Fellows and Members to sanction any alterations that may be made in the constitution and relations of the College or in any of its bye-laws.

In order to understand the anomalous constitution of the College as it now exists, it would be necessary to trace the history of the rise and progress of the various companies and corporations which preceded the College, and from which the College is descended. Mr. South's "Memorials" in their present form afford only casual and incidental aid in such a task. But fragmentary as they are, they do furnish sufficient evidence that the exclusive exercise of legislative powers by the Council is a flagrant violation of the fundamental principle of *corporation*.

Sir James Paget, in his brief and apologetic introduction, remarks "it is an error to suppose that English surgeons are, in any fair sense, the descendants of barbers." Happily this is strictly true. But to allege that "the surgeons from whom our College can trace an uninterrupted descent were not barbers" is not, in any fair sense, either historically true or logically consistent. The constitution of the College, as laid down in the Charter of the year 1800, is almost identical with that of the old Corporation of Surgeons, and this was framed on the same lines as the Combined Company of Barbers and Surgeons, which in its turn was merely an extension of the original Company of Barbers. Their principles of government are similar, their later policy and prejudices identical. It betrays a strange misapprehension of the nature and history of these and kindred institutions when a writer usually so accurate as Sir James Paget can suggest that the events recorded in these "Memorials" should be studied "as the history of a *development*"; whereas, on the contrary, they afford a most striking and typical illustration of what Brentano, in his "History and Development of Gilds," designates the *degeneration* of Craft Gilds. A brief survey of the history of these Gilds, of which the Barbers' Company, the Corporation of Surgeons, and the College of Surgeons are ordinary examples, will make this clear.

In the eleventh century the handicraftsmen of Europe were divided into two classes, the bondmen and the freemen. The latter belonged originally to the body of full citizens, and as members of the full Citizens' Gilds, enjoyed under the protection of their Gild immunity from external interference, while the former continued for some time subject to the control of the town or other authority in all matters relating to their trade. Even when the free handicraftsmen were expelled from the full Citizens' Gilds they maintained their independence, and exercised their right to freely elect their own warden. On the other hand, the Craft Gilds, made up of the whilom bondsmen, when obtaining their privileges, were frequently compelled to pay certain imposts in return for their greater independence, and had to consent to have their warden appointed by external authority. These and other considerations make it almost certain that the fraternity of Barbers consisted originally of bondmen who had obtained a smattering of medical knowledge and acquired some dexterity in performing minor surgical operations. Persons of this class swarmed in Europe from the second to the eighteenth century. Oribasius, writing in the fourth century, deplores not less the scarcity of properly educated medical men than the superabundance of pretenders of the medical art, who, though knowing only how to bleed, apply cupping glasses, make scarifications and other *servile* offices (*καὶ τὰ ἄλλα τῆς ὑπηρετικῆς ἐμπειρίας*), did not hesitate to arrogate to themselves the whole of medical practice, to the great detriment or actual destruction of their patients. Of such were the barber-surgeons of the fourteenth and succeeding centuries.

The idea implied in the foundation of all Gilds is that of a brotherhood for mutual help and support. As Wilda aptly remarks, the Gilds were "imitators of the family." The Craft Gilds were, however, more especially interested in the maintenance of the rights, privileges, and customs of the Craft. The essence of these Gilds was its general meetings, at which all the Gildmen met. The president or warden, who was always elected by the whole Gild, summoned the meetings and presided at them, and with the consent of those present enacted ordinances for the regulation of the Craft, and had to see that those ordinances were carried out.

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But when in the course of time the Craft Gilds obtained complete independence and authority in all matters relating to the Craft, there soon set in the *degeneration* of Gilds. The fees for membership were raised to an extortionate amount, and the members of the executive body began to entrench themselves behind restrictions, and thus gradually succeeded in transferring the government of the Gilds into the hands of a few of the richer or more influential families. Towards the end of the sixteenth century, instead of the general meetings of all the Gildmen, a "Court of Assistants" sprang up, who governed the Gild and enacted its ordinances, and in the seventeenth century the transfer of the elective franchise from the "Community" to the Courts of Assistants was generally recognised in the Charters. The Courts of Assistants were henceforth elected for life, and as individual members died the "Court" filled up the vacancies without reference to the opinion or wishes of the Community. An oath was also introduced, in which all the members swore to obey the master and wardens and *their* ordinances. This transference of authority from the assembled members of the Gild to the Court of Assistants was, however, not always effected without resistance. It appears, from a pamphlet of the year 1649, mentioned by Brentano, on the "Constitution of the Clothworkers' Company," that a part of the Gild associates, relying on the old Charters of the Gild, claimed for the whole body of the Gild members both the right of electing their wardens and of framing ordinances. In answer to this contention, "this pamphlet endeavours to prove," says Brentano, "with the most arbitrary misrepresentation of the sense and the words, that the word 'commonalty' in the old Charters meant, not the collective body of Gild members, but only the master, warden, and assistants." This was, be it remembered, nearly 250 years ago; but the Council of the Royal College of Surgeons of England, in the year of grace one thousand eight hundred and eighty-six, is not ashamed to resort to a similar subterfuge when eighteen thousand members of the Corporation claim the right to elect the president, to participate in the legislative acts of the College, as well as to supervise and sanction any alterations that may be made in the constitution or relations of the College, or in any of its bye-laws.

This common tendency and this culmination of Craft Gilds may be discovered in the history of the College of Surgeons, as described in Mr. South's "Memorials." In 1308, a warden was elected by the barbers and presented to the Lord Mayor; in 1375, two wardens were "chosen by common assent" of the craft; in 1415, two wardens were chosen "by a majority of the barbers practising surgery"; in 1423, the members of the conjoint Colleges of Physicians and Surgeons were of themselves to choose in prescribed form surveyors, &c.; in 1435, the members of the Guild of Surgeons were instructed to yearly come together on the day of St. Cosmo and Damien to choose four masters for the year "as oold custum was"; in 1461, the charter of Edward IV. provided that the Fellowship of Barbers were to elect two masters, and that whenever need be they were to make honest and lawful assemblies of themselves, and "also ordeyne and make Lawes and Ordenannces"; in 1493, the members of the Combined Fellowship of Barbers and Surgeons were to choose of themselves two wardens. These powers and privileges were confirmed in 1526 by Henry VIII.; but the process of "degeneration" had already begun. The master and wardens not only conducted the ordinary business of the Company, but began to speak of the statutes, ordinances, and oaths as those, not of the Company, but of the "master and wardens and their predecessors." Henceforth the degeneration spread rapidly. In 1604, by an Act of Parliament, the Court of Assistants were to be elected for life, and the master was to be chosen from among the assistants. The ordinary members of the company were more or less excluded from sharing in the management of the company. The Act of 1745, by which the Surgeons' Company—the immediate progenitor of the present College of Surgeons—was instituted, prescribed that the assistants were to be elected for life, the master and wardens were to be elected from the assistants, and "the power of making bye-laws and elections was vested in the master, wardens, examiners, and assistants." Meetings of members were rarely summoned, the last general meeting being, we believe, held in the year 1786.

The Charter of the year 1800, by which the College of Surgeons was founded, secured to the Court of Assistants the sole exercise of both the executive and legislative powers of the College. Great pains were taken to exclude Members of the College from exercising any control over either of these functions. Any loophole that may have been left through the inadvertence of those who inspired the Charter was stopped—*O tempora! O mores!*—by a bye-law framed in the year 1831, to prevent Members from meeting in the College. By a strange irony of fate, it is under the provisions of this bye-law that the meeting next week will take place. This is history; the inference is obvious.

VICTORIA HOSPITAL, BURNLEY, LANCASHIRE.

A CORRESPONDENT has favoured us with the following description of this hospital, which was opened by His Royal Highness Prince Albert Victor a few days ago, and which presents several points of novelty and interest in hospital construction.

The building consists of a central administrative block of three floors, with kitchen and laundry (detached one-storey buildings) at the back. At either side there is a one-storey ward block, connected by a cross-ventilated corridor, behind one of which is the out-patients' department, with access from the back of the site. Each ward block contains two small isolation wards, with a ward scullery and sister's room, and the ward itself, which is for twenty beds, and is circular in form, of 60 ft. internal diameter. The roof is flat, formed of concrete on iron girders, covered with rock asphalte, and is utilised for a convalescent day-room and smoking-room, glazed all round, and surrounded by a promenade 12 ft. wide. Access to the roof is obtained by a spiral staircase, occupying the centre of the ward, and enclosing an annular ventilating flue, which again surrounds a central smoke flue. In this ward are carried out very completely the suggestions of Professor John Marshall, who in this country first advocated this form of ward in a pamphlet "On a Circular System of Hospital Wards" (Smith, Elder, & Co.). The advantages this shape offers are: the absence of corners—there are absolutely none in this ward, as the walls meet both floor and ceiling with a round curve in place of the usual right angle; the greater relative amount of floor space that a given length of wall space in the form of a circle can enclose; the larger amount of light, especially of sunlight, received; the facilities for working; and the greater comfort of the patients, whose fellow-sufferers on the opposite of the ward are so far removed. More equable lighting and heating are readily secured, in this form of ward, while for ventilation the facilities are greater than in buildings of any other shape. The attention of Dr. McKenna of Melbourne, who more than thirty years ago first advocated this system, was drawn to it by his experience of the better results obtained in the treatment of wounded soldiers in the Spanish-American colonies when placed in circular buildings than when in those of the ordinary rectangular form. The floors of the ward are of polished oak; the walls of glazed bricks, pointed with cement; the windows are of British plate glass, made in three sections, the top ones opening inwards on hinges. The ceiling is made of Robinson's cement—a new variety, which can be applied on laths, and it is hoped that in this way a surface physically as smooth, hard, and impermeable as those of the floor and walls has been secured for the ceiling also, and that thus an important advance has been made on the ordinary plaster, which hitherto has been the only material that could be used for this purpose. The ward is lighted by three Wenham lights. The gas is burned in a closed glass chamber, practically outside the ward, and the products of combustion, warming the fresh air on their way upwards, are conducted into the ventilating shaft. The air consumed by the gas is drawn from the ceiling level, warmed on its way down the pipe, thus securing complete combustion and a brilliant white light, while assistance is given to the ventilation of the ward, and all noxious products are removed. For heating the ward three of Mr. Saxon Snell's thermhydric stoves are placed towards the middle of the ward, each connected with the single central smoke flue; but steam, which is used in the laundry and kitchen, and generally for warming water throughout the building, is also to be used for warming the wards. Two rows of graded pipes one inch and a half in diameter are placed along the bottom of the outer wall of the ward; while five such rows surround the central block, except at

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the entrance to the staircase. They are worked from the subway, so that any one, or all, may be used as required; and the arrangements are such that they can not only be worked, but even started, without any of the noise hitherto always associated with this means of heating. This was done during the visit of the Prince, steam being introduced into the perfectly cold pipe while he was in the ward without any noise whatever. As the whole of the outside wall can thus be uniformly heated without any disturbance to the patients, it is considered that in this point also a very great advance has been made. In the matter of ventilation, besides the advantages offered by the form of the ward, and the eighteen large windows, each with deep-bottom frame, so as to admit air between the sashes at the middle of the window, Ellison's conical ventilators have been introduced below the windows between the beds; while over each bed, eight feet from the floor, a Sheringham valve has been placed. Around the central block at the ceiling level exit openings for the air have been inserted, the flues from which ascend in the inner wall of the day-room, or sun-room, above, and thence proceed to the upper part of the central ventilating flues. By these the warm air in winter will readily make its way out. The arrangements for ventilation in summer are very perfect. At the floor level eight horizontal flues are provided, which run inwards below the stair to the bottom of the ventilating chamber, which surrounds the central smoke flue. This is annular in form and over thirty feet in height, and contains a series of four coils of steam pipe, each of different size, all worked separately from the subway. By these means fourteen different amounts of heating surface can be obtained in the flue, and it is hoped that even on the warmest summer day the column of air in the ventilating chamber, thirty feet in height, may be warmed to such an extent that it will ascend and draw the air through the ward at a rate sufficient to keep the air pure and the ward well ventilated. In Dr. John S. Billings' work on the Principles of Ventilation and Heating (New York *Sanitary Engineer*), attention is drawn to Professor Troubridge's investigations on the determination of heating surfaces required in ventilating flues, and descriptions are given of the arrangements in the Columbia College and the Johns Hopkins hospital, but in neither of these does there seem to be the necessary power of varying the amount of heating surface according to the external temperature, which is provided in the ventilating flues of the wards of the Victoria Hospital.

HONG KONG.

THE report of the Colonial Surgeon at Hong Kong for 1885 shows it to have been a very unfavourable year for the foreign residents, 3040 in number. The death-rate among them was higher than in any of the nine preceding years, and amounted to 32·56 per 1000 living; among the white troops it was 15·27, and for the rest of the European and American residents, 42·57. We are, however, without any information as to the composition of the latter in regard to age. The high rate of mortality among the troops, greatly above the average of the preceding five years, was due to an outbreak of cholera, which caused half of the deaths. The source of the disease could not be traced. No cases occurred among the police or in the gaol, and only nine were received into the Government Civil Hospital, of which six proved fatal, three being destitute European seamen, and three Chinese. The admissions into hospital of the white troops were 886 per 1000 of the strength, considerably under the average of the preceding five years; those of the black troops were 1173, and the deaths 20·46 per 1000 in an average strength of 173 men. In the police force the death-rate of Europeans was 26·0, of Indians 5·5, and of Chinese 13·2 per 1000; but the numbers employed are too small to justify any positive deductions from these results. The daily average number of prisoners in the Victoria gaol was 530, the admissions into hospital were 255, and 42 were treated in their cells, making a total of 297 cases, of which two died; these numbers give a ratio of 560 cases, and 3·77 deaths per 1000, a result which compares very favourably with the gaol statistics of India. The Tung Wa Hospital, "which is entirely managed by Chinese directors and doctors," continues to furnish an enormous death-rate in proportion to the cases. In 1885 the number of patients treated in it was 1967, and the deaths amounted to 1006. But 283 were moribund on admission; if these be deducted, there still remain 723 deaths in 1684 cases, or 42·9 per cent. "The chief reason for the great mortality in this hospital is that most of the patients when admitted are hopeless cases, the Chinese having a great antipathy to going into hospital at all except in the last extremity, or in case of utter destitution." Mr. Ayres, the colonial surgeon, calls attention to the lamentably defective state of sanitation in Victoria, the subsoil of which "is steadily being poisoned by sewage," and to the difficulty of getting even European house-owners to undertake the necessary sanitary measures of improvement. With regard to quarantine, he believes it to be perfectly useless in excluding cholera, even if it could be properly enforced. "What we have got to do," he says, "is to look at home, and not prepare a hotbed for the reception of disease, as a gardener does for mushrooms." Malarial diseases, fevers and bowel complaints, are the most prevalent, and are followed in many instances by severe anæmia and serious deterioration of health. It is evident there is much required to be done to put the town in a decent sanitary condition. Till that is accomplished, "it is reasonable to expect that the colony will become every year more and more liable to an epidemic of cholera. . . . . A more plentiful supply of water may do something to retard the evil day, but nothing short of a general conflagration in China town is likely to avert it." The colonial medical staff is still kept down at starvation point, and is obviously insufficient for the duties required of it, especially in the event (by no means improbable) of even one of its members falling sick. We trust that the question of an increase to its numbers may receive the favourable consideration of the Colonial Office.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF INSPECTORS OF THE MEDICAL DEPARTMENT OF THE LOCAL GOVERNMENT BOARD.

Scarlet Fever at Atherton, by Dr. PARSONS.—The average annual death-rate from scarlet fever between 1876 and 1885 at Atherton, in Lancashire, amounted to 1·40 per 1000 of the population, whereas it was only 0·55 for England and Wales. The total mortality and the infantile mortality are also excessive; and measles as well as scarlet fever tend to recur in an epidemic form every five years. The scarlatina spread immediately under consideration was largely due to the free intercourse between households infected and those as yet uninfected, the parents looking upon scarlet fever as a thing that everyone ought to have, and therefore the sooner it was over the better. The wearing of infected clothing at the mills and participation in large funerals also had a share in producing spread of the disease. The arrangement of the houses, opening as numbers of them do on to common back spaces, and the use of common privies, also tended to the extension of the infection; and badly kept, ill-paved yards, together with inadequate ventilation of houses, were found amongst the insanitary conditions which doubtless tended to increase the severity of the disease. The attempt, during a previous epidemic, to secure isolation in a cottage hired for the purpose failed, although admission was free; but this failure was, perhaps, in part due to the fact that the mothers of sick children were not admitted. It has very generally been found that the admission of mothers is not a serious inconvenience, since they are, as a rule, ready to go out and leave their children directly they find that the isolation arrangements are comfortable. In the absence of isolation, disinfection, though assiduously carried out, proved of little value; and, as Dr. Parsons observes, the reduction of scarlet fever in districts like Atherton must be sought mainly in the instruction and enlightenment of the people themselves. Although there has been some sanitary progress in Atherton during the past ten years, yet numerous defects still remain, and faults of house-drains, together with the mischievous form of midden-privy which has long been such a common source of nuisance in Lancashire, are among the most prominent that call for immediate

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action on the part of the sanitary authority. In 1885 there were forty-one deaths from measles and fifty from scarlet fever in a population of 13,500. This is an altogether unnecessary waste of human life.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 5947 births and 3371 deaths were registered during the week ending Oct. 23rd. The annual death-rate in these towns, which had declined in the preceding six weeks from 22·6 to 18·9, was last week 19·3. During the first three weeks of the current quarter the death-rate in these towns averaged 19·2 per 1000, and was 1·0 below the mean rate in the corresponding periods of the ten years 1876-85. The lowest rates in these towns last week were 12·7 in Nottingham, 13·9 in Brighton, 14·1 in Huddersfield, and 14·8 in Birkenhead. The rates in the other towns ranged upwards to 24·5 in Manchester, 25·3 in Halifax, 27·4 in Wolverhampton, and 33·5 in Preston. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had declined in the preceding six weeks from 1202 to 540, further fell last week to 438; they included 183 from diarrhœa, 83 from scarlet fever, 56 from measles, 49 from "fever" (principally enteric), 35 from whooping-cough, 32 from diphtheria, and not one from small-pox. The lowest death-rates from these zymotic diseases were recorded last week in Newcastle-upon-Tyne, Cardiff, and Portsmouth; and the highest in Preston, Wolverhampton, and Halifax. Diarrhœa caused the highest death-rates in Norwich, Bolton, Preston, and Wolverhampton; scarlet fever in Huddersfield, Liverpool, Salford, and Bristol; measles in Wolverhampton and Halifax; "fever" in Sunderland and Plymouth; and whooping-cough in Sunderland and Oldham. The 34 deaths from diphtheria in the twenty-eight towns included 25 in London, 2 in Liverpool, and 2 in Sheffield. Small-pox caused no death in London and its outer ring, or in the twenty-seven large provincial towns. Only 3 cases of small-pox were under treatment on Saturday last in the metropolitan hospitals receiving cases of this disease. The deaths referred to diseases of the respiratory organs in London, which had been 229 and 223 in the preceding two weeks, rose last week to 290, but were 46 below the corrected average. The causes of 69, or 2·2 per cent., of the deaths in the twenty-eight towns last week were not certified, either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Leeds, Bristol, Newcastle-upon-Tyne, Nottingham, and in three other smaller towns. The largest proportion of uncertified deaths was registered in Sunderland, Birkenhead, and Oldham.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 19·8 and 19·5 per 1000 in the preceding two weeks, further declined to 18·2 in the week ending Oct. 23rd; this rate was 1·1 below the mean rate during the same week in the twenty-eight English towns. The rates in the Scotch towns last week ranged from 9·7 and 11·5 in Greenock and Perth, to 19·4 and 21·6 in Aberdeen and Glasgow. The 450 deaths in the eight towns last week showed a further decline of 32 from the numbers in the previous two weeks, and included 25 which were referred to diarrhœa, 17 to scarlet fever, 17 to whooping-cough, 6 to "fever" (typhus, enteric, or simple), 5 to diphtheria, 2 to measles, and not one to small-pox; in all, 72 deaths resulted from these principal zymotic diseases, against 63, 82, and 88 in the previous three weeks. These 72 deaths were equal to an annual rate of 2·9 per 1000, which was 0·4 above the mean rate from the same diseases in the twenty-eight English towns. The deaths attributed to diarrhœa, which had been 22 and 46 in the previous two weeks, declined again last week to 25, of which 11 occurred in Glasgow, 4 in Edinburgh, and 4 in Dundee. The fatal cases of scarlet fever, which had been 21 and 12 in the previous two weeks, rose again last week to 17, of which 9 occurred in Glasgow, 6 in Dundee, and 2 in Edinburgh. The 17 deaths from whooping-cough, on the other hand, showed a further decline from the numbers in the two previous weeks; 12 occurred in Glasgow. The 6 deaths referred to "fever" corresponded with the number in each of the preceding two weeks, and included 3 in Glasgow and 2 in Edinburgh. Three of the 5 deaths from diphtheria were returned in Edinburgh, and both the fatal cases of measles in Glasgow. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had increased in the previous four weeks from 65 to 98, declined last week to 79, and were 4 below the number in the corresponding week of last year. The causes of 53, or nearly 12 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been 23·1 and 22·5 per 1000 in the preceding two weeks, further declined to 20·5 in the week ending Oct. 23rd. During the first three weeks of the current quarter the death-rate in the city averaged 22·0; the mean rate during the same period was 17·0 in London and 17·7 in Edinburgh. The 139 deaths in Dublin last week showed a further decline of 13 from the number in the previous week, and included 10 which were referred to diarrhœa, 7 to scarlet fever, 5 to "fever" (typhus, enteric, or simple), 1 to diphtheria, and not one either to small-pox, measles, or whooping-cough. Thus the deaths resulting from the principal zymotic diseases, which had declined in the preceding five weeks from 39 to 16, rose again last week to 23; they were equal to an annual rate of 3·4 per 1000, the rates from the same diseases last week being 1·9 in London and 2·7 in Edinburgh. The fatal cases of diarrhœa, which had decreased in the previous four weeks from 29 to 11, were 10 last week. The deaths referred to scarlet fever and "fever" exceeded the respective numbers returned in the previous week. Four inquest cases and 2 deaths from violence were registered; and 40, or nearly a third of the deaths, occurred in public institutions. The deaths both of infants and of elderly persons showed a decline from the numbers in the previous week. The causes of 16, or more than 11 per cent., of the deaths registered during the week were not certified.

THE SERVICES.

WAR OFFICE.—Army Medical Staff: Deputy Surgeon-General Randolph Webb has been placed upon temporary half-pay on account of ill-health; Brigade Surgeon John Davidge has been granted retired pay with the honorary rank of Deputy Surgeon-General. The undermentioned Surgeons-Major are granted retired pay, with the honorary rank of Brigade Surgeon:—John M. Fiddes, M.B.; William Morton Harman, M.B.; Surgeon-Major Joseph Fleming, M.D., from half-pay, to be Surgeon-Major, vice T. M. Kirkwood, deceased.

INDIA OFFICE.—The undermentioned Officers of the Staff Corps and Indian Military Forces have been permitted to retire from the Service:—Surgeon-General Michael Cudmore Furnell, of the Madras Medical Establishment, and Brigade Surgeon Charles Kelway Colston, of the Bombay Medical Establishment.

ARTILLERY VOLUNTEERS.—1st Invernes-shire: Murdo Mackenzie, Gent., to be Acting Surgeon.—5th Lancashire: Acting Surgeon Charles Joseph Trimble to be Captain.

ENGINEER VOLUNTEERS.—1st Cheshire: Andrew Stewart, Gent., to be Acting Surgeon.

RIFLE VOLUNTEERS.—1st Fifeshire: Acting Surgeon H. Gordon, M.D., resigns his appointment.—2nd Volunteer Battalion, the York and Lancaster Regiment: Honorary Assistant-Surgeon R. Storrs resigns his appointment.

GREAT NORTHERN CENTRAL HOSPITAL.—The names of some influential gentlemen have been added to the committee of management of this institution and district committees formed in North London. These committees will soon issue an appeal for funds to defray the cost of the new buildings in the Holloway-road, which have just been commenced. We hope that this appeal will be successful, as it is deserving of full support from the many wealthy and charitable inhabitants of these districts, which will be so much benefited by the new hospital. On the 24th inst. a demonstration of the North London Amalgamated Temperance Associations was held in support of the building fund.

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Correspondence.

"Audi alteram partem."

"REFORM AT THE COLLEGE OF SURGEONS."

To the Editor of THE LANCET.

SIR,—On Thursday, Nov. 4th, at 3 P.M., the Members of the Royal College of Surgeons of England will again, it is hoped, fill their theatre in Lincoln's-inn-fields with a body of men determined to attain fitting representation on the Council of that corporation. *L'union fait la force*, and no consideration of the personal inconvenience of individual Members should stand in the way of their assembling in their hundreds and ensuring for that meeting a success equally decisive with that of the meetings of last year. For two years and a half has this important question been under the bashful consideration of the rulers of the College, and at last they are asking for a definite plan to be formulated for their better information as to the views of the Members and Fellows. We are told "that it is not desirable to diminish the privileges of the Fellowship by depriving Fellows of the exclusive rights of electing to the Council, and of being eligible to become members thereof"; and yet, while the principle for which we contend is rejected, we are asked to offer up details. Surely by this time the Council of the College knows what the Members are seeking for! If it does not, after the 4th of November it will no longer be able to plead ignorance, for it will then have the main lines of the demand laid before it in a resolution, the terms of which he who runs may read. Let it then reply to this resolution either by an emphatic "No," or by granting the request embodied in the second resolution to be voted for that day—viz., to appoint a committee consisting of members of its own body, of deputies from the Associations of Fellows and of Members, and of independent Fellows and Members of the College, the said committee to draw up the detailed plan prayed for by the Council. Should the Council of the College refuse to grant these requests, which no impartial outsider could stigmatise as lacking in moderation, the Privy Council must be approached by a deputation of Members, including in its ranks, we hope, a contingent of Fellows, and bearing with it the petition, a copy of which your readers will find on p. 43 (advt.) of your issue of the 16th inst., signatures to which are coming in apace. In conclusion, we wish once more to draw the attention of Members of the College to that petition, earnestly begging their signature of the same, the present being a golden opportunity of their obtaining those rights which should never have been denied them.

We are, Sir, your obedient servants,

WARWICK C. STEELE, } Hon. Secs.
W. ASHTON ELLIS, }

October, 1886.

DIRECT REPRESENTATION OF THE PROFESSION ON THE GENERAL MEDICAL COUNCIL.

To the Editor of THE LANCET.

SIR,—Many things were necessarily omitted from the joint letter of Mr. Ker and myself in order to bring it within reasonable length, and I am much obliged to Mr. Hardy for now giving me an opportunity of supplying some of those omissions, and of correcting certain inaccuracies of statement and inference into which he and others have fallen. Going back to what took place at Brighton, there is another, and in my opinion a far juster, way of stating the facts than the one which he has adopted. It is as follows. The principle which I ventured to recommend as one likely to preserve us as a profession from much acrimonious personal discussion, namely, that of a primary recommendation of suitable candidates by a body of men, who, like the council of the British Medical Association, might reasonably be considered as above suspicion of unfairness—was discussed at two successive general meetings, one a very large and the other a very small meeting. At neither was any vote taken on my resolution, so that we are obliged to rely upon general impressions as to the sense entertained of it. My own idea is that the principle commended itself strongly to the very large meeting, and that if a vote could legally have been taken, it would have been adopted, with few if any dissentients. But to the very small meeting—the very, very small meeting, as it may be termed by comparison—it did not appear equally to commend itself; and recognising the inconsistency of allowing an extremely minute and numerically insignificant fraction of the previous day's meeting—which yet by peculiarity of the circumstances would be called the British Medical Association in general meeting assembled—possibly to arrive at a decision directly the reverse of its immensely larger predecessor, I withdrew the resolution, which therefore was never put at all. This having been done, the way was free to take any other course for testing professional feeling on what appeared to others, as well as myself, to be one of the gravest issues ever placed before us (for no one will doubt that our future must be greatly influenced by the character and ability of the representative that we shall return to the General Medical Council), and not being myself a member of the council of the British Medical Association, being untrammeled by office of any kind, and being, moreover, conscious of not having the remotest personal end to serve, I ventured to hope that anything that I might do would at least escape the risk of being supposed to spring from other than an honest desire to promote a good end, and that none of the numerous misrepresentations and imputations that are apt so to degrade the character of popular elections could be attached to it. The rest is soon told. A small conference was summoned by myself and two other gentlemen, who kindly acted with me, and at that conference it was decided to form a committee. My own part in the work must here be told, as the narrative will convince every unbiased mind of the absolutely free character of the committee. A few days only remaining before the day on which it was decided that a general meeting ought to be called, I procured 500 reply post-cards, and finding that the attempt to direct them myself, which I first made, would prevent their being issued at all, I placed them, together with a Medical Directory and a list of members of the British Medical Association, in the hands of a clerk, with no other directions than that they were to be widely distributed, so as to make them as useful as possible, and that they were to be sent by preference to gentlemen who were not members of the British Medical Association, and to those who, as far as could be judged, were in general practice. It was thought that by acting on such a principle the committee, though it would necessarily be a somewhat small one, would be likely fairly to reflect the general feeling of the profession. The result was not unsatisfactory. In two or three days 170 favourable replies were sent, and these, with the answers to circulars that had been previously issued by Mr. Ker, brought the number of the committee up to 350. The method for testing the opinion of these 350 gentlemen was the fairest that could possibly be adopted. It was simply that of asking them to choose three out of eleven gentlemen concerning whose qualifications not a word one way or the other had been said to them. Their judgment was not even biased by what took place at the meeting, as only 10 per cent. (about the usual proportion, I believe) were able to attend. And it is their decision, expressed in a most remarkable and decisive way—for it is certainly very remarkable that such a committee should have arrived at so united an opinion,—that is put before the profession, and not, as Mr. Hardy states, the decision of the three in whose honour they reposed sufficient confidence to entrust them with the duty of counting their votes.

Whether the attempt thus simply and honestly made to gauge the feelings of the profession from the feelings of a small portion of it indiscriminately appealed to will be a successful one or not remains to be seen. From the many hundreds of favourable replies thus far sent in we are encouraged to think that it will, and that the three gentlemen so freely indicated as likely to be of service to the profession will not improbably command as large a measure of support as those who adopted the more usual plan of announcing themselves as candidates and forming their own committees. One circumstance should not be omitted, as it indicates clearly the absence of bias on the part of the committee: it is that one of the three gentlemen finally selected is not even a member of the British Medical Association.

I am, Sir, yours faithfully,

Liverpool, Oct. 25th, 1886. WILLIAM CARTER.

To the Editor of THE LANCET.

SIR,—Dr. Stokes, the chairman of my committee, has received a note from a gentleman friendly to my candidature, but stating that, as "he believes me to be absolutely safe," he will use his third vote in favour of a personal

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friend, who he thinks has done good service to medical reform. Will you allow me to point out that if my friends, who are numerous and kind beyond all my desert, act on this view, I shall find myself at the wrong end of the poll. Many fair chances of election have been dashed by this sort of feeling. Allow me, therefore, to ask earnestly for one vote of every member of the profession who thinks that, as a general practitioner, and one having somewhat special knowledge of the working of the Medical Council, I can be of use in it.

As I am writing, let me take the opportunity of removing a doubt which a few of my friends seem to have, and one or two of my kind opponents seem to use a little hardly—viz., that I am not a *bonâ-fide* general practitioner. It is my pleasure, Sir, to be in active general practice, and, whatever the result of this election, it will be my greatest satisfaction to have had the wide support of my fellow practitioners.

I am, Sir, your obedient servant,

Highbury-place, October, 1886. JAMES GREY GLOVER.

To the Editor of THE LANCET.

SIR,—Having been a complete invalid for many months, I have had little inclination to take part in medical politics, and therefore the circulars emanating from the various candidates for representation in the Medical Council have been hardly looked at; but seeing that the election will shortly be upon us, I take the liberty of asking you to insert the subjoined in favour of two of the candidates who are before us, and to permit me to state the grounds on which I ask my Poor-law medical brethren and others to support them, and in order to prevent the supposition that I favour one more than the other I will take them alphabetically.

My first candidate is Sir B. Walter Foster of Birmingham. This gentleman for the too brief period that he was in Parliament secured by his great ability the ear of the House, and was an active supporter of direct representation. He is in the full vigour of life, active, eloquent, and industrious. He is sure of a seat in the next Parliament, and therefore he is one whom it is desirable in every way to secure as a friend, and being a Liberal is just that kind of representative that would make the dry bones that at present represent the various corporations stir a bit—perhaps reclothe them with flesh.

The second candidate for whom I solicit support is Dr. James G. Glover, of 25, Highbury-place, London. Dr. Glover, to my personal knowledge, has for many years been the advocate of reform in the Medical Council. He was an active member of the Committee on Medical Education which came into existence some years ago at the instance of Sir Andrew Clark, and whilst acting on that committee I had an opportunity of noting not only the very able work he did, but the clearness with which he advocated his views and the tenacity with which he adhered to them. There is, in addition, this fact in his favour—that he is not a person who can or will be swayed by those who represent the interests, and the interests only, of the corporations, to the detriment of the bulk of the medical public.

I am, Sir, yours obediently,

Montague-place, Russell-sq., Oct. 26th, 1886. JOSEPH ROGERS.

To the Editor of THE LANCET.

SIR,—At the present crisis, when for the first time the great body of the medical profession is about to choose its representatives on the General Medical Council, THE LANCET deserves the best thanks of all for the independent position which it has taken up in the matter.

The profession has too long been deprived of representation in the Council. Let us prove by the selection of representatives to be made that we need and merit a yet larger share of representation than the new Act of Parliament confers. If we now choose well, our representatives will hereafter hold the most influential position in the Council. They will represent the profession pure and simple, its scientific and humanitarian aims, and not the separate competing interests of the corporations, to one or more of which we are all of us none the less pleased to be affiliated. I have never been forward in medical politics, but I feel it to be desirable to support in every way independent candidates, such as Dr. Glover, Dr. Richardson, and more especially Dr. Prosser James, whom I have known intimately ever since he first entered my wards at the London Hospital in 1853. His knowledge of all branches of the profession, the position that he holds as a teacher, and the work that he has already done in the cause of reform, render him a specially eligible candidate. Dr. Prosser James is a sound general physician, who knows well from experience the needs both of the general practitioner and of the consultant, and who has done much to draw the veil of mystery from the practice of laryngology, while he has been long distinguished as an explorer in the field of laryngeal medicine since the pre-laryngoscopic times.—I am, Sir, yours truly,

W. J. LITTLE,

Oct. 18th, 1886. Late Physician to the London Hospital.

INFANT FEEDING.

To the Editor of THE LANCET.

SIR,—I have read with some interest the correspondence between Drs. Thurstan and Marshall on this subject. I think both gentlemen are right and both wrong—that is to say, both are too dogmatic, and that in individual cases the views expressed by each of them would be found to be correct.

Thus, I can call to mind many infants which have thriven on half milk and half water, and cannot therefore accept as true so dogmatic a statement as Dr. Marshall makes, that "no baby can certainly be expected to tolerate milk food of such a strength at that age." Nor can I endorse Dr. Marshall's and the widely accepted teaching anent the total unsuitability of farinaceous food, "physiology and experience" notwithstanding. And, first, as regards physiology: On what basis does this teaching rest? On a few isolated experiments on young animals, from which it would seem that the salivary, and chiefly the pancreatic, juices cannot reduce starch into a soluble form! But farinaceous foods contain other principles besides starch; moreover, it remains to be proved that the reduction of starch is necessary to health in infants. And, secondly, as regards experience: it would be just as true to say that experience teaches the value of farinaceous feeding; for few, if any, children of the poorer classes are brought up from infancy onwards without some farinaceous food, and enjoy the most vigorous health notwithstanding. I fear we doctors are all too apt to argue that because certain diets are unsuitable for some children they are unsuitable for all. I have long since given up all belief in "the physiological dyspepsia for starchy food in infants," originally promulgated in this country, I believe, by Dr. Prospero Sonsino, of Pisa, in the *Practitioner*, when the late Dr. Anstie was its editor. A firm believer in this very plausible doctrine, I once acted on it to the best of my ability, and unconsciously shut my eyes to facts everywhere staring me in the face. When my advice not to give foods to infants was always met by the statement that child after child never began to thrive until something over and above milk (breast or otherwise) was given, I began to ponder these things and to argue that I was taking too narrow a view; and when I again studied the question from the physiological standpoint and found on what an insufficient basis this physiological apepsia rested, I began to think that the testimony of sensible matrons, backed by a surrounding of healthy children, was a more reliable guide than the admixture of perhaps faulty physiological observations on animals, and of experience gained very largely from the sick and mismanaged children whom we meet with in our professional avocations.

I agree with Dr. Thurstan's opinion that the addition of a little thickening to milk renders the curd more digestible, probably by causing it during digestion to be more finely and uniformly divided. The reduction of the "caseine to digestible limits" is a troublesome and an expensive process, that cannot be easily carried out in those families which are most likely to require it. It must be remembered too, that it is not so much the quantity of the caseine as its behaviour in presence of the digestive juices which distinguishes human food from cow's milk.

Dr. Marshall's argument that failure with this or that diet depends not on the diet itself so much as on the mode of its administration applies to every kind of feeding. I think he will agree with me that even wholesome breast milk may be given in such quantities, and so frequently, that a child may become ill. How much more strongly does this argument apply to artificial food! His advice to keep

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to one dairy rather than to one cow is sound, provided the milk is good. The great fallacy about "one cow" milk is that it is constantly varying in quality. But there is no objection to give such milk, if, after trial, it is found to agree with the child. In country places this is quite a common and, I think, a very wholesome practice. The next best thing is to give an average milk, such as results from mixing together that from a large number of cows. I do not think we need fear "the disturbing influences of menstruation" in either case; for the generality of cows are stocked on the occurrence of the first menstrual period after calving, and, if impregnated, there is of course no recurrence.

The chief ingredient in farinaceous food which is held by authors to be so detrimental to the infantile digestion is the starch, one of the blandest and most universally distributed substances in nature. I cannot and will not believe that the minute quantity of starch which an infant consumes, even if fed entirely on farinaceous food, can bring about the serious mischief which is attributed to this kind of food. There are doubtless infants who cannot digest farinaceous food, just as there are infants who cannot digest milk in any shape. But we must consider these cases as exceptional, and regard them as instances of congenital dyspepsia, and not amenable to ordinary rules. On the other hand, there are infants with whom certain diets seem to disagree. Before condemning the diet, let us be quite sure that the child's stomach is in a condition to digest anything properly. Some months ago I was consulted about a puny infant who could not keep anything on the stomach; all kinds of diet and of drugs had been previously tried, so I decided on the following treatment:—I passed a tube into the stomach, and with a syringe poured in a quantity of warm water containing a little sodium carbonate; then reversing the current I emptied the stomach; this was repeated until the water returned almost pure. A small opiate was then administered; when the child was asleep, some nutrient suppositories were introduced into the rectum. The child was kept asleep more or less for twenty-four hours, and nourished with the suppositories, a few teaspoonfuls of warm water being given from time to time. The effect of this treatment was remarkable, and the progress the child made within a week most gratifying. I have tried the plan in an older and more chronic case, with satisfactory but not such marked results as in the first case. In these cases, it was not merely a question of diet, but of undoing the mischief which previous mismanagement had set up.

I am, Sir, yours &c.,

London, Oct. 18th, 1886. ROBERT WILLIAM PARKER.

TREATMENT BY MASSAGE.

To the Editor of THE LANCET.

SIR,—The arguments advanced by Dr. Sturges in his letter of the 9th inst. are so completely answered by his second communication and by Dr. Playfair's letter that it seems hardly necessary for me to say much more on the subject. Dr. Sturges regards Dr. Playfair as the highest authority on massage in this country; whilst Dr. Playfair himself assures us that he has never seen massage employed, and does not care how it is done. Dr. Playfair's admission that the striking results he has obtained in certain nervous diseases are due in a great measure to the removal of unwholesome domestic surroundings is in itself a convincing proof that he is speaking, not of massage—in which isolation plays no part,—but of the special mode of treatment associated with his name. Dr. Playfair evidently regards massage and the Weir Mitchell treatment as synonymous; whilst, curiously enough, Dr. Sturges now admits that they are not to be confounded. Dr. Playfair laments that massage threatens to become the prevailing folly of the day, but he does not tell us who is responsible for this unfortunate state of affairs—those who maintain that massage, depending as it does on a knowledge of anatomy and physiology, cannot be acquired in less than two years, or those who think that it is a knack like fly-fishing and tennis, to be picked up in "a few easy lessons." He tells us that when first he worked at the subject he never heard of such terms as "pétrissage" and "effleurage." This is, indeed, unfortunate, for had he taken the trouble to turn to the fourth volume of the well-known *Dictionnaire Encyclopédique des Sciences Médicales*, published in Paris in 1871, he would have found a full description of these modes of procedure. Even had he felt himself constrained to confine his attention to English writers, there is no reason why he should not have seen an article by Dr. Kent Spender, of Bath, which appeared in March, 1878, and in which both "pétrissage" and "effleurage" are mentioned by name. Dr. Playfair complains that a simple matter has been rendered complex by the introduction of these terms, but I think the difficulty has arisen from the persistent manner in which recent writers have thought fit to ignore the works of their predecessors.

I am quite sure, as Dr. Sturges says, that it would have given him no trouble to get together a list of authors on massage, and can only regret that he should not have done so, and even made himself acquainted with their writings. I think he is mistaken in supposing that in Great Britain only a languid interest is felt in massage, and that it will never take root in this country. Until recently hundreds of patients were sent abroad to undergo the treatment they could not get here, and would still be unable to obtain it if the primitive modes of training advocated by Dr. Sturges were generally adopted. I fully accept his statement that he has not read my book, although that admission may seem to detract somewhat from the value of the column and a half of detailed criticism with which he favoured me. I am obliged to him for his assurance that he will not stand between me and my readers, although it had not occurred to me that there was any danger in that direction. Dr. Sturges, in his anxiety to defend his "own hospital sisters and nurses",—who were not attacked,—seems for the moment to have forgotten that they are not his only colleagues.

I am, Sir, your obedient servant,

Weymouth-st., W., Oct. 1886. WILLIAM MURRELL, M.D.

To the Editor of THE LANCET.

SIR,—In my reading the other day I came upon the following:—"Sydney Smith, speaking of being shampooned at Mahomed's baths at Brighton in 1840, said 'they have squeezed enough out of me to make a lean curate.'" At that time it was as common for physicians and surgeons to have a list of "rubbers" for their patients as of surgical and monthly nurses. Mr. Grosvenor, the well-known Oxford surgeon, long before this used the art in the treatment of his patients.

I am, Sir, yours, &c.,

Oct. 1886. C. H.

INDUCTION OF LABOUR IN CERTAIN SEVERE CASES OF ALBUMINURIA IN PREGNANCY.

To the Editor of THE LANCET.

SIR,—The case published by Dr. Cullingworth in your issue of Sept. 18th presents many points of interest. The injection under the skin of ⅓ grain doses of nitrate of pilocarpine once a day for three successive days had no effect whatever, although a freshly prepared solution was used. Now, pilocarpine is a very powerful drug, and if no effect whatever was produced by its administration, I should be more inclined to think with Dr. Murphy that the specimen used was inert, rather than that the disease from which the patient was suffering neutralised its usual effects. It would be interesting to learn whether Dr. Cullingworth proved by experiments that the solution he used was potent. The same remark applies to his subsequent use of the liquid preparation of jaborandi administered internally. No effect whatever was produced, and so jaborandi and its active principle, pilocarpine, were considered useless. I do not think Dr. Cullingworth gave these drugs a proper trial; he ought to have obtained profuse perspirations by the subcutaneous injection of pilocarpine, repeated not at intervals of one day, but of fifteen minutes, for if sweating does not come on directly it will not come on at all.

In a case of pregnancy with albuminuria and convulsions which I published in THE LANCET of April 3rd this year, the first specimen of pilocarpine used did not make the patient sweat, or stop the convulsions, or produce any other visible effect. I believed, and still believe, that the solution used was useless, and did not really contain pilocarpine in an active form; for when I got a fresh solution I at once obtained the physiological effect, and there were no more fits.

Dr. Cullingworth says he used a fresh solution, but I think he will admit that he might have repeated the injections at short intervals until he obtained the sweating. If he could

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not make the patient sweat or salivate her with pilocarpine, that would be a very interesting physiological fact; but I apprehend that it is the sweating which does the good in these cases of eclampsia and albuminuria, and indeed Dr. Cullingworth's case would support that view if he had used it in larger doses or at shorter intervals, because no sweating was caused and no good done. But, as it stands, I think this case must be looked upon as one in which pilocarpine was not sufficiently tried, and if that be true the deductions drawn from it in reference to its ecbolic properties must also fall to the ground.

In recommending repeated injections of pilocarpine I must warn anyone who intends to give it a trial should opportunity afford, that it is a very potent drug, and will produce alarming symptoms of cardiac failure if too much is used; in such a case atropia should be at once injected hypodermically.

I am, Sir, yours truly,

St. Thomas's-street, S.E., Oct, 19th, 1886. P. HORROCKS.

TREATMENT OF TUBERCULAR MENINGITIS.

To the Editor of THE LANCET.

SIR,—In the annotations of Oct. 9th I notice a paragraph headed as above, in which 1 to 5 iodiform ointment is said to have produced wonderful effects, in the hands of M. Warfwinge, in the treatment of the above disease. I desire to call your readers' attention to the following points. Tubercular meningitis can only be diagnosed with certainty by post-mortem examination, therefore we must take with great caution any statement of a cure having taken place. It is simulated by typhoid, so as to be with great difficulty distinguished from it. The same may be said of suppurative pericarditis. Tubercular meningitis is an affection of the brain depending upon general acute miliary tuberculosis, and is usually accompanied by a deposit of nodules in and upon the lungs, pleuræ, liver, spleen, and kidney. Tubercular meningitis cannot be considered as a disease *per se*, although, owing to the fact that effusion into the ventricles of the brain, when excessive, produces death rapidly, it is convenient to consider separately this phase of tuberculosis. The effusion into the ventricles is caused by occlusion of the vessels by nodular growths of tubercle in their walls. If the iodoform rubbed into the scalp cured tubercular meningitis, then it must cure general miliary tuberculosis, as the head affection is only one of the expressions of this general disease, which it modifies so as to make it hardly recognisable. Thus, in a case of tuberculosis complicated with meningitis and effusion into the ventricles, we have the temperature never above 100°; pulse from 80 to 100, up to the day of death, when it becomes rapid—156 or more, whereas in the acute tuberculosis uncomplicated with effusion, we have a pulse of from 152 to 190, and a temperature of from 103° to 104·5°. In the first case, with meningitis, death takes place in from seven to fourteen days, and the patient is insensible most of the time; in the second, with the same general disease, minus the effusion, we have death occurring at the end of from fifteen to thirty days, and the patient is often sensible to the very last.

I am, Sir, yours truly,

MARTIN OXLEY, M.D.,

Oct. 15th, 1886. Consult. Phys., Liverp. Infirm. for Children.

"FRACTURE THROUGH THE UPPER EPIPHYSIAL LINE OF THE RADIUS."

To the Editor of THE LANCET.

SIR,—Mr. Batterham, writing to THE LANCET of Oct. 23rd, makes a few remarks on a short note of mine which appeared in your issue of Oct. 2nd, on a case in which a fracture through the clavicle and another through the upper epiphysial line of the radius occurred as the result of indirect violence in a child aged nineteen months. The general purport of his letter is to question the accuracy of my diagnosis, and (he himself not having seen the case) to prove that the fracture through the radius was not a fracture at all, but a subluxation of the orbicular ligament. In the first place, I gave no physical signs whatever on which Mr. Batterham could either question the correctness of my statement as to what occurred, or, on the other hand, found a hypothesis of his own. Not thinking it necessary to put down the exact process whereby I arrived at the diagnosis, and in order to economise space, I merely said that such a fracture was diagnosed. The age of the patient (nineteen months) and the nature of the accident (forcible traction on the arm) were both, it is true, against the *probability* of the lesion having been a fracture—that is, supposing the clearer logic of physical signs had been absent,—and if Mr. Batterham will look back he will see that I said as much in my note. The fact that the arm hung down helplessly has nothing to do with the point under discussion, being obviously due to the coexisting fracture of the clavicle. The physical signs, which, as I said, were omitted for the sake of brevity, and on which the diagnosis of the lower fracture was made, were as follows:—Crepitus, which I took to be genuine and not spurious; some slight displacement of the upper end of the shaft, which displacement, having been once reduced, could without the exercise of any force be reproduced; non-participation of the head of the radius in movement communicated to the lower end. Beyond this, there was, when the fracture apparatus was removed, an irregular thickening around the upper end of the bone which I at the time certainly associated with callus. I may perhaps add that Mr. Rich, assistant-surgeon to the infirmary, also saw the case, and after a careful examination entertained no doubt as to the accuracy of the diagnosis. The case, from the fact that a fracture was caused in a child's radius and clavicle by indirect violence, and from the fact that the fracture of the radius occurred, as I believe, through the upper epiphysial line, was doubly interesting and uncommon, otherwise I would not have reported it.

In conclusion, may I offer to Mr. Batterham my thanks for his well-meaning efforts for my better instruction in the diagnosis of fractures of the radius, whilst at the same time I trust he will forgive me if I take the liberty of adhering to my original opinion formed on actual observation of the case.

I remain, Sir, your obedient servant,

ALEX. FOULERTON, M.R.C.S., L.R.C.P.,

Resident Medical Officer, Royal Isle of Wight Infirmary.

Ryde, Oct. 24th, 1886.

THE MEETING OF GERMAN NATURALISTS AND MEDICAL MEN IN BERLIN.

(Continued from p. 706.)

THE sectional meetings could not be so arranged as not to clash with each other, and in reporting the principal work done I have to rely partly on the official record which, in the form of a daily journal, was published at the time, and occupies no less than 450 quarto pages. The whole of this was in the hands of the members a few days after the termination of the meeting, thanks to the indefatigable labours of the publishing committee (Drs. Guttstadt, Guttmann, and Sklarek) and the secretaries of the several sections.

In the Section of Physiology, Cerebral Localisation as shown by the experiments on animals formed the subject of discussion, which led to some unpleasant personal observations. Hitzig maintains his views as to the existence of motor centres in the brain; Goltz, on the other hand, reiterated the views which he had already expressed at the International Medical Congress in London and elsewhere, and especially challenged the observations of Munk on the visual centres situated in the cortex of the occipital lobes. Munk, on the other hand, showed dogs in which the cortex of the occipital lobes had been removed, and whereby the animal was rendered blind, and exhibited the brains of four dogs in support of his views. The discussion was continued by Fritsch, Christiani, Meynert, and others, but led to no practical conclusions. However divergent the results from experimental observations on animals may be, the researches of Ferrier and Horsley clearly demonstrate that for man at least the existence of separate motor centres cannot be disputed. Flesch spoke of some histological researches which showed that those regions of the cortex which had different physiological functions also had different histological structures, and that the various regions showed abrupt changes. This view was combated by Meynert, who alluded to his own observations and those of Lockhart Clarke. Many other papers of great physiological interest were read: such as the Physiology and Histology of the Secretion of Mucus, by Biedermann; and the Reduction of Hæmoglobin in the

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Heart of the Frog, by Kronecker. The observations showed that the more quickly the hæmoglobin is reduced, the oftener is the heart irritated, and the warmer it is; but that the reduction is independent of the work done by the heart's muscle or its tension. According to Röhmann's observations on the formation of lactic acid during the activity of the frog's muscle, lactic acid is formed and glycogen diminished. A small part of the lactic acid thus formed in the muscle goes to the kidneys and passes out by the urine; the larger proportion, however, passes into the liver and is there destroyed.

In the Section of Pathology and Morbid Anatomy, Knoll read a paper on the Pressure Variations in the Cerebro-spinal Fluid, and dwelt particularly on the fact that the vessels of the central nervous system remain unaffected when the vessels of the other parts of the body undergo contraction. Professor Chiari spoke of a peculiar form of Orchitis which he observed in persons, chiefly boys, who had died of small-pox. This affection seems to occur during all the stages of small-pox, and is characterised by isolated patches of inflamation, going on to necrosis. Schron gave an account of some observations on the Genesis of the Tubercle Bacillus and its development from Spores, and exhibited a number of preparations. The majority of the members present were, however, very sceptical as to the correct interpretations of the appearances seen in the preparations. Prof. Ponfick read a paper on the Formation of Biliary Colouring Matter in the Circulatory System, and Prof. v. Recklinghausen expressed his belief in the existence of true hæmatogenic icterus, chiefly characterised by the presence of hæmatoidin or bilirubin crystals in the blood. The Formation and Composition of the White Thrombus was the subject of two communications. Löwit's observations were directed chiefly against the views of Eberth and Schimmelbusch on the part which the blood plates play in the formation of the white thrombus. He believes, with Zahn, that the leucocytes form the chief component parts of the thrombus. Weigert followed with a new staining method, demonstrating that the thrombus seen in man contains a large amount of fibrine and leucocytes. The method he employs for staining micro-organisms is Gram's. Instead of placing the preparation in alcohol, after taking it out of iodine solution, he washes it with aniline water, when the fibrine appears deeply stained. Professor Virchow exhibited a number of very interesting preparations, and spoke of general hyperostosis of the skeleton with formation of cyst. The medulla of the bone contained compact bony tissue of ivory-like hardness, islets of fibro-cartilaginous tissue, and cysts. These changes have a close resemblance to those seen in Paget's disease—a view which was also expressed by Recklinghausen. Virchow is inclined to look upon them as arising from enchondromata. Professor Grawitz exhibited museum specimens which were prepared in a peculiar manner. The preparations so preserved kept their colour, size, form, and consistency. They may be kept in this way for some weeks, and the method is therefore very useful for teaching purposes. The following is the composition of the preserving fluid: 150 grms. of sodium chloride, 20 grms. of saltpetre, to 1 litre of water; to this is added 3 per cent. of boracic acid or tartaric acid. The method further recommends itself on account of its cheapness (1 litre costs about 1*d.*). Paltauf exhibited pure Cultivations of a Micro-organism seen in rhinoscleroma (cultivated from the expressed juice in six cases). These organisms resembled the pneumococcus of Friedländer, alike in their naked-eye cultivations, their microscopic appearance, and their behaviour when injected into mice. Arning showed some beautiful microscopic preparations of Lepra Bacilli, and demonstrated their presence in the nerves in lepra anæsthetica. He succeeded in preserving the bacilli in putrefying fluids, and found that they increased in quantity when so kept. Neither Arning nor Schottelius succeeded in inoculating animals with lepra.

A brief account of the more important papers in some of the other sections I shall refer to in my next communication.

AT a meeting of the executive committee of the Merthyr and Dowlais proposed hospital on the 23rd inst., it was announced that at least £2000 beyond the subscription of £1000 conditionally offered by Lord Bute towards such an institution had been promised, and the project is now, therefore, fairly afloat.

LIVERPOOL.

(From our own Correspondent.)

THE PREVALENCE OF SCARLATINA.

ALTHOUGH scarlatina prevails to a very considerable extent, the cases are not very severe, and there would be little to regret were it not for its very contagious nature, and the fact that so many cases are treated at home instead of in hospital, where, under the circumstances, they should be. It is to be hoped that the suggestions given in last week's LANCET will be adopted, and that every advantage will be taken of such hospital accommodation as presents itself, and that the sanitary, ventilating, and other arrangements of the hospital are what those of a fever hospital of the present date ought to be.

AN IMPORTANT REGULATION EVADED.

A lodging-house-keeper was, on the 27th inst., summoned before the stipendiary magistrate, and fined 20*s.* and costs for not having reported to the medical officer of health a case of scarlatina which had occurred in his house. The case came under the Common Lodging Houses Act, 1851, and the magistrate considered the regulation a most important one.

THE LOCK HOSPITAL.

Both the male and female wards of this hospital have been recently nearly filled with very severe cases. By a coincidence Mr. Lowndes was able to add confirmation to the other modes of diagnosis in the case of two male patients affected with syphilis, the female from whom they contracted the disease, a prostitute, being also in the hospital. All three were suffering from primary sores and papular eruption. It is another proof of the defect of the volunteer system and of the need of legislation to prevent the spread of syphilis that this woman insisted upon taking her discharge, and resuming her life of prostitution, although she was, as our French *confrères* would term it, "in full bloom of syphilis." Mr. Lowndes has also under his care two females who, though aged respectively twenty and nineteen, are imbeciles, and therefore the men who infected them would, if traced, be liable to a criminal prosecution under the Criminal Law Amendment Act, 1885.

A TERRIBLE DEATH.

An inquest was held at St. Helens, on the 27th inst., by the county coroner, on the body of a man who had been employed in some chemical works. On Saturday, the 23rd inst., he was standing on the edge of a caustic pan when he missed his footing and fell into the boiling caustic. He was got out and taken to the Providence Hospital, where he died the same night. The Government Inspector who had visited the works and made full inquiries, stated that the accident was entirely owing to the dangerous and unnecessary practice adopted by deceased.

Liverpool, Oct. 27th.

NORTHERN COUNTIES NOTES.

(From our own Correspondent.)

SHERBURN HOSPITAL.

SOME interesting facts relative to this hospital, which is situated about two miles and a half east of Durham, have just been published by the master, the Rev. H. A. Mitton. It was founded about 700 years ago by the well-known Bishop Pudsey, and was designed for the reception of lepers of both sexes. How and at which period Eastern leprosy arose in England may be a matter of doubt, but fortunately it became almost extinct about the middle of the fifteenth century, and the hospital revenues were thenceforward appropriated for the maintenance of poor persons. Mr. Mitton says that in 1500 it was found that "the master, like many predecessors, was pocketing the revenues of the house," and it was not until thirty years later that this and other abuses were swept away. Since the reconstitution of the hospital in 1857 its usefulness has been considerably extended. Part of its revenues is now applied to the maintenance of thirty old men, fifteen of whom are out-brethren, and receive a

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pension of 8*s.* per week. The in-brethren are provided with lodging, food, and clothing, and 4*s.* per week for minor expenses. The infirmary for patients, erected at a cost of £12,000, is a main feature of the charity. It is a large building, forming with the church one side of the quadrangle, capable of containing, with separate rooms, thirty patients—fifteen of each sex. A resident medical officer superintends these. The third main department in the scheme of the modern dispensation of the charity is the dispensary. Here five days in the week gather together a large company of sick and impotent folk from all parts of the county of Durham—Mr. Mitton says, "waiting patiently for their interview with the skilful and genial medical officer, Dr. Lionel Booth." Four thousand tickets yearly are issued to the clergy and large employers of labour in the diocese, and as these are all used, and as each order brings an average of five visits before it expires, this means about 20,000 medical consultations and medicine in the year. The dispensary is very popular, and was erected at a cost of £2000. It is quite separate from the infirmary. It includes the most complete arrangements for its purpose, and has a long shed for vehicles, which is sometimes filled on the dispensary days. Mr. Mitton says in his very interesting account—of which I merely give you a brief abstract—that "it is scarcely possible to exaggerate the amount of good effected through this department," but he also says that the main difficulty is to exclude those who are not really objects of charity, and it is to be regretted that orders are occasionally given, notwithstanding the express printed directions, which have to be cancelled on presentation.

SCARLET FEVER AT CONSETT.

At the last meeting of the Consett Local Board, the subject of scarlet fever, which has been epidemic in the neighbourhood for some time past, was considered. Dr. George Renton reported why the epidemic had not been got rid of, the causes being principally the reopening of the day schools, and the children being allowed to attend school from infected houses, as well as the funerals of schoolmates who had been stricken down with the fever.

NEWCASTLE.

An inquest has been held here on the body of a widow, sixty-four years of age, who destroyed herself by drinking an infusion of lucifer matches; and another case of attempted suicide by the same means is also reported.—During the fortnight ending Oct. 9th the number of cases of infectious disease reported to our medical officer of health, Mr. H. E. Armstrong, reached the high total of 109; 86 of these were cases of scarlet fever, and 17 of enteric or typhoid.—The umpire appointed in the case of the North-Eastern Railway and the College of Medicine here has awarded to the College authorities £18,664. This, I believe, is nearly twice as much as was at first offered by the company to the College for their building. The Natural History Society has also been awarded £12,830 for its old building in the vicinity of the College of Medicine.

Mr. C. L. Lightfoot and Mr. G. E. Williamson are candidates for the surgeoncy at the Eye Infirmary vacated by the resignation of Dr. Heath. Mr. Williamson is a lecturer at the College of Medicine, and has had for some years charge of the ophthalmic department at the Newcastle Infirmary.

Newcastle-on-Tyne, Oct. 20th.

EDINBURGH.

(*From our own Correspondent.*)

THE WINTER SESSION.

THE medical classes reassembled for the winter session on Wednesday, Oct. 20th, and the work of the session is now fairly commenced. Several of the professors and lecturers delivered special introductory lectures on the opening day; Prof. Rutherford choosing the Sense of Hearing as a subject, whilst Prof. Grainger Stewart lectured on Pasteur and Hydrophobia, and Mr. Caird, who commences this year a course on Surgery in the Extra-academical School, gave a most interesting *résumé* of the History of the Foundation and Progress of the Edinburgh Royal Infirmary. Mr. Joseph Bell has retired from the staff of the Royal Infirmary, and his place has been taken as Lecturer on Clinical Surgery by Mr. John Duncan. Mr. Duncan's introductory lecture dealt largely with the present state and future development and requirements of the school, and he especially insisted upon the necessity of an increase in the number of teachers of clinical surgery in connexion with the surgical wards of the infirmary.

DIRECT REPRESENTATION IN SCOTLAND.

The canvass for the election of a direct representative of the practitioners of Scotland is in active progress. The three candidates mentioned in a previous letter still hold the field, and there seems little chance that a severe contest can be avoided. On Friday the medical men of Edinburgh were invited to meet Dr. Bruce of Dingwall, who was accorded a very cordial reception by a fairly representative meeting of the profession in this city. No specific vote of confidence was asked for, but a motion was carried unanimously declaring that a fit candidate for the post could only be found in an independent practitioner untrammelled by official connexion with any of the schools or corporations of Scotland. This might apply equally favourably to Dr. Bruce and Dr. Sinclair, but amounted to a vote of no confidence in Dr. Morton of Glasgow. Several of the speakers at this meeting announced their intention of supporting Dr. Bruce, and it became evident that he has a strong following here, as well as in the Aberdeen district.

NEW UNIVERSITY BURSARIES.

It has been announced that Dr. Gunning, late of Rio Janeiro, has placed the sum of £5000 at the disposal of the University authorities as an endowment of eleven medical bursaries of £50 each, which are to be awarded triennially to Bachelors of Medicine or Bachelors of Science of not more than three years' standing, who shall present the best essays on the respective subjects. The subjects are Anatomy, Physiology, Zoology, Botany, Chemistry, Materia Medica, Surgery, Physic, Pathology, Obstetrics, and Public Health. The bursaries are each to be denominated by the name of some teacher of the Edinburgh School distinguished for his eminence in the branch to which each is dedicated; and the names selected corresponding respectively to the subjects in the above list are Munro, Bell, Forbes, Balfour, Black, Christison, Lister, Gregory, Thomson, Simpson, and Alison. The first competition is in April, 1887, in the branches of Anatomy, Chemistry, and Physic; and in the following year the subjects are Physiology, Botany, Surgery, and Pathology. The essays must be handed in before April 30th of each year.

THE RECTORIAL ELECTION.

The nomination of candidates took place last Saturday at a meeting held for the purpose in the old University Buildings. Lord Iddesleigh and Sir Lyon Playfair were nominated; and on a show of hands, the chairman, Mr. C. W. Cathcart, declared the result in favour of Lord Iddesleigh; but, upon the challenge of the chairman of the Liberal committee, appointed Saturday, the 30th, as the date for deciding the contest at the poll.

Edinburgh, October 26th.

IRELAND.

(*From our own Correspondent.*)

ROYAL UNIVERSITY OF IRELAND.

AT a meeting of Convocation held on the 27th inst., Dr. Whitla was elected a Representative of Convocation on the Senate of the Royal University for the ensuing three years. The other two candidates were Dr. McMordie and Mr. M. J. Farrelly.

DIRECT REPRESENTATION OF THE PROFESSION IN IRELAND.

At a numerously attended meeting of Limerick practitioners, held on Saturday last, the following resolution, proposed by Dr. Fitzgerald and seconded by Dr. O'Connor, was unanimously agreed to:—"That we adopt Dr. Laffan as candidate for the seat on the General Medical Council created by the late Act, and we urge on all provincial practitioners to sustain the man who has not only the support of the leading organ of the profession, THE LANCET, but is the only Nationalist before the constituency, and the only candi-

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date whose freedom from connexion with all the interested corporations alone fits him among all the competitors for independently defending the interests of the general practitioners."

DUBLIN WATER-SUPPLY.

The citizens of Dublin are supplied with an excellent water for drinking and dietetic purposes; and repeated analyses have shown that the water-supply is a sound and healthy one. Recently, however, Dr. Reynolds, Professor of Chemistry in the University of Dublin, has drawn attention to apparent insufficient filtration in the water supplied to the citizens. He states that for some time past he has found in it numerous and active living organisms, leading to the conclusion that the care of the filter beds and supervision of supply are among the arts lost to Dublin. Sir Charles Cameron, medical officer of health and city analyst, I am informed, some time since, in making an analysis of some of the water supplied to houses in the Pembroke township, discovered the presence of animalculæ in large numbers, and was of opinion that these organisms arose from the presence of eels, which got jammed in the mains or supply-pipes, and, dying rapidly, putrefied. The screen chamber, he believes, is not an effective filtering apparatus, but the filter beds in co. Wicklow are perfect. If similar beds are constructed at Stillorgan, they would cost about £50,000. Sir C. Cameron considers that the presence of these organisms is purely local.

MEASLES IN WEXFORD UNION.

It was reported that an outbreak of measles existed in Drinagh district, and last week the Local Government Board wrote in reference to this matter, requesting the Board of Guardians to obtain a report from the medical officer on the subject. The statement, however, was inaccurate, as Dr. Pierce, the medical officer, has reported that measles has disappeared from Drinagh, and that the cases which had come under his observation were of a very mild type.

ILLEGAL DISPENSING

and the unauthorised sale of poisons are carried on to a large extent in various parts of Ireland. The attention of the Pharmaceutical Society of Ireland has been called to this matter, and they have instituted prosecutions, obtaining convictions against several persons in co. Meath for these practices. They are determined to put the law in motion in every case that may be brought under their notice. If the Society or some other body were to prosecute pharmaceutical chemists for counter-practice, they would confer a great benefit on medical practitioners, more especially in Dublin.

The President of the Royal College of Surgeons, Ireland, Sir William Stokes, gave a reception last week at his residence in Merrion-square, which was attended by the principal members of the profession practising in Dublin.

The first of the introductories for the present session was given by Professor Fraser at the School of Surgery of the Royal College of Surgeons, Ireland, on Monday, the 25th inst.

Dr. Sweetnam of Schull has been unanimously elected medical officer of Glengariffe Dispensary, in the vacancy caused by the resignation of Dr. P. Cotter.

Collections in aid of the Dublin Hospital Sunday Fund will be held this year on Nov. 14th.

Dublin, Oct. 25th.

ROYAL COLLEGE OF PHYSICIANS.

THE ordinary comitia of the Fellows was held on the 28th inst., Sir W. Jenner, Bart., President, in the chair. Eight gentlemen were admitted to the Membership of the College.

A report upon the so-called Penjdeh Sore by Dr. Owen was received from the India Office.

It having been pointed out that the "Certificate in Hygiene" granted by the College does not verbally fall under the head of diplomas in public health, sanitary science, or State medicine, now registrable, the question of the desirability of a change in title of the certificate was referred to the Council.

The annual accounts were submitted, and the report of the Finance Committee was received and adopted. On the motion of the President it was unanimously resolved to present a copy of the autotype facsimile of Harvey's Prælectiones Anatomicæ to H.M. the Queen, and another to H.R.H. the Prince of Wales. The thanks of the College together with presentation copies of the work, were also voted to Mr. Edward Scott (who had bestowed great care in the difficult labour of transcribing the text), to Sir E. Sieveking, and Dr. N. Moore.

A report from the Committee of Management was received and adopted. It provides for the staff required at the new Examination Hall, and introduces the following important regulations relating to candidates referred at the Second and Third or Final Examination of the Examining Board.

"*Second Examination.*—A candidate referred on the Second Examination is required, before being admitted to re-examination, to produce a certificate that he has pursued, to the satisfaction of his teacher or teachers, in a recognised place of study, his anatomical and physiological studies, or his anatomical or physiological studies, as the case may be, during a period of not less than three months subsequently to the date of his reference.

"*Third or Final Examination*—A candidate referred on the Third or Final Examination is required, before being admitted to re-examination, to produce a certificate in regard to medicine and surgery, of having attended the medical and surgical practice, or the medical or surgical practice, as the case may be, at a recognised hospital, for a period of not less than six months subsequently to the date of his reference; and, in regard to midwifery, a certificate of having received, subsequently to the date of his reference, not less than three months' practical instruction in that subject by a recognised teacher."

Dr. Ord was unanimously re-elected a member of the Committee of Management.

The report of the Examiners for the College Licence was read. It stated that at the recent Final Examination 156 candidates presented themselves, of whom 91 passed.

Dr. George Johnson and Dr. S. O. Habershon were nominated Vice-Presidents of the College for the ensuing year.

Obituary.

ALFRED PESKETT, M.D. ST. AND., M.R.C.S. ENG.

THE inhabitants of the large districts of Leyton and Walthamstow sustained, on Sept. 24th, with much grief, the loss of the longest-established and one of their most able and esteemed practitioners in Dr. Alfred Peskett, who passed away in a severe attack of nephritis, at the age of fifty-eight. Dr. Peskett was the descendant of a long line of medical practitioners, and was himself the son of Dr. William Peskett of Petersfield. He received his early education under a private tutor, and subsequently served the old apprenticeship under his father. He studied afterwards at Guy's, where he was a distinguished student, and at the end of his curriculum in 1850 he graduated M.D. St. Andrews, and obtained the M.R.C.S. Eng. He shortly afterwards commenced practice at Leyton, where he married Miss Jane Collins, only daughter of Robert Collins, M.D., and in this same town he remained till his death an active and trusted practitioner for thirty-five years. He got through an enormous amount of work in his lifetime. He was medical officer of health for Leyton, surgeon to the West Ham Union, and public vaccinator and surgeon to the Leyton and Walthamstow Children's Hospital. In whatever position he found himself, whether as medical officer of health or surgeon to the patients of the West Ham Union, or with his private patients, he always did his work intelligently, assiduously, and to the happiness of all with whom he was brought in contact. Dr. Peskett was a dignified and courteous gentleman. Amidst all his hard and incessant work he found time,

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in association with his late friend and colleague Dr. George Yeates, and some of the richer inhabitants of the neighbourhood, to found and start the Leyton and Walthamstow Children's Hospital, which is now in a flourishing condition, and is a perpetual memorial of some of his good and useful work. He was also a friend to most of the literary and social societies of the district, and he had the good fortune to be the intimate friend of nearly all the practitioners of Leyton and Walthamstow. His funeral, which took place at the parish church, in the centre of the district where he had worked so long and so faithfully, was numerously attended by members of the various boards and committees on which he had worked, by most of his medical *confrères*, and by friends and patients from all parts.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted Members of the College at a meeting of the Court of Examiners on Oct. 21st:

Antrobus, Edmund, Birmingham.
Ayres, Charles James, L.R.C.P. Lond., Grosvenor-road.
Boger, William Henry, Southwark.
Bray, Nicholas James Northey, Aberystwith.
Callender, Eustace Maude, Beckenham.
Colborne, William John, L.R.C.P. Lond., Southsea.
Corbett, Herbert Henry, Bolton.
Craston, Charles Anthony, Wigan.
Doyle, Henry Martin, L.S.A., Melbourne, Australia.
Gee, Frederick William, L.S.A., Regent's-park.
Gidley, Gustavus George, L.R.C.P. Lond., Honiton, Devon.
Gregory, Seth, L.S.A., Calcutta.
Halliwell, Thomas, L.R.C.P. Lond., Birmingham.
Iddon, William Henry, Southport.
Jennings, Edgar, L.S.A., West Hampstead.
Lansdale, William, Chelsham-road.
Marks, Robert John, L.S.A., Clifton, Bristol.
Mast, Theodore Arthur, Buckingham-palace-road.
Morgan, George Frederic Elliott, Sharsted-street.
Scratchley, Henry William, Taunton.
Slack, George Arthur, Uffculme, Devon.
Taylor, Arthur Sneyd, Lewisham-road.
Todd, Frederick, Catford.
Tomlinson, William Henry, L.S.A., Manchester.
Wright, Charles Franklin, L.S.A., Great Yarmouth.

Admitted on the 22nd inst.:—

Boxall, Frank, L.S.A., Horsham.
Blackler, Henry John, L.R.C.P. Lond., West Norwood.
Denton-Cardew, Henry Warnell, Bloomsbury.
Dwyer, Hubert de Burgh, L.R.C.P. Lond., Kensington.
Edsell, George Alfred, L.S.A., Upper Norwood.
Francis, John Arthur, L.S.A., Southsea.
Freeman, Richard Austin, L.S.A., Caledonian-road.
Girling, John, L.R.C.P. Lond., Colchester.
Harston, Lionel de Courcy Eagles, L.R.C.P. Ed., Clapham-common.
Hawkins, Herbert Cæsar, Eastbourne.
Kingsford, Edward Claude, L.R.C.P. Lond., Clapham-common.
Pridmore, Walter George, Junction-road.
Roper, Harold Kennaway, L.R.C.P. Lond., Upper Norwood.
Semple, Henry Frederick, L.R.C.P. Lond., Redlands, Bristol.
Thomas, Frederick, L.R.C.P. Lond., Penarth, Glamorgan.

Admitted on the 25th inst.:—

Boase, Richard Davey, L.R.C.P. Lond., Plymouth.
Cox, James Herbert, L.R.C.P. Lond., Cape Town.
Dewes, Frederick Joseph, L.R.C.P. Lond., South Lambeth-road.
Freeman, Charles Delamark, Marylebone-road.
Kelsall, Charles James Seddon, L.R.C.P. Lond., Bayswater.
Miller, Frederic Richard, West Liss.
Mortlock, Charles, L.R.C.P. Lond., Kensington-park.
Muriel, John, Halligh, Suffolk.
Nelham, Albert Edgar, Warwick-street.
Popert, Alfred William, L.R.C.P. Lond., Anerley.
Sloman, Frederick, Farnham.
Vernon, Frederick William, L.S.A., Plaistow.
Williamson, Charles Frederick, L.R.C.P. Lond., Miklmay-park.
Wood, George Edward Cartwright, L.R.C.P. Lond., Portobello.

Admitted on the 26th inst.:—

Agnew, Edward Dalton, L.S.A., Soho-square.
Brown, Charles, L.R.C.P. Lond., Wandsworth-common.
Harper, John Maurice, South Hackney.
Ingleby-Mackenzie, Kenneth W., L.R.C.P. Lond., Guilford-st.
Jackson, William B. Gillson, L.R.C.P. Lond., Addington-street.
Lambert, Frederick Samuel, L.R.C.P. Lond., Red-hill.
Macevoy, Henry Thomas, L.R.C.P. Lond., Camden-road.
Manton, John Albert, L.R.C.P. Lond., Wakefield.
Moxon, Alban Henry, South Hackney.
Michell, John Charles, L.S.A., Taunton.
Pearson, Richard, L.R.C.P. Lond., Westbourne-park.
Thomas, Josiah Telfer, L.R.C.P. Lond., Camborne.
Winfield-Roll, Grahame, L.R.C.P. Lond., Brighton.

[In the list of candidates who passed on the 20th inst., for "Ashley" read Ashby.]

UNIVERSITY OF DURHAM.—On the 26th inst. the degree of M.D. was conferred on

Frederick Hancock.

VICTORIA UNIVERSITY.—The following gentleman has been approved for the Degree of Doctor of Medicine:—

Edward Gordon, M.B. Owens College.

The following gentleman has satisfied the Examiners in Part II. of the Final M.B. Examination (First Division), also distinguished in Obstetrics and Diseases of Women:—

O. J. Kauffmann, Owens College.

FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW.—At the October sittings of the examiners the following candidates passed the Examination for the Licence and were admitted Licentiates:—

Gibbon, William, L.K.Q.C.P.I., The Asylum, Carmarthen.
Madders, Charles, L.K.Q.C.P.I., Rathmines.

IRISH MEDICAL SCHOOLS AND GRADUATES' ASSOCIATION.—The dinner of the Association will be held on November 4th at the Café Royal, Regent-street.

THE Hull Sanitary Congress will hold its annual meeting on November 10th. The Archbishop of York will, it is expected, again preside.

THE collection made by the General Post Office towards the Hospital Saturday Fund amounts this year to £341 19s., as against £326 6s. 9½d. last year.

IT has been decided to amalgamate the Sunderland Hospital for Sick Children with the local infirmary, and to erect a new wing at the latter institution, to be devoted to the separate treatment of children.

THE death is announced at York of Mr. Alfred Hill, L.S.A., L.R.C.P. Ed., at the comparatively early age of thirty-eight. The deceased had been in failing health for some considerable time.

DR. DYKE, an old and esteemed resident in Merthyr Tydvil, well known as medical officer of health for the borough, took his seat on the local bench of magistrates for the first time on the 28rd inst.

ON the 23rd inst. the summonses against several inhabitants of Old Windsor, charging them with having damaged some of the tents erected by the urban and rural sanitary authorities on land near the Thames, were withdrawn.

PRESENTATION.—Dr. Presslie has, on the occasion of his marriage, been presented with a handsome silver drawing-room clock, with ornaments, by the members of the Aberdeen Society of Chemists and Druggists, as a token of their appreciation of his services to the Society.

HARROGATE MEDICINAL WATERS.—On the 22nd inst. the Mayor of Harrogate performed the ceremony of turning on water into a series of reservoirs constructed by the Corporation for the conservation of the various medicinal waters from the springs with which the town abounds.

MUNIFICENT BEQUEST.—By the will of the late Richard Mount, Esq., of Canterbury, the Maidstone Ophthalmic Hospital becomes entitled, on the death of his widow, which has just taken place, to £10,000, whilst a similar institution in London profits, it is stated, to the extent of £30,000.

UNIVERSITY OF CAMBRIDGE.—Notice has been issued that the examinations for the degrees of M.B., B.C., and M.C. will begin as follows: First and Second M.B. Examinations, Dec. 3rd; Third M.B., Part 1, Dec. 14th; Part 2, Dec. 15th, B.C. Examination, Dec. 18th; M.C. Examination, Dec. 17th. The names of candidates for the Third Examination and for the examinations in Surgery must be sent to the Registry (through the Prælectors of their respective Colleges) on or before Wednesday, Dec. 1st, those for the First or Second Examinations on or before Tuesday, Nov. 23rd. The certificates of candidates, accompanied by their postal addresses, should be sent to the Registry not less than seven days before the beginning of the examination for which they are entered. The fees for the examination must be paid to the Registry when the certificates are sent in.

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VACCINATION GRANT.—Mr. Walter Hutchinson, public vaccinator of the second district of the Newmarket Union, has been awarded the Government grant for efficient vaccination.

TAUNTON AND SOMERSET HOSPITAL.—The annual report, which was read on the 25th inst. at the general meeting of the governors of this institution, stated that the financial position of the hospital was still in an unsatisfactory state, the expenditure during the past year having exceeded the income by £574.

IT is proposed to hold a meeting of the various scientific societies in Australia and New Zealand in 1888 (the hundredth anniversary of the foundation of the colonies), upon the lines of the British Association meetings, and to form an Australian association for the advancement of science, with similar aims and objects.

CREMATION.—The eighth cremation took place at the crematory at St. John's, Woking, on the 21st inst. The remains were those of an old lady of sixty-four, who died from cancer, and who expressly desired cremation. The ashes weighed 3¼ lb., and were removed by two of her sons for burial in the family vault.

MEDICO-PSYCHOLOGICAL ASSOCIATION. The next quarterly meeting will be held at Bethlem Hospital, St. George's-road, London, on Tuesday, November 9th, at 4 P.M., when Dr. Hayes Newington will read a paper on "What are the Tests of Fitness for Discharge?" In the evening the members will dine together at the Holborn Restaurant.

THE NEW HAMBURG HOSPITAL.—The new town hospital for Hamburg, at Eppendorf, which is now nearly finished, is arranged on the pavilion system, and, exclusive of the buildings for administrative purposes, consists of eighty distinct pavilions; there are, besides, extensive grounds, and when completed this will be the largest and most perfect hospital in Germany.

FOOTBALL ACCIDENTS.—On the 23rd inst., during the progress of a game between the Bolton Wanderers and the West Bromwich Albion, on the ground of the latter, one of the home players had his right leg broken. On the same day, during a match at Bournemouth between Sussex and Hants and Dorset, one of the players in the latter team also had his leg fractured.

RETREATS FOR DRUNKARDS.—The sixth report of the Inspector of Retreats, under the Habitual Drunkards Act, 1879, for the year 1885, was issued on the 23rd inst. It states that during the year two new retreats had been added to the four houses already licensed under the Act, and that the management of the institutions and conduct of the patients had been during the twelve months eminently satisfactory.

THE ESSEX COUNTY ASYLUM.—On the 25th inst., Sir Thomas Barrett-Lennard, Bart., laid the memorial stone of a new block of buildings to be added to the Essex County Asylum, near Brentwood, at a cost of nearly £64,000. The new buildings are designed to accommodate 450 patients, and when they are completed the asylum will offer sufficient accommodation for all the patients in the county.

ST. GEORGE'S HOSPITAL MEDICAL SCHOOL.—The following is the result of the competition for the Entrance Scholarships:—£125 Scholarship, open to the sons of medical men, Mr. Alfred J. Lattey; £90 Scholarship, open to students who have passed the Cambridge first M.B., Mr. W. S. Lazarus Barlow; £65 Scholarship, open to students who have passed the Cambridge second M.B., Mr. Guy Budd Courteney; £50 Open Scholarship, Mr. G. Y. Cobb Hunter; £50 ditto, Mr. Francis N. J. MacVicars.

MIDLAND MEDICAL SOCIETY.—At the annual meeting, held on October 6th, the following officers were appointed:—President: Mr. Lloyd Owen. Ex-President: Dr. Holmes Joy. Members of Council: Mr. Messiter, Mr. Bennett May, Mr. Jordan Lloyd, Mr. Harmar, Mr. Ker, Dr. Simon, Dr. Savage, Mr. Chavasse, Mr. Ross Jordan, Mr. Priestley Smith, Mr. W. Thomas, and Mr. Eales. Treasurer: Mr. Garner. Auditors: Dr. Foxwell and Mr. A. F. Clay. Secretaries: Dr. Suckling and Mr. Haslam.

Medical Appointments.

Intimations for this column must be sent DIRECT to the Office of THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

BARNLEY, ARTHUR N., L.R.C.S., L.R.C.P.Ed., has been appointed Medical Officer for the Wigston District of the Blaby Union.

BEATLEY, WM. CRUMP, M.D. Durh., M.R.C.S., has been appointed Honorary Physician to the Hospital for Sick Children, Newcastle-on-Tyne, vice Dr. J. G. Houseman, resigned.

BENNETT, J. R. A., M.R.C.S., L.S.A., has been appointed Assistant Medical Officer at the Workhouse of the Parish of Birmingham.

CARTER, GRAHAM A., M.D., L.R.C.S., has been appointed Medical Officer of Health for Lichfield.

COTMAN, J. S. E., L.R.C.S., M.R.C.P.Ed., has been appointed Medical Officer for the C Division of the Metropolitan Fire Brigade.

DEANE, EDWARD, L.R.C.P., M.R.C.S., has been appointed Assistant House-Surgeon to the Royal Berks Hospital, Reading.

GRIFFITH, WALTER, S. A., M.B.Cantab., F.R.C.S., has been appointed Physician to the Out-patient Maternity, Queen Charlotte's Hospital.

HARGOOD, WILLIAM (late Clinical Assistant to St. Luke's Hospital), has been appointed Assistant Medical Officer to the Middlesex County Lunatic Asylum, Banstead Downs.

MOSELEY, G. WILKINS, M.B.Edin., has been appointed House-Surgeon to the Royal Hospital for Children and Women, Waterloo-bridge-road, S.E., vice E. H. Freeland, resigned.

SHALLOW, B. OLIVER, M.R.C.S., L.S.A., has been appointed Medical Officer for the Templecombe District of the Wincanton Union.

SWART, W. H., M.A., M.B.Cantab., M.R.C.S., has been appointed Resident Clinical Assistant to the East London Hospital for Children, Shadwell, vice B. M. Bond, Esq., resigned.

STADDON, J. R., L.R.C.P.Lond., M.R.C.S., has been appointed Medical Officer for the Bramford District of the Bosmere and Claydon Union.

TURNBULL, JAMES, M.B., C.M.Ed., has been appointed Medical Officer for the Parish of Dunbar.

Births, Marriages, and Deaths.

BIRTHS.

ALLDEN.—On the 19th inst., at Forest Lodge, Shirley, Southampton, the wife of John H. Allden, M.R.C.S., L.S.A., of a son.

DAVIS.—On the 26th inst., at 11, St. James's-square, Bath, the wife of Robert Davis, of a son.

GOSSE.—On the 24th inst., at Eccleshall, Staffordshire, the wife of Hope Wilkes Gosse, M.R.C.S., of a daughter (stillborn).

HARDWICKE.—On the 22nd inst., at Stour House, Dovercourt, the wife of W. W. Hardwicke, M.R.C.P., L.R.C.S., L.M., of a son.

MARRIAGES.

HILL—FORBES.—On the 21st inst., at St. Jude's, Southsea, Chas. Birnie Hill, Surgeon, Medical Staff, to Augusta Mary, third daughter of Captain C. R. P. Forbes, R.N.

PERN—HEYWOOD.—On the 26th inst., at the Parish Church, Eltham, Alfred Pern, F.R.C.S., to Melville Jane, third daughter of the late Thomas S. Heywood, Paymaster-in-Chief, Royal Navy.

PERRY—FLYNN.—On the 26th inst., at St. Peter's Catholic Church, Woolwich, Allan Perry, Surgeon, Medical Staff, to Agnes Lucinda, second daughter of Lt.-Colonel Flynn, Assistant Commissary-General of Ordnance.

STONHAM—TAYLOR.—On the 21st inst., at St. Paul's Church, Astley-bridge, by the Rev. George Forrester, B.A., Vicar of St. Paul's, Clapham, uncle of the bride, assisted by the Rev. T. Dickinson, Vicar of St. Clement's, Openshaw, also uncle of the bride, and the Rev. L. R. Hearne, Vicar of the Parish, Thomas George Stonham, M.D.Lond., M.R.C.S., of Claremont, Ventnor, to Lilian Isabel, eldest daughter of Rowland Taylor, Esq., Solicitor, and Coroner of Bolton, Lancashire.

DEATHS.

CHAPMAN.—On the 26th inst., at Old Friars, Richmond, Surrey, Fredk. Chapman, M.R.C.S., L.S.A., in his 73rd year.

DAVIDSON.—On the 22nd inst. (suddenly), at Marischal College, Aberdeen, Alexander Dyce Davidson, M.D., Professor of Materia Medica in the University of Aberdeen.

POUT.—On the 22nd inst., at Yalding, Kent, Henry Pout, M.R.C.S., L.S.A., aged 86.

MIDDLETON.—On the 26th inst., at Park-terrace, Didsbury, near Manchester, Thomas Middleton, F.R.C.S., in his 74th year.

N.B.—*A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.*

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Medical Diary for the ensuing Week.

Monday, November 1.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.

ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesdays, same hour.

CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2.30.

HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.

ROYAL INSTITUTION OF GREAT BRITAIN.—5 P.M. General Monthly Meeting.

ODONTOLOGICAL SOCIETY OF GREAT BRITAIN.—8 P.M. Communications will by given by Messrs. S. J. Hutchinson, A. S. Underwood, Walter Coffin, Storer Bennett, J. H. Mummery, A. P. Reboul, W. A. Hunt, &c.

MEDICAL SOCIETY OF LONDON.—8.30 P.M. Mr. Lawson Tait: The General Principles concerned in the Operation of Removal of the Uterine Appendages.

Tuesday, November 2.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.

CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

PATHOLOGICAL SOCIETY OF LONDON.—8.30 P.M. Dr. Sainsbury: Tubercular Mass in Supra-renals.—Dr. Sherrington: The Ascending Tract of the Spinal Cord.—Mr. Sydney Jones: Tumour of Palm of Hand.—Mr. Makins: Intra-bursal Fibroma.—Mr. Sutton: Cysts in neighbourhood of Hyoid Bone.—Mr. Treves: Melanosis of Hard Palate.—Mr. Paget: Tumour of Palate.—Dr. S. West: Acute Necrosis of the Fourth Cervical Vertebra. Card Specimens:—Mr. Fenwick: Calculus formed round an Umbrella Ring.—Mr. Shattock: Parts after Removal of the Ovary six months previously.—Dr. Coupland: Genito-urinary and Supra-renal Tuberculosis.

Wednesday, November 3.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesdays and Thursdays, 1.30 P.M.

ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department, Mondays and Thursdays, 9.30 A.M.

ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.

LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.

GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.

KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; and on Friday, 2 P.M.; and Saturday, 1 P.M.

OBSTETRICAL SOCIETY OF LONDON.—8 P.M. Specimens will be shown. Mr. Doran: Papilloma of Fallopian Tube (adjourned debate).—Dr. Champneys: On the Obstetrics of the Kyphotic Pelvis.—Dr. Dakin: Mercurialism in Lying-in Women.—Dr. Herman: Case of Lupous Stricture of Urethra.

Thursday, November 4.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

CHARING-CROSS HOSPITAL MEDICAL SOCIETY.—7.45 P.M. Hospitals for Special Diseases and Specialists (Discussion).

HARVEIAN SOCIETY OF LONDON.—8.30 P.M. Clinical Evening. Dr. T. Buzzard: A case of Nerve Lesion.—Photographs illustrative of Epilepsy in Guinea-pigs; also Surgical and Medical cases of interest.

Friday, November 5.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.—8 P.M. Exhibition of Pathological Specimens.—Dr. Owles: Notes of a case of Epithelioma of the Œsophagus and Stomach.—Mr. Keetley: Further Remarks on the Radical Cure of Hernia by Injection.

Saturday, November 6.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, October 28th, 1886.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Oct. 22	30·04	W.	45	44	...	57	42	...	Foggy
,, 23	30·03	E.	53	52	...	56	44	...	Overcast
,, 24	30·17	N.E.	53	50	...	55	49	·05	Cloudy
,, 25	30·25	E.	51	48	...	53	47	...	Raining
,, 26	30·14	E.	50	49	...	51	47	·04	Overcast
,, 27	29·90	E.	49	47	...	50	47	·06	Overcast
,, 28	30·07	E.	51	50	...	...	48	...	Hazy

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

We cannot undertake to return MSS. not used.

AN APPEAL.

A LARGE number of photographs are, it appears, sent each month to the offices of the *Amateur Photographer* for editorial criticism, and many which are sent in for competition for the various prizes offered by the proprietor of that journal are never claimed. It is proposed for the future to mount these in albums, and distribute them among the poor and to charitable institutions. A distribution of this sort could be much extended by the co-operation of those who have photographs or albums of no further use to them; and for such assistance the Editor of the *Amateur Photographer* has just issued an appeal, which, especially in view of the approaching Christmas, we commend to the kindly feeling of our readers.

Dr. W. S. Griffith.—In a communication to THE LANCET on the treatment of cancer by Chian turpentine, published on Dec. 17th, 1881, Professor Clay stated that the drug he employed was obtained of Messrs. Southall and Barclay, Birmingham.

Mr. W. J. Black is referred to a general notice at the head of this column.

INTUSSUSCEPTION; INFLATION.

To the Editor of THE LANCET.

SIR,—The three cases of intussusception recorded by Dr. Cheadle in THE LANCET of Oct. 23rd are of great interest. The inflator invented by Mr. Lund of Manchester, and recommended by Mr. F. Treves in your issue of Dec. 26th, 1885, p. 1182, greatly facilitates the operation of inflation.

I am, Sir, your obedient servant,

Burt, Londonderry, Oct. 23rd, 1886. E. DONALDSON.

DESTRUCTION OF LOCUSTS.

A PHARMACIST of Huete in Spain, Don Luis Arias, claims to have discovered a remedy against the devastations of locusts in another insect which deposits its eggs within the head of the locust, the larvæ when hatched causing the death of their host.

Mr. Basil.—Mr. Allen, Marylebone-lane, will no doubt give the information required.

E. has not enclosed his card.

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AN ANNOYING EXPERIENCE.

A CORRESPONDENT has forwarded us the particulars of a recent experience, in the hope that their publication will enable other medical men to avoid a similar annoyance. Our correspondent recently advertised for a qualified assistant, and received a reply from a person in a large northern town, styling himself an M.D. The references of the applicant were satisfactory, his name appeared in the Medical Directory for 1885, and our correspondent engaged him. On his arrival, however, he stated that he was not on the Register, and, after some cross-examination, admitted that though he had been registered his name had been struck off in consequence of a conviction for theft, a conviction followed by six months' imprisonment with hard labour. The theft he excused by the statement that an excessive use (or abuse) of chloral had brought on kleptomania. In consequence of this confession our correspondent felt justified in declining his services, giving him a sovereign towards his expenses, for which at the time grateful satisfaction was expressed. Subsequently, however, legal proceedings were taken to recover a month's salary and board, and our correspondent, having no time for litigation and actuated by compassion for the man's unfortunate position, has consented to a compromise. The moral is, the writer thinks, to engage assistants through a medical agent, by whom inquiries as to their antecedents are almost invariably made.

Dr. H. Cane.—We have freely expressed our opinion against an attempt to bind candidates or voters too rigidly in the election of Direct Representatives; but it would be a mistake to condemn three, as it would be to vote for three, in a group. Each candidate should be judged on his own merits, and each registered practitioner should take some pains to ascertain the claims of each candidate, whether he be one of a group, or take an independent position.

Mr. Montague H. C. Palmer.—The patient can scarcely be expected to pay, but the Accident Insurance Office ought to be charged.

Mr. Jalland (York).—The paper will appear in an early number.

SALICYLATE OF SODA FOR FETID URINE.

To the Editor of THE LANCET.

SIR,—Dr. Fagge, in his valuable work on the "Principles and Practice of Medicine," has the following:—"I believe that the tendency [of urine in paraplegia] to putrefaction may be completely checked by the administration of salicylic acid or some other antiseptic medicine by the mouth." Having resolved to try it, I did so; with what success the following case will show.

MRS. T——, aged sixty, complained on Oct. 2nd, 1886, of debility, loss of appetite, pain above the pubes, with frequency of micturition and pain in the act. The pulse was weak and slow; the urine alkaline, fetid, and flocculent. The patient was ordered fifteen-grain doses of salicylate of soda, to be taken every four hours in milk. After taking two powders she complained of nausea, pain in the head, giddiness, "buzzing" in the ears, and faintness. The dose was then reduced to seven grains and a half (on Oct. 3rd), and was continued for three days, when it was increased to ten grains every four hours. The urine, on being examined on Oct. 6th, was found to be sweet, and with a decidedly acid reaction. The pain on micturition and tenderness on pressure over the pubes had subsided, the general condition of the patient being decidedly better.—I am, Sir, yours faithfully,

Mexbro', October, 1886. CECIL ROBERTSON, M.B., C.M. Aberd.

THE FOOD OF PARIS.

THE annual consumption in Paris of various kinds of food which can be closely controlled by the registers of the *octroi* was during last year 146,825 tons—an increase of 446 tons over the previous year. Of pork 148 tons had been consumed less, while the consumption of horse-flesh, with a total of 3330 tons, had augmented 337 tons, as compared with 1884; the average price of this last-named commodity is sixty centimes a kilo, while the meat of asses and mules command about seventy centimes. Of poultry and game the aggregate consumption was 25,044 tons—a slight diminution as compared with the year before. The quantity of fish, &c. amounted to 25,631 tons—a slight augmentation, more particularly in oysters. The consumption of butter and eggs has fallen off by nearly 160 tons, which decrease, so far as butter is concerned, may readily be accounted for by the greater use of margarine.

Iatros.—Every district medical officer must be registered as qualified to practise both medicine and surgery; but under very special circumstances the guardians may appoint as district officer a medical man registered with one qualification only.

L.R.C.P. & L.R.C.S. Edin., and *M.B.* are referred to the article on Books in our Students' Number.

C. C.—We think a sojourn in Germany, *after* taking the M.B., would be a decided advantage.

SIR DOUGLAS MACLAGAN.

THE Nestor of the Edinburgh School, it is well known, is hardly less proficient as an "all-round shot," whether at the target or on the moor, than as a lyric poet or clinical consultant; and the combination of attributes—in connexion with his receiving the honour of knighthood (so gracefully referred to by Principal Sir William Muir at the opening of the winter session)—has suggested to an *alumnus* and graduate of the same school the following epigram, which appeared in a northern contemporary:—

"Laganide! Tibi nascenti bene dixit Apollo:
'I puer, i musis semper amande meis.
Te civem, medicum, doctorem fama manebit
Plurima, te vatem rite sequetur honos.
Regia te claros inter Schola noscet alumnos,
Majus Athenæo mox meriture decus.
Me duce suscipies feliciter arma Salutis,
Civibus ægrotis spe meliora parans;
Inque pharetrato grege conspiciere, timendus
Queis mea cunque affert "certa sagitta" necem.
Auspice te pubes ambabus idonea fiet
Partibus: hæc vitam conficit, illa novat.
Nec, positis curis, thalliarchus amicior ullus,
Seu versus fundes seu sine felle jocos.
Omne feres punctum commiscens utile dulci,
Divitibus gratus pauperibusque simul.
Teque suum decus et tutamen Edina fovebit
Donec iter facias serus in astra redux.'
Sic ait, auratoque humeros velatus amictu
In nemus arcanum Delphicus augur abit."

The following translation gives at least the sense of the original:—

"Maclagan! O'er thy cradle Phœbus smiled:
'On, favoured of my Muses! On, my child!
As patriot, physician, teacher, fame
Winged with thy verse shall waft abroad thy name.
Thy budding gifts the High School shall discern,
Yet prouder bays for Academe thou'lt earn.
With me for guide thou'lt ply the healer's art,
And health unhoped for to the sick impart.
Thy peers in archery thou'lt so outshine,
The foe shall take thy swerveless shafts for mine.
Through thee in Scotia's youth my power shall blend—
My power of death to foe, of life to friend.
And in free festal hour, as host or guest,
Thou'lt charm with lightsome lay, with genial jest.
Of high and humble the beloved alike,
The happy mean of work and play thou'lt strike.
So thee, Edina, as her joy and stay,
Shall cherish till thy late assumption-day!'
Thus spoke the Sun-god; and, in cloud half-seen,
Evanished into Delphi's thickets green."

A Young Practitioner.—It may, like chloroform, be administered on lint.

Dr. J. Miller.—The paper has been received.

USE OF LANOLINE IN MIDWIFERY PRACTICE.

To the Editor of THE LANCET.

SIR,—Permit me to call the attention of your readers to lanoline as a particularly efficient means of reducing the rigidity of the perineum in primiparæ. Owing to its penetrative and softening properties, I find it much preferable to the plan adopted by me of friction with pure lard. Only a few days ago this rigidity was strongly marked in an elderly primipara, where the forceps were required on account of debility on the part of the patient. I was surprised with what facility I succeeded in reducing it so as to enable me to apply the forceps much sooner than I should otherwise have felt justified in doing on account of the danger of severe laceration.

I am, Sir, yours truly,

Belford, Oct. 26th, 1886. C. CLARK BURMAN, L.R.C.P. & S. Edin.

VIPER POISON AND RABIES.

A WRITER in *Los Avisos* mentions that a dog which had been several times severely bitten by different rabid dogs, and had shown no symptoms of rabies itself, had been previously twice bitten by vipers, and suggests the possibility of the poison of the viper having conferred an immunity from rabies.

Mr. Spurgin.—We cannot understand why the judge refused to take the evidence of a scientific witness, as the case was pre-eminently one calling for decision on professional and technical grounds. We trust the matter will not be allowed to rest where it is, or a dangerous precedent will have been created. The honour of the profession, through one of its legally qualified representatives, is at stake.

THE letters of *Dr. Pirie*, *Mr. Exton*, and others must stand over till next week.

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UNIVERSITIES' MISSION TO CENTRAL AFRICA.

FOR the last five years the above Mission has maintained a medical mission on the East Coast of Central Africa. As we are informed, the medical mission has done, and is doing, very effective work among the natives there. A fully qualified surgeon sent out by the Medical Guild of St. Luke is at the head of it; and, in addition to attending the European members of the Mission and the natives directly under its charge, he gives medical advice, attendance, and medicine to the natives in the surrounding districts. The Mission is rapidly gaining influence over them; but, in order to carry on the work effectually, a large stock of drugs and medical appliances is required, and the drug fund of the Mission is no longer sufficient to provide these articles in proper amount. An appeal is therefore made for subscriptions, which may be sent, marked "For the Drug Fund," to the Secretary of the Universities' Mission, 14, Delahay-street, Westminster.

Quærens.—The duty of a regular practitioner who is asked to see a case, merely for diagnosis, which is being attended by a homœopath, and in the absence of the homœopath, is simple. He should decline to do so. We do not exist as a profession to gratify curiosity about the nature of disease. We exist to cure it, or at least to treat it. If we are not permitted to do this, or are asked merely to supplement and support a system of therapeutics in which we do not believe, we have no mission.

Subscriber.—The plain name, with "M.B." and "Surgeon," is best.

CHRONIC DYSENTERY.

To the Editor of THE LANCET.

SIR,—Could any of your readers suggest a remedy for chronic dysentery (muciform)? Astringents of every known description, ipecacuanha, Dover's powder, and bael have all been tried in vain. It occurs in a young man, and has now lasted for nearly two years.

I am, Sir, yours obediently,

October, 1886. EUREKA.

Mr. J. Powell.—It would be invidious, as well as difficult, to specify in detail the claims and the blemishes of each candidate. A study of their addresses, in connexion with what can be learnt from the ordinary sources of information, will enable any practitioner to form a fair opinion for himself. Our correspondent has about a dozen or fifteen to choose from. He can only vote for three. The act of selection must be the act of each registered practitioner. We advocate freedom of choice and the preference of general practitioners. The Council is full of the consultant class and the representatives of corporations. Let us hear in the Council the views of men who have to do the hard work of the profession.

Mr. R. Fendick.—75, Park-street, Grosvenor-square, W.

TREATMENT OF OZÆNA.

To the Editor of THE LANCET.

SIR,—I should feel greatly obliged if any of your readers would give me some hints in regard to the treatment of an obstinate case of ozæna which remains from an attack of diphtheria some years ago, and which has hitherto defied all attempts at cure.—I am, Sir, yours faithfully,

Oct. 26th, 1886. SUBSCRIBER.

Mr. Owen Coleman would do well to communicate with the Secretary of the Medical Officers of Schools Society, Dr. Alder Smith, Christ's Hospital.

R. P.—Klein, Micro-organisms and Disease.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Buzzard, London; Dr. Harkin, Belfast; Mr. E. A. Barker, London; Dr. A. Duncan, Glasgow; Dr. Campbell, Alfreton; Dr. Savage, London; Dr. H. P. Thurstan, Southborough; Mr. Thomson, Glasgow; Dr. W. Dale, King's Lynn; Mr. Maynard, Newcastle-on-Tyne; Mr. Pugin Thornton, Canterbury; Mr. H. M. Jones, Liverpool; Dr. Markham Skerritt, Bristol; Mr. E. Cheshire, Birmingham; Dr. Granville Bantock, London; Mr. Robertson, Mexbro'; Mr. Cotterell, Bicester; Mr. J. J. Pringle, London; Mr. Carr-Gomm, London; Mr. Mason, Burton-on-Trent; Mr. A. Haviland, London; Mr. Spreat, St. John's Wood; Dr. Morison, Suez; Mr. Hump, Ruabon; Messrs. Smith and Elder, London; Mr. Cripps, London; Mr. Rowe, Dundee; Mr. Lewis, Wakefield; Mr. Birchall, Liverpool; Mr. Hayward, Manchester; Dr. Campbell, Alfreton; Dr. Tait, Birmingham; Messrs. Simpson and Co., Leeds; Messrs. Dawson Bros., Montreal; Messrs. Witherby and Co., London; Rev. Forster, Worcester; Messrs. Wright and Co., Bristol; Mr. Fearn, Chesterfield; Mr. Russell, Liverpool; Mr. T. K. Clarke, Huddersfield; Dr. H. Cane, Belvedere; Messrs. Squire and Co., London; Dr. Jos. Rogers, London; Mr. Laffan, Cashel; Mr. J. Petrie, Alford; Mr. Foulerton, Ryde; Mr. Palmer, Newbury; Mr. E. Donaldson, Burt; Mr. Christian, Whitworth; Mr. Powell, Newcastle Emlyn; Dr. Bell Taylor, Nottingham; Dr. Park, Glasgow; Mr. F. Kerslake, Barnes; Mr. C. A. Buehl, London; Mr. W. S. A. Griffith, London; Mr. W. A. Ellis, London; Mr. Haslam, Birmingham; Dr. J. Pirie, Glasgow; Dr. Elder, Nottingham; Mr. J. F. Little, Ben Rhydding; Mr. Meere, London; Dr. MacMunn, Seaford; Dr. J. C. Renton, Glasgow; Dr. Carter, Birmingham; Mr. Cuthbert Johnson, Daventry; Mr. J. H. Cooney, London; Mr. Coutts, London; Mr. T. Easton, Stranraer; Prof. Macleod, Glasgow; Mr. C. C. Burman, Belford; Mr. Macdonogh, Twickenham; Messrs. Bates, Hendy, and Co., London; Mr. Addison, London; Mr. Pepler, London; Mr. J. R. Ware, London; Dr. Mackern, London; Dr. Macnab; Messrs. Keith and Co., Edinburgh; Mr. McKenzie, Kurrachi; Messrs. Thompson and Co., Launceston; Mrs. Starling, Portsmouth; Messrs. Lockwood and Co.; Mr. Beach, London; Mr. Fuge, Taunton; Messrs. Bell and Bradfute, Edinburgh; Mr. Wheeler, Manchester; Messrs. Oliver and Boyd, Edinburgh; Mr. Forster, Birmingham; Messrs. Porteous and Co., Glasgow; Dr. Marsden, London; Mr. Reynolds; Messrs. Lee and Nightingale, Liverpool; Mr. Allden, Shirley; Messrs. Reynolds and Branson, Leeds; Mr. Bella, London; Miss Hatton, Notts; Mr. Burdett, London; Mr. Bury, New Barnet; One who has Suffered; Enquirer; Eureka; A Licentiate; Subscriber; J. S., Liverpool; An Old-standing L.K.Q.C.P.I.; J. T.; H. A. B., Willesden; Alpha; Conservative; Editor, "Amateur Photographer"; Lecturer; C. C.; Quærens.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Bolton, Gedaiming; Mr. Fleming, Glasgow; Mr. Bigg, London; Mr. Hehm, Liverpool; Mr. Chadwick, Oswestry; Mr. Jackson; Mr. Saunders, Manchester; Mr. Ramsden, Halifax; Mr. Booth, Snaith; Mr. Owen, Anglesea; Mr. Davis, Bath; Mr. Williams; Mr. Glanville, Stoke Newington; Mrs. Landale, Bath; Dr. Lepage, Nantwich; Dr. Taylor, Windermere; Mr. Yeoman, Sheffield; Mr. Woodcock, Bradford; Mr. Sallows, Hornsey; Mr. Bethys, Reading; Mr. Richards, Plymouth; W. A. B.; Certainty; W. H. M. J., Manchester; M.D., London; M., Edin.; X. Y. Z.; Colliery; Medicus, Worsley; Beta, Wallsend-on-Tyne; M.R.C.S., London; A. S., Dulwich; Medicus, Nelson; E. T., Preston; R. D. S., Clapham; S. B.; Beta; Alpha, Carnforth; Kilburn; F.R.S.; Doctor.

Boston Independent, Jersey Weekly Press, Liverpool Daily Post, &c., have been received.

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Advertisements (to ensure insertion the same week) should be delivered at the Office not later than Wednesday, accompanied by a remittance.

Answers are now received at this Office, by special arrangement, to Advertisements appearing in THE LANCET.

Terms for Serial Insertions may be obtained of the Publisher, to whom all letters relating to Advertisements or Subscriptions should be addressed.

Advertisements are now received at all Messrs. W. H. Smith and Son's Railway Bookstalls throughout the United Kingdom and all other Advertising Agents.

Agent for the Advertising Department in France—J. ASTIER, 66, Rue Caumartin, Paris.

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Lectures
ON
DISEASES OF THE LACRYMAL APPARATUS.

Delivered at the Royal College of Surgeons.

BY HENRY POWER, F.R.C.S.

LECTURE III.—PART I.

GENTLEMEN,—The disease of which I have to speak to-day is Abscess of the Lacrymal Sac—its symptoms, results, and treatment: a disease that has been so fully and so well described by Mackenzie that it is unnecessary to do more than mention its salient points.

Two forms of this affection may be recognised: one primary, arising suddenly and passing through its phases rapidly; the other secondary, consequent upon antecedent disease of the sac, and less violent in its character. In the primary and acute form of dacryocystitis the sac is suddenly attacked with violent inflammation, pain is felt at the inner angle of the eye in the region of the sac, which is tensive, throbbing, and severe. This part of the face becomes red and swollen, and the redness extends over the eyelids and cheek, and in bad cases to the mouth and nose, presenting in many instances an ill-defined margin and a general resemblance to erysipelas, for which it is sometimes mistaken, the affection of the sac being overlooked. There is a variable degree of conjunctivitis of a catarrhal character, attended with chemosis and purulent discharge, so that the lids are glued together, and the patient is temporarily and mechanically deprived of vision—a condition that may occasion considerable mental depression. This is greatly aggravated by the severe pain, which prevents sleep, takes away all appetite for food, and leads to the occurrence of well-marked constitutional symptoms, rapid pulse, debility, and even rigors. In the course of a week the skin near the inner canthus assumes a purplish hue, and if left to itself matter forms, points at this spot, and discharges itself through one or two small openings. Retrocession of the symptoms then rapidly takes place, the redness and swelling become day by day more and more circumscribed, and the patient is once more able to open the eyes; pain diminishes, and at length vanishes. At this period one of two things may occur. The discharge from the opening in the skin may become thinner and less abundant, till at last it is only a yellowish watery ichor, and healing takes place; or a larger patch of the skin may die, when a fistulous orifice is left, into which a probe may be passed and made to penetrate the lacrymal sac. The case then becomes one of lacrymal fistula. The position of the opening of the abscess, when spontaneous, varies greatly in different cases. In the great majority of cases (98 per cent. according to Velpeau) it bursts in front of the sac, at a point which corresponds, when all swelling has passed away, to the lower margin of the orbit, at the point where it is in contact with the lacrymal sac; but it may discharge at a much more distant point. Thus Velpeau saw one case which opened upon the cheek, and another where the aperture was nearer the ala of the nose, a sinuous passage more than an inch long extending in this case between the sac and the external opening. The abscess may, however, discharge itself internally, and not externally; various cases are on record where the matter has discharged itself through the internal wall of the sac into the nasal meatus, and through the outer bony wall into the maxillary sinus; and I have seen one case in which it made its way apparently between the periosteum and the bone, till at length it reached the floor of the nose and established a fistulous orifice into the mouth through the palatine suture of the palatal bones.

Lacrymal abscess is rarely a primary disease. It may, of course, proceed directly from injury and from exposure to cold, but in the great majority of cases there can be little doubt that it occurs in those who are predisposed to an inflammatory attack by antecedent chronic inflammation of the membranous sac and duct or of the surrounding bone. These conditions are known as dacryocysto-blennorrhœa and dacryocystitis-catarrhalis. In the former case the contents of the sac are comparatively clear and transparent, and consist of mucus and tears, with but little pus; whilst in the latter case they are composed chiefly of pus. Some difference of opinion exists as to whether the accumulation is greatest at night or in the early morning, but it is usually stated that the sac becomes in most cases clear and empty during the night owing to the slow drainage, and turgid during the day from the larger amount of secretion that is produced in consequence of the movements of the eye and reflex stimulation of the glands.

Considerable discussion, both written and oral, has taken place on the question whether stricture of the lacrymo-nasal duct is caused by inflammation, or whether it precedes and induces the inflammatory attack. This point is not easily settled either by anatomical research or by clinical observation. Mere congestion, which may be quite sufficient to swell the membrane and obstruct the passage of tears, leaves very slight traces after death; whilst, on the other hand, it is certain that constriction may long exist without occasioning inflammation of the sac in the absence of any exciting cause. It seems probable that in most instances some chronic inflammation affects the duct, interfering more or less completely with the flow of tears into the nose. Exposure to cold, a catarrh, or some other cause, then causes an acute inflammatory attack; pus is generated, and an abscess forms, which may burst externally or (rarely) internally. This view is supported by the circumstance noted by Abadie[1] and Naudier, that when any existing obstruction at the lower part of the canal is relieved and the calibre of the duct restored to its normal size, inflammation of the sac, though it may previously have been rebellious and recurrent, soon disappears.

Velpeau[2] has noted that the dominant idea of the numerous works proceeding from the great school of the Academy of Surgery in France, and the view adopted and supported by Scarpa in regard to the etiology of dacryocystitis and lacrymal fistula, was that they were the result of some mechanical obstacle to the course of the tears. Heister was amongst the first to notice that the causes of this disease were of an inflammatory nature rather than mere obliteration, and this was the view entertained by Hunter. After him Demours and the English school, headed by Mackenzie and Lawrence, combated Scarpa and nearly all the surgeons of the last century, maintaining that lacrymal tumour is, in reality, only one of the accidents of chronic inflammation of the lacrymal passages. This view is now generally accepted; and, as Velpeau shortly expresses it, in the beginning the disease is almost always a moderate or chronic inflammation of the mucous membrane, which may originate either in the conjunctiva or in the sac itself, or in the nasal passages, and may in course of time induce a swelling, or vegetations, or ulceration of the mucous membrane; the last condition being rare, and estimated by Demours at only 1 per cent. of all cases. When inflammation is once established, purulent or mucous exudation takes place, and gives to the fluid contained in the lacrymo-nasal passages a consistence which favours its retention in the sac, especially since the calibre of the duct is diminished.

The observations of Hunter[3] on the etiology of this disease, though brief, are worthy of consideration. Fistula lacrymalis, he says, arises from an obstruction taking place in the passage of the tears from the lacrymal sac into the nose. "The causes are often foreign to the nature of the parts themselves, as the small-pox or measles. This I suppose not to originate, as has been supposed, from a pustule at the end or mouth of the duct, but from inflammation running along the duct and causing the sides of it to adhere; it may also arise from ulceration of the duct from a venereal or scrofulous disposition in the part, but most frequently from obliteration of the canal from inflammation. The tears not passing, the inner surface of the sac becomes stimulated by pressure and distension, and the salts of the tears, which have little or no effect while the sac is natural, when diseased irritate it and produce inflammation. The sac swells, suppurates, and opens externally, and discharges the tears by this opening till the natural passage opens or a new one is made. If the os unguis had

[1] Journ. d'Ophth., April, 1872.
[2] Dict. de Méd., 1838, t. xvii., p. 378.
[3] Hunter's Works, vol. i., p. 578, Palmer's edition.

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been susceptible of the stimulus and had ulcerated, it would have been fortunate, but it only thickens to defend itself from the disease; for we find Nature has made internal parts less susceptible of such stimuli, the ulceration only taking place next the skin, so that it would, perhaps, be better for us if Nature would sometimes vary from her usual course. This internal thickening is sometimes so great as to unite the external part of the nose to the septum, and render the operation of perforating the os unguis less successful. Opening the old passage seldom succeeds, as it is very liable to become diseased again, as in strictures of the urethra, which are so apt to recur, and here bougies cannot be had recourse to occasionally, as in the urethra. The operation, however, should not be done precipitately, as the duct often clears of itself, and the patient gets well."

Amongst the predisposing causes of acute inflammation of the lacrymal sac, pregnancy appears to be one of the most common, perhaps on account of its depressing influence on some constitutions, and partly, too, from the confinement to one room and want of exercise, to the constipation which so often accompanies it, and to the general derangement of the health. It is not unfrequent during lactation, and Galezowski states that lacrymal troubles often supervene suddenly, owing to violent and spasmodic efforts made during delivery.

I have not the least doubt that obstruction of the naso-lacrymal duct terminating in abscess is frequently associated with a carious tooth, adding one more to the numerous ophthalmic affections that are associated with, if not directly attributable to, dental disease. The periostitic inflammation which exists at the root of the tooth either spreads over the surface of the bone, and so leads to thickening of the membrane covering the ascending lamella of the superior maxillary bone, or the inflammatory process at the root of the tooth may possibly extend through the bone itself. In either case the mucous membrane becomes reddened and chronically swollen and congested, and when it is remembered that the inferior orifice of the nasal duct in the membrane is often only a small slit or round hole, it is easy to understand that a comparatively small amount of swelling may lead to the complete obstruction of the passage and to the retention of the tears in the sac. The very position and form of the swelling show that the obstruction is situated at the lower orifice of the tube, and before the lacrymal abscess develops, not only may some epiphora exist, but the region of the tooth and the part of the upper jaw extending towards the nose may, by carefully applied pressure, be found to be tender. I saw a lady who illustrated these remarks exceedingly well. In her case the right upper canine tooth became carious, the eyes being perfectly healthy. Some months after the tooth was affected she noticed that her right eye had become "watery." Whilst she remained at rest in a warm room no overflow of tears occurred, but exposure to cold air immediately compelled her to have recourse to her handkerchief for this eye. For a long time she had little pain in the tooth, though the caries was gradually extending through its substance. At length and suddenly, without apparent or known cause, lacrymal abscess formed, and, after causing considerable erysipelatous inflammation of the cheek, burst through the canaliculi, through which, when the inflammation had subsided, matter could for some time be squeezed when gentle pressure was applied over the region of the sac. The sequence of events seems here to be tolerably clear. The carious tooth caused periostitis, which at first obstructed and then caused complete closure of the inferior orifice of the nasal duct. Suppuration of the lining membrane was then occasioned by some cause, such as the action of cold or the entrance of some pathogenic germ, and the tube being elsewhere pervious, the purulent contents of the sac were discharged through the canaliculi. I can imagine no better evidence of the action of a diseased tooth in the production of lacrymal obstruction and abscess. I do not wish to insist too strongly on this connexion, but I think that in all cases of obstructed duct, where no cause is immediately recognisable, it is expedient that the teeth should be examined, and, if found diseased, that the patient should be placed under the care of a competent dentist. In many cases probably extraction would be the safest plan, but on this point I am not able to express a confident opinion. If the abscess be allowed to burst spontaneously, and even in some cases opened *secundum artem*, the aperture by which the pus has escaped remains patent, and a fistula acrymalis results.

Congenital fistula of the lacrymal sac has occasionally been noticed. Thus Steinheim[4] describes a fistula of the duct opening upon the surface of the upper lid, and believed to have existed at birth. Terson[5] reports two cases of the sac, but whether congenital or not is uncertain. Manz[6] writes: "It is still doubtful whether a congenital fistula of the lacrymal sac has been observed, though the possibility of its appearance as an occasional failure of the nasal duct to close is not to be denied." In this case it should be viewed as an arrest of development. Whelock Rider[7] has recorded what appears to be an indisputable case. The patient was twenty-one years of age, and presented about half an inch below the inner canthus and over the course of the lacrymal sac the opening of a canal sufficiently large to admit for a short distance upward and inward a No. 8 Bowman's probe, but it could not be made to enter the sac. The integuments about the opening and the walls of the canal were slightly indurated. Efforts at expiration with closed nostrils caused some clear fluid to exude. The fistula was noticed when the patient was only a few days old.

ABSTRACT OF THE

Introductory Lecture

Delivered at the opening of the Winter Session of

ANDERSON'S COLLEGE, GLASGOW,

BY J. R. WOLFE, M.D., F.R.C.S.E.,

SURGEON TO THE OPHTHALMIC INSTITUTION, AND LECTURER TO THE COLLEGE.

AT the outset the lecturer referred to the great advances recently made in medicine and surgery, as exemplified in the discovery of new drugs and in the operations now performed on several parts of the body which were formerly deemed to be beyond the reach of the surgeon. He thus showed that students now entering on their medical studies enjoyed many and important advantages which could not be offered to their predecessors. In this way the pleasure of the study had been considerably enhanced, but at the same time the responsibilities laid on students had become much heavier. Amidst the crowd of practitioners at present no one could push his way to the front by simply repeating other people's formulæ; it could only be done by independent thought and indefatigable industry. Dr. Wolfe then proceeded as follows:—

"The department of surgery which is my own province has made rapid strides since the discovery of the ophthalmoscope by Helmholtz. Previous to that discovery nearly all was guess-work, but by that instrument we have revealed to us all the deep tissues of the eye, the very commencement of an affection of the retina, optic nerve, vitreous and choroid, and even diseases which may exist in the more distant parts of the organism, such as the brain, heart, lungs, and kidneys, as well as constitutional cachexia. The discovery gave such an impetus to the study of eye diseases and to the development of eye surgery, that, thanks to the numerous labourers in that department in different parts of the world, ophthalmology may now be said to have approached the nature of an exact science.

"Among the eminent men of our profession who flourished in France during the Second Empire, such as Nélaton, Trousseau, Velpeau, Claude Bernard, &c., whose labours I have reported in THE LANCET of that period, no one deserves greater credit than Desmarres. By his brilliancy of conception and dexterity of execution he may be said to have revolutionised ophthalmic surgery. He was the first to show us how great is the liberty which may be taken with all the tissues of the eye, provided they be properly manipulated. He not only gained great victories over disease himself, but laid the foundation for future progress. The one eminent disciple of Desmarres who was destined to gain world-wide renown in ophthalmology was Albrecht

[4] Klin. Monatsbl., B. xiii., p. 303. [5] Presse Méd. Belge., 1878, p. 227. [6] Graefe: Sämisch Handbuch d. Ges. Aug., B. ii., p. 118. [7] Knapp's Archives, vol. xiii., 1884, p. 263.

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v. Graefe. Fired with the enthusiasm of Desmarres' teaching, he subsequently established an ophthalmic clinique in Berlin and became the founder of the ophthalmological school of Germany. When visiting La Charité in Berlin the other day, I saw with no small degree of pride the monument which has been erected to v. Graefe. This is the first public monument erected in that city to a private person, all others being in honour of royal personages and generals or other public functionaries. The distinction confers equal honour on the memory of our eminent *confrère* and on the Government of the German Empire. It shows that the old spirit of the nation—love of culture, appreciation of professional merit, and interest in all that benefits mankind—is still alive and has not been deadened by love of military glory. Herein lies the pledge of the future stability and prosperity of the nation. The statue itself is a beautiful life-like image of the man, but I could not help thinking that a lancet used in iridectomy, by the introduction of which operation he conferred a great boon on many sufferers, would have been more appropriate in his hand than an ophthalmoscope, an instrument invented by Helmholtz; nor could I help feeling that the symbolic group on each side of the statue was so paltry and insipid as only to disfigure the monument. Graefe was peculiarly fortunate in living during what may be called 'the golden age' of ophthalmology. There was such an absence of professional and national jealousy that he obtained the support, not only of the whole of the medical profession of Germany—without which, he himself said to me, he could never have tested the efficacy of his cure of glaucoma by iridectomy,—but also that of the Vienna, French, and other foreign schools. One great service which he rendered to this department was the founding of the *Archiv für Ophthalmologie* in conjunction with Arlt and Donders, the latter of whom published in this journal his famous papers on Refraction and Accommodation of the Eye, which now forms the canonical book of oculistic surgery. I, however, think it very unfortunate that Graefe's last work has not proved a success. I refer to his method of extracting cataract. At the meeting of the International Ophthalmological Congress at Paris in 1867, at which the operation was discussed, a report on the results of the new method was read by Otto Becker, then of the Vienna school. It was violently attacked by Professor Hasner of Prague in the *Annales d'Oculistiques*. I objected to it at the time as positively bristling with dangers. Notwithstanding the unfavourable report of the Vienna surgeons, which I deemed conclusive against it, it is still practised, and human eyes have been sacrificed in great numbers, both in this and other countries. In the old operation we never heard of sympathetic inflammation of the other eye, but in connexion with Graefe's cases came under my own observation in which the eye operated on has had to be removed and the other has become inflamed. It is very curious that in the most recent apologies for failure the micro-organisms are held to be responsible—the poor bacteria have to bear the whole blame. I regard this operation as calculated to tarnish the fair fame of v. Graefe, as the two groups are a disfigurement to his statue, and I therefore hold that it ought to be excluded from ophthalmic practice. I speak strongly on this subject because I know the misery which is caused to families by such disasters.

"When I was asked to address you to-day on ophthalmic medicine and surgery, I thought that it would prove useful to you that I should explain the general principle which underlies some operations which I have introduced, and the way in which they have been worked out by me. In searching for the safest and best method of operating for cataract, I have, during every stage of the operation, studied all the possible sources of danger and the surest means of eliminating these dangers, and have thus endeavoured to meet every possible contingency. I have in this way arrived at a method which is absolutely safe—so safe, indeed, that one need hardly ever fear of failure. In twenty cases on which I operated in the course of one month in the presence of four of my colleagues, there was not a single hitch during the operation or in the subsequent treatment; vision restored in all. Some of the cases operated on by me during the present month have been very critical. One patient, seventy-two years of age, was discovered to have heart disease; another had bronchitis and asthma to such a degree as to disturb the other patients; while in a third the cataract was the result of an injury of thirty-four years' standing, and in addition to traumatic complications there was a pterygium covering a great part of the cornea. I have also recently operated upon one of our citizens at the advanced age of ninety-one. In all these cases the healing process went on without a single complaint of pain in the eye, and vision was restored. I may mention that the risk in old people lies in the tendency the cornea has to collapse, and in consequence of that collapse there is a difficulty of removing the whole lens and a probability of subsequent suppuration. But these are simply facts which must be present to the mind of the operator, and according to which he must regulate his incision. It was only by carefully observing how Nature herself cures wounds and injuries that I arrived at a sure method of conducting this operation.

"The operation for the formation of new eyelids from skin flaps taken from distant parts was first suggested to me by the procedure of M. Reverdin, who grafted small bits of cuticle for the cure of ulcers, and the results obtained were tolerably good. I found, however, that when applied to the face this method gave it a scurvy look, and I was obliged to try the transplantation of a large flap, endeavouring to cut the cutis merely and keep free of cellular tissue. The fact that about one-third of a flap so cut suppurated proved to me that, though the first part could easily be cut free of cellular tissue, the knife is apt to go deeper when cutting is continued further. Hence, I concluded that if we want a large flap of skin to heal by agglutination, we must first remove it and then pare off any cellular tissue there may be underneath. Though on the publication of my first success the operation met with no favourable reception, it is now generally adopted. Of all the satisfactory reports of its success there is none more so than that by Dr. Swanzy of Dublin, who operated in seven cases. He reports that 'it was not until forced by the circumstances of a case that he employed it; now, having found it a most satisfactory proceeding, he much regrets that he postponed its trial so long.' To the practice of skin transplantation I was led by a feeling of sheer desperation. 'Here,' I said to myself, 'is an eye which might be made a useful organ but must be allowed to waste for want of a flap of skin which cannot be taken from the neighbouring part.' I was then compelled to study how the want could be supplied. This is also true of transplantation of conjunctiva from the rabbit.

"By the same feeling I was led to practise another operation—viz., that for detachment of the retina. If surgeons could remove dropsical fluid from the abdomen and thorax, were oculists to be baffled and pronounce a case incurable on account of retinal dropsy? It is true we have delicate ground to work upon, but this only shows the great necessity there is of taking advantage of all the devices of our art and devise new plans in order to overcome the difficulty. For what is ophthalmic surgery but simply the performing, in a delicate and precise manner, of operations upon the tissues of the eye which can be done on a large area in any other region of the body? My first successful case, reported in THE LANCET in 1868, was total blindness in both eyes; but such cases are not very numerous, and the operation had consequently a hard struggle to come to the front—in fact, six years elapsed before I had an opportunity of again bringing it prominently before the profession. This case, which had been certified by surgeons of another hospital as one of detachment of the retina, was exhibited before the Glasgow Medico-Chirurgical Society and the British Medical Association at Belfast in 1884. But all surgeons who had tried the operation in this country had invariably failed, and consequently more convincing proof was still required. This was afforded me in the end of the same year, when I was invited by two Parisian oculists to give a demonstration of my method on patients provided by them. I did so, and with success. The demonstration was reported in several medical journals in France and in this country. By its success great impetus has been given to the operation, and surgeons have been encouraged to study it more carefully than they have hitherto done.

"With these explanations you will be able to appreciate some of our endeavours to extend the sphere of eye-surgery, and to bring within the province of operative interference certain groups of cases which have until recently been considered incurable. Nor are the resources of surgery yet exhausted."

Dr. Wolfe, in conclusion, referred to the arrangements which have been made for the removal of Anderson's Medical School to the neighbourhood of the Western Infirmary.

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ABSTRACT OF

Introductory Address

ON THE

SOCIAL, SCIENTIFIC, AND POLITICAL INFLUENCE OF THE MEDICAL PROFESSION IN THE YEAR 1886.

Delivered on Monday, November 1st, 1886,

BY L. HEPENSTAL ORMSBY, F.R.C.S.,

SURGEON TO THE MEATH HOSPITAL AND COUNTY DUBLIN INFIRMARY.

GENTLEMEN,—On such occasions as this it is usual for the lecturer, in opening the session, to select some topic of passing interest wherewith to engage your attention for a very long hour or fifty minutes. At the risk of pleasing some only of my hearers, I select for my address the following subject—"The Social, Scientific, and Political Position and Influence of the Medical Profession in the year 1886." The topic no doubt is a large one, and embraces a wide field; however, in my allusions I will be as brief as the subject will admit.

The social position of the profession may best be viewed as regards the different countries and services we meet with in its members. First, as regards Ireland, the country most interesting to us all. In the past the metropolitan physician and surgeon was generally a man sprung from the ranks of aristocracy, and highly educated. Now, however, we find all grades of society entering the profession if they have the inclination and means to enter it. No one is debarred. All have the same chance to win their way to position and affluence. As there are degrees in trade, law, the public services, and other lines of life, so are there degrees of social standing in medicine and surgery. For in trade any ordinary individual can understand the difference between the social position of the prince merchant and that of the small huckster, and yet both belong to the same calling. In the great profession of law we have the same degree of social standing. We have the Lord Chancellor at the top of the social system, and the respectable legal practitioner who practises in the Lord Mayor's Court, and yet they both belong to law. Throughout the country our profession occupies as good a position as any other. There is no doubt that many depreciating influences are at work to more or less vulgarise the medical profession and its members. We have to contend against the great influx of very low persons, who now enter the profession without birth or refined feeling enough to realise the utter shipwreck they make of their calling if not suited to practise it as it ought to be practised. Again, there has not been, up to the present, any uniform State-qualifying examination through which all must pass before entering the profession in the three kingdoms. There have been at least twenty or even more portals, so that each licensing body, in order to attract or encourage men to enter it, offers, or pretends to offer, some special advantage. In this way many very badly prepared and half-educated men get their names on the Register year after year. Moreover, so long as you have a profession or licensing body allowing its members to adopt the low scale of fees beginning at sixpence for advice, consultation, and medicine included, what can you expect but a downward course of appreciation on the part of the general public? I firmly believe the system of low fees charged by general practitioners for drugs and medicines alone—in fact, for the mere mechanical agents of treatment, and not for the exercise of brains and judgment which select them, called advice—has done more to produce professional demoralisation in the rank and file of our order in England and Scotland than anything else, and has been the cause of the low place those who follow the practice are asked to occupy in the social system of modern society. Another depreciating influence which the Bar certainly does not suffer from, but which we do, is that the medical profession is not necessarily metropolitan, which the Bar certainly is; for in the remotest corner of the country we must necessarily find the medical man practising among people who, socially and scientifically, are very inferior to him in their attainments, and who are unable to offer him any advantages in his social intercourse; and in this way he loses tone in his conversation, in his dress, in his manners, and in his influence, and occasionally he contracts habits which certainly cannot be commended. There is another depreciating influence we must fight against until the general masses are properly educated so as to understand correctly and clearly the grades and social position the profession and its members ought to occupy. This depreciating influence is the absence of suitable State recognition for the leaders of medicine and surgery. In the constitution of our governmental system there should be (and it is imperatively called for) the Minister of Health or Sanitary Science, who should occupy a seat in the Cabinet, and to be only filled by a physician or surgeon of eminence and ability.

I must now dwell for a few moments on the second part of my theme—the scientific influence and position of the profession in the present day, and I would say to no class does science owe so much. Medical men from the days of Hippocrates have all along the line been the pioneers and promulgators of science. Contemplate for one moment their incessant toil, the varied, intricate, and in some cases most dangerous investigations in the cause of scientific truth, the combined result of all being that the community at large have alone derived the advantage of their labours. What has the discipline of law, divinity, or arms, as a body, done for science? Think of the enormous debt of gratitude that ought to be bestowed on medicine and surgery; and this fact can never be told too often, when the ignorant, the ungrateful outsider attempts to depreciate and minimise the labours of the profession. Although the public occasionally are slow to appreciate our scientific labours, we have an institution that we may well be proud of, and one which has helped to make England famous in the scientific world. I allude to the Royal Society of London, which knows no creed, no politics, no social class. Its object is pure and untarnished, as it was simply established for the furtherance of truth and science and for the recognition of original scientific work. The humble, and it may be unknown, worker will surely find his investigations carefully weighed and duly acknowledged by the conferring of the blue ribbon of science (the fellowship of the Royal Society), a reward far greater and perhaps more to be desired than the highest honour the State can bestow; and I am delighted to say that being an Irishman is no bar to its distribution, and physicians and surgeons have more frequently been the recipients of this much-coveted and enviable distinction than any other of the learned professions.

I must now say a few words as regards the political influence of the profession in the present day. Ten years ago, when I addressed you, there were but four medical men in the House of Commons, now there are ten; but even this increase is by no means a sufficient representation of their wants and wishes. The question arises, however, How can a man afford to give up his practice and lose so much a year for the cause of the public at large? and such self-denial is, to say the least of it, rare. If medical corporations wish to have medical representatives who are in touch with their present wants and aspirations, they must pay their representatives so much a year to make it worth their while to remain in Parliament and represent their views. Few medical men are able to put together large fortunes until they are advanced in life. At first, no doubt, there may be some little difficulty or jealousy in the selection, but the right man will turn up in the right place; and it is to be hoped that he will be a man who is thoroughly in accord with the wants of the great profession, and, having engaged in the practice of it, be better able to understand what will most conduce to its best interests. The man to represent the profession should be a comparatively young man, for this is the age for young and vigorous men. The University of Dublin and many of the other educational bodies must be represented by medical men if medical science is to have a place in the Legislature, and if we are not satisfied to allow the rank and file of the profession, numbering nearly 30,000 members, to remain silent.

And now let me for a moment invite attention to the position of our brethren in the army. Ten years ago, gentlemen, I warned you against entering the Army Medical Service, as I compared it then to a series of dissolving views of which we were at that time, in an interval, waiting for the next picture. I told you the remedy was simple, for if

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the gentlemen who had an ambition to serve their Queen and country would only hold back for a short time, they would compel the authorities to rectify the glaring and iniquitous defects by placing the army medical officer in his proper position, and giving him, in all fairness, equal advantages with his less scientifically educated combatant brother officer. I am happy to say my advice was taken, and the authorities were compelled, for want of men, to remedy many defects, but not all, as some few still remain. The army surgeon has a grievance which should be at once remedied. It appears that the commissions of those for the Indian Medical Service are dated from the period of joining Netley, while those for the Army Medical Department bear the date on which the course of instruction closes. The practical result of this difference is, that the Indian medical officers become the seniors of the others by four months, and this seniority must continue throughout their career, at least till they reach the administrative ranks. Formerly the rate of dating from the period of joining at Netley applied to both services, but the change was effected by the Warrant of 1877, *for reasons which have never been explained.* Furthermore, I feel a great injustice is frequently done to our army medical officers, who serve in unhealthy climates looking after the lives and health of the brave soldiers committed to their care. They may never have the luck to be in an engagement, and because they do not happen to see or hear a shot fired they are never decorated. Surely this is not fair or reasonable. Take, for example, the enormous and exhaustive duties of the chief administrative army medical officer in charge of a base hospital at some distance from active hostilities. No one who is not conversant with the minute details of his duties can really understand the wear and tear of mind and body such an officer endures, and yet this officer never gets any credit; his work is perhaps not known, and his name never appears in despatches. I would have all this changed. I would propose, if the military authorities do not do their duty to their medical officers, the corporations and licensing bodies from whom the medical officers have derived their diplomas should, from time to time, confer honorary high degrees on such as have proved themselves deserving of such distinction. In this way the decoration would be of more value, for it would be awarded by competent judges, who can distinguish high professional service on the part of the army medical officer, not perhaps on the battle-field, but in the prevention, cure, or alleviation of disease in outbreaks of fever, cholera, and other fatal disorders.

And now, in conclusion, I wish to say a few words to my junior hearers. Many of you are young men fresh from the country, with buoyancy of spirits, and without much ballast to freight you over the giddy whirlpools of a residence in town; and let me instil into you the fact that your early student life offers the best criterion we have of what your future professional life will be. All present, I am sure, wish to succeed, and you would like me to tell you how success is to be attained. Of one thing I am convinced, and that is that no such word as *impossible* should find a place in your vocabulary. A young man, I feel certain, can be very much what he pleases. You are now at that period of life in which you must turn to the right or left. You must now give proofs of principle, honesty of purpose, determination, and strength of mind, or you must sink into idleness and acquire the habits and character of a desultory ineffective creature, and if you once fall into that condition you will find it no easy matter to rise again. Pursue unflinchingly a course of irreproachable truth and rectitude, and you need fear nothing—not even the most sharp and cunning shafts that others, jealous of your progress, may choose to aim at you. The self-approval of your own conscience will be always to your own heart an infallible antidote against their poison.

JUBILEE OF A RUSSIAN MEDICAL PUBLISHER.—The *Zeitung für Buchhandel* states that the well-known St. Petersburg medical publisher, Carl Ricker, will reach his twenty-five years' jubilee in December. The Russian medical public is deeply indebted to M. Ricker for his enterprise in publishing a large number of national medical works and periodicals, amongst which latter the *Vrach*, which may be looked upon as the Russian LANCET, stands foremost. A multitude of translations of German, French, and English medical works have also issued in a Russian garb from M. Ricker's establishment on the Nevski Prospect.

TREATMENT OF UTERINE FIBRO-MYOMA.

BY J. KNOWSLEY THORNTON, M.B., C.M.,
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(*Concluded from page 813.*)

THE third case is another illustration of the impossibility of diagnosing between some uterine fibro-cysts and ovarian cysts; and it also illustrates how success may be obtained in complete supra-vaginal hysterectomy by Schroeder's method of suturing the stump, when it is impossible to secure it in Koeberlé's serre-nœud outside the peritoneum—the plan I much prefer in the majority of cases.

CASE 3.—C. C. M——, aged thirty-nine, married eighteen years, and mother of one child aged seventeen, was admitted into the Samaritan Hospital, under my care, on April 12th, 1886, said to be suffering from an ovarian tumour. She was very anæmic and emaciated. There was a large globular cyst filling the whole abdomen, and percussion was clear in the flanks and epigastrium. On vaginal examination the uterus was found to be much enlarged, and displaced to the left side of the pelvis. I could not make out whether a large solid mass which nearly blocked the pelvis was part of the tumour or was a fibro-myoma, but I came to the conclusion that there was an ovarian cyst, and multiple fibro-myomata as well. The family history was good, but one of her sisters was known to have a fibro-myoma uteri. Menstruation was free and regular; occasionally she had an unusually heavy discharge. The kidneys were irritable, and secreted only about twenty ounces of pale urine, of low specific gravity and with a trace of albumen. The bowels were loose and irritable. She first noticed a hard tender lump in the left iliac region about four years ago. It had grown slowly till the last six months, during which the increase had been very rapid, with much pain in the back and under the ribs, and with very marked emaciation. I operated upon April 14th, and on opening the abdomen found a thin liver-coloured cyst, with recent adhesions all over its anterior surface, and dark contents, with much old blood clot. It had all the appearances of an ovarian cyst with a twisted pedicle. After emptying the cyst and separating the parietal adhesions, I found what I believed to be a false pedicle attaching it to the fundus of the uterus; but on transfixing and tying it, I found bleeding going on from the uterine surface below my ligatures from a crack, which at once suggested to me that the cyst was of uterine origin; and, proceeding farther to explore the pelvis, I found a large pedunculated subperitoneal outgrowth, to the pedicle of which the cyst was also adherent, and very free hæmorrhage occurred when I separated it. The uterus was, as I had expected, greatly enlarged by a mass of more or less pedunculate outgrowths, which surrounded it and extended deeply into both broad ligaments. Seeing that its removal would be unusually dangerous and difficult, I attempted to stop the hæmorrhage from the two torn uterine surfaces by suture, by actual cautery, &c., but found, as in similar cases before, that nothing would stop it, the uterine tissue tearing or cracking away and fresh bleeding taking place at each attempt. I therefore determined to perform a complete supra-vaginal hysterectomy, and having with much difficulty (owing to the growths in the broad ligament) tied off and removed the ovaries and tubes, I applied the serre-nœud to the uterus, but was obliged to put it on so deeply in the pelvis, that I found it would be impossible to bring it outside the peritoneum, and having before met with disaster from attempting a half extra-peritoneal and half intra-peritoneal treatment of the stump in a similar case, I decided to remove the serre-nœud, clean out the uterine canal right through into the vagina with corrosive sublimate and powdered iodoform, and then suture the stump on Schroeder's plan and drop it in. Having completed the operation, I placed two glass tubes in the pelvis, each with their separate rubber sheet and sponges. The temperature rose in the evening to 101°, and the pulse to 112. The tubes were removed at the evening dressing on the next day and the patient made an uninterrupted recovery, her temperature being normal and pulse 76 on the fourth day. On the seventh day after operation the sutures were removed and the wound was found well healed; at the same time I removed a plug of iodoform gauze which I had placed in the vagina after the operation. The bowels were relieved by enema on the eighth

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day. The only trouble she had was from some return of the diarrhœa from about the twelfth to the fifteenth day; this was, however, easily controlled by a bismuth mixture.

I think it would be difficult to find a group of more instructive cases in the whole of my case-books, and yet they all come together, as so often happens in practice. The lessons which we learn from them are:—1. That there are certain ovarian cysts which, from their method of growth and from the way in which they stretch out the uterus and bladder as they grow, it is impossible to differentiate from uterine tumours. 2. That there are some fibro-cysts of the uterus which, especially when they are complicated with solid outgrowths, as they often are, it is impossible to differentiate from ovarian cysts. 3. That there are pedunculate fibro-myomata which grow so fast, and cause such emaciation, that it is impossible to differentiate them from solid ovarian sarcomata. 4. That the ovarian cysts which burrow deeply in the cellular tissue round the uterus are slow and uncertain in their growth, are often causes of considerable pain and distress, are apt to give rise to inflammatory action, which, if allowed to recur from time to time, renders their removal extremely difficult, and from their seat are especially liable to interfere with the action of the kidneys, and lead to serious inflammatory or cystic changes in these organs. 5. That in view of the impossibility of exact diagnosis in some cases, an exploratory operation should be advised whenever there is danger of interference with the ureters by intra-pelvic pressure, whenever the presence of the tumour gives rise to recurrent attacks of pelvic inflammation, and whenever other symptoms indicate operation. 6. That the operator who undertakes to perform ovariotomy must be prepared to find himself face to face with the most formidable hysterectomy which it is possible to perform, and therefore no one should undertake these operations without being fully provided with the appliances necessary for the completion of such exceptional cases.

Before concluding I must say a few words on the general surgical treatment of uterine fibro-myomata. I have at various times published in tabular form the results of my practice, and to these papers I will refer those who wish to go fully into the question.[1] I can only briefly here indicate the class of cases in which I would advise removal of the ovaries and tubes, and that in which I would perform complete supra-vaginal hysterectomy. Here I will repeat again what I have often said before, and what I always say distinctly to any patient upon whom I am to operate for fibro-myoma: "I propose in this case to remove the ovaries and tubes, because I think that is the most suitable and least dangerous operation; but I cannot pledge myself not to remove the tumour, because when the abdomen is opened I may find it impossible to remove the ovaries and tubes, or in a case in which I have intended to perform hysterectomy I may find it safer and better merely to remove the ovaries and tubes." In certain cases the removal of the ovaries and tubes is easy, and then it is a much less dangerous operation than hysterectomy. In certain other cases it is quite impossible to remove them without making a clean sweep of the uterus down to somewhere near the internal os. Again, in some cases it is so easy to include both broad ligaments in the same wire which surrounds the uterus, that it is an easier and safer operation to perform complete hysterectomy than merely to remove the ovaries and tubes. It is well to decide as nearly as one can before operating which operation is the right one in any given case; but one must always be prepared to modify that operation when the parts are actually before one's eyes and in one's hands. Speaking generally, small soft tumours or general enlargements of the uterine body, which cause hæmorrhage or pain or both, out of all proportion to their size, are those for which the removal of the ovaries and tubes can be best performed, and in which this procedure gives the most satisfactory results, and they are often very unsuitable cases for hysterectomy, because their bases are deeply seated in the broad ligaments, and their small size has not led to any stretching of the cervix, so as to bring the part where the serre-nœud should be applied up into the abdomen. As a general rule, the smaller the tumour the easier the operation; but it is not always so, as the fibro-myoma may grow out into one broad ligament, stretching the ovary and tube over its surface, so as to make it very difficult or even impossible to remove them efficiently and safely. Then there are certain comparatively small growths which involve the whole body of the uterus or the whole of one wall, carrying up the broad ligaments and ovaries and lengthening the cervix, which give rise to very serious hæmorrhage, and often grow fast. These cases are most suitable for complete hysterectomy, because this procedure is in them easy and simple, while it is often almost impossible to tie off the greatly enlarged and stretched ovaries. Then, again, there are certain cases in which the ovaries and tubes have become adherent in the pelvis, where it is very difficult to remove them at all, and still more difficult to make sure that they are thoroughly removed, and yet this may be the only possible procedure from the bedding of the fibro-myomata deep in the broad ligaments, and the density of the adhesions they have contracted there during the inflammatory attacks which have also glued down the ovaries and tubes. Then in certain cases in which the uterine mass has already become too large to hope for cure by oöphorectomy, the base will be too broad for the ovaries and tubes to be included in the wire, and they must be carefully ligated off before the wire is applied to the uterus, and when this is the case it is strongly advisable to pass the free end of the wire through the broad ligament on each side at the angle where it has been cut down in separating the ovary and tube; this not only affords a safeguard against bleeding, but it gives the wire a fixed point on each side, and when tightening it one is not nearly so liable to get it on to the bladder, or too deep towards the ureters—accidents which may easily happen if it can slide up and down the uterus. In a certain number of cases, and very formidable cases they are, it is not only necessary to ligate off the appendages separately, but also to divide the peritoneal covering of the uterus and peel back the bladder, or enucleate large masses of the tumour from deep in the broad ligaments, before the neck of the uterus can be cleared for the application of the wire. Such cases may require suture of broad ligament surfaces to one another or of peritoneal edges, or application of cautery or perchloride of iron, or drainage of cavities left in the broad ligament, but each must be dealt with as seems best at the moment, and I would advise those who have any doubt as to their fertility of resource and quickness of decision and execution in face of alarming hæmorrhage, to avoid meddling with uterine tumours, because the simplest operation may end in the most desperate difficulties. In saying this, however, do not let me be misunderstood: these dangers must be faced by some among us, for the time has come when fibro-myomata must be removed or kill in a certain number of cases, and it is no use for those who will not see the necessity to din into our ears the old cries that they do not kill, and that therefore they must be left alone. They do actually kill in a large number of cases, by hæmorrhage, by peritonitis, by slow invalidism, and by destruction of the kidneys. Probably if we could get at the true life-history of all the cases of uterine tumour, we should find a very heavy death-rate from granular kidneys and their results—heavier far than anything surgery has to mourn in its tentative march towards a radical and fairly safe operative cure.

I opened my remarks by pointing out how we may in many cases spare the knife by judicious treatment. I will close them by saying that I have attacked eighty-eight cases of fibro-myoma or fibro-cyst of the uterus, with a mortality of 15·9 per cent., much of which is due not really to surgery, but to diseases which have resulted from pressure, from inflammation, and from exhausting hæmorrhage, before the aid of surgery was invoked. Eleven of the deaths occurred in the first half of the cases, and only three in the second half. And who can say that this mortality, among the most miserable and most diseased of the cases, is not amply atoned for by the seventy-four healthy and useful women who enjoy again new lives as the result of operation?

[1] Removal of Uterine Fibroids by Laparotomy (Transactions of the Obstetrical Society of London, vol. xxii., 1880). On the Relative Value of Hysterectomy and the Complete Removal of the Uterine Appendages for the Cure of Uterine Fibroids (Transactions of the American Gynæcological Society, vol. vii., 1882). Clinical Lecture on the Surgical Treatment of Fibro-Myoma of the Uterus (Medical Times and Gazette, July 7th, 1883). On the Operative Treatment of Uterine Fibro-Myomata (British Medical Journal, Oct. 13th, 1883). Cases of Hysterectomy, with Remarks on the Value of Carbolic Acid Spray (British Medical Journal, May 23rd, 1885, p. 1031).

THE foundation-stone of the permanent building for the Victoria Hospital for Caste and Gosha Women at Madras was laid by Her Excellency Lady Grant Duff on Sept. 18th.

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ON SOME CASES OF CYCLOPLEGIA, OR FAILURE OF THE ACCOMMODATION.

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THE intrinsic muscles of the eye not unfrequently suffer from various degrees of paralysis, paresis, or atony. Six well-recognised varieties of such palsy exist—viz., (1) Paralysis of all three intra-ocular muscles, the dilator and sphincter pupillæ, and the ciliary muscle, the iris being motionless and accommodation impossible—so-called ophthalmoplegia interna;[1] (2) paralysis of the sphincter pupillæ alone—paralytic mydriasis; (3) paralysis of the dilator pupillæ alone—paralytic myosis; (4) paralysis of the ciliary muscle alone—cycloplegia; (5) paralysis of the sphincter pupillæ and ciliary muscle, as commonly occurs in oculo-motor palsy; (6) paralysis of both muscles of the iris, or iridoplegia. It is questionable whether the only other possible combination of paralytic myosis and cycloplegia ever occurs, and the innervation of the muscles would not suggest the likelihood of such coexistence.

Each of these various palsies may be either complete or of various degrees of incompleteness. Their causation may be classified under the three heads—(1) toxic, local or general; (2) traumatic; (3) pathological. Under the first heading would be included the familiar effects of atropine, homatropine, anæsthetics in the late stage; also duboisine, daturine, hyoscyamine, gelsemine, muscarine, and coniine.[2] In the second category would be placed the various effects of contusion on the irido-ciliary system; iridoplegia and mydriasis are perhaps the most common. I have known the former persist for weeks, months, and even years after the injury; failure of accommodation from this cause is, I think, less common, and when present less pronounced. It is to a particular group of the cases which fall under the third heading that I wish to direct the attention which I think they have not sufficiently received.

Now, failure of accommodation may, of course, be due to inability of the eye to effect either or both of the requirements upon which this action depends—viz., (1) slackening of the capsule by contraction of the radial fibres of the ciliary muscles, and (2) the increased thickness of the lens by virtue of its elasticity. An example of the failure of the latter preventing accommodation is seen in the early stages of cataract; its cause is mechanical, and it has nothing in common with the nervous and muscular causes of cycloplegia. Again, the regularly progressive restriction of accommodation from youth to age can hardly be deemed other than physiological, and only attracts attention and demands correction when the near point has receded further than the vocation of the individual requires. The advancing presbyopia of glaucoma is usually ascribed to the deleterious effects of tension upon the ciliary nerves and their branches.[3] Next, there is a whole group of diseases or morbid states which are perhaps the most frequent antecedents of that asthenopia which results from atony or paresis of the ciliary muscle—diseases which have this one characteristic in common, that they are debilitating diseases, and produce marked and persistent anæmia, accompanied by languor and a general depression of the nervous and muscular systems. Foremost among these stands diphtheria, the facts concerning which were worked out by Trousseau[4] and Donders,[5] typhus,[6] small-pox,[7] typhoid,[8] gastric fever,[7] rheumatism,[6] diabetes,[6] trichinosis,[6] locomotor ataxy,[6] and forms of sore-throat of a non-diphtheritic character.[8] In 1871 Mr. Hutchinson[9] pointed out that during lactation accommodation may fail, and I have numerous notes of cases in which the amplitude of accommodation has been reduced many dioptres, and this usually in proportion to the protraction of the nursing and the inability of the mother to meet the additional demand upon her strength. I have also observed similar cycloparesis during pregnancy, in the puerperal state, after abortion and miscarriage, and associated with menorrhagia and dysmenorrhœa. A few of these cases I may here cite in detail.

CASE 1.—Mary E——, aged twenty-nine. Married nine years; six children, last three months ago, suckling. Complains of "stabbing pains in the eyes" and "dimness" since confinement. She shuns the light, constantly wipes the eyes, and resents examination. The eyes appear perfectly normal, but while V = $\frac{6}{12}$ with + 1 D, she cannot read Jaeger 1 or 2 at any distance, but with +3 D she can do so easily. With −3 D cannot see even $\frac{6}{60}$. She is delicate and anæmic. Ordered a mixture of citrate of iron and ammonia, and to begin to wean the child. One month later she could read Jaeger 1 fluently at 22 cm., and all asthenopia had disappeared.

CASE 2.—Susan F——, aged twenty-eight; three children, last ten months old; suckling. Complains of asthenopia; cannot read or sew close to her. V with each eye $\frac{6}{9}$; has ·5 D hypermetropia. With +2 or +3 D reads Jaeger 1. Cannot neutralise even a −3 D glass.

CASE 3.—A. R——, aged thirty-two. Multipara; aborted nine months ago at three months of pregnancy; since then has been delicate, and suffered from asthenopia. V with each eye = $\frac{6}{9}$; cannot read small print or sew. With +3 D reads Jaeger 1. Cannot see $\frac{6}{60}$ through −3 D.

CASE 4.—S. B——, aged forty. Seven children, last nine weeks ago; is suckling. Complains of asthenopia when reading or sewing, since confinement. V each eye $\frac{6}{9}$; no hypermetropia; requires + 2 D to see Jaeger 1 at a convenient distance.

CASE 5.—Miss W——, aged forty, governess, single. Had "gastric fever" in May this year; laid up several weeks. Catamenia irregular; occasionally misses a period. Complains of recently acquired asthenopia, especially of the left eye, when reading. V right eye = $\frac{6}{9}$; left eye = $\frac{6}{12}$; not so good with + 1 D. With right eye reads Jaeger 1 at 22 cm.; with left can only read Jaeger 6, but with + 2 D reads Jaeger 1, and ten minutes after the instillation of eserine she can do the same without assistance.

The following case was presumably referable to antecedent small-pox.

CASE 6.—Sarah C——, aged twenty-nine; married; four children, last eight months ago. Sixth months ago contracted small-pox severely; vaccinated (three marks). A fortnight after recovery she noticed she could neither sew nor read, and this condition has continued up to the present time. V with each eye = $\frac{6}{24}$ c + 2 D = $\frac{6}{9}$; but with this hypermetropia corrected she can only read Jaeger 16; with + 6 D reads Jaeger 1, and twenty minutes after the instillation of eserine she could do the same without assistance. Pupils rather dilated, but acted to light. She also complained of dysphagia, and on drinking a glass of water much of it returned through her nose; so that the soft palate was also paralysed, as indeed could be seen on inspection. Under tonic treatment and weak eserine drops she completely recovered.

The cycloplegia of lactation is most common in young multiparæ, in hypermetropes, and in those naturally delicate or otherwise debilitated; it is seldom complete, the iris is rarely affected, and their visual acuity is usually less than normal. This latter fact is probably to be accounted for by the presence of some retinal asthenopia or anæmia; Mr. Hutchinson,[10] in recording a case of loss of accommodation from nervous shock, insists on the "important distinction to be drawn between a sudden failure of sight from this cause and from epilepsy of the retina." The condition of the retina in epilepsy we know to be that of extreme ischæmia; and it is common to see an unusually grey or anæmic fundus in the puerperal state, and occasionally this may culminate in epileptic amaurosis. I was asked some two years ago by Dr. Godson[11] to examine the eyes of a woman on whom he had three days previously successfully performed Porro's operation, and who had become suddenly blind. The question of embolism had been raised. The symmetry of the lesion rendered such cause improbable, and on ophthalmoscopic examination I saw the most anæmic fundus I have ever observed. I gave a favourable prognosis, which was justified by the sequel.

The treatment of these cases of enfeebled accommodation

[1] J. Hutchinson: Medico-Chirurgical Society's Transactions, 1878.
[2] T. L. Brunton: Text-book of Pharmacology (1885), pp. 184-193, &c.
[3] J. Soelberg Wells: Treatise on Diseases of the Eye (1873), p. 517.
[4] Clinique Médicale de l'Hôtel Dieu, vol. i., p. 497, *et seq.*
[5] Accommodation and Refraction of the Eye, 1864, p. 599.
[6] Landolt: The Refraction and Accommodation of the Eye, 1886, pp. 552-3, where several authorities are cited.
[7] Vide Cases 5 and 6.
[8] Roy. Lond. Ophthal. Hosp. Reports, 1873, p. 436.
[9] Ibid., 1871, p. 38; also Power, THE LANCET, May 8th, 1880, p. 711.
[10] Royal London Ophthalmic Hospital Reports, 1871, p. 38.
[11] For full report of case, vide Brit. Med. Jour., Jan. 26th, 1886, p. 164.

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is good diet and some preparation of iron—the ammonio-citrate appears to be the most efficacious. In cases due to lactation it is desirable to suggest an early weaning of the child. The prognosis is extremely favourable. As regards causation, this appears to be in no respect different from that of the cycloplegia of diphtheria and other debilitating diseases. The blood of the pregnant and puerperal woman "is deficient in albumen, and the amount of coloured globules is materially diminished."[12] It would appear that there is no specific cause at work, but that mere anæmia is sufficient to occasion either accommodative asthenopia, which may amount to complete cycloplegia, or retinal asthenopia, which may culminate in epileptic amaurosis.

Albert-terrace, N.W.

COMPLETE AMPUTATION OF MALE GENITALS FOR RECURRENT EPITHELIOMA.

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S. K——,[1] of good family history, aged twenty-nine years, came to me in April, 1885, suffering from a hardened condition of the end of his penis. There was a small superficial ulcer, which gave rise to very little pain and discharged a small quantity of thin pus. He denied emphatically ever having placed himself in the way of syphilis, and stated that the hardness of the penis had more or less obtained for three months, the ulcer for a fortnight or three weeks. The glands of the groin were enlarged and hardened, and erections of the penis, which were very frequent, were also very painful. Being in some doubt in regard to malignancy, I placed the patient under a mercurial course, and watched the progress of the ulcer. For upwards of three weeks it underwent no perceptible change; its edges were not ragged; there was but little pain; no tendency to bleed or excavate. The edges were barely raised above the surface, the base even, and no eversion of the borders. In fact, it presented no marked features of epithelioma. The induration, however, rapidly increased, until half the penis was of a characteristic leaden consistence. The diagnosis, which was no longer doubtful, was shared by Mr. Rushton Parker and Mr. O. Thomas, and the penis amputated early in May, just in front of the pubes. The patient was at his work in a fortnight, the enlarged inguinal glands having meanwhile subsided. For over seven months the patient was completely rid of the disease, but at the end of the year he complained of soreness at the end of the stump. He came to me in January, when I found the disease had returned at the site of amputation, which was occupied by a tumour, painful on pressure, and freely discharging pus through the urethra. The inguinal glands had again become enlarged, and difficulty was experienced in micturition. The scrotum in the neighbourhood of the urethra had become ulcerated, and the left spermatic cord was much enlarged and indurated about an inch from the inguinal canal. An operation being imperative, the patient was admitted into the Stanley Hospital towards the end of January, where, owing to the kindness of my colleague Mr. Sheldon, I was enabled to treat the patient.

On Feb. 4th, having made an incision through the length of the raphé of the scrotum, I came down upon the corpus spongiosum, and slowly dissected it from the adherent corpora cavernosa. The cavernous bodies were next followed to their origin, and with a blunt scalpel the crura were separated from the pubic arch. The corpus spongiosum was then divided, the posterior part being left of sufficient length to easily reach the perineal skin wound, the anterior part being included with the cancerous mass.[2] The left testicle was now removed, the involved cord being dissected high up and secured in the inguinal canal. The right testicle was next excised, together with most part of the scrotum, excepting a flap, into which I made a slit for the reception of the urethra and brought down like an apron over the perineum. The edges of this flap were stitched to surrounding structures, and the urethra made secure to the central opening. The wound was kept as fresh as possible, the patient placed upon light dietary, and an indiarubber catheter maintained in position. The temperature rose to 102° upon the second day, but was reduced, and he recovered, without any symptom of interest, in three weeks. In seven weeks he was able to work.

Several cases have been lately reported where the crura have been dissected from the rami after the manner first described by Mr. Pearce Gould. But I have only met with the reports of two cases where the dissection was as complete as that which I now report. One was a case described by Professor Annandale some years ago, where, if my memory does not fail me, he removed the penis and testes, but did not clear the pubic arch. The other is reported by Mr. Wheelhouse of Leeds, where, if I understand his description, the organ was severed anteriorly to a ligature or switch placed around it in front of the triangular ligament, and he further advised that, should any of the remaining portion of the crura look suspicious, it had better be clipped away. In any case I think it would be well to remove the whole of the crura at once, on the same principle that it is wise to remove the whole and not merely a section of the breast for scirrhus; it adds but little to the complexity or danger of the operation, and may be the means of preventing a recurrence. The case I have reported is also interesting inasmuch as the patient was only twenty-nine years old, and had never been the subject of phimosis. His inguinal glands at the time of operation were extremely hard, and I was sorely tempted to remove them. Indeed, in a few days after operation they felt so thoroughly malignant that I appointed a day for their excision. In a few days, however, the hardening quite disappeared. This accords with the observation of other surgeons. In my own practice I have had to deal with only four cases of epithelioma of the penis, in three of which I performed the ordinary flap amputation. In one case a recurrence occurred in the glands twelve months after operation. In the remaining three cases the stump was the seat of attack. In that where the glands became affected they were normal in every way at the time of the amputation, whereas in the other three instances they were enlarged at the time of the operation, but subsequently became healthy. Six months have now elapsed since the operation, and there is no sign of return. The patient is at work; has, of course, full bladder control, and suffers no manner of inconvenience except from a superabundance of skin, which is apt to become damp and irritable, but only to a very slight extent. The general conclusions I have arrived at with regard to future cases are: (*a*) when the diagnosis of epithelioma is beyond question, and the patient of a suitable age, the amputation should include the crura; (*b*) that the testes should, in the majority of cases, be removed; (*c*) that a scrotal flap should be saved as a covering for the perineum; (*d*) that there should be no hurry about excising enlarged inguinal glands; (*e*) the higher up the artificial penis can be brought, the more convenient to the patient, and the sooner it will unite to the surrounding tissues, as the discharges gravitate to the most dependent parts.

Liverpool.

[12] Playfair: Science and Art of Midwifery (1882), vol. i., p. 141.

[1] Shewn at the Liverpool Medical Institute.

[2] In dissecting I made a small puncture in the tense corpus spongiosum, and experienced great difficulty in controlling the hæmorrhage, which only ceased by leaving a Spencer Wells forceps upon the gap for about twenty-four hours.

TWO CASES OF HYPERPYREXIA OCCURRING IN THE COURSE OF ENTERIC FEVER.

By GRENVILLE E. MOFFET, M.B.,
SURGEON, ARMY MEDICAL STAFF.

HYPERPYREXIA occurring in the course of enteric fever is, I think, of sufficient importance to justify the publication of the following two cases:—

CASE 1.—M. W——, aged twenty, was admitted into hospital on Aug. 2nd, 1885. He had been feeling unwell for about ten days before admission, the chief symptoms then being slight chills towards evening, headache, restlessness at night, nausea, and frequent epistaxis, with slight diarrhœa—three or four stools daily. On admission, he complained of headache (frontal), rachalgia, and general weakness. Face flushed; eyes suffused; skin hot and dry. Temperature in axilla at 10 A.M., 102·8°; tongue dry, red at tip and edges; pain on pressure and gurgling in iliac fossa; a few rose-coloured spots over abdomen, which was slightly

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tympanitic; spleen distinctly felt under margin of ribs; heart sounds normal, but weak; pulse 120, weak and compressible; dulness over bases of both lungs; firm crepitation over right base and large subcrepitant râles over left; respiration 24 per minute. He was ordered poultices to the back of the chest, and an enema of starch and laudanum to control the diarrhœa; milk and lime-water (equal parts), and beef-tea thickened with arrowroot, to be taken in small quantity every hour. At 7 P.M. the patient was not any better. Temperature 104°; pulse 130, very weak and compressible; delirium, with subsultus tendinum and muscular tremors; two loose stools since morning; slight epistaxis. To have half an ounce of brandy every second hour during the night. At 10 P.M. there was considerable epistaxis, which was controlled by a hypodermic injection of ergotin. For the next six days there was no amendment in the patient's condition. The adynamia became more pronounced; he lay on his back low down in the bed; his gaze was fixed and stupid; the pulse was small and very compressible, ranging from 120 in the morning to 140 in the evening; there were fibrillary muscular tremors, subsultus tendinum, and sordes on the teeth and on the tongue, which was hard, dry, and brown; the respiration was laboured and hurried; the temperature ranged from 102·6° to 103·2° in the morning, and from 103° to 105·2° in the evening, till on the evening of August 9th it reached 107·2°. At this time the patient was in a state of high delirium, the radial pulse was hardly perceptible, respiration 66 per minute, and there was great restlessness and floccitation. It was resolved, under the circumstances, to try the effect of the wet pack, as the patient seemed dying, and that rapidly, from an overheated condition of the blood. An enema of two ounces of iced brandy having been administered, the patient was enveloped in sheets wrung out of water at a temperature of 80° F., the water being gradually cooled down to 50°. The effect of the wet pack is seen in the following table:—

Time P.M.	Temp. of bath.	Temp. of patient in axilla.	Remarks.
8·30	80°	107·2°	Condition of patient as described above. Enema of 2 ounces of iced brandy.
8·45	80°	107·4°	—
9·0	60°	108·0°	Respiration 68; restless.
9·15	60°	106·0°	—
9·30	60°	105·2°	Pulse 140; respiration 68. Enema repeated.
9·50	50°	103·8°	Pulse 120, stronger; respiration 60.
10·5	50°	101·6°	Tongue moist; delirium less; pulse 120. Wet pack stopped.

On stopping the wet pack the patient was removed to another bed, dried, and covered with a single blanket, two ounces of warm beef-tea being given at the same time. The tongue was moist, skin soft, no floccitation, and the pulse full and much stronger. At 11.30 the temperature was 101°, but by 12 midnight had again risen to 105°, when the wet-pack was again employed, with the effect of reducing the temperature at 2.30 A.M. to 102·2°; the pulse, however, was very quick and small (over 140), respiration 64 and laboured, lips livid, and face cyanosed. By 3 A.M. the temperature had risen to 105·8°, and at 3.15 the patient died.

Necropsy, nine hours after death.—Body emaciated. Cranial cavity: Membranes congested; sinuses engorged; ventricles contained a small quantity of serous fluid; brain substance congested; weight, 86 oz. Thorax: The lungs did not collapse on opening the thorax. Weight of right lung, 26½ oz.; lower two-thirds consolidated (red hepatisation). Left lung œdematous at base; exudation of frothy fluid on section; weight, 17½ oz. Heart: Weight, 17½ oz.; contracted; veins engorged; valves healthy; pericardium empty. Abdomen: Peritoneum slightly thickened; mesenteric glands much enlarged, size of small almonds, softened, and of a deep plum colour. Liver: Weight, 77 oz.; hypersæmic. Spleen: Weight, 31 oz.; greatly enlarged, congested, and softened. Kidneys: Weight, 7 oz each; capsule adherent; medulla slightly injected. Intestines: Mucous membrane congested, the lower third being of a slate-grey colour; softened at parts, and more deeply congested in lower half of jejunum and ileum, Peyer's patches being also prominent and congested in these parts; ulceration very slight, being limited to three small ulcers about the size of threepenny pieces in the ileum, near the ileo-cæcal valve. The solitary glands of the ascending colon were prominent and congested, but there was no ulceration. The mucous membrane was slightly injected.

CASE 2. G. T——, aged twenty-three, was admitted into hospital on Aug. 6th, 1885, with symptoms precisely similar to those of M. W——, but there was no epistaxis; the diarrhœa was greater, there being ten or twelve stools in the twenty-four hours; the tongue was dry and brown, with sordes on the teeth. The temperature at 10 A.M. was 103°, pulse 130, and respiration 48 per minute. Patient had been feeling ill for a fortnight before admission; he was therefore in a more advanced stage of the disease than the last patient. He was ordered ten grains of aromatic powder of chalk and opium, after each loose stool, to check diarrhœa; also to be given half an ounce of brandy every hour in milk; in other respects the treatment was similar to that adopted in the last case. At 7 P.M. the patient was very delirious; temperature 105°; pulse 148. The bowels had not been opened since 2 P.M. A draught of chloral hydrate (25 grs.) was prescribed, and an ice-bag was applied to the head. On the 9th he was somewhat better. Temperature at 9 A.M. 103°; tongue moist. Slept fairly well previous night; pulse 126, stronger; two loose stools since 6 A.M. On the 10th there was a decided change for the worse; delirium had supervened, and the patient was wild and noisy, having to be held down in bed; marked tympanites. He was ordered turpentine stupes to the abdomen, an enema of two drachms of tincture of assafœtida to a pint of tepid water, and small pieces of ice to suck; three leeches were also applied behind each ear. At 8 P.M. the delirium was less and the tympanites somewhat relieved, but otherwise there seemed no improvement. The temperature had risen to 108° (rectum); pulse 148, small and compressible; breathing shallow and laboured, 62 per minute. It was resolved, after consultation, to try the wet pack also in this case, the details being carried out in precisely the same manner as in the last case, and with the following result:—

Time P.M.	Temp. of bath.	Temp. of patient in rectum.	Remarks.
8·40	80°	108·0°	Pulse hardly perceptible at wrist; heart sounds feeble. Enema of 2 ounces of iced brandy.
9·0	60°	108·6°	—
9·20	60°	107·2°	Pulse 132, more volume; respiration 44.
9·40	50°	106·4°	Enema repeated.
10·0	50°	103·8°	Pulse 126; respiration 40; tongue more moist; involuntary evacuation of bowels. Wet pack stopped.

At 11 P.M. the temperature had risen again to 106°; pulse 130, feeble and fluttering; respiration short and hurried, 44 per minute. An iced enema of an ounce of brandy with an ounce of milk was administered, but was not retained. It was not considered advisable to try the wet pack again, as the man seemed rapidly sinking. At 12.10 A.M. the temperature had reached 109°, and remained at that height till 1 A.M., when death took place.

Necropsy, eleven hours after death.—Body emaciated. The cranial cavity presented the same appearances as in Case 1. Weight of brain, 63½ oz. Thorax: The lungs did not collapse on opening the thorax. The right lung weighed 22 oz. and the left 20½ oz.; both œdematous at base. On section a large quantity of frothy fluid exuded from the bronchi; retro-bronchial glands greatly enlarged, and of a dark bluish-grey colour. Heart: Weight 11 oz.; healthy; no fluid in pericardium. Abdomen: Peritoneum firmly adherent to the intestines, especially to the jejunum and ileum; mesenteric glands very much enlarged, softened, and of a dark slate colour. Liver: Weight 62 oz.; slightly hypersæmic. Spleen: Weight 13½ oz.; softened and friable. Kidneys: The right kidney weighed 6 oz. and the left 8 oz.; cortex pale; medulla greatly injected in both. Intestines: The mucous membrane of the small intestine was of a dirty brickdust colour, and softened. Twelve or fourteen ulcers corresponding to the patches of Peyer, and varying in size from half an inch to

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two inches in diameter, were seen extending from the ileo-cæcal valve to the lower part of the jejunum, those at the lower end of the ileum having a gangrenous appearance. The patches of Peyer in the upper half of the jejunum were prominent, congested, and surrounded with vascular rings, the mucous membrane over them being softened. The mucous membrane of the cæcum and ascending colon was deeply injected throughout, and presented several small ulcers (corresponding to the solitary glands), many of which had coalesced to form larger ones.

Remarks.—Both the above patients were soldiers, about the same age, living under the same conditions as regards food, surroundings, &c., and both came from the same barrack-room. It is interesting, therefore, to note (1) the marked similarity of the symptoms and the nearly identical course of the temperature; (2) the marked difference in degree of the intestinal lesions; and (3) the great disproportion between the temperatures and the intestinal lesions in the two cases. This last point bears out what Wunderlich says regarding the course of temperature in disease. "Even when the *course* of the temperature," he says, "is identical in two cases of fever, it by no means follows that both originate in the same way. It is, on the contrary, highly probable that the opposing circumstances of production and loss of heat in different cases, and even with an identical height of temperature, may vary very greatly."

Gibraltar.

ON A CASE OF SUPPURATION OF THE MASTOID CELLS SIMULATING INTRA-CRANIAL ABSCESS.

BY EDWARD COTTERELL, M.R.C.S., L.R.C.P. LOND.

IN the following case it will be seen that the history and symptoms pointed apparently to an intra-cranial abscess, so much so that the question of trephining, with a view to evacuating the confined matter, was discussed; but before proceeding to this somewhat hazardous operation, a free opening was made into the cells of the mastoid process, with the result of completely relieving the urgent symptoms and ultimately curing the middle ear disease. In using the words "hazardous operation," I do not mean to imply that the operation of trephining is *per se* hazardous, because, with all the resources of antiseptic surgery at our command, it is difficult to believe that there is any risk in the operation when carefully performed, but the hazardous nature of the proceeding in an intra-cranial abscess consists in hitting off the exact spot to trephine in order to evacuate the matter. The difficulty in diagnosing the exact locality of the abscess is admittedly very great, as the symptoms are in most cases vague and unreliable, whilst the differential diagnosis between a limited collection of pus in the cerebrum or cerebellum, and between a limited or diffuse meningitis, is beset with difficulties which in the present state of our knowledge it is impossible to overcome; but I think that most surgeons will be inclined to agree with the following statement made by Mr. Hulke in reference to these cases. He says:[1] "However, the fact that the clinicist is not yet in the position to form a certain judgment concerning the precise nature of the local disorder does not, in the presence of the almost certainly fatal termination of the otitic intra-cranial abscess when left to take its natural course, exonerate him from further efforts; when his judgment attains a high degree of probability, the propriety of a surgical operation for the evacuation of the abscess should be faced."

H. F——, a young lady aged fifteen, has the following history. Nine years ago, whilst playing one evening, she introduced a bead into her left external auditory meatus, and in trying to extract it only pushed it further in. The next morning she was taken to see a medical man, who made fruitless efforts to extract it. Two days after this she was taken to another surgeon, who endeavoured, whilst the child was under the influence of chloroform, to get the bead out; but he also failed. Nothing further appears to have been done, and chronic suppuration of the middle ear was naturally set up. Six months after its introduction the bead dropped out whilst she was having her ear syringed. But the expulsion of the foreign body did not cure the middle ear disease, and since that time she has suffered from chronic otitis media purulenta, the discharge being most offensive, and often making her sick by trickling down the pharynx. In February, 1885, she began to complain of intense headache, accompanied with vertigo. Gradually she became very strange in her manner, getting very excited at times, screaming at the top of her voice, and biting her fingers, bedclothes, or anything that came in her way. These symptoms became intensified at night, and her screams, or rather yells, quite disturbed the neighbours. Her head was shaved and ice applied to it. Large doses of bromide of potassium were administered in the day with chloral at night, but the symptoms rapidly became more severe and intensified; as photophobia came on the headache became very much worse, and about this time tenderness was noted over the mastoid process of the left side. The screaming fits now became much more severe and prolonged, and during her paroxysms she would jump up and throw herself about the bed, becoming very violent and attempting to bite anyone who touched her. The optic discs were normal.

At this stage I came to the conclusion that the case was either one of meningitis or of abscess within the cranium, as the symptoms seemed too severe for pus pent up in the mastoid cells. Having obtained permission of her friends to operate, I determined first of all to trephine the mastoid cells, and see if that would do any good, though I confess I had no faith that it would; and should no pent-up pus be found there, I was prepared to trephine over the temporo-sphenoidal lobe and explore that region for an abscess, or, if a limited meningitis were found, to wash out and drain—treating it, in fact, as an ordinary abscess. Accordingly, on March 9th, the patient being under the influence of chloroform, an incision was made over the left mastoid process, and the cells thoroughly opened up with a gouge. About a drachm of fetid pus was evacuated, and then a free communication was established between the external wound and the tympanum with a tooth elevator. A small drainage-tube having been inserted, iodoform powder was blown in and the wound dressed with iodoform wool. On recovering from the anæsthetic her headache was better and she had no more delirium or screaming fits. The wound healed by granulation, small scales of dead bone occasionally coming away. It is now over eighteen months since the external wound closed, and since then she has been completely free from all discharge and from pain in her ear and head, so that I think she may be looked upon as cured.

Bicester.

[1] THE LANCET, vol. ii. 1886, p. 3.

A CASE OF DIPHTHERIA OF THE VAGINA WITHOUT THE THROAT BEING AFFECTED.

BY SURGEON JAS. B. CLIBBORN, R.N.

(*Communicated by the* DIRECTOR-GENERAL OF THE MEDICAL DEPARTMENT OF THE NAVY.)

MRS. T——, the wife of a private in the Royal Marine Light Infantry, when attending her child, who was suffering from diphtheria, was scratched by him on her right wrist. Some days after (time uncertain) a few isolated, inflamed, vesicles that were very painful appeared on the wrist, which implicated the glands at the bend of the elbow and axilla. There was no pyrexia, and the throat was not affected. The wrist soon healed under treatment, and the inflammation in the glands subsided, when a fresh crop of vesicles appeared around the nipples of both breasts; there was still no rise in temperature, and the patient complained of little inconvenience beyond weakness and general malaise. The latter crop of vesicles went away as rapidly as those on the wrist, but the patient complained of weakness, daily increasing, accompanied by anorexia, with insomnia; she also stated that there was a fetid discharge from the vagina. On making a vaginal examination the mucous membrane was found to be greatly inflamed, discharging pus and covered in parts with well-developed shreds of false membrane. The constitutional symptoms now rapidly developed, asthenia increased, and the patient suffered at times from delirium and delusions, and had one well-marked epileptiform convulsion. The urine contained a small quantity of albumen. The highest temperature taken only

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indicated 99·4°; the throat at no time presenting an inflamed appearance. The inflammation in the vagina daily increased, large shreds of false membrane, almost forming complete casts of the vagina, were discharged; asthenia was great; the pulse small and compressible; the pupils were frequently irregular, and responded feebly to light. About this period of the disease the patient (who was five months pregnant) was attacked with well-marked labour pains, occurring at regular intervals. As it was considered that, should a miscarriage take place, the disease would extend to the uterus, with a probably fatal issue, very large doses of opium were given with a view of stopping the uterine contractions, which had the desired result after the patient had taken about five grains of this drug. Under treatment the discharge from the vagina became less, and the development of false membrane decreased till about ten days after its first appearance, when it had entirely disappeared. Convalescence rapidly took place, and the patient, who was removed to the country, was subsequently delivered of a living child, with no bad results.

Treatment.—Carbolic acid combined with quinine was given internally every three hours (each dose containing one minim of carbolic acid, ten minims of glycerine, and one drachm of tincture of quinine, in an ounce of water), the urine being carefully watched during its administration. Iodoform was applied locally with vaseline (a drachm to the ounce). When the vagina became affected, it was frequently washed out with a solution of permanganate of potash. Strips of lint soaked in iodoform and vaseline were introduced into the vagina and changed every few hours. Stimulants and strong liquid food were given in large quantities when the asthenia was great.

Remarks.—This is one of several cases I have treated with carbolic acid and quinine given internally in this disease; the results so far have been more satisfactory than any other treatment I have seen tried. The cases in which it has been adopted have, however, been too few as yet to merit more than a suggestion that it is worthy of a more extended trial.

POISONING BY BENZOLINE VAPOUR.

By A. G. R. FOULERTON, M.R.C.S., L.R.C.P.,
RESIDENT MEDICAL OFFICER, ROYAL ISLE OF WIGHT INFIRMARY.

POISONING by benzoline is of sufficiently rare occurrence to warrant the recording of the following case, in which, however, as will be seen, the effects of the poison may have been complicated to some extent by the high temperature in which the patient was at the same time placed.

W. S——, aged twenty-five, a well-made and healthy-looking German, entered a zinc tank used for the storage of benzoline, and then all but empty, at 9 A.M., and at 11 A.M. was found lying insensible at the bottom of it. The tank was some 5 ft. 6 in. high, with a small man-hole at the top, and exposed to the direct heat of a powerful sun, a thermometer inside registering 105° F. Shortly afterwards, when the man was brought to the infirmary, I found him in the following condition: Smelling strongly of benzoline; unable to stand, but capable of answering simple questions in an indistinct sort of way; moaning occasionally, and from time to time bursting into a hysterical laugh; face flushed; surface of body and limbs cold and clammy; muscular tremors and twitchings in the legs and arms; pupils widely dilated, reacting to a strong light stimulus; pulse 88, full and soft; respiration from 8 to 9 in the minute, deep and stertorous, irregular in rhythm, as much as fifteen seconds intervening between the separate inspirations; heart's action feeble; temperature in axilla 98·8°. Shortly after admission he vomited freely, the ejected matters being bile-coloured and smelling of benzoline.

The man was given at once twenty-five minims of solution of ammonia with half a drachm of ether and put to bed, wrapped up in blankets, and hot-water bottles used. He then had half a drachm more of ether with some brandy, and was given frequent half-drachm doses of aromatic spirit of ammonia. For about two hours the patient remained in much the same condition, becoming at times absolutely unconscious, his breathing also getting worse at intervals. At the end of that time he began to improve rapidly, and was soon afterwards able to give a rational account of himself, but could not say how long he had been in the tank before he lost consciousness. His pupils were still dilated, and he complained of bad headache. He then had an attack of profuse sweating, and by the evening had completely recovered, no trace of his misadventure remaining beyond some slight headache. The temperature and respiration were normal, and the pulse 76. The urine passed presented nothing extraordinary, and a motion following the administration of half an ounce of castor oil was of a dark-green colour.

From these symptoms it will be seen that benzoline is a well-marked example of an inebriant poison. It was not thought necessary to give an emetic, as the man had merely been exposed to the vapour and had not swallowed any liquid benzoline; he settled the matter, however, by vomiting spontaneously. Theoretically, brandy and ether (being themselves inebriants) would seem to be contra-indicated, but the result was sufficiently satisfactory to justify their use. Looking back on the case, I cannot help thinking that the man might have been further benefited by a little bloodletting, for I regard the main symptoms as pointing to failure of the heart's action, diminished capillary tension, and consequent stagnation in the venous system, with overdistension of the right side of the heart. Were a similar case to occur to me again, I should be content, I think, with the application of external warmth and moderate bleeding and the free use of ammonia.

Ryde.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Prooemium.

UNIVERSITY COLLEGE HOSPITAL.

SARCOMA OF THE RECTUM; LITTRÉ'S COLOTOMY; RELIEF; REMARKS.

(Under the care of Mr. ARTHUR E. BARKER.)

THE malignant growth met with in the rectum is almost always the adenoid or cylindrical epithelioma, sometimes undergoing colloid degeneration. Scirrhus and encephaloid are very rare, and it is probable that recorded cases of the latter will become fewer as the microscopical examination of these growths is more regularly conducted, many cases which would otherwise have been classed as encephaloid proving to be of sarcomatous nature when thus examined. The reasons which induced the operator to prefer Littré's operation to that of left lumbar colotomy, which is usually practised when local removal of the growth is impossible, will be found in the remarks appended to the case.

H. A——, aged thirty-eight, a labourer, was admitted into University College Hospital on July 29th, 1886, on account of diarrhœa alternating with obstruction of the rectum, and severe pain, the result of growth in the bowel. His sufferings began with violent diarrhœa in the previous March, which lasted about two months, and was followed in June by constipation. On straining blood was passed, but pain was not complained of until the end of June. It was then a well-marked symptom, especially at night and during efforts at defecation, which were usually fruitless.

On admission a large mass of growth could be felt in the rectum, almost completely surrounding the bowel. It was soft and lobulated, and completely blocked the passage. A portion of it, as large as a hen's egg, was broken off with the finger by Mr. Heath on July 30th, and was found on microscopical examination to consist of fibro-sarcoma. Profuse bleeding followed, but was checked by plugging of the rectum. As there seemed no prospect of benefit from any local operation and the patient's sufferings were severe, it was determined to open the colon and establish an artificial anus. This was done by Mr. Barker on Aug. 18th by Littré's method. All antiseptic precautions having been observed, an incision was made from a point just internal to the anterior superior spinous process of the ilium, downwards and inwards for about three inches, terminating about an inch above Poupart's

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ligament. The several layers of muscle were divided on a director until the subperitoneal tissue was reached. Only three small vessels required attention and were closed by forcipressure. When all oozing had been arrested and the wound had been thoroughly dried, the carbolic spray was turned on and the peritoneum was opened in the direction of the skin wound for about an inch and a half. The parietal peritoneum was then stitched over the cut muscles to the skin by four fine silk stitches on each side. Into the now funnel-shaped opening a portion of the sigmoid flexure of the colon was drawn and secured. It had not at once presented in the wound, but was easily found on pushing aside the coils of small intestine which at first appeared. There was not the slightest difficulty in drawing it into the desired position or fixing it. This was done by means of eight fine silk sutures on either side and one extra one at the angle where it seemed to be needed. These sutures only passed through the serous and muscular coats of the bowel and then through the parietal peritoneum and skin. Special care was observed to obtain firm contact of the two serous surfaces at each angle of the wound. The surface of the gut included by the oval of stitches measured about an inch long and half an inch broad. The operation was completed by closing the angles of the skin wound by silk sutures, but the bowel was not yet opened. The area of operation was then dusted with iodoform and dressed with strips of salicylic wool; over these a thick pad of ordinary wool was secured by a spica bandage.

After the operation the patient was very comfortable, sleeping and taking food well. The rectum continued for the first few days to discharge thin sanious mucus from the growth, but little or no fæces, There was no pain either in the rectum or the wound, and his general condition was excellent. The first dressings were not disturbed until the fourth day, when the wound was found in a most satisfactory condition. The surface of the bowel bulged forwards into the opening, and was covered with almost dry plastic lymph, which united it also to the parietal peritoneum. There was no irritation about the stitches. The same dressing was applied as before. The wound was again uncovered on the sixth day, and was observed to be healing perfectly. The patient's state was so satisfactory that the bowel was not opened till the eighth day. The prominent area of the bowel was then simply notched with scissors, and an opening an inch long made through all its coats. These were now everted and secured with four silk stitches. Hard scybala were seen in the opening, but were not disturbed. Iodo-vaseline was now smeared round the edges of the wound and skin, and a pad of oakum was laid over all. No anæsthetic was used for this opening of the bowel, and so perfectly well did the patient feel that he asked "was he not to get off the operation-table and walk into the ward." After this convalescence was uninterrupted. There was no trouble with the wound, the angles of which healed partly by granulation. On the tenth day a hard motion was passed by the new anus, which continued henceforth to act regularly, nothing but bloody slime passing by the rectum. In order to check this latter discharge if possible, the rectum was washed out both per anum and by the new opening with water, and later with a decoction of hæmatoxylin. Iodoform bougies were also introduced, but the running from the surface of the growth continued. Beyond this the patient's general condition was as good as could be. The bowels acted regularly, sometimes aided by aperients; the new opening working admirably; no fæces passed by the rectum. The patient was able to attend to his bowels himself, and to cleanse the parts after each motion thoroughly. He remained in hospital (up each day) until Oct. 8th, and then left for Highgate Infirmary. It was plain, however, that the cachexia was increasing before he left.

Remarks.—After alluding to the comparative rarity of sarcoma of the rectum, of which this was a typical example, Mr. Barker said that he was led to adopt Littré's method of opening the colon—i.e., in the groin—from the following considerations:—In the first place the seat and amount of the obstruction was well known, and also the extent of the growth. There was consequently every prospect of finding the sigmoid flexure quite healthy so far above the latter. The opening in the groin is easier to get at during a motion, and easier to cleanse afterwards, than one in the loin. Although the peritoneal cavity is opened in Littré's operation, the use of antiseptics reduces the consequent risk almost to vanishing-point; moreover, the difficulty of avoiding injury to the peritoneum by Amussat's method is considerable, and the membrane is often wounded. The operation in the groin is, on the whole, easier in cases in which there is not extreme distension of the colon. In such cases, where immediate relief of the obstruction is demanded, the operation in the loin is probably the safest, and perhaps the easiest. But where the obstructive symptoms are not very severe, and the bowel can be left unopened for a day or two, Mr. Barker would prefer Littré's operation, as giving more comfort to the patient, the opening being more under his control than if in the loin.

TOTTENHAM HOSPITAL.

COMPOUND DEPRESSED FRACTURE OF SKULL; TREPHINING; RECOVERY.

(Under the care of Dr. E. HOOPER MAY.)

WALTER B——, aged seven years, was admitted on April 15th, 1886. He was throwing stones at a cart-horse which was loose on the marshes, when it turned suddenly and kicked him on the forehead. He was found to be suffering from a compound depressed fracture of the frontal bone. The wound was to the right side of the middle line, and extended out and down immediately above the supra-orbital ridge for a distance of two inches. The two tables of the skull were seen to be driven in beyond the level of the inner table of the surrounding bone. The hæmorrhage from the wound was considerable; there was no escape of brain substance, but serum was discharged as well as blood from the wound. He vomited frequently, the vomit consisting of his recently partaken dinner. No squint, no paralysis, and no pain. He appeared to be drowsy, at times lapsing into stupor, which lasted about a minute and a half, the face becoming blanched; on return of consciousness he cried to be taken home, and resented any examination of the wound. Pulse 72.

Chloroform being administered, the wound was enlarged and a disc of bone raised from that surrounding the outer edge of the depressed portion. A small trephine was employed, and by means of necrosis forceps three-fourths of the outer part of the depressed fragment was removed with some difficulty owing to the firm impaction. The remainder of the depressed bone was raised to the level of the surrounding bone and a large separated piece of the inner table removed. The sharp corners of the perforation in the skull were snipped off with bone forceps. The dura mater was found to have a small perforation at the lower part of the wound. The edges of the wound were united by sutures of carbolised silk, a rubber drainage-tube inserted, and a dressing of dry perchloride gauze and salicylic wool applied, with a gauze bandage stitched over to form a cup. The pulse, which had during the operation gone down to 60, now rose to 72. He was sick several times after the chloroform, and once vomited dark blood. The diet ordered was milk and beef-tea, and a powder of three grains of calomel was prescribed at bedtime. A subcutaneous injection of morphia was administered during the night because of restlessness. It produced sleep, although disturbed at times by sudden cries.

April 17th.—The bowels had not acted since admission; restless. Calomel powder repeated. Feels hungry; crying out for solid food. Wound dressed; tube removed; only small quantity of sanious discharge. Perchloride of mercury lotion (1 in 1000) used to irrigate wound.

18th.—Calomel had acted; appetite somewhat impaired. The wound was not dressed again until the 24th, when the sutures were removed. The edges had united except where the tube had been.

May 17th.—Temperature 100° F., with an evening one of 99°, apparently due to a slight catarrh. It had never risen above normal previously, and in a few days subsided to its former condition.

28th.—He was discharged with wound firmly healed. The scar was in the form of two sides of a triangle, the apex pointing down, each side enclosing the angle measuring an inch and a half. The perforation in the bone was felt to be uniform, and measured an inch and a quarter by half an inch. So that as the bone removed measured two inches by one, there had evidently been considerable formation of new bone. Pulsation of the brain was felt through the perforation in the skull. The intellectual faculties were extremely active, his aptitude for mental arithmetic being exceptional.

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ST. GEORGE'S HOSPITAL FOR DISEASES OF THE SKIN, LIVERPOOL.

ULCERATING POST-NATAL NÆVUS.

(Under the care of Mr. RICHMOND LEIGH.)

A. G——, aged four weeks, when first seen, had a peculiar nævoid patch in the right temporo-malar region, about six inches in length by two and a half in width. There were similar smaller patches on the upper lip and ear, and others, very small, in the scalp. The various patches had each the exact appearance of a nævus, were slightly elevated above the surface of the skin, and varied in vividness of colour according to the state of the circulation, being brightest when the child was excited, especially when crying, and palest when it was sleeping. The main patch was slightly ulcerated in places. The first appearance of the disease was at the age of two weeks, and the growth had since then rapidly increased to the size mentioned. The child's general health was good; it was well-nourished, and had only its mother's milk. The disease improved slowly under treatment, disappearing in some parts while extending in others; but, on the whole, not much progress was effected. Ethylate of sodium was applied to a portion of the growth several times, but without good effect, the scab caused by it, on being shed, leaving an ulcerated surface. This ulcerative tendency prevented the use of strong remedies, and, in spite of treatment, proceeded, in the patch affecting the ear, almost to gangrene, eating through a portion of the lobe. No ethylate had been used to this part. Subacetate of lead and zinc ointments were used with some advantage, lessening the ulcerated surface, which was also effected by boracic cod-liver oil. Iodide of iron was given internally.

The parents leaving town, the child passed from under observation, the disease being still extensive, and having a malignant look in places. In spite of this, the child's health was better than it had been, the mother remarking that it was "getting fat." The case was under treatment for a little over four months, and when last seen the disease was rather less than at the beginning of treatment.

NEWCASTLE-ON-TYNE INFIRMARY.

SUBPERIOSTEAL SARCOMA OF TIBIA.

(Under the care of Mr. PAGE.)

WE are indebted for the notes of the following case to Mr. F. P. Maynard, M.B., house-surgeon.

R. H——, aged twenty-one, single, was admitted to Ravensworth ward on Sept. 9th, 1886, complaining of a swelling of the left calf. Had always enjoyed good health, and his family history was good. Six years ago he had his left ankle badly bruised by a horse. Last April he felt aching pain deep seated below the inner tuberosity of the left tibia, which was somewhat better at nights. A week later the knee became stiff and began to swell. The swelling, he says, was hard all over, well defined, immovable, not tender, the skin not being red, and it increased rapidly.

On admission he was found to be a tall man, weakly in appearance, and all organs healthy. The left leg lies on its outer side, semi-flexed; the thigh is atrophied. Situated on the inner surface of the upper third of the leg is a flattened oval swelling, commencing above at the line of the knee joint, and extending below to the upper portion of the middle third of the leg, being seven inches long, and reaching in front to the crest of the tibia; behind, it reaches beyond the middle line, filling the lower half of the popliteal space, measuring nine inches and a half in its broadest transverse diameter. Œdema extends about two inches beyond these easily defined borders all round. The tumour fluctuates all over, or, rather, is elastic; is deeply attached, but does not crackle anywhere. The skin over it is reddened, but not adherent, due to its having been blistered previously to admission. The leg and foot are much swollen from œdema. There is no fluid in the knee-joint, and neither swellings nor tender spots can be felt in the thigh or groin. An exploring needle drew off bloody fluid, containing large numbers of round, oval, and tailed white cells.

Mr. Page amputated through the middle of the thigh, using the continuous suture. On examination a tumour was found lying between the gastrocnemii and soleus, and spreading upwards till it was in contact with the margin of the semilunar cartilage of the knee-joint. It was yellow in colour, and lobulated on its surface; on section it presented a soft friable gelatinous substance, exuding an oily liquid on pressure, and containing numerous cysts, one as large as a hen's egg. At the upper portion it was developing into cartilage and calcifying. The tumour had not infiltrated the muscles, but had a thin but distinct capsule, which at its margins became continuous with the periosteum of the tibia. Where it was in contact with the bone—posterior and inner surfaces of upper end of tibia—there was no periosteum and no capsule, but the growth was invading the bone, making small excavations on its surface. Microscopic examination made by Dr. Limont showed the tumour to be a spindle-celled sarcoma developing into cartilage and calcifying in places.

This case differs from the majority of similar cases collected and described by Mr. Butlin in his work on Sarcoma and Carcinoma in three points only—viz., his cases generally affected older persons, showed a greater tendency to implicate the skin and fungate, grew more slowly, and were seldom of the spindle-celled variety; like his, the lymphatic glands were unaffected. The man is and will remain under observation.

GLASGOW EYE INFIRMARY.

TWO CASES OF CONICAL CORNEA; REMARKS.

(Under the care of Dr. J. CRAWFORD RENTON.)

CASE 1.—A. S——, aged twenty-two, was admitted on July 26th, 1885. Complains of dimness of vision in left eye, with which he can only distinguish light and shade. On examination, well-marked conical cornea is observed. Vision of right normal when aided by + 1·75 D cyl. placed horizontally.

July 27th.—Two drops of solution of cocaine (4 per cent.) were introduced into the left eye, the cornea being afterwards carefully bathed with antiseptic solution. When the cornea was non-sensitive, Bowman's medium-sized trephine was applied to the apex of the cone, and the layers of cornea carefully removed down to Descemet's membrane; through it the anterior chamber was punctured and the eye bandaged.

Aug. 15th.—Case has progressed favourably, and patient was dismissed, to return in two months.

Oct. 16th.—Readmitted. Iridectomy performed downwards and inwards.

Nov. 15th.—Sees No. 16, unaided by spectacles.

Feb. 20th, 1886.—Aided by + 3·50 D cyl. placed horizontally, he sees No. 6.

CASE 2.—H. C——, aged eighteen, was admitted on March 19th, 1886. Complains of dimness of vision in both eyes; sees No. 20 with right; counts fingers with difficulty with left. On examination well-marked conical cornea is noted in both eyes.

March 22nd.—The operation of trephining was performed, as above described, on the left eye.

29th.—The same operation performed on the right eye, the trephine not being carried so deeply as in the left.

April 19th.—Both eyes have progressed favourably, the left having a very dense cicatrix, the right much less so. An iridectomy was performed downwards and inwards in left eye.

May 7th.—Sees No. 6 with right eye and No. 14 with left.

July 14th.—Sees No. 4 with right eye and No. 8 with left; aided by — 3 D sph. the vision of left is raised to No. 4, so that the two eyes are equal for near objects. Distant vision is the same in both eyes.

Remarks.—The above cases illustrate well the value of Sir Wm. Bowman's admirable operation for conical cornea. The good result in the right eye of the second case, in which the trephine was not carried so deeply as usual, suggests the advisability of trying this in future cases. No proximate or remote cause could be discovered to account for the conical cornea. Both patients were healthy young lads who had not strained their eyes in any special manner; some congenital weakness must therefore be blamed for the defect until our knowledge is more perfect.

CENTRAL MEDICAL ASSEMBLY ROOMS FOR ST. PETERSBURG.—The Pirogoff Surgical Society of St. Petersburg is taking the lead in a movement for providing a central place of meeting for all the medical societies, where also accommodation will be found for all their libraries.

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Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

Tuberculous Mass in Supra-renal.—Ascending Antero-lateral Tract.—Tumour of Palm of Hand.—Intra-bursal Fibroma.—Hyoidal Cysts.—Melanosis of Hard Palate.—Tumour of Palate.—Acute Necrosis of the Fourth Cervical Vertebra.

AN ordinary meeting of this Society was held on Tuesday last, Dr. J. Syer Bristowe, F.R.S., President, in the chair.

Dr. HARRINGTON SAINSBURY exhibited a specimen of Tuberculous Mass in the Supra-renal Body. The patient had a lumbar abscess, widespread tubercle, and lardaceous disease. The specimen contrasted with the change found in Addison's disease. Was the fibro-caseous change in the latter disease a primary or secondary one? Secondary affections were generally to be regarded as chance affections and subject to the laws of chance. If the bilateral supra-renal lesions of Addison's disease be tuberculose and secondary, there should, according to the law of chance, be a relatively large number of cases of unilateral secondary lesion like the specimen shown. Routine examinations of the adrenals was necessary to determine this. It was probable, however, that the lesion of Addison's disease was primary and to be regarded as a system disease.—Dr. KINGSTON FOWLER had seen cases of tuberculous masses in both supra-renal capsules associated with general tubercle. There was a difference in the appearances of these from those met with in Addison's disease.

Dr. COUPLAND exhibited a specimen of Tubercular Affection of both Supra-renal Capsules from a man aged forty-six, in whom there was also widespread disease of the urinary tracts. He was convinced of the tubercular nature of the adrenal change in Addison's disease. In four cases the bacillus had been found, and although Dr. Curnow and Dr. Maguire have not discovered the bacilli, still, as the latter remarked, they were not abundant in caseated areas. It was possible that the degree to which the change had advanced might explain the difference in the appearances of the capsules.—Dr. G. N. PITT said that in disease of the spine the supra-renal capsules were sometimes affected and probably secondary. In some cases of local sympathetic disease the skin was pigmented.—Dr. S. WILKS said that Addison's disease was evidently a primary disease; it was not tuberculous in the ordinary sense, but the outcome of a chronic inflammation like cirrhosis of the liver.—Mr. D'ARCY POWER had examined two cases of caseous disease of the adrenals associated with general tuberculosis and all the signs of Addison's disease.—Dr. HADDEN had shown a specimen in which no fibro-caseous change was present, but merely an interstitial fibroid change in a case of Addison's disease. In other cases both bodies were enormously enlarged; in some from tuberculous disease; in others from cancerous disease, but without the symptoms of Addison's disease. He thought a destructive change was a *sine quâ non* of Addison's disease.

Dr. SHERRINGTON gave an account of the Ascending Antero-lateral Tract of the Spinal Cord. He exhibited transverse sections of the spinal cord of the human fœtus of the seventh and eighth month. They had been stained with osmic acid &c., so that the developed tracts were black, and the other white matter with the grey matter were coloured pale yellow. Besides the pyramidal tracts, there were bands of undeveloped fibres in the periphery of the antero-lateral column, except where the direct cerebellar tracts were situate. The "ascending" tract begins at the front end of the anterior median fissure, and extends circumferentially back to the crossed pyramidal tract. This tract becomes fully developed late in fœtal life, and may be traced from the second sacral nerve upwards as far as the region of the antero-lateral nucleus. He wished to ascertain how far it corresponds to the ascending antero-lateral tract of Gowers and Hadden. There was another tract found degenerated in tabes dorsalis by Lissauer; it was wedge-shaped and situate near to the exit of the posterior roots; it extended throughout the cord, but not above the level of the decussation. In the dog there was no anatomical evidence of the ascending tract, but he had made experiments on this animal. He practised division of the posterior half of the spinal cord of the dorsal region, followed by later division of the anterior part, with electrical and other excitations to the sciatic nerve; the sensory reaction being determined by rise of blood-pressure. He found that the rise was often very great, even when the spinal cord was almost completely divided, which would favour the belief that there was a sensory tract in the periphery and anterior portion of the antero-lateral column.—Dr. G. N. PITT said that the column was known as Gowers' tract, and as such was described by Obersteiner of Vienna. There were variations in the shape of the tract. Whether the tract described in the fœtus by Dr. Sherrington and the above exactly correspond was a moot point. About the eighth month these ascending tracts began to develop, and the cutaneous functions of the skin also began to be exercised; was there any causal relation between the two occurrences?—Dr. HADDEN said that Dr. Bastian had described the tract many years ago, and his own case occurred later by one year than Dr. Gowers' description.—Dr. ORMEROD remarked that some cases of annular sclerosis might be attributed, not to degeneration of any special system, but rather to an extension of a meningitis.

Dr. SYDNEY JONES exhibited a large specimen of Tumour of the Palm of the Hand from a woman aged twenty-five, in whom it had been growing for eleven years. It reached from above the anterior annular ligament and encroached on the forefinger and the thumb, and also extended to the root of the middle finger. It was removed without much difficulty. It was composed of lobulated masses of soft fibromatous nature, and distinctly encapsuled. He had seen two tumours of the kind during the last year, but had never seen one so large as this. Large nervous cords pass around the pedicle of the tumour; but, with the exception of numbness of the middle finger, no nervous symptoms had resulted from the removal.

Mr. MAKINS showed specimens of Intra-bursal Fibroma. He considered that such growths originated in hypertrophy of the walls of bursæ and sheaths of tendons; also in thickening of the walls of ganglia formed by hernial protrusions of tendon sheaths. Specimens were shown of these growths (1) in the bursa patellæ; (2) in tendon of the biceps about the knee-joint, and from other parts. The sheath of the tendon of the middle finger was sometimes the situation of them. A papillary form of growth was frequently observed. Pedunculated forms of cartilaginous tumours were also of similar origin. Hypertrophied synovial fingers might be regarded as fibro-lipomata.—Mr. B. SUTTON considered that Mr. Makins had offered a true explanation of Mr. Jones's case—that it was a thickened ganglion. It was possible to trace transitions between inflammatory, fibromatous, and sarcomatous changes in bursal walls. In the Medico-Chirurgical Transactions he had described pedunculated bodies resulting from hypertrophied villi in knee-joint, shoulder, and ankle-joints. A "lipoma arborescens" was degenerated synovial villi.—Mr. H. T. BUTLIN doubted whether the explanation of Mr. Makins held good, for there was no tendon sheath that reached continuously from the finger to the annular ligament.—Mr. ROGER WILLIAMS joined in the discussion.

Mr. J. BLAND SUTTON described cases of Cysts in the neighbourhood of the Hyoid Bone. The first patient was a man who presented a tumour the size of a large walnut, occupying the floor of the mouth, bulging forward in the middle line. During the nine years he had noticed it he had submitted to seven operations. An anæsthetic was administered, and it was ascertained the cyst lay between the two genio-hyo-glossi muscles, and was so firmly attached to the hyoid bone as to need a raspatory to detach it. It was full of sebaceous matter, and contained a few hairs. The walls were composed of dense tissue, lined with squamous epithelium and dotted with sebaceous glands. The second patient was a woman, aged twenty-seven; the cyst in her case also was dermoid, and contained sebaceous material. Mr. Butlin, in his work on the tongue, inferred that these cysts were very rare. He spoke of about twenty recorded cases, but it is not difficult to find three times this number, for the cases described as sebaceous cysts of the tongue were really of the same nature as dermoids. Sebaceous cysts arising in the tongue, like those occurring beneath the deep cervical fascia, differed from those arising as a result of obstruction to the duct of a sebaceous gland. In branchial fissures incompletely obliterated, and in a persistent lingual duct, cavities lined with epithelium beset with sebaceous glands, which poured their secretion into the duct or persistent branchial space, existed. That

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many of the so-called ranulæ arose from the lingual duct, and persistent portions of branchial fistulæ, was beyond doubt. The lingual and thyroid ducts might be detected in 10 per cent. of all bodies examined, and the thyroid duct in 15 per cent. Streckeisen found the latter duct and accessory thyroid cysts in about 25 per cent., but this might be accounted for by the facts that he obtained his material from a goitrous district. Mr. Sutton was induced, in part, to follow up the investigation, because Dr. Norman Moore stated before the Society that accessory thyroids were very rare. Many cystic tumours described as arising in the thyroid body really originated in accessory thyroid bodies and detached portions of the thyroid duct, and every transition might be traced from cysts lined with epithelium and filled with mucus to others containing papillary contents, of which a very beautiful example was exhibited last session by Mr. Bilton Pollard. The most aberrant examples, and at the same time the most malignant forms, were such cysts as Mr. Treves exhibited before at the last meeting. Cysts in the neighbourhood of the hyoid bone might be compared with cysts found in the ovary and its neighbourhood. 1. Cysts lined with epithelium, and filled with clear or mucoid fluid. 2. Cysts with papillary or villous processes projecting into their interiors. 3. Cysts with malignant carcinomatous growths sprouting from the walls. 4. Dermoid tumours.—Mr. H. T. BUTLIN could not concur entirely in the views expressed. There were cysts situated between the mylo-hyoid and the genio-hyo-glossus muscles, and nowhere near the middle line.

Mr. TREVES exhibited a specimen of Primary Melanotic Tumour of the Hard Palate from a woman aged fifty-eight, who was almost edentulous, and who for four years had worn a "false palate," which irritated the front and right side of the palate near the alveolus. In this region a tumour at first appeared of the size of a pea, but rapidly grew. When first seen it was a flat swelling covered by natural mucous membrane, but very black, or rather mottled, in appearance. There was severe pain. With chisel and mallet the portion of hard palate containing the tumour was successfully removed. It was a large spindle-celled sarcoma growing from the periosteum; recurrence of the growth took place after some months. The mucous membrane of the mouth of lower animals was much pigmented, and the present almost, if not quite, unique case seemed to indicate a reversion to a lower type.

Mr. BOWLBY (for Mr. Stephen Paget) showed Tumours of the Soft Palate. One from a man aged sixty; it easily shelled out, was well encapsuled, was a mixed-celled sarcoma, and contained embryonic muscular fibres and also tubular glands. The second tumour had a hyaline matrix with enbryonic cells and incipient tubular glands.

Dr. S. WEST showed a specimen of Acute Necrosis of the Fourth Cervical Vertebra from a man aged forty-eight. The disease began with pain in the shoulder, and this was followed by loss of power in the left hand. No cause could be discovered for the disease, unless it were a syphilitic affection of the periosteum. Later in the course of the case the left arm became completely paralysed and the right weak; still later there was complete paraplegia and a rapidly formed bedsore. The temperature rose to 108° before death.

The following card specimens were shown:—Mr. E. H. Fenwick: Calculus formed round an Umbrella Ring. Mr. Shattock: Parts after removal of the Ovary six months previously. Mr. Targett: Sarcoma removed from Sacral Region (recent).

MEDICAL SOCIETY OF LONDON.

The General Principles of Removal of the Uterine Appendages.

AN ordinary meeting of this Society was held on Monday last Mr. R. Brudenell Carter, F.R.C.S., President, in the chair.

Mr. LAWSON TAIT read a paper on the General Principles involved in the Operation of Removal of the Uterine Appendages. He took as his text the paper of Sir Spencer Wells in the *International Journal of Medical Sciences*. The number of operations to be performed must remain at present an unknown quantity. Nomenclature was the first general principle. He objected to the employment of the terms "spaying" and "castration." "The confusion resulting from faulty nomenclature was evident in Sir Spencer Wells's article, because he seems to assume that the removal of the uterine appendages has an argument against it in that it involves the non-production of the whole series of beings that might result from the subject of the operation." This could be no argument where the sterility of the woman is already frequently secured by the presence of serious disease. The mortality of the operation is not 14½ per cent., as stated by Sir Spencer Wells. The mortality in Mr. Tait's hands has only been 2 per cent. In cases of ovarian dysmenorrhœa and neuralgia, which have resisted all treatment, and in which life or reason is endangered, the operation should be limited or extended largely by the social position of the patients. In women who have to work for a living, it is impossible not to see the necessity of extending it to a much larger proportion of cases than in the upper ranks of life. For nervous excitement and madness, the operation, he agreed with Sir Spencer, was inadmissible except in certain cases of menstrual epilepsy. Of course the consequences should be explained to a sane patient. Mr. Tait said that Sir Spencer had completely misunderstood and confused the facts of his (Mr. Tait's) work. He considered that the diagnosis of the presence of irreparable disease in the ovaries was not only possible, but he had correctly performed it in hundreds of cases, dating from 1871. As showing the frequency of tubal disease, mention was made of four deaths from this cause in Queen Charlotte's Hospital, and these cases, during life, were regarded as puerperal fever. His earliest cases were for the purpose of relieving pain which was caused by diseased ovaries of small size, and was a departure from the principle, which had been maintained up to that time, that ovarian tumours ought not to be removed until they threatened life—a conclusion which could not be resisted with the high mortality which occurred in the practices of nearly all operators until 1878. After that the diminution in the mortality permitted the extension of old principles and the intervention of new ones. Such cases should not be called "oöphorectomy," or "castration," or "normal ovariotomy," or "Battey's operation," or any other name which does not mean that they were cases of removal of ovaries just as diseased as if they were the biggest cystomata which could be found in our lists.

The PRESIDENT congratulated the author on the lucidity and ability with which he had stated his case.

Dr. HALLIDAY CROOM thought it would be well if Mr. Lawson Tait would read a second paper on cases in which the operation should not be performed. He had a difficulty in knowing where to draw the line in the treatment of inflammatory disease. In some cases there was evidence of perimetritis and fixation of the appendages. In another class of cases the tube was inflamed and the ovary tender and a little displaced, and this in a young woman. Ought we in this second class to advise the removal of the appendages or to recommend simple, mental, physical, and sexual rest? He did not think it right that the patient should be allowed to decide the question for herself. He considered that these operations had been more frequent than they ought to have been. An imperfect diagnosis was one of the reasons for this. A bimanual examination should be made in all cases of doubtful diagnosis.

Mr. KNOWSLEY THORNTON said he was prepared to agree with the greater part of the paper. But even now the "general principles" were not fully stated. He could not accept the doctrine that removal of the tubes stops the menstruation. There was no evidence in support of this statement; and his own experience was decidedly opposed to that notion. In one case of pyosalpinx which he had treated surgically the patient menstruates regularly still. In other cases the menstruation ceased when both ovaries were removed and the tubes left. If the general title of "removal of uterine appendages" be applied to all such operations he thought there would result hopeless confusion. Are we to use this designation when but one tube or one ovary was removed? He did not think Mr. Tait's proposal would obtain a good nomenclature. He begged to say that he was not arguing against these operations, for he himself had practised them in a considerable number of cases with success. He believed that ovarian tumours occurred in far larger numbers than diseases of the tubes. Perhaps the latter were not more than one-sixth of the former in number. He doubted whether sterility was always secured in cases of tubal disease or ovarian disease before the operation was performed. In a case where he had removed two large dermoid tumours there was till the operation a fruitful ovary, for he operated whilst the patient was pregnant, and the healthy child of that pregnancy was still living. As to the four out of five deaths at Queen Charlotte's Hospital, it showed that

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these patients were not sterile, for that hospital only admitted cases of midwifery. He asked whether sterile women died of puerperal fever. As to the mortality of this operation, 15 to 20 per cent. was more like the truth than 2 or 3 per cent. He had not practised this operation extensively, but had lost two cases out of fifty, or about 4 per cent. This mortality was an element not to be lost sight of. He believed in the occurrence of ovarian dysmenorrhœa, but the ovary was not necessarily bound down. Consultations were, he admitted, "farcical" sometimes, owing to the prejudice of some consultants. He could not believe that the operation was always a permanent and complete cure for uterine myoma; there was a certain number of failures. In one case three or four years elapsed, and then the woman began to bleed again.

Mr. C. E. JENNINGS related a case of Uterine Hæmorrhage to show that the bleeding might continue owing to the ovary not being completely removed.

Mr. ALBAN DORAN said that Dr. K. Fowler's observations published two years ago in the Medical Society's Transactions proved the frequency of occurrence of disease of the tubes. He hoped that the future of abdominal section would be directed towards watching the disease of the appendages with a view to curing their diseases rather than to removing the organs themselves. Until 1882 the disease which he described as papilloma of the tubes was almost completely ignored.

Dr. IMLACH considered that bimanual examination might sometimes be attended with pain and danger from the possibility of bursting a pyosalpinx or of causing an escape of the contents of the tube into the peritoneum. He considered that disease of the tubes was a more frequent cause of sterility than mere ovaritis. Hydrosalpinx was most frequent at the ages of thirty-five to forty-five, when the menstrual life was drawing to a close.

Dr. HEYWOOD SMITH thought a great deal of the bitterness of writers of leading articles arose from professional jealousy. He objected to the use of the designations "spaying" or "castration" to describe the operations. The prognosis of many cases was made different according to the social status of the patient. The rich could afford to be treated medically, but the poor would hail the operation as bringing speedy relief from pain and restoration to working life.

Dr. GRANVILLE BANTOCK argued on the meaning of the term "unsexed." It might mean that the patients would be incapable of bearing children as the result of the operation, or that they would be deprived of sexual desire and feeling. In acute diseases of the appendages the desire was almost always absent, and frequently also in chronic disease. He agreed with Mr. Tait that "if in doubt open the abdomen" was the correct line of treatment. To curb the zeal of his too enthusiastic followers should be the aim of Mr. Tait.

Mr. LAWSON TAIT, in reply, said that Dr. Bantock had misrepresented him. The abdomen should be opened in cases of doubt only when there was risk to the life of the patient or when the patient was in a serious condition. As to bimanual examination, he urged that if the diagnosis could not be made with a skilled finger the operation should not be done. Ovulation and menstruation were not concurrent; he believed that the ovaries had relatively nothing to do with menstruation. As to the frequency of the diseases of the uterine appendages he could say nothing positively, but there seemed to be some grounds for believing that tubal disease was very frequent. Referring to the argument of Mr. Thornton relating to Queen Charlotte's Hospital, he urged that, the tube of one side being diseased, the patient was sterile on that side, and this incomplete sterility rendered the risk more serious, as, indeed, the four deaths showed. The mortality of an operation was not the mortality of a number of operators, but the mortality that the operation was capable of in the hands of experienced operators. He was sceptical of the existence of ovarian dysmenorrhœa, and believed that his operation was always a cure for uterine myoma, though the bleeding did sometimes continue a while after the operation.

ISLINGTON MEDICAL SOCIETY.

THE opening meeting of the Islington Medical Society took place, as usual, at the residence of W. Cattlin, Esq., Highbury-place. The chief feature of the proceedings was the narration of several cases of interest by Dr. Gilbart Smith. One was a case of very acute vertigo, in a boy of fourteen, following an exhausting game of cricket on a hot day, two days before. There was great loss of power in the legs, so that he was found crawling, being unable to walk. He could not bear a pillow below his head on account of the giddiness. The pulse was 45; the heart sounds and the temperature normal. There was no vomiting, only slight frontal headache, and the optic discs were natural. For a month there was no improvement in the vertigo. But the later reports are that it is now, after a second month, on the decline. Dr. Smith thought that the symptoms pointed to some myelitis. Another of the cases was that of a medical man, who had albuminuria from gouty kidney and heart disease. On account of these symptoms he had some years ago relinquished practice, but underwent such improvement as to resume work. He did well until a short time since, when, after some excitement, he had a rigor, followed by pyrexia and pericarditis, with all the added distress of a dilated heart and aorta. The chief relief was obtained from very small hypodermic doses of strychnine and digitaline in solutions of uniform strength. The third case was one of alcoholic paralysis in a lady. The chief feature was some wrist-drop and weakness of the limbs; head always clear. A very important point in this case was that the alcohol was supplied by the *druggist*. In another case, also that of a lady, eau-de-cologne was the spirit taken.

CAMBRIDGE MEDICAL SOCIETY.

AT the meeting on Oct. 8th, Dr. J. B. Bradbury, President, in the chair, the following communications were made:—

Removal of Depressed Fractured Bone of Skull.—Professor HUMPHRY showed a boy who had recovered after a severe injury to the skull. He was admitted into Addenbrooke's Hospital on August 23rd, suffering from a compound fracture of the frontal bone, the result of a kick from a horse twenty-four hours previously. There was a wound three inches in length and a fracture two inches in length, with a gutter depression. He was unconscious but could be roused. The depressed portion was removed, by sawing the contiguous bone with a Hey's saw and elevating the depressed bone. The dura mater was not injured. The boy appeared no better for the operation the next day, and only on the fourth or fifth day became conscious. Soon after he completely recovered. Professor Humphry commented on the great fluctuation in the treatment of injuries to the skull that had taken place during this century. In olden times the practice was always to trephine, and the patients almost all died. The tendency afterwards was not to trephine at all, and the results were more satisfactory. Recently, since the introduction of antiseptics, operative interference was more frequent, and the cases better selected. He thought the compression symptoms were due, not to the depressed bone, but to the injury to the brain at the time of the accident, and the removal of the depressed portion often appeared to give no immediate relief as in the above case, though it might prevent the onset of inflammatory affections from the irritation of sharp pieces of bone. He would advise operative interference in cases of compound fracture of the skull with depression, but not in simple fractures.

Incomplete Pericardial Sac; escape of Heart into Left Pleural Cavity.—Dr. BOXALL showed the chest organs of a woman who died with symptoms simulating pulmonary thrombosis on the third day after the birth of her third child. The necropsy, however, showed that a very peculiar accident had occurred. The pericardium on the left side was represented only by a sickle-shaped fold attached to the diaphragm and forming a pocket three-quarters of an inch deep. The heart was found lying in immediate contact with the lung, its apex being situated nearly three inches to the left of this pouch, from which it had evidently escaped during a severe attack of vomiting on the second day after delivery. This accident was followed by dyspnœa and collapse, in which the patient died thirty hours later.

Cancrum Oris.—Mr. WHERRY related a case of cancrum oris lately under his care in Addenbrooke's Hospital. A domestic servant, aged twenty-five years, had a deep ulcer filled with yellow slough, occupying the whole of the inside of the left cheek, said to have begun as a gumboil. The ulcer was almost painless. The skin of the left cheek was dusky red in colour over the slough, was nearly destroyed, and eventually there was a perforation through the cheek. The separation of the slough was at no time accompanied

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by any hæmorrhage, there seemed to be no granulating surface to bleed, and there was only a thin watery discharge and faintly tinged saliva. Her complexion was remarkably pale-yellow and wax-like. The fever was high and the pulse rapid. The register on the chart was usually 104° to 105°, and the pulse 160 or more. She had been ailing four or five weeks, and had suffered from the ulcer two weeks before admission. No treatment was of any value in checking the progress of the malady, and she died exhausted in twelve days. She had always a good appetite, partook heartily of a liberal diet, and did not consider herself very ill. On two occasions operations were performed under ether. At first the slough was cleared out and the cavity left was swabbed freely with nitric acid. At a later stage the cheek was laid freely open from the outside. Quinine stopped the rigors which occurred occasionally. Iron was also given, and later on opium. Condy's fluid and insufflation of iodoform were tried locally. This patient was always pale and perhaps anæmic, but she was not ill-fed or ill-nourished, nor was she recovering from any acute fever. She had been able to do her duty as a domestic servant until attacked by the disease. Mr. Wherry briefly mentioned the reasons for making a difference between cancrum oris and other conditions somewhat similar, as ulcerative stomatitis. It was not a case of acute necrosis of the upper jaw. Though as yet no organism had been isolated from the blood or tissues, nor had the disease been inoculated, it seemed probable that in the future, as in the case of anthrax, a definite micro-organism would be discovered. In cancrum oris animals injected with the blood died of septicæmia, usually with peritonitis.—Mr. HEMMING (Kimbolton) described two interesting cases of anthrax contracted while cutting up a beast just killed, both patients recovered after injections about the slough with carbolic acid.—Sir GEORGE PAGET elicited that a dog and a cat died from eating of the entrails of this beast, but that a farmer, who begged for some of the meat, took it home, boiled it, and he and his family lived on it for a week and received no hurt. Sir George Paget considered that the micro-organism in the meat had been destroyed by the boiling.—Professor HUMPHRY described the ecchymosis in the skin and serous membranes found at the post-mortem examination of Mr. Wherry's patient, and agreed that death was probably from septicæmia.

THE REGISTRAR-GENERAL'S REPORT.

WE have received from Mr. Haviland copies of a correspondence, too long for publication in our columns, which he has had with the Home Office on the subject of the omission, from the supplement to the Registrar-General's report, of certain data which were given in the previous decennial supplements prepared by Dr. Farr. In the tables showing the mortality by certain causes Dr. Farr stated the deaths of males and females separately, while in the present report they are given for persons without distinction of sex. Mr. Haviland justly points out that by this arrangement a very important element in the study of the geographical distribution of disease is suppressed, as the relative male and female population varies considerably in different registration districts and at different ages. The bearing of this on any inquiry as to the relative healthiness of different localities is fully appreciated by Dr. Ogle, for he remarks, "It is necessary to point out that two places might be on a perfect equality with each other as regards their climate, their sanitary arrangements, their closeness of aggregation, as also the habits and occupations of their inhabitants, and yet might have very different general death-rates, owing to differences in the age and sex distribution of their respective populations.....It is unsafe, therefore, to base any comparison between two areas upon their general death-rates until it has been first ascertained that the populations of the two are practically identical as regards their age and sex distribution." But if it is unsafe to omit this element in any comparison of the general mortality of a town or district, how much more so must it be in the investigation of the death-rate arising from diseases which affect the two sexes in a markedly different degree? For instance, in the decennium now reported upon, in addition to deaths from childbirth, the following marked differences are shown by the returns for the whole population of England and Wales. The relative proportion of deaths of males and females respectively was—by cancer 32 and 62, by diseases of the urinary organs 52 and 27, of the generative organs 1 and 10, by suicide 11 and 3, and other violent deaths 101 and 33. It would certainly be interesting, and might be important from a preventive point of view, to trace how far these differences are general over the kingdom, or confined to particular districts, and if the latter, to endeavour to ascertain the causes to which they are probably due. But under the altered form of the returns this cannot be done. The reasons assigned by Dr. Ogle for the change are "not merely to economise space, but to give a broader, and therefore more secure, basis for the calculation of rates, and also to meet the practical requirements of the Medical Department of the Local Government Board." We own that we are unable to comprehend the last two reasons; for surely, if the whole of the deaths were included in the table, it would not narrow the basis to record the subdivision into male and female, nor do we think Dr. Buchanan would object to this additional information on the ground of its exceeding the requirements of his department. We are inclined to believe that the real difficulty has been raised by the officials at the Treasury on the score of expense. It looks very like one of those petty economies which sometimes are enforced, even at the risk of destroying really useful work. Considering that this supplement is only brought out once in ten years, we do not think it could be characterised as extravagance if the detailed tables were published in the form originally adopted by Dr. Farr. Such a course would have the advantage of providing "a broader and more secure basis for the calculation of rates," by enabling the results of each succeeding decennium to be added to those of preceding periods. Dr. Ogle is so well aware of the important bearing of age and sex distribution upon statistical inquiries, that we feel well assured the change was not made on his recommendation, but was much more probably introduced in opposition to his wishes.

THE HOURS OF SHOP ASSISTANTS.

THE Shop Hours' Regulation Bill has at last become law. By extending to young persons employed in shops the benefits of a fixed work period enjoyed by their more fortunate companions in factories, it will do something to check the evil of heedless over-pressure, which has already told with disastrous effect against the class of shop servers. Being fully cognisant of this effect in our professional capacity we view with much approval, if we cannot yet say with full satisfaction, the passing of a measure of such proved necessity, even though to our regret it comes as an example of paternal legislation. Objections to the Bill continue to be urged by those who regard it as a superfluous measure. Pictures are drawn of shops in which trade is slumbering or moves easily on a semi-domestic system which needs no regulation, of the impossibility of inspection or of any benefit without this, of the banishment of young persons from behind the counters in favour of their elders, who have no means of retreat from overwork, and of the tyranny and ruin implied in a general reduction of the hours of service. On the other hand, we might urge with greater force the fact that easy situations do but caricature the worry and hurry which prevail in the shops of many city thoroughfares, and it is for such that this Bill is intended, while the supposed injustice and oppression of a general earlier closing are more than equalled in the actual, if not evident, compulsion which an employer can under present conditions exert if he chooses upon his dependants. If we should say anything in criticism of the Bill, it would be that it does not go far enough. We have no wish to under-estimate the difficulties of the State in dealing with the question of adult labour. At the same time we cannot but see that to fix the limit of supervision at eighteen years of age is to leave absolutely without such protection as they require a large number of persons of all ages, whose well-being, all things considered, may be a matter of even greater consequence than that of their juniors. We are loth to believe that inspection cannot be applied in the interest of shop *employés*. How any Bill can be administered without some machinery of supervision is not very clear, and we cannot but express once more the hope that means directed towards this end will yet come to find their legal expression within the terms of the Act.

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THE LANCET.

LONDON: SATURDAY, NOVEMBER 6, 1886.

THE position which the Royal College of Physicians has taken up with regard to the requisition of the Apothecaries' Society for permission to enter into combination is, we believe, one of *non possumus*. There can be little doubt that the Royal College of Surgeons will answer in practically similar terms. The Conjoint Examining Board is considered to be complete, and nothing further to be necessary so far as they are concerned. Should the petition for admission into a joint combination with the Colleges be refused, the next question that arises is, What can the Apothecaries' Society further do? It cannot at present grant a statutory diploma in surgery, as it can in medicine and midwifery, although it examines in all three subjects, and has done so for the last few years. It can only practically grant a medical, as distinguished from a surgical, qualification, just as the Royal College of Surgeons, although also examining in three subjects, has occupied the converse position. The Apothecaries' Society must, in order to give a complete qualification under the terms of the recent Medical Act, combine for purposes of examination with a body legally qualified to grant a diploma in surgery, just as the College of Surgeons has formed a Conjoint Examining Board with the College of Physicians. A refusal on the part of the Colleges to admit the Apothecaries' Society to conjoint action will drive the latter to appeal to the Universities, and there can be no doubt as to the nature of the reply that will be given to such a petition. The University of London and the Royal University of Ireland are the only Universities that do not require residence, but their insistence on the highest possible professional standard is so notorious that the suggestion that the Apothecaries' Society should be allowed to flourish under their wing could hardly be entertained. The General Medical Council is the next body to which appeal can be made, and it may appoint, if "it shall think fit," assistant examiners, and on such appointment the qualification becomes duly registrable as a complete licence in medicine, midwifery, and surgery. We presume that such examiners will be well-known surgeons, and this will probably be the termination of the difficulty, for we question if the Colleges or Universities will give way or the Society be allowed to undergo a sudden extinction. But should the General Medical Council refuse to come to the assistance of the Society, a further appeal to the Privy Council is provided for, and, from the words of Sir LYON PLAYFAIR previously to the passing of the recent Medical Act, there can be but little doubt that the Government will see to its perpetuation as a qualifying body, and that the conditions for its existence will be forthcoming. Are the Colleges therefore wise in ignoring the claims of the Apothecaries to be admitted to a Conjoint Board, when it is almost certain that the Hall will still remain as an institution, venerated by many practitioners, and that it will be still able to grant a registrable diploma in all branches of practice? So far as a mere examining board is concerned, it is obvious that no strength can accrue to the authorities responsible for the present conjoint scheme by admitting the Apothecaries' Society into combination. The only reason, and it is a very powerful one, for urging the Colleges to weigh carefully their decision, is that the Apothecaries' Society under their Acts of 1815 and 1874 have the power of prosecuting illegal practitioners, and this is too important a function to be lightly passed over. Such a power cannot be dispensed with in any profession—the Incorporated Law Society discharges this function for the legal profession,—and the Apothecaries' Company deserves every thanks for exercising it, if somewhat sparingly, at least wisely and judiciously, and to the benefit of the community as well as of the profession. This power surely ought to have been invested in the General Medical Council by the Act of 1886, in accordance with the reasonable dictum that responsibility and authority should have been put side by side with direct representation, and then the question of the future of the Apothecaries' Society would have been determined on its status and position as an examining body. But this is now impossible, and it is only one of the many blots and shortcomings in this hasty and incomplete measure which we pointed out when it was being considered in Parliament. We shall now probably see, as a result of the Act, the initiation of two grades of practitioners in England—one consisting of graduates of Universities and those who hold the diplomas of the Colleges, and the other of the licentiates of the Apothecaries' Society only; and as regards the welfare of the medical profession the existence of another complete, but necessarily lower, qualification must be looked at as a very serious question in the future.

IT is to be hoped that the action which the Government have taken with regard to the troopship *Euphrates* may constitute the beginning of the end of the attempts to impose measures of quarantine on vessels passing from India to this country by means of the Suez Canal. We announced last week that four deaths from cholera had taken place on board the troopship before her arrival at Perim, at the mouth of the Red Sea, and it remained to be seen whether the Alexandria Board of Health would allow the vessel to proceed into the Mediterranean without touching anywhere on her way, or whether attempts would be made to carry out the usual system of quarantine with all its attendant fees and rewards. The free passage of the Canal was refused, and the vessel with its human freight of some thousand souls was ordered to return over a hundred miles down the Red Sea to El Tor, where a quarantine establishment is supposed to exist. But as a matter of fact there is at El Tor nothing resembling a proper quarantine station. The place is unhealthy, only a few huts are available, and the commonest decencies of life are wanting. To land a thousand men, women, and children there under such circumstances would be one of the very best methods of bringing about disease and death. In fact, last year the director of the establishment was himself obliged to urge his superiors not to require the landing of the crew and passengers from a French transport, and this on the ground that such a proceeding could only aggravate disease and lead to mischief. In view of these considerations, the British Government

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took a step which, if followed out, must have an important influence in getting rid of this quarantine system along the line of traffic between Europe and our possessions in the East. They refused to allow the *Euphrates* to be sent to El Tor, and they announced that unless she were permitted to pass through the Canal she would be ordered to come home by the Cape route. It is well known that money considerations have always had much to do with these detentions in the Red Sea, and it has more than once been a question whether Great Britain would not do better to build a special class of troopships capable of fast sailing and to resume the Cape route, rather than run the risk of obstructive delays with her troops in the Red Sea. But hitherto the matter has only amounted to a suggestion, resort to the alternative route never having been actually entertained. The threat, however, had an immediate effect. Shipping dues, Canal dues, quarantine fees, and all sorts of expenditure by which numberless people profit, would come to an end if Great Britain really carried out her intention, and hence permission was at once granted for the *Euphrates* to pass through the Canal, provided the vessel was first submitted to a so-called process of disinfection, which, as everyone knows, can only be a mere form in the case of a ship which is occupied by crew and passengers.

When the demand for the free passage in quarantine of the Canal was made at the Rome Conference by Sir GUYER HUNTER on behalf of the British delegation, support came from an unexpected quarter, for the Egyptian delegate handed in a document in which he declared that the quarantine establishments in the Red Sea were altogether mythical in so far as efficiency was concerned, that the passage of the Canal in quarantine could be made without any danger to Egypt, and that it was, in point of fact, the only solution of the difficulty. But the French delegation, pretending that they were not satisfied that the sanitary condition of this country sufficed for the protection of the Continent, declared that if England were once infected she would constitute a source of danger to Europe, and hence that British vessels, not touching elsewhere, were not even to be allowed to pass direct to this country. It was pointed out by Dr. THORNE THORNE that such a spread of cholera to Europe was purely hypothetical, and that, as a matter of fact, cholera had never taken such a course; but the desire for maintaining quarantine was too strong, and the very passage which has now been granted in the case of an infected vessel, such as the *Euphrates*, was denied. In short, the pecuniary consideration has wrought more than any number of scientific discussions could have brought about.

It remains to be seen how far the case of the *Euphrates* can be regarded as a precedent for action on the part of the British Government. We have yet to learn the medical history of the crew and troops on board, and it may be that if at the moment when the vessel was allowed to enter the Canal there were no actual cases of cholera on board, the precedent may be regarded by the Egyptian Board as not covering the case of a vessel having actual disease amongst her passengers. But it is to be hoped that, whether there be disease present or not, our Government will never again consent to allow the crew and passengers of a Government ship to be landed in a swampy, unhealthy spot, where no proper provision is made for their reception and treatment, simply to please communities who decline to make their ports healthy, and hence want all disease and all risk of infection dealt with, for their protection, on the unhealthy shores of a distant tropical sea.

THE Hawaiian Legislature has recently issued a report on Leprosy presented them by the Board of Health, accompanied by a supplement and an appendix containing extracts from official reports and records, which are of great interest in enabling us to follow the steps taken at such enormous cost (10 per cent. of the whole revenue in 1884) to try to control the progress of the disease in the Hawaiian Islands. The Board also issued in 1885 to foreign governments a circular letter and the questions prepared in 1862 by a committee of the Royal College of Physicians of London, and they have summarised the answers in a further report to the Legislature.

According to Dr. HILLEBRAND, leprosy was introduced into the island of Oahu by the Chinese in 1848, and he saw the first Hawaiian leper in 1853. Ten years later he called the attention of the authorities to the prevalence of what the natives called "Mai Pake," or the Chinese disease, in which he recognised leprosy. Whether this disease really was introduced by the Chinese, and perhaps other immigrants, and propagated from Oahu with rapidity over the other islands, or whether it was an heirloom which the Hawaiian race brought with them to these parts, and which had escaped much recognition since the landing of the first American missionary in 1820, is a very debatable point, but evidence is now forthcoming to show that cases of leprosy were seen on the islands before the date of Dr. HILLEBRAND'S Chinaman. Directly, however, attention was drawn to the facts the public mind became greatly agitated, and it was believed that a sudden development of leprosy had taken place and that a rapid spread was going on. When means of relief were offered and a search was made, an enormous amount of disease was disclosed. The Law of Segregation was enacted in 1865, and the Kalihi Leper Hospital established on the island of Oahu, near Honolulu, in which a sure diagnosis might be made and incipient cases treated, whilst incurable and dangerous lepers were isolated on the special settlement (now about 5000 acres in extent) so often described, on the northern side of the island of Molokai. The Kalihi Hospital was abolished in 1875, but in 1881 it was considered advisable to build one for very similar purposes at Kakaako, near Honolulu, and in 1884 like institutions were projected in each island of the group. From time to time the Board of Health was encouraged in the hope that its efforts were rapidly stamping out the disease, but each time it was disappointed, as a more vigorous search by increasingly experienced officials and perfected methods disclosed the continued great prevalence of the disease in all the islands. Dr. EMERSON wrote in 1879, after a medical inspection, that leprosy was deeply rooted in the declining native population, and it was calculated in 1882 by the best authorities that from 4 to 5 per cent. of the whole native population of 40,000 people suffered from it. Throughout, the application of the law has been imperfect and spasmodic, and has necessarily given rise incessantly to cases of great hardship and heart-

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rending scenes, such as may be easily imagined from the breaking up of homes and separation of relatives and friends. There are insuperable monetary and other difficulties to the merciless and rigid enforcement of the law, and it has been found impossible to segregate all the lepers, so that the desired progress must be slow, and indeed it must be confessed that after twenty years it is but little apparent. As Dr. MOURITZ points out, the great drawback lies in the fact that the leprosy is not shunned by the Hawaiian until the later loathsome stages have set in and the sufferer has become a burden to the family, and that there is not that social ostracism practised whereby in many countries the progress of the disease is checked. Meanwhile lepers live in unrestricted intimacy with their families until surrendered to the authorities in the later stages, and it appears that in 1884, in 90 per cent. of the lepers segregated the disease was of several years' standing. A periodical examination of the schools should be carried out, for Dr. ARNING found 7·27 per cent. of early leprosy in two schools in Honolulu, and the detection by the same physician of many bad cases in remote gulches and corners where few white men penetrate would seem to show that much remains to be done in the systematic examination of the islands. So far 3076 lepers have been received on the Molokai settlement in the twenty years of its existence, and there have been about 700 living there annually in recent years. The history of this settlement, and of the immense difficulties encountered, and at last, we are glad to say, in great measure surmounted, is full of interest and instruction to other countries, and we heartily congratulate all concerned on the immense progress made in ameliorating the lot of the unfortunate beings doomed to eke out their existence on a spot so remarkable for its natural features, and the use to which it has been put by the Hawaiian Legislature.

IN an article which we published last June we evidently gave great offence to the *Australasian Medical Gazette*. We need hardly explain that we had no intention of saying anything at which our contemporary could take umbrage, and we do not think that our comments merit the condemnation they have received. We commented adversely on the action taken by the Government of Queensland in the case of the emigrant ships *Dorunda* and *Quetta* with a view to prevent the importation of cholera into the colony. For this, however, we are not taken to task. But we are blamed for the suggestion that Australasia would do well to adopt our system of medical inspection and isolation instead of the modified quarantine which is at present relied on; and we are reminded of the various points, climatic and other, in which Great Britain differs from the colony, and which justify resort to quarantine in Australia, although the alternative system is admitted to be the best one for ourselves. With some of the points referred to we cannot agree. Thus, it is stated that though physically Great Britain is an island, yet epidemiologically she is a part of the continent of Europe. This, in so far as cholera is concerned, is hardly correct. We believe our greatest danger from cholera comes from India and the Red Sea; and it is matter of notoriety that when England has suffered from invasion of that disease, the infection has come to us, after a somewhat lengthened sea-voyage, by way of the Baltic and the Mediterranean, and not from those countries which lie near to us in the west of Europe. But we are willing to admit that our circumstances and those of Australasia do differ in some important respects, and that action as regards cholera which would only be fraught with mischief if it were applied to this country might be practicable and in some sense justifiable in the colony. Still, there is one consideration which, in our opinion, outweighs all others—namely, the fatal influence which trust in quarantine restrictions has upon the progress of measures which tend to the improvement of public health. The mere fact that communities are promised by their Governments that they will be protected against the importation of such diseases as cholera by quarantine measures has almost invariably had a very deterrent effect on expenditure and works aimed at the removal of those conditions, the existence of which alone makes the importation one to be dreaded; and although, as we are reminded by our contemporary, our internal sanitary administration is still the reverse of perfect, yet we know, as a matter of fact, that had it not been for the knowledge that our Government would make no pretence of guaranteeing safety by quarantine measures, the vast improvements which in this country have been effected when cholera has appeared as a prospective or immediate danger would never have been carried out. And, after all, cholera is not the only, or indeed the main, disease to be dreaded. Enteric fever, for example, causes needless mortality in Australia as well as in England, and whereas quarantine restrictions cannot be expected to assist in eradicating that fever, yet one of the most striking reductions in the mortality of this kingdom which has resulted from sanitary measures initiated by a dread of cholera is that of this fever, which, above all others, kills at the most remunerative period of human life. In short, the system we have been compelled to fall back upon in regard to imported infections, because of the impracticability of quarantine, has done more to reduce our mortality from general causes, and especially from preventable diseases, than any other. This is a consideration which, we venture to submit, no community should disregard.

The parallel drawn by our contemporary between the attempted quarantine detention of sick and healthy alike at Leicester when small-pox occurs, and the proceedings adopted as to quarantine in Australasia, is hardly an apt one. In the Leicester case the law is defied, and those in authority refuse to carry out an all but unfailing method of disease prevention, and then attempts by resort to measures of detention which we believe to be illegal to make up for their default. Such a system courts failure, for it would only require a refusal on the part of the hitherto healthy to submit to a detention which there is no means of enforcing, in order to bring the whole scheme into sudden disrepute. Besides which, the Government of the country not only does not encourage such detentions, but it declares them to be altogether illegal. In this case the healthy have a well-recognised and all but certain means of staving off disease; and hence our Government does all it can to discourage resort to other means, which are not only less certain in their influence, but which fail to effect the indirect good which comes of adopting the proper remedy. "Some day," says

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our contemporary, "the English system will be the best for all the world." After all, then, we only differ as to the proper date for its application; our view being that Australia would benefit from the system even at this comparatively early date in its commercial and sanitary history. In this country we erred by delaying its application, and we have suffered in consequence.

THE approaching session of the Medical Council ought to be interesting, as being its last meeting without the presence of direct representatives of the profession which it is supposed to rule and represent. Looking at the matter from an outside point of view, it would seem as if there were nothing to justify the meeting of the Council till it shall have been made more complete by the addition of the direct representatives. But this may be a wrong conclusion, and we shall be prepared for any good and sound work that may be reported as accomplished or in progress. We can only guess at some of the business that is likely to engage the attention of the General Council. It may be remembered that at its last meeting the Council was much occupied in the discussion of the Reports of the Visitors to the Universities of the United Kingdom. These reports were of a valuable and interesting character, and excited questions of much moment. They occupied so much of the attention of the Council that the discussion of other matters had to stand over. One of these other matters was the *consideration of Reports from the Branch Council on a system of Visitation of Examinations for the year 1887*. It might be thought that one of the principal reasons for the impending meeting of the Council was the consideration of these reports. But we can scarcely think this will be so, for one simple reason. The new Act enjoins a new method on the Council for acquainting itself with the efficiency or otherwise of examinations. Hitherto the Council has had only one way of doing this—viz., by a System of Visitation. At first, the members of the Council representing one examining body in each division of the kingdom went to visit another in the same division, and then the visit was reversed. A little advance was made on this primitive and suave method of visiting, by sending the representatives of a body in one part of the United Kingdom to visit a corporation or university in another division. But obviously this was not satisfactory. There was, if not a tendency to mutual admiration, at least a sense of fellow-feeling and fellow-fear. The representatives of different divisions of the kingdom were still members of one common body, tempted to be to each other's faults a little blind, and to their virtues very kind. An improvement on this system of visitation was introduced by appointing gentlemen of high standing and experience as teachers and examiners from the outside, and associating them in the visitations with the members of the Council.

The new Act provides a different way of ascertaining the sufficiency of the qualifying examinations. Section 3, Clause 2, requires for this end the appointment of a sufficient number of Inspectors, "*to attend, as the General Council may direct, at all or any of the qualifying examinations held by any of the bodies.*" We cannot suppose that such an important provision of the new Act will be put in force before the completion of the Council under the same Act; and obviously the discussion of any elaborate schemes of visitation formulated before the passing of the new Act would be a waste of time.

Another important decision of the Medical Council at its last meeting was to visit and report on the Medical Schools, with the permission of the said schools. It is possible that Clause 3 of Section 3, referring to the appointment of inspectors, may be considered to give the Council new powers of inquiry into the efficiency of schools; but even so, it seems to us that this question, too, ought to stand over till 1887, when the direct representatives come into office.

One thing we gather from the Minutes—that we may expect the report of the completion of the work of the Statistical Committee, upon which an enormous amount of labour must have been expended. We shall look to the final results with much interest. The state of the Register may fitly engage the anxious consideration of the Council. The attention of outsiders has been much drawn to it and to its many imperfections during the recent months, and in connexion with the new Act and the impending elections. It is evident that the system hitherto pursued of occasional and promiscuous inquiry under Section 14 of the Act of 1858 does not give us anything like such a correct Register as we ought to have. A shrewd lawyer has recently estimated that there may be 2000 errors in the Register! This, with such large unused sums of money in the hands of the Council, is most unsatisfactory, and ought to exercise the ingenuity of the Council. There is a want, too, of readiness in printing the Register and additions to it—a want, we cannot think of disposition, but of ready ability to meet the real need of the profession. One fact will suffice as an illustration. For the purposes of the impending election it is of great moment to get the addresses of those registered since the present Register was published. It will scarcely be credited that a printed list of these names cannot be had "for love or money." An advertisement in our present number shows that nearly the whole of the members of the Medical Services have no addresses so far as the Register is concerned, and are not to be reached by anxious candidates. An attempt is to be made to get them at the eleventh hour, but it is too late.

Finally, the new law regarding the Recognition of Foreign and Colonial Degrees will require the early attention of the Council. But it is highly desirable that there should be no haste in this matter, and that time should be taken to gather necessary information.

Annotations.

"Ne quid nimis."

COMPULSORY ATTENDANCE AFTER REJECTION AT EXAMINATION.

ONE of the most harmful proceedings on the part of the Conjoint Examining Board in England has been to re-examine rejected candidates without the production of further certificates from the teachers in the subjects in which they had been previously rejected. The College of Surgeons, when acting alone, had always insisted that a candidate who had been referred should, on presenting himself for re-examination, produce proper evidence

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that he had been engaged in the interim in studying the subjects in which he had previously failed to pass; but under the regulations of the Conjoint Board this wise proviso has been dropped. Candidates who had once gained their certificates were signed up for ever. The only limit to their presenting themselves over and over again was the elasticity of the purse of their parents and guardians, and students have been re-examined quarterly and half-yearly for two or three years on one certificate. As a rule, their knowledge, incomplete as it was at first, grew gradually less and less, and time that should have been devoted to anatomical and physiological studies, or to medical, surgical, and obstetric practice, as the case might be, was spent in general idleness, without the possibility of any interference on the part of the authorities of the school, who were generally blamed by the parents, whilst the fault rested entirely with the Conjoint Examining Board. This was pointed out in very explicit terms in our Students' Number, and we are glad to find that the Committee of Management for the Conjoint Examining Board has recognised the necessity of insisting on a further course of study by rejected candidates under their authorised teachers, and that the regulations recommended by it, and printed in our last number, in the Proceedings of the Royal College of Physicians, will do something to prevent the demoralising effect on the discipline of the medical schools which this unfortunate omission is answerable for in the past three or four years.

SLEEPING IN TURKISH BATHS.

FEW general assertions are particularly true. We cannot endorse the statement that it is wrong to sleep in a heated atmosphere like that of a Turkish bath, just as we are unable to adopt the opinion that the Turks generally are "indolent." It is doubtless "a most dangerous proceeding" for the subject, or victim, of what is, or was, popularly called a "carouse," by which is generally signified a debauch of heavy drinking, to lie down and sleep off the effects of his intoxicating and exhausting excess in an atmosphere and under conditions which will draw blood rapidly to the surface, and thus to some extent deprive the heart of its natural stimulant, if the person so acting have a weak heart. The heart's action will have been quickened by the hot air, and exhaustion may supervene at the moment when determination to the surface occurs. There can be no question that cases of submersion or "drowning" may end fatally because the unfortunate victims are plunged into warm baths which determine the blood to the surface and leave the exhausted heart without proper support or stimulus. We admit all this; but it does not follow, thereupon, that sleeping in the average atmosphere of a Turkish bath is dangerous to average mortals. On the contrary, we are of opinion that a "nap" taken under such conditions, not too prolonged, is both refreshing and restorative. The mistake frequenters of Turkish baths commonly make is that of staying too long in the "hot room." As a matter of fact, it is neither necessary nor safe to raise the temperature of any room in a Turkish bath above 140°F., and no bather should remain in a room heated to above 120° for more than a very few minutes. There can be no worse practice than to go into a highly heated room until *after* perspiration has commenced. Thus acceleration of the heart's action, which is likely to be followed by exhaustion, does not occur if the bather is content to wait in a room of low temperature until after the skin has commenced to act. Practically, the following rules may be taken as safe and sufficient for the guidance of those who use the Turkish bath for restorative purposes, and particularly the many who, suffering from sleeplessness and brain worry in these days of work at high pressure, seek, and generally find, comfort and refreshment in that relaxation and repose which the hot-air bath, when properly ventilated, is sure to afford. 1. Go at first into one of the least heated rooms, with a temperature very little above blood-heat (or, say, not much over 100° to 110°), and remain there until the surface of the body is moist and slightly reddened. 2. If the skin does not become warm and begin to grow red and moist in ten minutes, ask one of the shampooers to affuse the surface with *warm* water, and to rub it briskly and lightly with a soft towel. Then return to the apartment where the temperature is not much above 100°, and wait until perspiration is established. 3. When perspiration has fairly commenced, and the surface is moist from head to foot (not before), have a little cold water thrown on the feet and legs, and then go into a room of somewhat higher temperature, but do *not*, on any account, enter a part of the bath where the heat registered by the thermometer is more than 140° F. This is very important. 4. Either lie down on a couch or sit while in the bath, and, if not disagreeable to do so, keep the eyes closed as much as possible. 5. Do not remain in any of the hot rooms longer than half an hour; not so long if the ventilation be imperfect or the air impure. 6. Ask the shampooer to "finish" with an affusion of gradually cooled water, not cooler than is pleasant. Do not either take the plunge bath or receive the douche. This direction is especially for those who are not sure as to their organic state, and points to a necessary precaution in cases of weak heart or exhausted nervous system. 7. Drink nothing but iced water, potass- or soda-water, or lemonade, while in the bath. Take a small cup of coffee or tea when in the cooling room, and lie down, or remain sitting, wrapped in towels, until the perspiration has subsided, but not long enough to feel cold. Then dry the skin with a rough towel, rubbing briskly, and dress quickly. 8. A short walk is desirable after the bath, and soon afterwards a light meal, with pleasant conversation and cheerful surroundings; but the exercise taken, whether physical or mental, for some hours after the bath should be very moderate, and worrying work of any kind ought to be avoided. These are general directions, and may be modified in special cases, but they will apply to the multitude of bathers by whom the bath is used as a measure of relief and restoration after brain toil, and in mental and muscular weariness.

ANTIPYRIN AND ANTIFEBRIN.

AT the meeting of the Verein für innere Medicin at Berlin on the 18th ult. Dr. A. Fränkel read a paper upon Antipyrin (see *Münchener Med. Wochensch.*, Oct. 26th), especially in the treatment of acute rheumatism. Having prescribed it in thirty-four cases of this disease he arrives at the conclusion, supported by the published observations of Lenhartz and Alexander, that its action is that of a specific. Rapid recovery ensued on its administration in nine out of thirteen mild cases and in four out of twenty-one severe cases. It is superior to salicyl compounds; first, in the readiness of administration, being given in the amount of 15 grammes during the first three days and of 3 grammes daily during the next six days; and, secondly, in the freedom from unpleasant physiological effects. He only once noted vomiting after antipyrin, and twice an "antipyrin rash" appeared. Free sweating occurs with the defervescence produced. Respecting protection from endocarditis he is unable to pronounce from paucity of material, but some authors think this must be answered in the negative. Nor can it absolutely replace other anti-rheumatic remedies; for in two cases it had no effect and in fifteen cases there was relapse. He did not know of any contra-indications to its employment, and summed up to the effect that antipyrin is an energetic specific anti-rheumatic agent; that its trifling phy-

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siological effects make it important to prescribe it at first in every case of acute articular rheumatism, but that it is no substitute for salicylic acid, some cases reacting to the one drug and some to the other. Dr. Fränkel also reported on antifebrin, introduced by the Strasburg school—a substance of exceptional interest, since in chemical composition it differs from any other known antipyretic. It is derived from aniline, is an odourless powder, slightly soluble in water, but readily dissolving on the addition of rectified spirit. It produces slight toxic effects, does not induce vomiting, and is not repugnant to take. In hourly doses of 0·1 gramme it causes a transient fall in temperature of from 3° to 4° C. Dr. Paul Guttmann, in discussing the paper, remarked that of 18 cases of acute rheumatism treated with antipyrin the average duration was 25 days, and of 67 treated with salicylic acid, 35·2 days.

THE SANITARY STATE OF WEST COWES.

THE sanitary state of West Cowes has been prominently brought before the public on more than one occasion, and owing to the allegation that diphtheria was prevalent there, Mr. Spear was recently instructed by the Local Government Board to make inquiry into the matter. On arrival he was officially informed that the townspeople doubted the existence of diphtheria, but he soon found seven well-marked unequivocal cases in four different families, all the cases exhibiting the typical fibrinous exudation in the fauces, fever, and albuminuria. This disposes of the denials as to the existence of the disease. Later on a total of seventeen unequivocal attacks, one of which had proved fatal, and four doubtful attacks were heard of. In discussing the causes of this prevalence, Mr. Spear states that considerable suspicion attached to the milk service, for each of the infected households in the first series of cases was found to be receiving milk from one and the same dairyman. There were points which went to reduce the significance of this fact, but both Mr. Spear and the medical officer of health could not but regard the association of the milk distribution with the incidence of the disease as of significance, and this, although nothing could be detected by which the milk-supply could have become contaminated. But the 1886 outbreak in West Cowes was not a singular occurrence. In 1885 the district suffered severely from the same disease, and no less than seventeen deaths were recorded from it, forming a rate of mortality more than ten times the corresponding average rate for England and Wales; and having regard to this fact, it becomes possible that, in some degree, a retention of the poison may have been a cause of the recurrence of the disease. Our information as to the etiology of diphtheria is still so imperfect that no sanitary authority could be regarded as to blame for such a recurrence, provided they had taken care to remove from their midst the defective circumstances with which the disease is so often found to be associated. But, unfortunately, this proviso by no means applies to the case of West Cowes, for so common were defects leading to excremental pollution of the atmosphere of the town and of individual houses that the facts justified the conclusion that these conditions were largely associated with the outbreak. Retention of foul black deposit in sewers, scanty and most imperfect ventilation of a tide-locked culvert half a mile in length, a universal absence of proper sewer ventilation, offensive emanations from street gullies, defective construction and ventilation of house-drains, and danger to the public water service; these are the conditions which were found to obtain in West Cowes, with its well-known narrow thoroughfares, in which there is a considerable amount of overcrowding of houses. Then, again, in the new part of the town we read of badly constructed and overflowing cesspools; and as to the general disposal of the sewage, it is stated to be a source of nuisance. At last we learn that the sanitary authority have called in a consulting engineer to advise on the state of the sewers, but we cannot forget that as far back as 1879 the local medical officer of health found the public drains "nearly all in a bad state," that in 1880 he drew the attention of the authority to the defective state of the sewers and that Dr. Ballard and Mr. S. J. Smith, C.E., have visited the district on behalf of the Local Government Board. In the face of such a record, it is useless for those representing the authority to publish statistics based on a supposed population, and tending to show that the general mortality is small, or to point to the fact that they have been by no means inactive. What the public will want to know before this hitherto favourite seaside resort has its credit restored is, whether the sanitary authority have efficiently dealt with obvious sources of danger to health to which their attention has for some years past been directed, and which in 1885 and again in 1886 were associated with the fatal spread of a disease which is largely preventable by the adoption of ordinary and well-known sanitary measures.

RELATIONSHIP BETWEEN HYALINE AND AMYLOID DEGENERATION.

DR. STILLING, of Strasburg, has demonstrated (Virchow's *Archiv*, vol. i., p. 103) that hyaline degeneration may merge into that of amyloid degeneration. His observations were made chiefly on the spleen, as the organ which earliest undergoes waxy changes, the object being to show that in recent cases of amyloid degeneration areas of hyaline change are also present. In a case of phthisis, of which full details are given, this combination was well marked, and the hyaline product mixed with amyloid was also found in other cases of acute and chronic disease, though always of the same class—viz. chronic inflammation of bone and joints, and in tuberculous disease of the lungs; the hyaline change being more predominant than the amyloid in cases of short duration. In one case the spleen appeared to be amyloid throughout, but on applying the characteristic tests it was proved to be altogether hyaline. It is interesting, in relation to these observations, to remember that so long ago as 1879 this connexion between hyaline and amyloid degeneration was pointed out by Dr. Stephen Mackenzie and Dr. Ralfe in the debate of that year at the Pathological Society on lardaceous disease. Dr. Mackenzie, speaking with reference to the influence of fever in producing lardaceous disease, called attention to the changes in bloodvessels that occurred in certain diseases with blood alterations—a change which consisted of a hyaline transformation, which did not give a characteristic reaction with iodine, but stained slightly with methylaniline violet. Dr. Mackenzie did not regard this hyaline material as lardaceous, but, as it occurred in diseases attended by alterations in the blood and most of them febrile in character, he thought an investigation into the nature of the hyaline change might throw some light upon the origin of lardaceous disease. Dr. Ralfe, speaking with reference to the same subject, thought the difference between hyaline and waxy degeneration was one only of degree, the hyaline being the first step in the degenerative process. He has further stated that a microscopic examination of the hyaline substance shows at first that it consists of granules of an albuminous character, which are insoluble in ether; but at a more advanced stage these granules become distinctly fatty and soluble in ether. From this he argues that the hyaline changes are the first step in a process, which, if acute, leads to fatty degeneration; if chronic, to lardaceous degeneration. Though the extensive and elaborate researches by Stillman have now established the

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fact of the connexion between hyaline and lardaceous degeneration, it must not be forgotten that the suggestion first came from England.

YELLOW FEVER INOCULATION BY ONE OF THE PROTECTED.

DR. R. ISSARTIER, surgeon in the Messageries Maritimes, who has submitted himself to Dr. Freire's anti-yellow fever inoculation, describes in the *Journal de Médecine de Bordeaux* he observations and experiments of the Brazilian professor. The microbe found in all the fluids of persons and animals dead of yellow fever, in their vomit, and even on the walls of yellow fever wards and in the earth of the cemetery, is named Cryptococcus xanthogenicus. Wherever it existed it served to inoculate animals, and a guinea-pig kept in a confined space containing a jar of fresh earth from the cemetery very soon died, while other guinea-pigs kept in a similar space with the same earth, sterilised by heat, remained sound. A series of animals could be inoculated from one another, and the virus appeared to lose nothing of its activity by transmission, so that Professor Freire had to try some other plan for attenuating it for "vaccination" purposes. This he succeeded in doing by means of gelatine cultures in Pasteur's flasks. After the seventh culture guinea-pigs inoculated with the attenuated virus appeared to suffer only a slight indisposition, instead of dying, as those inoculated with each of the preceding ones did. The writer and a number of other medical and lay persons, together with Dr. Freire himself, were inoculated or "vaccinated" with the seventh culture, and none of them experienced more inconvenience than slight headache and transient malaise. They were subsequently proved to be quite unaffected by much more virulent cultures. Dr. Issartier states that the yellow fever mortality among the protected persons in Rio was 1·6 per cent., while among the rest of the population it was 13·7 per cent.

BURIAL REFORM.

A MEETING of the Church of England Funeral and Mourning Reform Association was held in the Town Hall, Chester, on the 25th ult., the Dean presiding. In addition to the more immediate objects of the Association, the promotion of burial in perishable coffins and the use of simple "earth to earth" graves, several other matters of medical interest were discussed. Thus, one of the speakers, who, though not a member of the Church of England, sympathised heartily with the Association and its work, commented severely upon the risks to which the mourners and other attendants at funerals were exposed by standing bareheaded in inclement weather. This is no new grievance, but has been frequently discussed before and admits of a very easy remedy. Clergymen are not required to be bareheaded even while reading the service, but may, and often do, wear the college cap, or a velvet skull-cap. In Wales, Welsh wigs used to be provided for the purpose; and those who are frequently called upon to officiate at funerals, such as cemetery chaplains, almost invariably adopt some covering for the head. If, therefore, the officiating minister in the very act of his sacred office may remain covered, there can be no reason why laymen should stand bareheaded under any circumstances, much less in a broiling sun, pelting rain, or in the teeth of a cutting east wind. The clergy have set the example; let the laity follow. The former consider their health as of greater importance than the mere appearance of reverence which would be exhibited by uncovering the head; laymen might, with equal reason, conclude that their own health is of greater importance than any increased amount of reverence on the one hand, or respect to the deceased on the other. Another point of interest was the custom of washing the body soon after death, which Mr. F. W. Lowndes of Liverpool, in a paper read by him, condemned as a most unnecessary and often dangerous custom. He argued that while performed by some relative, nurse, or friend, and prompted by an affectionate feeling to pay the last act of attention to the dead, there was some justification for the practice; but when strange women were hired for the purpose he condemned it as a repulsive proceeding. His remark that after the battle of life the poor body should not enter into a fight with death and nature, but should literally rest in the grave, met with the general approval of the meeting. Resolutions in favour of funeral and burial reform were carried unanimously, and it was stated by the Rev. F. Lawrence of Westow Vicarage, York, the indefatigable secretary of the Association, that the cause is making rapid progress in all parts of the country.

BRAIN LESIONS FOLLOWING INJURIES TO THE HEAD.

POPULAR thought attributes a great many diseases to the agency of falls on the head. Doubtless in many cases the fall and the disease are but accidentally related. But we believe that injuries to the head may be the potent agent in the causation of many cerebral lesions. The belief that traumatisms can cause blood extravasations with laceration of brain-substance is of course well founded, but the doctrine that inflammations and new growths may arise as the direct result of injury can at best be based only on greater or less probability. If the fall or blow does not rupture vessels and causes no obvious bruising of cerebral tissue, can it so disorder the molecular processes of nutrition as to lead to the formation of tumours? An interesting case of aphasia, with loss of "ear" for music, has been placed on record by Kast. A youth, aged fifteen, fell from a cart struck his head against the wheel. The accident was followed by loss of consciousness which lasted several hours, and on restoration to consciousness it was found that the right side of the body was paralysed, and that, though he seemed to comprehend what was said to him, he could not utter a word. The paralysis slowly disappeared. At the end of two months the aphasia had altered its characters. The boy was no longer unable to say some words, but he had completely lost the artistic use of his vocal cords, though prior to his accident he was a distinguished member of a choral society. Thus he sang falsely and out of tune, and could not correctly follow the lead of another singer. After the expiration of two years, however, he regained perfectly, so it is said, the artistic use of his voice, but still remains largely aphasic as to the employment of words for the construction of sentences.

THE CANAL BOATS ACTS.

THE report of the Inspector under the Canal Boats Acts forms part of the last annual report of the Local Government Board. Speaking generally, it would appear that there is distinct evidence that the legislation as to canal boats has been satisfactory, and that the local authorities are becoming more and more alive as to its necessity. The registration of boats seems to be fairly well carried out, but in point of sleeping accommodation and of the ventilation of the older boats improvement is still wanting. The water-supply for the occupants of barges is also a matter which calls for more attention, for although suitable receptacles are, as a rule, available for a proper water, yet the canal water often forms the only available supply, and it is rarely fit for drinking purposes. It is, however, satisfactory to learn that the indecent herding together of men, women, and children is now hardly ever met with, and that in consequence of the supervision exercised, many of the younger women who formerly followed a very questionable sort of life in wandering about with barges have now engaged themselves as domestic servants

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or otherwise. As instances of the action being taken, we may refer to the following. In Manchester, where 592 boats have now been registered, 58 summonses were taken out, and in 37 cases fines were imposed or costs were enforced, together with a caution as to the future. In 13 of these cases the cabins were dirty, and in 6 they were overcrowded. In Wolverhampton 502 boats have been registered, and there were 126 cases in which offences against the Acts were detected. About a fourth of these were taken before the magistrates and fines inflicted, a large proportion being for breach of the regulation placing restrictions on the residence of girls over twelve years of age on board canal boats. At Bristol special provision has been made for removal to hospital of any cases of infectious diseases on the boats, but, speaking generally of the kingdom, few cases of such disease were met with afloat. During the past decennial period the death-rate amongst bargemen, lightermen, and watermen was nearly twice as high as amongst agricultural labourers; there is therefore ample room for improvement in this respect amongst the floating population of our canals and rivers.

THE EFFECT OF RETAINED MEMBRANES ON THE PUERPERAL STATE.

DR. FISCHER, of Professor Slavianski's clinic, writing in a recent number of the *Vrach*, gives the result of a number of observations made for the purpose of testing the commonly received view that portions of membrane retained in the uterus after the expulsion of the placenta are liable to produce serious consequences—as hæmorrhage and especially the so-called auto-infection or septicæmia,—and that therefore it is of the utmost importance that they should be removed by the hand or by intra-uterine injections. This view is supported by the authority of Winkel, Dohrn, Ahlfeld, and others; while Olshausen, Credé, Weiss, and Landau consider that there is little harm in the retention of even considerable portions of the chorion. Dr. Fischer's observations extended over 682 labours, in each of which he carefully examined the afterbirth. In forty-two of these cases (i.e., 6·2 per cent.) a portion of the chorion was retained. Credé's method of manipulating the fundus uteri gave the best results regarding the percentage of retention. In primiparæ retention was nearly twice as frequent as in multiparæ, the percentage being 9·1 and 4·9 respectively. Some effect appeared to be exerted by the time at which the rupture of the amnion took place, which, when either too early or too late, seemed to predispose to retention. Premature deliveries also were rather more frequently followed by retention than those at term. As a rule, the retained chorion came away in the course of from four to six days, generally in several small portions, sometimes, however, in fragments of considerable size, and in one case, where three-quarters of the chorion had been retained, it was passed entire on the fifth day without having caused either hæmorrhage or sepsis. Amongst the forty-two cases hæmorrhage occurred only four times, and was always easily arrested either by hot irrigation or by ergot and manipulation of the uterus. When, however, we learn that out of the forty-two cases manual extraction of the fœtus was required seven times, and that a considerable loss of blood occurred during the third stage eleven times, four cases of slight post-partum hæmorrhage does not appear at all excessive. With regard to pyrexia, in twenty cases, or 47·6 per cent., there was none; in twelve, or 28·6 per cent., the thermometer, which was always used thrice a day, once registered a rise above normal; and in ten, or 24·8 per cent., there was more or less pyrexia. In order to compare these with cases in general, Dr. Fischer gives the results of similar observations made on all the cases he has attended for the last two years. These show that there was no pyrexia in 58 per cent., that the temperature was only once above normal in 17·6 per cent., and that there was pyrexia in 24·4 per cent.; so that the ratio of appreciable pyrexia was about the same in the cases in which retention occurred as in ordinary cases. A slight amount of endometritis occurred in three out of the forty-two cases. Dr. Fischer concludes from his observations that there is no ground for supposing that retention of fragments of membrane gives rise to "auto-infection," and considers that the commonly received view is fraught with danger, inasmuch as it tempts the accoucheur, when sepsis occurs, to throw the blame, not on himself, as he ought to do, but on some fancied auto-infective process, and thus probably prevents his being as particular as he should be in employing antiseptic methods in the management of the labours he has to attend.

THE BOSTON COTTAGE HOSPITAL.

THE annual meeting of the subscribers to this institution was held on Thursday, October 8th, when the annual report was presented by the committee. It would appear that this hospital, which still retains the name of "Cottage" Hospital, had a small beginning some years ago, and was for some time conducted on the principles which are found in similar institutions. Here the original intention was simply to provide nursing and food, each patient being attended by his own medical attendant, who, we presume, supplied medicines and other necessaries. As the advantages of the hospital became known, the applications became more numerous, the necessity for a larger building was recognised, and the present institution built. At this time the subscribers paid for medicine and surgical instruments, in addition to their maintenance of the hospital, and patients were admitted from surrounding villages who could not conveniently be attended by their own medical men. Boston is a town containing several practitioners, each of whom would be entitled, under the old rules, to attend his patient; and it could hardly be conducive to the well-being of the inmates, or to the maintenance of the discipline of the establishment, to have a number of practitioners visiting, possibly at irregular hours, and sometimes several at a time. It was therefore thought advisable to limit the number of medical men and form a responsible staff of three, who in the opinion of the committee were best qualified to act for them to the advantage of the patients. Of late there has been, it would seem, an agitation raised with the view of increasing the number of the staff of the hospital, not because the present staff is either inefficient or too small—indeed the committee is quite satisfied with the present working of its staff and thankful for the services rendered by it,—but because it is alleged that some medical men in the town are anxious to continue attendance on such patients as have been under their care outside. It seems to us that it is in the power of the subscribers on appeal to say whether it is their wish to increase the staff or not. If it is, then either all the practitioners who wish ought to be allowed to attend any of their patients who may be there, in conformity with the original intention of the founders, or after notification of the proposed increase the addition to the number should be made by a majority of the votes of the subscribers. It is a pity that some of the expressions used at the meeting have given offence; all the statements made tend to show that the committee is satisfied with the present arrangement, and it was agreed that no general meeting be called to alter the rules unless a requisition signed by one-fourth of the subscribers be received by the secretary. We much regret to see it stated that one cause of the diminution of the Hospital Sunday Fund for the benefit of the hospital was due to the agitation raised in the town. It might be well for the subscribers to consider whether the hospital retain the title of the Boston Cottage Hospital or be called the Boston Hospital only.

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DR. DESNOS ON RUTHERFORD'S HEPATIC STIMULANTS.

Dr. DESNOS has communicated to the Académie de Médecine an account of a number of observations made in La Charité on the clinical effects of some of the hepatic stimulants recommended on physiological grounds by Prof. Rutherford. Specimens of baptisin, sanguinarin, juglandin, and phytolaccin were obtained from Edinburgh, and administered to forty-eight patients suffering from various chronic affections, or convalescent from acute diseases. They were not confined to bed, as the recumbent posture itself favours constipation. The quantities given in each case generally varied from 10 to 30 centig. in pills, one half being given an hour after breakfast, the other at 2 P.M. Sometimes a larger quantity was given, and then a third dose was ordered at night. No gastric disturbance was ever observed as a consequence of taking these drugs, and griping pains only occurred under exceptional circumstances. As a rule, evacuations were produced spontaneously sooner or later after taking the pills—occasionally, indeed, a few hours after the first dose, but sometimes an enema of plain water was required, though in these cases the character of the stool showed that the drug had produced a softening effect upon it. Dr. Desnos remarks that enemata are frequently required to complete the action of even very active purgative medicines. Sometimes a single stool was produced; sometimes several were passed on the day following the administration of the pills; and occasionally with patients who were habitually constipated the bowels acted regularly from the time the hepatic stimulants were taken. In some cases repetitions were required, and in some the drug seemed to lose its effect, and recourse was had to different remedies altogether. The bulk of the stools voided varied, being sometimes very considerable. Occasionally fatigue was complained of, but generally the patients felt much relieved. Very exceptionally no evacuations at all were obtained. Baptisin proved itself a reliable purgative and cholagogue in doses of from 10 to 30 centig.; it occasionally, however, caused griping. Sanguinarin, though given in quantities of 60 centig., failed entirely. Juglandin, in doses of from 10 to 20 centig., acted similarly to baptisin, but in two cases produced several dysenteric stools and griping. Phytolaccin, in doses of from 10 to 20 centig., seemed to act more certainly, and to have a greater tendency to regulate the bowels afterwards than any of the other substances, Dr. Desnos therefore prefers it to them, and considers that "it is capable of enriching the therapeutics of constipation with a valuable agent."

OFFICIAL VACCINATION RETURNS.

THE vaccination returns as to children whose births were registered in 1883 were completed during the course of last year, and they show that 85·6 per cent. were successfully vaccinated, whilst 9·2 per cent. died unvaccinated, 0·01 per cent. remained unvaccinated on account of their having had small-pox, 0·1 per cent. were certified as insusceptible of vaccination, in 0·9 per cent. vaccination had been temporarily postponed, and 4·2 per cent. remained wholly unaccounted for as regards vaccination. The percentage of default is slightly higher than any previously recorded; the increase having taken place in the eastern, the north-midland, the north-western, and the northern divisions of England and Wales. In the metropolis there has been a progressive and substantial improvement; thus in the five years 1873-77 the average percentage of births unaccounted for was 8·1, whereas in the period 1878-81 it had fallen to 6·8. In 1883 the unions of St. Pancras, Poplar, Fulham, Kensington, Whitechapel, and Woolwich stand in the foremost rank for efficiency. But in the provinces the amount of default has slightly risen, and in bringing about this result, Keighley with an amount of default reaching 68·3 per cent., Leicester with 43·8 per cent., Dewsbury with 20·0 per cent., Derby with 18·9 per cent., Barrow-on-Soar with 16·8 per cent., Oldham with 15·5 per cent., and Easington with 15·0 per cent., occupy the most prominent positions of unenviable notoriety. On the other hand, in Birmingham and Leeds the percentage of births unaccounted for is as low as 1½ per cent., in Bolton it is only 1·2 per cent, and in Huddersfield 1·0 per cent. The day of reckoning has yet to come, and unless there be an amendment, which we can hardly hope for until the lesson has been learnt by a bitter experience, the populations of the unprotected unions will some day have cause to envy those communities which, in this matter, have not blindly followed the guidance of fanatics, who, by the way, are almost invariably themselves vaccinated.

INTERESTING CASE OF RABIES AT BRADFORD.

WE understand that one of the Bradford police force was a fortnight ago severely bitten by a dog supposed to be mad. The evidence obtained from a post-mortem examination of the animal, made by Dr. Hime, was, as is usual, quite undecisive. However, Dr. Hime, to decide the question, applied Pasteur's test, by inoculation of a rabbit with material taken from the dog, he being the first to do so in this country. The rabbit has shown the usual symptoms of rabies, and there is no longer any doubt as to the dog having been rabid. It had bitten the man on two fingers of his right hand, and died ten days after while under Dr. Hime's observation. It is extremely fortunate that Dr. Hime, who for a considerable time was in Paris studying Pasteur's method, has been thus able to utilise his knowledge of the subject. He has previously been able, by application of the same method, to pronounce several suspected dogs to be free from rabies. Fortunately the policeman was, by Dr. Hime's advice, despatched to Paris for treatment, and his public history will be watched with interest. Dr. Hime, it will be remembered, took over to Pasteur a party of nine persons bitten by a rabid dog last March, and subsequently had himself to undergo a course of treatment by M. Pasteur for serious injuries received. One person bitten by the same dog which bit the nine died of rabies, but he was not treated by Pasteur.

INFECTIOUS DISEASE AND THE DUNDEE TAILORS.

THE Dundee branch of the Amalgamated Society of Tailors adopted at their last meeting the following resolution:—"That the thanks of the Dundee tailors be tendered to the editor of THE LANCET for voluntarily taking notice, in that most valuable paper, of the greatest curse that surrounds our trade, and the great danger and consequent heavy death-rate that is inflicted on the public, by so many of our master tailors." In communicating this resolution to us, the Secretary of the Society adds that the sum of 15s. a week given to tailors who are kept away from their workshops when suffering from infectious disease is not paid by the Dundee sanitary authorities, but by the Tailors' Trade Union. This is highly creditable to the men who out of their slender earnings contrive to save sufficient to provide such solid help in time of need. But we maintain that it is the community which owes them compensation. Isolation is not necessary for the cure of a fever patient; on the contrary, it may on certain occasions, retard a convalescence. During the period of desquamation the patient remains in-doors, when a short walk in the sun would be a pleasant restorative. But the inconvenience, the expense, and the loss of business resulting from isolation are rightly imposed to save the public at large from the danger of infection. Surely, then, it is the inhabitants generally that stand under obligation towards the individual who suffers on their account. A few

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workers may be as provident as the Trades Unionists of Dundee, but this does not justify the community in shirking its responsibilities. What, also, is to happen to those who do not belong to a union or a benefit society? Practically the fear of sanitary and preventive measures compels the poor to conceal the presence of infectious disease. The work they do is consequently contaminated, and the community is thus punished for neglecting the obvious duty of paying a liberal compensation to those who sacrifice their personal interests to preserve the public health.

DIRECT REPRESENTATION: LIST OF CANDIDATES.

THE following gentlemen are the candidates for election as direct representatives for the respective divisions of the kingdom. We place them without favour in alphabetical order. We have no wish to be severe on any candidate who does not obviously represent over-represented bodies by history or by actual office. Five general practitioners in the Medical Council would be like letting fresh air into the Council room. If the general practitioners use their votes to elect officials of corporations, they will deal a deadly blow at the principle which has been conceded so tardily and scantily:—

England.

Balding, D. B., F.R.C.S. Eng, Royston.
Brown, George, M.R.C.S., London.
Bullock, H., F.R.C.S. Eng., Isleworth.
Carpenter, R. H. S., L.R.C.P. Lond., Stockwell.
Dolan, T. M., M.D. Durh., F.R.C.S. Edin., Halifax.
Foster, Sir B. W., M.D., F.R.C.P. Lond., Birmingham.
Glover, J. G., M.D. Edin., London.
James, Prosser, M.D. St. And., London.
Morris, Edwin, M.D. St. And., F.R.C.S. Eng., Spalding.
O'Connor, B., M.D. Qu. Univ. Irel., London.
Richardson, B. W., M.D. St. And., F.R.S., London.
Taaffe, R. P. B, M.D. Lond., Brighton.
Watts, A. N., M.R.C.S., L.R.C.P. Lond., Sharnbrook.
Wheelhouse, C. G., F.R.C.S. Eng., Leeds.

Scotland.

Bruce, William, M.D. King's Coll. Aberd., Dingwall.
Morton, James, M.D. St. And., Glasgow.
Sinclair, R., M.D. Glas., Dundee.

Ireland.

Jacob, A. H., M.D. Trin. Coll. Dub., Dublin.
Kidd, G. H., M.D. Edin., Dublin.
Laffan, Thomas, M.K.Q.C.P.I., M.R.C.S., Cashel.
McMordie, W. K., M.D. Qu. Univ. Irel., Belfast.

THE BACILLI OF RHINOSCLEROMA.

AT a meeting of the Imperial Society of Physicians of Vienna on October 20th, Dr. Paltauf demonstrated preparations and cultures of the bacilli of rhinoscleroma, which he had made in conjunction with Dr. V. Eiselsberg (*Münch. Med. Woch*, Oct. 26th). These bacilli discovered by v. Frisch are short thick rods, which were found by Cornil and Alvarez to possess a characteristic capsule. They are best demonstrated by staining the fluid expressed from the new growth with gentian-violet, or with an after stain with iodine and safranin, when they appear as oval cocci, or as short rods twice as long as broad, generally encapsuled. In sections they are well seen by staining first with gentian-violet and then rapidly immersing in clear oil. The capsules may be brought into view by staining with carbol-fuschin and washing in acetic acid, or by thymol-gentian-violet and acetic acid, or by aniline-water-safranin. These bacilli may be well cultivated in gelatine, agar, and potato. They form beautiful needle-like cultures similar to those of the pneumococcus—a similarity so great as to render them indistinguishable. Animals cannot be inoculated with the disease. In a mouse inoculation of the bacilli excited the formation of an abscess in which non-encapsuled bacilli, were found. After inoculation into the pleura, animals die in from twenty-five to twenty-eight days, and in the exudation and swollen spleen numerous diplococci or short rods indistinguishable from pneumococci were found. After subcutaneous inoculations in fatal cases numerous encapsuled cocci were found in the blood, spleen, and at the site of inoculation. Animals surviving inoculation were susceptible to further inoculation. By a comparison with the pneumococcus, it was found that animals infected with the latter died in two days, those infected with the bacilli of rhinoscleroma died in five days or survived. Out of six guinea-pigs that were inoculated two died, one exhibiting an interstitial pneumonia with numerous bacilli, the other dying with acute pleurisy and pericarditis—associated with encapsuled cocci. Rabbits are insusceptible—another analogy of this microbe with Friedländer's pneumococcus,—so that the only difference established between the two kinds is that the one is less virulent than the other.

CONTAGIOUS DISEASES (ANIMALS) ACT, 1886.

THE Local Government Board have addressed a letter to local sanitary authorities pointing out the powers they possess under the Contagious Diseases (Animals) Act of 1886, and the Orders in Council made thereunder. These powers are mainly those of making and enforcing regulations for the cleanliness of cowsheds and the better keeping of cows, and for guarding milk against infection or contamination. Until the passing of this Act sanitary authorities had no other control over these places than is conferred by the general sanitary Acts over all premises situated in their district. Now it will be their own fault if every cowshed is not properly paved, drained, and cleansed, sufficiently lighted and ventilated, and supplied with wholesome water. Some difficulty, due to the habits and customs of farmers, will have to be surmounted before farm buildings are put into order, and perhaps this is not lessened by the fact that farming is not nowadays sufficiently profitable to leave money for extensive improvements and repairs. Nevertheless, if this duty is seriously undertaken by the administrators of the law, very much can be done. At trivial cost, and with very great advantage, all cesspools and other sunken receptacles for human excreta can be abolished; the use of pails renders them unnecessary, and relieves the farmer of a risk which is always attendant upon their presence on a farm. The better paving and draining of farmyards will do much to improve the conditions under which cows live, and money expended in these directions will make ample return in promoting the health of these animals. The necessity for better water-supply is obvious to all those who have experience of country farms, and it may be anticipated that the means which will be taken for preventing the pollution of the soil will have considerable influence upon the condition of neighbouring wells. It is matter for extreme regret that the Act is practically powerless to enable precautions to be enforced against infection or contamination of milk due to some ailment of the cow. Mr. Power's recent report on "milk scarlatina" has shown the necessity for legislation for this purpose; but although local authorities can make regulations prescribing precautions to be taken by purveyors of milk and persons selling milk by retail against infection or contamination, these words only relate to conditions which may occur after the milk has left the animal. The Milkshops Order of 1885 prohibits the use of milk for food whenever disease exists among the cattle in a dairy or other

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building or place; but unfortunately the word disease is limited in its application to certain specified maladies, and ailments which we are beginning to learn have the most serious effect upon the health of milk consumers are not included in this restriction. It is, however, somewhat satisfactory that the authorities who are responsible for the condition of cowsheds and dairies are those whose duties primarily relate to the prevention of disease in man. Some steps must of necessity be taken to learn the causes of milk epidemics which are constantly destroying life in different parts of the country. The legal powers of these authorities are doubtless limited, but the moral duty remains, which we hope will be fully recognised, that every effort should be made to study the origin and prevent the occurrence of these calamities.

PNEUMOTOMY.

IT is possible that cavities in the lung may come to be regarded as amenable to the same kind of surgical treatment as is regularly practised for empyema. An interesting case of pneumotomy was read before the Académie de Médecine by MM. de Bearmann and Pengrueber. The patient was a child, aged twelve years, who had the physical signs of a large cavity situate in the middle of the right lung. The sputa were abundant and fetid, being expectorated five and six times a day by the aid of paroxysms of coughing. A large U-shaped incision was made at the level of the sixth rib, below the angle of the scapula. The periosteum was stripped off this rib, and some five centimetres of the rib resected. The thermo-cautery was next passed into the lung, so as to open the cavity, which was judged to be immediately adjacent to the region of the incision, and just above the level of the seventh rib. At the depth of about one inch the cavity was entered, and much fetid matter escaped. The incision was then enlarged, so that the finger could be passed freely into the cavity. A drainage-tube was inserted, and the wound sutured and dressed with iodoform. Very little blood was lost. The wound progressed satisfactorily, and had nearly healed at the end of three weeks.

THE SANITARY CONDITION OF RIPON.

AN important memorial has been presented by the medical practitioners of Ripon to the Sanitary Committee of the Town Council. It draws attention to the unsatisfactory condition of the drainage of the city, and it is alleged that were it not for this, for the deficient sewer ventilation, and for the surface nuisances, visitors would be induced to make much more lengthened stays in the place, and others would resort to it for the purposes of permanent residence. In the end it was resolved to invite the medical profession of the city to confer with the Sanitary Committee on the subject of their memorial. It was, perhaps, unfortunate that the report of the medical officer of health for the city should have been presented at the same meeting, and that in connexion with a death-rate of only 13·2 per 1000, and with a comparative absence of infectious deaths during a single quarter; the opinion should have been expressed that the report would doubtless dispel the excitement prevalent respecting the health of the city. We cannot think that Mr. Husband would wish to minimise the gravity of such disease-producing conditions merely because the natural result of allowing them to exist has not yet been actually brought about. The real point at issue is—are such conditions prevalent as the memorial refers to, and, if they are, what do the Corporation intend to do in order to prevent mischief arising from them? Unfortunately, we have a recently issued official report on Ripon before us, and the Local Government Board inspector, in describing the city, speaks of yards retaining surface filth; of houses huddled together without regard to the need for the circulation of air about them; of middens clustered about dwellings; of new houses built on "tips" of rubbish and ashes; of a water-supply derived from the Ure, which is higher up polluted with sewage, although active indications of pollution are not chemically discoverable in certain given samples; of very bad sewers and faulty house-drains; and of pollution of the Ure by the city sewage. These are the points to which the direction of the Town Council should be directed, and we may assume that their gravity will not be under-estimated because of comparatively small death-rates.

PROF. CHARCOT ON HYSTERICAL CONTRACTURE.

A CORRESPONDENT writes:—"The recognition of the fact that hysteria affects the male as well as the female sex is likely to have considerable influence on the practice of medicine, and the profession is deeply indebted to the labours of Professor Charcot and his assistants at the Salpétrière, who first called attention to this fact, and who are still working to elucidate the phenomena of this mysterious disease, so that with the progress of time we may hope for as complete a knowledge of this as of other diseases of the nervous system. One of the most recent discoveries in connexion with this subject is the fact that contractures are easily produced in persons suffering from hysteria by the application of various agents, of which bandages are the most important from the frequency of their application, and from the fact that the resulting contracture is usually supposed to be due to the original injury. The following account of a case which was used by Professor Charcot to illustrate his views in a lecture, subsequently published in the *Progrès Médical*, will serve to illustrate the importance of the recognition of the phenomena of hysteria. A butcher, thirty years of age, in whose antecedents nothing worthy of note was found, in the course of his work sustained an injury from a fall of a heavy mass of beef. At the time he did not lose consciousness, but felt stupefied, he heard a noise as of something breaking in his left arm, but felt no pain either at the moment or subsequently, but he found that all voluntary movement in his left arm was quite gone, and it gave him the idea as if the limb was absent. Two days after the accident he went to the Hôpital St. Antoine, when the hand, wrist, and fingers were considerably swollen; there was no voluntary movement, no rigidity, and no sensation. For fifteen days the arm was treated with poultices, and subsequently for forty-five days put up in a plaster-of-Paris bandage, at the end of which time the apparatus was taken off, but the arm was found to be in a state of contracture. Chloroform was administered, and the rigidity quite disappeared. There was no evidence of joint lesions or contractions of tendons such as might be expected to occur in a limb placed at rest for such a period of time. An apparatus was applied, with a view of straightening the fingers, but the flexion was so strong that it quickly became useless. After leaving St. Antoine, the patient visited several other hospitals, and was finally handed over to the care of Professor Charcot, at which time the forearm was in a state of supination, the fingers were flexed on the palm with a tendency to overlap each other, and the thumb was so strongly pressed on the index finger that it had made a considerable depression in the flesh. There was no voluntary movement, the reflexes at the wrist and elbow were exaggerated, and when called into action produced a trepidation of the muscles. There was slight atrophy of the limb, but no alteration in electric reaction of the muscles, and no evidence of joint or tendon lesion. There was a hemialgesia of the left side, with obnubilation of the senses of taste, hearing, and smell, and retraction of the field of vision of the same side. Sometimes in the arm there was a sensation of an aura, which mounted

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to the throat, producing a sense of suffocation and sometimes aphonia lasting a day or two. Such is the case, and the interpretation is as follows. The original injury gave rise to monoplegia flaccida of the left arm in a subject showing most of the objective signs of hysteria, of which disease this kind of paralysis is often a symptom, but by the application of bandages this monoplegia flaccida was changed into a monoplegia spastica. In support of this interpretation the Professor exhibited another young man who had been suffering six months from a monoplegia flaccida of one upper extremity with anæsthesia, in whom one or two turns of an Esmarch's bandage produced a condition of contracture. This, however, lasted only as long as the bandage was applied, but, as pointed out, if applied for a long period of time, it is extremely probable that this transitory condition would become chronic. Another interesting fact is that in the first of the two cases the application of a bandage to the left lower extremity produced a contracture resembling a true talipes equinus.

GLASGOW UNIVERSITY CLUB, LONDON.

THE inaugural dinner of this Club took place in the Holborn Restaurant on Friday, October 22nd. The chair was taken by Prof. Sir Wm. Thomson, F.R.S., who came to London specially to preside at this the first social gathering of the Club. In proposing the toast of the evening, Sir W. Thomson dwelt upon the large measure of success which had attended the Club, its list of members already numbering over one hundred names, and its financial position being very prosperous. The other speakers were—Sir Joseph Lister, Bart., Prof. Gairdner, Prof. Hales, Surgeon-Major Muir, M.D.; Drs. Guinness, Mitchell-Wilson, Chalmers, Finlay, Heron, and Carfield; and Messrs. McClymont McIlraith, Turner, and Legge. Fifty members of the Club and guests sat down to dinner, and several gentlemen wrote expressing regret for their unavoidable absence. Songs and recitations were given during the evening by Drs. Guinness, Chalmers, Yarrow, and Fisher.

FOREIGN HOSPITALS.

MR. F. C. CARR-GOMM, Chairman of the House Committee of the London Hospital, has recently published notes of visits which he paid during the summer now ended to some of the general hospitals in foreign capitals, which are perhaps somewhat less known than those in Western Europe. The institutions visited by Mr. Carr-Gomm were the Commune Hospital at Copenhagen, the Marie Magdalene at St. Petersburg, the Foundling Hospital at Moscow, and the City Hospital at Stockholm. In the pamphlet before us, particulars are given of the building and fittings, staff, conditions of admission to, and dietary of these charities, from which it appears that the bedding supplied to each patient is superior to, and the diet certainly more varied, even if not better than, that used in this country. It must be remembered, however, that it is very hard, if not impossible, to make any comparison whatever between our administration here and that of foreign hospitals, because not one of the latter is supported by voluntary contributions, but all are either institutions directly under the national government or under their several municipalities. The principal noticeable results of the different system to ours are, first, that, with an equal determination to secure the greatest efficiency of administration, they are not hampered by an incessant striving after greater economy in every department; and, secondly, that the other hospitals in the city, being under the same management, are never perplexed with overcrowding, but can, as occasion requires, pass on their extra patients to other hospitals or take into their vacant beds the overflow of others. Each of these systems has, no doubt, its special merits and demerits, but it would be an evil day for us if it were ever found necessary to put our hospitals, like our Board schools and workhouses, on the rates, and to remove those incentives to private generosity which the existence of our voluntary hospitals so abundantly supplies, even though such a result might make the management of them infinitely easier.

UNIVERSITY OF LONDON.

ACCORDING to the present calendar (1886-87) of the University of London, "candidates who in or after 1885 have passed the Intermediate Examination in Science will be considered to have passed the Preliminary Scientific M.B. Examination." It having been pointed out to the Senate that this regulation as worded would inflict some hardship on students who had passed an equivalent, or even practically identical, examination in preceding years, it has been determined to allow to candidates who have passed on and after 1880 the same privileges as are accorded to those who only passed last year.

MALFORMATION OF THE ŒSOPHAGUS.

AN interesting and curious arrest of development and alteration in the anatomy of the œsophagus is described by M. Boisvert in the *Journal de Médecine de Bordeaux*, No. 13. The upper part of the œsophagus started from the pharynx in the customary manner, but was narrower than usual, and terminated in a cul-de-sac, somewhat dilated, behind the situation of the bifurcation of the trachea. The lower part of the gullet commenced at the bifurcation of the trachea as a tube, continuing the direction of the trachea, and after a short course of three centimetres terminated in the stomach. When milk was taken, it was received into the cul-de-sac and ejected therefrom partly into the trachea, whence it found its way into the second part of the œsophagus. It is needless to say that with each ingestion of food attacks of asphyxia from the first nearly took the life of the infant, but did not end fatally until nine days had elapsed. The epithelium which lined the two parts of the œsophagus was of the stratified variety.

MANGE IN FOXES.

A WIDE extension of mange in the fox is creating much concern among lovers of the popular and health-giving recreation of fox-hunting. As the fox approaches more and more to the domesticated habits of the dog, he becomes liable to the maladies and surfeits of an artificial life. It has been found impossible in some of the most fashionable hunting localities to breed and rear a sufficient number of foxes. They have often to be imported from districts where fox-hunting is impossible, and in some instances from the Continent. This necessitates for a time artificial feeding and confinement, which has to be continued even after the cubs are turned down, in order to retain them in the locality where there has been a dearth of them. The development of mange among the imported animals and its communication to others are the result of "spoon-feeding" of cubs, as it is popularly called, which not only engenders disease but lessens the courage and fitness of the animal for sport. Good hounds refuse to run an artificially reared fox; thus there is danger of bringing the sport by such artifice into disrepute. Another reason why home-bred foxes are fed artificially is that it lessens their destructiveness. Pheasants and poultry are safer where foxes are fed. But food with "fleck and feather" is the natural aliment of the fox, and if he is to be kept fit for the sport of fox-hunting, as it is understood by true sportsmen, this he must have, even to the detriment of the pheasant-preserve and the hen-roost. In our artificial conditions of life it is important for

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purposes of health to retain and encourage out-door recreation; but for the man of middle life it becomes more and more difficult to indulge in the physical recreation suited to his earlier years. Fox-hunting and shooting are exceptions to this, for they can be indulged in to the verge of old age. To many a hard-worked man in a profession or in business, it is the only recreation and relief to the cares of duty. It is therefore a matter of regret that anything should interfere with this health-giving recreation.

THE SEWERAGE OF BROADSTAIRS.

THIS watering-place, so attractive to many who wish to combine some quiet and rest with the breeze off the east coast of Kent, appears to be in a sore plight as to its recently constructed works of sewerage. The outfall sewer has been carried along the foreshore at the foot of the chalk cliffs, and, owing to statements as to its inefficient working, the surveyor was instructed to report on it. He found considerable deposit in it, especially in "that part which is 14 in. out of level." The concrete around the pipes is so bad that the sea has in places washed it away, with the result of breaking some of the pipes. There is no ventilation whatever in the whole length of the outfall, and when the sewage is penned up the smell from the street ventilators is very bad indeed. The tidal flap at the outfall is broken off, and the works generally are in a "very alarming condition." Here we have the very conditions which have enabled people to say that before they had sewers they were comparatively healthy, but after sewers were provided the causes of typhoid fever became rife. And it is not only those who are responsible for the execution of the works who are to blame, for the lack of ventilation shows that, unless the original plans were departed from, the scheme itself was in part faulty. The chairman of the Local Board of Health appears only to desire to get the best possible remedy, and hence he proposed to communicate to the Local Government Board the whole facts, but ultimately a previous and shorter report than the one detailing the mischief was agreed to be transmitted to the central authority.

BITTERS IN DIGESTION.

IF any doubt still survived as to the prejudicial action of bitters on the digestive process, Dr. Tschelzoff's recent experiments may be regarded as having given it the *coup de grâce*. He has shown that bitter substances produce effects more hurtful than beneficial on digestion and assimilation, though till quite recently it was an article of popular, if not of professional, belief that these substances, while proving indifferent in the peptonification of albumen, yet hindered fermentation, and were therefore useful in certain ailments of the stomach. Experimenting with a great number of bitter substances, chiefly extracts, as being in more general consumption, he dealt with artificial digestion prepared with gastric juice; and in other cases he administered flesh to dogs, to some of which he gave bitter extracts, and, having sacrificed the animals, he weighed the quantity of the meat digested. In still other cases he kept the dogs alive while introducing into their stomachs, through permanent fistulæ, either flesh only, or flesh in union with bitters. He found invariably that in artificial digestion a small amount of bitter extract suffices to retard the digestion of fresh fibrine, and that the same effect, rather less pronounced, is produced in the natural stomach. Turning next to determine in what way bitters can whet the appetite, whether by augmenting the gastric secretion or by irritation of the mucous membrane, he experimented on dogs in whose stomachs he had made permanent fistulæ. After having introduced flesh only or flesh in union with bitters, he collected the gastric juice, and found that, in these cases also, the bitter extracts diminished the gastric secretion, which underwent only a slight and brief augmentation when the bitters were employed in small doses. In every case the energy of the gastric juice was enfeebled. As a further result of experiment, he ascertained that bitters retarded the pancreatic digestion, while the biliary secretion was enhanced by extracts of absinthe and trefoil. The traditional belief, or rather assumption, that bitter extracts retard fermentation, is further shown by Tschelzoff to be fallacious. Indeed, the stronger the dose of bitters, the greater the intensity of the fermentation; in this case, however, the bitters do not behave in the same manner, and so the extracts of quassia and absinthe do not ferment, while fermentation becomes stronger in presence of powdered rhubarb or quinine. Finally, the putrefaction of organic substances, like blood or urine, he found to be favoured by the presence of bitter extracts, which in the organism also impede the assimilation of nitrogenised compounds.

PROFESSOR VIRCHOW AT THE BROWN INSTITUTION.

THE veteran pathologist of Berlin during his recent visit to this country spent an afternoon in inspecting the pathological work of the Brown Institution. The Professor-Superintendent, Mr. Victor Horsley, was able to show Professor Virchow many fair specimens of the kind of work that experimental pathology is pursuing in the face of much difficulty and many disadvantages in this country. Professor Virchow was shown the methods adopted in the pursuit of the pathology of myxœdema by Mr. Horsley. The centres of phonation in the cerebral cortex of the monkey, and those of the hand and thumb, as ascertained by Mr. Horsley, Dr. Felix Semon, and Dr. Beevor, were also demonstrated. Dr. Wooldridge explained his experiments on the blood plasma, and Messrs. Ballance and Edmunds exhibited specimens of their investigations on the ligature of large arteries in animals.

LOCALISED ELASTIC SPONGE PRESSURE.

PROFESSOR C. WEIL has for some time past been making use of pressure by sponges in several different classes of cases in which continuous and evenly distributed pressure seemed to be indicated. He now gives the results of his experience of this method in some articles in the *Prager Medicinische Wochenschrift*. The plan seems to have been first proposed by the late C. von Heine, and was mentioned by Professor Weil as long ago as 1877 at a meeting of the Prague German Medical Society. The plan adopted is to envelop the whole part in a firm plaster-of-Paris or soluble silicate bandage, and when this has set to cut a "window" in it exactly corresponding to the area over which pressure is required. Wedge-shaped pieces of sponge are then packed into the "window." This sponge pad is kept exerting constant pressure by the application of a strongly stretched indiarubber band encircling the whole part over the plaster-of-Paris bandage. The sponge should be of a fine quality, with small pores. It must also be quite clean and free from sand, but this must be effected by beating, and not by washing, which causes a loss of elasticity. Professor Weil knows of no other means of producing such rapid resorptive effects as sponge pressure, and he cautions his readers that if not carefully watched the articular synovial membrane and ligaments may become seriously impaired by the strong and constant pressure exerted on a joint. As a rule, the application must be removed and renewed every twenty-four hours, even when the patient is free from pain—as, in fact, is usually the case. After the first twenty-four hours an extensive exudation is found to have greatly diminished, the skin being blanched, wrinkled, and dried up, with here and

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there little yellowish bullæ, showing the situation of the pores of the sponge. Sponge pressure was successfully employed in hydrarthrosis of the knee. Here the plaster-of-Paris bandage was applied to the thigh and leg, fixing of course the joint; the bandage, too, was carefully strengthened on the posterior aspect. The next day a "window" was cut out, so as to expose the anterior and lateral aspects of the joint. Three thick wedge-shaped pieces of sponge were then applied, a large one over the upper portion of the joint, and two smaller ones at the sides of the patella, the patella and its ligament being free. The sponges were kept *in situ* by an assistant, while the interstices were filled up with cotton-wool, and an indiarubber bandage tightly applied over all. This was allowed to remain for twenty-four hours. No pain was felt, nor was there any swelling of the foot, or blueness or numbness of the toes. When the bandage was removed the swelling was seen to be greatly reduced. The bandage was reapplied with new sponges, but not so tightly as before. In two days' time the swelling was no longer perceptible; after this, light pressure was continued for a few days. The plaster bandage was then removed and the slight return of the effusion produced by movement of the joint controlled by massage. The sponge pressure proved useful in many other affections of the joints, bones, and tendon-sheaths, also in angiomata and herniæ. Professor Weil proceeds to give some interesting particulars of a case of rheumatoid arthritis, another of a very large angioma of the infra-axillary region, and some of very large herniæ, in all of which sponge-pressure proved very useful.

ABERDEEN CHAIR OF MATERIA MEDICA.

OUR Edinburgh correspondent writes:—In consequence of the untimely death of Professor Dyce Davidson, of Aberdeen, a vacancy has occurred in the teaching staff of that university. There is a strong feeling in Edinburgh in favour of Dr. Stockman as a candidate for the post. Dr. Stockman is assistant to Prof. T. R. Fraser, in the Materia Medica department of the university; during the period of his teaching and laboratorial research he has earned the reputation of an able lecturer and a skilful investigator in experimental pharmacology, and during the present year has gained the high distinction of a university gold medal for his researches upon the action of vegetable astringents.

PROPORTIONAL MORTALITY.

AT the recent meeting of the British Assooiation at Birmingham, Mr. Baldwin Latham, the well-known civil engineer, read a paper, of which the title was "Proportional Mortality," and its object to describe a method by which, in the author's words, the proportional death-rate of a district may be very correctly arrived at with great facility by the use of "constant" numbers. This method proposes to construct from the proportion of births to deaths registered in a population in a given year, with the help of the mean proportion which such facts for the same population bore to each other in the preceding census years, a figure which is somewhat arbitrarily called the proportional death-rate of the population. It is asserted by Mr. Latham that this so-called proportional death-rate would be a more trustworthy indication of the true sanitary condition of any district than the death-rate calculated for intercensal years upon the estimated population of the district. It may be fully conceded that, so long as our census enumerations are not held more frequently than once in ten years, estimates of population in the several years of these decennial periods, even if revised from time to time in accordance with the fluctuations in the recorded increase of inhabited houses on the rate-books, must necessarily constitute an element of uncertainty in the construction of death-rates. The value of Mr. Latham's proposed method mainly depends upon whether its results are more trustworthy than those supplied by what has been called the national system. Now, Mr. Latham's method assumes not only constant relations between the births and deaths recorded in a population, but attributes all the recorded fluctuations in those relations to the rise or fall of the death-rate; it practically assumes a stationary birth-rate. In the face, however, of the marked depression in the marriage- and birth-rates in England and Wales in recent years, the hypothesis of a stationary birth-rate must involve a fallacy. It is patent that a decrease in the excess of births over deaths may be due either to a decrease of the births or to an increase of the deaths, and that any system that attributes fluctuations in the excess of births over deaths solely to increase or decrease of deaths cannot yield trustworthy results. It may be true that the populations of towns are liable to more violent fluctuations than are their birth-rates, but it should also be remembered that it is far easier to test the approximate accuracy of an estimate of population than the accuracy of the hypothesis of a stationary birth-rate. It would, especially at the present time, be essentially unsound to adopt the hypothesis of a stationary birth-rate as a basis for the calculation of a death-rate. It should, moreover, be borne in mind that by far the most serious objections to the crude death-rate—that is, to the mere proportion of deaths to population—as a test of sanitary condition, are that this figure takes no account of the disturbing influences of varying sex and age distribution in different populations. It is scarcely necessary to point out that Mr. Latham's method makes no pretence of eliminating these disturbing influences, and cannot even on this ground claim any superiority over the national system.

MELBOURNE HOSPITAL.

AT an inquest recently held on the bodies of three patients who had died in the Melbourne Hospital from blood-poisoning, the jury stated that, from the mass of evidence brought before them, they were unanimously of opinion that the hospital is in a thoroughly insanitary state, is a constant menace and injury to sick poor, and calls for the immediate attention of the authorities with a view to its removal and rebuilding in a more suitable place. They also urged the Government, the committee, and the public to take immediate action, as they considered the hospital to be a disgrace to the city. The coroner, in summing up, described the out-patients' ward as a bureau and exchange for diseases. The insanitary condition of the institution has been previously recorded and commented on in our columns; but surely after such a vigorous and sweeping condemnation as this, the responsible authorities will feel it their duty to take remedial action at once.

THE FULHAM TRAGEDY.

THE last incident in this sad drama occurred on Thursday, the 28th ult., at the inquest on the bodies of Mrs. Leader and her infant child, which were recovered from the Thames three days previously. The further evidence of mental derangement, as sworn to by the husband of the deceased, is now valueless; but should it have transpired that the unfortunate woman had survived, it would then have been of paramount importance. The symptoms mentioned by Mr. Leader were pains in the head and side of the deceased after her confinements, excitability, and threatened violence to herself on some occasion previously to marriage. These deserve enumeration as being applicable to some future case of homicide in which the murderer may possibly not make away with himself. The jury, after a

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consultation, returned a verdict of "Found drowned," properly making no allusion to the mental condition of the deceased mother at the time of the commission of the act.

SOCIETY FOR THE PREVENTION OF HYDROPHOBIA.

IT can only be regretted that there should be a *raison d'être* for such a Society. The Government of the land, instructed by its scientific advisers, ought to have prevented any occasion for its existence. To an unbiased mind it is difficult to understand why there seem to be insuperable objections on the part of some individuals to the eradication of rabies. The principal veterinary surgeon of the army, Mr. Fleming, has added the weight of his authority by supporting the new association. Dr. Burdon Sanderson and Mr. Victor Horsley are also amongst its adherents. But the Society has not only the support of the veterinary and medical professions; its position has lately been strengthened by a decision of the highest legal authority of the land. The Lord Chief Justice and his brethren have now spoken decisively on the meaning of the words "under proper control" occurring in the Dog Act of 1871. A dog must be either muzzled or led. The magistrates of London have now no excuse. The matter is settled. They cannot plead ignorance of the meaning of the Act. But the mischievous doctrine that moral control is sufficient has a deeper root in the country. A contemporary insists that we have already given the system of muzzling a fair trial, and then recommends that the police order be rescinded as useless, and even promotive of the spread of rabies. An argument of this sort is not worth notice. The order of the police has never been in proper force. We sincerely hope that the time will not be far distant when the enforced muzzling of every dog in the kingdom for the space of at least six months will give science the opportunity of testing its hypothesis, which is simply this: that rabies being a disease only developed as the result of contagium, the removal of those means by which the contagium spreads must infallibly lead to the extermination of the disease.

THE CHOLERA AT MALAGA.

RUMOURS are current that Asiatic cholera has broken out again at Malaga, Almeria, and other towns in Spain. Some persons have taken flight already, and the local authorities at Grenada have demanded permission to protect themselves by inflicting quarantine on all new comers. It will, we fear, be difficult to obtain authentic information, particularly with regard to the condition of affairs at Malaga. Last year, when the presence of cholera was freely acknowledged in many towns of Spain, the authorities strenuously maintained that Malaga was free from infection. It was admitted, it is true, that there were about 400 cases and 200 deaths from "gastro-enteritis of a choleriform description"; but the shipping interests of Malaga rendered it imperative to deny the presence of cholera at so important a maritime station. Nevertheless the cholera had broken out, though it never spread to the same alarming extent as in other great centres. Malaga, fortunately, possesses an excellent water supply. The Torremolinos stream, captured at its source, is brought to Malaga in iron pipes, so that it cannot be contaminated on the road. On the other hand, there are some inhabitants who persist in drinking the water from the old wells which still exist in several houses. These private wells and the defective condition of the town sewers and drains are quite sufficient to account for a recurrence of cholera. While these evils continue, it is futile to throw the responsibility on Italian or other vessels visiting the port. The climate of Malaga is one of the best in Europe for the treatment of several complaints. The town should be a fashionable and prosperous health-resort, as well as an important commercial port. The indolence and the ignorance of the Spanish authorities alone prevent the full development of these natural advantages. Let us trust that this double chastisement—these two years of cholera—may teach the indispensable lesson, and that the authorities, shaken by public opinion, will awake from their lethargy. Private wells could and should be closed at once. At small expense house drainage can be considerably improved. This much, at least, could be done immediately; while, in time, the means might be found to rebuild the sewers and provide efficient means of flushing. The large influx of visitors, seeking renewed health under the beautiful sky where the sugar-cane and the banana ripen in the open air would materially help to cover the cost of such sanitary improvements. The inhabitants of Malaga would thus increase their own prosperity, protect themselves against epidemics, and, by converting their town into a health-resort, help to save or prolong the lives of many thousand foreigners.

DR. MORTON'S CANDIDATURE.

DR. MORTON has been addressing a meeting of registered practitioners, and trying to convince them that, though he is actually the president of a corporation in Scotland, he is quite eligible to represent the practitioners of Scotland. We admit the courtesy and the ingenuity of Dr. Morton's address, but it is quite ineffective. A man cannot serve two masters, and Dr. Morton's primary duty as the chief officer of the Faculty is to serve it first. For the time being he has special obligations to a corporation already over-represented. There should be no doubt as to his rejection by the practitioners of Scotland. We are somewhat doubtful about the practice of "stumping." If medical men are to speak in all the chief towns as a condition of election, there will be a great temptation to talk nonsense, which Dr. Morton fortunately avoided, and the most eligible men will decline the ordeal.

INFLUENCE OF LIGHT ON FERMENTS.

IT would seem to be necessary to keep away from the light all ferments that are meant to act in the darkness of the stomach and duodenum. Mr. Arthur Downes has made observations on the influence of light on various ferments now frequently prescribed in cases of digestive disorder. Active solutions of malt diastase, pancreatic diastase, and trypsin were all rendered inactive by an exposure to sunlight in half-filled flasks for the space of one month. A solution of pepsine also became inactive after a similar amount of exposure. Even rennet had some of its properties enfeebled. Other flasks (control experiments) were kept in precisely the same conditions, with the exception that they were not exposed to light. The ferments in the vessels kept in the dark remained perfectly active.

SEWAGE DISPOSAL: ANOTHER SUGGESTION.

A CORRESPONDENT of the *Pall Mall Gazette*, who signs himself an "Architect," has suggested that the sewage of London should be strained through wire buckets, and the solids thus caught, cremated, the remaining liquid being subsequently disinfected. This proposal has brought down upon his head a storm of ridicule; engineers have freely pointed out the fact that by this method he would practically catch nothing, unless it were some of the babies, corks, indiarubber balls, dolls, clothes-pegs, &c., which find their way into the sewers, and that it would be necessary for the meshes of his wire net to be 5000 to the square inch if he is to meet with any success in extracting the finer particles

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which constitute the bulk of sewage. The notion of thus dealing with an amount of sewage which, it is stated, would daily fill a box 40 ft. wide, 40 ft. high, and three miles long, has created much amusement in the minds of engineers, and it has been suggested that the "scheme is only a grave irony, not to be taken seriously, but in ridicule of the Metropolitan Board's tinkering with the problem." Is this possible? We note that the Metropolitan Board of Works are about to appoint an architect; recent action of this Board suggests the possibility that the correspondent may be a candidate for this office, and that he hopes to commend himself to their good sense by a proposal which is at any rate suggestive of the course they have adopted.

"THE UNIVERSITY COLLEGE (LONDON) GAZETTE."

THIS *Gazette* is published by the University College Society, an association formed and maintained with the object of promoting fellowship amongst the past and present students of University College, London. Professor Henry Morley initiated the movement, which resulted in the amalgamation of the various Societies that have their habitation within the walls of the Gower-street University. The *Gazette* is edited by a gentleman of excellent literary tastes, who dates his introductory letter from the Church of St. Mary Ottery, wherein was interred 500 years ago the mortal remains of John Gower, after whose name we have the street so famous in the annals of unsectarian movements. The *Gazette* will undoubtedly serve as an emblem as well as a promoter of the object the Society has in view.

THE BOWMAN LECTURE.

PROFESSOR ZEHENDER of Rostock will, as we have already stated, deliver the Bowman Lecture before the Ophthalmological Society on the evening of Friday, Nov. 12th, at 9 P.M. His subject will be "The Parasitic Diseases of the Eye." It is to be hoped that members of the profession will attend the lecture, and show by their presence their approval of the enterprise of the Society.

THE MYOPATHIC FACE.

AT a recent meeting of the Société Médicale des Hôpitaux, M. Landouzy exhibited three cases of progressive muscular atrophy affecting the face, shoulder, and arm. There is a family likeness in the different cases, owing to the existence in all three of the "myopathic face." This peculiarity of the countenance is best seen when an attempt is made to get signs of animation in the face. It is found that the patients cannot whistle, blow, extinguish a candle, make grimaces, or kiss, owing to the atrophy of the orbicular muscle of the mouth. A good description and phototype illustrations of this affection may be seen in Dr. Gowers' manual. This form of myopathy appears to be less rare than has generally been supposed, for Landouzy has himself met with nine cases in the course of five years.

SCARLET FEVER IN THE HUDDERSFIELD UNION.

A few weeks ago we reported an epidemic of scarlet fever in the Cumberworth district of this Union. We are now informed that the fever still rages, that fresh cases are occurring daily, and, although this state of things has continued for several months, we understand that no measures have been taken either for the closing or disinfecting of the various schools throughout the district. The disease has also spread into the adjoining Unions of Wakefield and Penistone. A few cases of typhoid have also been reported. We should like to ask, What are the authorities doing?

PROFESSOR VON ARLT.

WE regret to learn that since the amputation of the thigh which Professor von Arlt has undergone in consequence of gangrene, the vascular affection has made still further progress, and there is now little hope of the recovery of the great Vienna ophthalmologist.

FOREIGN UNIVERSITY INTELLIGENCE.

Buda Pesth.—A Professorship of Odontology is about to be established.

Leipsig.—Professor Ludwig will celebrate his seventieth birthday in December.

Santiago.—The Chilian government are about to appoint a Professorship of Physiology, with a salary of 15,000 francs and free passage.

THE Société Française d'Hygiène proposes for competition the following subject for the year 1887:—On Seditariness in Schools (Primary and Secondary), and on Intellectual Overpressure in Superior and Special Instruction. The first part will set forth the facts and observations which establish the evil; the second part will indicate the best means for combating it. The work should not exceed thirty-six pages of an 18mo pamphlet. The prizes offered are a gold medal of the value of 500 fr. (£20), and two silver medals of the value of 150 fr. each. The memoirs (written in French, English, German, Spanish, and Italian) should be forwarded in the usual academical form to the Secretary of the Society, 30, Rue du Dragon, Paris, before April 1st, 1887.

THIS year we notice throughout the country an accession of medical men as municipal representatives. Mr. W. Berry, J.P., M.R.C.S.E., after a contest, retains his seat in the Wigan Town Council; Dr. Braidwood of Birkenhead, and Dr. Moore of Southport, have both been successful; whilst Dr. Cross of Liverpool, and Dr. Bark and Dr. Wills of Bootle, head the poll in their respective wards. Dr. Cocker is mentioned as the jubilee mayor for Blackpool.

FOR some months past an epidemic has been reigning in the Greek seaside town, Nauplia, called by the local physicians *ἕκτερος τύφου*. It attacks especially the well-to-do classes, and generally proves fatal in three or four days. The bodies are of a yellow colour, and quickly become black. The Athens Sanitary Council describes the disease as pernicious yellow fever, and considers it of a non-infectious character.

THE annual public meeting of the Medical Society of University College, London, will take place on Wednesday next, Nov. 10th at 7 P.M., when the Fullerian Professor of Physiology in the Royal Institution of Great Britain, Professor Arthur Gamgee, F.R.S., will deliver an address on "Medical Education and Medical Degrees in relation to the present position of English Medicine."

IN the Saxon town of Colditz, which contains about 5000 inhabitants, and is situated near Leipsig, a society for leaving nature to cure diseases (Naturheilverein) is in course of formation. The six local practitioners have agreed to inform the members that they must not expect medical assistance from them in case they should change their minds.

A CASE of poisoning by the roe of herrings is reported in *La France Médicale* No. 122, by M. Belin. The chief symptoms were vomiting and diarrhœa, attended with severe colic and burning sensations throughout the whole course of the stomach and intestines.

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E first meeting of the Epidemiological Society will be d on Wednesday, Nov. 10th, at 8 P.M. The President, r. Walter Dickson, will deliver an inaugural address, entitled "A Review of the past year, with some Reminiscences of Cholera and Tropical Fevers."

THE Lord Advocate of Scotland has intimated, in reply to a correspondent, that he does not consider he can interfere in the matter of the purification of the Clyde, and is of opinion that the initiative should be taken by the Corporation of Glasgow.

THE Russian military medical authorities have decided to select an army surgeon annually, to be sent for two years to the asylum in connexion with the St. Petersburg Military Medical Academy for the purpose of studying mental diseases.

THE Society of Hygiène of France have conferred on Dr. B. W. Richardson, F.R.S., the distinction of Honorary Membership, in recognition of his many and original advances in sanitary science, and his labours for the public health.

THE next meeting of the Neurological Society will be held at Bethlem Hospital, S.E. on Wednesday, Nov. 17th, at 8.30 P.M. The subject for discussion, introduced by Dr. Savage, will be "On the Relationships of Epilepsy and Insanity."

DR. FAUVEL, the laryngologist, has just received the Cross of Officer of the Saviour from the King of Greece, for services rendered to the Greek surgeons who came to Paris to study his treatment of throat disease.

A SERIOUS outbreak of diphtheria is reported to have occurred at Hawkshead, a small town in North Lancashire, near Windermere. The local authorities have closed the schools for a month.

IN reference to a recent charge, we may say that the name of Donald McGregor Macguire, of Davies-street, Berkeley-square, does not appear in the Medical Register.

Pharmacology and Therapeutics.

GEDDES' FLUID EXTRACT OF HEMLOCK BARK.

THE Abies Canadensis, Canada Pitch, or Hemlock Pitch, is a tree which belongs to the natural order Coniferæ, and grows abundantly in the United States. The bark contains an astringent principle, and is used in some parts of America in the process of tanning. The fluid extract prepared from the bark is of value in the treatment of leucorrhœa and allied conditions. It is also recommended in inflammatory diseases of the mucous membrane lining the cervix, and in granular degeneration of the vaginal portion of the cervix itself. Geddes' Fluid Extract of Hemlock Bark is a reddish-brown fluid almost of the consistence of treacle, and having a very marked astringent taste. It is free from alcohol, and it is said that it will keep good for years in any climate. It would obviously be unfair to offer any opinion as to its therapeutic value without an extensive trial in a variety of cases.

VIBURNUM PRUNIFOLIUM IN THREATENED ABORTION.

The black haw, or Viburnum prunifolium, has long been used as a household medicine for various purposes, and was recommended some twenty years ago by Phares in cases of habitual or threatened abortion. Recently Dr. I. M. L'voff has made several trials with this drug, and, as the result of the success obtained by its means, recommends it as strongly as Phares. The number of cases in which he gave it was fifteen. Nine of these were cases in which abortion had become a habit; but by means of this treatment they all completed their full term of pregnancy. In the other cases signs of commencing or threatening abortion had already presented themselves—considerable hæmorrhage, shortening of the cervix uteri, and dilation of the os, together with slight griping pains in the uterus. In these the viburnum proved equally successful, the threatened abortion being arrested and the pregnancies lasting their proper time. The preparation usually employed was the dry extract, of which two grains were given four times a day in pill or powder. No disagreeable symptoms were ever produced by it. When the uterine pains were severe, a quarter of a grain of opium was added; but when this was not the case, the viburnum was given alone. The uniformly satisfactory results were obtained in spite of the fact that some of the women were poor, and, so far from being able to lie in bed, were actually obliged to attend to their household duties, so that the arrest of hæmorrhage and of the threatened abortion could only be ascribed to the viburnum administered.

SOLANINE.

An account of the properties of solanine has recently appeared in the *Bulletin Général de Thérapeutique* from the pen of Dr. A. G. de Montguyon. Solanine poisons the terminal motor plates of organic life, narcotises the medulla, spinal cord, and nerve trunks, and so produces paralysis of the terminal extremities of the sensory and motor nerves. These physiological effects allow solanine to be classed as an analgesic agent. Solanine may be prescribed without risk in strong doses. It has none of the inconveniences of morphine or atropine, has no cumulative action, and is specially a substitute for morphine. It does not cause congestion of the brain, even in elderly people, and probably not in children. In all conditions of excitement, spasm, or pain, solanine may be employed with a prospect of success. The ordinary dose is thirty centigrammes three or four times a day. It may be given fasting or after meals, and the dose may be greatly increased. For hypodermic injections a solution of the chlorhydrate in distilled water may be used in the proportion of from one to five centigrammes per dose, administered from two to four times a day.

CALOMEL IN HEART DISEASES.

According to several communications which have recently appeared in the Pesth and Vienna medical journals, calomel in doses of about three grains per diem has been observed to increase very largely the quantity of urine passed in cases of cardiac dropsy, thus determining in a very short time the existence of œdema due to heart disease. The mode in which it acts seems to be by promoting the absorption of the exudation, not by any direct effect upon the heart or kidneys; the strength, frequency, and rhythm of the pulse not being usually modified at all. Calomel is quite useless in nephritic dropsies, or those caused by obstruction of the portal system or by inflammatory processes. If diarrhœa occurs opium may be given, and if stomatitis, chlorate of potassium, without interfering with the absorptive action.

LANOLINE.

Lanoline, or rather "suint," according to M. Rohart, has a great affinity for sulphur (*British and Colonial Druggist*). It can absorb 110 times its own bulk of sulphuretted hydrogen. This sulphurised "suint" saponifies with great facility, even in the cold. Considering the penetrative properties of lanoline and the value of sulphur in many cutaneous affections, these facts are of some medical interest. It is already asserted that cases of sycosis that have proved refractory to other remedies have been greatly benefited by the sulphurised lanoline.

METHYLAL.

Methylal is believed by Signor Personali to possess anæsthetic and hypnotic properties. It is a mobile colourless liquid. Suspension of reflex action with deep unconsciousness, preceded by anæsthesia, were observed after subcutaneous injections in dogs. The effects in rabbits were less marked; the heart-beats were somewhat increased in number, the blood-pressure slightly lowered, and the respiration was slowed and rendered more profound. It is believed also to antagonise the spasmodic actions of strychnia. It relieves abdominal pain in human beings, and as an oint-

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ment or liniment causes anæsthetic effects on the skin. As a liniment, the proportion is 5 per cent. of methylal in 85 per cent. of oil of almonds; as a syrup for internal administration, 1½ in 100 parts of simple syrup.

IODOFORM VASELINE IN SMALL-POX.

Dr. Colleville recommends in the *Union Médicale du Nord-Est* a vaseline ointment of iodoform, of the strength of 1 to 20, as not only an antiseptic emollient gratifying to the patient, but as somewhat anæsthetic, and as preventive of the formation of foul-smelling scabs and of pitting. Dr. Colleville has observed that in a case of confluent small-pox where iodoform ointment was frequently applied the vesicles were prevented from developing into pustules. No signs of iodoform poisoning have been observed in any of the ten cases in which this treatment has been employed.

NEW ANTIPYRETIC.

It is asserted that the leaves of a Ceylon plant, the Michelia niligerica, have been found to possess marked antipyretic properties, a decoction of the plant acting in this respect more powerfully than cinchona. A peculiarly bitter principle is also said to have been extracted from the leaves.

THE COLONIAL AND INDIAN EXHIBITION.

[SECOND NOTICE.]

WHEN the Exhibition was first opened, the catalogues relating to the various colonies were not published, and the general catalogue was deficient in special information. Now, however, the catalogues of the different colonies would constitute a formidable and, in the main, an interesting library. These volumes are not mere dry enumerations of the objects exhibited, but generally contain essays on the colony and its principal resources. In some there are numerous illustrations, so that from every point of view information is forthcoming. The natural wealth of each colony is carefully shown, and though the data are given principally for commercial and manufacturing purposes, the facts are also most useful to the scientist. The botanist will find at the Exhibition many opportunities of extending his practical experience and of examining innumerable specimens. The chemist may see a variety of extracts from the plants special to each colony. New South Wales, for instance, has no less than four volumes ready for distribution to those who are seriously studying the condition of the colony. There is the official catalogue, a well-printed book of 478 pages. A report issued this year, under the authority of the Government of the colony, gives a detailed account of the progress, present condition, resources, and statistics of New South Wales; this occupies 221 pages. Then we have the Year-book of the colony, another 168 pages of very small type with illustrations; and a second and shorter work on the "Progress of the Colony," specially prepared by the Commissioners at the Exhibition. This enumeration will give some idea of the literature forthcoming, and the other colonies have shown similar energy in this respect. From these books we gather that the mean annual temperature at Sydney is 62·7° Fahr., that the average birth-rate was 37·90 per 1000 in 1884, the death-rate only 15·88, and marriages 8·35. Mortality tables ranging over periods of ten years are missing, and the above figures therefore cannot be taken as conclusive. In some cases facts are forthcoming demonstrating the energy of colonists with respect to public enterprise bearing on the preservation of health. Thus, the Sydney waterworks will cost more than £2,000,000 sterling; it is necessary to cut through nearly five miles of solid rock. £500,000 sterling is now also voted by the Government to supply several smaller towns with water. Side by side with these great public works, there are, of course, details and exhibits relating to individual firms and private enterprise; and among these we noted a case of candles and night-lights in the court devoted to New South Wales, which are manufactured with the oil of eucalyptus; by the burning of these lights peroxide of hydrogen is thrown off, and this should not merely act as a disinfectant, but relieve complaints of the respiratory organs, especially spasmodic asthma and bronchitis. We have also the celebrated Wingen oils with which the Australian contingent to the Soudan was amply provided. From time immemorial the lava powder found near the Mount Wingen crater has been used by natives and settlers as a remedial agent both for cattle and human beings. Mr. Charles Allen, M.P.S., has now, however, extracted an oil from the lava which is most popular throughout the colony as an application to sores and as an embrocation.

At the Exhibition, as in Australia, Victoria is the close neighbour of New South Wales. As a rising colony its importance cannot be exaggerated, and such statistics as are at our disposal indicate that it is also an exceptionally healthy colony. The illustrated handbook to Victoria prepared for the Exhibition states that in 1884 the marriage-rate equalled 7·63 per 1000, the birth-rate 30·49, and the death-rate 14·27. This is undoubtedly a remarkably low death-rate, but it cannot be compared with that of Europe, as the proportion of children in Victoria is much smaller. The fact that there is no winter, so to speak, in Victoria, must further contribute to the health of the population. Cattle are able to live in the field all the year round, though no sort of shelter is provided, and such climatic conditions must help to render physical existence easy. Winter is merely the more rainy season of the year, and snow is unknown. Among the various exhibits in this court may be noticed photographs of the Victorian Asylum for the Blind, some Australian filters and disinfectors, various mathematical and philosophical instruments, and a model of the quarantine station established at Point Nepean by the Central Board of Health for the colony. The Technological Museum is specially interesting, for we have specimens of 200 trees, the wood being polished, and the leaf, bud, and flower accurately painted on the smooth surface. The Acacia and the Eucalyptus are the principal families. From a medical and sanitary standpoint the importance of the latter is becoming better understood every day. Indeed, all Australian plants have already been subjected to extensive examination. It is not therefore the novelty, but rather the increasing appreciation of their virtues, that calls for notice. The acacias only contain the tan principle and certain gums soluble in water, such as occurs in the Indian acacia; but the products of the eucalyptus would repay closer study. For instance, the Atherosperma moschata cortex, to be found in the deep ravines of Victoria and Tasmania, is a useful sedative and diaphoretic. It contains a tonic bitter. The shepherds and others exposed to coughs and colds make constant use of the bark. As a tincture (four ounces of bark to twenty of rectified spirits of wine), it is taken on loaf sugar (not in water); while the oil has the reputation of exerting a specific influence in slowing the action of the heart when administered in small doses. For medical purposes generally, too much importance has been attributed to the eucalyptus globulus. The amygdalina species is preferable. It is a purer hydrocarbon, while the globulus is nearer to an oxycarbon. The odour also of the amygdalina oil is more aromatic and pleasant, and would therefore be more grateful when used as a disinfectant in a patient's room. The essential oil of the Eucalyptus amygdalina is largely employed as a styptic; it is sprinkled on a wet rag to relieve rheumatism; five or six drops on a piece of sugar may be taken as a sedative and in cases of colic. In fact, the medical uses of the eucalyptus are far more extensive than is generally known in England, though the Australians have for many years appreciated all these advantages. Mr. J. Bosisto, M.P., exhibits essential oils, gums, barks, and resins of this and other Australian trees, and particularly insists on the Succus eucalyptus rostrati, the red gum tree, as a delicate mucilaginous astringent, which he considers a safer and more effective remedy than either kino or catechu. Mr. Bosisto is not only the president of the Royal Commission for Victoria, but is an analytical chemist who has devoted more than twenty years to the study of the eucalyptus, both from a chemical and commercial point of view. His opinion on this subject is well worth considering, and we cordially join with him in the protest he is making against the wasteful destruction of trees in Australia. These trees aid materially in equalising the climate, while the aromatic odours they give forth are believed to be beneficial. Though there are 150 species, they all possess a volatile essence, but the yield varies greatly. Taking the eight principal types, Mr. Bosisto found that for 1000 pounds' weight of fresh leaves, the minimum yield of volatile essence was 7 fluid ounces, and the maximum 500 fluid ounces. Applying this calculation to the colony of Victoria, and reckoning according to the very lowest average, Mr.

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sto concludes that there are 9,730,500 gallons of an ential and volatile substance held at one and the same me in the eucalyptus vegetation. For the whole of Australia he puts down the amount at 96,877,440,000 gallons. This may be rough guessing, but nevertheless it helps us to understand how vast the volume of this wholesome evaporation must be; and its possible influence on the preservation of health is consequently obvious.

THE SCOTCH ELECTION OF DIRECT REPRESENTATIVES.

THE following correspondence has been sent us, and is worthy of consideration by all who wish to make representation of the profession a reality. The return of the President of the Faculty, as a reply to the demand of the profession for direct representation, would indeed be a *reductio ad absurdum*.

18, Carlton-place, Glasgow, Oct. 11th, 1886.

DEAR SIR,—In acknowledging receipt of your circular letter recommending Dr. Sinclair, of Dundee, as a candidate for the representation of the medical profession of Scotland in the General Council, I take advantage of the opportunity thus afforded of acquainting you with the success, so far, of our exertions in behalf of Dr. Morton, of spina bifida repute, whom many of us in the west are anxious to see promoted to a seat in the General Medical Council. We had our first meeting of committee last week, and the returns so far showed that about 300 members expressed a wish to serve on the committee, while a considerable number of busy men contented themselves with intimating their intention of voting for Dr. Morton. We are setting agoing an organisation for a complete and satisfactory canvass not only of our city but of the neighbouring towns and western counties, and we hope in the course of a few weeks to obtain the pledges of nearly half the entire constituency. We are pleased to find that the University people are not as yet putting forward a candidate, and we are in hopes that many of our friends in the east will help us in the west to carry our man. Even without them, however, we hope to win. I suppose the friends of Dr. Sinclair and of Dr. Bruce also are likely to fight to the end. Should you, however, come to find from your returns that you are not likely to win as we are here, instead of going to Dingwall with your support, I need hardly say it would find a hearty welcome from Glasgow and the west.

I am, dear Sir, truly yours,

(Signed) JAS. DUNLOP, M.D.,
President of Committee.

David Greig, Esq., M.D., President of Dr. Sinclair's Committee.

(*Dr. Greig's Reply.*)

Dundee, Oct. 12th, 1886.

DEAR SIR,—We have such confidence in Dr. Sinclair's prospects of success that the disposal of his support to any other candidate has never once entered our minds, and much less has it been, or is it likely to be, seriously entertained. Into your satisfaction that the University authorities have not started a candidate we most heartily enter; and it will give us equally great pleasure to learn that the considerations as to the direct representation theory, which have induced four prominent members of the profession in Edinburgh to decline invitations to come forward, have weight with Dr. Morton and his committee. These considerations mainly concern their University and Corporation connexions. Dr. Morton is an excellent man and would make an excellent corporation representative, but he has been too long identified with the governing body of the Faculty of Physicians and Surgeons of Glasgow, of which he is now President, to be acceptable to the great majority of the profession in Scotland. When he says in his address that if elected he will strive to get this number of direct members increased, I have no reason to doubt his sincerity. But I would venture to point out to you that his own election would be a very powerful argument in the hands of the parliamentary and other opponents of direct representation. It would obviously be open to them to say that the only effect of the concession had been to disturb the balance by increasing the representation of one corporation at the expense of the others.

I am, Sir, yours truly,

J. Dunlop, Esq., M.D. Glasgow. (Signed) DAVID GREIG.

ENTRANCE SCHOLARSHIPS, &c.

University College Hospital.—The entrance scholarships have been awarded as follows:—£100, W. A. Savage; £60, H. Tilley; £40, W. M. Stevens.

University College, Liverpool (Royal Infirmary School of Medicine).—The Holt tutorial scholarships of £100 each for one year have been awarded to A. W. Collins and J. E. Gemmel; and the Roger Lyon Jones scholarships of twenty guineas per annum for two years to H. A. Burrowes and A. J. Chalmers.

University of Durham College of Medicine, Newcastle-on-Tyne.—The Charlton Scholarship, value £35, the Dickinson Scholarship of £15, and a gold medal have been awarded to B. G. Sumpter; the University Scholarship, of £25 per annum for four years, to Raymond Henry Shaw; the Gibb Scholarship, of £25, to M. M. Bowlan; and the Tulloch Scholarship, of £20, to A. E. Cope.

School of Physic in Ireland.—The Medical Scholarship, of £20 per annum, tenable for two years, for anatomy and the institutes of medicine, has been awarded to Henry C. Drury, B.A.; and that of £20 per annum, tenable for two years, for chemistry, physics, botany, and comparative anatomy, to Alfred R. Parsons.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Salford Urban District.—Not only did Salford, in common with most large towns in England, experience an exceptionally low death-rate in 1885, but during the five years which have elapsed since 1880 the average annual rate of mortality in the borough has been lower than the average rate in the five years which preceded that date by not less than 4·5 per 1000. When the Public Health Act, 1875, was passed the rate of mortality per annum averaged 28·4 per 1000, and in Salford proper, the oldest part of the borough, it averaged 31·5 per 1000. Since then the borough has progressed considerably in matters relating to health. The small-pox epidemic of 1875-76 led to the establishment of a hospital for infectious diseases; then came large demolitions of bad house property; the scavenging arrangements and the ultimate disposal of refuse were greatly improved; food-supplies were carefully looked after with the aid of the Adulteration of Food and Drugs Act; the provisions of the Dairies, Cowsheds, and Milkshops Order brought nearly 700 establishments connected with the milk-supply under supervision; and many other improvements were carried out. The result is one as to which Dr. Tatham may be congratulated, for the sanitary administrstion of a borough containing some 200,000 people is associated with numberless difficulties. During 1885 there were reported under the provisions of the Notification Act 632 cases of scarlet fever, 205 of enteric fever, 54 of diphtheria, 32 of typhus, 15 of puerperal fever, and 11 of small-pox. The conditions affecting the incidence of these several diseases are discussed in the report; and, speaking generally of the diminution which has taken place in England and Wales in the mortality from infectious diseases, it is pointed out that it has been mainly felt in the large towns. Thus in London it amounted to 17 per cent., whereasin the rural districts it was only 5·5 per cent., and in the small towns only 2 per cent. This Dr. Tatham regards as implying that although infectious diseases still have a tendency to excessive prevalence in densely crowded districts, yet the sanitary efforts for their repression are commonly more effectual in great towns than they are in smaller communities. But as to diarrhœa, Salford continues to occupy a position of unenviable notoriety. The borough is grouped with Preston and Leicester as possessing the highest diarrhœa mortality amongst English towns, and unfortunately her position in this respect has not yet indicated any tendency to improvement. As regards the isolation of the infectious fevers, considerable progress has been made in connexion with the steady improvements which the Corporation have, at great cost, made in the hospital provision. Taking the nine years, 1876-84, during which such accommo-

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dation has been available, the proportion of admissions to hospital to the number of deaths in the borough was as 1·04 to 1, whereas in 1885 it amounted to 5·3 to 1; figures which conclusively show that the people of Salford do increasingly appreciate the great safeguard against infection which proper isolation in hospital affords. Many other matters are discussed in the report under consideration; they show how large an amount of skilled attention is devoted year by year to the improvement of public health.

Sunderland Urban District.—In his last quarterly report on this borough Dr. Harris refers to a steady general improvement in the mortality returns, and he points to the fact that during the past eighteen months the death-rate has been lower than at any period for twenty years. But diarrhœa was more than usually prevalent during the past quarter. No special local sanitary conditions were found to be associated with this occurrence, whereas, according to the report, it was elicited that the greatest mortality occurred among children under twelve months of age who were fed from the bottle. Out of 77 deaths of children at this age, 60 were bottle-fed and 17 were suckled. Whilst this fact is prominently put forward, no relaxation is allowed to take place in securing additional cleanliness of air and soil in the districts where diarrhœa and other preventable diseases occur.

Preston Urban District.—Diarrhœa was fatally prevalent in Preston during the end of August and the beginning of September. The high temperature which prevailed is reported by Dr. Piking to have been accompanied by diminished air movement, and the result was soon felt in the poorer and more confined parts of the town. And even when the air temperature fell considerably, the ground temperature still remained high, and the improvement as regards diarrhœa prevalence was in consequence only slight. In all, there were during five weeks 88 diarrhœa deaths. Of these, 6 only occurred amongst adults, whereas 71 were in children under twelve months.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns 5990 births and 3220 deaths were registered during the week ending Oct. 30th. The annual death-rate in these towns, which had been 18·9 and 19·3 per 1000 in the preceding two weeks, declined last week to 18·5. During the first four weeks of the current quarter the death-rate in these towns averaged 19·0 per 1000, and was 1·5 below the mean rate in the corresponding periods of the ten years 1876-85. The lowest rates in these towns last week were 11·9 in Derby, 13·5 in Sunderland, 13·9 in Brighton, 14·6 in Salford, and 15·3 in Portsmouth. The rates in the other towns ranged upwards to 24·4 in Norwich, 24·5 in Manchester, 25·4 in Cardiff, and 30·0 in Wolverhampton. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had declined in the preceding seven weeks from 1202 to 438, further fell last week to 401; they included 130 from diarrhœa, 84 from scarlet fever, 72 from measles, 63 from "fever" (principally enteric), 35 from diphtheria, 17 from whooping-cough, and not one from small-pox. No death from any of these principal zymotic diseases was recorded last week in Bolton; whereas they caused the highest death-rates in Norwich, Nottingham, Liverpool, Halifax, and Wolverhampton. The greatest mortality from measles occurred in Leicester, Wolverhampton, and Halifax; from scarlet fever, in Manchester, Bristol, Liverpool, and Huddersfield; from "fever," in Preston, Nottingham, and Portsmouth; and from diarrhœa, in Norwich, Salford, Cardiff, Nottingham, and Wolverhampton. The 35 deaths from diphtheria in the twenty-eight towns included 23 in London, 2 in Norwich, and 2 in Manchester. Small-pox caused no death in London and its outer ring, or in any of the twenty-seven large provincial towns. Only 3 cases of small-pox were under treatment on Saturday last in the metropolitan hospitals receiving cases of this disease. The deaths referred to diseases of the respiratory organs in London, which had been 223 and 290 in the preceding two weeks, further rose last week to 295, but were 80 below the corrected average. The causes of 84, or 2·3 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Bolton, Wolverhampton, and Derby. The largest proportions of uncertified deaths were registered in Sheffield, Huddersfield, and Hull.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 19·5 and 18·2 in the preceding two weeks, rose again to 18·6 in the week ending Oct. 30th; this rate was 0·1 above the mean rate during the same week in the twenty-eight English towns. The rates in the Scotch towns last week ranged from 13·9 and 15·1 in Edinburgh and Dundee, to 19·9 in Paisley and 23·3 in Glasgow. The 460 deaths in the eight towns last week showed an increase of 10 upon the number in the previous week, and included 28 which were referred to whooping-cough, 24 to scarlet fever, 22 to diarrhœa, 6 to diphtheria, 2 to measles, 1 to "fever" (typhus, enteric, or simple), and not one to small-pox; in all, 83 deaths resulted from these principal zymotic diseases, against 88 and 72 in the preceding two weeks. These 83 deaths were equal to an annual rate of 3·4 per 1000, which was 1·1 above the mean rate from the same diseases in the twenty-eight English towns. The fatal cases of whooping-cough, which had been 25, 21, and 17 in the previous three weeks, rose last week to 28, of which 24 occurred in Glasgow and 3 in Edinburgh. The deaths from scarlet fever further rose from 12 and 17 in the preceding two weeks to 24, and included 13 in Glasgow, 8 in Dundee, and 2 in Edinburgh. The 22 deaths attributed to diarrhœa showed a further decline from the numbers in recent weeks; 7 were returned in Glasgow, 5 in Edinburgh, and 4 in Dundee. The 6 deaths referred to diphtheria, although exceeding recent weekly numbers, were below the average for past years; 4 occurred in Glasgow and 2 in Edinburgh. The solitary death referred to "fever" was recorded in Glasgow. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 98 and 79 in the preceding two weeks, rose again last week to 96, but were 21 below the number in the corresponding week of last year. The causes of 61, or more than 13 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been 22·5 and 20·5 per 1000 in the preceding two weeks, rose again to 21·9 in the week ending Oct. 30th. During the first four weeks of the current quarter the death-rate in the city averaged 22·0; the mean rate during the same period was 17·1 in London and 16·8 in Edinburgh. The 148 deaths in Dublin last week showed an increase of 9 upon the number in the previous week, and included 9 which were referred to diarrhœa, 10 to scarlet fever, 4 to "fever", and not one either to small-pox, measles, diphtheria, or whooping-cough. Thus 23 deaths resulted from the principal zymotic diseases, corresponding with the number in the previous week; they were equal to an annual rate of 3·4 per 1000, the rates from the same diseases last week being 1·8 in London and 2·5 in Edinburgh. The fatal cases of scarlet fever, which had been 2 and 7 in the previous two weeks, further rose last week to 10, and exceeded the number in any previous week of this year. The deaths referred to diarrhœa, on the other hand, had further fallen to 9, from numbers declining in the preceding six weeks from 29 to 10. The 4 deaths referred to "fever" were within one of the number in the previous week. Five inquest cases and 3 deaths from violence were registered; and 28, or nearly a fifth, of the deaths occurred in public institutions. The deaths both of infants and of elderly persons showed an increase upon the numbers in the previous week. The causes of 20, or nearly 14 per cent., of the deaths registered during the week were not certified.

VOLUNTEER MEDICAL STAFF CORPS.—The members of this corps recently held their competitions in waggon and stretcher drill, bandaging, and the application of the triangular bandage. Surgeon-Commandant Cantlie was in command, assisted by Surgeon Rees Hall, the adjutant. The prizes for waggon loading were awarded to a section of Surgeon-Major Platt's (St. Thomas's Hospital) company, and for field stretcher drill to Surgeon Squire's (University College Hospital) company. The other series of competitions were postponed. Surgeon Beevor, M.D., of the Scots Guards was the judge.

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Correspondence.

"Audi alteram partem."

DIRECT REPRESENTATION OF THE PROFESSION ON THE GENERAL MEDICAL COUNCIL.

To the Editor of THE LANCET.

SIR,—The correspondence in your columns to-day and previously seems to reveal two things: 1st, that the long-standing feud between the universities and the corporations is being fanned into a flame; and, 2nd, that Dr. Bruce may now be said to be announced as the nominee of the universities. Those who countenance the former unfair proceeding are obscuring the main question before the profession. Those who give countenance to the latter are showing an unaccountable degree of magnanimity, especially if they have read Dr. Bruce's address or lecture to the Northern Counties Medical Association. This address, indeed, makes short work of university medical monopoly, and knocks down almost all the hoarding that keeps the classes of inefficient professors crowded with reluctant and neglected students. A graduate, who has not the courage to sign his name, writes in an injured strain because there is no Edinburgh candidate in the field. Pray whose fault, positive or negative, is it that this is the case? The general practitioners of Scotland ought to be, and according to present appearances are to be, represented by one who has had a long enough training in the wants and woes of the profession to fit him for legislating in their behalf; and, *certes*, he is too well posted up in the subject to suggest either regulations that have been in force long ago, or regulations that are never in the least likely to come into force.

Dr. Morton is the chosen candidate of the most populous portion of Scotland, and this choice rests upon the knowledge that he has long been the manly and independent advocate of the rights of the general practitioner, with whom he has identified himself far more than with any corporation. True it is, that he has been a Fellow of the Faculty for many years (and is now President, it may well be added, by the voice of the general practitioner), but that does not alter his position, nor is it likely to modify his politics one whit. Nay, he evidently has no desire to sever his connexion with the Faculty, even though that body, under certain influence, treated him rather coldly for a time on account of his politics. He has had the good sense to advocate free trade in teaching and the removal of the anomalies that are always apt to grow upon monopoly. As to the objection, whether real or not, that is made about connexion with a corporation, it need only be remarked that if a man is within hail of a corporation, he is surely not to avoid it lest at any time he should aspire to represent his fellow-practitioners at the General Medical Council. Is he to debar himself from having the corporate intercourse with them whereby he can best inform himself about their needs? or is he to allow his mind to be a *tabula rasa* till the combined wisdom of the Council has written something upon it?

The proposal that two of the candidates should join their forces is an admission that they are or may become of the same colour, and an admission of their individual weakness and of Dr. Morton's strength. If this strategic movement is prompted by the intention to use them merely as pawns in the game, the profession will know how to resent the manipulation by a transposition of votes that may rather astonish the movers.—I am, Sir, your obedient servant,

Glasgow, Oct. 22rd, 1886. J. PIRIE, M.D.

To the Editor of THE LANCET.

SIR,—As a member of the British Medical Association, I refuse to support any candidate who attempts to use our machinery or official influence for his own purpose, since in general meeting assembled, at Brighton, we distinctly declined to take any part in the selection of candidates. Had it not been for the unauthorised actions of those members of our Council who, after the refusal of the general meeting, persisted in the attempt to commit the Association to interference in the election, I could gladly have supported Sir B. Foster, but I cannot in any way sanction the nominees of a committee acting in opposition to the expressed will of the general meeting. We have been informed that this committee is unofficial, self-appointed, and not identified with the Association. We are now informed that the Council has passed a resolution in favour of *two of its own members* who are the candidates of the committee. Is that act also "unofficial and not identified with the Association," but only another attempt to delude members into a "misconception"?

I am, Sir, your obedient servant,

HENRY W. WILLIAMS, M.D.

Chapel-place, Cavendish-square, W., Nov. 2nd, 1886.

To the Editor of THE LANCET.

SIR,—I wish to draw the attention of all Poor-law medical officers to the fact that one of their own number, Mr. D. B. Balding, is now a candidate for their direct representation at the General Medical Council. This gentleman is one of the vice-presidents of their own special corporation, and for many years past has worked hard for their cause; therefore I hope they will now acknowledge his past services by giving him their best support.

I remain, Sir, your obedient servant,

FRANCIS A. DAVEY, M.R.C.S.E., L.S.A.

Barkway, Herts, Oct. 30th, 1886.

To the Editor of THE LANCET.

SIR,—I am sorry to find that my address to the registered medical practitioners of England and Wales, which was duly forwarded for insertion in your advertising columns of last week did not appear, and, as I am informed, it was "crowded out." Of this I make no complaint, as I suppose it was occasioned by ordinary business pressure. I trust, however, that you will allow this letter to appear in your next, by way of explanation, as much surprise and disappointment has been occasioned by the non-appearance of the address last week.—I am, Sir, yours very obediently,

Royston, Nov. 1st, 1886. D. B. BALDING.

*** The address referred to, which arrived too late for insertion in our last issue, will be found in the advertising columns of our current number.—ED. L.

POLLUTION OF THE THAMES.

To the Editor of THE LANCET.

SIR,—I read your excellent article of the 9th inst. on the above subject with much interest, but it is impossible to separate the subject and to isolate, as it were, any portion. The subject of sewage utilisation must be considered as a *whole*, and the following questions are all intimately identified—viz., "Health of Towns," "Pollution of Rivers," and "Utilisation of Sewage Matters." So far the sanitary condition of London and all other large cities has been adversely affected by the modern underground system of cesspool drainage, and the rivers have been fouled, while the excreta of the population have not in one single instance been utilised, and the agriculturists have been deprived of the finest fertilising agent for arable land yet discovered. The truth is, it is not possible, nor will it ever be, to utilise the excreta by any process whatever *beyond* the sewer's outfall, unless such an arrangement can be made with the heavens as shall admit of a regular and constantly repeated rainfall; and it is a sad reflection that many millions sterling have already been wasted in vain attempts to overcome the difficulty and to solve what is now known as "the sewage problem." When the Commission sat over which Lord Bramwell presided, it was said that no subject but the pollution of the Thames could be considered; but how the Commission could deal with the pollution of the Thames without taking into consideration the question of the drainage of the metropolis I am at a loss to understand, since the pollution of the Thames during the last forty years has occurred in consequence of the discharge of the soil from a quarter of a million waterclosets of London through the drains and sewers into the river. The arrangement by which this evil has been produced has been adopted and carried out during the period above named, and it cannot be denied that it is altogether hopeless to attempt to purify the Thames by any process whatever *beyond* the sewer's outfall, unless the *solid* portion of the excreta is intercepted at the fountain head before it has been placed under the control of the rainfall, and with this, even, it will be necessary to convey the liquid portion of the excreta, with the water from the

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waterclosets, in small pipes separated entirely from the rainfall and other surface sewage. The *excreta* sewage, in fact, *must* be kept separate and distinct from the *rainfall* sewage; no process whatever, whether it be filtration, subsidence, deodorisation, irregular or intermittent downward filtration of the effluent which may escape from any sewage works, can affect the question in the least, since it is not the effluent which is the cause of the pollution of the rivers, but that portion of the excreta, almost the entire portion, which is washed from its hiding-place in the house drains during the rainfall, and during the rainfall alone, and escapes from the sewers through the storm outlets into the rivers; it is, I say, through the storm outlets that the sewage of all large cities finds its way into the rivers, avoiding, as it does, and as it always will do, *any* works which may have been constructed for the pretended purpose of purification and utilisation.

By the kind permission of Sir J. Bazalgette, I have been over the sewage works (London) at Bow, and I have been in the sewers and over the sewage works at Birmingham, Croydon, &c., and with the exception of the latter place, where some portion of the excreta may be utilised in a rough and ready manner, scarcely any utilisation of excreta *whatever* takes place. Nor is the evil of the modern underground cesspool system confined to our cities, where it propagates septic and zymotic diseases in every direction, nor to the pollution of the rivers, nor to the waste of the finest fertilising agent known, but the ocean itself is suffering to an alarming extent, which is being fouled by the wretched system all round the coast, and the fish are either being driven away from our shores or rendered unfit for human food in consequence of a consumption by them of a material—human excreta—which, if it were utilised by our farmers on their *arable* land, would produce crops of wheat, barley, oats, &c., such as would gladden the hearts of our depressed agriculturists.

In the metropolis at this moment there are no less than 4000 miles of these underground elongated cesspools, under every house and every street; but these cesspools being out of sight, they are not easily recognised until some foul odours are detected, and an epidemic of typhoid, diphtheria, or diarrhœa occurs, or, what is still more common, a prevalence of septic diseases, such as occurred at Marlborough House, the House of Commons, the Horse Guards, &c., and, if my memory does not fail me, at the Local Government Office itself, which had been so recently constructed with every pretended sanitary improvement of the modern type; and if an examination were made, there would be found scarcely a single house in the metropolis in a sanitary condition or anything approaching to such a state. With the exception of small-pox, where has been the diminution of zymotic disease? while septicæmia has been largely increased. There has, without doubt, been a diminution, and a very large diminution, in the death-rate from phthisis, which formerly caused the deaths of 11 persons per 1000 of the population of the metropolis; but the diminution which has taken place has been due to the discovery of the stethoscope, which has enabled the physician to detect and to treat phthisis in its earliest stage, and not to sanitation in any of its pretended forms.

Another reason why preventable disease ought to be less prevalent and the death-rate be diminished, especially in large cities, is that the area over which people now live is greatly extended. In former years, before railways were made, Londoners lived in London and brought up their children there; whilst at the present time such people, both rich and poor, have removed into the surrounding rural districts, and they have taken their children with them, with the inevitable effect of increasing the rural death-rate and of diminishing the town death-rate; and since the death-rate of children below one year old is from sixteen to eighteen times greater than that of adults, it is obviously unfair and misleading to compare the death-rate of the metropolis at the *present* time, when there is a very small proportion of children to adults in the population, to a period of, say, thirty years ago, when there was a very large proportion of children in the population.

I have been compelled to refer to the sanitary condition of the metropolis in connexion with its drainage, and especially in connexion also with the pollution of the Thames, since it is impossible, as I said at the beginning of my letter, to separate the one from the other. Let us beware! While we are polluting the Thames and other rivers of the United Kingdom, we are at the same time, and by the same process, contaminating the atmosphere of the houses and streets of the metropolis and other large cities by a system which can only be described as the most injurious, the most wasteful, and the most abominable that was ever devised by the human mind.

I am, Sir, yours truly,

Birmingham, Oct. 22nd, 1886. E. CHESSHIRE, F.R.C.S.

INDUCTION OF LABOUR IN CASES OF ALBUMINURIA IN PREGNANCY.

To the Editor of THE LANCET.

SIR,—I am fortunately able to set at rest any doubts which Dr. Horrocks may have as to the activity of the specimens of pilocarpine and jaborandi used in the case reported by Dr. Cullingworth. Both preparations which were used on that occasion are known to have been active, and as both of them are still in the hospital, I have had an opportunity of again testing them since reading Dr. Horrocks' letter, and find them still active. Yesterday I injected under the skin of a patient one-third of a grain of the pilocarpine used in the case referred to. Ten minutes after the injection the face became brightly flushed, and profuse perspiration and salivation followed. I myself also took, yesterday, a drachm of the same fluid extract of jaborandi as that administered in the case under discussion, the dose also being similar, and marked diaphoresis and salivation ensued. I have thus met Dr. Horrocks' objection that the preparations used were probably inert. Dr. Horrocks begs the question when he says that if the drug produces marked diaphoresis then good will follow. The point is, that in this case a dose, which is usually recognised as a full one, and which is sufficient to produce striking physiological effects on other patients and on healthy persons, failed to produce marked diaphoresis or other beneficial effect on our patient. This is surely a fair trial. Dr. Horrocks says that the dose of one-third of a grain ought to have been repeated in fifteen minutes. Considering the weak state of the patient and the depressing effects often produced by the drug, we did not feel justified in repeating the dose, nor am I inclined to think would Dr. Horrocks himself have cared to do so, judging from the warning tone of the last paragraph of his letter.

As regards the imputed ecbolic action of pilocarpine, Dr. Horrocks appears to be guilty of hasty generalisation. In the first of his cases (THE LANCET, June 13th, 1885), labour came on a week after pilocarpine was discontinued; but he thinks it possible that this drug set up the uterine contractions. In his second case the patient had strong convulsions, and labour seems to have commenced before the exhibition of pilocarpine. The os dilated rapidly after pilocarpine was given, and on this ground Dr. Horrocks remarks that "it would appear that pilocarpine must be looked upon as an ecbolic." As a matter of fact, the weight of evidence lies quite on the other side, as is shown by the researches of Dr. Hyernaux (*Lond. Med. Record*, January, 1879), and by cases reported by Mr. Clay, Dr. Kleinwachter, and others. Considering the well-known double relationship which exists between general convulsions and uterine contractions, one is bound, I think, to be doubly cautious in drawing inferences as to the oxytocic action of drugs in cases of eclampsia. I am, Sir, yours faithfully,

ARCHIBALD DONALD.

St Mary's Hospital, Manchester, Nov. 2nd, 1886.

To the Editor of THE LANCET.

SIR,—I have but little to add to the foregoing letter. Dr. Donald effectually disposes of the suggestion as to the inferior quality of the drugs administered. Both Dr. Horrocks and Dr. Murphy (THE LANCET, Oct. 16th) write as though they held a brief for pilocarpine, and both, when the anticipated result fails to follow the exhibition of their pet drug, fall back on the stock argument that the specimen used must have been bad. We have surely had enough of this method of attempting to prop up a weak cause in the notorious instance of Chian turpentine. As to the other and more curious suggestion, that the remedy ought to have been injected every quarter of an hour, I can only hope that no one may be tempted to act upon it. I assure Dr. Horrocks that the sole object I had in view in reporting my case was to record the fact that in a typical case of albuminuria in pregnancy pilocarpine failed to give

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relief. All that this proves is that this drug, potent as it is, is not infallible any more than any other diaphoretic, and that there still remain cases of albuminuria in pregnancy where the induction of premature labour becomes the proper and only efficient mode of treatment.

I am, Sir, yours faithfully,

Manchester, Nov. 2nd, 1886. C. J. CULLINGWORTH, M.D.

TREATMENT BY MASSAGE.

To the Editor of THE LANCET.

SIR,—There is one statement in Dr. Playfair's letter on massage which, I think, should not go unchallenged. It is contained in the sentence: "The plain truth, stripped of verbiage, is that massage is nothing more than a vicarious way of giving exercise to patients who cannot take it themselves." Now massage may be all this, but it is something more; and further on in his letter Dr. Playfair seems to admit this, for he says "that massage is capable of doing much good in conditions other than those for which I have employed it is perfectly likely." It is too late in the day to say that massage is "likely" to do good in other cases than those for which Dr. Playfair employs it. We know it for a fact. To take a single example from many: So long ago as 1876 Mosengeil showed by experiment[1] that if he injected indian ink into the knee-joints of a rabbit and applied massage, the particles of ink showed themselves very shortly in the region of the vessels and the interstices of the muscles, and the swelling rapidly diminished. The pure mechanical operation of simple massage is thus at one and the same time pain-diminishing and pain-removing. Massage has thus an antiphlogistic action. This experiment, the details of which may be found in the publication referred to, established the mode by which exudations in joints and muscles were removed through massage. Now, when massage or simple kneading is employed in cases of joint or other effusions with good results, can it be called "nothing more than a vicarious way of giving exercise to patients who cannot take it themselves"? Should it not rather be regarded as a valuable curative agent? This is only one case out of many in which simple massage has been of proved utility. As for true massage—including, as it does, kneading, active and passive exercises, nerve, vibration, &c.,—the list of diseases and minor ailments for which it may be used is a large one. It may be that many cases, as Dr. Playfair suggests, are subjected to massage which are unsuitable; but what medicine, operation, or mode of treatment ever existed or gained repute of which the same could not be said? It is proved beyond doubt, I think (1) that even simple massage is more than a vicarious way of giving exercise; (2) that the system of manual treatment is a valuable curative agent in many diseases.—I am, Sir, yours truly,

Stranraer, Oct. 25th, 1886. THOMAS EASTON, M.A., M.B.

To the Editor of THE LANCET.

SIR,—The discussion as to the length of time required to learn massage, or, as I much prefer to call it, medical rubbing, will greatly help towards the settlement of the question.

At the Worcester meeting of the British Medical Association (1882) I read a paper on Medical Rubbing, which was published in the journal the following week, and after four years' further experience and teaching, perhaps I may be allowed to express an opinion. Dr. Sturges and Dr. Playfair are right when they say that the manipulations practised as part of the Weir Mitchell treatment can be learnt by an apt pupil in a few lessons, but they are wrong in supposing that all the "art and science" of medical rubbing is embodied in these elementary proceedings. Dr. Murrell is right when he says that the field of usefulness that lies before a skilled rubber is a vast one, but he is wrong in saying that it takes two years to acquire the science and practice of massage. I also submit that we are not justified in using technical terms drawn from a foreign language when we can find equivalents in our own mother tongue. Let a pupil be taught (*minus* the French terms) medical rubbing in all its many branches, including muscle-beating, muscle-rolling, deep thumbing, active movement, and the manipulations for the treatment of rheumatoid arthritis, infantile palsy, writers' cramp, tennis elbow, &c., still he cannot possibly spend two years over the course. A period of three or four months will amply suffice if he will ever make a rubber, and a lifetime will be too short if he has not the natural gifts that are essential to success. I quite agree with Dr. Easton, that it is quite time that a course of training for medical rubbers was organised and certificates granted. The number of so-called rubbers (who should be termed bruisers) that are abroad is astonishing. I have seen several patients black and blue all over after being treated by some of the fraternity, and they have prejudiced many medical men against a most valuable means of treatment. The sooner, too, that many utterly unsuitable persons who are "learning to rub" are sent about their business the better for themselves and for their clients. The handsome incomes (nay, fortunes) now being earned by medical rubbers show that it will amply repay those who wish to learn properly for incurring the needful expense.

I remain, Sir, yours faithfully,

J. FLETCHER LITTLE, L.R.C.P. Ed.

Ben Rhydding, Oct. 25th, 1886.

*** Our space will not allow of the publication of more letters on this subject.—ED. L.

[1] Langenbeck's Archiv für Klinische Chirurgie.

INFANT FEEDING.

To the Editor of THE LANCET.

SIR,—In answer to Mr. Parker's letter in your issue of Oct. 30th, permit me to say that the views expressed by me in my last letter were written with the knowledge that they are adapted for general use, and not for "individual cases."

The principles of feeding that have been advocated by me in this correspondence constitute, I thoroughly believe, the highest and the best form of feeding yet known for children who must be reared from birth by hand. I wish to be clearly understood on this point, and I offer this opinion as the result of my own experience, gained not from "sick and mismanaged" children only, but from those also who were known by me at their birth, and who have been reared by what seems to me to be the proper method from that time onwards. It is possible that Mr. Parker may not have this advantage; at least, the inference is a fair one from the passage from which the above extract is quoted. I cannot recede from the statement made by me, that half cow's milk and half water is much too strong to commence with at the time of birth, and that failure is courted by its adoption. Some children may escape with less inconvenience than others; but very few, if any, are likely to escape altogether, without some upsets which might be avoided, but which are so often accepted as the inevitable consequences of infancy. Dyspepsia to a greater or less degree is frequently, in my judgment, the result of such rash and intemperate use of cow's milk—probably much oftener than it is "congenital."

Mr. Parker, in speaking of infants who have thriven upon half milk and half water, leaves us to infer that this feeding was started at the time of birth, because my remarks upon Dr. Thurstan's case, which he quotes, were distinctly in reference to the first week in life. I am disposed to treat the pancreas and salivary glands with some respect, and would remind Mr. Parker that at the third month they are still rudimentary. This fact from his standpoint is of no importance. When infants are reared by "mixed" feeding, liberties may be freely taken with them, which children who are fed without the help of breast milk are quite unable to tolerate. This fact may help to explain the following passage from Mr. Parker's letter—viz., "for few, if any, children of the poorer classes are brought up from infancy onwards without farinaceous food, and enjoy the most vigorous health notwithstanding." The children of the poor are much more commonly fed in the "mixed" manner than in any other, and it is a fallacy to suppose that the wealthy matron is more inclined or able than her poorer sister to give the natural food to her offspring. For purposes of economy the poor adopt it, if from no higher motive. In this town, owing to the chief work requiring much female labour, children get farinaceous feeding entirely at an early date, and our death-rate and out-patient rooms show the results.

I can hardly, I fear, endorse Mr. Parker's statement that the progeny under such circumstances is a healthy one. Mr.

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Parker very emphatically declines to be convinced that any evils can result from the use of farinaceous food. We must agree to differ therefore. I look upon the use of farinaceous food to divide the curd as at least an unnecessary expedient, which can be entirely done away with if a cow's milk diet is suitably adjusted and properly given. I am glad that Mr. Parker agrees with what my letter contains bearing upon the mode of administration of food; but, from the tenour of his remarks, I do not gather that he, with myself, recognises the fact that teachers and practitioners do not attach much importance to those details. How many men in practice will tell us the quantity per meal an average child will take at a given age, or what strength of milk preparation is most likely to be well digested at the same age? This is not taught in the schools, and I know of no book, except the last edition of my friend Dr. Goodhart's, which attempts to make complete suggestions on the subject. It may be a common practice in some counties to stock cows so early as represented by Mr. Parker; I am led, however, to believe that it is not the general custom. I have heard too often the frank expressions of the typical matron, but her evidence, even when backed by the "healthy family," is not always reliable.

I am, Sir, yours truly,

Nottingham, November, 1886. LEWIS W. MARSHALL, M.D.

CHIAN TURPENTINE IN THE TREATMENT OF CANCER.

To the Editor of THE LANCET.

SIR,—In your issue of Oct. 16th, Dr. J. Clay has published an account of the successful treatment by Chian turpentine of a case of epithelioma of the tongue which was under our joint care, and, with your permission, I should like to supplement this by the narrative of another case, with a like result from the same treatment.

Mrs. G——, aged forty-nine, sent for me in Oct. 1883. She had been suffering from occasional and severe hæmorrhage from the vagina for some five or six months, accompanied with but little pain and slight colourless discharge in the intervals of the hæmorrhages. On examination per vaginam, the os and cervix uteri were replaced by an extensive ulcerating surface of a decidedly malignant character. The hæmorrhage was soon arrested by cotton-wool plugs saturated with glycerine of tannin, but it frequently recurred, and between its arrest and reappearance a purulent discharge, with the characteristic cancerous odour, was observed. In the hope that some alleviation of the symptoms might result, I gave her the Chian turpentine pills according to Dr. Clay's formula, and she took them for some weeks. However, there was no improvement in any way, and it was decided that Dr. Playfair should see her in consultation. He did so, and confirmed my diagnosis of cancer, considering it to be of the medullary form. His prognosis was that "she could not last many weeks." He advised the carrying out of Dr. Clay's treatment in its entirety—viz., the Chian turpentine mixture, and the insufflation of charcoal and tannin per vaginam. The treatment was rigidly carried out, mainly by my coadjutor, Mr. W. A. Fox. Instead of losing ground, notwithstanding the persistence of the discharge and occasional hæmorrhage, her strength was maintained during the next few months, when all her symptoms gradually abated. The treatment, however, was fully continued for nearly a year, at the end of which time she was practically cured, and about twenty months from the time Dr. Playfair first saw her, he again examined her, and said that she was perfectly cured, to his extreme astonishment. She remains without a vestige of the disease at the present moment.

I am tempted, with your permission, to add a note respecting a case of long-standing cancer of the breast in a woman aged forty-eight, who had been an out-patient at a metropolitan hospital, and was discharged as unfit for operation. The left breast was destroyed down to the ribs, and its place taken by a superficial cancerous ulcer surrounded by nodules of cancer. She took Dr. Clay's remedies for some months, and then discontinued them on account of the expense. I have seen her to-day (October 16th) and find that the nodules have much diminished in size, that all her pain had disappeared, and that she has gained and is gaining flesh.

May I suggest as one of the reasons of the failure of this treatment as carried out at the Middlesex Hospital, and by medical men generally, is an insufficiently long trial of the remedies—in fact, too great haste in discarding a treatment which does not give immediate results.

I remain, Sir, your obedient servant,

New Barnet, Oct. 20th, 1886. G. W. F. BURY, F.R.C.S. (Exam.)

To the Editor of THE LANCET.

SIR,—Dr. Clay reports three more cases of cancer cured by Chian turpentine! The drug was tried in the cancer wards of Middlesex Hospital when Dr. Clay first recommended it, and declared to be utterly useless. In the West Norfolk and Lynn Hospital it was tried at the same time, and, as far as I could see, without the slightest influence on the course of the disease. For the credit of the profession and for the sake of humanity the claims of Dr. Clay for Chian turpentine in the treatment of cancer ought either to be repudiated or reconsidered.

I am, Sir, yours obediently,

King's Lynn, Oct. 21st, 1886. WM. DALE, M.D. Lond.

To the Editor of THE LANCET.

SIR,—The transposition of the word "mixture" in my paper published in THE LANCET for October 16th, has caused me to have several letters asking for an explanation of the incongruous sentence. In the second column, page 720, line 41, the sentence should read: "He was ordered the following: Eight ounces of Chian turpentine mixture (Southall's)," &c. By allowing this explanation to appear in THE LANCET, you will oblige

Yours, &c.,

Birmingham, Oct. 30th, 1886. JOHN CLAY.

VITAL STATISTICS OF READING.

To the Editor of THE LANCET.

SIR,—I observe that you have published a paper read by my friend Mr. Barford, of Wokingham, at the Reading Pathological Society, in which he contrasts certain statistics as regards Reading with those of other districts.

Mr. Barford has taken the figures of the Registrar-General on "registration districts," and has thus contrasted the Reading district (which is, as regards population, almost identical with the borough) with scattered rural districts, containing only villages and towns of much less size than Reading, but having a far greater area in acres. Thus he has contrasted the following "registration districts" with Reading: Bedford registration district, 97,406 acres, with a population in 1881 of 42,932 (including the small town of Bedford); Bradfield, 64,700 acres and 18,000 people; Newbury, 44,695 acres, 21,300 people, and several districts of a similar character, none containing any large town like Reading; or in other words, districts ranging from about 40 to 150 square miles, many of them sparsely populated, were contrasted with the Reading Union, populated by 43,494 people, of whom (in 1881) 42,050 lived in the borough on about three square miles, or 2094 acres. If the correct statistics were taken for the borough or urban sanitary district of Reading, it will be found that the reduction in the general death-rate has been from 24 per 1000 in 1841, to 18 per 1000 (imported deaths in hospital being excluded) taken on the average of the last ten years (1876 to 1885), and for this period the birth-rate has been 36·6 per 1000, and the infant mortality 132·5 per 1000 births. Mr. Barford says, "Out of 1000 infants born in Reading, no less than 139 die during the first year of their existence." This language would seem to imply that is the case at the present time, whereas in the last five years the infant mortality for the borough has been 121·2 per 1000 births, and for the ten years (1876 to 1885) 132·2. Dividing this period into two periods of five years, the saving of infant life on the last five years, as contrasted with the first five years, has been 22·6 per 1000 births. This reduction, taken with reference to the total number of children born in each year, would give an annual saving of the lives of 34 children. Mr. Barford does not state what he has taken as a standard of excellence for infant mortality, but simply says, "The lives of at least 40 infants might be saved every year." Therefore, during the last five years (1881 to 1885) this has very nearly been accomplished. I cannot follow Mr. Barford when he states that Bedford resembles Reading, and that as the population

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of the Bedford registration district was 42,000 and Reading 38,000, "the comparison should be a little in favour of Reading." Apparently, he would seem to think that the registration district of Bedford is coincident with the town of that name, whereas Bedford "registration district" covers 150 square miles, and in 1881 had a population of 42,932, whilst the Reading "registration district" covers seven and a half square miles, and in 1881 had a population of 43,494, out of whom 42,050 resided in the borough on three square miles. The small town of Bedford, which is included in the above district, had in 1881 only 19,532 people, and in ten years had only *increased* 2631 in population, but Reading had increased 9736. A comparison between th respective town or urban districts would have been to more purpose, rather than one based on the respective registration areas or unions which differ so widely, and it is to be regretted that the returns of the Registrar-General do not refer to urban and rural sanitary areas, as at the present time it is only the medical officers of health who can give the rates for their respective sanitary districts. Although I should be very pleased to see the infant mortality of this borough still further reduced, I think, for the credit of the town, the improvement that has already taken place should be recorded.

I am, Sir, yours faithfully,

JOHN SHEA, M.D., &c.,
Medical Officer of Health. Reading and Wokingham Urban and Rural Sanitary Districts.

Oct. 20th, 1886.

STATISTICS OF OVARIOTOMY.

To the Editor of THE LANCET.

SIR,—I owe to the courtesy of the secretary to the Royal Medical and Chirurgical Society the receipt of an abstract of a paper read by Mr. Knowsley Thornton on the 26th ult. In that abstract will be found the following sentence: "Septicæmia has not been quite banished, but much has been done in this direction, *as shown by one consecutive series of 100 ovariotomies performed at the Samaritan Hospital without a death.*" That statement of results has been publicly quoted in its most evident sense—viz., that there were 100 consecutive cases *without a death from any cause*. This has been corrected in the report which you have published, but in such a way as to escape the notice of any but a critical reader, by the simple addition of the words "from septicæmia." I desire therefore to call attention to this correction, and to remove an erroneous impression.

I am, Sir, yours faithfully,

GEO. GRANVILLE BANTOCK.

Granville-place, W., Nov. 2nd, 1886.

BIRMINGHAM.

(From our own Correspondent.)

HOSPITAL SUNDAY.

The universal lament as to trade depression has not failed to produce a marked diminution in the amount contributed in this honoured custom; still there is reason to be satisfied that it is not less, and that the spirit of liberality exists among those who are willing to give to the best of their means. An excuse of any kind is often sufficient to retard the flow of charity, and when one can see so much expended in holidays and amusements of all kinds, it is reasonable to infer that, however bad the commercial aspect of affairs may be, there is still a sum left for enjoyment of a personal kind, a little self-denial in which would present a serious difference to our charities. The amount of the collections this year, which go to the General Hospital, up to the present time is £3931 1*s.* 11*d.*

QUEEN'S COLLEGE.

At a recent meeting of the Council of this College the Home Secretary was elected a member of the Council. In view of prospective legislation on the foundation of a central university in the midlands, this appointment may be looked upon with much satisfaction. It is singular to note in a town which boasts of progress in educational and political matters that no exception was taken to the fact that the Home Secretary belongs to the Roman Catholic faith. The time has passed for differences of this nature to affect the governing body of an advancing institution, and though the College possesses a theological faculty it is sufficiently guarded by common sense and numbers to prevent any undue influence of the kind suggested entering into its administration.

THE MEDICAL SCHOOL.

A goodly number of fresh entries and an enthusiastic teaching staff gave a good augury for the session, which was commenced by a conversazione and distribution of prizes at the beginning of the month. The advantages are well received by the students, and the opportunities of study afforded by the amalgamation with the Mason Science College are recognised as being valuable elements of success.

THE MIDLAND MEDICAL SOCIETY, BIRMINGHAM.

On Wednesday, the 3rd inst., the annual meeting of this Society was held at the Grand Hotel, under the presidency of Mr. Lloyd Owen. An address was given by Mr. Thomas Bryant on the value of exploratory operations in the practice of surgery, which was listened to by a large and appreciative audience. Mr. Bryant spoke of such operations being justifiable when they lead on to treatment, and instanced their particular value in diseases of the breast and testis. In regional surgery, and especially with regard to the question of hernia, intestinal strangulation and obstruction, he quoted cases, and gave deductions from his own experience, to mark the importance of early recourse to surgical aid. A new method of performing colotomy in cases not requiring immediate relief was mentioned, namely, by transfixing the bowel with needles to the upper and lower margins of the wound, and opening some days later. On the motion of Mr. Oliver Pemberton, seconded by Mr. Bennett May, a vote of thanks was accorded to Mr. Bryant for his valuable and instructive address.

THE QUEEN'S HOSPITAL, BIRMINGHAM.

I regret to have to note the retirement of Mr. Furneaux Jordan from the active duties of his profession in connexion with the Queen's Hospital, Birmingham. At a meeting of the general committee held on the 2nd inst., the following resolution was passed: "That the committee receive with great regret the resignation of Mr. Furneaux Jordan, on account of ill-health, of the office of honorary surgeon which he has held for a period of twenty-three years (having previously held the office of assistant-surgeon for three years), in the course of which he has rendered very valuable services to the hospital, with equal distinction to himself, and has retained the entire confidence of the committee; and they trust that his retirement from professional work will materially conduce to the improvement of his health, and to the prolongation of his valuable life. The committee also hope that Mr. Furneaux Jordan will allow them to recommend him to the governors for election as consulting surgeon."

A GHOST.

The suburbs of Birmingham have lately been much excited by the presence of some appearance attributed to supernatural agencies in the form of a ghost. The application of ash or hazel in a solid form has been suggested as a remedy, and it is expected that the performer of this illusion will have a sorry time of it if met with by the masculine residents of the localities visited. In the meantime much perturbation is caused in the minds of the children and servants where these visitations have occurred.

NORTHERN COUNTIES NOTES.

(From our own Correspondent.)

SUNDERLAND: INFANT MORTALITY AND THE FEEDING-BOTTLE.

IN his last report the medical officer of health, Mr. A. E. Harris, makes some pointed reference to infant mortality in the borough of Sunderland and the feeding-bottle, during the last quarter the deaths from diarrhœa being higher than usual. There were, he says, "no special local causes to account for this increase in the disease, which has been more than that usually prevalent in the kingdom. Nevertheless, it has been elicited that the greatest mortality occurred among children under twelve months old, who were fed from the bottle. Out of seventy-seven deaths of children of this age sixty were fed and seventeen suckled."

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He also adds that, as regards the general health of the borough, there can be no doubt that the improved cleansing of the streets and ashpits has had a most beneficial and salutary effect. This is proved by the decline in the number of deaths from zymotic diseases, which he pointed out over three years ago would probably decrease with more efficient work, and that "what is true of the family is true of the town—that cleanliness begets health."

"IN THE ARMS OF MORPHEUS."

Some boys at Sunderland got a caution the other day likely to last them for some time. They stole from a chemist's a bottle of what they thought were cough lozenges; these they carried off as a great prize and distributed among their friends. The lozenges turned out to be morphia, and at least six of the boys fell into a profound sleep, and were awakened with some difficulty after a long time; they then felt what is termed "the after-damp" in mining districts—viz., sickness and headache.

THE VICTORIA HALL DISASTER.

It will be of interest to many to know that between £3000 and £4000 is invested with the corporation in connexion with the Victoria Hall (Sunderland) disaster, and that the interest of the fund is applied to sending children to convalescent homes. The fund is under the direction of a committee of management, and the children are recommended by the infirmary staff, the Children's Hospital, or by private practitioners. This is being done until such time as the committee of the fund are in a position to establish a convalescent home.

TYNE PORT SANITATION.

At the last meeting of the Tyne Port Sanitary Authority, it was shown that the work done by this authority during August and September included the inspection of 10,9 British steamers and 637 sailing vessels, 350 foreign steamers and 246 sailing vessels, including fishing vessels, steam and sail. There were 2627 inspections made, and sanitary defects corrected. The report showed that a great improvement had been noted in the crew spaces and closets on board the ships. At the same meeting the medical officer of health, Mr. H. E. Armstrong, presented a copy of the report of the Local Government Board, which says, as regards the Tyne: "The joint board of the Tyne affords a typical example of efficient administration. The authorities have established a well-organised staff for carrying out the duties of the port, including the medical officer of health, Mr. H. E. Armstrong, also appointed by the urban district, a master mariner as an inspector of nuisances, and two assistants, together with a steam launch, to facilitate boarding, and two floating isolated hospitals—viz., one for port purposes, which was supplemented in 1884 by a second for cholera cases." The report then goes on to speak of the new floating hospital of a novel design, which has been described previously in these notes.

NEW ENTRIES.

It is stated that the number of new students who have entered at the College of Medicine here this session is 66 for the full curriculum, and the number who have entered for the required term of "residence" for the degree is 42.

THE TESTIMONIAL TO MR. R. G. GAMMAGE.

Mr. Gammage of Sunderland, having been compelled by ill-health to retire from practice, a purse, principally contributed by his professional friends and amounting to £86, has been handed to him on his departure to the south.

Newcastle-on-Tyne, Nov. 2nd.

IRELAND.

(From our own Correspondent.)

ACADEMY OF MEDICINE IN IRELAND.

The fourth annual general meeting of the Academy of Medicine in Ireland was held on the 29th ult., presided over by Dr. Robert McDonnell, F.R.S. The report was a satisfactory one, the income amounting to £844, and leaving a balance to credit of £392. The Council recommended a grant of one hundred guineas out of the funds of the Academy towards the expenses of the annual meeting of the British Medical Association in Dublin in 1887, which was agreed to, and the office-bearers for the various sections having been elected, the proceedings terminated. The opening address of the Surgical Section of the Academy will be given on the 13th inst. by Sir William Stokes, president of the Royal College of Surgeons in Ireland, when an interesting and eloquent discourse may confidently be expected.

ROYAL UNIVERSITY OF IRELAND.

The Senate at a meeting held last week elected several Fellows in various departments, among others Dr. Lynham, of the Queen's College, Galway, in the Department of Medicine. December 30th has been appointed for a meeting of Convocation to elect a member of Senate in the place of the Rev. Dr. Kavanagh, deceased. The degrees in the Faculty of Medicine obtained in the recent examinations were conferred at the Royal University on the 28th ult., Lord Emly, Vice Chancellor of the University presiding. At the meeting of Convocation held last week the proceedings were of a very noisy and unseemly character. The chief business transacted was the election of a member of the Senate, the result being that Dr. Whitla, of Belfast, was successful. It was generally believed that this would be the case, but it was not thought that his majority would have been so large.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

In the recent examination for the 3rd and 2nd Professional of this College, the rejections were extremely numerous, and in the latter, out of sixty-six candidates twenty were stopped at the *vivâ voce* alone. A supplementary examination, I am informed, will be held for the 3rd Professional in about three months, and probably for the 2nd and 1st Professional Examinations as well.

CORPORATION GRANTS TO DUBLIN HOSPITALS.

At a recent meeting of the Dublin Town Council the following sums were granted to various charitable institutions—viz, £300 each to Jervis-street, City of Dublin, Meath, Sir P. Dun's, and Mercer's Hospitals. As sectarian feeling unhappily runs high in the Corporation of Dublin, two general hospitals obtained more liberal donations; thus the Mater Misericordiæ was granted £500, and St. Vincent's Hospital £400. In the same way the Coombe Lying-in Hospital got £500, the Rotundo Lying-in, with great difficulty, exactly half that amount, and the National Lying-in Hospital, £100. The other grants included £150 to Steevens's, £300 to Hospital for Incurables, £150 to St. Mark's, £160 to the National Eye Infirmary, £250 to the Children's Hospital, and £100 each to the two Orthopædic institutions.

CITY OF DUBLIN HOSPITAL.

I had an opportunity on the 28th ult. of seeing at this hospital some interesting cases recently operated on by Mr. Wheeler, among others a patient from whom the previous week a calculus had been removed, which measured three inches in length by five-eighths of an inch in width. The patient had a slight attack of cystitis, but was doing remarkably well. The same morning two operations were performed by Mr. Wheeler in the theatre of the hospital. The first was the radical cure of varicocele, the left side being engaged. Mr. Wheeler dissected down to the affected parts, and tied the veins above and below, removing pieces of the veins. The second operation was the removal of a tumour (apparently fibro-cartilaginous in its nature) from the parotid region, which had been growing for the past three years. The tumour was about the size of a pigeon's egg, and was very tedious and troublesome to remove, in consequence of its position, and the manner in which it was bound down by fascia.

ARTERIAL ANOMALY.

There was last week in a subject in the dissecting-room of the Ledwich School of Medicine, Dublin, an example of a comparatively rare anomaly. The right subclavian artery came off from the arch of the aorta, and the right common carotid also took its origin from the arch. Practically there was no arteria innominata. The two carotids at their origin were barely separated. Excluding the coronary arteries, there were four branches from the arch of the aorta.

THE MEATH HOSPITAL.

The introductory lecture was given on Monday by Mr. Ormsby, and the annual dinner took place the same evening at the Shelbourne Hotel, presided over by Sir William Stokes, president of the Royal College of Surgeons.

Dublin, Nov. 2nd.

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PARIS.

(From our own Correspondent.)

M. PASTEUR'S INOCULATIONS.

In a recent series of experiments to test the value of M. Pasteur's prophylaxis of rabies, Professor Frisch, of Vienna, inoculated sixteen rabbits by trephining. The virus used was of the third generation—that is, had evoluted in the organisms of three rabbits. Fifteen were subjected to preservative injections, one being set aside for comparison, but they all became rabid on the sixteenth day, and died on the twenty-first. Six other animals were inoculated with a preparation of the cervical medulla from a mad dog, but instead of trephinings, the virus was injected hypodermically. Three of these were subjected to preventive treatment, and the others kept as a test. None of these six animals became rabid. These experiments would seem to show (1) that rabies can be determined absolutely by inoculations of the nervous centres, in which case the preservative treatment is inefficacious; (2) that when the virus is introduced by the skin rabies does not necessarily follow. These statements have elicited a further communication on the subject from M. Pasteur. Upon examining, says M. Pasteur, the histories of those cases in which death has occurred from rabies after the preventive inoculation, it will be found that most of the victims were children who had been bitten severely about the face. In these cases the original treatment may not be sufficient, and it is now recommended that the inoculation should be hastened, in order to arrive quickly at the strongest cultures. The first day, for instance, the medullæ of twelve, ten, and eight days should be inoculated, at eleven, four, and nine o'clock. The second day those of six, four, and two days, at the same hours. The third day that of one day. The treatment is resumed on the fourth day by inoculations of eight, six, and four days. The fifth day by those of three and two days. The sixth by that of one day. On the seventh the marrow of four days; on the eighth that of three days; the ninth of two days; the tenth that of one day. Three treatments are thus made in the course of ten days, each terminating in the inoculation of the freshest virus. M. Pasteur adds, that when the wounds are not cicatrised, and when the patients have delayed, these treatments may be renewed, with intervals of a few days, for four or five weeks, and when the wounds are severe. The whole "intensive" treatment, as he terms it, may be employed in one day. M. Pasteur has submitted ten children who were bitten on the head or face during the month of August to this new plan of treatment, and he asserts that it is also efficacious after intra cranial inoculation of the nervous centres of animals where the slower method fails. It will be interesting to hear what Professor Frisch thinks of the modified method. In the meantime M. Pasteur enjoyed an ovation at the Academy of Sciences, where he was complimented by the president, who begged him to persevere in his researches without being discouraged by hostile criticism. "Go ahead," said M. Jurien de la Gravière, "and the whole Academy will uphold you in your triumphal progress." At the Academy of Medicine M. Pasteur gave a second reading of this communication, and evoked expressions of the greatest satisfaction from M. Verneuil, who is, if I may be excused the expression, in the same line of business. "To-day's communication," said the eminent professor, "has done ample justice to these dark doings (the criticisms of the incredulous). M. Pasteur can henceforth advance in the path of progress without heeding his obscure critics!"

THE FRENCH SURGICAL CONGRESS.

The French Congress of Surgery continued its sittings during the remainder of October. M. Gross of Nancy related a case of cystotomy for the extraction of a hair-pin from the bladder of a young girl. He went on to say that there were two conditions in children which rendered the supra-pubic operation advisable—the elongated form of the bladder, and the high position of the peritoneal cul-de-sac, so that the distension of the rectum is not necessary, although some elevation may be gained by it. M. Chenieux of Limoges condemned the practice of drainage in antiseptic surgery, and found a supporter in M. Mollière of Lyons. All wounds, however large, if placed in exact apposition and rendered aseptic by non-irritant agents should heal by first intention, which is impossible where there is a drainage-tube. Even in ovariotomy, hysterectomy, and similar operations, drainage is the reverse of useful. As long as the liquids exuded are thoroughly aseptic, it is better that they should be kept in a closed cavity, where their function is analogous to the effusions occurring at the seats of fractures. M. Chenieux considers, moreover, that when the patient is in a state of prostration this exudation forms a reserve fund which can be drawn upon by absorption for the first few days, whilst alimentation is insufficient. The discussion on nephrotomy and nephrectomy brought forward a number of eminent speakers. M. Le Dentu began by remarking that the indications and contra-indications of nephrectomy had been well summed up by Gross of Philadelphia. The kidney should be removed in sarcoma of the adult, non-malignant neoplasms, in the early stage of tubercular disease, and in fistulæ and rupture of the ureter. It is formally contra-indicated in sarcoma of children, cancer, and advanced tubercle. In other cases, such as floating kidney, hydro-nephrosis, suppuration, and calculus, nephrotomy or nephrectomy may be resorted to according to circumstances. The incision should be transverse or oblique, and not too large, and resection of the last rib should not be practised. Transperitoneal nephrectomy should only be employed in exceptional cases, as the front of the kidney may be reached, as Thornton has shown, from behind, without cutting the peritoneum. M. Lucas-Championnière, Bouilly, Reliquet, Demons, and Malherbe communicated their experience of the two operations. M. Ollier of Lyons stated that a modification of the operation of nephrotomy, as first practised by himself, was preferable to that usually adopted. Except in cases of sarcoma and malignant disease, he enucleated the kidney from its capsule. The risk of peritoneal injury is avoided, and there is much less hæmorrhage. As regards incisions, he differs entirely from M. Le Dentu. Their form is immaterial, and their length causes him no anxiety. He has made some of thirty-four centimetres (over twelve inches). He does not hesitate to remove a rib, or even two if necessary. M. Pean gave his experience of the two operations, and stated that he would perform nephrectomy in localised cancer of the kidney where the general health is satisfactory. He prefers the lumbar operation, but does not fear to reach the kidney by the abdomen when expedient. In 1884 he removed an enormous cancer by gastrotomy, the abdominal wall being incised in the middle line. The peritoneum was sutured in front of the cavity left by the ablation of the tumour, and the abdomen then closed. The patient is now in perfect health.

TREATMENT OF PHTHISIS.

The introduction of sulphuretted hydrogen into the respiratory passages by breathing gives rise to various disturbances, which may terminate, when a sufficient amount is taken, in death; but it was shown by Claude Bernard that when absorbed by the rectum an almost indefinite quantity may be eliminated by the lungs without harm. Dr. Bergeon, of the Faculty of Lyons, has been experimenting on the action of gaseous enemata for some time, and finds them useful in a variety of diseases depending upon the presence of micro-organisms. The practical point was to find a suitable vehicle for the administration of the sulphuretted hydrogen which should at the same time be without danger to the economy and easily tolerated by the bowel. It is said that carbonic acid fulfils these conditions. It is easily tolerated by the large intestine. It is rapidly absorbed, and is eliminated by the lungs with the medicinal gas it contains. It has, moreover, a therapeutic action itself, which may be the chief factor of this new treatment. Dr. Bergeon states that those who have tried this method in Paris, Lyons, Geneva, and Marseilles, in cases of phthisis, have generally observed a rapid disappearance of the suppuration, with progressive improvement. Expectoration has ceased, and the only stethoscopic signs remaining are of a dry character, and due to cavities and cicatrices. In the last three months the treatment has been tried at the Hôpital St. Antoine. In two cases of asthma, an injection of carbonic acid, charged with sulphydric acid, was made half an hour after admission. The dyspnœa was decreased considerably, and the treatment being continued, the respiration became free, and the attacks did not recur during the treatment. Nine cases of pulmonary phthisis, presenting

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general and physical signs of the disease, together with bacilli, were treated in the same manner. Cough and expectoration were greatly diminished, and the increase in weight was rapid—from one to two pounds a week, amounting in one instance to nine pounds in six weeks. The bacilli, however, did not disappear from the sputa. Dr. Bergeon recommends his method in phthisis, asthma, whooping-cough, inflammation, bronchiectasis, bronchorrhœa, and pulmonary catarrh. He insists upon the greatest care in its application. The CO_2 should be absolutely pure, and prepared by the action of sulphuric acid on bicarbonate of soda. The recipient should be perfectly free from air, and great care should be taken to prevent the entrance of air at any part of the tube, its introduction into the bowel even in minute quantities being said to cause meteorism and enteralgia. Four or five litres of CO_2 charged with sulphuretted hydrogen are sufficient for an injection, which should be repeated twice daily, care being taken not to administer the gas within three hours after a meal. As regards the *modus operandi*, two very important instruments for the production of the gas and its subsequent sulphydration are figured in the *Bulletin de l'Académie de Médecine*, but practically the two points seem to be the introduction of the pure CO_2 into a five-litre bag without admixture with air, and its passage through a sulphureous solution before entrance into the bowel. Those who possess a thermo-cautère will find that, with a little ingenuity, nothing but a bag to hold the CO_2 is necessary beyond the apparatus which works the cautery. The bag being adapted to the aspirating ball of the thermo-cautère by means of an indiarubber tube, which may be kept closed by a clip instead of the more expensive tap, a rectum tube is substituted at the other end for the cautery. The bottle of the thermo-cautère being replaced by a more capacious jar holding a pint of sulphydric solution in its lower half, and leaving room for the gas above, the apparatus is complete. Upon removing the clip between the bag and the ball, and working the latter, the CO_2 is aspirated and forced through the solution, where it becomes charged with sulphuretted hydrogen, and then passes on to the bowel. I may mention in this connexion that various anti-microbic treatments are being carried out in the Paris hospitals. At Laennec they are using hypodermic injections of eucalyptol, as proposed by Dr. Roussel, who claims that the bacilli are thus destroyed. In the majority of cases this has not been observed, but in one instance, which will probably be communicated to the Academy shortly, the micro-organisms, which were abundant in the sputa on admission, disappeared under treatment. Dr. Filleau claims to obtain a similar result by the use of a 1 per cent. solution of carbolic acid, of which he injects a hundred drops at each operation. No local irritation of any importance follows, if the carbolic acid is chemically pure, in the form of silky crystals. Iodoform increases daily in favour, especially where there is hypersecretion.

Paris, Nov. 1st.

THE SERVICES.

ADMIRALTY.—In accordance with the provisions of Her Majesty's Order in Council of April 1st, 1881, Surgeon John O'Callaghan has been placed on the retired list of his rank.

The following appointments have been made:—Fleet Surgeon Thomas H. Atkinson to the *Brilliant*, temporary; Staff Surgeon Frederick M'Clement to the *Active;* Staff Surgeon John Tyndall, to the *Revenge;* Surgeon C. B. D'E. Chamberlain, to the *Asia;* Surgeon J. E. Fogerty, to the *Excellent;* Surgeons R. Hickson and John Lowry, to the Plymouth Hospital; and Surgeons G. D. Trevor-Roper and Octavius S. Fisher, to the *Impregnable.*

RIFLE VOLUNTEERS.—16th Middlesex (London Irish): Acting Surgeon H. R. H. Bigg, from the 22nd Middlesex (Central London Rangers), to be Surgeon.

HOSPITAL SATURDAY FUND.—At a meeting of the Board of Delegates of this fund held on the 30th ult., it was reported that the collection now reached, after payment of all expenses, £8500. It is anticipated that before the close of the fund for the present year (30th inst.) some £2000 or £3000 more will be paid in by those subscribers who have not yet made their annual return. Of the amount now in hand £4000 was realised by the ladies' out-door collection in July.

MEETING OF FELLOWS & MEMBERS OF THE ROYAL COLLEGE OF SURGEONS.

A GENERAL meeting of the Fellows and Members was held in the theatre of the College of Surgeons on Thursday afternoon last, to receive a report from the Council of their transactions during the past collegiate year. There was a large attendance both of Fellows and Members, showing an undiminished interest in the questions of reform now agitating the College. As will be seen from the following abstract of the proceedings, a full report of which will be published in our next issue, speakers, both Fellows and Members, were, with one exception, unanimous in recommending the adoption of the resolutions which were put from the chair. The exception was Mr. Erichsen, who has hitherto always posed as a friend of reform, and was recently a candidate for Parliament in the Liberal interest for the University of Edinburgh. Mr. Rivington's speech lost much of its force by being too long, and by the persistency with which he disregarded the evident impatience of the meeting.

After a few opening remarks from the President, Mr. W. S. Savory, Mr. Timothy Holmes moved: "That in the opinion of this meeting it would conduce to the welfare of the Royal College of Surgeons, and would tend to promote the interests of medical polity and education, (1) if Members of the College were empowered to take part (separately or conjointly with the Fellows) in the election of members of the Council; (2) if Members of the College were eligible to sit in the Council, provided (*a*) that no Member of the College shall be entitled to vote till he have been such member for a period of ten years; (*b*) that no Member of the College shall be eligible to sit in the Council till he have been such member for a period of twenty years; and (*c*) that not more than one-fourth of the Council shall consist of Members of the College who are not also Fellows."

The motion was seconded by Dr. Danford Thomas. It was opposed by Mr. Erichsen, and supported by Mr. Marshall and Mr. Rivington. On being put to the meeting it was carried by a very large majority, only a few hands being held up against it.

The following motion was proposed by Dr. Ralph Gooding, seconded by Mr. John Tweedy, and agreed to: "That with a view to give effect to the recommendation in the foregoing resolution, the Council is hereby respectfully requested to empower certain members of its body to meet and confer with representatives of the Association of Fellows and of the Association of Members, together with, if necessary, an equal number of Fellows and Members who may not belong to either of the Associations, to be selected in any manner satisfactory to the Council."

On the motion of Dr. F. H. Alderson, seconded by Dr. Burgess, it was resolved: "That with reference to the report from Mr. John Marshall, on page 15 of the Council's report, this meeting requests the Council of the College to consider the advisability of accepting an arrangement for combination with the Apothecaries' Society, as well as the College of Physicians, for the purposes of conjoint examinations for medical diplomas in England and Wales, under the Medical Act of 1886, and to report thereon at a future meeting of Fellows and Members, to be summoned for the purpose at an early date."

It was then moved by Mr. Willett, and seconded by Mr. R. Davy: "That, in the opinion of this meeting, the method recommended by the Council for widening the basis upon which the Fellowship is obtained tends to lower the academic status of that diploma, and, in the interest of surgical education, is not advisable."

To this an amendment was moved by Mr. W. Steel, and seconded by Mr. Ashton Ellis, that the word "first" be inserted in the resolution before the word "method." The amendment was carried by a small majority, and the motion thus amended was carried as a substantive resolution.

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Obituary.

DR. JOSEPH E. MILLER, J.P.

AFTER a brief illness the subject of this notice passed away last Sunday, at his city residence in Derry, at a very advanced age. Dr. Miller for some time past had been in delicate health, but serious symptoms did not supervene until about eight days since. The deceased was in his ninety-fourth year, and belonged to a family remarkable for their longevity, several near relatives having attained to upwards of ninety years of age. He was in extensive practice in Derry for sixty-nine years, where he held a leading position, and filled many civic offices with credit, including that of Mayor, to which he was repeatedly appointed; and on his retirement from the Corporation he was presented with a handsome piece of plate, in recognition of his public services. The son of a Presbyterian minister, Dr. Miller graduated in Edinburgh in 1815, and commenced the practice of his profession in Derry two years afterwards. During the epidemic of cholera in that city in 1832, and the famine fever of 1847, his exertions on behalf of those attacked were unceasing, and his treatment eminently successful. In 1824 he married a daughter of Dr. Scott, of Derry, and leaves one son—viz., Sir Wm. Miller, M.B., J.P., the well-known surgeon to the City and County Derry Infirmary.

Medical News.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—The following gentlemen were admitted Members on Oct. 28th:—

Bury, Judson Sykes, M.D. Lond., Manchester.
Hogben, Edgar, M.B. Dub., Birmingham.
Mackenzie, Hector William Gavin, M.B. Camb., St. Thomas's Hospital.
Mott, Frederick Walker, M.B. Lond., Harrow.
Philpot, Joseph Henry, M.D. Lond., South Eaton-place.
Wethered, Frank Joseph, M.B. Lond., Chest Hospital, City-road.

The following gentlemen were admitted Licentiates on Oct. 28th:—

Abbott, William Louis, Guy's Hospital.
Armstrong, George Samuel, Burton-crescent.
Ayres, Charles James, Grosvenor-road.
Baker, William Henry, Offerton-road.
Barrett, Ernest, St. Bartholomew's Hospital.
Bell, George Craigie, Eden Villa, Leytonstone.
Biddlecombe, Edward Henry, North Allington, Bridport.
Bigelow, Arthur Wellington, Burton-crescent.
Blackler, Henry John, Knight's-hill, West Norwood.
Blakeney, John H., Jaffray Hospital, Gravelly-hill, Birmingham.
Boase, Richard Davey, Headland-park, Plymouth.
Böhrsmann, Matthias Christian Robert, Sydney, N.S.W.
Bowden, Walter, Hilldrop-crescent, Camden-town.
Brown, Charles, Baskerville-road.
Caven, John, Burton-crescent.
Chaldecott, John Henry, St. Paul's-road, Camden-square.
Christopherson, Cecil, North-West Hospital, Kentish-town-road.
Clarke, Walter James, Bryanston-street.
Colborne, William John, Birdhurst-road, New Wandsworth.
Crawford, Gustavus Rochford Jarvis, New Brunswick, Canada.
Darrell, Harrington Wyndham, Burton-crescent.
Davis, William, Evelyn-street, Deptford.
De Nyssen, Petrus Johannes, Portsdown-road, Maida Vale.
Dewes, Frederick Joseph, South Lambeth-road.
Dreaper, Wm. Grey, Richmond-hill, Old Trafford, Manchester.
Dwyer, Hubert De Burgh, Argyll-road.
Edsell, George Alfred, Beulah-hill.
Edwards, Percy, Western General Dispensary, Marylebone-road.
Gidley, Gustavus George, Honiton.
Gledden, Alfred Maitland, Helenslea, Hornsey-lane.
Goodall, Edwin, Guy's Hospital,
Goose, William, Oakley-square.
Halliwell, Thomas, Malpas-road, Brockley.
Halstead, George Ezra, Water-lane, Brixton.
Halsted, Harold Cecil, Gore-road.
Hamilton, Herbert James, Burton-crescent.
Harris, Clayton Campbell, Craven-road, Paddington.
Haultain, Charles Selby, Endsleigh-street, Tavistock-square.
Hill, Charles Marshall, Granville-square.
Honey, Thomas E., Westbourne-park-crescent, Harrow-road.
Honsberger, Jerome, Burton-crescent.
Hood, Frederick Colton, Gloster-place, Portman-square.
Horner, Charles Julian, Fern-hill, Walthamstow.
Ingleby-Mackenzie, Kenneth Walter, Guildford-street.
Jones, David Ogden, Gloster-place, Portman-square.
Kelsall, Charles James Seddon, Talbot-road, Bayswater.
Lambert, Frederick Samuel, Station-road, Redhill.
Leeming, John, Burton-crescent.
Lipscomb, Eustace Henry, Trinity-square.
Macevoy, Henry John, Camden-road, Holloway.
McNair, George, Thurlow-hill, Dulwich.
Manson, Magnus Olaf, Romola-road.
Manton, John Albert, South-parade, Wakefield.
Millar, Lindsay Flagg, Ontario, Canada.
Mortlock, Charles, Ladbroke-gardens, Notting-hill.
Moyle, Walter Henry, Helston.
Mugford, Sidney Arthur, Sisters-avenue, Wandsworth.
Nowell, Barnes, Halliford House, Sunbury.
Parker, William, Dempsey-street, Stepney.
Parry, William Thomas, Burton-crescent.
Pearson, Henry Aked, Sale, Manchester.
Pearson, Richard, Durham-terrace, Westbourne-park.
Pockett, Lewis Walter, Gibson-square, Islington.
Popert, Alfred William, Beverley-road, Anerley.
Powell, Frederick Hamilton, Bernard-street.
Prall, Samuel Esmond, Fortess-road, Kentish-town.
Raymond, George Howard, New Brunswick, Canada.
Remfry, Leonard, Nightingale-lane, Clapham.
Rigby, John William, Kelsall, Chester.
Risdon, Will'am Newt, Balfour-road, Norwood.
Roll, Graham Winfield, St. Thomas's Hospital.
Russell, Robert Hamilton, Salop Infirmary, Shrewsbury.
Sankey, Julius Ivor, Portland-road, Notting-hill.
Semple, Henry Frederick, Fairview, Fernbank-road, Redland, Bristol.
Sherrington, Charles Scott, Caius College, Cambridge.
Smith, Newman, Welbeck-street.
Smyth, Henry James, Iverson-road, West Hampstead.
Tattersall, Charles Hermann, Monton-road, Eccles, Manchester.
Tebb, William Scott, York-road, Lambeth.
Thomas, Frederick, Sewardstone-road, Hackney.
Thomas, Josiah Telfer, Chelsham-road.
Wallis, Charles George, Ripley, Derby.
Watts, Harry John Manning, Belsize-park.
Way, Lewis, Belsize-road, Hampstead.
Williamson, Charles Frederick, Mildmay-park.
Wood, George Edward Cartwright, Baileyfield, Portobello.
Woodhouse, Francis Decimus, King-street, Kensington-square.
Woods, Frank, Fairholme-road.
Woollcombe, Walter Ley, Plympton.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted Members of the College at a meeting of the Court of Examiners on Oct. 27th:

Aston, William, L.S.A., Codsall, Wolverhampton.
Gedge, Arthur Johnson, L.S.A., Brandon Methwold.
Honey, Thomas Edward, Stoke Devonport.
Manson, Magnus Olaf, L.R.C.P. Lond., Cape Colony.
Moyle, Walter Henry, L.R.C.P. Lond., Helston, Cornwall.
Risdon, William Newt, L.R.C.P. Lond., South Norwood.

Admitted on the 28th ult.:—

Goose, William, L.R.C.P. Lond., Oakley-square.
Lipscomb, Eustace Henry, L.R.C.P. Lond., St. Albans.
Nielsen, Frederick William, Durham County Asylum.
Smyth, Henry James, L.R.C.P. Lond., West Hampstead.

The following gentlemen, having passed the necessary examination in Dental Surgery, were admitted Licentiates of the College at a meeting of the Board of Examiners on the 3rd inst.:—

Acton, John Streets, Woodlands-road, Barnes-common.
Baker, Arthur Ernest, Camden-road, Oakley-square.
Croucher, Arthur Thomas, Osborn-terrace, Clapham-road.
Kendrick, Alfred, Nugent-road, St. John's-wood.
Ludbrook, Frederick Milner, Shalcombe-street, West Brompton.
Moore, Henry John, Charing-cross Hospital.
Pattinson, Charles Augustine, Archway-road, Highgate.
Smith, John Percy, Smith-street, Chelsea.
Tibbs, John Arthur Seymour, Old Steine, Brighton.
Williams, Herbert, Talgarth-road, West Kensington.
Woodhouse, Joseph, Camden-road, Oakley-square.

[In the list of Members published last week Mr. Edward C. Kingsford should have been described as of Upper Clapton, not "Clapham-common."]

UNIVERSITY OF CAMBRIDGE.—At a congregation held on Oct. 28th, Dr. Octavius Sturges was appointed Assessor to the Regius Professor of Physic during the current academical year. The following degrees were also conferred:

BACHELORS OF MEDICINE.—Walter Malden, Robert Chambers Priestly, E. Duguid Ritchie, Trinity; Fredk. Cecil H. Piggott, Emmanuel.
BACHELORS OF SURGERY.—Edward Duguid Ritchie, Trinity; Frederick Cecil H. Piggott, Emmanuel.

UNIVERSITY OF DURHAM.—On the 26th ult. the degree of M.D. was conferred on

Frederick M. Cock, M.B., M.S.

(Not "Imcock," as misprinted in our last issue.)

ROYAL UNIVERSITY OF IRELAND.—The following degrees in the Faculty of Medicine were conferred last week by Lord Emly, Vice-Chancellor of the University:—

BACHELOR OF MEDICINE.—Exhibitions (Second-class), £25 each: George S. Thomson, John R. Conner, John A. Keogh. Honours (Second-class): George S. Thomson, John Conner, John Keogh. Upper Pass: Samuel R. Collier, Frederick J. Crawford, Thomas Lusk, Francis L. Sealy, Edmund Woods. Pass: John Boyd, Robert Boyd, Patrick J. Burke, Timothy Corkery, Charles F. Daly, Denis J. Flynn, George Fuller, Howard J. Gahagan, John F. Gordon, Edward Griffin, William B. Hayes, John W. Irwin, James Johnston, David Junk, Charles R. Leader, William M. Lewis, Matthew

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McAulay, James McMaster, Edward McSherry, James Mangan, Alexander P. Mooney, Charles Morgan, Michael Murphy, Frank Murray, Wm. J. Niall, Daniel O. Mahony, Timothy O'Riordan, Edward O'Sullivan, William Patterson, Henry Pillow, Edward Robinson, Richard Spencer, William Steen, Alexander Stevenson, John Thomas, George Vance, Eaton Waters, Michael Williams, James Williamson, Alleyn Wolfe.

MASTER OF SURGERY.—Honours (First-class): George Thomson, Andrew Buchanan; (Second-class) James D. Williamson, Frederick Crawford, Alleyn Wolfe. Pass: Arthur Atock, John Attridge, John Boyd, Robert Boyd, George Browne, Patrick Burke, Samuel Collier, John Connor, Timothy Corkery, Denis Flynn, George Fuller, Edward Griffin, William Hayes, John Keogh, Daniel Lane, Charles Leader, Lyness Lyttle, Matthew McAulay, Edward McSherry, Wm. Milligan, Alex. Mooney, M. J. Murphy, Frank Murray, Wm. Niall, T. O'Riordan, E. O'Sullivan, W. Patterson, H. Pillow, E. Robinson, M. Robinson, R. Spencer, W. Steen, J. Tobin, G. Vance, Eaton Waters, Michael P. Williams, Edmund Woods.

MASTER OF OBSTETRICS.—Honours (First-class): George Thomson; (Second-class) S. R. Collier. Pass: P. J. Burke, John Connor, F. Crawford, C. F. Daly, Howard Gahagan, David Junk, John Keogh, Charles F. Knight, Daniel Lane, Thomas Lusk, E. McSherry, A. P. Mooney, M. J. Murphy, J. O'Connor, R. H. Spencer, A. K. Stevenson, J. C. Thomas, J. D. Williamson, Edmund McN. Woods.

The Dr. Henry Hutchinson Stewart Medical Scholarship, which is tenable for three years, was awarded to John W. Wolfe.

SOCIETY OF APOTHECARIES.—The following gentlemen passed their examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received certificates to practise, on Thursday, Oct. 21st:—

Jones, John, Kilsane, Stanhope-road, Streatham.

Passed on Oct. 28th:—

Darlow, Alfred, Plasket, Essex.
Gibbard, Thomas Wykes, Strixton, near Wellingborough.
Oliver, Francis G., M.R.C.S., L.R.C.P., Sunningside, Tunbridge.
O'Reilly, George Hartley, Wyndham House, Crescent-road, Reading.
Pedley, George Aston, The Terrace, Camberwell.
Redman, Wm. Edward, Vicarage-terrace, Neasden.
Williamson, Charles Fredk., M.R.C.S., L.R.C.P., Mildmay-park.
Young, R. Weekes. St. John's Villas, St. John's-road, Penge.

THE local Hospital Saturday Committee have just handed over to the Coventry and Warwickshire Hospital £660 as the result of their appeal for the current year.

THE death from blood-poisoning of Mr. Charlton, a well-known and highly-respected surgeon of Brabourne, is announced.

THE new water-supply for Stratford-on-Avon was formally inaugurated on the 27th ult. It is a gravitation scheme, and has cost £22,000 in execution.

A COMMITTEE was appointed at a meeting of the Bournemouth Commissioners on the 2nd inst. to consider a proposal to commemorate the jubilee year by the erection of a hospital, to be called the Victoria Hospital, or some such institute, in the centre of the town.

BRADFORD INFIRMARY. — The late Sir Henry Edwards left a legacy of £1000 for this charity, and Lady Edwards has contributed £750 for furnishing and endowing a children's cot in the same institution, in memory of her late husband.

ON the 28th ult., a woman was summoned at the Clerkenwell police-court, at the instance of the St. Pancras Vestry, for allowing her grandchild, while suffering from scarlet fever, to be exposed in the public thoroughfares. A fine of 10*s.* was imposed.

GUY'S HOSPITAL UNIVERSITIES' CLUB DINNER.—This dinner will be held at the Holborn Restaurant, at 7.30 P.M., on Nov. 22nd, Dr. Brailey in the chair. Mr. A. S. Taylor, of Guy's Hospital, will receive the names of Guy's men, being members of Oxford or Cambridge Universities (colleges and degrees should be stated), wishing to attend.

A LECTURE on "Transfusion for Hæmorrhage in Military Surgery" was delivered on the 28th ult., at the Medical Staff Mess, Woolwich, by Mr. C. E. Jennings, F.R.C.S. The lecture was followed by an interesting discussion, in which Sir T. Crawford, the Director-General, who presided, and several other officers, took part.

ST. JOHN AMBULANCE ASSOCIATION.—The annual report of this Association has just been issued. It states that during the past twelve months 11,703 "first aid" certificates and 1635 "nursing" certificates have been awarded, whilst the total number of medallions which have been granted up to the present time is 5130. These figures show a substantial and satisfactory increase in results, and the report, taken as a whole, must afford great encouragement to those interested in extending the knowledge of "first aid" and "nursing."

VACCINATION GRANT.—Dr. Merlin, of the Sutton district of the Ely Union, has received a Government gratuity for the fifth time for efficient vaccination.

CARDIFF WATER-SUPPLY.—On the 28th ult., the Llanishen Waterworks, having a capacity of 317,000,000 gallons, were formally opened by Mr. Alfred Thomas, M.P. The new works, which have been in progress since 1878, are required for the town of Cardiff, and the water stored in the reservoirs has its original source in the Brecon Hills.

DONCASTER INFIRMARY.—At the annual meeting of the governors of, and subscribers to, this institution on the 28th ult., it was reported that the number of in-patients admitted during the year was 192, and that 2800 out-patients had been treated. The expenditure amounted to £1444, the income exceeding this sum by about £250.

DEATH FROM CHLOROFORM.—An inquest was held on the 27th ult. at the Huddersfield Infirmary on the body of a boy aged four years, who died in the institution on the previous day while under the influence of chloroform. The jury found that the cause of death was sudden failure of the heart's action, and expressed the opinion that the chloroform was duly and properly administered.

WALLASEY MEDICAL CHARITIES.—The first lecture of a course to be delivered in aid of the Wallasey medical charities was given on the 28th ult. by Mr. H. M. Stanley, the famous African explorer, on the subject "My African Travels and work." By a similar course of lectures last year, £60 was placed at the disposal of the various charities.

THE death is announced, in the seventy-fourth year of his age, of Mr. Thomas Middleton, a formerly well-known medical practitioner in Salford. The deceased was born in 1813, commenced practice in 1834, and in 1852 was elected a Fellow of the Royal College of Surgeons. After his retirement from the active practice of his profession, Mr. Middleton resided at Didsbury, where his death occurred.

BRISTOL DISPENSARY.—For many years past considerable inconvenience has been experienced in consequence of the increasing work in the different departments of this institution having outgrown the accommodation afforded by the old building, which has for a long period been the headquarters of the dispensary, and the committee have therefore decided upon the erection of new premises, the first section of which is now in progress. The estimated cost of the new building is £6000.

PORT SAID BRITISH HOSPITAL.—The hospital building to be erected at Port Said on land granted by the Suez Canal Company, is now ready, and will be shipped to Egypt in a few days. It is a commodious, airy structure of one storey, containing two wings, one on each side of an open passage, united under one roof at the entrance. At present the hospital is planned to contain 30 beds, but more patients could be accommodated on an emergency. In all there are five wards, the principal of which is 38 ft. long by 28 ft. wide, and the average height of the various apartments is 10 ft. to the eaves, or 19 ft. to the top of the ridge. The whole of the building stands on a frame, which will rest on concrete pillars 4 ft. above the ground, so as to allow of a free draught of air underneath. The hospital, which occupies about half an acre of ground, is built with Baltic fir, and its construction has cost about £3000.

ACADEMY OF MEDICINE IN IRELAND.—The following office-bearers have been elected for the ensuing year:—Medical Section (Council): J. Little (President), W. Beatty, M. Boyd, J. Magee Finny, T. Grimshaw, R. A. Hayes, H. Kennedy, A. Montgomery, J. W. Moore, W. Moore, C. Nixon, C. Norman, J. M. Redmond. Surgical Section (Council): Sir W. Stokes (President), W. Colles, C. Coppinger, H. Gray Croly, Kendal Franks, Edward Hamilton, P. J. Hayes, E. Stamer O'Grady, E. D. Mapother, W. Thornley Stoker, W. Ireland Wheeler. Obstetrical Section (Council): A. V. Macan (President), Lombe Atthill, J. A. Byrne, J. J. Cranny, Professor Dill, Andrew Horne, George H. Kidd, J. R. Kirkpatrick, T. M. Madden, R. D. Purefoy, William Roe. Pathological Section (Council): W. G. Smith (President), C. B. Ball, J. W. Beatty, E. H. Bennett, A. H. Benson, A. H. Corley, A. W. Foot, J. E. Little, J. M. Purser, J. A. Scott, J. B. Story. General Treasurer: George F. Duffey. General Secretary: William Thomson.

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THE UNUSUAL COINCIDENCE AT ST. THOMAS'S HOSPITAL.

To the Editor of THE LANCET.

SIR,—The annotation in last week's LANCET giving an account of the simultaneous occurrence of pneumonia in husband and wife, induces me to send a brief outline account of a similar incidence of the disease which I met with last year in my practice. I consider that these coincidences are worth noting, as having probably a bearing upon one of the causes of pneumonia.

On April 11th, 1885, I was called to see a man, aged twenty-five years, suffering from acute inflammation of the apex of the left lung. The case ran the usual course to recovery, the only remarkable feature being the excessive amount of delirium, quite out of proportion to the area of lung involved. I may remark, in passing, that it has been a matter of observation with me that in cases of pneumonia attacking the apex there is more delirium than in those in which the base is primarily affected. I shall be glad to know if this coincides with the experience of others.

On April 14th, that is, three days after the commencement of the husband's illness, the wife, a strong young woman of thirty years of age, was attacked with acute inflammation of the right base. She was far advanced in pregnancy, and daily expected her second confinement. She progressed favourably for the next three days, but about 6 A.M., on the 18th, labour pains set in, and she was delivered in about two hours of a female child, which survived its birth only eighteen hours. There was no more than the usual quantity of hæmorrhage, but the extra call made by the expulsive efforts during the second stage of labour upon a respiratory system already heavily handicapped by a partially consolidated lung had a very exhausting effect. She never seemed to rally, gradually sinking until 4 P.M. of the 19th, when death took place.

In this instance, as in the cases reported from St. Thomas's Hospital, the disease probably had a septic origin. The husband informed me that three days before he was taken ill they removed from a house in which they had lived for eighteen months because they never felt well in it, attributing this to bad smells emanating from the slop-stone pipe. The probability is that their insanitary surroundings had much to do with the simultaneous occurrence of pneumonia in these two young people.

I am, Sir, yours faithfully,

Farnworth, Nov. 1st, 1886. J. A. MACKENZIE, M.B. (Aberd.)

To the Editor of THE LANCET.

SIR,—It may be of interest to your readers for me to briefly record two cases, recently under my care, which possess some similarity to those quoted in your last impression under the heading "Unusual Coincidence."

At the end of last month I was called to see a man (G——) temporarily staying in our village on a visit with his wife. I found him to be suffering from pneumonia affecting his left base, and in addition I ascertained that he had gonorrhœa. My attention was then drawn to the wife, who was stated to have been unwell for some days, and found that she was affected with the same disorder (viz., gonorrhœa). Two days after my first visit the woman showed symptoms of some lung trouble, which on examination proved also to be pneumonia; but in her case the right base was affected. The disease ran a mild course in both (although in the man's case the symptoms were at first rather acute), and they were convalescent in little over a week.

Is one justified in thinking that the lung mischief had anything to do with the venereal complaint, and that this also was a case of pneumonia having a septic infection for its origin?

Knowing the many demands on your valuable space I have omitted all detail in my account.

Believe me, Sir, yours obediently.

Pontesbury, Salop, Nov. 1st, 1886. STUART OLIVER, L.S.A. Lond.

"DIPHTHERIA: ITS TREATMENT."

To the Editor of THE LANCET.

SIR,—If your correspondent, Mr. Merces, will refer to THE LANCET of April 10th last, he will see that in a long article I have advocated the employment of large, concentrated, and frequently repeated doses of the tincture of iron, and that, as I state there, for the last twenty years I have found it a most successful system of combating this terrible disease. I believe that iron has some specific action in arresting the rapid deterioration of the blood that takes place in diphtheria, and by its beneficent properties prevents the often disastrous lesions that are so fatal a concomitant of the disease. Since writing that article I have had communications from American physicians who had read it in THE LANCET, to the effect that it is not unusual in America to give even larger doses than I suggested, and speaking most highly of large and frequently repeated doses of the perchloride of iron in diphtheria.

I am, Sir, your obedient servant,

Sherborne, Oct. 31st, 1886. N. E. DAVIES.

"THE IRISH BRANCH COUNCIL AND THE APPROACHING ELECTION."

To the Editor of THE LANCET.

SIR,—In your issue of Oct. 23rd Mr. Laffan of Cashel gives me credit undeservedly. It was Dr. Cox and Dr. C. Nixon who detected the flaw in the nomination paper.—I am, Sir, yours faithfully,

Dublin, Oct. 28th, 1886. J. P. DOYLE, Physician and Surgeon.

THE POPULATION OF FRANCE AND ITALY.

A. L. S. (Barrow-in-Furness).—A lively controversy has been going on in the journals of those two nationalities as to their respective populations, France maintaining that that of Italy is decimated by emigration; Italy hotly rebutting the statement and contending that of the two it is France that is showing signs of decrease. The outcome of the contest may thus be summarised:—Italy in 1871 had 26,801,154 inhabitants, and in 1881 she had 28,459,628—in other words, an increase of 1,658,474 within the decennium. Again, on Dec. 31st, 1885, by the excess of births over deaths, her population was computed at 29,699,785. In France, on the other hand, the increase of the population is distinctly less. At the end of 1876 her census showed 36,905,788 inhabitants, and at the end of 1885, 37,918,745—an increase of but 1,009,953, as compared with the preceding return. Again, France, on an average, has 102 births annually per 1000 women between the ages of fifteen and fifty, while in Italy the proportion is of 157 births. The emigration of Italians by no means neutralises this excess of births over deaths. From 1876 to 1885 about 449,000 emigrated to Transatlantic countries, of whom a considerable number after a year's absence came back. True, there has been an increase of emigrants in the years immediately preceding 1885, but still it is much lower than the numbers that annually leave Britain, Germany, and the Scandinavian countries. On an average, in the decennium 1876–85 there left Italy for non-European countries 158 per annum for every 100,000 of the population, while in the decennium 1875–84 the yearly emigrants from England were 440 per 100,000; from Scotland, 520; from Ireland, 1146; from Germany, 212; from Switzerland, 221; from Sweden, 423, and from Norway, 731. France, with her not inconsiderable colonies, not only cannot keep up a strong emigration, but has to reinforce by the foreign arm her national labour. Indeed, it is computed that she has a standing immigration yearly of between 40,000 and 50,000 workmen, mainly Germans and Italians, who become domiciled within her borders. In her last census (1885) over a million of such immigrants were calculated to have taken up their abode in her midst. The proportion of her births is very insignificant; insomuch that her political economists and hygienists are seriously preoccupied with the phenomenon, seeing in it a menace to the future prosperity and power of the country, as well as to her influence in competition with other States. For with existing means of defence and offence it is, above all things, numbers which tell in securing respect for a nation's integrity and independence.

Dental Student.—In some cases brandy would effect the desired object; in others it has been known to increase the difficulties of administration.

"CHRONIC DYSENTERY."

To the Editor of THE LANCET.

SIR,—In reply to "Eureka's" letter, in your last issue, asking for a suggestion as to the treatment of chronic dysentery, I would strongly urge him to try the following mode of treatment, which was recommended by Mr. Rawle, and is as follows:—1. Inject a pint and a half of warm water into the rectum at 90° F. 2. When this has come away, inject two ounces, by measure, with a gum-elastic bottle of the following: Quiniæ disulph., gr. x.; tinct. camph. co., ʒiv.; decoct. amyli ad ʒij. It is generally retained; but if ejected, it may be repeated after an hour or two. I have tried this remedy in two cases of dysentery following military service in Egypt, and with most satisfactory results in both cases, after treatment by endless internal remedies. The injections may be given night and morning, and the effects are generally soon evident.

I am, Sir, your obedient servant,

ARTHUR G. BLOMFIELD.

Devon and Exeter Hospital, Nov. 1st, 1886.

To the Editor of THE LANCET.

SIR,—Last year I had charge of a case of chronic dysentery in a young man, in which the administration of fifteen minims of oil of turpentine in mucilage and cinnamon water twice a day, alternating with a three-grain pill of ipecacuanha powder twice a day—i.e., two doses of each daily,—produced a rapid improvement in the character of the stools and in the state of the patient. In a week the turpentine was discontinued, and a fortnight later one three-grain pill of ipecacuanha was sufficient to keep the stools in order. Subsequently, whenever he noticed any return of mucus or blood, the patient would take one pill daily. He contracted the disease in India, and was discharged from the army in consequence of his broken-down state of health. He had been given a variety of astringents, and was when I first saw him taking pills containing nitrate of silver and opium.

Trusting your correspondent, "Eureka," will be equally fortunate if he follow the treatment I did, I am, Sir, yours faithfully,

Oct. 30th, 1886, E. W. F.

To the Editor of THE LANCET.

SIR,—I would advise your correspondent, "Eureka," to give hamamelis virginica a fair trial in his case, and should be pleased if he would let me know the result. I am, yours faithfully,

St. Albans, Oct. 30th, 1886. A. H. BOYS.

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DR. EDWIN MORRIS'S CANDIDATURE.

Dr. Edwin Morris has our hearty good wishes, and would make an excellent representative of general practitioners. The documents sent us for publication are too lengthy, and of the nature of advertisements.

A Hospital Dispenser.—Hospital dispensers must place themselves in the same category as chemists' assistants, only they have advantages which the latter do not possess. They are not required in most hospitals to produce certificates beyond those of good moral conduct, knowledge of drugs, and skill in dispensing. They have fixed hours. In some hospitals they take it in turn to remain until a late hour in case their services should be required. As a rule, they are better paid in proportion to their work. No one in authority would prefer a very young man, unless he possessed very good qualifications, to a senior. The question of pension depends upon the duration of service and the skill or devotion to duty shown by the particular dispenser. Those engaged in work the payment of which is dependent so often upon the charity of the benevolent cannot compare their position with that of those engaged in the public services.

Mr. R. S. Coulthard, M.B.—Mr. Eassie's book on Cremation of the Dead (8s. 6d.), and the Transactions of the Cremation Society, edited by the same gentleman (both works published by Smith, Elder, and Co.), would probably afford the information desired.

A. K. C.—Yes, under the circumstances detailed it would have been wise to have induced labour prematurely.

ABSCESS OF THE LIVER IN INDIA.

To the Editor of THE LANCET.

SIR,—With reference to Surgeon A. Tomes's remark in your issue of the 9th inst., to the effect that "abscess has never yet been met with in any person, native or European, below fifteen" in India, will you allow me to point out that I published in the *Indian Medical Gazette* for February, 1881, the particulars of a case—that of an infant of six months, whose liver contained not one, but seven different abscesses of this kind. The body of this infant was brought in for "the doctor's inspection," as it is called out there, by the police, as belonging to a proclaimed village or family in the district, and the examination was conducted by that enthusiastic pathologist and intelligent practitioner Dr. Wilkie, of the Bengal Army, who was at that time in medical charge of the Allahabad gaol. Excuse my availing myself of this opportunity to intimate here my extreme surprise at the strange and, to me, utterly inexplicable oblivion into which this my contribution to the literature or clinical history of this condition appears to have fallen. Though several books or essays have since been published on hepatitis in India, only one of them—viz., that of my friend, Dr. Chevers—has condescended to notice it; yet it not only cost me sixteen years of rigorous study on the spot, but it still, as I presume to think, "holds the field" as one of the most elaborate or exhaustive of its kind in our language. But then I have no handle before my name or string of honorary distinctions after it; I am neither a professor *en retraite*, nor yet a Knight of the Shire; I am not even of the quorum; and so it is as well, perhaps, as it is wise to ignore me.

I am Sir, your obedient servant,

Cedars Club, West Kensington, W., Oct. 12th, 1886. WM. CURRAN.

E.—As our correspondent puts the case he is quite in the right. An employer may justly claim to be satisfied as to the nature of the illness of one of his *employés*, and it is not unreasonable that he should wish to have the opinion of his own adviser; but a medical man requested to visit the patient of another medical man should communicate with the practitioner in attendance, and only see him in consultation or with the full assent of the gentleman in charge. That Dr. R—— should have declined a direct reply surprises us.

Dr. ——'s communication arrived too late for consideration this week.

"HEREDITY IN LOWER ANIMALS."

To the Editor of THE LANCET.

SIR,—As I was abroad when my letter on the above subject appeared and did not return for some weeks subsequently, I do not know whether Mr. Weddell's interesting communication on the same subject is the only one that has followed mine. I had a kind note from Dr. Brown-Séquard enclosing a paper of his, and commending the publication of such facts bearing upon the very important question of heredity. All this encourages me to send you a story vouched for by a patient of mine, of a cat which had been taught to beg sitting up. Her kittens did not beg, but her kittens' kittens did so quite naturally, sitting up like the mother.

I am, Sir, your obediently,

Nov. 1st, 1886. GEORGE A. HAWKINS-AMBLER.

"TREATMENT OF OZÆNA."

To the Editor of THE LANCET.

SIR,—If "Subscriber" will try a solution of chloride of zinc, two grains to the ounce, and cause it to be injected warm with a glass syringe four or five times daily, I think much success will be obtained in this troublesome complaint.—I am, Sir, yours faithfully,

Brighton, Nov. 1st, 1886. C. H. WELCH, F.R.C.S.

THE BRITISH MEDICAL ASSOCIATION AND THE ELECTION.

A South Walian resents what he calls the dictatorial manner in which some of the gentlemen connected with the British Medical Association offer their advice in favour of distinguished officials of that body as candidates for the direct representation of the profession in the Medical Council. In support of his complaint he sends two notes. One of his kind advisers does not mention anything about a third candidate. Of the other he says: "With regard to a third representative, he is good enough to allow me to indulge in my own fancy. 'But,' he adds, 'do not fail to vote for Foster and Wheelhouse.'" We must not venture to criticise the tactics of the zealous members of the Association. Our correspondent is not bound to accept the dictation. We publish a list of candidates from which to choose. Besides, the obvious friendship of one of his advisers is shown by his closing remark: "As I am off to Egypt, I can only wish you a merry Christmas and a happy new year when they come!" Can anything be more calculated to make a man vote right than such sentiments as these?

Ignoramus.—Our correspondent's questions seem rather unpractical. The power to charge for certain professional services depends on the nature of the qualification. The M.D. is not a surgical qualification. Our correspondent is not bound, we presume, to have all his qualifications registered, and may have any he pleases erased. The sanitary certificates are registrable only on special conditions. The registration of the M.B. and of the C.M. should take place at the same time; they are not given separately.

Conservative.—The sale of surgery fittings and fixtures, drugs, and bottles in conjunction with the transfer of a medical practice would, we believe, comprise and include dispensing counters, shelves, drawers, drugs, bottles, window blinds, and gas fittings, oil cloth or carpet, but not chairs, tables, &c.

LIFE ASSURANCE AND MEDICAL FEES.

To the Editor of THE LANCET.

SIR,—The practice of some life assurance companies tendering the paltry fee of half a guinea for examinations under such and such sums is absurd. I would ask, What has a medical man to do with the amount insured? The forms contain as many questions, the same number of organs are to be carefully examined, and the knowledge and skill required, as far as I can see, of the medical man are the same whether the sum be for £50 or £5000. I only regret that medical men are to be found who will do the work, and exercise the skill for the paltry sum. Why do not the insurance companies insist on their clients availing themselves of a qualified man (if possible their last attendant), make them pay for examination, and refund by small portions by reducing premiums or the insurance office find the money and augment the premiums until the guinea was refunded to them; or let the insurance office find one-half the fee, and their client the other half under such and such sums?

I am, Sir, yours truly,

Daventry, Oct. 27th, 1886. CUTHBERT JOHNSON.

A Constant Subscriber should apply at the office of the St. John Ambulance Association, St. John's-gate, Clerkenwell, for a copy of instructions.

Dr. Bernard O'Connor's letter is too long for insertion.

"REFUSE DISPOSAL."

To the Editor of THE LANCET.

SIR,—Under the above heading, in the current number of THE LANCET, I notice the following sentence:—"Whitechapel, we understand, has determined to depend upon cremation." Will you allow me to state that at the present time all the refuse from the houses in the Whitechapel district is being thus disposed of. I may mention briefly that, under the direction of Mr. La Rivière, surveyor to the Board, works have been constructed, and are actually in operation, which resolve unsavoury, and even dangerous, materials into inoffensive vapour and harmless useful clinker. Whitechapel is, I believe, at present the only metropolitan sanitary authority which so satisfactorily disposes of such refuse.

I am, Sir, yours faithfully,

JOSEPH LOANE,

Whitechapel, Oct. 29th, 1886. Medical Officer of Health.

THE LATE DR. MOXON.

To the Editor of THE LANCET.

SIR,—Soon after the death of the late Dr. Moxon an announcement of an intention to promote a suitable memorial appeared in the journals. As yet no public effort appears to have been made to carry this intention into effect. There must be many who, like myself, are anxious to subscribe their guinea to record their appreciation of the striking individuality and talent of the deceased physician, whose scrupulous, unselfish professional bearing, and generous, ever-ready sympathy must have endeared him to hundreds of his fellow practitioners. May I inquire through the medium of your columns whether any steps are being taken in the matter?

I am, Sir, yours faithfully,

Southport, Nov. 2nd, 1886. ROBERT HARRIS.

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THE UNUSUAL COINCIDENCE AT ST. THOMAS'S HOSPITAL.

To the Editor of THE LANCET.

SIR,—The annotation in last week's LANCET giving an account of the simultaneous occurrence of pneumonia in husband and wife, induces me to send a brief outline account of a similar incidence of the disease which I met with last year in my practice. I consider that these coincidences are worth noting, as having probably a bearing upon one of the causes of pneumonia.

On April 11th, 1885, I was called to see a man, aged twenty-five years, suffering from acute inflammation of the apex of the left lung. The case ran the usual course to recovery, the only remarkable feature being the excessive amount of delirium, quite out of proportion to the area of lung involved. I may remark, in passing, that it has been a matter of observation with me that in cases of pneumonia attacking the apex there is more delirium than in those in which the base is primarily affected. I shall be glad to know if this coincides with the experience of others.

On April 14th, that is, three days after the commencement of the husband's illness, the wife, a strong young woman of thirty years of age, was attacked with acute inflammation of the right base. She was far advanced in pregnancy, and daily expected her second confinement. She progressed favourably for the next three days, but about 6 A.M., on the 18th, labour pains set in, and she was delivered in about two hours of a female child, which survived its birth only eighteen hours. There was no more than the usual quantity of hæmorrhage, but the extra call made by the expulsive efforts during the second stage of labour upon a respiratory system already heavily handicapped by a partially consolidated lung had a very exhausting effect. She never seemed to rally, gradually sinking until 4 P.M. of the 19th, when death took place.

In this instance, as in the cases reported from St. Thomas's Hospital, the disease probably had a septic origin. The husband informed me that three days before he was taken ill they removed from a house in which they had lived for eighteen months because they never felt well in it, attributing this to bad smells emanating from the slop-stone pipe. The probability is that their insanitary surroundings had much to do with the simultaneous occurrence of pneumonia in these two young people.

I am, Sir, yours faithfully,

Farnworth, Nov. 1st, 1886. J. A. MACKENZIE, M.B. (Aberd.)

To the Editor of THE LANCET.

SIR,—It may be of interest to your readers for me to briefly record two cases, recently under my care, which possess some similarity to those quoted in your last impression under the heading "Unusual Coincidence."

At the end of last month I was called to see a man (G——) temporarily staying in our village on a visit with his wife. I found him to be suffering from pneumonia affecting his left base, and in addition I ascertained that he had gonorrhœa. My attention was then drawn to the wife, who was stated to have been unwell for some days, and found that she was affected with the same disorder (viz., gonorrhœa). Two days after my first visit the woman showed symptoms of some lung trouble, which on examination proved also to be pneumonia; but in her case the right base was affected. The disease ran a mild course in both (although in the man's case the symptoms were at first rather acute), and they were convalescent in little over a week.

Is one justified in thinking that the lung mischief had anything to do with the venereal complaint, and that this also was a case of pneumonia having a septic infection for its origin?

Knowing the many demands on your valuable space I have omitted all detail in my account.

Believe me, Sir, yours obediently,

Pontesbury, Salop, Nov. 1st, 1886. STUART OLIVER, L.S.A. Lond.

"DIPHTHERIA: ITS TREATMENT."

To the Editor of THE LANCET.

SIR,—If your correspondent, Mr. Merces, will refer to THE LANCET of April 10th last, he will see that in a long article I have advocated the employment of large, concentrated, and frequently repeated doses of the tincture of iron, and that, as I state there, for the last twenty years I have found it a most successful system of combating this terrible disease. I believe that iron has some specific action in arresting the rapid deterioration of the blood that takes place in diphtheria, and by its beneficent properties prevents the often disastrous lesions that are so fatal a concomitant of the disease. Since writing that article I have had communications from American physicians who had read it in THE LANCET, to the effect that it is not unusual in America to give even larger doses than I suggested, and speaking most highly of large and frequently repeated doses of the perchloride of iron in diphtheria.

I am, Sir, your obedient servant,

Sherborne, Oct. 31st, 1886. N. E. DAVIES.

"THE IRISH BRANCH COUNCIL AND THE APPROACHING ELECTION."

To the Editor of THE LANCET.

SIR,—In your issue of Oct. 23rd Mr. Laffan of Cashel gives me credit undeservedly. It was Dr. Cox and Dr. C. Nixon who detected the flaw in the nomination paper.—I am, Sir, yours faithfully,

Dublin, Oct. 28th, 1886. J. P. DOYLE, Physician and Surgeon.

THE POPULATION OF FRANCE AND ITALY.

A. L. S. (Barrow-in-Furness).—A lively controversy has been going on in the journals of those two nationalities as to their respective populations, France maintaining that that of Italy is decimated by emigration; Italy hotly rebutting the statement and contending that of the two it is France that is showing signs of decrease. The outcome of the contest may thus be summarised:—Italy in 1871 had 26,801,154 inhabitants, and in 1881 she had 28,459,628—in other words, an increase of 1,658,474 within the decennium. Again, on Dec. 31st, 1885, by the excess of births over deaths, her population was computed at 29,699,785. In France, on the other hand, the increase of the population is distinctly less. At the end of 1876 her census showed 36,905,788 inhabitants, and at the end of 1885, 37,918,745—an increase of but 1,009,953, as compared with the preceding return. Again, France, on an average, has 102 births annually per 1000 women between the ages of fifteen and fifty, while in Italy the proportion is of 157 births. The emigration of Italians by no means neutralises this excess of births over deaths. From 1876 to 1885 about 449,000 emigrated to Transatlantic countries, of whom a considerable number after a year's absence came back. True, there has been an increase of emigrants in the years immediately preceding 1885, but still it is much lower than the numbers that annually leave Britain, Germany, and the Scandinavian countries. On an average, in the decennium 1876–85 there left Italy for non-European countries 158 per annum for every 100,000 of the population, while in the decennium 1875–84 the yearly emigrants from England were 440 per 100,000; from Scotland, 520; from Ireland, 1146; from Germany, 212; from Switzerland, 221; from Sweden, 423, and from Norway, 731. France, with her not inconsiderable colonies, not only cannot keep up a strong emigration, but has to reinforce by the foreign arm her national labour. Indeed, it is computed that she has a standing immigration yearly of between 40,000 and 50,000 workmen, mainly Germans and Italians, who become domiciled within her borders. In her last census (1885) over a million of such immigrants were calculated to have taken up their abode in her midst. The proportion of her births is very insignificant; insomuch that her political economists and hygienists are seriously preoccupied with the phenomenon, seeing in it a menace to the future prosperity and power of the country, as well as to her influence in competition with other States. For with existing means of defence and offence it is, above all things, numbers which tell in securing respect for a nation's integrity and independence.

Dental Student.—In some cases brandy would effect the desired object; in others it has been known to increase the difficulties of administration.

"CHRONIC DYSENTERY."

To the Editor of THE LANCET.

SIR,—In reply to "Eureka's" letter, in your last issue, asking for a suggestion as to the treatment of chronic dysentery, I would strongly urge him to try the following mode of treatment, which was recommended by Mr. Rawle, and is as follows:—1. Inject a pint and a half of warm water into the rectum at 90° F. 2. When this has come away, inject two ounces, by measure, with a gum-elastic bottle of the following: Quiniæ disulph., gr. x.; tinct. camph. co., ʒiv.; decoct. amyli ad ʒij. It is generally retained; but if ejected, it may be repeated after an hour or two. I have tried this remedy in two cases of dysentery following military service in Egypt, and with most satisfactory results in both cases, after treatment by endless internal remedies. The injections may be given night and morning, and the effects are generally soon evident.

I am, Sir, your obedient servant,

ARTHUR G. BLOMFIELD.

Devon and Exeter Hospital, Nov. 1st, 1886.

To the Editor of THE LANCET.

SIR,—Last year I had charge of a case of chronic dysentery in a young man, in which the administration of fifteen minims of oil of turpentine in mucilage and cinnamon water twice a day, alternating with a three-grain pill of ipecacuanha powder twice a day—i.e., two doses of each daily,—produced a rapid improvement in the character of the stools and in the state of the patient. In a week the turpentine was discontinued, and a fortnight later one three-grain pill of ipecacuanha was sufficient to keep the stools in order. Subsequently, whenever he noticed any return of mucus or blood, the patient would take one pill daily. He contracted the disease in India, and was discharged from the army in consequence of his broken-down state of health. He had been given a variety of astringents, and was when I first saw him taking pills containing nitrate of silver and opium.

Trusting your correspondent, "Eureka," will be equally fortunate if he follow the treatment I did, I am, Sir, yours faithfully,

Oct. 30th, 1886, H. W. F.

To the Editor of THE LANCET.

SIR,—I would advise your correspondent, "Eureka," to give hamamelis virginica a fair trial in his case, and should be pleased if he would let me know the result. I am, yours faithfully,

St. Albans, Oct. 30th, 1886. A. H. BOYS.

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DR. EDWIN MORRIS'S CANDIDATURE.

Dr. Edwin Morris has our hearty good wishes, and would make an excellent representative of general practitioners. The documents sent us for publication are too lengthy, and of the nature of advertisements.

A Hospital Dispenser.—Hospital dispensers must place themselves in the same category as chemists' assistants, only they have advantages which the latter do not possess. They are not required in most hospitals to produce certificates beyond those of good moral conduct, knowledge of drugs, and skill in dispensing. They have fixed hours. In some hospitals they take it in turn to remain until a late hour in case their services should be required. As a rule, they are better paid in proportion to their work. No one in authority would prefer a very young man, unless he possessed very good qualifications, to a senior. The question of pension depends upon the duration of service and the skill or devotion to duty shown by the particular dispenser. Those engaged in work the payment of which is dependent so often upon the charity of the benevolent cannot compare their position with that of those engaged in the public services.

Mr. R. S. Coulthard, M.B.—Mr. Eassie's book on Cremation of the Dead (8s. 6d.), and the Transactions of the Cremation Society, edited by the same gentleman (both works published by Smith, Elder, and Co.), would probably afford the information desired.

A. K. C.—Yes, under the circumstances detailed it would have been wise to have induced labour prematurely.

ABSCESS OF THE LIVER IN INDIA.

To the Editor of THE LANCET.

SIR,—With reference to Surgeon A. Tomes's remark in your issue of the 9th inst., to the effect that "abscess has never yet been met with in any person, native or European, below fifteen" in India, will you allow me to point out that I published in the *Indian Medical Gazette* for February, 1881, the particulars of a case—that of an infant of six months, whose liver contained not one, but seven different abscesses of this kind. The body of this infant was brought in for "the doctor's inspection," as it is called out there, by the police, as belonging to a proclaimed village or family in the district, and the examination was conducted by that enthusiastic pathologist and intelligent practitioner Dr. Wilkie, of the Bengal Army, who was at that time in medical charge of the Allahabad gaol. Excuse my availing myself of this opportunity to intimate here my extreme surprise at the strange and, to me, utterly inexplicable oblivion into which this my contribution to the literature or clinical history of this condition appears to have fallen. Though several books or essays have since been published on hepatitis in India, only one of them—viz., that of my friend, Dr. Chevers—has condescended to notice it; yet it not only cost me sixteen years of rigorous study on the spot, but it still, as I presume to think, "holds the field" as one of the most elaborate or exhaustive of its kind in our language. But then I have no handle before my name or string of honorary distinctions after it; I am neither a professor *en retraite*, nor yet a Knight of the Shire; I am not even of the quorum; and so it is as well, perhaps, as it is wise to ignore me.

I am Sir, your obedient servant,

Cedars Club, West Kensington, W., Oct. 12th, 1886. WM. CURRAN.

E.—As our correspondent puts the case he is quite in the right. An employer may justly claim to be satisfied as to the nature of the illness of one of his *employés*, and it is not unreasonable that he should wish to have the opinion of his own adviser; but a medical man requested to visit the patient of another medical man should communicate with the practitioner in attendance, and only see him in consultation or with the full assent of the gentleman in charge. That Dr. R—— should have declined a direct reply surprises us.

Edina's communication arrived too late for consideration this week.

"HEREDITY IN LOWER ANIMALS."

To the Editor of THE LANCET.

SIR,—As I was abroad when my letter on the above subject appeared and did not return for some weeks subsequently, I do not know whether Mr. Weddell's interesting communication on the same subject is the only one that has followed mine. I had a kind note from Dr. Brown-Séquard enclosing a paper of his, and commending the publication of such facts bearing upon the very important question of heredity. All this encourages me to send you a story vouched for by a patient of mine, of a cat which had been taught to beg sitting up. Her kittens did not beg, but her kittens' kittens did so quite naturally, sitting up like the mother.

I am, Sir, your obediently,

Nov. 1st, 1886. GEORGE A. HAWKINS-AMBLER.

"TREATMENT OF OZÆNA."

To the Editor of THE LANCET.

SIR,—If "Subscriber" will try a solution of chloride of zinc, two grains to the ounce, and cause it to be injected warm with a glass syringe four or five times daily, I think much success will be obtained in this troublesome complaint.—I am, Sir, yours faithfully,

Brighton, Nov. 1st, 1886. C. H. WELCH, F.R.C.S.

THE BRITISH MEDICAL ASSOCIATION AND THE ELECTION.

A South Walian resents what he calls the dictatorial manner in which some of the gentlemen connected with the British Medical Association offer their advice in favour of distinguished officials of that body as candidates for the direct representation of the profession in the Medical Council. In support of his complaint he sends two notes. One of his kind advisers does not mention anything about a third candidate. Of the other he says: "With regard to a third representative, he is good enough to allow me to indulge in my own fancy. 'But,' he adds, 'do not fail to vote for Foster and Wheelhouse.'" We must not venture to criticise the tactics of the zealous members of the Association. Our correspondent is not bound to accept the dictation. We publish a list of candidates from which to choose. Besides, the obvious friendship of one of his advisers is shown by his closing remark: "As I am off to Egypt, I can only wish you a merry Christmas and a happy new year when they come!" Can anything be more calculated to make a man vote right than such sentiments as these?

Ignoramus.—Our correspondent's questions seem rather unpractical. The power to charge for certain professional services depends on the nature of the qualification. The M.D. is not a surgical qualification. Our correspondent is not bound, we presume, to have all his qualifications registered, and may have any he pleases erased. The sanitary certificates are registrable only on special conditions. The registration of the M.B. and of the C.M. should take place at the same time; they are not given separately.

Conservative.—The sale of surgery fittings and fixtures, drugs, and bottles in conjunction with the transfer of a medical practice would, we believe, comprise and include dispensing counters, shelves, drawers, drugs, bottles, window blinds, and gas fittings, oil cloth or carpet, but not chairs, tables, &c.

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JOSEPH LOANE,

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SIR,—Soon after the death of the late Dr. Moxon an announcement of an intention to promote a suitable memorial appeared in the journals. As yet no public effort appears to have been made to carry this intention into effect. There must be many who, like myself, are anxious to subscribe their guinea to record their appreciation of the striking individuality and talent of the deceased physician, whose scrupulous, unselfish professional bearing, and generous, ever-ready sympathy must have endeared him to hundreds of his fellow practitioners. May I inquire through the medium of your columns whether any steps are being taken in the matter?

I am, Sir, yours faithfully,

Southport, Nov. 2nd, 1886. ROBERT HARRIS.

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USE OF COCAINE IN MIDWIFERY PRACTICE.

To the Editor of THE LANCET.

SIR,—In your issue of Oct. 16th Mr. G. Pearce Baldwin writes to ask "the strength of the cocaine solution" used by me in obstetric practice. If he will turn again to the number of THE LANCET dated June 12th, he will see that I have stated that the compound I have found so useful is one containing cocaine six, vaseline seventy-four, and glycerine twenty parts. The statement "vaseline twenty-four" is a misprint, corrected in a subsequent number. I have lately been using a stronger preparation, and hope before long to publish notes of twenty cases of ordinary labour in which cocaine was applied. I regret having been prevented making an earlier reply to Mr. Baldwin's query.

I am, Sir, yours faithfully,

Chiswick, W., Nov. 3rd, 1886. BERNARD F. HARTZHORNE.

THE New York correspondent of the *Journal of the American Medical Association* writes:—"It has been reported that some of the physicians in the lower part of the city have of late been induced, either from a sense of pity, for a money consideration, or the sake of currying favour, to make out false certificates of death in the case of individuals dying of phthisis who were insured in cheap life insurance companies, which reserve the right to pay only half the amount of the policy to the beneficiary in the event of the person insured dying of consumption. It is to be hoped, for the honour of the profession, that the number of such medical men is exceedingly small; though that the thing actually occurs sometimes seems evident from the fact that a reputable physician, who reported to the Bureau of Vital Statistics the fact that he was asked by an undertaker to make out such a false death-certificate, is said to have remarked to a reporter who called to see him in reference to the circumstance: 'I can't afford to talk about this matter unless the newspapers are willing to pay me to move out of this neighbourhood.'"

Mr. John Jones (Brynddu).—1. The penalty is attached to the offence of falsely pretending to be, or take or use any name or title implying legal qualification.—2. The Apothecaries' Society has the power of prosecuting in the case mentioned.

FETID URINE.

To the Editor of THE LANCET.

SIR,—While salicylic and benzoic acids are both well-known remedial agents in anmonuria (*vide* Medical Digest, Appendix, 1028: 5 and 1067: 5), still nothing surpasses boracic acid, given in frequent ten-grain doses. Since Perez recommended this drug in THE LANCET (July, 1884, p. 133) I have very frequently used it, and have never been disappointed.

I am, Sir, yours truly,

Boundary-road, N.W., Nov. 1st, 1886. RICHARD NEALE, M.D. Lond.

Dr. Kucher (New York) will find a notice of his book in our issue of the 23rd ult.

An Old-standing L.K.Q.C.P.I.—The question is not one to be settled by the Medical Council.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Prosser James, London; Dr. B. W. Richardson, London; Mr. H. Power, London; Dr. Fothergill, London; Mr. Startin, London; Mr. John Holm, London; Dr. Donkin, London; Dr. Bantock, London; Dr. Marshall, Nottingham; Prof. Clay, Birmingham; Mr. Spurgin, Maryport; Mr. J. W. Joy, Paignton; Dr. H. W. Jones, Ilford; Mr. S. Oliver, Pontesbury; Dr. Rogers, London; Mr. Welch, Brighton; Mr. A. H. Butcher, Birkenhead; Mr. Mackenzie, Farnworth; Dr. Macgregor Aberdeen; Mr. Hawkins-Ambler, Kirkburton; Messrs. Hildesheimer and Faulkner, London; Dr. A. Blomfield, Exeter; Dr. G. B. Beale, Tottenham; Mr. Kinsey, Bedford; Mr. Ager; Mr. F. P. Maynard, Newcastle-on-Tyne; Dr. Lycett, Wolverhampton; Mr. T. M. Burney, Dundee; Mr. F. M. Middleton, Yorkstown; Surgeon-General Maclean, Southampton; Mr. Laffan, Cashel; Dr. Newman, Stamford; Mr. J. Loane, London; Mr. J. P. Doyle, Dublin; Mr. J. W. Mason, Kingston-on-Thames; Prof. McKendrick, Glasgow; Dr. Lowndes, Liverpool; Mr. H. J. Collins, London; Mr. Haslam, Birmingham; Dr. Edwin Morris, Spalding; Dr. W. W. Jones; Mr. Keay, Bolton; Mr. Clement Lucas, London; Mr. A. H. Boys, St. Albans; Mr. H. F. Marshall, Birmingham; Dr. B. O'Connor, London; Mr. C. E. Cassall, London; Dr. N. E. Davies, Sherborne; Mr. J. H. Wood, Boston; Mr. Francis Davey, Barkway; Surgeon-Major Alcock, Ballybrack; Messrs. Lee and Martin, Birmingham; Mr. W. W. Myers, Takow; Messrs. Smith and Son, Manchester; Mr. Sawyer, Birmingham; Messrs. Mackay and Sons; Dr. Rayner, Hanwell; Mr. Shepherd, Bristol; Dr. Scott, Manchester; Dr. Beaman, London; Mr. Sell, London; Dr. Leeson, West Brighton; Mr. R. Harris, Southport; Mr. H. Buck; Mrs. Hall, Amersham; Mr. Love, Dewsbury; Mr. Bury, Wrexham; Dr. T. W. Hime, Bradford; Mr. S. Snell, Sheffield; Dr. Shea, Reading; Dr. J. Hamilton, Glasgow; Mr. R. Rentoul, London; Mr. Armstrong, Newcastle-on-Tyne; Dr. H. Williams, London; Mr. L. Humphry, Cambridge; Mr. Hallowes, Newark; Dr. Heron, London; Dr. Giles, Wem; Mr. Dessurne, London; Dr. R. Neale, Hampstead; Mr. A. Drysdale, Cannes; Dr. Dowding, Bournemouth; Messrs. Hall and English, Birmingham; Dr. Foster; Dr. Rayner, Malvern; Dr. J. R. Lee, London; Mr. Priestley, Folkestone; Dr. Cullingworth, Manchester; Mr. Cotterell, Bicester; Mr. Marriott, Hastings; Mr. Wharton Jones, Ventnor; Mr. A. Donald, Manchester; Messrs. Macfarlan and Co., Manchester; Mr. J. M. Cotterill, Edinburgh; Dr. G. Bantock, London; Mr. Hartzhorne, Chiswick; Mr. Windus, Ipswich; Mr. J. Jones, Brynddu; Mr. Blandford, Stockton-on-Tees; Dr. P. James, London; Mr. Birchall, Liverpool; Mr. Hunt, Hull; Mr. Hume, Edinburgh; Dr. Bauning; Dr. Richardson; Dr. Beattie, Edinburgh; Messrs. Gilson & Co.; Yorkshireman; E. W. F.; A Victim; Juvenis; Practitioner; Medicus, St. Ives; Sauve qui Peut; A South Walian; Matron, Canterbury.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Woakes, London; Mr. Kilburn, Ventnor; Mr. Mills, Glasgow; Messrs. Rock and Co., Hastings; Mrs. Starling, Portsmouth; Messrs. Sanger and Banker, Edinburgh; Mr. Macdonald, Dumfries; Mr. Williams, Liverpool; Mr. Long, Sherborne; Mr. Taylor, Buxton; Mr. Brockelbank, Islington; Mr. Johnstone, Coombe; Mr. Sell, London; Mr. Heywood, Manchester; Mr. Brown, Westgate-on-Sea; Messrs. Goddard and Massey, Notts; Mrs. Learmonth, London; Mr. Bland, Colchester; Dr. McKenzie, Manora; Mrs. Starling, Portsmouth; Messrs. Kilner Bros., London; Mr. Meadows, Ipswich; Mr. Allsop; Messrs. Armfield and Son, London; Dr. Juler, London; Mr. Jones, Otley; Mr. Britton, Harrogate; Mr. Bennett, Marsden; Mrs. Gray, Banff; Mr. Needham, Barnwood; Mr. Allot, Heckmondwike; Mr. Darke, London; Mr. Jones, Gravesend; Mr. Morgan, Peckham; Dr. Bower, Bedford; Mr. Stride, Brighton; Messrs. Layton, London; Dr. Fraser; Mr. Pattison, Widnes; Dr. Buchanan, Glasgow; G. A. J.; W., Burgess-hill; Alpha, London; X. M., Notting-hill; J. M. M., Aveley; Robertus, Sheffield; M.D., Birmingham; X. Y. Z.; Medicus, Sunderland; W.; Matron, Bedford Infirmary; L. M. N.; Delta; Nurse, Croydon; T., Oldham; M.B., Notting-hill; Medicus, Boro'; M. H. M.

Tyneside Echo, Windsor and Eton Gazette, Architect, North British Daily Mail, Daily Ipswich Journal, West Cumberland Times, &c., have been received.

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Lectures
ON
DISEASES OF THE LACRYMAL APPARATUS.

Delivered at the Royal College of Surgeons.

BY HENRY POWER, F.R.C.S.

LECTURE III.—PART II.

ACCOUNTS of the post-mortem appearances presented by cases of lacrymal obstruction followed by lacrymal abscess and lacrymal fistula are singularly rare. I have never had an opportunity of making one myself, and I here reproduce a description of one made upwards of a hundred years ago by that excellent surgeon, Jean Janin, and recorded in his "Mémoire sur les Voies lacrymales" (p. 114, 1772):—Janin was requested in August, 1767, to see a woman, aged fifty-seven, in the Hôtel Dieu of Lyons, who had suffered for some years from a lacrymal fistula of the right eye. The tumour of the sac was considerable, and the amount of matter which regurgitated through the puncta was so large that the eyelids, which were healthy, were covered with it. A few days afterwards the patient died from pleurisy. Advantage was taken of the opportunity to investigate the cause of the obstruction. M. Duffieu sawed through the head and carried the half to his rooms. Janin dissected with him the great angle of the eye with the object of displaying the canaliculi, which they had taken the precaution to tie with a silk thread near the puncta; the tumour of the lacrymal sac; and lastly, the bony nasal duct. Janin removed the anterior wall of the groove in the maxillary bone. As soon as the lacrymal passages were visible, it was observed that the upper part of the tumour rose more than a line and a quarter above the superior part of the groove in the os unguis; that the part of the nasal duct at which the tumour ended was constricted; that the rest of the canal was atrophied or withered as far as its orifice; and that the diameters of the canaliculi and that of the common duct were larger than natural. "We now," Janin says, "detached the lacrymal sac and the nasal duct from the os unguis. They were united by a multitude of bloodvessels and lymphatics; the os unguis was perfectly healthy. The lacrymal sac having been cut transversely about three lines from the point of constriction, a yellowish fluid exuded. The tunics of the sac were thinner than natural. After having washed the summit of the sac, we noticed that the internal walls had coalesced without any trace of ulceration, and that the openings of the pores were larger than natural. The section of the lower part being inverted, we found that the circumference of the constriction was plaited like the wristband of a shirt. A probe-pointed sound having been passed into the orifice of the nasal duct, I conducted it as far as the constriction without meeting any obstacle. The thickness of the constriction appeared to be about the third of a line. The canal being laid open as far as the sphincter or constricted part, it was noticed that the same folds or plaits were visible in the lower as in the upper segment. The resistance offered by the sphincter to the passage of a sound induced us to open it laterally lest it should be destroyed, and lest the folds that we had observed should be destroyed by compression. By this means it was shown that the walls at the seat of the stricture presented a rigidity and density which they did not elsewhere present. The canaliculi, being opened, presented nothing remarkable." He then describes the effects of boiling them in water for three hours. He also found some small tubercles in the upper part of the lacrymal sac, which he considered to be enlarged glands, and then advances a theory that the acrid secretion from these glands irritates the sphincter in the nasal duct and causes a mucocele, and finally irritates the sphincter at the puncta lacrymalia, after which an abscess-like swelling, though it does not contain real pus, which discharges itself by the cheek, and so on, into details in regard to which we need not follow him.

Auzias-Turenne[1] had the opportunity of dissecting the two lacrymal sacs of a woman who suffered from double dacryocystitis, and the account is exceedingly instructive. On the left side there was a swelling, and the least pressure upon it made a thin fluid of a purulent character regurgitate. On opening the sac, it was found to contain much pus and mucus mingled together; the mucous membrane was inflamed and the inner surface was lined with muco-purulent secretion. The corresponding canaliculi were patent, but the inferior orifice of the duct was closed by the swollen mucous membrane, which formed a plug. On the right side there was no swelling, though on opening it proved to be as much distended as the left. The membrane presented the same lesions. Notwithstanding this, the nasal canal was free, and had not undergone any material alteration. On this side, however, the canaliculi were closed. From this Auzias-Turenne concludes that an inflammation of the lacrymal passages was here the primary factor of the disease, and had led on the one hand to occlusion of the nasal duct, and on the other to closure of the canaliculi.

Malgaigne[2] records the case of a man, who died at the age of twenty-seven, who had suffered from double fistula from the age of twelve. Both osseous canals were so constricted that an ordinary stylet could not be introduced, but the mucous canals were not obliterated. Lenoir gives a precisely similar case. Dubois records the case of a man who must have suffered much from surgery, since he ran the gauntlet of the Parisian surgeons for thirty years, none of whom were able to perforate the constriction even when sharp stylets were used.

There is the widest possible difference of opinion in regard to the presence of disease of the bones in lacrymal abscess. Janin,[3] for example, states that in his experience it is so rare for the os ungnis to be carious without some external cause or injury, that he doubts if it ever becomes so. Amongst the many cases he treated—and his attention was particularly directed to this subject—he only met with one instance, and this was caused by a gunshot. Hence he thinks the plan adopted by the ancients of the application of the actual cautery as cruel as its indication is false, for it proceeds on the idea of the denudation and caries of the os unguis and adjoining bones. If it is ever successful, it is only owing to its stimulant action on the soft parts, the previously healthy bone being in all probability damaged by it. And so the subsequent use of a trocar or trephine is required to perforate the os unguis, not so much to establish a new route for the tears, as to destroy the bone supposed to be affected with caries. Janin even thought that ulceration of the sac was very rare. Now, on the other hand, Hasner[4] and Fano,[5] recent writers, believe that tumour and fistula of the lacrymal sac are the direct consequences of ostitis, and the latter proposes that the treatment should be applied to the bone affection. In regard to the frequency with which carious bone occurs in these cases, I find that in 124 cases in St. Bartholomew's Hospital, 36 men and 88 women, there were 14 cases in which bare bone was felt. Nine of these occurred in men, though I am of opinion that now and again the contact of the probe or sound with bone was due to a false passage being made. In some of these cases, as might be expected, the slitting up of the canaliculus, and the passage of a probe or the retention of a style, proved of little service, and the patient left the hospital with epiphora; but in such a case as the following it is probable I felt the bone as the result of a perforation of the wall of the sac: "Woman, aged eighteen. Obstruction for two years. Canaliculus slit up. Returned with epiphora after three months. Canaliculus again slit up; duct opened with probe; bare bone along whole course. Great improvement took place whilst the patient remained in hospital. After leaving the hospital for a month, she returned to show herself; the lacrymal trouble was then found entirely cured." I think we may fairly say here that the dead bone—which must, if the note be correct, have been of considerable extent—had not become detached; and we can hardly suppose it to have been either absorbed, or, if present, to have ceased to be troublesome. Zehender,[6] a

[1] Bull. de la Soc. de Chir., p. 774, 1849. [2] Thèse, p. 36.
[3] Loc. cit., 1772, p. 119. [4] Annl. d'Oculist., 1850, t. xxvi., p. 108.
[5] Journ. d'Ophth., July, 1878; Archiv. Gén. de Méd., Oct. 1877; Gaz. Méd. de Paris, p. 31, 1878.
[6] Klin. Monatsbl. f. Augenheilk., 1869.

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very good authority, believes that fistula consequent upon caries is a somewhat rare disease.

The importance of determining the length, calibre, and direction of the nasal duct is so great, in view of the frequency with which the operation is performed of slitting up the canaliculus, and the introduction of probes, sometimes of large size, into the duct, that I thought it would be interesting to examine a considerable number of the skulls in the Museum of the College (see Tables), and I desire to express my obligation to Mr. Gustavus Hartridge, assistant-surgeon at the Royal Westminster Ophthalmic Hospital, for the very great trouble he took, and the time he devoted, to the examination with me. The plan we adopted was in the first place to determine the length of the complete bony canal formed by the os unguis lacrymal bone and the complete bony canal together. We further thought it might be useful to measure the width from the inner margin of one groove to the inner margin of the opposite groove. Careful measurements were then taken of the width of the bony canal; and, lastly, two thick straight probes of wax were introduced for some distance down the ducts and kept applied to the grooves above, and their inclination noted. We examined in this way about 500 skulls, including Europeans, Asiatics, Negroes, Australians, Chinese, and others.

I shall endeavour to place before you some of the results we have obtained, and at the outset let me remark that measurements of this kind can only be approximate. To take the very first set of measurements—those that give the distance from the floor of the orbit through the nasal bony

Direction of Ducts.

——	Parallel.	Subparallel, 100 mm. or more.	Convergence (in millimetres) above naso-frontal articulation.								
			10 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 to 90.	90 to 100.
Europeans	37	117	—	4	3	7	8	15	22	34	28
Negroes	33	46	—	—	1	1	3	6	4	5	12
Cingalese	4	6	1	—	—	—	2	3	5	—	1
Madras	4	7	—	—	1	1	5	3	2	3	1
Vancouver's Islanders	2	2	—	—	—	—	—	—	—	2	—
Peruvians	2	4	—	—	1	1	—	2	1	—	1
Chinese	2	11	—	—	—	—	1	3	1	2	1
Polynesians	3	9	—	—	1	—	2	—	1	—	—
Andaman Islanders ...	4	11	—	—	—	—	—	—	1	—	2

Diameters of Ducts.

——	Right nasal duct (antero-posterior diameter in millimetres).			Right nasal duct (lateral diameter in mm.).	
	Number of skulls.	Total measurements in millimetres.	Averages.	Total measurements in millimetres.	Averages.
Europeans	110	445·25	4·05	411·75	3·65
Negroes	90	479·75	5·33	422·75	4·69
Chinese	18	91·0	5·0	84·5	4·7
Madras	16	66·5	4·16	64·5	4·03
Cingalese	16	70·5	4·4	64·5	4·03
Vancouver's Islanders	14	74·0	5·3	58·25	4·16
Polynesians	13	59·75	4·6	52·25	4·02
Andaman Islanders	7	35·0	5·0	28·5	4·07
	284	1321·75	4·65	1187·0	4·18

——	Left nasal duct (antero-posterior diameter in millimetres)			Left nasal duct (lateral diameter in mm.).	
	Number of skulls.	Total measurements in millimetres.	Averages.	Total measurements in millimetres.	Averages.
Europeans	95	402·75	4·24	374·75	3·9
Negroes	91	490·25	5·38	429·25	4·71
Chinese	18	91·0	5·0	82·25	4·56
Madras	15	63·0	4·2	56·25	3·75
Cingalese	14	60·25	4·3	57·25	4·06
Vancouver's Islanders	12	63·25	5·27	55·5	4·6
Polynesians	14	67·75	4·82	58·75	4·19
Andaman Islanders	8	37·5	4·7	31·0	3·86
	267	1275·75	4·77	1145·0	4·27

and superior maxillary bone. This was done with a wax cylinder, which was introduced into the upper opening of the nasal duct, and pushed down till it touched the floor of the nose. A pin was stuck into it above at the level of the floor of the orbit. The length of the segment thus marked off gave the length of the complete bony canal and the space between its lower orifice and the floor of the nose. The cylinder was then drawn up till the lower extremity was only just visible through the nares, a point which was found on frequent examination to be immediately below the ridge for articulation with the inferior turbinal bone on the ascending or nasal process of the superior maxillary bone. This gave the length of the complete bony canal of the nasal duct. A third measurement was made, which gave the length of the groove in the canal to the floor of the nose,—nothing would apparently seem easier, but, in point of fact, in a large number of cases it cannot be exactly taken. It is, indeed, easy to fix the superior limit—namely, the level of the floor of the orbit; but when a probe, or, as we used, a portion of wax taper, is passed down the canal, it is sometimes found to slope far backwards, so that it does not touch the floor of the nose till the posterior margin of the hard palate is almost reached, whilst in other instances the outer wall of the nasal fossa is so curved that it is difficult to determine the level of the floor. In the same manner, it is not easy to give the length of the lacrymal groove, since it becomes gradually shallower above till it is altogether lost. Still, as all the measurements were taken by the same hands, tolerable uniformity may be considered to have been arrived at.

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First, then, in regard to the distance between the floor of the orbit and the floor of the nose, in millimetres, it was on the average:—

	mm.		mm.
In 292 Europeans	27·47	In 12 Peruvians	26·6
,, 114 Negroes	26·1	,, 22 Chinese	25·5
,, 23 Cingalese	26·47	,, 16 Polynesians	26·2
,, 27 Madras	22·22	,, 15 Andaman Islanders ...	22·4
,, 6 Vancouver's Islanders	26·0		

Secondly, in regard to the length of the complete bony canal formed by the os unguis and the superior maxillary bone, it was on the average:—

	mm.		mm.
In 287 Europeans	15·3	In 12 Peruvians	16·6
,, 114 Negroes	14·1	,, 22 Chinese	15·1
,, 23 Cingalese	15·0	,, 16 Polynesians	14·5
,, 27 Madras	13·7	,, 15 Andaman Islanders ...	13·0
,, 6 Vancouver's Islanders	15·0		

Next, in regard to the length of the groove and the complete bony canal, it was on the average:—

	mm.		mm.
In 286 Europeans	30·7	In 21 Chinese	30·7
,, 114 Negroes	29·0	,, 15 Polynesians	30·2
,, 23 Cingalese	30·2	,, 15 Andaman Islanders ...	27·4
,, 27 Madras	29·0	,, O'Beirne	43·0
,, 6 Vancouver's Islanders	31·0	,, Another giant	39·0
,, 12 Peruvians	32·32		

The average width between the vertical crests of the two lacrymal bones was:—

	mm.		mm.
In 290 Europeans	19·7	In 22 Chinese	19·2
,, 114 Negroes	21 0	,, 15 Andaman Islanders ...	19·8
,, 23 Cingalese	18·47	,, 17 Polynesians	17·3
,, 27 Madras	17·4	,, O'Beirne	28·0
,, 6 Vancouver's Islanders	19·0	,, Another giant	22·0
,, 12 Peruvians	18·5		

The transverse measurement varies within considerable limits—thus: skulls Nos. 3 and 329 are both 33 mm., whilst 81, 83, 129, and 137 are 17 mm., and 92 only 13 mm.

Address

ON THE

VALUE OF EXPLORATORY OPERATIONS IN THE PRACTICE OF SURGERY.

Delivered at the Inaugural Meeting of the Midland Medical Society, Birmingham, on Nov. 3rd, 1886,

BY THOMAS BRYANT, F.R.C.S.,

SENIOR SURGEON TO GUY'S HOSPITAL.

GENTLEMEN,—Your invitation to give the inaugural address of this the thirty-second session of the Midland Medical Society is an honour which I highly appreciate, and for which allow me at once to thank you warmly. In the execution of my task I trust I may be fortunate enough to bring before you some material for thought, sufficient either in quantity or quality to justify your choice, although in presence of the distinguished and critical audience I see before me I may well doubt my power of so doing. To excite your interest I have therefore selected a subject for my address which, if of no novelty in this assembly, is of importance both to the physician and surgeon, and which I believe will well repay an hour's consideration. My subject is the Value of Exploratory Operations in the Practice of Surgery.

As an occasional measure, an exploratory operation was not unknown to surgeons in the student days of my oldest hearer, but I am not sure that it was not almost entirely confined to such cases of strangulated hernia as had been pressed out of the hernial sac, out of sight, though not into the abdominal cavity; to such cases as were known as examples of reduction *en masse* or *en bloc*; to cases, indeed, then but little understood, but which have since been unravelled by the industry of my former colleague, Mr. John Birkett.[1] With the full knowledge and recognition of what is now known as displaced hernia, which Mr. Birkett's paper supplied, the value of the exploratory operation for diagnostic leading on to curative purposes became apparent, and it may be said with truth that the true importance of exploratory operative measures, as a principle of practice, then for the first time became so recognised as to be systematically adopted in our hospitals and taught in our schools. I must not forget, however, that an occasional exploratory operation was performed upon a diseased joint, when by the course of events its progress had been unsatisfactory and the question of its excision came to be entertained. In my *young* student days—now more years ago than I care to name—my late teacher, Charles Aston Key, performed several of these operations and resected shoulder- and elbow-joints after an exploratory incision, made with diagnostic intentions, had cleared up the nature of the case. The way in which he changed his line of action, and quietly decided, after inspection of the joint, on excision, amputation, or giving the joint a chance of a natural cure, is to me now, in my *advanced* student days, a very vivid and pleasant recollection. In recent periods exploratory operations have been more frequently undertaken, and they have been applied to a great variety of cases. This development of exploratory surgery is doubtless due to two main causes: firstly, to the increased confidence surgeons display in the primary treatment of wounds, which naturally springs from their full appreciation of the value of cleanliness in its highest and fullest sense, and from the use of antiseptics as aids to cleanliness; and, secondly, to the manner in which an exploratory operation can be conducted with a patient under the influence of an anæsthetic. In the pre-anæsthetic period exploratory operations were for the most part impracticable, as were most abdominal, prolonged, and delicate operations in which care and nicety of manipulation were essential to success. The surgeon's object was then to complete an operation, and to get rid of a local trouble as quickly as skill could carry out its object. Operations undertaken before spectators with watch in hand were not likely to be of an exploratory nature. In the present day, with anæsthetics at our command, all these things are changed. A surgeon with a patient anæsthetised can explore a part leisurely for diagnostic as well as for operative purposes. He can satisfy himself before he proceeds to complete his work that the disease for which he is about to operate is no other than the one diagnosed. Having decided that the measure contemplated is right, he can then proceed with his operation in all confidence. The operation itself he can also complete with every care and attention, since the necessity of speed in its execution has been practically eliminated; but he should at the same time remember—or, rather, not forget—that, as prolonged operations are detrimental to the patients, it is his duty to complete them as speedily as he can consistently with thoroughness; and that, moreover, as dilatoriness in execution is injurious to the art of surgery, he should not allow himself to lapse into slow and tedious ways, but accomplish with smartness and decision what he may have to do. I am convinced that these points have failed to secure sufficient attention, and that, as a consequence, many patients under the prolonged influence of the carbolic or other spray, and an indecisive manipulation, have suffered seriously. The art of operative surgery, besides, is likely from the same cause to degenerate into a fumbling process, which will neither redound to the credit of our profession nor the benefit of our patients. In saying this, however, I have no wish to see surgeons return to the hazardous, if brilliant, dash of the pre-anæsthetic period.

Exploratory operations are of value for *diagnostic* as well as *curative* purposes; and I take it, if we regard the operation from a clinical point of view, in order to justify the measure, these two purposes should as a rule be combined. To cut into any part of the human body merely with the view of learning something more than we previously knew of the nature of the disease we have to treat can hardly be considered a right proceeding, although if by that exploratory measure we have made one step forward in the treatment of the case, the nature of which prior to the exploratory incision was too obscure to justify operative action, the exploratory procedure must be pronounced justifiable. To cut into a tumour for diagnostic purposes which, whatever its nature, cannot be extirpated, would be a measure to be condemned; whilst to cut into a growth the nature of which can only be read with certainty after an incision has been made down to or into its substance, and which, if of a

[1] Vide paper published in 1859 in the Transactions of the Royal Medical and Chirurgical Society.

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cancerous kind, cannot be too early removed, is a scientific, conservative, and sound proceeding. Whether the swelling or tumour to be explored be in one of the extremities or in a superficial gland, as the breast, or whether it be situated in the lumbar region, beneath the abdominal muscles, or in the abdominal or pelvic cavities, does not affect the rightness or wrongness of the practice we are discussing, which must be pronounced wrong it it cannot lead to a sound treatment, but is right if it leads thither.

To illustrate this practice more fully let me apply it to regional surgery, and first of all to the breast and the treatment of its tumours. Let me ask the surgeons present how many breasts would each have saved and not removed, had an exploratory incision into the substance of the tumour been made for diagnostic purposes before the operation of excision had been proceeded with? By such a simple measure how many chronic abscesses of the breast would have been cured, and tumours composed of single serous cysts successfully treated, and the breasts saved? Could I canvass the surgeons present and confidentially from their private note-books obtain their statistics, I am convinced at least a score of these cases would be accumulated. I should head the list with one of cyst. By the adoption of an exploratory incision these cases would be saved. May fewer such errors occur to be recorded in the future! Again, let me ask how many lives would probably have been saved, with the mere sacrifice of a breast, if, in the first stage of lobular cancerous infiltration of the breast gland, the true nature of the disease had been clearly revealed by a well-timed exploratory incision, followed, on the diagnosis of the case being thus made manifest, by an excision of the affected organ? Might not surgeons fairly expect, by the general adoption of this exploratory incision into such breasts, better results as to a long immunity from disease, and probably a larger number of cures than can now be recorded, when valuable time is too often lost whilst the case is being watched to make the diagnosis sure, and at the same time the disease from having been purely local, is spreading by local if not by lymphatic or vascular infection? I have in dealing with breast tumours during the last few years acted on this principle, and have not regretted it. I have saved breasts the seat of cystic trouble which would otherwise have been excised, and in cases that have turned out to have been carcinoma I have been led to remove them early, when the epitheliomatous elements were confined to the breast structure itself, and the disease, clinically, could be pronounced to be local. Such treatment as this must surely lead up to better results than can now be recorded. By it it is to be hoped that with the lapse of time a cure of the local cancerous affection may become a reality, in the same way as surgeons now record cases of undoubted cure after the removal of a local epithelial disease from other structures, such as the lip and skin generally.

In disease of the testicle it is hardly necessary to point out the wisdom of a like practice. In such affections an exploratory incision, before excision is proceeded with, can never do harm. By the adoption of the practice, as a rule, testicles lost in hæmatoceles will be always saved and never removed, as occasionally now they are, under a wrong diagnosis. In the following interesting case I have reason to hope the same practice has been successful; time must, however, be the prover. The case as it stands is in my knowledge unique, and consequently claims record.

Encysted Hæmatocele of the Testis, the Cyst being situated beneath the Tunica Albuginea; incision; cure. (Dresser, Mr. A. J. Taylor; Ward-clerk, Mr. J. D. Cruickshank).—George C——, aged twenty-three, a labourer, living at Sandringham, Norfolk, was admitted into Guy's Hospital, under the care of Mr. Bryant, on May 21st, and discharged on June 20th, 1886. Six years previously, the patient noticed that the left testicle was swelling. There was no pain in it. Five years ago the swelling was tapped, and about three ounces of clear fluid were drawn off. The scrotum was thereby reduced to its normal size, and did not again swell for about three or four years. During the last year the swelling had increased, and was tapped eleven days before admission, when only a small quantity of fluid escaped, and with it was mixed a little blood. There was scarcely any decrease in the size of the testicle after this tapping. The patient then came to Guy's Hospital. He had had no injury or gonorrhœa. On admission, he was a fairly well nourished man, rather pale; and said he felt quite well in himself. The left side of the scrotum was occupied by a swelling which measured three inches and a quarter from above downwards, and two inches and a half from side to side. The testicle on the other side measured two inches from above downwards, and one inch from side to side. The swelling was quite painless, and made up of three smaller swellings. The one below was firm, and felt like the body of the testicle, though the patient did not experience any special testicular sensation when pressure was made on this swelling. The second, above, felt tense and elastic. A third swelling, on the outside of the two others, felt hard and solid, and measured one inch from above downwards, and three-quarters of an inch from side to side. The skin of the scrotum was discoloured, being of a purplish-blue colour. The glands in both groins could be felt, but were not enlarged. The patient said the testicle was not painful or tender; it only inconvenienced him by causing a sensation of weight. The chest was resonant; the breath sounds and heart sounds were normal. Temperature 97·6° F.; pulse 68; respiration 22. The urine was clear; sp. gr. 1026; it contained no albumen or sugar, but a slight precipitate, which cleared up with nitric acid, and under the microscope was seen to be amorphous phosphate. On May 24th Mr. Bryant saw the patient and considered the case to be one for exploration. On the 28th, chloroform having been administered, the tumour was held in the left hand and the skin made tense over it. An incision, an inch and a quarter long, was made in the middle line of the tumour, and the structures were divided down to the tunica vaginalis, the cavity of which was found to be completely obliterated by adhesions. The tunica albuginea, being exposed, appeared to be tense and distended as if by fluid or growth. A puncture was made in the cyst wall beneath the tunica albuginea, and a small quantity of blood spurted out. The opening was enlarged to the size of the skin incision, all its fluid contents (measuring about an ounce and a half) were turned out, and the cavity was examined. It was found to be a cyst with a perfectly smooth lining, the wall being composed of thickened tissue. The testicle was felt to be normal, lying in a position somewhat behind and below the cavity. The cyst wall was covered by the tunica albuginea. The cavity was washed out with iodine water, and packed with strips of iodoform gauze so as to promote suppuration. There was no hæmorrhage beyond a little capillary oozing. The operation lasted a quarter of an hour. The cyst appeared to occupy the position of the corpus Morgagni, and it was thought that there had been a hydrocele developed in connexion with this body which had been converted into a hæmatocele by the previous tappings. Microscopically, nothing but blood-cells could be seen in the fluid which was in the cyst. The patient was sick after the chloroform.—May 31st: The external dressings had been changed each morning, but the plug was not removed from the cavity until this morning. Nor could this be done until chloroform was given, as the edges of the cavity had nearly closed. When a finger was afterwards introduced into the cyst cavity, it was found to be lined with healthy granulations. The wound looked healthy, and the discharge from it was slight and consisted of blood-stained serum, there being no pus. Oiled dressing was passed into the wound. From this date until June 11th the patient progressed favourably. The wound was dressed daily with iodoform gauze, and a small drainage-tube was kept in position. There was no pain in the wound except when it was dressed. The edges of the wound became covered with healthy pink granulations. On June 6th the drainage-tube was left out. On the 11th the wound measured two inches from above downwards, by one inch across. The patient complained of pain whilst passing urine; but there was no urethritis. On the 12th the tonsils were enlarged and red, and the patient began to be feverish; but the scrotal wound remained healthy. On the 13th the evening temperature was as high as 103·2°. On the 14th the evening temperature had fallen to 99·2°, and the throat felt easier, though it did not look any better. On the 16th the patient had diarrhœa, and much difficulty in talking or swallowing. On the 17th, as both tonsils were greatly enlarged, red, and tense, Mr. Bryant made a small incision into each, but no pus came away. The patient had had no shivering, and his temperature in the morning before the operation was 99° F.; the diarrhœa still continued. On the 18th, the left tonsil was smaller, but the patient did not feel that he was relieved by the previous day's operation. Gargles and poultices to the throat had been used for a week past; now it was ordered that the throat be painted with glycerine and tannic acid. On the 19th, the house-surgeon

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removed both tonsils with the guillotine; no suppuration was found in either tonsil. On the 21st, the wound, which was still dressed every other day, measured an inch and a half by half an inch, and was quite superficial. The granulations, being prominent, were touched with nitrate of silver. The throat was much better, and the patient could talk and swallow with ease. He, however, could not sleep; consequently an injection of morphia (a quarter of a grain) was given hypodermically at night. On the 26th the patient went home. The scrotal wound was a superficial granulating surface, which measured one inch by a quarter of an inch. The testicle could be moved about quite freely and without pain; it was not at all adherent to the granulating surface. As measured between the fingers, both testicles appeared of the same size. The throat was still swollen, but not painful. When seen some months later he was well.

In diseases of joints it would be well if the operation of excision were, as a rule of practice, preceded by an exploratory incision. The clear knowledge of the true condition of the affected joint gained by the proceeding would doubtless induce the surgeon in many cases to adopt a less heroic treatment than excision, and trust more to the reparative power of nature, after a free vent to disorganised tissues had been afforded by the incision, or, possibly, necrosed bone had been taken away. I could exemplify this practice fully by cases had I time; but my object to-day is to illustrate a principle. The exploratory measure would likewise prevent the possibility of comparatively healthy joints being resected under an erroneous diagnosis.

In abdominal, renal, vesical, and pelvic surgery, the value of exploratory operations for diagnostic leading up to curative purposes is, however, the best shown; and it is here that the greatest care is requisite, in order that a measure which is so good when rightly regulated should not be abused or misused. Let me put a case. A surgeon is called to see a patient with every symptom of acute strangulation of the intestine. He searches diligently for some external hernia, and fails to find one. What is he to do? Is he, before adopting any decided line of treatment, to stand by and watch the progress of the case with the hope, on the Micawber principle, of something turning up, either to relieve the patient (a very remote possibility), or to indicate the exact cause of strangulation? Or should he, for diagnostic purposes, at once perform an exploratory abdominal incision, the incision itself in all probability enabling him to discover the cause of the symptoms or strangulation; divide a band, if present; relieve an internal hernia; possibly undo a volvulus; or press out an intussusception? I have no hesitation in stating that his line of duty lies in the way of action, and not of inaction, since success is probable under the active practice advocated, and most improbable, if not impossible, under the expectant inaction. Where the symptoms are associated with an external hernia, displaced by manipulation or otherwise, every sound surgeon would sanction immediate exploration; why should the same line of action be wrong under circumstances which are so slightly dissimilar? To stand still for a correct diognosis to be made as to the exact cause of strangulation is, as a rule, to wait for a post-mortem examination. It should be enough, with a certain combination of symptoms present, for the surgeon to know that strangulation exists, and, for this, action is called for. With such a diagnosis, when the cause is *certain*, as an external hernia, the line of treatment is definite; it is in every text-book. When the diagnosis as to the exact cause of strangulation is *uncertain*, although problematical, the diagnosis should be made more certain, or cleared up by an exploratory operation, more particularly where the exploratory incision will in all probability be the direct means of hopeful surgical treatment. In a case of acute intestinal strangulation or of obstruction, as it is too commonly wrongly called, to be asked to wait to see the effect of medicines, with the hope that kind nature will find some means of relief, is, to the surgeon who mentally sees a probable strangulation from a band, twist, or internal hernia, a wicked weakness: seeing that by medical treatment one case recovers, and, it may be added, to the astonishment of all; whilst eleven die, to the astonishment of none. Is it right, may I ask, that eleven cases should be allowed to drift, when the chances against success from purely medical and expectant treatment are so small? Ought not cases of intestinal strangulation and obstruction to be regarded more from the surgical point of view than the medical? And should not the question of mechanical relief be the point for *primary*, and that of medical relief for *secondary* consideration? Ought not the question of exploratory operation for diagnostic purposes to stand in the very foreground of every such case? I maintain that this question of operation should be the very first to be considered in every case of what has been called acute obstruction, but which, I hold, should be regarded as one of acute strangulation. If this question be answered affirmatively, let action promptly follow decision. If negatively, let medicine and expectancy have fair play. But, under all circumstances, let the diagnosis and line of treatment based upon it correspond.

Again, should an acute peritonitis be present, and its cause be obscure—should some deep-seated abdominal or pelvic suppuration exist, and its true position be only guessed at, is it a wiser and safer practice to treat the patient on the expectant principle, and let the trouble take its course, which, as a rule, lies in a downward direction, or is it more resonable, hopeful, and surgical to learn through an exploratory abdominal incision something more of the case's origin, and thus treat it? If the cause be some cæcal perforation (the most probable) the exploratory operation will not only give diagnostic information, but be the direct means of giving relief. If it be suppuration connected with a pelvic organ, the same result will be obtained; and if the cause of inflammation and suppuration be obscure, by the exploratory incision a vent to the inflammatory or purulent fluids will be afforded, and thus a better chance than existed before be given to the patient. For suppuration in the peritoneal cavity, ovary, or Fallopian tube should be dealt with as elsewhere by evacuation, irrigation, and drainage. By this line of treatment I am convinced a better result will in the future be recorded than the present method can show.

Acting upon this principle, I, in 1867, opened the abdomen of a gentleman aged fifty-one, and divided a band, and the patient was alive eighteen years subsequently.[2] In 1884 I opened the abdomen of a young man, aged twenty-two, who had had symptoms of strangulated bowel for six days. I found a band at once near the prominence of the sacrum, and divided it without the slightest trouble. All active symptoms at once ceased, and the bowels acted freely. He died, however, on the sixth day from perforation; the operation had been too long deferred. I have performed the same operation on three other occasions at least, but with no life-saving success. The band was readily found in all, and divided, but the patients were too depressed to rally. These results are not to discourage us. If life was not saved in all the cases it was because the bowel was too damaged before operative relief was given, and success under these circumstances is no more to be expected than it can be in cases of external hernia which have been allowed to drift. The lesson to be learnt from these failures is the necessity of promptitude.

I must here, however, give you two cases, which have never been recorded, in which life was saved by an exploratory operation under most unpromising circumstances. In both cases deep-seated abdominal suppuration existed. In one the course of events clearly showed it was connected with the cæcum or its appendix. In the other case I can only say the suppuration existed behind the mesentery, but its cause has never been made clear. Both cases well illustrate the value of an exploratory operation.

The first case alluded to I saw on October 17th, 1885, with Dr. Hubbard, of Elgin-road, Notting-hill. The patient was a healthy girl, aged twelve, the eldest of a family of five. In November, 1884—that is, eleven months before I was consulted,—the child was suddenly taken ill with high fever (temperature 102°F.), a furred tongue, and intense pain in the right iliac fossa. She was treated by Dr. Hubbard, and recovered sufficiently to get up and run about; but similar attacks recurred at uncertain intervals during the next nine months. Early in October, 1885, another attack occurred, associated with pain and tenderness more in the right lumbar than the iliac region. Some swelling was likewise visible. When I saw her on Oct. 17th the child was very ill, with feverish symptoms. The right thigh was somewhat flexed upon the pelvis, and extension caused pain. The abdomen was hard from muscular rigidity, and anything like pressure over the right iliac or lumbar regions caused pain. There was clearly some fulness in these parts. I felt sure some deep-seated suppuration existed. Under

[2] Trans. Med. and Chir. Soc., vol. l., 1867.

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these circumstances, I next day gave some anæsthetic, and cut down through the abdominal muscles above and behind the crest of the right ilium, and evacuated two or three ounces of fetid pus; with the pus passed a puff of wind. The pus flowed from above the wound as well as from below, and, as I believed the abscess to have some connexion with the cæcum, I enlarged the opening downwards in front of the anterior superior iliac spine, washed out the cavity well with iodine water until it returned as clear as it entered, and put in a drainage-tube. After this the acute symptoms subsided and fever disappeared, but the abscess did not heal. For two months it continued to discharge a little, although the abscess cavity was well irrigated. On two occasions the tube was taken out, but, retained secretion giving trouble, it was reintroduced. About the end of the second month I saw the child again, and when probing the wound I thought I felt a hard body. This suspicion was proved to have been correct, for on Jan. 26th, 1886, a hardened orange pip passed from the sinus [specimen handed round], and in three weeks the child was convalescent. She is now perfectly well. Whether this pip had become impacted in and subsequently ulcerated through the cæcal appendix, or whether it had passed more directly through an ulcer in the cæcum, may be an open point; but the case is given here as a good example of the value of an exploratory incision through the abdominal walls, and possibly into the peritoneal cavity.

The second case was one of peritonitis following retro-peritoneal suppuration in a child about five years of age. The true cause of the abscess was obscure; it may have been due to accident. It evidently had no connexion with any intestinal or abdominal viscus. The case could not have recovered if it had been left alone. The exploratory operation alone saved life. I give the report somewhat condensed from the notes of Mr. Samuel Mills, who called in my assistance, and ably and skilfully conducted the case after the operation to its final successful ending.

Archibald P——, aged four years and eleven months, a fair boy of delicate appearance, was the patient. Mr. Mills was called to him on July 15th, 1885, and was told by the boy's mother that he had been screaming with pain in his abdomen during the night. He had on the previous day had shivering and some vomiting of water and mucus, due, as the mother considered, to his having eaten some ripe gooseberries the same morning. He had fallen down a staircase, a distance of eight or ten feet, a few days previously to the illness. He complained of having hurt his back and stomach after he fell, but he seemed all right next day. He was in great pain, when seen by Mr. Mills, across the lower part of the abdomen and around the umbilicus, at which points he was also very tender, the slightest pressure increasing the pain. The recti muscles were rigid and contracted. There was slight general swelling of the abdomen, and, as far as could be made out, slight dulness below the umbilicus in the centre. There was tympanitic resonance at the epigastrium, and in both flanks. The bowels had been relieved twice during the night and morning, the result of a white powder administered the night before. The temperature was 103°, pulse 140. The cheeks were flushed; the pain was more or less continuous, but with occasional exacerbation, causing him to scream loudly. The tongue was thickly coated with grey fur. Mr. Mills ordered hot turpentine stupes to be applied to the abdomen, a mixture of acetate of ammonia, aconite, and four-drop doses of laudanum every three hours, with iced milk and soda-water to drink. His mother stated that he had been very ill whilst visiting at Ventnor ten weeks previously, in a similar manner, and had been under the care of Dr. Harvey, of that town. The illness had lasted upwards of three weeks, and the boy had subsequently been home seven weeks, but had not thoroughly recovered his looks and former strength. On July 16th the patient was no better; he had scarcely slept; the abdomen was slightly more swollen and tender. There had been no further action of the bowels or vomiting. Temperature 103·8°; pulse 145. Mr. Mills ordered the entire abdomen to be smeared with equal parts of extract of belladonna and glycerine. The dose of laudanum was increased to five drops every three hours. On the 17th the patient's state was about the same. The evening temperature was 104°, and the pulse 150. An enema of thin gruel with turpentine and castor oil came away, slightly tinged only with fæcal matter from the lower part of the rectum. On the 18th the patient seemed worse. A draught of morphia (one-third of a grain) given the previous night had produced no relief. The abdomen was more swollen, and was tympanitic except in the centre line below the umbilicus. The dulness extended down to the pubes and to each iliac region; but there was resonance in the flanks. As the boy had not passed much urine, a catheter was used, and two ounces of urine were drawn off. The rectum, examined digitally, was found to be quite empty; whilst nothing abnormal could be felt. There had been no action of the bowels, no rigors, and no vomiting; but the abdominal pain was much the same. On the 19th the boy passed another bad night; his abdomen was more swollen; and he looked pinched in the face. Mr. Mills advised a consultation with Mr. Bryant, as he thought the only chance for the boy lay in making an abdominal section, with the hope of releasing some purulent collection, probably in connexion with the cæcum. Mr. Bryant saw the boy, and decided to make a section on the right side of the abdomen. Mr. C. Coward administered chloroform. The urine, of which there were two ounces, was drawn off through a catheter. Mr. Bryant first made an incision about the right semilunar line, and opened the abdominal cavity. Distended and slightly injected intestine appeared at the wound, and from it some clear serum escaped. On the introduction of a finger through the wound towards the median line of the body, its passage was arrested by some central swelling which pressed forwards from the spine, and as it was thought this swelling could be better dealt with from the left side of the abdomen, it was decided to close the wound already made. The abdominal cavity was well sponged and the wound stitched, care being observed in suturing the peritoneum. The left side of the abdomen was then opened in the same way, and an abscess cavity that contained two or three ounces of thick pus, and which was situated behind the mesentery, was opened, evacuated, irrigated, and drained. A large drainage-tube was left in the otherwise closed wound. The peritoneum was thoroughly cleaned. The boy was under continuous chloroform anæsthesia for an hour and three-quarters. During the operations all instruments, sponges, and hands were immersed in a 2 per cent. solution of carbolic acid. Carbolic oil dressings, and carbolised gauze with absorbent cotton-wool paddings and flannel bandage, were applied. Three hours after the operation the patient had had a little vomiting, possibly due to the chloroform, and complained of pain in the abdomen. A third of a grain of morphia in two drachms of water was given by the mouth and retained. Five hours later he had slept, and was more comfortable. On July 20th it was noted that he had passed a better night than any previously since the beginning of his illness. The bowels acted twice spontaneously; on the second occasion the motion was rather relaxed, but contained neither blood nor mucus. The bandage and dressings were soiled with rather offensive-smelling discharge. Dark greenish-yellow discharge was escaping through the drainage-tube, which was kept clean by the injection of a warm carbolised stream of water through it into the cavity of the abscess, by which the cavity was also thoroughly cleansed. Fresh dressings, similar to the former, were again applied. The boy took milk and beef-tea readily. His temperature was 102·2°; pulse 130. The morphia (one-third of a grain) was repeated. On the 21st the bowels had acted four times; the motions were loose, but otherwise natural. On the 22nd the wounds were dressed. All silk sutures had cut their way through the edges of the wound, which was widely gaping and suppurating. A regular granulating tract was established from the abscess by the left wound. The cavity of the abscess was syringed out, and the tube with the rest of the dressings was replaced. On the 23rd the note was that the bowels had acted three or four times daily; a bismuth and opium mixture was therefore given. On the 24th the boy had a good deal of pain in the abdomen; there was very little discharge from the tube, which did not reach to the bottom of the wound. Pressure on the right side of the abdomen brought to the surface some accumulated pus. The left wound was dressed night and morning. The note on Aug. 1st was to the effect that the boy had gone on very much the same during the past week. The right wound was granulating, the left one discharging freely. He had pain in the right loin, which was fuller in appearance than the left side. He complained also if pressed over the right loin. He was placed on his left hip and side for a few hours each day, so as to assist the escape of pus from the left wound and the tube. He took some solid food with about three ounces of brandy during twenty-four hours. The bowels

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continued relaxed in spite of the constant administration of bismuth and opium mixture. He was remarkably tolerant of opium. On the 8th the wound was granulating; the granulations looked pale and flabby. Thin watery pus escaped through the tube. He was extremely thin and emaciated, taking semi-solid food with beef-tea and brandy, and quinine (half a grain) every four hours. On the 15th the tube was removed. On the 22nd the patient was sitting up, partially dressed; the right wound was nearly healed, the left wound still discharging a little. He subsequently quite convalesced, and on Nov. 20th was said to be well. In August of this present year he still remained quite well.

I must not allow myself to enter into the question of making exploratory abdominal incisions when any suspicion exists of serious or suppurative troubles about the uterine appendages; and happily my so doing is not needed, since you have in one of your members an advocate of the practice of extreme power and of unquestionable success who would certainly go as far as, and probably further than, I can go in favour of exploratory measures in these classes of cases. Mr. Lawson Tait's experience, skill in operating, and success encourage him to do what men of less power and experience had better not attempt; and I would say to him, "Go on, and prosper." To a surgeon who can show "139 consecutive cases in two years of ovarian and parovarian cystomata removed without a death, and 113 exploratory abdominal section cases with only three deaths—these three, moreover, dying from the disease, and not the operation,"[3] I, as a general surgeon, can only bow in all modesty, and envy the specialist who can publish such figures. I may, however, say this: When a woman has an abdominal or pelvic disease which in all human probability, if left alone, will destroy her life, and there is a fair reason to suspect that that disease is curable by operative measures, I hold that an exploratory incision by which a definite diagnosis can be made is not only a justifiable but a called-for measure, more particularly when the exploratory incision can be employed as a step in the operation by which the woman may be cured. If by the exploratory incision a negative conclusion is obtained—the negative conclusion being, in fact, positive knowledge—and the curative operation cannot be completed, the patient has incurred a risk—possibly, some would say, a trivial risk—but no more. But, however great or trivial the risk may be, if it has been fully explained beforehand to the patient, or to her or his friends, and has been accepted, the surgeon's responsibility, whatever the results, is but slight. Let the surgeon see, however, in all these cases, that the patient is made acquainted with, and a party to, this proceeding. To submit an adult patient at any time to an operation without making him or her clearly understand the risks and effects, immediate and remote, of the operation is an error—I should say a very grave error. It is one that cannot be supported by argument. No one here would like to be so treated.

It is true that exploratory operations must at times be expected to fail, and abdominal operations in particular, since abdominal cases are always complex, and their diagnosis difficult and sometimes uncertain. This very difficulty, however, in a manner supports the argument in favour of exploratory measures, for by such, and such alone, can a sound diagnosis often be made. I may say most truly that, of the exploratory abdominal operations I have made, I have never regretted having made one. Where success has not followed the exploration, it has *not* been from the incision, but for want of its early application. A strangulated bowel from a band may be released "too late," as may a strangulated bowel in a hernia. It cannot be expected to recover under the one circumstance more than under the other. Experience tells us also that at times, when an abdomen has been opened under the hope that some band or internal hernia may be present, nothing but a peritonitis with its effusions has been found, and it must be added that in some cases after the exploratory operation convalescence followed. I have had the pleasure of seeing such a case as the subjoined in the hands of my colleagues, Dr. F. Taylor and Mr. C. Symonds, and I know of others.

Acute Peritonitis simulating Intestinal Obstruction; abdominal exploration; recovery.—John W——, aged twenty-three, on April 26th, 1886, in the early part of the day, felt pain in the abdomen, which increased and became very severe at 10 P.M. Vomiting ensued, which lasted through the night. During the next two days he vomited and had pain. On April 29th Dr. Fredk. Taylor saw him, when the vomit was green and abundant. The patient looked ill, with sunken face; and his abdomen was full and tympanitic, but without local tenderness, and without visible coils of intestine. The bowels had not acted since the onset of the illness, nor had any flatus passed per rectum. The case being of a very doubtful nature, it was decided on the 30th to explore the abdominal cavity. This was done by a median incision, and acute peritonitis affecting mainly the lower abdominal zone and the pelvic peritoneum was found. There was no distension of the bowel. Coils of small intestine occupied the pelvis. The region of the cæcum was healthy and the appendix was free. A urinous odour was detected once on a sponge used in the pelvis, but as there was no pus and no fluid it was decided to close the wound. The recovery was interrupted once by the formation of a deep swelling on the right side, probably peritoneal in origin. This subsided.

It transpired that this patient had suffered from stricture of the urethra and cystitis, had had threatenings of a prostatic abscess, and had once before had a somewhat similar though milder attack. In all probability the peritonitis was secondary to some prostatic or vesical trouble. How far the exploratory incision acted towards the recovery it is difficult to say, since it is of course known that cases of peritonitis, from whatever cause, occasionally recover under medical treatment. This fact, indeed, is a treacherous one, since it helps to foster a dilatory if hopeful line of practice, and prevents the medical mind seeking early surgical assistance. What a story a surgeon of any long experince could tell of the evils of procrastination. "Too late! too late!" in his hands would be a text for a series of instructive, though sad, lectures. What a story a physician of experience could tell of recoveries without the surgeon's aid, when such aid was contemplated; and from the latter the evils of too early interference might be inferred. In both conclusions much truth is embodied. I do not, however, hesitate to assert that much more harm has in abdominal intestinal surgery followed the expectant than the operative treatment; and that, if the latter has not been as successful as it ought to have been, it is because it has not had a fair chance. Too late interference has been the rule, promptitude the exception; and let us remember that in these cases the operative interference must in its object be exploratory.

(To be concluded.)

[3] Tait: Edin. Med. Journal, May, 1886.

ON THE TREATMENT OF SNEEZING, HAY FEVER, ASTHMA, ETC., BY THE GALVANO-CAUTERY.

BY F. DE HAVILLAND HALL, M.D.

ALL introducers of novel medical or surgical procedures are apt to run to extreme lengths and to arrogate to the plans they have brought forward claims to which they can have no pretension; hence the caution with which the statements of innovators must be received. It would be a great pity, however, if these extravagant assertions should prevent attention being paid to the kernel of truth contained in the husk of excessive laudation, and this seems especially needful in regard to the views propounded by Hack of Freiburg, who undertook to cure a large number of neurotic affections by the free use of the galvano-cautery to the mucous membrane covering the inferior turbinated bone; later on, he certainly modified his opinion somewhat, but he still claims too large a field for this plan of treatment. That there are certain neurotic affections the starting-point of which is the nasal mucous membrane cannot, I think, be denied, and in these cases cure can be most readily effected by treatment directed to the part primarily affected. Hack, by pointing out that the most ready method of influencing the nutrition of the mucous membrane of the nose is by the employment of the galvano-cautery, has enabled us to treat successfully and promptly many cases formerly very difficult to manage. As a type of the kind of case in which I would use the galvano-cautery to the nose the following may be taken as a good example.

Mrs. C——, aged twenty-seven, was sent to me last May by my friend Dr. Penny, and she gave the following account

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of herself. She said that she had been married eighteen months. In June, 1885, while pregnant, she commenced to suffer from violent fits of sneezing; these continued to occur very frequently until Oct. 25th, when she was delivered of a stillborn child, the limbs of which were said to be much contorted. On inquiry, I found that for the last three or four years she had suffered from hay fever, usually lasting about a month. When she applied to me in May, she stated that she was again pregnant, being rather more than three months advanced; that the fits of sneezing had recurred as severely as last year; and that her doctor had advised her that it was of the utmost importance, in view of what had occurred in her former pregnancy, that she should seek relief from her distressing ailment. Apart from the sneezing, her general health was excellent in every respect. I found the mucous membrane covering the inferior turbinated bone on the right side greatly hypertrophied; the same condition, though somewhat less marked, existed on the left side. After applying a solution of cocaine, I used the galvano-cautery (as described later on) to both nostrils. The patient did not complain of any pain from the procedure. She was directed to come again in a fortnight. As I was unfortunately prevented by illness from seeing her, Mr. Butlin kindly made the second application of the galvano-cautery. I next saw her on July 3rd. She informed me that the sneezing was not so bad as formerly; it was less frequent at night, and there were only about four attacks daily. On examining the nose, the mucous membrane was found to have contracted to such an extent that I did not think it necessary to make another application of the galvano-cautery. I recommended her to use a 2 per cent. solution of cocaine in the form of spray night and morning, and to have a bottle of carbolised smelling-salts to inhale whenever an attack of sneezing seemed imminent. The further history of the patient is best told in an extract from a letter I received from her husband on Aug. 17th: "I am very pleased to be able to report *very great* improvement; I cannot say that it has quite left her, but it is only very occasional now, and nothing like it used to be. The carbolised salts prevented many an attack of sneezing, and she is able to do without the spray, and I think it may now be said that she is cured of a most inconvenient and, in her case, dangerous complaint."

When I undertook the treatment of this case I was not very sanguine as to success. In the first place, I do not think that the condition of the nervous and vascular system which obtains in pregnancy is likely to influence favourably a procedure, the object of which is to remove the tendency towards certain reflex actions by diminishing or annihilating the irritability of the locality upon which the train of symptoms depends. Secondly, it was to my mind very uncertain to what extent the fœtus in utero was itself the predisposing cause of the attacks. In favour of this view was the fact that after delivery the attacks ceased, only to recommence when she became pregnant. Lastly, there was the history of several attacks of hay fever, and I was afraid that though she might get temporary relief, nevertheless during the summer months she would probably have a return of the complaint. The result, however, was better than I expected.

The introduction of cocaine has inaugurated a new era in the treatment of nasal diseases and of the various reflex symptoms dependent thereon. This has been brought about in two ways: firstly, and most important, the local anæsthetic effect of cocaine enables one to perform most operations within the nose without causing the patient pain worth speaking of, and without having recourse to general anæsthesia; and, secondly, by the power it has of causing contraction of the nasal mucous membrane, a much better view can be obtained of the posterior nares. The method of treatment I employ is the following. In the first place, it is necesary to make an examination of the nasal mucous membrane without the use of cocaine, otherwise, owing to the action of the drug to which I have just alluded, the hypertrophied parts might be overlooked. Having settled which areas are to be attacked, I spray out the nostril with a 10 per cent. solution of cocaine. Then I wait five minutes, and apply, by means of the brush, a 20 per cent. solution of the same drug to the part of the mucous membrane which is to be cauterised. Again waiting five minutes, I try if the sensibility of the mucous membrane is annihilated; if not, I wait a little longer, or, if necessary, make a second application with the brush. As soon as I have satisfied myself that the mucous membrane is insensible to pain, I make two or three deep furrows parallel to one another in the mucous membrane by means of one of Schech's delicate platinum-headed galvano-cautery instruments heated to a red heat by a galvanic battery. All that the patient will have to do after the operation is to pass a little cold cream or zinc ointment up the nose, which will relieve the smarting caused by the burning. In about a week or ten days, according to the depth of the furrows and the idiosyncrasy of the patient, the burns will have healed, and, if necessary, a further application may be made, though I prefer to wait two or three weeks to see how much contraction has taken place before repeating the process. If the cocaine has been properly applied, there is little or no pain at the time of the operation, and though occasionally the patients complain of the smarting which comes on the next day, some cooling application generally suffices to relieve this.

Notwithstanding that I have a firm belief in the efficacy of this operation—if so simple a procedure may be dignified by the name,—I do not usually employ it till I have tried other measures and failed. I remember one case in particular which I saw three years ago. In this patient there was hypertrophy of the mucous membrane of the nose, with the history of violent attacks of sneezing and running from the nose; after a time the sneezing ceased, and was replaced by attacks of asthma, coming on about 1 A.M. and lasting till 4. I had quite made up my mind to operate, but, as the patient was pregnant, I thought it advisable to wait until after her confinement, so I ordered her a mixture containing three grains of citrate of caffeine and ten grains of bromide of potassium. I did not see the patient again for some months, but on her next visit she told me that she had experienced great relief from the mixture, and that she had not had a bad attack of asthma since her last visit. I have seen her again within the last few months, but, as her condition has much improved, I do not think it will be necessary to have recourse to the galvano-cautery. In vol. i. of the Westminster Hospital Reports, I have recorded a case of excessive sneezing which had lasted for eleven months; in this patient, syringing out the nostrils with a lukewarm solution containing the glycerine of carbolic acid, borax, and the bicarbonate of soda, sufficed to effect a speedy cure. I have mentioned these two cases to show that it is not necessary in all attacks of violent and protracted sneezing, hay fever, asthma, &c., to employ the galvano-cautery, though in some cases the cautery is the most speedy and certain method of treatment.

Before ending this short account I would wish to direct attention to the carbolised smelling-salts, from which the patient on whose case this communication is based derived much benefit. I have ordered the salts very frequently, and they almost invariably give relief; and to persons prone to coryza I would strongly recommend them. Directly the usual indications of a cold in the head are experienced the salts should be inhaled, and recourse had to them every ten or fifteen minutes while the irritation about the nose lasts. In my own case I have aborted many a threatened attack of coryza by this means. As regards the use of cocaine spray for the relief of hay asthma, I do not think much good is to be expected from this drug; the constringing action which at first results from its use is followed by a dilatation of the vessels, and the fluxion which accompanies this sometimes sets free the reflex, which results in an attack of sneezing or asthma.

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ON THE

DIAGNOSIS OF UNILATERAL PYELITIS AND PYO-NEPHROSIS IN WOMEN.

BY ARTHUR LEWERS, M.D. LOND.,

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IN women when the urine contains pus, and when for various reasons we suspect that the pus comes, in part at least, from the urinary tract above the bladder, it becomes a matter of importance to determine if possible whether the pus comes from one side or both sides, the possibility of relief by nephrectomy being kept in mind. To decide this point catheterisation of the ureters has been proposed and carried out by various observers; the practical difficulties of this proceeding are, however, so great that it is unlikely to come

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into general use. On this point Skene says:[1] "Catheterisation of the ureters has been performed by Simon and Winckel, but as it is difficult, not without danger, and of little practical value, I shall not dwell upon it here." Again, Erichsen says:[2] "Catheterism of the ureter, even in the female, cannot be carried out with sufficient certainty to be of any use." The method to which I desire to call attention is, on the other hand, easy of execution, and in the case in which it was tried gave a perfectly satisfactory result. It is as follows: The urethra is dilated; then one piece of a Bryant's rectal speculum is passed along the urethra into the bladder, and so placed that, seen from the front, it occupies one lateral half of the urethra and bladder beyond. When in this position the speculum divides the bladder into two compartments; for example, supposing the speculum occupies the right lateral half of the urethra and bladder, then the orifice of the left ureter is in view. The surface is gently mopped with cotton-wool, and then the character of the urine escaping from the ureter is observed. As it collects in the hollow of the speculum, some of it may be taken up with a syringe and tested in the usual way. Having finished the examination of the left ureter, the speculum is now quickly turned round so as to lie in the left lateral half of the urethra, thus bringing the orifice of the right ureter into view. When this was done in the case about to be narrated, a little fountain of clear urine about a quarter of an inch high escaped from the right ureter, the exit of the urine from it having evidently been prevented by pressure of the speculum while the left ureter was being observed. Here also, if the obvious characters of the urine do not at once settle the point at issue, some may be collected and tested. The electric light is necessary for illumination, unless direct sunlight be available. In the following case observations made in the manner described showed that suppuration was taking place on one side only, as pus was seen steadily oozing from the left ureter and clear urine came from the right. Guided by the oozing of the pus from one particular point, a hollow probe was passed two inches along the left ureter, but I was not able to pass the probe along the right ureter. The evidence already obtained would not, however, have been rendered any more conclusive by catheterisation of the ureters. I think, then, that in women when the urine contains pus, and when, owing to other considerations—for instance, wasting, fever, failure to improve under local treatment, such as washing out the bladder with antiseptic lotions,—we have reason to believe that the presence of pus is not to be accounted for by cystitis alone, the method above described should be employed with a view to give the patient the benefit of surgical treatment if the affection prove to be unilateral. The following is an abstract of the case referred to:—

A. G——, aged eighteen, shop assistant, was admitted to the London Hospital on May 15th, 1886, complaining of inability to hold her urine. She first began to experience micturition trouble in November, 1885. She noticed then that she had to void urine more frequently than she had to do before, and had to get up at night to pass it. In January, 1886, she began to have some pain during micturition, which became more and more frequent, and at last the bladder was so irritable that for some time before she came to the hospital she had been quite unable to hold her urine. She had never passed blood with her urine. On one occasion, in April, 1886, the patient had a pain across the small of the back and in the stomach. The pain was severe and shooting; it came on suddenly and went away suddenly; it did not cause nausea or vomiting, nor did it pass down towards the legs.

On admission, the patient was anæmic, but fairly well nourished; the temperature normal. There was no tenderness in the abdomen, nor anything abnormal to be felt there. Vulva and skin adjacent to it red and sore-looking. Hymen perfect, but lax. On vaginal examination, pressure on the anterior vaginal wall caused pain, much more than the same pressure on the posterior vaginal wall. The uterus and its appendages were normal. The sound passed into bladder a distance of three inches or rather less, the measurement being taken from the external orifice of the urethra. The passage of the sound caused pain. About a drachm of urine was obtained by passing a catheter; reaction amphoteric; it contained pus in abundance, and some shreds or flakes; no casts; only pus-cells and bladder epithelium were seen under the microscope. The other organs were healthy.

The case was thought to be one of cystitis only for some time, and the bladder was washed out daily with liquor carbonis detergens (one drachm to a pint) and afterwards with boracic acid lotion, without however, any improvement taking place.—May 31st: The temperature had hitherto been normal; but from this date onwards the patient suffered from attacks of high fever running an irregular course; the temperature on several occasions being as high as 104°.—July 8th: Examined under ether to-day. No tumour to be felt in the region of either kidney.—Aug. 21st: The patient has lost 13 lb. in weight since June 14th.—31st: There have been general pains during the attacks of fever, but no pain specially referred to the region of the kidneys. For the last three weeks increased resistance has been felt in the region of the left kidney; palpation causing some pain, and exciting the abdominal muscles to contract. When the patient lay on her face, dulness over the left kidney in the back was found to reach two fingers' breadth lower than over the right kidney. Under ether a lump was easily felt in the situation of the left kidney. The observations on the character of the urine flowing from the right and left ureters respectively were then made, as described at the beginning of this paper. My colleague, Mr. Treves, saw the case with me, and it was agreed that it was probably one of scrofulous degeneration of the left kidney, and that the right kidney was healthy, as evidenced by the urine flowing from its ureter. Although the patient's condition was most unfavourable, yet, as the rapid loss of weight and other grave symptoms made it certain that the case must end fatally in a short time if left alone, we felt it right to suggest operative interference to the patient and her friends, at the same time putting the risk fairly before them. Consent having been readily given, Mr. Treves accordingly operated. The patient did very well after the operation and the temperature was persistently lower than it had been previously, though still febrile. The urine contained (three weeks after the operation) a small quantity of pus, due no doubt to the cystitis which still remained. The amount of pus in the urine was trifling, however, when compared to the large quantity passed before removal of the kidney.

Whatever the ultimate result may be in this particular case, there is no doubt that a diagnosis sufficiently probable to justify an exploratory operation could have been made by the method described months earlier when no tumour was to be felt in the abdomen, and before the patient's strength had been so much reduced as to render her a very unfavourable subject for operative interference at all.

Note on the Operation by Mr. Treves.—"The kidney was approached by the ordinary lumbar incision. It was embedded in an extensive mass of tough adhesions. It was subsequently found that this perinephritic inflammation was the main constituent of the 'renal' tumour, since the gland itself was but little enlarged. The adhesions were broken down with difficulty. It was found impossible to separate the kidney from its capsule or from the supra-renal body. The latter structure, with the entire kidney, were therefore removed. A surgical pedicle could not be established. The ureter, distended with caseous and purulent matter, gave way, the renal vessels were clamped and subsequently ligatured. The kidney was entirely occupied by a series of tubercular abscesses. The wound was stuffed with sponge covered with iodoform, and the cavity left to granulate up."

Wimpole-street, W.

[1] Diseases of the Bladder and Urethra in Women, p. 136.
[2] Science and Art of Surgery, vol. ii., p. 927 (8th edition).

ON THE

THERAPEUTIC USES OF THE HOT BATH.

By W. J. NOTLEY, M.D.

THE application of heat in various ways to the surface of the body has long been recognised as a remedial agent of no small power, and the hot-air and vapour baths are often resorted to, either by the advice of the medical man or empirically, from a knowledge of the good results previously obtained from them. By those who have written on the subject, the effects of these baths are ascribed almost entirely to their action on the skin; and if any more remote influence is attributed to them, it is mainly through the skin as an organ of elimination that this influence is believed to be

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brought about. The hot-water bath, on the other hand, is usually regarded with dread, and persons who are advised to take a warm bath are commonly enjoined with the greatest earnestness not to allow the attendant to have the water in the bath at a higher temperature than 98° or 100° F. It is no doubt a wise precaution to warn those who are the subjects of serious cardiac disease or of any profound circulatory derangement to guard against too hot a bath or too long a continuance in a bath of any kind whatever; and we caution such persons with equal earnestness against anything that may put a great or sudden strain upon the heart or arterial system. In such cases we prohibit football, and running to catch a train, an omnibus, or a tramcar; but it does not follow that people whose vascular systems are ordinarily sound may not indulge in these pleasures, if pleasures they are, to their heart's content; while to a great many of those whose muscles become weak and flabby from want of use, a good deal more running and jumping than they usually get would be beneficial in the highest degree. In the same way, it has appeared to me that persons suffering from various disorders, always excepting those above mentioned, may take the hot bath without danger, and in many cases with great advantage to themselves. By the hot bath I mean, in the case of the wet bath, one at a temperature ranging from 100° to 110° Fahrenheit. In the dry-air bath a temperature much higher than this can of course be borne.

Some time ago an opportunity was afforded me of making some observations on the effect of the hot bath in removing some morbid conditions of the system. A man of middle life, in temperament nervous-sanguine, spare, and somewhat below the average height and weight, complained of languor, debility, want of energy, and lowness of spirits. On examination it was found that his heart and arteries were sound, though his circulation was rather weak. His alimentary system was fairly good, though the quantity of food taken was below the average. His skin was somewhat dry, and a few spots of psoriasis were found on the extensor aspects of the legs, arms, and trunk. His urine was cloudy with phosphates, and below the average in quantity. As the Turkish bath was not in this case available, he was advised to take a water bath at a temperature of 105° F., and directions were given him how to proceed in case of faintness. The day after taking the bath his condition was wonderfully improved. His circulation was stronger, his urine was clear, and he now felt cheerful and well. This improved state of matters continued for about twelve days, when all the unpleasant symptoms reappeared, and he began to feel as ill and dejected as ever. The most natural proceeding was, of course, to order him another bath, and this he took with the same happy result as before. Since that time he has had the hot bath about once a fortnight, and by this means has managed to keep himself in very tolerable health and spirits.

It would be interesting to know the exact means by which the hot bath produces this powerful and beneficial effect on the system. It must, in the first place, be carefully borne in mind that the warm bath at a temperature below 100° F. has no influence that can be compared with the results to be obtained from the hot bath. The hot bath stimulates the whole system, and the effect of this stimulation appears to last for some time, for the patient above referred to remained well for about a fortnight after taking the bath. Having ascertained that his diet was as nearly uniform as possible, the quantity of urea excreted on three successive days immediately before and after the bath was estimated by Russell and West's method, with the following result:—

Average quantity of urine in twenty-four hours for three days *before* the bath ...	916·67 cc.
Average weight of urea in twenty-four hours for three days *before* the bath ...	22·8 grms.
Average quantity of urine in twenty-four hours for three days *after* the bath ...	1040 cc.
Average weight of urea in twenty-four hours for three days *after* the bath ...	26·25 grms.

From this it appears that the quantity of urine and the weight of urea excreted were below what are usually stated to be the averages for a healthy man, but that both were very perceptibly increased by the hot bath. If we may assume that the other secretions and excretions were proportionally increased, then we have clear evidence as to the proximate cause of the improvement brought about in the general condition of the body. Perhaps we may compare the action of the hot bath with the action of any other irritant of moderate severity. The theory of counter-irritation is confessedly somewhat hazy and inadequate; but it is a matter of every-day observation that a moderate stimulation of the skin relieves congestion of internal organs immediately subjacent to the area of stimulation. In many cases there is only a remote connexion between the vascular supply of the viscera so acted upon and the portion of skin stimulated. It must be by a reflex action of the nervous system that a poultice over the loins can relieve congestion of the kidneys, or one on the skin of the chest can benefit a similar condition in the lungs. It is not unreasonable to suppose that there is some sort of connexion between the centres presiding over the vascular supply of any portion of the body surface and those regulating similarly the quantity of blood proceeding to the organs lying immediately beneath. Thus a stimulus applied to any portion of the skin would lead to an increased activity of the nerve centre presiding over this area of the body surface, and so relieve any existing congestion of the connected or contiguous centre governing the vascular supply of the viscera lying in the neighbourhood of the stimulated surface. I think it was Dr. Berry Hart, of Edinburgh, who first suggested this explanation of the action of counter-irritants. In this way, then, the hot bath would relieve congestion of many centres, and by restoring them to a healthy action would promote the circulation of healthy blood not only through the thoracic and abdominal organs, but also through the higher nerve centres, thereby leading to the dispersion of those morbid feelings conjured up by the faulty nutrition of the cerebral convolutions. Whether this be really the mechanism by which the good effects described above are produced, or whether some other explanation can be given, it seems clear enough that the hot-water bath might be used, with proper precautions, in many cases difficult to treat in any other way, such as chronic gastric catarrh and the protean forms of dyspepsia. One of the most marked effects of the hot bath is seen in the increased force of the circulation, and following necessarily from this an increased degree of muscular energy, with a corresponding increase of activity in the mental functions. In short, the flagging energies are restored and a more healthy tone is given to the whole system.

As in most other remedies, so in the case of the hot bath, the time and manner of application are of some importance. Like all other baths, the hot bath should be taken before the principal meal of the day, and if this meal be taken early the good results will be more certain than if it be taken late. The duration of the bath should be about fifteen minutes, and the temperature should be about 105° F. If faintness should come on while in the bath, the whole head should be immersed in the hot water, and kept there for a few seconds, when the faintness will disappear. The usual directions given in public baths are to get out of the bath as soon as drowsiness or faintness begins and to ring for the attendant; but anyone who attempts to do this will most certainly aggravate his danger. As pointed out some time ago by Mr. Benham and subsequently by myself, the application of heat to the head is a potent means of averting syncope. From time to time we hear of deaths in the warm bath; and I am convinced that many of these might have been prevented by the adoption of the simple method referred to, instead of the deadly and often impossible means commonly recommended.

Birmingham.

PAROTITIS FOLLOWING OVARIOTOMY.

BY W. H. JALLAND, F.R.C.S.,
SURGEON TO THE YORK COUNTY HOSPITAL.

DURING the month of January last there were some letters in THE LANCET upon the connexion between the parotid gland and the genital organs, more especially with reference to operations on the latter being followed by inflammation of the former. Mr. Stephen Paget, in his letter published on Jan. 9th, quotes five cases of parotitis following ovariotomy published by Professor Möricke, and one other case which occurred at St. Bartholomew's Hospital. As this seems a comparatively rare occurrence, I enclose the notes of the following case, which was under my care in the York County Hospital. The patient was admitted on Sept.

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17th, 1885, and was not operated on until the 21st of the following month. During the whole of the time she was in the hospital no case of mumps occurred, nor, as far as we could gather, were there any mumps amongst the friends or in the family of any of the friends that came to visit her, so I think we may fairly assume that she did not contract this disease from an external source. The notes of the case were taken by Mr. E. F. Morris, house-surgeon.

Mary P——, aged twenty-one, servant, was admitted into the York County Hospital on Sept. 17th, 1885. She gives the following history. About three years ago she felt very weak—much more so than she had done for some years previously. She consulted a medical man, who treated her for weakness and pain in her left side of a sharp shooting nature, situated over the tenth and eleventh ribs. This continued for a year without any other signs or symptoms, when she noticed that her body was enlarged (then about half its present size); it had slowly increased. The only symptoms she now complained of were weakness, headache, and pain in her left side and legs. Bowels rather costive. She commenced to menstruate at the age of fourteen; this continued normally for three or four months, then stopped again for more than a year. Since then she has been very irregular, sometimes going for two or three months, sometimes only a fortnight.

On examination, the chest &c. appeared normal, but a distinct trace of albumen was found in the urine. Nothing else was noticed except an abnormal abdomen. The family history was good. She had been quite well up to fourteen years of age.

On examination of the abdomen, it was found to be distinctly enlarged, and, as it were, by two bodies: one, more or less round, filling up the right pelvis and reaching to the umbilicus; another, seemingly more oblong, passing up into the left flank. On palpation the swelling was more or less felt. Both bodies were regular, and in no way nodular. No other bodies could be felt; no wave, fluctuation, or thrill could be obtained. On percussion, there was dulness over the centre of the tumour extending immediately down to the pubes; resonance in both flanks, but much more marked in the right, the left being comparatively dull. The umbilicus in no way protruded. Per vaginam, the uterus was normal in position and length; os virginal; distinct movement in front of the uterus on movement of the abdominal swelling; otherwise the parts were normal. Measurement above umbilicus, 32½ in.; below, 36 in.

Oct. 21st: To-day, under ether, Mr. Jalland performed ovariotomy. Abdominal wall very adipose, but hæmorrhage very slight. On opening the peritoneum the tumour was found to be cystic and non-adherent. It was tapped and some fluid drawn off, when it was seen to be polycystic. With some little difficulty the growth was lifted out of the abdomen and removed. The pedicle, which was not a very broad one, was tied in two pieces with Chinese silk. The other ovary was also found to be slightly cystic, and was likewise removed. The abdomen was then wiped out with sponges, as there was some ascitic fluid in the pelvis. The abdominal wall was then stitched up with wire and catgut, and the wound dressed antiseptically. The spray was used prior to, but not during, the operation.—21st: At 6.30 P.M. the patient had well recovered from the ether, the vomiting being very slight immediately after operation. Temperature 99°; pulse 108. Ice was given. — 22nd: Patient easy and well. No pain. Temperature 98·6°; pulse 96. Diet of milk, lime, and ice, in teaspoonfuls. At 8.20 P.M. the temperature, was 100·8°.—23rd: At 10 A.M. there was some slight vomiting; otherwise well. Temperature 100·2°.—24th: This morning the patient complained of some stiffness of the neck, with pain at the angle of the right jaw. There is now slight swelling over the right parotid gland, which is very tender. In the evening the swelling and pain had increased.—25th: At 3 A.M. the patient was in very great pain; right side of face immensely swollen. Temperature 103°; poultices ordered. The patient had passed an uneasy night; slept but little; pain very severe; swelling increasing. Three leeches ordered. At 6 P.M. the patient was better, the swelling less, and the pain not so great. Temperature 101°.—26th: Swelling disappearing; pain less; feels better; no abdominal symptoms. Temperature 99·2°; pulse 105.—28th: Right side of face painless, but still swollen.—30th: Left side of face swollen and painful. Leeches ordered.—Nov. 2nd: Pain nearly all gone; both sides of face still somewhat swollen.—4th: Antiseptics left off; wound almost healed. The patient is now practically well.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

GUY'S HOSPITAL.

CASES OF STRANGULATED HERNIA; OPERATION FOR REDUCTION AND EXCISION OF THE SAC; REMARKS.

(Under the care of Mr. R. CLEMENT LUCAS.)

MR. CLEMENT LUCAS has long maintained that an operation for strangulated hernia ought not to be considered complete until the sac has been excised, and that the after-treatment is often unnecessarily prolonged. Formerly, it used to be considered always advisable to keep a patient lying in the hospital for a month or six weeks after kelotomy. After excising the sac, in uncomplicated cases, he completely closes the canal and the wound. Primary union is thus obtained, and the patient sits up on the sixth day, and leaves the hospital, wearing a truss, on the fourteenth day after the operation. In a paper read before the Clinical Society in October, 1885, Mr. Lucas showed how, by excising the sac and suturing the umbilical aperture, the mortality after the operation for umbilical hernia might be lessened. It will be observed in the following cases, two of which were femoral and one inguinal, complicated with undescended testicle, the patients in each case left the hospital well on the fourteenth day. It is hoped that others will more generally adopt this method of treating strangulated hernia. For the reports of the three cases, all operated upon within a week, we are indebted to Mr. Metzgar, the dresser, who attended to the patients after the operations.

CASE 1. *Strangulated Hernia in an Infant complicated with undescended Testicle: Operation for Reduction; Excision of Sac and Testicle.*—W. J. C ——, aged one year and eleven months, was admitted into Lydia ward on the evening of Sept. 1st, at 11 P.M., suffering from strangulated inguinal hernia on the right side. A hernia had first come down in that position when he was three months old, his mother returning it by pressure. As the testicle had not descended on that side, a truss had not been applied, but his mother had been warned of the danger and instructed to come to the hospital immediately if the hernia became irreducible, or if at any time the testicle appeared, in order that on the descent of that organ a truss might be adjusted above it. At 3 o'clock that afternoon the child's bowels had been opened, and at 8 o'clock, whilst crying, the hernia came down, it being rather larger than it had ever been before—viz, the size of an ordinary hen's egg. His mother tried to return it as she generally did, but was unable; so he was brought to the hospital.

On admission the patient's temperature was 100·2° and the pulse 105. The hernia being very tense, an icebag was applied till 12 P.M., when he commenced to vomit for the first time. Taxis was then employed, but for a short time only, and, the hernia being unreduced, chloroform was administered. Mr. Lucas then tried taxis in the inverted position, but, owing to the tense condition of the tumour, for a short time only. An oblique incision was then made over the tumour, and the structures were severally divided down to the sac; as the hernia was not constricted externally to that structure, it was opened. Some turbid serum was let out, and it was seen that, though dull in colour, the intestines still maintained their characteristic shiny appearance. The constriction, which was at the internal ring, was then divided and the bowel returned. The testicle was found lying about three-quarters of an inch below the internal ring; the sac containing the testicle was then separated, and, having been transfixed and tied with a double catgut ligature, was excised. The margins of the canal were then sewn up with three chromic catgut ligatures, these going deeply into the posterior wall. The skin incision having

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been sutured with wire, carbolic dressings were applied; strict antiseptic precautions having been observed during the operation. The patient was then put to bed, with a pillow under his knees, and pillows arranged supporting his back after the manner of an inclined plane. He was ordered one minim of tincture of opium every three hours, and one pint of milk in the next twenty-four hours.—2 A.M.: Asleep, no sickness.

Sept. 2nd.—The patient has slept well all night. No sickness. Temperature 101·4°; pulse 110. Opium omitted.

3rd.—Wound dressed; looking well. Temperature 99°; pulse 90.

4th.—Temperature 97·6°; pulse 88. Wound dressed; all wire sutures removed. Bowels opened; motions not formed. Taking three pints of milk.

6th.—Temperature 98·2°. Allowed three pints of milk and one of beef-tea.

7th.—Has been gradually improving for the last two days. Temperature 97·2°. Sat up in bed for two hours.

8th.—Temperature 97·8°. As the bowels have not been opened for four days, a soap enema was administered, which acted freely. Had some boiled sole for dinner. Has sat up all day.

On the 10th a truss was fitted, and on the 14th the child went out quite well.

Remarks.—It will be noticed that in this case the congenital hernial sac was complicated by an undescended testis. In operating on the tumour in the inguinal canal Mr. Lucas first came upon the testicle, which was drawn on one side to allow the sac to be opened above it. The stricture was a very tight one at the internal ring, which appeared to be further external than normal. To prevent the recurrence of strangulation and to lessen the risks after the operation, Mr. Lucas sacrificed the undeveloped testis, ligaturing the cord and sac together at the internal abdominal ring and cutting everything away. The canal was afterwards drawn together by chromicised gut, cut short and left, and the skin wired up. No suppuration took place, and recovery was complete in a fortnight.

CASE 2. *Strangulated Femoral Hernia in a Female; Operation for Reduction; Excision of the Sac; Suture of the Canal.*—E. W——, aged forty-six years, was admitted into Lydia ward at 1 P.M. on September 2nd. She had suffered from a left femoral hernia for fifteen months, for which she had worn trusses, but, as all of them had fitted badly, the hernia frequently came down, being attended with vomiting. She could always reduce it herself. It came down at 12 o'clock on the previous evening, being rather larger than usual, and as she was unable to reduce it she came to the hospital; she had not vomited.

On admission the temperature was 100·8°. The hernia was very tense, being about the size of a pigeon's egg. Ice was applied at once, and was continued for an hour, when taxis was employed; but the hernia was still irreducible. Vomiting occurred soon after her admission. Mr. Lucas was sent for, and ether having been administered (the pulse being weak, 128), he attempted to reduce the hernia by taxis, but being unsuccessful a vertical incision was made over the tumour; the tissues were then divided down to the sac, which was found to be not constricted at the saphenous opening, so it was opened, when some serum escaped, and the bowel was seen to be of a dark purplish colour. The constriction, which was at Gimbernat's ligature, was then divided, and the bowel returned; the sac was separated, transfixed, double-ligatured with catgut, and excised; the canal was afterwards sewn up with chromic catgut, and the skin incision was closed with wire sutures. The patient was then propped up in bed, as in the former case. She was sick once immediately after the operation. Ordered one-grain pill of opium every six hours, and a pint of milk and two ounces of brandy in the twenty-four hours.

Sept. 3rd.—Slept well. Temperature 99·4°; pulse 86. Some retention of urine was relieved by the catheter.

4th.—Going on well. Wound dressed; looks well. The opium pill to be given night and morning only. Temperature 98·2°. Passed flatus.

5th.—Wound dressed, wire sutures removed.

6th.—Enema of warm water administered, but was ineffectual. Diet: two pints of milk, one egg, and a pint of beef-tea.

7th.—Bowels opened after a soap enema.

8th.—Got up for one hour.

9th.—Had a sole for dinner.

13th.—Had a chop for dinner. Bowels opened by soap enema.

16th.—Truss fitted, and patient discharged well.

Remarks.—This was an uncomplicated case of strangulated femoral hernia in which no time was lost. The chief factor in determining an unfavourable result after strangulation is loss of time, during which the condition of the bowel is gradually deteriorating. Next to this Mr. Lucas maintains that injudicious taxis is responsible for more deaths than any other cause; and especially is this the case with femoral hernia, where the constrictions are usually tight and always very rigid. He has twice known the bowel ruptured by taxis for femoral hernia, and considering the knife-like edges presented by the saphenous opening and Gimbernat's ligament this is not to be wondered at. On the other hand, the risks of operation he regards as so trivial, that in the face of the danger of delay they should not be considered. When operating, he proceeds in the ordinary way by dividing the structures outside the sac, but should he succeed in reducing the bowel without opening the sac, he invariably proceeds to cut away the sac before closing the wound. The sac he regards as an abnormal structure to be eradicated without mercy; and he holds that by its removal many risks are avoided during the progress towards recovery, whilst at the same time a radical cure is effected.

CASE 3. *Strangulated Femoral Hernia in a Male; Operation for Reduction; Excision of the Sac; Suture of the Canal and Skin.*—C. O——, aged forty-two, was admitted into Job ward at 12 noon on Sept. 7th. He had suffered from right femoral hernia for four years, but had never worn a truss, reducing it himself when it came down. At 6.30 this morning it came down while at his work, and he was immediately seized with great pain, faintness, and cold sweats; he tried to reduce it, but could not do so, it being much larger than it had ever been before.

On admission the hernia was very tense, devoid of impulse on coughing, of the size of a pigeon's egg, and very painful. He had not been sick. Temperature 99°; pulse 120. Ice was applied for one hour, after which taxis was unsuccessfully tried; the patient was then put under chloroform and taxis again unsuccessfully employed for a short time. Mr. Lucas then made an incision over the tumour, and having come down on the sac, opened it, as the constriction was not external to it. Some bloody serum was let out, and the bowel was seen to be purplish-black and coated with clot. The constriction, which was at Gimbernat's ligament, was then divided, and the bowel returned. The sac was then excised, and the crural ring and canal sewn up with chromic catgut. The skin incision was sutured with wire, and antiseptic dressings applied. The patient was propped with pillows as in the preceding cases, and was ordered a one-grain pill of opium every six hours, and a pint of milk in the next twenty-four hours.

Sept. 8th.—Patient is quite comfortable; sleeps well. Opium omitted. Temperature 99·4°.

9th.—Temperature 99°. Wound dressed; looks well. Allowed one pint of milk and one of beef-tea.

10th.—Wound dressed; wire sutures removed.

13th.—Got up for an hour; bowels opened. Temperature 98·6°. Had a sole for dinner.

16th.—Bowels acting every day. Had mutton chop for dinner.

21st.—Went out, wearing a truss.

Remarks.—It will be observed in this case that though the bowel had been strangulated six hours, and was found at the time of the operation to be purplish-black in colour, coated with a thin layer of clot, and lying in a sac containing bloody serum, no vomiting had occurred before the operation. We had in this case but one symptom of strangulation—viz., an irreducible, painful hernial tumour devoid of impulse. The absence of vomiting was probably due to the strangulation having occurred before the man had broken his fast, and the pain and distress from which he suffered prevented him from taking anything after the bowel had come down. Doubtless, had injudicious friends primed him with brandy for the relief of pain, or given him castor oil for colic, vomiting would not have been long delayed. As it was, Mr. Lucas rightly regarded the one symptom sufficiently urgent to justify immediate operation. The bowel being reduced and the sac removed, progress towards recovery progressed without interruption. He sat up on the sixth day, and left the hospital well at the end of a fortnight.

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NEWCASTLE INFIRMARY.

A CASE OF RUPTURE OF THE BLADDER; FRACTURE OF THE ASTRAGALUS AND OTHER BONES; POLYURIA. RECOVERY: REMARKS.

(Under the care of Dr. ARMSTRONG.)

WE are indebted to Mr. Frederic P. Maynard, M.B., house-surgeon, for the notes of the following case:—

Ellen D——, aged sixteen, a big, strong, stout girl, was admitted on Sept. 24th, 1886, having fallen forty feet from a window, her fall being broken by alighting on a man who was passing at the time. She was much collapsed, but soon rallied, and she was found to have sustained the following injuries when she was examined under chloroform:—Large hæmatoma of left cheek and orbit, right pupil dilated, left contracted, both reacting to light. Spinous process of twelfth dorsal vertebra fractured. Skin of arms grazed; no fractures. Right thigh and leg uninjured; os calcis fractured in two places, one transversely just in front of the epiphysis, which was drawn upwards by the gastrocnemii; and the other transversely further forwards. The astragalus was broken across its neck. Crepitus and mobility were easily obtainable between all these fractures, especially as the patient was under chloroform. The foot was pointed and swollen, the ankle appearing broader than natural. External malleolus of the left leg was broken and comminuted. The os calcis could be felt entire; astragalus broken across neck, where crepitus could easily be felt on flexing and extending the foot. The arch of the foot was flattened, and the foot lay with the toes pointed and everted. The abdomen was tender all over, especially above the pubes. No tympanites. There was a hæmatoma over the sacrum, and the whole perineum and both buttocks were black from bruising, but no wounds anywhere. Blood escaping from vagina. (Was regular, and menstruated one week ago; passed urine just before falling.)

A catheter was passed into the bladder, and two ounces and a half of dark bloody urine drawn off. The bladder was washed out with a warm solution of Condy's fluid. On passing a duck-billed speculum, there was found to be an irregular rent in the anterior wall of the vagina, four inches long, running obliquely upwards from right to left, and reaching below to within three-quarters of an inch of the meatus and above to the posterior fornix. The finger was passed through it into the bladder, but no other wound could be felt. The anal sphincter was relaxed; there was no wound of the rectum, which was full of fæces. Coccyx uninjured. The vagina and bladder were washed out with perchloride of mercury solution (1 in 2000), and Mr. Maynard proceeded to sew up the wound in the bladder. At its upper end a Λ-shaped piece of mucous membrane was removed, to make the sides meet better, and twelve deep sutures altogether of silkworm-gut were introduced from above downwards by means of a curved needle set at right angles to the handle shaft. After again syringing, a plug of iodoform wool was placed in the vagina, and the bladder drained by means of a gum-elastic catheter tied in. At first the urine was bloody, but clear the next day. It contained traces of albumen until Oct. 1st, when it became normal. The legs were put up in splints.

Sept. 26th.—Temperature 101·8°; pulse 144. Has passed five pints five ounces of urine in the last twenty-four hours by catheter; it contains albumen, but no sugar.

27th.—Temperature and pulse still high; urine normal in quantity.

28th.—Temperature 102·4°; urine five pints six ounces; no sugar; tampon withdrawn and vagina examined; wound healing; edges rather everted between sutures, and ragged; upper portion of vaginal mucosa superficially sloughing.

Briefly, the temperature kept up until Oct. 5th, when all sloughs had come away (injections of Condy's fluid had been used frequently), and the urine became normal, and subnormal in quantity. On the 19th the last suture was removed, and the bladder found firmly united, no urine ever having passed through it. The splints were left off the legs, and some movement was obtainable in both feet. On the 25th the girl was in every way well, the feet improving in movement daily, and micturition and urine being normal.

Remarks.—This appears to be a case—very rare—of rupture of the bladder, when empty, from indirect violence. The momentum of the heavy uterus (she was a big girl, and the uterus was also large) when her fall was broken by the man she alighted upon, would force it down upon the perineum, and probably ruptured the vesico-vaginal septum, and by the stretching of its ligaments caused the great abdominal pain and tenderness. There were no signs of any instrument, sharp or blunt, having wounded the vagina, though there certainly was general bruising of the nates and perineum. The polyuria was of interest, inasmuch as there was no glycosuria. There was a blow over the left orbit and cheek, which may be supposed to have caused some cerebral mischief. The fracture of the astragalus *alone* in the left foot is a very rare condition. Monahan records ten cases, and Erichsen refers to two in his own experience, though one of his was accompanied by a most peculiar deformity, and there was no injury to the malleolar arch.

Medical Societies.

ROYAL MEDICAL & CHIRURGICAL SOCIETY.

Disseminated Myelitis and Measles.—Acute Tubercular Ulceration of the Larynx.

AN ordinary meeting of this Society was held on Tuesday last, Mr. G. D. Pollock, F.R.C.S., President, in the chair.

Dr. THOMAS BARLOW read a paper on a case of early Disseminated Myelitis occurring in the Exanthem stage of Measles, and fatal on the eleventh day of that disease. The patient, a policeman, aged twenty-three, was admitted at the London Fever Hospital on June 11th, 1885, suffering from measles—the second day of the rash. There was nothing special about his case, except that he complained of soreness down the breast-bone and at the epigastrium. At midnight on the 13th there was retention of urine. On the 14th he was drowsy, but intelligent when roused. There was paralysis of the lower limbs, with loss of knee-jerk and of plantar reflex; but the patient was able to localise a pinch on either leg. The grasp of both hands was weak. There was still retention of urine. On the 15th the patient's mental state was quite clear, but in every other respect he was worse. He could only speak in a whisper; his cough was ineffectual. He complained, as on admission, of fixed pain down the breast-bone and at the epigastrium. The paralysis of the lower limbs, absence of knee-jerk and retention of urine continued; the weakness of grasp in the hands was more marked, and the intercostals were paralysed. There was slight deviation of the tongue to the left. The patient gradually become cyanosed, and died on the evening of the 15th, which was the eleventh day from the onset of measles. The post-mortem examination, beyond consolidation of the lower lobe of the left lung and intense congestion, with ecchymoses of the tracheal and bronchial mucous membranes, showed no important visceral changes. In the brain the grey matter of the convolutions was darker than natural, and the brain substance unduly soft. The ependyma of the lateral ventricles was easily detached. The spinal cord showed extensive softening in the upper dorsal region. Opposite the fifth dorsal vertebra the cord was quite diffluent. There was also red softening in the lumbar region, most marked in the grey cornua, which at some spots were quite tunnelled. Microscopic examination of the cord, made by Dr. Penrose, showed that the changes were mostly vascular, consisting of great engorgement of vessels, infiltration of surrounding tissues with leucocytes, and slight interstitial extravasation of blood. No changes were found in the nerve-cells, fibres, or supporting tissues of the cord. In the medulla oblongata very similar changes to those present in the cord were found, with the exception that no hæmorrhages had occurred. The stress seemed to have fallen chiefly on the hypoglossal and vagus nuclei. The case was recorded because (1) accounts of the post-mortem appearances in fatal measles with nervous complication were very rare; (2) because it had considerable resemblance to a fatal case of disseminated myelitis after small-pox recorded by Westphal; (3) because it possibly threw some light on the changes which give rise to certain groups of cerebro-spinal symptoms left after some of the fevers, especially those allied to multiple sclerosis to which Westphal first drew attention.—Dr. CHEADLE referred to a case of cerebro-spinal meningitis following measles almost as closely as that of Dr. Barlow's. The measles began on

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Oct. 14th, the rash came out on Oct. 18th, and the signs of meningitis appeared on the 24th. There were opisthotonos and rigidity of limbs, with marked vaso-motor phenomena and a very high temperature, during the early stage. It was possible that such a poison as that of measles could lead to the occurrence of myelitis and meningitis, for it certainly could cause diphtheritic disease. He asked whether in the severe measles that affected islands like Fiji there were any spinal lesions?—Dr. S. WILKS spoke of the relation of various secondary affections of the nervous system to acute specific fevers. Sometimes they were sequelæ, but at others they were concurrent. Cases of paraplegia occurring in connexion with typhoid fever might be mere coincidences, or the symptoms might follow on the disease. He objected strongly to the notion of reflex paraplegia from typhoid fever, the paralysis being ascribed to the afferent influence of ulcerated intestines on the spinal cord. It was satisfactory to find that cases did occur in which actual organic lesions were to be found as explaining the occurrence of the paralysis. Sometimes there was no acute specific fever at all, but the case from the first was one of myelitis, the other febrile symptoms being due to the nervous lesion.—Dr. ORMEROD mentioned cases of paralysis which began at a clear interval of about a month after measles. Three members of a family, the father, son, and daughter, were the subjects of the diseases; but they were affected in different epidemics of measles. The paralysis began with turning in of the foot, followed by wasting of muscles of the leg. The gradual onset was unlike infantile palsy. In one case the paralysis progressed, and began to affect the hands. Reference was made to a paper by Dr. H. Tooth on the peroneal type of progressive muscular atrophy. It was important in these cases of nervous disease to recognise the two factors—viz., measles and family disposition. It was the same in hereditary ataxy, in several cases of which there was a history of distinct acute disease. Whether the cases first referred to were examples of progressive myelitis or peripheral neuritis due to measles poison he was not prepared to say.—Dr. G. V. POORE was interested in the explanation of the initial symptom of pain down the breast-bone. It was probably of spinal origin, and the region of the fifth dorsal nerve, where the disease reached its greatest intensity, would be the part of the cord corresponding to the seat of the pain. There seemed no doubt that the myelitis and measles ran concurrently. He asked whether there was any history of a blow on the back.—Dr. BEEVOR remarked on the rapidity with which the disease runs its course. He mentioned a case of myelitis which terminated fatally in five days; the paralysis began in the legs; the microscopic changes were much the same as those met with in Dr. Barlow's case.—Dr. BARLOW said that Dr. Cheadle's case was interesting as occurring within the exanthem period of measles. He thought it was important that the diseases should be classified according to the period at which the nervous symptoms commenced. In his own case Dr. Barlow believed that the spinal affection was as much a part of the measles as the skin rash and the bronchial catarrh. The cases referred to by Dr. Ormerod were interesting, and he had also seen two children affected in the same way. The family predisposition and the acute specific disease were important etiological factors. There were many recorded cases of acute ascending paralysis occurring in connexion with acute specific fevers, in which no kind of lesion could be found. Nothing could be learnt of any traumatic influence in the case described; but the exposure to weather incident to a policeman's life may have had some share in the causation of the myelitis.

Dr. ABERCROMBIE and Dr. GAY read a conjoint paper on [illegible] Three cases of Acute Tubercular Ulceration of the Fauces. The authors related three cases of acute tuberculosis in children in which ulceration of the fauces occurred within a few days or weeks of death. In one of these cases the ulceration was shown by microscopical examination to be tubercular. In the other two there was no reason to doubt that it was of the same nature. Pain in the throat and dysphagia were the only premonitory symptoms of this affection, soon followed by the development of whitish punctiform spots, about the size of a pin's head, on the soft palate, uvula, or tonsils. In the course of a very few days these spots enlarged and coalesced, subsequently breaking down and leaving variously shaped irregular superficial ulcers. The ulceration may spread until the whole of the fauces are involved. The death of the patient usually occurs before the ulceration is far advanced. Generally the fauces are more or less constantly covered with a viscid secretion, which greatly adds to the difficulty of diagnosis. The usual symptoms of acute tuberculosis will be present, especially the fever and emaciation, but the other signs of the disease are often masked. There is usually, but not always, considerable enlargement of the glands of the neck, and these may suppurate. The differential diagnosis of this affection from diphtheria, tonsillitis, and syphilitic affections of the throat was briefly discussed. The authors regard this form of angina as only a part of general tuberculosis, in which respect it differs entirely from the chronic tubercular ulceration of the fauces, which is either primary in the pharynx or spreads there from the larynx. The disease always proves fatal, though the patients do not usually or necessarily die from the throat affection.—Dr. PERCY KIDD could not agree that there was any actual distinction between acute and chronic forms. The disease might spring from the larynx or was primary, but it should not be lost sight of that the expectoration from the lung might be the source of it. Of 500 necropsies, he had met with six or eight cases of tubercular disease of the pharynx. Sometimes the disease began as minute whitish specks, followed by ulceration, and this only one month before a fatal termination. Herpetic vesicles on the pharynx might cause some difficulty in diagnosis for a time; so that diphtheria was not the only disease for which tubercle of the pharynx could be mistaken.—Dr. ABERCROMBIE thought there would not be much difficulty in distinguishing the acute from the chronic. In some cases the ulceration was secondary to the appearance of whitish spots or nodules. He was under the impression that in pharyngeal herpes there was also herpes about the mouth, so they had left it out of consideration.

MEDICAL SOCIETY OF LONDON.

Spontaneous Uterine Rupture.—Hepatico-bronchial Fistula.—Iodide Rash.

AN ordinary meeting of this Society was held on Monday last, Mr. R. Brudenell Carter, F.R.C.S., President, in the chair.

Dr. A. H. N. LEWERS read a paper on Rupture of the Uterus during Gestation. It was an accident of rare occurrence, and its causation was but little understood. A study of nineteen recorded cases led Dr. Lewers to express the opinion that "spontaneous" rupture during pregnancy was invariably due to "interstitial" gestation. He described a case that occurred in his own practice at the London Hospital, in which a multipara, believed by herself to be in the fifth month of gestation, suddenly became ill with severe pain in the abdomen, vomiting, and collapse. Abdominal section was performed, and then the fœtus and placenta were discovered in the peritoneal cavity, and a rent in the fundus of the uterus was detected at the outer part on the left side. The post-mortem examination showed that the rent in the uterus involved that part of the wall through which the left Fallopian tube passed. The case was not one, therefore, of genuine rupture of the uterus, for the fœtus had never occupied the uterine cavity. Dr. Lewers considered that spontaneous ruptures of the uterus attributed to pathological softening of the wall were of doubtful occurrence. He thought, also, that cases of genuine spontaneous rupture should be kept apart, and not placed in the same category as those where rupture of the uterus occurred during premature labour, or in criminal attempts at the production of abortion, or from direct violence. There was nothing in the records of cases of spontaneous rupture to militate against the suggestion he desired to make—that spontaneous uterine ruptures are invariably cases of "interstitial" gestation. He submitted that where the symptoms pointed clearly to the occurrence of the accident exploration of the abdomen was the correct surgical treatment.—Dr. BRAXTON HICKS made some remarks on accidental hæmorrhage, having symptoms like those met with in rupture of the uterus.—Dr. JOHN PHILLIPS remarked that the fœtus in Dr. Lewers' case measured eight inches in length, but the rent in the uterus did not seem to be large enough to admit of the exit of so large a fœtus.—Dr. C. H. F. ROUTH described a case of rupture from his own practice, and congratulated Dr. Lewers on his paper, which contained a valuable suggestion.—Dr. LEWERS said that in the case mentioned by Dr. Hicks the hæmorrhage occurred so late in pregnancy as to place it in a different sphere from those cases to which his paper drew attention.

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Dr. DE HAVILLAND HALL read notes of a case of Hepatico-bronchial Fistula occurring in a meat salesman, who suffered much pain in the hepatic region, followed by jaundice three weeks before he was seen. Vomiting of bright bile also occurred. An enormous quantity of bilious fluid was brought up at one time. The liver was enlarged, not tender; the urine was loaded with bile, the motions pale, and the patient jaundiced. The discharge of bilious fluid was continued, and it was evident that the bile came from the lung, as it was expelled by coughing and was frothy. The patient eventually recovered. Dr. Hall quoted Trousseau, Goodeve, Frerichs, and Murchison to show the rarity of the affection. The first case reported was one in THE LANCET by Mr. W. E. Green, July 6th, 1878. The second was one by M. Laboulbène to the Société Médicale des Hôpitaux, Aug. 1875. The third was recorded by Dr. Dreschfeld in THE LANCET, vol. ii. 1879, p. 867. Dr. Hall pointed out that in the majority of cases hitherto recorded hepatico-bronchial fistulæ had been caused either by the rupture of an abscess or of a hydatid cyst in the liver, and the discharge of their contents into the lung; but from the result of his investigations he would add the impaction of a gall-stone and consequent dilatation of the bile ducts as another cause of these fistulæ. In taking a grave view of the prognosis in these cases, Dr. Hall pointed out that two of the four cases to which he referred ultimately died. He stated that the treatment must necessarily be of an expectant kind. If there were complete obstruction to the entrance of bile into the intestine, the purified ox bile of the British Pharmacopœia might be given with advantage. Should there be any difficulty in clearing the lung of the bilious fluid, a stimulating emetic, such as ten grains of carbonate of ammonium and twenty grains of ipecacuanha, might be required. The question of surgical interference might come into question if bile accumulated in the pleural cavity. A bibliography was appended to the paper.—The PRESIDENT thought that medical officers of Netley could add largely to the number of cases of hepatico-bronchial fistula.—Dr. LOWE mentioned a case of the kind which turned out to be hydatids; it occurred in a young man, a fisherman.—Dr. SANSOM and Dr. S. WEST also joined in the discussion.

Dr. SAMUEL WEST showed a coloured drawing of a case of Iodide Rash, taken from a man aged sixty-seven. The eruption began as vesicles, which increased in size and became purulent. A sanguineous exudation escaped when the blebs were ruptured. The forehead and face were the chief seats of the eruption.—Dr. C. H. F. ROUTH and Dr. DE HAVILLAND HALL and Mr. J. H. MORGAN joined in the discussion.—Dr. SANSON mentioned a case of fatal iodic purpura from the administration of syrup of iodide of iron. —The PRESIDENT said that minute doses might be borne where the ordinary dose caused iodism.

HARVEIAN SOCIETY.

Etiology of Hydramnios.—Alpine Winter Climates.

A MEETING of this Society was held on Thursday, Oct. 21st, J. Hughlings Jackson, F.R.S., President, in the chair.

A specimen of Supra-vaginal Amputation of the Cervix Uteri was exhibited by Dr. Lewers. The operation had been performed for malignant disease in July last, by means of scissors, with satisfactory results to the present time.

Dr. JOHN PHILLIPS read a paper on the Etiology of Hydramnios and its relation to certain Fœtal Deformities, commencing with a brief sketch of the mode of development of the amnion and its structure, the variable composition of the amniotic fluid at different periods of pregnancy, and the presence in it of urea. The following three views were at present held in the etiology of the disease:—1. That the amniotic fluid is a product of fœtal origin (Lallinger). 2. That it is the product of the maternal organism (Ahlfeld, Scanzoni, and Schroeder). 3. That it is a common product of fœtal and maternal origin (Virchow). The theory that the fluid is a transudation of the liquid parts of the fœtal blood across the amniotic membrane was dilated upon at some length. It was concluded that the cause of the secretion was probably due to resistance met with by the fœtal circulation in the placenta or cord; the greater the resistance the larger the amount of the hydramnios. The cord and amnion were given as the means of escape by exosmosis of the fluid, and their histological structure briefly described. Ahlfeld's theory that the cause is to be found in the modification of pressure which the uterus undergoes in the progress of pregnancy was upheld for the first three months of that condition. The frequent connexion between hydramnios and turning was then discussed. The author concluded his paper by giving the various groups of fœtal malformations, calling attention to exaggerated tension of the cord, umbilical venous thrombosis, and varicosities, as having a large share in the causation of the disease. Microscopic specimens were exhibited.—Dr. ALDERSON referred to the length and twisting of the cord as a cause of hydramnios, and noted that the mother in such cases had generally taken but little exercise.—Dr. C. GOOD had met with cases of congenital cystic kidney, hydronephrosis, cystic liver, and even hydrocephalus, without any hydramnios. He thought that the cause of the fluid was not yet proven.—Mr. GRIFFITH remarked that fœtal urine was not understood even by experienced chemists, and the existence of urea in the fluid had been denied by Odling. The quantity of amniotic fluid varied in ordinary cases with the length and number of twists of the cord, but in hydramnios the cord was generally shorter than normal. —Mr. CRIPPS LAWRENCE laid stress upon the method of insertion of the cord and called attention to intra-uterine amputation of limbs by strangulation.—Dr. MORTON mentioned cases of early rupture of membranes, the secretion of fluid continuing until delivery. These seemed to prove that the membrane must have secretive powers.—Dr. ROUTH pointed out that hydramnios usually occurred about the fifth month, and hence could not be due to renal secretions. —Dr. PHILLIPS replied.

Dr. TUCKER WISE read a paper on Alpine Winter Climates, in which he described the various out-door exercises and sports indulged in by patients seeking health in the High Alps. He considered that judgment was necessary in the selection of cases for the mountain climates, but did not limit the benefit of winter residence to cases of consumption only. Patients frequently arrived in the Alps on their own responsibility and even in opposition to medical advice, and this sometimes led to results which caused gross misunderstanding regarding the climates. Under the influence of the sun's rays and dry air the sensation of cold in the Alps was out of all proportion to the pitch of the thermometer; A low temperature that would be chilling and dangerous to delicate persons in England was apparently borne with comfort in the Alpine snow regions. The great importance of sanitation and uniformity in warming hotels inhabited by invalids was dwelt on, and especially the supply of pure air within doors. The following conditions were deemed unsuitable for winter residence: (1) diseases of the brain, heart, or large vessels; (2) tendency to articular rheumatism; (3) kidney diseases; (4) acute inflammation of throat or larynx; (5) some diseases of the bladder or prostate; (6) neuroses or vascular excitement; (7) hysteria; (8) persons of advanced age, unless the circulatory apparatus were sound; and (9) extreme emphysema. It was not possible, however, to lay down any hard-and-fast rules. — Dr. SYMES THOMPSON spoke very highly, from personal experience, of the good effects of the Alpine winter climate. He should not be inclined to include throat cases amongst those generally unsuitable. Even laryngeal phthisis had occasionally been benefited. In most throat conditions the continuous inhalation of dry air was useful. The increase of smoke at most of the popular health-resorts was becoming a serious consideration. As a general rule, patients unable to walk about should not be sent to the high altitudes.—Dr. EWART believed that almost all classes of cases obtained some benefit, and certainly he had seen good results in cases of nerve exhaustion. More information was wanted with respect to the selection of climates suitable to different stages of disease. Cases of pharyngeal disease where the mucous membrane was always moist, and especially adenoid growths in the naso-pharynx, usually did well in dry air. Pharyngeal deafness also was often much relieved at high altitudes.—Dr. WISE replied.

ASSOCIATION OF PUBLIC SANITARY INSPECTORS.—The annual address of the Chairman of this Association, Mr. G. B. Jerram, was delivered on the 6th inst. The subject of the address (the practical importance of which to the public cannot be exaggerated) was on the Best Materials and Methods of Construction of Drain-pipes, and the most efficient means of making Joints impermeable to Gas and Water. A discussion, in which several members joined followed the delivery of the address.

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Reviews and Notices of Books.

A Manual of Midwifery. By A. L. GALABIN, M.D. London: J. and A. Churchill. 1886.

THE writer of a manual of midwifery has a difficult task before him; he must possess a wide and accurate knowledge of the literature of the subject, and extensive experience of its practice; on the other hand, he must possess decision of character, and the qualities which constitute a "strong judge," qualities which enable him to weigh facts for himself, to come to a definite conclusion, and, having done so, to state his results with a healthy dogmatism. As a corollary to this last quality, he must possess a keen nose for quackery, and courage to reject it. In the interest of the student, he must not only relentlessly separate the grain from the chaff, but must not hesitate to ruthlessly destroy the chaff. The present work is the lineal successor of the excellent manual of Tyler Smith, but our author in 1886 has a far more difficult task than Dr. Tyler Smith had in 1849 and 1858, on account of the large amount of new work done since that time; to keep the volume down to nearly its original bulk, he has to exercise a nice judgment as to the space to be assigned to each subject. It will be our task to endeavour to estimate the present work on the above principles.

The chapter on the Anatomy of the Pelvis is generally good and lucid; we think, however, that the measures given are too minute. Small decimals are of no importance practically, seeing that they cannot be accurately measured in the living woman, and there is no such thing as a normal pelvis.

The chapter on Ovulation and Conception is also generally good and clear. We regret, however, to see that our author has included within it statements which are, in our opinion, unproved, and have given occasion to a large number of unnecessary operations. We refer to the explanation of the mechanism of impregnation given on p. 46. If these are our author's definite conclusions, we are sorry for it; if they are not (and we seem to detect a certain hesitation in their enunciation), we regret that he should be, or appear to be, capable of being quoted as an upholder of these views, and implicitly as an approver of the practices founded on them. The remaining chapters on Development are good, but Fig. 40 (p. 66) contains a serious error, as it professes to show the chorion stripped off the fœtal part of the placenta as far as the umbilical cord.

The chapter on the Management of Normal Labour (one of the most important for the student and practitioner) is one of the least satisfactory in the book, and does not bear the impress of familiarity with the details of the subject which we should have expected from one in the author's position. The directions are often incomplete and vague, and the subject of antiseptics is dealt with so imperfectly that it had almost better have been omitted. In any subsequent edition the space assigned to some of the more lengthy and less important subjects might well be transferred hither. Manual dilatation of the perineum, recommended at p. 196, is in our view objectionable. The rules for the expulsion of the trunk (on the same page) might be improved. The author says it should be assisted "if the child is in danger of asphyxia." Under what circumstances this danger is present he does not say. There is no word to the effect that under ordinary conditions a child may live with its head alone in the world for an indefinite period; and this is an important point, for the tendency of the ignorant is to hurry. The eyes should also surely be wiped with a clean napkin at once. The importance of thrombi (p. 199) for the arrest of hæmorrhage, is very doubtful. The examination of the placenta (p. 200) is far too cursory, and should be greatly enlarged. The perineum is better examined by the eyes than by the fingers (*ibid.*) in our opinion, and the introduction of the fingers into the vagina after the birth of the child (*ibid.*), is not a practice to be recommended. The directions for the application of the binder (p. 201) might be improved; students require accurate instruction in this matter, and these directions will, we fear, result in a good deal of wrinkling and riding up. The direction to repair the perineum without an anæsthetic, founded on a fear of hæmorrhage is, in our experience, quite unnecessary in ordinary cases; and, if so, it must be remembered that a little pain *after* delivery is never forgotten by a woman, while she soon forgets all that has gone *before*.

In the description of Face Presentations (p. 209) the author names them by the *forehead* rather than the chin. This seems to us a mistake, inasmuch as the mechanism of face cases is almost identical with that of vertex cases, if it is only remembered that the chin represents the occiput, and the easiest statement is always preferable to the harder, if both are correct. In the chapter on Pelvic Presentations, the paragraph relating to dorso-posterior positions (p. 226) does not include the mechanism of the shoulders, which is peculiar and by no means to be taken for granted. We are glad to see (p. 227) that the chief danger to the child is stated to be abolition of the placental circulation, rather than pressure on the cord.

The chapter on the Management of the Puerperal State contains several pieces of advice with which (we may be old-fashioned) we do not agree: among these are feeding a patient soon after labour with fish, chicken, or meat; the recommendation to insist on a woman nursing her child for at least the first four or six weeks, "even if the milk is deficient in quantity or poor in quality"; under these circumstances the child, in our experience, generally suffers, and is far better brought up by a wet-nurse. On the next page it is recommended that both breasts be used at each time of nursing. We think this is not good advice; the breasts are liable to be imperfectly emptied and the nursing powers to suffer. Moist dressing is recommended for the cord; it has, we think, been proved that dry treatment (the usual treatment) is best and safest. Again, four parts of water to one of condensed milk is too strong a mixture—at least to start with.

In the chapter on the Vomiting of Pregnancy we find among the exciting causes "inflammation of the cervix and grave displacement." We are sorry to find our author directing the student to the cervix for the cure of this complaint. As to the "grave displacement," we say the same; and we do not quite gather whether Dr. Galabin has really made up his mind on the latter point, for on p. 300 we read that retroversion of the gravid uterus is by far the gravest displacement of the pregnant uterus. This is no doubt true, and yet in this condition where is the aggravation of the vomiting? Is not this an absolute disproof of the hypothesis?

The subject of Eclampsia is always a difficulty. We do not yet know the pathology of the affection; but the student will, we fear, in the chapter devoted to it, be confused with details, and will miss the strong guidance in the right direction which he will look for. In the differential diagnosis we see nothing about epilepsy, from which eclampsia has not seldom to be distinguished. The author decries bleeding, which has, in our opinion, been too much neglected in suitable cases.

No part of a treatise on midwifery is of more importance than that concerning Placenta Prævia. The chapter on this subject in the volume before us is disappointing. We fail to gather the treatment recommended: on p. 382 we are advised to dilate the cervix with a sponge tent, then with hydrostatic dilators, then to puncture the membranes; on

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p. 384 to "puncture the membranes as soon as they can be reached"; on the same page, lower down, to dilate "until the os is large enough to allow either the passage of the fœtus or the performance of version, according to the circumstances of the case"; on the next page, "the performance of version has long been the traditional treatment for placenta prævia, and is still the most effectual means of finally checking the hæmorrhage." It is not, however, bipolar version, for we read below a caution against tearing the cervix by forcing in the *hand* too hastily. On p. 386, "to recapitulate," the following order of treatment is recommended—(1) Partial separation of the placenta; (2) if necessary, plugging; (3) leave the case to nature, or use forceps, or use version. What our author really means we cannot make out. We are also surprised to find no trace of the work done on the subject during the last three years, especially in Berlin, which has simplified the treatment to a very great extent. It would, in our opinion, have been worth all the discussion before us to teach the student plainly that in placenta prævia the great treatment is bipolar turning as soon as two fingers can be introduced, that the bleeding ceases on turning and before extraction, and that extraction can be generally omitted with advantage.

The chapters on Pelvic Deformities are excellent; great use is made of the modern teaching with regard to the "pressure of the femora," to which we shall refer, and which contributes greatly to the elucidation of the problems. We shall only point out one or two small matters that seem to us debatable. On p. 485, treating of the effects of pelvic contraction on labour, our author says, "The uterine wall being more stimulated than usual by the pressure of the fœtus, the pains quickly assume an expulsive character." This seems to us generally to depend on the nature of the contraction: in contraction of the brim the head is often held up so high that it cannot stimulate the lower uterine segment; in contraction of the outlet the head is able to press through on the lower uterine segment, and to stimulate it. The chances of success in inducing labour depend, in our experience, largely on this point. In a note on p. 490, it is said that Dr. Matthews Duncan found that the neck of the fœtus gave way under tension of 80 lb., or a little more. The correct weight is 100 lb., not 80 lb.

The chapter on the Forceps is excellent; it includes a plea for the vectis in face-to-pubes cases which sounds very reasonable. These are awkward cases, and treatment by forceps is often unsatisfactory. We do not fancy the pattern of forceps recommended by the author, which seems a compound of three or four different patterns; the flanges get in the way and are clumsy, and the digitations on the handles hurt the hands. On p. 557 we are told that "it is now the usual plan, even if straight forceps are used, not to pay much regard to the position of the head, but apply the blades at each side of the pelvis." No doubt it is the rule in long forceps cases to apply the blades to the sides of the pelvis; still, we think it most important that the position of the head should be borne in mind. The forceps nearly always lies a little obliquely, and its obliquity must either favour or impede the rotation of the head; it is therefore important that its obliquity should be in the right and not in the wrong direction. The explanation of the exertion of axis traction by ordinary long forceps (first recommended, as far as we remember, by Osiander) is good; in practice we have found the forceps apt to slip backwards if used in this way. In dealing with occipito-posterior cases, we think it is well to recommend traction with the forceps, while rotation is promoted by pressure on the anterior lying temporal region.

The chapter on Version is also very good. The author recommends seizing the knee in bipolar turning; we think this limits the operation. It is sometimes quite easy to turn through a cervix barely admitting two fingers, and through which a small fœtal foot passes with great difficulty; a cervix large enough for the knee to pass easily is already on the road to sufficient dilatation for ordinary internal version.

The chapter on Craniotomy &c. is good. We cannot say the same for that on Cæsarean Section; the chapter might have been written three or four years ago, and before the description of any of the recent improvements by Sänger and others, which have raised grave doubts as to the inferiority of the old operation, if done with care and attention to minute details. This is an unaccountable omission in a book which generally bears the mark of good contemporary knowledge. Our author is apparently a sincere believer in the train of ills said by our transatlantic brethren to follow lacerations of the cervix; we confess we do not come across these cases.

Another chapter which we shall mention is that on Puerperal Fevers. This occupies nearly fifty pages, but is not, to our mind, successful. To begin with, our author's inferences are founded chiefly on "Collective Investigation Reports," which are quite unsuitable for settling questions of this nature. It is impossible to get unity; the information is largely founded on impressions, and those who remember the great difficulty attending the unravelling of even a single case of puerperal fever will, without in any way impugning the integrity of the informants, hesitate to accept the conclusions founded on evidence so multiform. We will put the main question in a nutshell. If the "autogenetic" form (so-called) is "much the more common" (p. 715), how is it that antiseptics have entirely put an end to epidemics of puerperal fever in lying-in hospitals. As regards scarlatina, we can only say that the believers in this as a great source of puerperal fever require so many variations as to rash, throat, and other ordinary symptoms, so many peculiarities as to incubation, to be believed by us. that we are entirely sceptical on the point. What we want is an accurate analysis of a series of cases of scarlet fever observed in lying-in hospitals. If these should show that scarlet fever is always scarlet fever, the whole theory of puerperal scarlatina would, in our opinion, become untenable. With regard to the question of abstention from practice after a case of puerperal fever, our author advises the practitioner to give up practice "for a time"—i.e., "at least a week"; if he has conveyed infection to another patient, then as long as two or three weeks. In a note on the same page (p. 737), however, he quotes a case of his own to prove the safety of attendance after careful disinfection. We agree with the note, and not with the advice given in the text. If our author abstains from practice according to his own advice (and the note seems to show that he does not), he is probably the only person in obstetric practice who does so. Time we believe to be no safeguard; careful disinfection we believe to be all-sufficient. To recommend abstention from practice is not only at variance with the facts of the case—it is, if anything, a mere concession to Mrs. Grundy, who is apt to demand more and more if unreasonable concessions are granted her. To abstain from practice without disinfection is useless; to disinfect *and* abstain is certainly unnecessary. In lying-in hospitals a separate room is recommended for each patient. We do not believe this would be of much use unless each patient has a separate nurse, and this is in most cases quite unnecessary. In a well-managed hospital no patient is ever infected from another. As regards treatment, our author rightly prefers the irrigator, which acts by gravitation, to the Higginson's syringe, which acts by intermittent squeezing; but we think the latter is preferable to the common syringe recommended (p. 742) as the second best. Nor need a Higginson's syringe, if well made and carefully used, carry air. We do not endorse the advice given on p. 743 to puncture distended coils of intestines.

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In the chapter on Phlegmasia Dolens the disease is described as probably of septic origin. This seems to us unlikely in the face of the almost certainly good prognosis of the complaint.

The proofs have clearly been revised with great care, and printer's errors are rare. We have noted a few of the more important clerical and grammatical mistakes: "Dolores cruentæ" (p. 154)—"dolor" is masculine; "pubes" (p. 44) is a singular and not a plural noun; "forceps" is a singular collective noun, and means a pair of tongs or pincers; "labiæ" (p. 654) should be "labia," from "labium" (singular); "weed" (p. 248)—an affection we do not believe in—should be spelt "weid"; "scarletina" (p. 349) is probably intentional, though peculiar—it occurs frequently, and is always spelt the same.

We have referred to two instances in which Dr. Galabin has missed good work recently published, but we must now refer to mistakes of another sort. In some instances the author has made serious omissions of reference. An instance of the kind occurs on p. 23, with regard to the explanation of pelvic deformities. In 1883 Dr. Champneys pointed out that the pressure of the femora was outwards; until that time it was believed to be inwards; this view, first brought out by Dr. Champneys, has changed our theories of the production of pelvic deformities. On the page of this work above mentioned, Dr. Champneys' ideas, and almost his words, are adopted, and the idea is used throughout to explain pelvic deformities, but without acknowledgment, although the names of other writers on the subject are mentioned. In justice to the propounder of this view, and as a guide to the reader, proper reference to the original source of it should have been made.

In conclusion, we may describe the book before us as the work of a first-rate mechanician and of an obstetric physician extremely well read in the literature of his subject; the exceptions above mentioned do not prove the contrary. The language is lucid and natural, and the best chapters are excellent; we have indicated them above. Our author is at his best when clearly elucidating a mechanical problem; as a strong and fearless guide to the student and practitioner in the ethics of daily practice he is far less satisfactory. A teacher should be one to "strengthen the weak hands and confirm the feeble knees"; to brush away cobwebs relentlessly, and to refrain not from flinging a stone at quackery. Of these qualities we find no trace in the present work; with the addition of these qualities our author would have produced a work worthy to rank with the best English manuals of midwifery. Where these qualities are not required, the work is generally capital; where they are necessary, it disappoints us.

Paralysis from Peripheral Neuritis. By THOMAS BUZZARD, M.D., F.R.C.P. London: J. and A. Churchill. 1886.

THE profession will be thankful to Dr. Buzzard for issuing his Harveian Lectures in a separate form. The subject of peripheral neuritis is of such recent growth, and has such wide bearings in neurology, that the bulk of the profession has not yet had time to become acquainted with its teachings and bearings. The full title of Dr. Buzzard's lectures is: "Some Forms of Paralysis from Peripheral Neuritis—of Gouty, Alcoholic, Diphtheritic, and other origin." In these lectures the profession will find a very useful summary of our knowledge of the subject, together with accounts of many original cases that have come under the authors's cognisance.

Our Dress and our Food in relation to Health. By D. EDGAR FLINN, F.R.C.S. Dublin: M. H. Gill and Son. 1886.

This little book, popularly written and compiled from a series of lectures, contains a few clear simple hints as to the arrangement of dress and the *rationale* of food. It touches lightly on fashions past and present in regard to their bearing on the subject of health, and denounces emphatically the injurious systems of tight-lacing and high heels. The author recommends woollen materials for wear, on account of their warmth and porosity, favouring the escape of perspiration. Next in order he places cotton-cloth; and then silk, which has the advantage of lightness. The weight of the present style of dress is condemned, both from a hygienic and artistic point of view, since it does not allow the limbs free play. The hints on food, the process by which it is digested, and the degrees of nutrition contained respectively in various articles of diet, may be useful to the general public. The author insists on the necessity of "variety" for the maintenance of health.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

A LARGELY attended meeting of Fellows and Members was held on the 4th inst. at the College, for the purpose of considering the report of the Council, together with the resolutions, of which notice had been given on behalf of the Associations of Fellows and Members.

The PRESIDENT (Mr. W. S. Savory), in opening the proceedings, said the report that was in their hands contained so full a record of the Transactions of the Council for the year ending July last that he need not detain them by any additional remarks upon the subject. They would see that, in addition to the ordinary work of the year in all matters relating to the general conduct of the College, the time and attention of the Council had been largely occupied with two or three very important subjects. In the first place, there had been, and still existed, the great duty of making all necessary arrangements and appointments for the efficient working of the Examining Board under the Conjoint Scheme with the College of Physicians, and no doubt they had all looked with interest to the progress which the new Examination Hall was making towards completion. The new scheme was full of promise for the future. Then there was the exciting question whether any practicable and worthy plan could be devised by which the Colleges might be enabled to provide those who passed their examinations with degrees in Medicine and Surgery. (Cheers.) And, lastly, there were recent arrangements for widening or modifying conditions of admission to the Fellowship. There had been, and still was, abundant material for the work of the Council, and he was sure he might say it was with pleasure that the Council placed their report in the hands of the Fellows and Members.

Mr. TIMOTHY HOLMES then moved the first resolution:—"That in the opinion of this meeting it would conduce to the welfare of the Royal College of Surgeons, and would tend to promote the interests of medical polity and education, (1) if Members of the College were empowered to take part (separately or conjointly with the Fellows) in the election of members of the Council; (2) if Members of the College were eligible to sit in the Council, provided (*a*) that no Member of the College shall be entitled to vote till he have been such Member for a period of ten years, (*b*) that no Member of the College shall be eligible to sit in the Council till he have been such Member for a period of twenty years, and (*c*) that not more than one-fourth of the Council shall consist of Members of the College who are not also Fellows." He said it was with very great pleasure that he and all those to whom the report was addressed must acknowledge its courteous and conciliatory tone, and it was with still greater pleasure that they acknowledged the great progress which the College had made in coming forward—he hoped he might say annually—to meet the Members and Fellows in consultation. (Cheers.) There were several matters in which the business of the College had very considerably changed in the sense in which those who were acting with him desired that it should change, and, in one matter especially, to which he hoped he might refer without impertinence—he meant Mr. Savory's presence in the chair. (Cheers.) They felt that the practice which used to prevail of handing the presidency, as it were, round the council-table was one which diminished the dignity of the office, and was not

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favourable to the efficiency of the College. They were delighted to see that a change had been made in that routine, and that in the first instance the choice of re-election had fallen upon so worthy a representative of British surgery. (Cheers.) He observed by the report that the Council stated that on questions concerning the constitution of the College they would always be glad to have an opportunity, as far as practicable, of consulting the Fellows and Members. The idea of giving medical and surgical degrees by the diplomas of the united Colleges was a matter which touched the medical profession so very nearly that they had the strongest reason to thank the Council for their implied promise that the Fellows and Members would be consulted upon that subject before any definite action was taken. (Cheers.) This would apply still more strongly to the proposition for the inclusion of the Society of Apothecaries in the Conjoint Scheme. On these matters the Council had by implication promised to consult what he was going to call their constituency—what he hoped would be their constituency. (Cheers.) For this they had nothing but thanks to give, and to express the hope that the Council would persevere in the course of reform which for a long time appeared to be impossible. The report also stated that "the Council are not only the representatives of the Fellows, and have not only responsibilities to the Fellows and Members, but the College holds an important relation with, and its Council have grave responsibilities to, the whole profession, the general public, and the State." Those words could not by any possibility be improved upon. How had its duties to the profession been discharged? He had never been one of those who had decried the management of the Colleges. As far as he had seen they had been anxious to do their duty; with respect to the examinations especially, their attention never flagged, and they had been anxious to make them, if possible, more practical in every way. At the same time, it could not be denied that the system of examinations which the College had instituted, and were now administering, was one which pressed hardly upon the student and upon the medical practitioner (cheers): on the student in that much of his time was absorbed in learning what he afterwards was compelled to forget (cheers), that a large period of his study was not given up to the practical study of disease (hear, hear), and that his toil was very frequently rewarded, however industrious he might have been, by frequent rejection and mortification at the last; and on the practitioners because they were mortified by the ill-success of their sons, and mulcted in pocket considerably by the amount of time which all this very frequently involved. (Hear, hear.) This was a matter which required the attention of the College. He did not think the Council could be altogether satisfied with it, but they had worked hard at the matter, and had done what they considered to be their best. He only regretted that the examinations appeared to have a tendency to become more and more complicated and less and less practical. (Cheers.) But when he turned to other matters connected with the profession, he could not congratulate the Colleges at all either on their success or on their endeavours. When they saw that medical men, trying to earn their livelihood by honest practice, and to whom quackery and cheating were odious, received from great institutions like that College and the College of Physicians no protection of any kind (loud cheers), they could not help thinking that a little more knowledge of, and sympathy with, the circumstances of the ordinary members of the profession would do a very great deal of good to the Council of that College; and one reason for asking that the Council would move the Crown to admit within their council-chamber some of the Members as distinguished from the Fellows was that it might be more in sympathy with the general body of the profession on matters of this kind. Then, turning to the duties that the College owed to the public, they had one matter for just pride, for in no part of the world were there such splendid monuments of the liberality of private individuals to the State and to the world as those contained within the College walls. The Hunterian Museum was a proud monument of what energy and liberality, continued over a series of generations, might do for the public and the profession. But leaving that, he was not aware what duties the College discharged to the public, and yet there were plenty of duties that it might discharge. (Hear, hear.) Was there, for instance, any public scandal, any public abuse, more gross than that of the hospitals of this country? Were there not, besides the great hospitals, which in themselves were not entirely free from abuses, a crowd of minor institutions which were really in no sense of the word public charities? (Hear, hear.) He believed that this matter was entirely a stranger to the deliberations of the Council, but it ought not to be. If the Council comprised members who knew more about these matters and suffered more by them, their action on this question would be very considerably stimulated; and for this, amongst other reasons, he should advocate the admission into the council-chamber of some of the Members. With regard to the duties which the College owed to the State, the State appeared to be considerably more content than he was at their neglect. He never observed while he was on the Council that the College was ever consulted on the subject of legislation, or that its opinion exercised more influence on the progress of legislation than that of far inferior bodies or of private individuals. He believed that the reason was because the College did not represent a large constituency (hear, hear); and if the Council were strengthened by having a great constituency anxious to connect themselves with it, he was quite sure that its influence upon the progress of legislation and on State questions would be infinitely extended. It was with a view of remedying these evils that he was anxious that the Council should take into mature consideration the admission of Members to a vote and seat in the Council. They were not foolish enough to suppose that any violent change ought to take place, but they were quite certain that it would give it immensely increased force with all the bodies to whom the report referred—viz., the profession, the public, and the State. The Council asked for a detailed plan, but the Fellows and Members were certainly not prepared to supply the details of the plan to persons who altogether repudiated the principle, and could only use the details for the purpose of obstructive criticism. At the same time, they were anxious to argue this matter as friends, and in the resolution had gone a little further than they need have done, for they had provided the heads of a scheme. In doing that he wished to correct an error that had appeared in the papers. They did not profess for a moment that these were the unanimous opinions of their two Associations. The Members were unanimous to a certain extent; they wished for more, but they were prepared to accept a representation on the Council in the proportion of one to four. But with respect to the admission of Members into the Council the Association of Fellows was not unanimous, for although the resolution was passed unanimously at the meeting of the Council of the Association the other day, that unanimity was only due to the fact that certain gentlemen who thought otherwise were absent. There was no doubt a minority of both Associations, who, though they would be perfectly willing to give the vote to Members, did not at present desire to see Members on the Council. It would be a matter of extreme interest to know in what way the opinion of the Fellows was divided on this subject, and he thought that that opinion could be much better obtained by the Council of the College than by any private association. The Council was pledged to obtain an alteration of its Charter in favour of Fellows who wished the privilege of voting by papers, but he should like to ask how they would meet a strenuous opposition on the part of Members who claimed similar privileges in their own College to those which had been conceded to them in the chief public body connected with the medical profession. (Cheers.) They were most anxious that these questions should not come before the public or public officials as matters of controversy, and that when the new Charter was applied for the whole body of the profession should say that they were satisfied with it. (Cheers.) But that could not be if there were really, as he believed there was, a determination on the part of the Members to have some voice in their own College, and if in spite of such an expression of determination the Council should still try to exclude them. (Cheers.)

Dr. DANFORD THOMAS said, on behalf of the Association of Members, he had much pleasure in seconding the resolution. Many of them were present last year when a similar resolution was carried by a large majority. This resolution, though modified in form, declared that the Members should take part in the election of the Council, and asserted as a principle that direct representation should follow. It was in accordance with the feelings of the Fellows, who in subcommittee and in the General Committee of their Association had agreed to support the Members in their just and natural aspirations to become more closely affiliated with the College of which they claimed to consider themselves an integral part. (Cheers.) They were Members not

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merely because they paid a certain sum of money and received, as suggested by some, a *quid pro quo* in the shape of a diploma, but after four or five years of continuous study and the passing of the required examinations they had become legally entitled to the Membership, and the Council had no option in the matter. Was it, then, unnatural or to be wondered at that, as properly constituted members of a corporate body, they should expect to take some part in its government, in its proceedings, and in the election of its Council? Hitherto the Council had not seen its way to accede to these laudable desires on the part of the Members. It had suggested, however, that it would be willing to consider any well-devised scheme adopted by a majority of the Fellows and Members. The resolutions now submitted were the result of many meetings and of joint considerations by the Fellows and Members in the only practical manner at their disposal; and although the Members had conceded much, and had departed from their original standpoint, they had done so in deference to the wishes and suggestions of the Fellows, and in order that they might approach the Council in a spirit of unity and accord. (Cheers.) He hoped that ere long the Council would be prepared to hold out the right hand of fellowship, and would be ready to believe that in keeping touch with the Members and affiliating them more closely to itself the status of the College would be greatly improved and the hands of the Council materially strengthened. (Cheers.) For example, by the assistance of its Fellows and Members, and their collected accumulated knowledge, the annual report which they were that day invited to consider might be expanded by the Council, and become an authoritative record of the art and science of surgery and its progress in every quarter of the globe—a document of real and scientific value. Again, they must not forget that the acceptance of their resolutions might be the commencement of a movement in the direction of converting the College from what it was at one time—a trade guild—into a recognised seat and centre of surgical science and learning for the whole profession. (Cheers.) Medical graduates of universities—he spoke more particularly of the Scotch, which were great licensing bodies—had always had some share in the management of their institutions as members of Council, but they were now engaged in seeking a much larger and more efficient control than they had hitherto enjoyed, and so strong was the public feeling on this question—that their claims were practicable and reasonable—that a Bill submitted to Parliament last session was to be presented again as a Government measure in the spring of the ensuing year. (Hear, hear.) In conclusion, he reminded the Council that the great bulk of the College income had been derived from the contributions of the Members (hear, hear), and that whatever greatness of reputation the College had attained, it had been built up not merely by the labours of the Council, valuable as they undoubtedly had been, but by the general support accorded to it by its Fellows and Members throughout the world. Through them it had obtained most of its wealth and most of its dignity, and all of its position and importance. In return for this the Members asked nothing more than that which Parliament had in its wisdom accorded to the profession at large—viz., "direct representation." (Cheers.)

Mr. JOHN ERIC ERICHSEN said he had heard with very great pleasure the very eloquent though somewhat discursive address with which they had been favoured by Mr. Holmes, and also to the essay delivered by Dr. Danford Thomas; but he must confess that he had failed to be convinced by the arguments brought forward by either gentleman that it would be advisable for the Council to adopt the resolution that had been proposed. The only arguments adduced by Mr. Holmes appeared to be two—one that by the admission of Members into the Council there would be a better guarantee that the Council would exercise more influence than it had hitherto done in the suppression of quackery, and the second that by the introduction of Members into the Council and giving Members the franchise the weight of the College in all affairs of state would be increased. (Cheers.) That might be so or not, but he altogether doubted it. Dr. Thomas referred to the custom of the Scotch universities, but in the Scotch universities the graduates had no voice in the election of the governing body. If any franchise were given to graduates at those universities, it would not be to those who passed the minimum qualifying examination—the Bachelorship, for instance,—but only to those who had passed the fullest examination to which the graduates could be submitted. If they were to be guided by custom, he might say that, so far as he knew, there was not a single collegiate or academic body in the country in which men who had merely passed the minimum qualification had the franchise for a seat upon the governing body. (A voice: "London University—how about the Convocation?") They had no seat upon the governing body—not upon the Senate. But this was not a matter on which they need appeal to custom, or on which there was any necessity for declamation; it was purely a matter of argument. He would ask, in the first place, did the Members of the College demand this as a right, or did they ask that it should be accorded as a matter of grace by the Council? ("As a right!") What right had the Members to ask it? A right must be founded on one of two bases: it must be either for the redress of a wrong, the restitution of some privilege that had been withdrawn or was unfairly witheld; or it must be in virtue of some inherent property in the Membership that gave that right. Had any privilege ever been withdrawn from the Members of that College? ("Yes.") They had never possessed the franchise. Before the institution of the Fellowship the Council was self-elected; it was practically elected by the Court of Examiners. In order to do away with that abuse, that great surgeon and very wise demonstrator, Sir Benjamin Brodie, instituted the Fellowship, with the view of widening the electoral basis, and giving the franchise into the hands of men who were *bonâ-fide* surgeons of repute and position. Since then, the franchise for a seat upon the Council had been in the hands of the Fellows; but the Members had no electoral power whatever—no right therefore had been withdrawn from them. With regard to the Membership possessing any inherent power by which they had, as it were, the right of the franchise, he would remind Members of a very eventful period in the history of each individual amongst them—that evening when they passed through the ordeal that enabled them to obtain the Membership, on which occasion an address was delivered to them by the President of the Court of Examiners. (Laughter.) That address probably went in at one ear and out of the other (laughter); it contained a definition of the privileges and immunities to be enjoyed by the possessors of that diploma, but not a single word was uttered which could lead them in any shape or way to expect that they would have the franchise of the College bestowed upon them. If, however, any Member desired the franchise and wished to get it, there was a ready means of doing so, and one of which many men who were engaged in practice availed themselves—namely, by taking the Fellowship. That door was open to every Member, and although there were only 1200 or 1300 Fellows, there was no reason why there should not be 12,000 or 13,000, if they chose to avail themselves of the privilege offered. If, however, they were to admit the Members on the same footing as the Fellows to the franchise, and to seats on the Council, what would happen? Many Members came up for the Fellowship not only on account of the scientific and professional distinction that it conferred, but also because it gave them the franchise, and because in their turn they had a right to count on a seat in the Council, and they might even aspire to the chair which their President so worthily filled. But if Members were admitted to all this, the Member who presented himself at that examination for the Fellowship and was rejected would nevertheless have exactly the same collegiate rights of franchise, and a seat upon the Council if he could obtain it, as his more successful competitor who passed creditably through the ordeal of examination. The whole thing would be an utter absurdity, and it would necessarily eventually lead to the extinction of the Fellowship. (No, no.) If this were not demanded as a right, and should be accorded as an act of grace, would it strengthen the Council of the College, or the College itself, in any way? What was the business of the College, and what were the functions of the Council? The business of the College was not political—they left that to an association; it was not ethical—they left that to the Medical Council; it was not commercial—they left that to anyone who chose to take it up. (Oh, oh!) The business of the College was twofold—it was educational and scientific. It was educational in this sense: it was the great examining body of the country, and through the medium of its examinations it controlled the education of the future surgeon. Who were the people who could do this most efficiently? They were certainly the men who had been the teachers in the medical schools throughout the country. Education was a business that had to be learnt as well as other matters, and no man could be a thorough

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examiner unless he had been a teacher for years. He would ask where did they find the teachers of those subjects with which alone the College concerned itself—anatomy, physiology, and surgery? They found them almost exclusively amongst the Fellows. With regard to the scientific aspect of affairs, which was the second great business of the College, the arrangement of its museum and its libraries and general scientific departments, he had no hesitation in saying that, with all respect to the great body of Members, they did not offer so good a body of scientific men as did the Fellows of the College. Therefore he did not see it was possible to strengthen the Council, so far as its scientific department was concerned, by the infusion of 25 per cent. of Members into that body. Take, for instance, the fellowship of the Royal Society as a measure of a certain amount of scientific status. They would find a very large number of Fellows of that Society upon the Council, and there would be no possibility of adding to the strength of a Council which comprised such men as Paget, Lister, Marshall, Hulke, and Johnson by the infusion of any number of Members outside. But if there were justice to be done to the Members in this matter, there was also some justice to be meted out to the Fellows. With regard to the Association of Fellows he knew nothing. He should like to know of how many Fellows it was composed, and what was its proportion to the great body of Fellows. This he might say, that, as far as the Fellows were concerned, they had a superior position derived from their superior professional and scientific status, gained by examination, gained by the evidence that they had given of superior knowledge and power of work or ability, whatever it might be; and they had, besides this, the position that was due to them in relation to the franchise and to the Council. If the number of Fellows upon the Council were diminished by one-fourth, they would *pro tanto* diminish the chance that every Fellow had of coming upon that Council; that would be simply robbing Peter to pay Paul. (Oh, oh!) They were taking something from the Fellows to give it to the Members. (Cries of "Time, time.") He must apologise for having detained the meeting so long, but it was a matter on which he felt very strongly, believing as he did that it would neither add to the dignity, the influence, or importance of the College in any way whatever to make any change in the present mode of election to the Council.

Mr. MARSHALL (Dover) said he had listened with great pleasure to the excellent speeches of the mover and seconder of the resolution, whose arguments entirely covered the subject. He would therefore appeal to the sense of justice, the good feeling, and the desire for conciliation, which he was sure must exist in the mind of every member of the Council. He hoped that the resolution would not only be passed by a large majority of the Members, but also by the wish and support of the Council. He was only speaking the feelings of the meeting when he said they would rather take it as a free gift from the Council than have it forced on by a majority. (Cheers.) He hoped the meeting would not be influenced by the speech just made by a gentleman whom they all honoured and venerated (cheers)—a gentleman of whom it was impossible to speak in too high terms. He was certainly surprised and grieved when he heard Mr. Erichsen make such a Conservative speech (laughter), when he remembered that not very long ago the same gentleman was the Liberal candidate for the University of Edinburgh. (Much laughter.)

Mr. ERICHSEN.—This is not a political body.

Mr. MARSHALL said he did not believe that such an anomalous state of things as the exclusion of the Members from participation in the government of the College could much longer exist. It might have been tolerated fifty or sixty years ago, but it could not be tolerated now. Whether the resolution was carried on the present occasion, or next month, or next year, it was only a question of time (Hear, hear), and on behalf of those who had initiated the movement he would declare that they intended to persevere until their efforts were crowned with success. (Cheers.)

Mr. RIVINGTON said it had been generally stated in influential quarters that the arguments adduced on the preceding occasion made a considerable impression on the usually impassive minds of the stationary element in the Council. That view was partly borne out by the very lengthened interval which had elapsed since the resolutions of the Fellows and Members were presented to the Council. He did not wish to strike any note of discord, but he thought that the reply had, after an interval of eleven months, been vouchsafed in a form which was scarcely polite to the Fellows and Members. This view was also borne out by the Fabian tactics which had been adopted, and also by the improved tone of the latest report. That report was bland and courteous, and was also in the highest degree encouraging, inasmuch as it contained in itself strong evidence of actual conversion (laughter), but unfortunately conversion or conviction was not always accompanied by a frank acknowledgment. The old proverb remained true that "a man convinced against his will was of the same opinion still." The Council actually invited the submission of a plan of representation of Members on the Council, and they promised faithfully to give to the plan the most careful consideration; but if they were not prepared to accept any such plan such an offer would be a mockery, and he could not believe that the Council would stoop to such an unworthy artifice. The only alternative to that interpretation was that the Council were in reality convinced of the political necessity of granting what the Members desired; but, being convinced against their will, they took care to affirm in the very forefront of the report that they were not convinced, as though they said, "We will do this obnoxious thing if sufficient pressure is brought to bear upon us." (Laughter.) Exclusive privileges were right and proper in certain cases when no injustice was done to others, and when policy and expediency were not opposed to their maintenance. The President and Members of the Council enjoyed the exclusive privileges of their office, but the exclusive privileges of a very small minority of a very large constituency were antagonistic to the spirit of the nineteenth century, and it was chimerical to hope to maintain them. The least satisfactory feature of the reply of the Council was the contrast presented between the jealous guardianship of every atom of political privilege, and the laxity in lowering or proposing to lower the academic status of the Fellowship by admitting Members at a comparatively early age, either with a modified examination or without any examination at all. It was, however, utterly futile to expect any solution of this question from any kind of proposition concerning the Fellowship. There were at present only 1124 Fellows, but if the number were increased to 3000 there would still be 15,000 Members who would go on demanding enfranchisement. He believed the Members would be satisfied with having four representatives on the Council, and it would not be necessary to take away one single representative of the Fellows. If the Council continued to say, in their highest and loftiest manner, "We are not convinced of the necessity of this change, but we will consider any plan submitted to us, and at the same time reserve to ourselves the right not only to modify details but also to reject the principle," then the Members of the College would be seriously wanting in ordinary acumen and business capacity if they receded one inch from the position they had already taken up. (Cheers.) He heartily agreed with the proposition that "it would conduce to the welfare of the Royal College of Surgeons, and would tend to promote the interests of medical polity and education," if the Members of the College were empowered to take part separately in the election of the Council, and if they were eligible to sit in the Council, "provided that no Member of the College shall be entitled to vote till he have been such Member for a period of ten years." He would however, prefer that the number of years should be determined in the Committee which was to be appointed by the Council and the Associations to consider the question. (Laughter.) With regard to the proposal that no Member should be eligible to sit in the Council "till he have been such Member for a period of twenty years," he considered ten of fifteen years would be quite sufficient. Let the present constitution of the College continue pretty much as it was, but let the duration of councillors be reduced from eight to five years, and let a few Members' representatives be placed on the Council. He strongly objected to the Associations of Fellows and Members. They were necessary evils at the present time, but they were opposing the Council, and it was not desirable that such outside bodies should exist. They ought to be brought within the pale of the constitution. (Cheers.) The Members might be formed into an association called a Convocation, and the Convocation might meet annually, and every member of Convocation might have the right to vote in the election of members of Council. At the University of London any graduate was eligible to vote after he had been a graduate for two years. If the limit were placed at three years, that would be a sufficient interval to find out what the Members were made of, whether they

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advertised or not. (Laughter.) The restriction of twenty years simply limited the area of choice. If the members of the Council were so exalted that they could not bear the idea of any Member of the College sitting betwixt the light and their nobility, it would be easy to make all representatives of Members sitting on the Council Fellows *ipso facto*. The exclusion of Members from all control over the affairs of the College, from all voice in the framing of educational regulations and regulations for examination, and from all control over the expenditure of money which they had themselves contributed towards the funds of the College, was essentially unjust. (Cheers.) It was unjust by reason of the numbers of the Members, by reason of their position in the College as actual Members of the Corporation, by reason of their social standing, and by reason of their liberal education. This exclusion could be remedied without doing harm to anyone, and also without infringing in any way on the present rights of the Fellows. The admission of Members to the Council would give a needed variety to the Council, and vary the monotonous type of the hospital surgeon. (Laughter.) Surely when the right of direct representation on the Medical Council had been given, it was anomalous that it should not be given on the Council of the College. The concession asked for was in accordance with the spirit of the age, which many of the leaders of the profession had failed to recognise. At present, the Council were blind, and could not read the signs of the times. The spirit of the age also loudly called for facilities for granting degrees for London students. The schools of London were languishing, almost decaying, and the tide of students was flowing rapidly northwards to the schools of the Scotch universities on account of the passive attitude of the University of London, which would not apply any effectual remedy. The same influence appeared to predominate at the Council of the University as at the Council of the College, only there was a very remarkable difference; for while at the University it was considered absolutely necessary to maintain the standard of education at the highest point, at the College it was actually proposed to confer the Fellowship without any examination in anatomy and physiology. (Laughter.) He believed that representatives of Members, when on the Council, would have the courage of their opinions. Fellows came forward and posed as great reformers and roared loudly as lions, but as soon as they reached the desired haven they cooed as gently as sucking-doves. (Laughter.) The representatives of Members would not be exposed to those influences which seemed to overcome the reforming feelings of the Fellows; they would not be candidates for seats on the Board of Examiners; they would have nothing to look for from their seat on the Council, and therefore they would not listen to the voice of the charmer, charmed he never so seductively or so well. A great question had sprung up in connexion with the Medical Act of 1886, in which the Members of the College were specially interested. He referred to the refusal to admit the Society of Apothecaries into any conjoint scheme in London. The result of such a refusal would be a second examining board in London. (Cries of "Time, time.")

The PRESIDENT said there was a distinct motion before the meeting, and he hoped that Mr. Rivington would confine his remarks to it.

Mr. RIVINGTON said a second examining board in London would be an intolerable evil. If representatives of the Members of the College were placed on the Council, they might be trusted to take just views of that and other important questions. (Cries of "Time, time.")

The PRESIDENT said he should really have to interpose with authority if Mr. Rivington did not pay attention to the appeals that were made to him. He had repeatedly wandered from the question before the meeting.

Mr. RIVINGTON said the representatives of the Members would exercise a vigilant supervision over the expenditure, and he did not believe they would endanger the existence of the College or run any risk of forfeiting the Charter by holding property in excess of the provisions of the Charter. There was also the question of the large expenditure on the Board of Examiners. (Renewed cries of "Time, time.") He considered that the only just principle to the appointment of examiners would be that every medical school should be represented upon the Council as examiners. There was one other point which he desired to refer to. (Prolonged cries of "Time, time.") The medical profession craved for unity. (A voice: "And for brevity." Much laughter.) It did not seek divided authorities and internecine conflicts. The Council of the College alone stood in the way of the realisation of the wishes and aspirations of the Members.

The cries of "Time, time," "Sit down," "Vote," "Order, order," &c., continued for some minutes, during which Mr. Rivington repeatedly commenced a sentence, but was never permitted to finish it.

The PRESIDENT said that if Mr. Rivington did not accede to the appeals to finish his speech at once, he should put it to the meeting as a distinct question whether he should be further heard.

Mr. Rivington thereupon sat down.

Mr. R. PARAMORE attempted to continue the discussion, but the cries of "Vote, vote" were so vigorous that he found it impossible to proceed.

The resolution was then put and carried, with a very few dissentients.

Dr. RALPH GOODING proposed: "That, with a view to give effect to the recommendation in the foregoing resolution, the Council is hereby respectfully requested to empower certain members of its body to meet and confer with representatives of the Association of Fellows and of the Association of Members together, with, if necessary, an equal number of Fellows and Members who may not belong to either of the Associations, to be selected in any manner satisfactory to the Council." He said the resolution followed as a natural sequence to those sentiments which the meeting had just endorsed. Enough had already been said as to the many virtues, the intelligence, and the strong claims to direct representation possessed by those who had honourably gained the station of Membership of the College. He would, however, remind Mr. Erichsen that there was a distinct precedent for granting the privileges which had been so long denied. At the London University graduates of a certain standing were endowed with the highest privileges and the widest powers that the University could bestow. They were eligible as members of Convocation, and also for election to the Senate. Besides this, they could all record their vote for a representative in the Imperial Parliament. When he reminded the meeting that such names as James Paget, William Jenner, William Gull, George Burrows, George Johnson, Richard Quain, and Samuel Wilks were indelibly inscribed on the senatorial roll-call, he would ask his brother practitioners whether they considered that the trust reposed in those graduates had been in any way abused. No less than one-fourth of the members of the Council of the College were graduates of the London University, and would therefore endorse the observations he had made. The Council in the report fully recognised the gravity of the question, but complained that they had no detailed plan before them embodying the desired changes; but no such plan could ever be produced until some form of *rapprochement* were arrived at between the several parties concerned. He therefore hoped that his resolution would be agreed to, and if the governing body would carry out its principle, results would be produced largely conducive to the prosperity and future progress of the corporation. The Members did not crave for abstruse lectureships or dignified professorial chairs; they did not wish to diminish the privileges of the Fellows, or in any way to impair their *status;* on the contrary, they pledged themselves to resist any proposal which might in any way detract from the value of that distinction.

Mr. JOHN TWEEDY seconded the resolution. He said he sincerely felt that if the resolution were carried into effect great good would result to the College, and great honour and dignity to the profession. For many years it was his duty to be in close relationship with members of the Council, and he could conscientiously say that he believed every one of them was earnestly anxious to do what he considered best for the College; but they thought rather too much of the exclusive interests of the College, and not quite enough of the interests of the Fellows and Members. He was once on a deputation from the Association of Fellows to the Council, and he was gratified to find that some result had ensued. If a conference were held between the various sections of the Fellows, Members, and members of Council, an amicable understanding would soon be arrived at. There would be a ready adjustment of all differences, and from that time forward the College would go on with increasing prosperity. It was very important that these rudimentary questions of the constitution should be settled, so that other and more dignified matters might be grappled with, such as making the College not merely an examining body, but a great academy

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for surgical research and the advance of surgical science. He hoped that the Council would see its way to receive the resolution in a friendly and amicable spirit. (Cheers.)

The resolution was then carried *nem. con.*

Dr. F. H. ALDERSON proposed: "That with reference to the report from Mr. John Marshall on page 15 of the Council's report, this meeting requests the Council of the College to consider the advisability of accepting an arrangement for combination with the Apothecaries' Society, as well as the College of Physicians, for the purposes of conjoint examinations for medical diplomas in England and Wales under the Medical Act of 1886, and to report thereon at a future meeting of Fellows and Members to be summoned for the purpose at an early date." He said that the resolution dealt with a matter affecting every member of the College, the general public, and perhaps the very dignity of the College itself. It was a question upon which full information should be obtained before a decision was arrived at. The Council had very few opportunities of knowing the wants of the Members, how they were influenced by irregular practice, and how much they suffered from it. When this question was dealt with by the College in July last, and when Mr. Marshall decided that it was not for the advancement of the College to admit the Apothecaries' Hall to the conjoint scheme, matters were very different. At that time the Hall merely gave an examination in medicine; they had no right to give any degree in surgery; but since then the scene had shifted, much to the advancement and improvement of the Apothecaries' Hall. The College should now take advantage of this, accept things as they are, and recognise that it was advisable to consider whether the Hall should be admitted to the Conjoint Scheme. At present no man had a right to call himself a surgeon unless he had a diploma of the College, but if the Apothecaries' Hall were made an independent board of examiners they would confer a diploma that would give the right to anyone having their licence to call himself a surgeon. That would be detrimental to the interests of the College and to the public interest, as it would introduce an inferior class of practitioners to compete with the Members, not only on equal terms, but perhaps on superior terms, for it was mooted that if the Hall were not permitted to enter into combination with the Colleges of Surgeons and Physicians they would look elsewhere, to a university—Durham, perhaps,—and make arrangements by which their licentiates could obtain a degree, and have a right to call themselves "Doctors." The College must therefore take care that no single corporation should confer what might be called an inferior qualification, or certainly at an inferior fee. If this were not seen to, the general public as well as the Members of the College would suffer. The Government had decided that the Apothecaries' Hall should not be crushed out, that any body examining in medicine and midwifery should also examine in surgery, and so be enabled to give a complete diploma. Since the Act was passed a change had come over medical politics, and what was desirable a few months ago might be far from desirable now. A man, and certainly a Council, had a right to go with the times; they might change their opinions, and no doubt they would give the Members an opportunity of becoming Fellows, which many of them, like himself, would appreciate. The alternative was to admit the Hall to the Conjoint Scheme, and then there would be one Examining Board in London, giving a thorough, complete, and full diploma. There was very great secrecy about the College of Physicians. He had never heard of meetings of their licentiates, such as there were at the College of Surgeons. The Council there appeared to sit in secret conclave, the licentiates knowing nothing about them; they were a very honourable and august body, but very secret, and for that reason the Hall should be admitted to the new scheme of medicine. No further opportunity might occur for fifty years. It was most important that the Council of the College of Surgeons should study the wishes of the Members, and proceed cautiously and deliberately to take this question into consideration.

Dr. BURGESS, in seconding the motion, said he was formerly an examiner at the Apothecaries' Hall, and knew something about the working of that institution, and the examination was as rigid and as good as any in the country. As regards the possibility of the Hall starting a separate examination, he thought they would do it, and, what was more, it would answer. He would strongly recommend the College not to burn their boats in too great a hurry, because they might want them to row back in when it was too late.

Dr. WICKHAM BARNES said he had had thirty-three years' experience in general practice, and knew a little of the requirements of the public and the feelings of a very large body of medical men; and, as the President's labours were directed to the interests of the public as well as to those of the patients, he felt that the expression of the opinion of the meeting would be gladly welcomed by the Council as a guide to their future deliberations. Everyone admitted the valuable services of the Society of Apothecaries, and therefore it should have the honour which was justly due to it. What would be regarded by the uninitiated as a slur should not be cast upon a highly respected body of men throughout the country who held the licences of the Society.

The resolution was carried *nem. con.*

Mr. WILLETT (in the absence of Mr. Paul Swain) moved: "That, in the opinion of this meeting, the method recommended by the Council for widening the basis upon which the Fellowship is obtained tends to lower the academic status of that diploma, and, in the interest of surgical education, is not advisable." He did so, he said, rather by way of protest. There were already three grades of Fellowship, and the Council had proposed three or four more. There was therefore great scope for discussion, but he would not prolong the meeting by any further remarks.

Mr. RICHARD DAVY seconded the motion.

Mr. W. STEEL moved as an amendment that before the word "method" the word "first" should be inserted, as some Members disapproved of the one, but could hardly say they disapproved of the other.

Mr. ASHTON ELLIS seconded the amendment, which was put to the meeting, when twenty-four hands were held up in its favour, and the same number against it.

Mr. STEEL said he thought the amendment had not been understood.

The PRESIDENT thereupon again put it, when it was supported by 38 to 34, and subsequently carried as a substantive motion by 48 against a very few.

A vote of thanks to the President concluded the proceedings.

IRISH MEDICAL SCHOOLS AND GRADUATES' ASSOCIATION.

THE autumn meeting of the above Association (which now includes 423 members) was held at 49, Berners-street, London, on Thursday, the 4th inst., the President, Dr. H. Macnaughton Jones, F.R.C.S.I., in the chair. The members and their friends, to the number of fifty-five, dined together the same evening at the Café Royal, Regent-street, the President in the chair. Among the guests present were W. Howard Russell, Esq., LL.D., Dr. Withers Moore, Professor Michael Foster, and several colonial physicians, including Drs. J. T. Chapman and G. A. Syme. Among the members present were Sir Thomas Crawford, K.C.B. (President-elect of the Association); Professor Gerald Yeo (Chairman of the Council); Professor Alex. Macalister, F.R.S. (Cambridge); Inspector-General J. N. Dick, R.N.; Deputy Inspector-General W. H. Lloyd, R.N.; Deputy Surgeon-General N. Ffolliott; Brigade-Surgeon G. C. Gribbon,; Surgeon-Major E. A. H. Roe; and Dr. J. Stewart (Hon. Secretary).

After the usual loyal and patriotic toasts had been duly honoured and responded to severally by Dr. W. Howard Russell, Professor Michael Foster, Professor Gerald Yeo, Sir Thomas Crawford, and Dr. Dick, Dr. Withers Moore proposed the toast of the evening, "Success to the Irish Medical Schools and Graduates' Association," coupling therewith the name of the President. In reply, Dr. Jones spoke of the rapid growth of the Association, opining that their present number, though large, could only be considered the nucleus of future greatness. The toast of "The Irish Medical Schools" was proposed by Professor Alexander Macalister. Dr. Dolan, of Halifax, who had been adopted as one of the candidates recommended by the Association for "Direct Representation," replied, and a most agreeable evening closed with music and recitations by the members.

ON the 3rd ult. a meeting was held at Chester to consider the desirability of presenting a testimonial to Dr. Waters, of that city. It was decided that the presentation should take the form of a portrait of the recipient, and subscriptions are now being received for the purpose

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THE LANCET.

LONDON: SATURDAY, NOVEMBER 13, 1886.

ONE of the most obvious results of the general meetings at the College of Surgeons, now becoming an annual custom, is the improved tone in which the discussions are carried on. When we look back to the indecorous conduct which characterised one or two of the earlier meetings, the absence of any concerted plan of action, and the quality of the speakers, we are struck with the great improvement which has been made in all these respects, and congratulate the Fellows and Members most heartily. We can only hope that they will continue their deliberations in the same spirit of moderation, notwithstanding the little sympathy they meet with at head-quarters. Yet, notwithstanding this apparent want of sympathy, there is abundant evidence in the reports which the Council presented to them at the meeting that some of their representations are being acted upon. And, as Mr. HOLMES happily pointed out, the President himself (Mr. SAVORY) is holding office during two consecutive years, thus breaking away from the tradition and custom of handing the presidency round the council-table. We agree with Mr. HOLMES in thinking that the dignity of the office will be enhanced, and that this change from routine will be favourable to the efficiency of the College. Further evidence of conciliation is to be found in the statement of the Council that they are quite prepared to give careful attention to any jointly-authorised plan by means of which a share of representation in or upon the Council may be given to the Members of the College. It is significant, too, that among the members of Council who supported the President at the general meeting last week was a well-known and highly-esteemed general practitioner, the first who has been avowedly elected as such.

Most important of all, however, is the absence of any organised opposition to the proposals for reform which were presented as the joint recommendations of the Associations of Fellows and of Members. Nor is this all; there is no real personal opposition. At the meeting in 1885 the only spokesman in favour of the *status quo* was Mr. BRUDENELL CARTER, while at this year's meeting Mr. ERICHSEN stood alone as champion of the Council. We do not know whether these gentlemen spoke on behalf of the Council, but whether or no, neither of them adduced a single argument which will hold water. Mr. ERICHSEN'S contention was weak and illogical, and his arguments against the desired reforms were still further weakened by the known liberality of his political views, as recently enunciated in Edinburgh. Moreover, Mr. ERICHSEN has hitherto been regarded, and has always acted, as a bold but careful reformer. We were therefore quite unprepared for such a conservative speech, and still more for such an illogical one as that made by Mr. ERICHSEN at the College of Surgeons. His argument that there is not a single collegiate or academic body in this country in which men who had merely passed the minimum qualifying examination had the franchise or a seat upon the governing body was met by a direct negative, for it was stated that *every* graduate at the University of London of two years' standing was eligible to vote and even to sit on the Senate if his fellow-graduates chose to elect him thereto. When Mr. ERICHSEN inquired whether the Members demanded these changes "as a right or as a matter of grace," the meeting loudly proclaimed "As a right." He then said, "A right must originate either in the redress of a wrong, the restitution of a privilege withdrawn or unfairly withheld, or it must be in virtue of their most inherent property in the Membership." Strangely enough, it is not on *one* but on *all* these grounds that Members now seek for the full franchise, and these are just the grounds on which they claim it. Mr. ERICHSEN, as a past president of the College, must know very well that formerly Members of the College were eligible for the Council and for the highest offices, and that they were deprived of these privileges by the institution of the Fellowship. The wholesale election in 1843 of some 250 of the Members to the Fellowship silenced opposition for the moment, and though it gave great offence to the Members at large, matters were allowed to remain as they were. As to whether Membership of the College ever implied an inherent right to the franchise, we would ask, "What is 'the fundamental principle of *corporation*,' and why was the term Member selected in preference to Licentiate?"

Nor was Mr. ERICHSEN more happy or more logical in supporting the Council in their refusal to grant the wished-for changes "as an act of grace." He questioned whether such a step, "as an act of grace," would strengthen the Council or the College in any way. The business of the College, he said, was not political; it was not ethical; it was not commercial; but was educational and scientific; and he contended that the men who could most efficiently control education and examinations were those who had been teachers. Surely such an argument is radically unsound, unless the chief object of the Council is to make teachers. But surgeons have other purposes to serve: they have to watch over the health of the State, and education and examinations alike must be made to subserve this great purpose. It cannot be doubted that the Council of the College will be strengthened, in the best sense of the word, by the admission of men practically acquainted with the needs of the State, and with the requirements, as to education and general attainments, of those who go forth as general practitioners. As a politician Mr. ERICHSEN will look at all these matters from that standpoint, and will not be surprised that we have ventured to criticise him somewhat freely.

Mr. HOLMES' speech in favour of the advocated reforms was a model of careful reasoning; when it has been circulated and carefully studied, it cannot fail to exercise considerable influence upon any waverers that may exist among the Fellows. Mr. HOLMES speaks with the authority of a Fellow and a past member of Council, and when he urges that it will tend to promote the interests of medical polity and education if Members are empowered, under certain circumstances, to take part in College management, we may feel quite sure that

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success will soon crown the efforts they are making to acquire this privilege. As his arguments will be found fully reported elsewhere, and as we have so often previously placed similar ones before our readers, nothing further need be said beyond an expression of thanks to this gentleman for his powerful advocacy.

Mr. RIVINGTON (to whose letter published in another column we would direct attention), we cannot help thinking, marred an otherwise powerful speech, also in favour of reform, by the introduction of irrelevant matter and a little too much cynicism; and able as were the arguments they lost force by reason of their great length, for "brevity is the soul of wit." We differ from Mr. RIVINGTON on the question of the standing necessary to qualify for a vote and a seat in the Council, and think the Associations have done well in fixing the respective limits at ten and twenty years. A man can get the Membership of the College at twenty-one years, and could thus vote at thirty-one years, and sit in the Council at forty-one years of age. Considering the importance of the business of the College, it is well that a Member should have attained years of discretion before he is allowed to exercise his voting privilege, and still more before he is considered eligible to sit on the Council. The intervals will afford him leisure to work up the past history of his College, and to make himself thoroughly acquainted with the questions to be decided.

A resolution was also submitted and carried, praying the Council to empower certain members of their body to meet and confer with representatives of the two Associations and with an equal number of independent Fellows and Members to be selected by the Council. Such a conference will in all probability take place, for after their expressed readiness to consider any detailed plan duly authorised by the two bodies, the Council will hardly refuse such a natural mode of arriving at a solution of the questions in dispute. Mr. HOLMES expressed a hope that the Council might see their way to obtaining a distinct vote of the Fellows; it would be little trouble or expense to the Council, with all the machinery they possess, but a great expense and trouble to any private association. Moreover the result would be more official, and therefore more authoritative.

We last week referred to the future of the Society of Apothecaries, another subject that was touched on at the general meeting. The failure to secure the much-needed one qualification for England is standing proof of the small political influence which even the united Colleges possess. This is due largely to the want of constituents ready to help them when help is needed. It is to be hoped that the Council of the College of Surgeons will no longer resist the reasonable demands of its Fellows and Members, but will, on the contrary, take up and direct a movement which otherwise will assuredly prove too strong for opposition.

So uniformly has the analytical method been adopted, and so persistently has that line of investigation been pursued by the workers in almost every branch of science during the last half century, that it is quite refreshing to find a writer who has the spirit—we had almost said the originality—to employ, or even to drift into using, the synthetical method in the discussion of any subject in science. This fact alone would give a peculiar interest to the paper by Mr. FINCKS in the current number of the *Contemporary Review* on "The Gastronomic Value of Odours." It is the author's opinion that instead of multiplying the varieties of function, such as those of taste and smell, and separating these from what is called a general sensation, we may with advantage regard the differences which are now recognised as susceptible of being explained in a way to simplify the study of sensation, and with certain practical consequences and results. We are not, indeed, sure that Mr. FINCKS is himself aware of the value of the line of reasoning he has adopted, for synthesis may be the very last object at which his effort is aimed. Thus we find him saying: "The pungent quality of mustard, the fiery quality of alcohol and ginger, and the cool sensation in the mouth after eating peppermint, are due to the nerves of touch and temperature, which are commonly classed as one sense, though they are quite as distinct sensations as sight and hearing, or taste and smell." Nevertheless, he *is* synthetical, for he proceeds to argue: "So distinct are they that, whereas it is probable that the sense of sight is a modification or development from the sense of temperature, being an adaptation to faster ether waves; the sense of touch, whose function is the perception of solids, gave rise in successive degrees of refinement to hearing, for the perception of air-waves; to taste for the discernment of liquid qualities; and to smell for gaseous qualities." Presuming it must be supposed that by "liquid qualities" and "gaseous qualities" Mr. FINCKS means the qualities of liquids and gases respectively, it is easy to see that by following out the line of argument suggested, either intentionally or unwittingly, the reader, after losing himself in a maze of devious sense paths, is led back to first principles, and finds that in the excursion he has become convinced that the so-called senses are only so many means of bringing the organic consciousness to bear on the physical environment, and that the divers apparatus employed for this purpose are really modifications of one fundamental instrument by which the special qualities of bodies are enabled to impress the nerve centres within us. Sifted down to their ultimate elements—if we may so express our idea—the impressions thus produced or elicited or received are no more than positive, negative, or comparative records of vibration, either communicated by intermediate ether waves or directly by what we call contact, although, strictly speaking, there is no such thing as actual contact throughout the physical environment. Practically, it amounts to this: sensation is a process which may be illustrated by the action of the phonograph, which records every vibration into which its drum is thrown. The difference between sound and sight is simply the difference between one set of vibrations and another. The difference between heat and cold is the difference between vibration so rapid as to produce at one stage boiling, at another vaporisation, and vibration so slow as to cause, first, partial "congelation," and then actual freezing, with assumption of the solid form, with what we term rigid molecules, probably the erroneous conception of an incomplete idea. It is easy to see how this hypothesis of the unity of the several impressions, so far as their essential nature is concerned, must broaden

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out into a theory which will cover the whole system of the special senses, and include every variety of sensation produced.

The main purpose of Mr. FINCK's paper is to claim for the sense of smell that it constitutes the major part of the sense of taste, and that, in point of fact, we appreciate odours when we think we are tasting. There is much to be said for this view, and we incline to the opinion that the author will carry most intelligent readers with him. The paper may be studied with interest for its own sake, but it is rather for the sake of the principles involved in the argument than for the special doctrine taught in this paper that we dwell on it. The gossiping remarks about the effect of odours in eliciting or stimulating appetite are interesting in themselves, but they are also valuable as suggesting the consideration that one so-called sense may be excited by, and through, another. It is true that the odour of a well-cooked dinner elicits a desire to taste it; but it is not less true that the sight of it does the same, and if the sense of smell is essential to taste, so also is the sense of sight essential. Although the blind develop touch and some other of the perceptive faculties to a degree of acuteness which in some measure compensates for their want of sight, in the absence of this compensation, as in cases of sudden blindness, when there is not time for the special development of other senses, the sense of taste, and often that of smell also, will be found impaired. A familiar experiment that of attempting to discriminate between the flavour of different sorts of wine with the eyes blindfolded, or to determine whether a pipe or a cigar which the person blindfolded is smoking remains alight, will suffice to illustrate the very close connexion which subsists between sight and the other senses. Each and all are intimately related, and we doubt whether the connexion between any two of these special functions is actually closer than that which subsists between the whole number. In short, we incline to the opinion that Mr. FINCKS has simply expounded the truth with regard to the mutual helpfulness and interdependence of two of the senses while contending that smell is the complement, or a component part, of taste. If he will pursue his investigations a little further, he will find that all five or six of the so-called senses may be shown to be closely connected as faculties of perception, and this is simply and solely due to the fact that they are only special adaptations of the initial function of cognisance, which makes every variety of living organism struggle to bring itself into relation with the outer world by the development of special organs of perception according to its particular needs.

A SUBJECT of much importance as affecting the welfare of the sick poor, has been brought before the guardians of the Whitechapel Union by their clerk, Mr. W. VALLANCE. In a very thoughtful memorandum which he has prepared for their consideration, he discusses the possibility of improving the present form of medical administration of the Baker's-row Infirmary, and points out the difficulties attendant upon, and the advantages which would accrue from, a modification of existing arrangements. This question is not of mere local significance.

It will be recollected that, as the outcome of a LANCET Commission, the sick poor were removed from the workhouses and placed together in separate institutions, where better opportunity was given for their proper care and treatment. The chief officer in these infirmaries is the medical superintendent, who is aided in the performance of his duties by one or more assistant medical officers; these duties include not only the medical treatment of the patients, but also a considerable share in the administration of the institution. A large number of patients are persons suffering from chronic disease, together with others whose more temporary illness has compelled them to seek the aid of the State organisation which exists for the relief of the poor. The medical superintendent has thus to possess not only the knowledge of the physician, but has often to exercise the skill of the surgeon; it is true that purely surgical cases requiring operative assistance are willingly received into general hospitals, and in many cases the guardians encourage, and even pay for, their admission into these institutions; nevertheless, many surgical cases find their way into Poor-law infirmaries, and are solely dependent upon the medical superintendent for their chances of recovery. There is no doubt that the guardians and the poor have been well served, and that these offices are held by men who have amply justified the action of those who originated the scheme for the better treatment of the poor.

It has, however, been felt that a still better arrangement was possible; that by the appointment of visiting physicians and surgeons great professional advantages would result. The ailments of the patients would afford valuable material for study, the students who would accompany the visiting staff would derive benefit from the experience they would thus gain, whilst, to use Mr. VALLANCE's own words, "there would be an improved classification of the sick, a better record of cases, a higher standard of nursing, and increased means for the efficient training of pupil nurses." There is no question that these gains would follow the appointment of a competent visiting staff to Poor-law infirmaries. CHARCOT has already taught that much information is to be obtained from the study of chronic nervous diseases that are to be found in somewhat similar institutions of his own country; and there is in England an almost unlimited field for investigation of other chronic maladies for those who have the knowledge and patience to undertake it. The main difficulty which stands in the way of any change which would give opportunity for this work to be undertaken is the question of administration. Mr. VALLANCE assumes that the adoption of the proposed scheme would, among other alterations, necessitate the transfer of the control of the internal administration from the medical officer to the matron. With this opinion we are not in accord. It has in some general hospitals been found to work well for the medical officer to retain complete control over all questions of administration, and at the same time to recognise the visiting staff as those who should decide upon matters of treatment in any case in which they may think it desirable. They would be to him in the same position as are the guardians in all questions of administration. Nor would the governing body cease to maintain complete supremacy over all matters involving expenditure, but they would, where this related to medical treatment,

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have the additional advantage of the best professional advice.

Probably the best method would be that which would affiliate each of the workhouse infirmaries with one of the general hospitals possessing in connexion with it a medical school. Such an arrangement would be beneficial alike to the patients, to the guardians, and to the profession. Every additional means for the promotion of medical knowledge is an advantage to the whole community, and no other plan would bring to the service of the institution so much available experience and skill, or lead to the better utilisation of the material for study which it contains. But perhaps the greatest good which would result has not been fully seen. We have learned by degrees that the more general interest that is taken in public institutions and the more clearly every detail of their inner life is known, the more thorough is their administration, and the more substantial is the justice done between those who participate in their benefits and those who contribute to their maintenance. Such a result would not be the least of the good that would arise from the adoption by the metropolitan Poor-law authorities of the change indicated in Mr. VALLANCE'S memorandum.

ON or before the 15th inst. all registered practitioners will, or ought to, have received voting papers for the election of Direct Representatives on the General Medical Council, and these papers must be returned to the Registrars of the several Branch Councils on or before November 22nd. The time for action has therefore arrived. For many years the principle of direct representation of the profession on the Council has been discussed and agitated for, and it has been embodied in the recently enacted measure only as the outcome of persistent effort and unflinching pressure on the part of those who have been impressed with the need for bringing the Medical Council into more complete sympathy with the profession in general. The prolonged discussion has shown that even in the ranks of the profession itself and among its leaders there are those who oppose this direct representation, and to this fact in some measure it may be due that it has been adopted tentatively, and that only a very small proportion of the Council is to be thus chosen. Friends and foes alike are looking to this election with keen interest. How will the profession respond to the trust imposed in it? Will it show itself to be eager for the franchise, and possessed of an intelligent perception of its needs and interests? Or will it be indifferent to its newly acquired privilege, and leave the power it gives to be used by a few only, who shall wield it under the influence of personal feeling, rather than with a grave sense of responsibility? The answers to these questions will soon be given, and upon them depends in no small degree the future welfare of the profession. We have long contended for the right of direct representation, and have maintained against all opposition that the profession would use it worthily and well. The proof of this must now be given. This election will be important more as an indication of the spirit with which the profession views this great question, than as an indication of its preference for individuals. We would therefore urge all our readers, and all whom they may be able to influence, to see to it that a fitting response is made to the trust imposed on them. Let there be no delay, no indifference. But let every man at once fill up and sign his voting paper, and return it as promptly as possible. By a very large poll the profession will show that it has been in earnest in contending for direct representation, and that it does not look upon the opportunity of having a voice at the Council board as it never has been heard before as a matter of little moment. Our first motto should be "Vote early—vote all."

There is, however, another reason why *all* should vote. By so doing the profession will keep the election in *its own hands*, and will take it away from parties, cliques, caucuses, and wire-pullers. Should only a small proportion of voters exercise their right, it will of course be in the power of such men as we have indicated to rule the election, and in place of the voice of the profession being heard at the Council we may have the voice of a party or a clique. Let the profession demonstrate not only its desire and fitness for this franchise but its personal independence. The choice of members of the Council should be governed exclusively by considerations of their fitness for this special office. High professional status, former services to the profession, personal friendship, local connexion, and other similar considerations, should not of themselves influence the vote, but only such personal characteristics, habits of mind, and experience as fit a man to represent at the Council table the views, the aspirations, and the needs of the great body of the profession, who have hitherto been entirely unrepresented and very often misrepresented. We have already expressed the opinion that only those who have had long and daily experience in the labours of general practice can fairly represent the thousands of those who are devoting their lives to this honourable calling. And we are glad to see that this view is generally shared, for all the candidates are at special pains to show that they possess this first claim to the confidence and votes of the electors. Nor should assent to one or two "test" questions be allowed to have too much weight. No doubt it is important that the views of the profession on particular questions should be represented, but parliamentary and other elections demonstrate only too conclusively how unwise it is to make a ready assent to party shibboleths the high road to election. The personal and professional character of a man is of far more value than adhesion to one or two "cries" or "schemes."

Annotations.

"Ne quid nimis."

THE MEDICAL COUNCIL AND THE ELECTION.

IT seems a most unfortunate arrangement that, when all the energy of the staff of the office of the Medical Council is taxed to the utmost with the heavy work incidental to the election of direct representatives, the Medical Council should be about to meet to distract all concerned with other questions of difficulty and requiring undivided attention. Have our readers ever realised the amount of work involved in obtaining the accurate addresses of some 18,000 registered persons; then of sending to them voting papers without mistake somewhere between the 10th and 15th inst.—five days, be it noted, in which the officials must be preparing for the meeting of the General Medical Council; then of receiving

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and taking care of them for a period of seven days, up to the 22nd, after which no more can be received? Then will come the most serious work of all—the counting of the votes—which the profession will expect to be done with equal care and promptitude. Two days ought to be ample time to count the votes that will be received if the requisite staff of officials is at hand. The President of the Council is a merciful man. Has he really sufficiently considered the reasons for postponing the meeting of the Council in order that this laborious and responsible work of the profession and of the Council may be well done? We have said nothing about the question of scrutineers, having unbounded confidence in the fairness and judgment of the Medical Council. But it is right to ask that the question should be seriously considered by the Branch Council in view of the possibly jaded condition of officials; nor should the Council be above taking a hint from political authorities as to taking necessary securities in the matter. How many of the profession will vote? Nobody can say, and there is the greatest variation in the estimate. We advise all our readers to record and promptly return their votes according to their own judgment. A small vote would be condemnatory of the principle of direct representation. Moreover, let not voters be persuaded to indulge in mere personal preferences, as if voting were an act of private friendship, or as if giving one vote would exhaust a voter's duty. Three candidates have to be elected, and three votes should be given.

CLINICAL TEACHING IN THE UNIVERSITY OF GLASGOW.

THE Medical School of Glasgow is greatly exercised by a question raised and kept alive by Dr. McVail, in reference to the unhappy divorce between the splendid clinical resources of the Royal Infirmary and the teaching of the Glasgow University. This divorce is nothing less than a misfortune; unhappily it is one to which there are too many parallels in the profession. If the buildings and laboratories and apparatus of the Scotch universities could be brought to the London hospitals, what a perfect medical school we should have. If the Royal Infirmary of Glasgow, with its 530 beds, could be transferred to Edinburgh, what a lack it would supply, giving abundant material for dresserships, clerkships, surgical examinations and the like, which is not forthcoming now in any amount proportionate to the numbers of the school. This disproportion, indeed, is the principal defect of the Scotch universities, which the recent inquiry of the visitors of the General Medical Council disclosed. It is, however, a great one, and tells very seriously on the interests of medical students. It is an open secret that good Scotch students fare hardly at the examinations of the Royal College of Surgeons; and the explanation given is that they do not receive adequate clinical instruction. In the report of the visitors of Glasgow, strange to say, the same defect was noticed, in spite of a population of near half a million and a Royal Infirmary of over 500 beds, famous and classical as is the place where Sir Joseph Lister first enunciated and tried his antiseptic principles, which have so raised and revolutionised surgery. In the report, the visitors say the printed regulations of the Glasgow University are silent as to requiring candidates to have acted as dressers, clinical clerks, and obstetricians, nor could the visitors learn that any such requirements exist. Nor was the defence of the Medical Faculty to this objection convincing. Dr. McVail, in the Glasgow University Council proposed a bold remedy for this defect in the Glasgow University—viz., that the Royal Infirmary School should be incorporated into a college of the University, and all its teachers be placed on the same footing as University professors. We can easily see that the University would have much to say before accepting so bold a proposal as this. But the force of many of Dr. McVail's arguments cannot be questioned, and it would add immensely to the strength of the University of Glasgow as a medical school to associate it with the 530 beds of the Royal Infirmary.

PRIVATE BILL LEGISLATION AND SANITARY AUTHORITIES.

AN important judgment was delivered this week in the Queen's Bench Division by Mr. Justice Stephen with regard to the right of a sanitary authority to utilise the public rates in order to go to Parliament for an Act to perform such a duty as the provision of a proper water-supply. The action was that of Cleverton *v.* St. Germans Rural Sanitary Authority, the plaintiff being the solicitor to the defendants, who had unsuccessfully promoted a Bill in Parliament to interfere with certain water rights of the Earl of St. Germans, their object being to comply with an instruction of the Local Government Board in giving a proper supply of water to the parish of Torpoint, where there had been an outbreak of fever. On behalf of the plaintiff it was contended that a public body could go to Parliament for an Act for the performance of its legal duties; whereas, on the other hand, it was alleged on behalf of the defendants that Parliamentary action had only been allowed as within the power of a local authority where it was taken in defence of the rights and governing powers of such authority, and that apart from this an authority could only perform its duty by means of the powers then in existence, which in this case would have included action by means of a provisional order. Mr. Justice Stephen pointed out that Sections 51 to 70 of the Public Health Act indicated the methods by which a local authority were to supply water, and he held that the provisions of the Act, aiming, amongst other things, at the exercise by the central authority of a proper controlling power as to expenses &c. over local authorities, strongly pointed out that the way to a private Act was by provisional order, and that nothing in the Amendment (1878) of the Public Health Act pointed in a contrary direction. The principle was laid down over and over again that a public body was not to go for an Act of Parliament except in self-defence. Whether those who had employed the plaintiff were personally responsible or not for the expenses incurred Mr. Justice Stephen did not say, but he held that the authority had not the power to incur the expense, and hence judgment would be for the defendants.

THE MULTIPLICATION OF MICRO-ORGANISMS.

DR. PERCY FRANKLAND has made some interesting experiments upon the multiplication of micro-organisms (Proceed. Roy. Soc., No. 245, 1886), which have a distinct bearing upon the dissemination of infective disease. The procedure consisted in determining the number of colonies on a gelatine plate derived from one cubic centimetre of the water or other liquid containing the micro-organisms. He first selected a series of experiments upon natural waters, taking those supplied by the metropolitan companies. He found that at the ordinary temperature of the air there is a decided tendency for the micro-organisms to become reduced in number after storing for some time, but that the number of colonies is enormously increased by exposing them to an incubating temperature, just as happens to a less extent during the first few days of storage at ordinary temperatures. Differences in these respects were noted in accordance with the kind of water examined. Thus the micro-organisms in filtered river water become multiplied at 20°C. with far greater rapidity than those in the unfiltered waters, whilst the organisms in deep well-water have little tendency to multiply in the cold, but their multiplication at 20° C. is far in excess of anything

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observed in the case of the river waters. Upon this Dr. Frankland remarks: "These tables show the enormous capacity for multiplication which is possessed by the micro-organisms present in this deep well-water. This is the more surprising, at first sight, when it is borne in mind that this water contains the merest trace of organic matter. It must, however, be remembered that this water is at the outset almost wholly free from micro-organisms, and that it has never before been inhabited by such living matters; it is only reasonable to infer, therefore, that those of its ingredients which are capable of nourishing the particular micro-organisms which flourish in it are wholly untouched, whilst in the case of the river waters the most available food-supply must have been largely explored by the generations of micro-organisms which have inhabited them." In reading this, the mind involuntarily reverts to cases of epidemic disease spread through infection of wells, of which so striking an instance occurred at Caterham some years ago, when the dejecta of one typhoid patient were the occasion of a severe epidemic, due to the well which had been infected by them; and the cholera epidemic of 1849 is another out of an innumerable number of instances which, on the germ theory, can well be explained when one recognises the enormously rapid rate of multiplication of micro-organisms in favourable conditions. Dr. Frankland further describes his investigations as to the multiplication of pathogenic micro-organisms, testing for this purpose the bacillus pyocyaneus, Finkler-Prior's comma spirillum, and Koch's comma spirillum, for which, however, reference should be made to the paper itself, as the facts are too varied to admit of abstract, and require study, together with the tables which illustrate them. Suffice it that in water the Finkler spirillum rapidly loses its vitality, far more rapidly than either Koch's spirillum or the bacillus pyocyaneus. It is, however, pointed out that regard should be had to the original source of these micro-organisms before estimating the value of such investigations. There may be an inherent lack of vitality which would render conclusions drawn from one specimen quite fallacious.

METROPOLITAN ASYLUMS BOARD.

AT a meeting of the Metropolitan Asylums Board, held on Nov. 8th, the Managers adopted a report of their General Purposes Committee recommending that their fever and small-pox hospitals should be made available for clinical instruction, and that the suggestion of the Local Government Board should be enforced: that gentlemen should be engaged as clinical assistants at these institutions; that they should be registered medical men, should have specified duties, and should in all respects be subject to the regulations in force with regard to the hospitals; further, that they should act as clinical assistants, that they should be associated with each hospital, and that they should have board and residence while engaged upon these duties. We regard with much satisfaction this extension of the usefulness of these institutions. It has always been a source of regret that so much valuable material should be lost to those who are desirous of gaining an intimate knowledge of acute infectious disease. Diseases such as those received into the Managers' asylums are not as a rule admitted into general hospitals, and as a result many men now leave their schools without having all the information they should possess of maladies of this kind. The action of the Managers will to a great extent overcome this difficulty; the effect of their decision upon the institutions under their charge is certain to be beneficial, the patients will themselves derive advantage from the more thorough clinical records of their cases which will be kept, and the medical superintendents will be relieved of a duty which, if thoroughly carried out, would make a serious demand upon their time, and will now be able to devote themselves more fully to the other responsible duties which devolve upon them. We have referred in another place to the hope that has been created that other Poor-law institutions will be made available for adding to the knowledge of disease. The question may well be considered hereafter, whether a closer relation between the medical schools and these asylums may not prove advantageous to the public and to the profession alike.

SOMNAMBULISM.

THE habit of sleep-walking can often be so far controlled that no very serious consequences result. Unfortunately, as we are taught by a recent fatal case, the absence of such control may be attended by risks of no mean kind. The obscure physical change which underlies the state of somnambulism is, therefore, one which possesses a practical importance as well as a scientific interest for the physician. Its clear explanation, indeed, is as yet hardly possible, for like almost every functional nervous disorder, it might be explained on more than one hypothesis of perverted nervous action; and there is no theory of its pathological plan which does not vary of necessity with the shifting creed which at present embodies and expands with our ever-growing knowledge of brain function. The one point of which we can lay hold is the fact of co-ordinate motor activity, cerebral in its development, and surviving actively in a state of apparent mental rest. That this should be due to an autogenetic energy of motor centres, rather than to the influence of sensory impressions on these, is, however, hard to believe. The fact that sleep-walking is not necessarily associated with signs of muscular irritability during the intervals of wakefulness, while, on the other hand, such signs are common as proofs of constitution or disease—for example, chorea,—which have no definite connexion with somnambulism, must tend to confirm an opposite view. It is much more probable that a directing impulse of sensory origin is primarily accountable for this inconvenient habit. The cerebral sensorium is a large and undefined area—how far intelligent we cannot say. It is important, however, to remember, that complex and once volitional actions carried on by its means do often become by practice so really automatic that partial sleep or stupor does not arrest their unconscious performance. This is what happens in somnambulism. The intellect and the controlling will are torpid if they do not slumber, while the sensori-motor man whom they should govern is awake and active. But whence comes the guiding impulse for his irrational movements? The sensation of muscular activity may supply much of this when the walker is on his feet. It is not so clear by any means, but highly improbable, that this force alone can begin his progression. We are therefore driven to look for other causes of cerebral stimulation, and in this connexion it will be instructive to turn aside and consider other conditions of a like kind. Take, for example, dreams. Here we have another state of half sleep, without, it may be, any tendency to rise up or walk, but with marked disturbance of the ideational faculties. The intelligent sensorium is then alone active, and that drowsily. A feature very frequently noticed, however, in dreamers is the tendency to restless movement. In such cases it would seem as if the capricious energy of scattered thinking centres touched here and there the springs of motor power and stirred them up to a like fitful action. May we not believe that there are other states of dreaming, with fancies perhaps less vivid and irregular, but having more in common with the orderly influences of memory and will, and that these also stimulate the centres of motion to a like initiative and thus more purposeful but unconscious action? If so, we have an explanation of somnambulism, which is founded on an evident analogy but may also fairly rank as a logical and scientific

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hypothesis. So much for the theory of this strange condition. Meanwhile the necessity for its practical treatment is, with some at least, a pressing one. As regards this part of our subject, it follows from the preceding remarks that daily worries, as they are fruitful causes of sleeplessness, must, as far as possible, be controlled if sleep is to be more than a dreamy drowsiness. Some men can throw off anxiety for a time when they go to rest; others, less gifted with self-control, ponder them in their beds. The advantage of the former in every way is of course apparent. It was a prudent resolution which led the philosopher Kant to spend a quarter of an hour before he retired each night in abstracting his mind from its preoccupations; light sleepers might well adopt his method. Nor should the strictly physical causes of nerve irritation be overlooked. These, in fact, are worries which attack us through the visceral and other outposts of sensation. Late and heavy meals should therefore be avoided, for he sleeps best who retires with a cool head and digestive organs not required to add night duty to their daily task.

ROYALTY AND THE SICK.

THE Queen's subjects have had many opportunities of observing her concern for their welfare, especially when accident, illness, or other trouble has occurred to prove the quality of her sympathy. It was characteristic of Her Majesty that during her stay in Edinburgh she did not forget to visit the Hospital for Incurables. Had she found other engagements too pressing to admit of this, no one would have felt surprised. The lot of the permanent invalid, monotonous and sad as it must be to himself, has in its very permanence a tendency to dull somewhat the sense of fellow-feeling in those about him. His ailment has become his usual, one might say his normal, state. The highest promise of skill does not ensure him a remedy for all his ills. Hope there still is in such cases, it is true; but it is the hope of partial, not perfect, recovery on this side of the grave. To be, in some degree at least, forgotten is one considerable trial of the confirmed invalid, and his happiness necessarily consists in large measure of that courageous faculty, contentment. That some invalids do show this faculty in a marked degree is daily manifest; and as we think of this, the Royal visit seems, with a grace other than that of mere charity, or even sympathy, to recognise its obscure but real merit.

THE PORT OF LONDON.

THE steady work of supervising vessels and docks with regard to their sanitary arrangements has been materially favoured by the absence of any home epidemic which might have made special demands on the time of the sanitary officers, and by the impetus which cholera in Europe has afforded. There still remains much to be done by ship-owners and shipbuilders to secure the health and well-being of the crews, but Dr. Collingridge announces that structural alterations having this end in view are steadily on the increase. Improvements are also being carried out in the docks. One of the matters as to which some progress has been made, but concerning which much more precaution is needed, is the bringing home of the clothes and effects of seamen who have died abroad, and Dr. Collingridge has urged that the Board of Trade should require captains and agents to refuse such effects unless they are satisfied, as the result of a proper certificate, that they have been disinfected, or that the disease from which the seaman had died was not infectious. The matter is one of importance, and we are glad to learn that increased attention is being given to it, and that the number of instances in which infected clothing is brought home is steadily diminishing. With regard to the destruction of foods which are unsound, a difficulty has arisen as to eggs, which a metropolitan authority has recently decided to be neither "fish, flesh, nor fowl." If eggs are to be dealt with satisfactorily, it may be necessary to refer to them specially in any amendment of the law; but fortunately the odour of a bad egg, as a rule, suffices to prevent its being used as food. Referring to the pollution of the Thames by the outfall sewers of the metropolis, Dr. Collingridge attributes the comparative absence of complaint during the past summer to the cool, wet season; and he states that when for a week or two the weather had been hot the river became discoloured and offensive as formerly, and this notwithstanding the treatment to which the sewage is subjected. He also points out that the recommendation of the Royal Commission that no crude sewage should be discharged into the Thames at any point above the Nore appears likely to remain a recommendation and nothing more.

THE PERILS OF A JOCKEY'S LIFE.

THE melancholy death of that incomparable horseman, F. Archer, tragical as it was, forms a painful sequel to a career of great brilliancy. It may be said that the lamented deceased had, by his professional reputation in one of our national sports, become known at least by name in every part of the civilised world. It is not our purpose or desire to say one word against a pastime encouraged alike by great and small, the peer and the peasant, the ermined judge and the criminal over whose fate he holds the scales of justice; but we would fain direct attention to the abuses of Nature's laws incidental to the prosecution of an occupation which under the most favourable circumstances is not free from risk. It has been truly said that the love of money is the root of all evil; and in the great majority of cases the desire to cast the hazard for fortune has a determining influence directly or indirectly upon the mode of life demanded of a jockey possessed of the desire to shine in the eyes of the giddy and thoughtless world. Little does the great multitude guess how dear a price a jockey pays for the encouraging shout that cheers him in his struggle, and the popular applause that greets his victory. It is not going too far to say that the sufferings and privations entailed by a severe course of training, protracted over several years, are, on physiological grounds, certain to jeopardise health, even if they cannot be proved to sacrifice life. In not a few instances jockeys have been known to sicken and die from acute inflammatory mischief, brought on by exposure to cold whilst their physical powers are at the lowest line of resistance, or by repeated chills—"cold upon cold"—they have fallen at last victims to that fell disease phthisis. Such was poor young Constable's fate. Unfortunately, too, the sweating and wasting required to bring down the weight of a jockey in a short time in order to enable him to ride in a race is often entailed on those who are constitutionally ill-fitted to withstand the shock—for starving and running and sweating are no mean factors in producing shock—to which they are submitted. It was little short of monstrous, and nothing short of cruel, that F. Archer should, by the necessities of his professional engagements, be required to reduce his weight from over 9 st. to 8¼ st., in order that he might be enabled to ride St. Mirin in the Cambridgeshire of 1886—a race which will be memorable as the one to take part in which Archer subjected his frame to a strain that in all probability was never recovered from. According to a contemporary, "typhoid fever" was assigned as the last illness from which the great jockey suffered. This may be so. If it was, the onset must have been unusually insidious for delirium to have supervened on the date mentioned. The verdict of the jury was technically correct, but to the unscientific mind it carries a stigma which no one would wish to be attached

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to the memory of the late popular jockey. That he was bereft of his reason cannot be doubted; at the same time, in common justice to the dead and living, we would assert that the fatal catastrophe had quite sufficient cause in recent physical strain and exposure and their consequences, without assuming that there was any underlying or latent basis of even "temporary insanity."

CHOLERA PROSPECTS.

WHILST cholera still slumbers in different parts of the continent of Europe, the time has come when we in this country may congratulate ourselves that for a third year during the European epidemic of 1884–86 we have escaped. Both in 1884 and in 1885 there were several instances in which the disease reached our shores, or even found its way inland, but this year no case has been recorded in which such importation has taken place, and there is now no likelihood that we shall be exposed to any real risk this year. It is true that both England and other countries having even a colder climate than our own have suffered from cholera during the winter months, but so far as England is concerned the disease has not commenced at so late a date in the year as we have now reached; it has rather on such occasions been an extension into the winter months of an epidemic which had previously established itself during the autumn. And even on the Continent there is a general tendency to the subsidence of cholera. In Trieste, where, since the epidemic first broke out on June 7th, there have been 882 cases and 544 deaths, the disease is rapidly disappearing. At Fiume the same applies. So also with the occurrence of wintry weather in Galicia and Hungary the disease has received a check. At Pesth cholera is abating, and only a second single case has followed the first one that was imported into Vienna. At the same time there are newly infected districts. In Italy we learn that cholera has appeared at Genoa, and that a recrudescence has taken place at certain localities in the south—as, for example, at Maddaloni, between Naples and Caserta. Then, again, there is the story of cholera in the villages of Finthen and Gonsenheim, near Mayence, to which we have referred in another column. In short, there is abundant evidence to show that there is sufficient cholera slumbering in Europe to give rise to considerable anxiety as to what may be expected next year, and whilst we may reasonably dispel fear as to any spread of the disease to this country during the coming winter, yet in view of future prospects sanitary authorities should not relax the measures of prevention which have been initiated during the summer months.

CHEMICAL RESULTS OF THE INGESTION OF DEFIBRINATED BLOOD.

DR. A. V. GRIGORIEFF publishes in the *Russkaya Meditsina* an account of a series of observations on the effect of the addition of defibrinated blood to the diet upon the metabolism and assimilation of nitrogenous matters. He made use of four different persons for his experiments, two of them being healthy and able to walk about; the other two, who were suffering from dyspepsia and in a weakly state, were confined to the wards of the hospital. During three days they were given ordinary diet, then for a second similar period part of the meat was replaced by about twenty ounces of defibrinated calves' blood, and finally a return to the original diet was made for a third period of three days. During all the time the quantity of food was noted and the amount of ingested nitrogen ascertained. The excretions were also quantitatively analysed for nitrogen, the difference between that ingested and excreted giving, of course, the amount assimilated. The results were similar in all the cases, and showed that the metabolism and assimilation had been invariably increased by the blood diet. In one case, which was that of a vigorous subject, the mean nitrogenous assimilation, which was 86·45 per cent. in the first period, increased to 89·78 per cent., the increase continuing, though not to the same extent, through the third period. In the other cases the difference produced by the blood diet was less marked. On the whole, the author thinks the treatment likely to prove useful in weakly persons, but he suggests that the culinary art must be called to our aid in order to overcome the natural distaste to such an article of diet as defibrinated blood.

DRAINAGE OF RICHMOND.

ON the 10th inst. at the Richmond Vestry Hall, Mr. Arnold Taylor, an inspector of the Local Government Board, opened an inquiry with reference to an application by the urban and rural sanitary authorities of the district, for sanction to borrow the sum of £100,000 for the execution of a joint scheme of sewerage and sewage disposal. The proposal is to lay a collecting sewer along the river bank at Richmond, and a main sewer thence to Mortlake. Another sewer would pass from Barnes to Mortlake, and these would serve to convey the whole of the sewage of Barnes, Mortlake, Kew, Richmond, and Petersham, to eleven acres of land on the river bank in Mortlake parish, where it is intended to treat it by a system of chemical precipitation and filtration, the effluent passing into the Thames. There is no serious opposition from any source, and the promoters are confident of success in getting the scheme passed by the Local Government Board.

OUR ARMY.

THE annual general return of the Army for 1885, furnished by the Adjutant-General, shows the average strength of officers to have been 7075, and of non-commissioned officers and men 190,989. Of these, 3248 officers and 88,331 men were employed at home, and the rest on foreign service. In the whole force, exclusive of officers, there were 2588 deaths and 3581 discharges by invaliding during the year, being in the ratio of 13·55 and 18·75 per 1000 of the strength. The total loss by these two causes was therefore 32·30 per 1000. The number of recruits enlisted was 68,536, and of these 19,864 were rejected on primary and secondary medical inspection, being in the ratio of 290 per 1000. The total number of recruits who joined the service was 39,552, or 577 per 1000 of those enlisted; of these 37 died and 31 were discharged as invalids within three months of the date of enlistment, making together a loss of 1·7 per 1000 of the recruits who joined. The return of the ages of the recruits who joined shows that 369 per 1000 were under 19, 261 between 19 and 20, and 370 were 20 and upwards. Compared with the preceding year this shows an increase in the proportion under 20 years of age. Their heights were: under 5 ft. 5 in., 306; 5 ft. 5 in. to 5 ft. 6 in., 206; 5 ft. 6 in. to 5 ft. 7 in., 188; and above 5 ft. 7 in., 300 per 1000. The chest measurements were: under 34 in., 345; 34 in. to 35 in., 347; and 35 in. and upwards, 308 per 1000. Their weights were: under 120 lb., 199; from 120 lb. to 130 lb., 382; and 130 lb. and upwards, 419 per 1000. We regret that the returns of crimes and punishments are unfavourable as regards the progress of temperance among the soldiers, for, compared with 1884, there has been an increase in the number of courts martial for drunkenness among the troops abroad, and the fines for drunkenness were in the ratio of 249 per 1000 of the strength, as against 235 in the preceding year. The average strength of the first class of the army reserve was 37,376, and the deaths reported were 308, or in the ratio of 8·24 per 1000; the second class averaged 7135, with 120 deaths, or 16·82 per 1000. The first class consists almost

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entirely of men under 35, and the second of men over 40 years of age. The strength of the Militia on Jan. 1st, 1885, is stated to have been 104,380; and the deaths during the year are returned as 417, or 4·0 per 1000; that of the enrolled Volunteers is returned as 224,012, with 871 deaths, or 3·89 per 1000; but there seems reason to believe that the returns of deaths are by no means complete in either of these branches of the service.

M. PASTEUR.

M. PASTEUR has recently presented before the Academy of Sciences certain statistics and offered certain explanations of failures which require careful examination and comparison. In the absence of a detailed report it is impossible to examine very critically or compare with accuracy, but from an investigation into the figures, and a consideration of the proffered explanations, we are led to believe that M. Pasteur has successfully answered the arguments of his opponents and calumniators. The sum total of inoculated individuals has been 2490; of whom 80 were from England, 2 from British India, 18 from the United States, and 191 from Russia. Of the 1700 French persons who were treated 10 died. M. Pasteur apparently proves by statistics furnished by mayors and others that a very small minority of people who were bitten during the year 1885-86 in France did not go to him for treatment, and that of these 17 died of hydrophobia. In the hospitals of Paris the mortality from hydrophobia was 11 per annum for five years. Last year the number of deaths was 21, but since November, 1885, when the Pasteur system was introduced, only two individuals had died, and these had not been inoculated. One died after inoculation, but the treatment of this case had been under the old systems of mild injections of virus. And this is Pasteur's explanation of his failures in cases where the bites of rabid animals were received in the face and head. Most of those who underwent the mild treatment were children who had been bitten severely in the face, and it was only after a sad experience that the necessity for stronger injections was made evident. Now, in cases of severe bites in the head or face inoculations of a more intense kind, made with freshly extracted virus, are used. Alluding to the deaths of the three Russians from Smolensk, M. Pasteur stated his belief that the other sixteen Russians were saved by being subjected to more intense treatment after the deaths had proved that mild injections were useless in cases of the kind.

ANÆSTHETIC EFFECT OF OINTMENTS.

DR. TOPOROFF has published in the *Russkaya Meditsina*, an account of a series of observations made with the object of determining the absolute and relative effects of various narcotic and anodyne ointments on the sensitiveness of the skin, with reference both to mechanical and electrical excitants. The portion of the surface to be experimented on was first cleansed and moistened, and the sensibility estimated by means of a Weber's compass æsthesiometer with tortoiseshell points, the direction of the line joining these being vertical, as it is known that sensibility as tested by the compass is greater in a vertical than in a horizontal direction. When the least distance at which two points could be distinguished was determined, a drachm of the ointment was rubbed into the surface over a circular area measuring an inch and a half in diameter for ten minutes. After the lapse of another ten minutes the sensibility was again estimated, and a third time after an interval of half an hour from the end of the rubbing. The electrical sensibility was tested by means of the primary current of a Spamer's induction apparatus, the secondary coil being gradually pushed over the primary, so as to increase the strength of the current according to the divisions of a scale. With a 1-to-8 belladonna ointment the tactile sensibility was always diminished, the mean difference being 0·6 centim. at ten minutes and 1·1 centim. at thirty minutes. When lanoline was used as a basis instead of lard, the mean diminution was only 0·55 centim. at ten minutes and 0·95 centim. at thirty minutes. With hyoscyamus, aconite, and conium much the same results were obtained, but the degree of anæsthesia produced was slighter. With chloroform ointment of the same strength (i.e., 1 to 8), the diminution was 0·66 centim. at ten minutes and 0·8 centim. at thirty minutes. In this case the substitution of lanoline for lard in the composition of the ointment produced a markedly diminished effect, the mean figures being 0·3 centim. at ten minutes, and 0·62 centim. at thirty minutes. Turning now to ointments made of powdered substances, it was found that, so far from any anæsthesia being produced, the sensibility was actually increased by them. This was the case in almost all the observations made with hydrochlorate of morphia ointment (1 to 60), opium ointment (1 to 19), and bromide of potassium ointment (1 to 6), the augmentation being less when lanoline was employed than when the ointments were prepared with lard. No very decisive results were obtained by the observations of the effect of narcotic ointments on electrical sensibility, but the author instituted a series of observations in order to determine the influence of the friction with lard and lanoline alone, and found that ordinary sensibility was invariably increased, for a short time at least, the mean figures being, for lard, 4·25 centim. at ten minutes, and 1·75 centim. at thirty minutes. In the case of lanoline, the mean increase at ten minutes was 5·5 centim., but no effect at all was detected at thirty minutes. The author remarks that the hyperæsthesia apparently produced by the ointments prepared with powdered narcotic substances—morphia, opium, and bromide of potassium—is therefore probably due to the mere friction with the lard, the medicament being unable in the form of powder to penetrate through the skin. According to these researches, lanoline would appear to be a less advantageous basis for anodyne ointments than ordinary lard, the difference in favour of the latter being especially marked in the case of chloroform ointment. The effect of the ointments seemed also to vary considerably with the region of the body experimented on. Thus, while the diminution produced by chloroform ointment on the forehead is stated as ·95 centim., the figure indicating its effect on the inner surface of the thigh is only 0·1 centim.

PENNY DINNERS.

THE Central Council for Promoting Penny Dinners have published this year a treatise of much interest in connexion with the working of their scheme. It consists for the most part of essays, in which the difficult question of gratuitous, or virtually gratuitous, relief in the shape of food for starving school children is exhaustively discussed. The leading principle, that regular feeding is absolutely necessary for a child whose education is compulsory, is plainly set forth and proved by the writers of these various papers. In a large number of cases the utter impossibility of applying it has also been but too fully demonstrated. The question as to how this difficulty shall be met resolves itself into three sections as it affects the children: firstly, of those who from no fault of their own are too indigent to buy sufficient food for their families; secondly, of those who carelessly neglect them; and thirdly, of the drunken or vicious, whose poverty is due to their own misconduct. In each case the children suffer by the misfortune or fault of their parents at an age when they can do little to provide for themselves. As might be expected, there is some difference of opinion among the writers of these various papers as to the best remedial

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method. We may shortly summarise these views as follows: Every necessitous child unable to pay for the daily meal should be supplied with a penny for this purpose out of the charitable fund of the Central Council. Where neglect or vice is the cause of poverty, the law should be invoked to determine the liability of parents, and the child, if advisable, transferred to an industrial school. In every instance discretion is necessary to prevent an abuse of charity; but this a careful teacher, with the information gained from School Board visitors, should be able to exercise. The plan here detailed involves no great expenditure for its execution. There is much to be said for it, and public opinion will not, we hope, fail to recognise in a substantial manner in the future, as in the past, its deserving claim to consideration.

CHOLERA IN GERMANY.

THE current issue of the *Berliner. Klin. Wochenschrift* (No. 45) contains a communication from Dr. Hueppe respecting the outbreak of cholera in the neighbourhood of Mayence. It appears that about the middle of September cases of a choleraic character appeared at Finthen and Gonsenheim, some of which were fatal. Asiatic cholera was unsuspected, and the last fatal case, on Oct. 27th—that of a nurse—was officially declared at Mayence, upon the authority of the medical men who made the post-mortem examination, to have none of the characters of that disease. But, as Dr. Hueppe points out, the post-mortem examination alone may not suffice to diagnose the disease, the anatomical changes being perhaps but slight. He therefore regrets the premature publication of such an opinion, which might shake the public confidence in the profession, supposing the statement proved erroneous; and in the present instance he was on Oct. 29th given some material from the case in question, and discerned therein Koch's comma bacillus, and had clearly distinguished it from allied organisms (such as the Finkler-Prior bacillus). This discovery was confirmed by Dr. Gaffky of the Imperial Hygienic Institute and Dr. Reissner. Dr. Hueppe writes therefore to correct the misapprehension abroad upon the nature of this epidemic, and suggests that the cholera may have been introduced from Italy or Hungary by commerce or travellers. Fortunately the epidemic has remained localised, and Dr. Hueppe's action may do good by putting the sanitary authorities in other parts of Germany on the alert.

WINDOW-CLEANING FROM THE OUTSIDE.

ONE might well think that the teaching of experience was hardly needed to impress on servants and householders the culpable recklessness of having upper windows cleaned from the outside by someone standing on the ledge. A recent fatal accident incurred in this way unfortunately points to an opposite conclusion. It is sincerely to be hoped that this sad occurrence will give the death-blow to a custom which, in spite of general condemnation in the past, still survives as a perpetual menace to personal safety. Law is not wanting to restrain it, for the practice in question is illegal. The plea of necessity cannot as a rule, if ever, be urged in its justification, for the work can be otherwise done, and done as efficiently. Mere hurry and convenience are its inadequate excuses. On the other hand, one thoughtful glance is enough to reveal the many risks of accident which it entails. We note with satisfaction that the mistress of the poor girl whose case we have mentioned was in no way to blame for its fatal termination, her housemaid, who was very young, having acted against orders. Regrets are now, however, unavailing, and must give place to the consideration of preventive measures for future use. Of such one will naturally be looked for in the strict attention of the police to cases of this kind. An inventor whose patent appears in the Edinburgh Exhibition professes to have devised another, in the shape of an appliance which, when fastened on to a window frame, allows it to be turned inward for cleaning and replaced as required.

ENGLISH MEDICAL CLASSICS.

THE rapid progress and keen concentration bestowed on working out new facts in modern medicine has for a time arrested our backward glance to the work of our forefathers. Some, indeed, consider the task superfluous, and declare that medicine has no history worth recording before nearly the middle of this century. Others admit that there is an interest, and regret that they cannot spare time to make acquaintance with the literature of the past. No doubt many of the old authors are hardly worth acquaintance, but still among much rubbish undoubted gems are to be found. The chief interest, however, that attaches at present to the study of medical history is the help it is likely to afford in giving us an insight into the natural history of disease: how some diseases have died out, how others have been modified, and how some new ones have been introduced; and what influence the various conditions of social life, of agriculture, drainage, &c., have had in bringing about such changes and modifications. In fact, the time seems to have come when we are sufficiently advanced to investigate by the light of modern pathology many of the difficult problems of the past. What, for instance, was the disease that ravaged France in the fifteenth century known as *trousse gallant?* was it unrecognised syphilis, or was it related to the *pellagra* of Italy, or, as some of the symptoms would suggest, was it *beri-beri*, now known only in tropical climates? What from its symptomatology was the probable nature of the sweating sickness? Then again, as regards recognised epidemical diseases—have they undergone any modification in type within the last few centuries? Cannot the descriptions of some of the new diseases be recognised in works of some of the older authors?—besides many other questions of interest too numerous to particularise here. The task is not so difficult as would at first sight be supposed. The older physicians, if they lived in prescientific days, were careful and accurate clinical observers, and it is not difficult to follow them in the account of their cases. Thus Dr. Norman Moore has recently established without doubt, from the records of the physicians, the fact that Prince Henry, son of James I., died of typhoid fever, and not, as had been hitherto supposed by some, of consumption, and by others of poison. Again, too, in Willis's description of the epidemics that broke out in the Royal and Parliamentary armies, 1645, we can easily distinguish the cases of typhus from the cases of relapsing fever; whilst in an outbreak occurring about the same year in a farmhouse he gives an excellent account of typhoid fever attacking members of the family in succession. It appears to us, then, a pity that some attempt is not made to bring forward some of the old English medical classics in a useful and easily accessible form—for instance, such works as Dr. Caius' "Counseil against the Sweate," Glisson's treatise on Rickets, and Sydenham on Gout; whilst an abstract of recorded outbreaks of epidemic disease by leading medical authorities from the earliest times to the present would be most useful, especially as the older authorities were always careful to note what they called the "epidemic constitution" of the year—that is, the most important meteorological conditions that were observed. Again, there is another piece of work that ought to be undertaken: in Caius College there exists a number of MSS., some of them dating from the thirteenth century, collected and presented by the illustrious founder, Dr. Caius. Some of these manuscripts are only transcripts or commentaries of well-known authors—Hippocrates, Galen, &c.; but some

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are original compositions, graduation theses, and such-like, and full of interesting details. The most important and valuable ought to be published; but who will undertake the task? The cost would not be great, since none of the MSS. are of great length, and there are plenty of men who would be willing to supervise the editions as a labour of love. Perhaps, if the matter were properly brought under the notice of the Sydenham Society, they might feel disposed to publish some of the more important of these old MSS. from time to time.

THE SANITARY STATE OF WEST COWES.

IT is with regret that we have read the report of the reception by the West Cowes Local Board of Health of Mr. Spear's report on the very serious and fatal prevalences of diphtheria which have occurred in that town. The recommendations attached to the report essentially agree with those which have been made by their own medical officer of health, by a previous medical inspector, and by an engineer inspector from the Local Government Board. But the chairman, in producing the report, stated that, with the single exception of the suggestion as to the provision of hospital accommodation, the recommendations were not worth the paper they were written on. The question of the existing system of sewerage is now being inquired into; but as regards such matters as the very defective condition of the house-drains, which has been officially under notice ever since 1881, and the need of a sufficient water-supply to be laid on at constant pressure from a source, and under conditions beyond risk of contamination, it was decided simply to write to the Local Government Board, and say that the several items in the report had been carried out. We doubt the policy of such disregard of an important document, and we think that the public will look for something more than this before anything like confidence is restored as to the healthiness of West Cowes. Had the sanitary authority felt able to dispute the matters of fact detailed in the report, they would doubtless have done so. As it is, they evidently prefer to adopt that which, in our opinion, is a very injudicious course.

THE BLOOD AT BIRTH.

DR. F. KRUGER of Dorpat has been investigating (Virchow's *Archiv*, 106, Hft. 1) the condition of the blood of the fœtus at birth, and comparing its properties and composition with the maternal blood. The subject has been studied before. In some respects the present research confirms the previous ones—notably those of Becquerel and Rodier. Like those authors, Krüger finds a very slight comparative increase in the total solid constituents of the blood at this early period of existence; but he shows that in fibrin fœtal blood is markedly deficient—viz., about one-third of that contained in maternal blood. The amount of hæmoglobin is about the same as that of maternal blood, but it increases in quantity in the infant for some time after birth. Unlike the adult, there is no notable difference in the composition of blood in the two sexes. Fœtal blood at the moment of birth has a great tendency to coagulate, but coagulates slowly—i.e., the process begins early, but continues for a long time before it is completed. Inquiring into the reason of this, he directed attention to the factors which, according to Schmidt, are essential to coagulation—viz., the leucocytes and blood-plasma. Three possibilities presented themselves: either there is a diminished activity of the blood-plasma in causing the liberation of "ferment" from the corpuscles, or the number of leucocytes must be less than in the adult, or these corpuscles part with the ferment less readily. On the first hypothesis, coagulation ought not to be quickened on the addition to the plasma of more lymph corpuscles; but the contrary is the case. Nor is there any diminution in leucocytes, the absolute and relative number per cubic millimetre being the same as in the adult. It is concluded, therefore, that the reason of the slowness of coagulation of fœtal blood depends on the nature of the white corpuscles, and their slighter readiness to break up.

THE BRITISH EYE HOSPITAL AT JERUSALEM.

OUR readers are aware that we take a lively interest in all charitable and religious uses of Medicine among less favoured nations, all the more so where all mere sectarianism and proselytism are kept in abeyance. With this disposition we have read with great pleasure last year's report of the Eye Hospital established in Jerusalem by the Order of St. John on a site given by the Sultan. The report is written by the resident surgeon, Mr. John Hovell Ogilvie. The hospital is resorted to by the poor of all parts of Syria. The only painful part of the report is that which shows the disproportion of its accommodation to the demand. Accordingly, it happens that many persons who walk from great distances—possibly Jaffa, or Gaza, or the Desert,—plodding on in the hope of being admitted with what otherwise may be incurable disease, find no room for them. Mr. Ogilvie has found it so difficult to reject that he has sometimes had eleven cases in the hospital, where there is only accommodation for four. This want of accommodation cannot long survive when the facts are known. The work done is of the best. The cases are carefully classified in the report, and the results of treatment are given with obvious candour. No less than 121 have been admitted into hospital. The new cases seen at the dispensary were 3238; the total number of consultations was 13,462. Most of the cases admitted were such as needed operation; 231 operations were performed, including 55 for the extraction of cataract, and 37 for making artificial pupils where dense and extensive opacities of the cornea, giving little hope of success, existed. Of the cataract cases, 48 were successful. The iridectomies were not so satisfactory, but, considering the nature of the cases, favourable results were obtained. The cases of ophthalmia—catarrhal, chronic, granular, granular with pannus, and ophthalmia tarsi — reach nearly 1500. Cleanliness and disease are the only conditions of admission; the requirement of cleanliness has become extensively known, and had a marked effect. The patients are Protestants, Greek and Armenian Christians, Latin Christians, Jews, and Mahommedans. Frequently Christians, Jews, and Mahommedans have occupied the same ward, verifying the noble aim of the Order, "*Pro fide, pro utilitate hominum.*" We appeal to Jews, Christians, and Mahommedans, who have the means, to convert these four beds into twenty, and so fulfil the old satisfaction of Job, "I was eyes to the blind."

DUBLIN DAIRY YARDS.

THERE has recently been published a paper by Dr. C. F. Moore, of the South Dublin Union, which was read before the Academy of Medicine in Ireland. This paper gives a very unsatisfactory account of Dublin dairy yards. Dr. Moore points out that the importation of pleuro-pneumonia into England was due to disease received from Dublin, and he attributes this occurrence to the neglected condition of cowsheds in that city. After quoting Ferrand and Klebs, who traced the prevalence of diphtheria to offensive dung-heaps, and the opinion of the former that manure should be kept in closed wells made of stone and glazed with bitumen, so constructed that all fluid filters away from the solid matter, he described the conditions frequently met with in Dublin. The manure heaps, he says, are often placed in the angles of yards, one or more of the walls enclosing the manure being those of a dwelling-house or cowshed, or

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stable, or abutting on a street or lane; and though he comments on the comparative absence of diphtheria from that city, he states that he has in many instances traced the connexion between disease of various forms to proximity to manure-heaps. His conclusion is that cattle should not be kept in towns of any considerable size, and that Dublin is so conveniently situated with regard to suitable farm land on both sides that it could easily dispense with the housing of cattle within the borough boundary.

HOSPITAL CO-OPERATION WITH PROVIDENT DISPENSARIES.

DR. RENTOUL has been again arguing for the establishment of co-operation between hospital authorities and provident dispensaries. He argues that the creation of these in Liverpool would diminish pauperism. He says that in Manchester seven out of nine provident dispensaries are self-supporting. In Manchester, in four of the hospitals, investigations are made by special inspectors into the means of applicants, and if they are found to be receiving wages above a certain scale they are considered ineligible for gratuitous relief, and are referred to a provident dispensary. The scale is as follows: Man and wife, 18*s.* per week; single men or women, 12*s.*; each child, 1*s.* 6*d.* per week. This system has reduced the number of unfit applicants. Dr. Rentoul makes a statement as to the cost of out-patients to hospitals on the high authority of Mr. Nixon, the accuracy of which we venture to question—viz., that the average cost of each out-patient is 4*s.* per week. We cannot understand or believe such a statement, which is greatly at variance with other testimony on the subject. What is there in the medicine or anything else given to the *out-patient* that can cost 4*s.* per head per week? According to Dr. Rentoul there are 147 provident dispensaries in England, of which 40 are in London. Their benefit members are 286,162, paying £50,909, of which £34,222 were paid to a medical staff of 370. This would give about £92 to each medical man. Provident dispensaries are undoubtedly beneficial to the working classes and the public. It is not quite so clear that they have at present profited the medical profession, who generally do a great amount of work in them for very little money, and this injustice must be remedied.

THE AUSTRIAN MEDICAL ASSOCIATION.

THE Austrian Medical Association, which now comprises twenty-six branches, with a total of 4500 members, recently held its seventh annual meeting at Innsbruck, and resolved to petition the Government to make vaccination obligatory throughout the empire by imperial statute, also to restrict the privilege of private practice to medical men who have already served in a hospital. The Association expressed an opinion that considerable changes were desirable in the regulations concerning the training of medical students; and, lastly, a request was preferred that a law should be made assigning substantial pensions to the widows and orphans of medical men who might meet with their death through attending to their duties during an epidemic.

CHROMIC ACID v. GALVANO-CAUTERY.

M. POSKIN has reported to the Liège Medical Society on his use of chromic acid in more than 100 cases of diseases of the nose, pharynx, and larynx, as showing the great value of this powerful caustic in hypertrophy of the turbinated bones, polypi, and granulations in the ears. He remarks that, as it is a violent poison, acting especially on the gastro-intestinal tract, it is necessary to exercise great caution, especially in pharyngeal and laryngeal cases; and he eschews it altogether in the case of children. Its action may be neutralised by a weak solution of carbonate of soda. The best way of employing chromic acid is to heat moderately a very small crystal on a silver probe, to which it will adhere as a dark-brown coating. If the heat is too great a green oxide is formed, which is devoid of any caustic action. M. Poskin finds that chromic acid compares favourably with the galvano-cautery, both on account of the cost and the convenience with which it may be applied. It is, he thinks, also quite as efficacious and less dangerous. The eschar which is produced falls in from three to five days.

THE LATE SURGEON-MAJOR T. R. LEWIS.

THE friends and colleagues of the late Surgeon-Major T. R. Lewis, Assistant Professor of Pathology in the Army Medical School, being anxious to commemorate the life and works of one who contributed so largely to scientific medicine, have prepared a circular for distribution (of which we have received a copy from the secretary) inviting subscriptions for this purpose. They suggest as the most fitting memorial a reprint of his numerous scientific reports and papers, with his portrait as a frontispiece and prefaced by a biographical notice. It is proposed to issue a copy of the reprint to each of the subscribers, a list of whom will appear in the preface to the volume. A committee has been formed under the presidency of Sir Thomas Crawford, K.C.B., M.D., Director-General A.M.D., for the purpose of carrying these proposals into effect, the secretaries being Surgeon-Major G. E. Dobson, F.R.S., and Surgeon H. S. McGill, M.S, and the treasurers Messrs. Holt, Lawrie, and Co., of Whitehall-place, S.W.

WESTMINSTER UNION AND DR. JOSEPH ROGERS.

AT the meeting of the Board of Guardians held on Friday, the 5th inst., the question of the superannuation grant to Dr. Joseph Rogers, of which due notice had been given on the night of his resignation, came up for discussion. The board was unanimous in deciding that the grant should be made, the only difference of opinion being whether his service at the Westminster Union should alone count, or whether it should embrace his tenure of office at the Strand also. It was eventually decided by a large majority in a very full board, that the twelve years he was "medical officer" at the Strand Workhouse should be estimated in virtue of the fact that the parish of St. Anne—which had been taken out of the old Strand Union and joined to St. James's—was during that period under his professional charge. We understand that the Local Government Board, who had been previously appealed to, has sanctioned this procedure of the Westminster Board. Dr. Rogers is to be congratulated on this recognition of his services in the past, which were most handsomely referred to by the guardians present.

DRUNK OR SOBER?

THIS is the complementary question to that other important one, "Drunk or dying?" When the answering of this question is left to policemen, because there is no competent medical practitioner within call to ascertain the facts, the decision is very regrettable; but when a medical opinion is given, and an unskilled judgment is preferred to it, the choice is not only unreasonable, but reflects discredit on the person making it, albeit those persons chance to have magisterial authority, and enjoy the dignity of justices of the peace. We entirely sympathise with the feelings of Mr. Pearce, of Brierly Hill, who has had his opinion set aside by the "great unpaid" in favour of that of the police in the case of a man accused of being drunk, whereas he was sober. It is, or rather let us say it ought to be, beyond the province of a magistrate to reject a medical

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opinion on a point of this sort unless there be ground for thinking that the opinion given was not in *bona fides*. It is not for justices to determine the accuracy of a professional opinion: they may decide that it is falsely given, but not that it is false in itself. This is a view of the matter which it is desirable to enforce.

DEATH OF A PASTEUR PATIENT.

A MAN named Wilde met with an abrasion of the skin on Oct. 1st, whilst tending a patient named Oates, who died from hydrophobia a day after the slight accident to Wilde. The circumstances seemed to indicate the advisability of Wilde's being sent to Paris to receive treatment at Pasteur's hands. The abrasion on the hand was freely cauterised by Dr. Foote of Rotherham with nitrate of silver, and the patient Wilde underwent a course of treatment at Paris, receiving nineteen inoculations in all. He returned to England at the end of two weeks, and remained in good health till Oct. 30th, when his fatal illness began. The clinical history, as detailed by Dr. Foote, lends no support to the belief that death resulted from hydrophobia. In fact, the case was regarded by him as an ordinary one of "congestion" of the lungs, the result of a chill. In the face of this evidence it is impossible to include this case in the list of failures of M. Pasteur's method. As will be seen in our correspondence columns, Dr. Hime seems to have satisfied himself of the absence of rabies in the case.

OVERHEAD WIRES.

THE "Works and General Purposes Committee" of the Metropolitan Board of Works has been good enough to agree with a Select Committee of the House of Commons in the opinion that something should be done about the overhead wires of the telegraph and telephone systems. This is encouraging, and ought to prove consoling to the surviving victims of accidents, and the friends of sufferers generally, during the long period which is only too certain to elapse before any serious step is taken in the matter. From a practical political point of view, we must confess that this accord between two "authorities" in condemning an easily remediable evil does not appear likely to expedite a much-needed reform. Being agreed on the subject, the authorities concerned will probably shelve the question at issue. It is, then, necessary that the agitation commenced in the interest of public safety should be promoted with increased vigour. Doubtless there will be plenty of illustrative narratives of fact available for the purpose of argument as soon as the winter snows make their appearance.

INTRA-PULMONARY INJECTIONS IN PHTHISIS.

DR. JOHN BLAKE WHITE, of New York, advocates the plan, which has been adopted by Gougenheim, Shingleton Smith, and others, of injections into pulmonary cavities in phthisis, believing that by their use life may be prolonged and sometimes saved. He finds the following formula to occasion the least amount of irritability when injected: atropia, one-third of a grain; sulphate of morphia, two grains; tincture of iodine, three drachms; carbolic acid (pure), twenty minims; glycerine, one drachm and a half; alcohol (diluted 20 to 30 per cent.), an ounce and a half; the quantity injected at a time being from fifteen to thirty minims. He employs a syringe capable of holding one drachm of fluid and provided with needles, which are perforated near the tip in four places, so that the injection may enter the cavity in the form of spray. Eleven cases are reported (*Med. Record*, May reprint), and although in several the immediate effect appears to have been the excitement of violent coughing, in most there was a marked improvement in the general condition, with diminution of expectoration and abatement of the physical signs.

GENERAL PRACTITIONER CANDIDATES.

WE are asked by a correspondent to publish the names of candidates who are in general practice for the convenience of those general practitioners who wish to be represented by men of their own order. In England voters can scarcely go wrong in this matter, the majority of the candidates being in general practice. The list will be found in last week's issue of THE LANCET. In Scotland and Ireland respectively there is some risk of the single seat being appropriated practically by the nominees of the medical authorities who have hitherto monopolised the Medical Council. This will be simply lamentable; but it will be the fault of the practitioners themselves. Let there be no mistake upon this point.

THE IRISH ELECTION AND THE SOUTH-EASTERN MEDICAL SOCIETY.

A CORRESPONDENT seems embarrassed by the importance attached to the vote in favour of *two* candidates for the one Irish seat recorded at a meeting of a society called by a contemporary "the South-Eastern Medical Society" of Ireland. He has ascertained that the society exists, and states that it consists of seven individuals. We can only advise our Irish brethren to disregard all societies and vote for a representative of general practice in Ireland, and not to expect commiseration if they do not do so and find the seat secured by a high official of one of the Dublin bodies, who have hitherto monopolised the Irish seats ever since there was a Council.

CASE OF EPULIS IN CONNEXION WITH A WISDOM TOOTH.

MR. DAVID HEPBURN reports a case, under his care at the Dental Hospital of London, of a very vascular, friable, epuloid growth springing from the cyst-wall of an impacted lower wisdom tooth. The patient, a house painter, aged eighty-two, also complained of neuralgic pains over the side of the head and a sense of numbness along the jaw. There was loss of sensation in the region of the mental foramen. The tumour was removed, and a fortnight later another had formed, which was also excised, when a wisdom tooth was detected. This, being with considerable difficulty extracted, was found to be surrounded with a thick membrane, and the pedicles of the tumours were distinctly visible upon the surface. When seen a few days later, the neuralgia had entirely ceased, but there was no return of sensation.

RAPID MECHANICAL DILATATION IN DYSMENORRHŒA.

DR. WILLIAM GOODELL, Professor of Gynæcology in the University of Pennsylvania, strongly recommends rapid dilatation of the cervix by instrumental means in cases of dysmenorrhœa and sterility. It is, he finds, much more satisfactory than treatment with tents. In one case, where the pain was so severe that two physicians were in attendance giving chloroform for forty-eight hours, a single dilatation effected a cure. "No serious symptom," he says, "has ever followed, though the dilatation is carried to the extent of an inch or an inch and a quarter. In four or five cases tears have resulted, but never of sufficient magnitude to require a suture."

COCAINE IN ACUTE PHARYNGITIS.

DR. KURZ mentions in the *Abeille Médicale* that having a severe case of phlegmonous inflammation of the pharynx, producing dyspnœa, violent headache, and great pain in the neck, which was unrelieved by chlorate of potash, salicylic acid, quinine, and ice, he painted the pharynx with a 4 per cent. solution of cocaine. The first application caused a

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choking sensation and vomiting; it was repeated at the end of five minutes, and this time no reflex actions appeared. After two more applications the local symptoms disappeared as if by magic, the extreme tumefaction becoming scarcely perceptible, and the voice, respiration, and power of deglutition returning. The cure was ultimately completed by a 2 per cent. resorcine spray.

THE RELATIONS OF THE APOTHECARIES' SOCIETY TO THE ENGLISH CONJOINT BOARD.

WE understand that a committee is being formed to arrange for a general meeting of the profession (to be held at an early date) to obtain a further proof of the feelings of medical men generally in regard to the relations of the Society of Apothecaries and the Conjoint Board, and that the following gentlemen have consented to act as honorary secretaries:—Mr. J. Wickham Barnes, hon. secretary, Poor-law Medical Officers' Association; Mr. W. C. Steele, hon. secretary, Members' Association; and Mr. W. G. Bott, hon. secretary, Association of General Practitioners.

At a meeting of the Council of the Poor-law Medical Officers' Association, held on November 4th, the resolution adopted at the conjoint meeting of the Fellows and Members of the Royal College of Surgeons in relation to the Society of Apothecaries and the "Conjoint Examination," was submitted for consideration, when it was unanimously resolved that this Council, heartily concurring in the said resolution, advises all Poor-law medical officers to use their efforts to obtain for the Society of Apothecaries its proper position in relation to the Conjoint Board.

FOREIGN UNIVERSITY INTELLIGENCE.

Prague.—Professor Bandl, who has just been appointed to the chair of Gynæcology, has been obliged by ill-health to cease lecturing. Bacteriological classes have been established under Professor Soyka in the German University, and under Dr. Hlava in the Bohemian University, for the purpose of giving instruction in bacteriology to all the district medical officers in Bohemia, who by a recent regulation of the Government are required to pass through a course of practical bacteriology.

Freiburg.—The new lecture theatre for anatomy and the newly erected zoological institute have been opened for use since the beginning of this session.

Königsberg.—Next year an additional Extraordinary Professor of Medicine is to be appointed.

Marburg.—Professor Dr. A. Wigand, Director of the Botanic Garden and of the Pharmacognostic Institute, has died, at the age of sixty-five. He was engaged on the fourth edition of his "Pharmacognosis."

AT the meeting of the Society of Medical Officers of Health, to be held on Nov. 19th, the Council will present a report on a communication recently addressed by the Commissioner of Metropolitan Police, on the subject of disinfection of public conveyances after use by persons suffering from infectious disease. Also on a recent report of the General Purposes Committee of the Metropolitan Asylums Board on the subject of Contract with Metropolitan Sanitary Authorities for the reception into the Board's Hospitals of persons suffering from infectious disease, and who are not paupers. Members are invited to bring forward subjects of interest for discussion.

THE Town Council of Astrakhan has awarded the widow of a Russian medical man, whose life was sacrificed during a recent epidemic through his devotion to his professional duties, the sum of £300, and has also undertaken to educate his son.

THE Vice-Chancellor of Cambridge University has communicated to the Senate a letter which he had received from the Attorney-General, to the effect that Mr. John Lucas Ward had left him the sum of £10,000 to be spent "in the promotion, without regard to sect or party, of scientific and literary research, or of either of those objects, in Cambridge or in the metropolis, or in both these places." After consultation with Professor Huxley, Sir James Paget, and several others, a scheme has been formulated, the fund to be called "The John Lucas Ward Fund," and to be devoted to the foundation of studentships in Pathology, open to males or females. It is also expressly set forth that studentships shall not be awarded as the result of a competitive examination, but the students are to be elected on the nomination of the Professor of Pathology.

WE are asked to state that the members of Dr. Richardson's Committee have been actively at work in promoting his return as a direct representative on the Medical Council, and have received large promises of support from all parts of the electorate, nomination papers having been filled up for them by leading representatives of the profession from London, Liverpool, Birmingham, Hull, Wakefield, and other districts.

DR. GREEN PACHA, head of the Egyptian Sanitary Department, has returned from his inspection of the western district prisons, Toura, Bennah, Mansoura, Tantah, and Alexandria. He reports that the sanitary conditions of these establishments are disgraceful. Every forty prisoners are occupying on an average cubic space only sufficient for thirteen.

AT a meeting of the Senate of the Royal University of Ireland, held on Oct. 28th, for the conferring of degrees, the Vice-Chancellor announced that the Senate had decided to confer "the honorary degree of Master of Obstetrics upon a distinguished graduate of the University, Dr. Henry Macnaughton Jones, one of the examiners in this department."

AT the last meeting of the Border Counties British Medical Association, a resolution was passed that the Association would find the funds to enable Dr. Spurgin to obtain a new trial in his action against Mr. J. C. Nicholson, and to fight the case over again.

THE authorities of Victoria University on the 4th inst. selected Mr. Mitchell Banks, of Liverpool, as their representative on the Medical Council.

IT is stated that disquieting news of the health of M. Paul Bert, French Resident-General at Annam, has been received at the Foreign Office in Paris.

DR. SAINT, a well-known physician of Evreux, has died suddenly from eating poisonous mushrooms.

POLLUTION OF THE WATER OF LEITH.—Professor Crum Brown and Mr. R. C. Reid, C.E., have issued a report on this subject. The sources of the pollution only are dealt with, the question of remedy being for the present ignored. It is estimated that 178,000 gallons of sewage per day find a passage into the stream, and that from factories 27 tons of solid matter are discharged into the river every working day, of which 40 per cent. is organic. By the time the river reaches the boundary of Edinburgh, it is offensive and unpleasant both to sight and smell. The foul smell is chiefly due to the sewage, while the unsightly appearance, turbidity, brown colour, persistent froth, and the greater part of the deposit in the bed are caused by the discharge from the paper mills.

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DIRECT REPRESENTATION: DR. GLOVER'S CANDIDATURE.

A MEETING of the executive committee and other friends of Dr. Glover was held at the house of Mr. Hutchinson, 15, Cavendish-square, on Wednesday last, at 5 P.M. Among those present were Mr. Hutchinson (in the chair), Sir Andrew Clark, Dr. Hughlings Jackson, Mr. Keele, Mr. Buckston Browne, Mr. Tweedy, Dr. Maclagan, Dr. Goodhart, Mr. Alfred Cooper, Dr. Wilbe, Dr. Milner Fothergill, Dr. Cholmeley, Mr. Hames, Dr. Stokes, Dr. Reid, Mr. Sibley, Mr. Wakley, Dr. Ford Anderson, Mr. Pearce Gould, Dr. Slight, Mr. Christopher Heath, Mr. Jennings, Dr. Davidson, Dr. F. H. Bastable, Mr. Henry Stokes, and others.

Mr. HUTCHINSON, in opening the proceedings, explained the object of the meeting, and expressed himself strongly in favour of the direct representation of the profession on the General Medical Council. He said that he knew Dr. Glover to be a man of great intelligence, great knowledge and experience in the special work of the Council, and of singular integrity of purpose, and he urged that to return him would serve to emphasise the great principle of Direct Representation.

Dr. GLOVER, in the course of his remarks which followed, said that the Medical Council was elected to administer an Act of Parliament by which its duties were strictly limited. The original intention of Parliament was that the Crown nominess should be general practitioners, and it was because such a selection had never been made that it became necessary to obtain the direct representation of the profession. He held that the regulation of medical education would be greatly helped by the presenceof general practitioners on the Council. Even now a man who had only attended six cases of midwifery might obtain a legal qualification to practise midwifery, and he was of opinion that such a state of things would long ago have been remedied if those who were personally acquainted with the immense importance of this department of general practice had had a share in the control of medical education. As an instance of the unsatisfactory nature of some of the work of the Council, he mentioned that the Medical Register was inaccurate, and that there was no printed list of the 800 names that had been added to the Register during the present year.

Dr. CHOLMELEY moved the following resolution:—"That this meeting cordially congratulates Dr. Glover on the expressions of support and kindness which have reached him from all parts of the kingdom and every section of the profession." He stated that he had had personal experience of Dr. Glover's very thorough acquaintance with the work of the Council. He had the most profound confidence in him as a direct representative of the profession, and he was convinced of the need of general practitioners on the General Medical Council, especially in reference to the education of medical stndents.

Dr. HAMES seconded the resolution, and, as a general practitioner, urged all present to do their utmost to secure Dr. Glover's return.

Mr. TWEEDY, in supporting the resolution, spoke of his intimate association with Dr. Glover in medical politics for fourteen years. Dr. Glover had followed the work of the Council so closely that his election would only convert a passive member of that body into an active one. He believed that the election of Dr. Glover and of the general practitioners would do much to secure a better recognition of the profession by the public and the State. The resolution was carried unanimously.

Sir ANDREW CLARK then moved the following resolution:—"That this meeting recognisesin Dr. Glover's position as a general practitioner, and his exceptional acquaintance with the Medical Council and its work, the very fittest qualities of a direct representative, and urges the profession to an early and hearty vote in his favour as soon as the voting papers are received." It was impossible for the Medical Council as formerly constituted to understand the needs of the body of the profession, and the Crown had failed in its duty, for, as representing the people, it ought to have nominated members of the Council from among the general practitioners. However, the profession had at last gained a great principle, and the present election would be an important crisis, for if the profession did not rise to a due sense of their responsibilities they might lose the advantages supposed to be gained. He named six qualifications of a good direct representative: (1) He should be a general practitioner; (2) he should be at the present time in *bonâ-fide* general practice; (3) character; (4) acquaintance with medical reform, its past history, its future needs; (5) perfect sympathy with his fellows; (6) independence and energy. He believed that Dr. Glover fulfilled all these conditions, and he strongly felt that he deserved the support of the whole profession.

Dr. WILBE seconded the resolution.

Mr. SIBLEY expressed his cordial concurrence with the resolution. The Medical Council was not in full sympathy with the general body of the profession. In supporting Dr. Glover, a great service would be done, especially as no one else knew so well the past conduct of the Council. The resolution was then carried unanimously.

Mr. KEELE moved, and Dr. GLOVER seconded, a vote of thanks to Mr. Hutchinson for kindly lending his house for the meeting, in acknowledging which Mr. Hutchinson said his act was only a very small expression of his very strong desire to see Dr. Glover elected to the Council.

REPORT OF THE MEDICAL OFFICER OF THE LOCAL GOVERNMENT BOARD.

[FINAL NOTICE.]

IN the last part of his annual report to the Local Government Board, Dr. Buchanan reviews the history of the pathology of cholera since the date when Koch announced, after his visit to Egypt in 1883, that this disease was identified, in so far as causation is concerned, with a definite microphyte; and in an appendix to the report are two papers by Dr. Klein on the same subject. One is a reprint of a communication which he addressed to the Royal Society last year on the Relation of Bacteria to Asiatic Cholera; and the other is a supplement dealing with the same subject, but bringing our information of it down to April of this year. We are reminded of the discovery by Koch of the comma bacillus in the alimentary canal of persons suffering from cholera, and also in certain tank-waters, and of Dr. Klein's subsequent observations, which went to show that the bacilli in question had not an unquestionable claim to be considered essential to the disease. Indeed, Dr. Klein is now disposed to regard these bacilli and other organisms found in the intestinal contents as merely incidental to the putrefaction of those matters. In Dr. Klein's supplement the story is told of the discovery of comma bacilli by Dr. T. R. Lewis in the normal fluid of the mouth, and Dr. Klein explains how he himself found the same organisms in the contents of the cæcum of perfectly normal guinea-pigs, a discovery which has a most important bearing on the experiments carried out by Koch on these and other animals, which he endeavoured to inoculate with cholera poison, and which were afterwards found to exhibit in their intestinal canals mucous flakes and numerous comma bacilli. And quite irrespectively of this, Koch's methods of operating are shown to have been perfectly capable of producing death in the animals experimented on, regardless of any cholera poisoning. The precise significance of the comma bacilli of Finkler and Prior, which are distinctly different to the organism described by Koch, and also of the bacteria described by von Emmerich and Buchner, but which have been shown by Brieger to be identical with those isolated by him from normal fæcal matter, are discussed in the report; and lastly, the experiments by Nicati and Rietsch, by van Ermengen and by Klebs, are referred to in connexion with Koch's theory of a special chemical ferment, manufactured by comma bacilli in the intestine of the cholera patient, acting as a direct cause of cholera symptoms. As to these latter, Dr. Klein observes that it is quite erroneous to regard, as Klebs does, the production of a poisonous ptomaine as peculiar to cultures of comma bacilli, since, under his own direction, Berdez has distinctly proved that in cultures of septic bacillus subtilis, as well as in cultures of Koch's comma bacilli, there is present a chemical poison having the same effect on animals as that attributed to cultures of Koch's comma bacilli. This contribution may be regarded as an authoritative summary, bringing our knowledge of the relation of bacteria to Asiatic cholera down to current date, and it shows most clearly that the question is as yet by no means solved.

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VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns 5681 births and 3172 deaths were registered during the week ending Nov. 6th. The annual death-rate in these towns, which had been 19·3 and 18·6 per 1000 in the preceding two weeks, further declined last week to 18·2. During the first five weeks of the current quarter the death-rate in these towns averaged 18·8 per 1000, and was 1·9 below the mean rate in the corresponding periods of the ten years 1876-85. The lowest rates in these towns last week were 11·9 in Derby, 14·2 in Birkenhead, 14·6 in Nottingham, and 15·0 in Birmingham. The rates in the other towns ranged upwards to 24·5 in Plymouth, 25·6 in Oldham, 25·7 in Preston, and 28·0 in Wolverhampton. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had declined in the preceding eight weeks from 1202 to 401, further fell last week to 368, and were fewer than in any week since the end of June; they included 102 from diarrhœa, 74 from scarlet fever, 66 from measles, 52 from "fever" (principally enteric), 42 from whooping-cough, 32 from diphtheria, and not one from small-pox. No death from any of these principal zymotic diseases was recorded last week in Cardiff; whereas they caused the highest death-rates in Preston, Halifax, and Wolverhampton. The greatest mortality from measles occurred in Halifax and Wolverhampton; from scarlet fever, in Salford, Bradford, Newcastle-upon-Tyne, and Huddersfield; from "fever," in Plymouth; from whooping-cough, in Sunderland; and from diarrhœa, in Hull, Sunderland, and Preston. The 32 deaths from diphtheria in the twenty-eight towns included 18 in London, 4 in Portsmouth, 3 in Norwich, and 2 in Manchester. Small-pox caused no death in London and its outer ring, or in any of the twenty-seven large provincial towns. Only 2 cases of small-pox were under treatment on Saturday last in the metropolitan hospitals receiving cases of this disease. The deaths referred to diseases of the respiratory organs in London, which had been 290 and 295 in the preceding two weeks, were last week 293, and were 103 below the corrected average. The causes of 69, or 2·1 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Nottingham, Portsmouth, Brighton, and in seven other smaller towns. The largest proportions of uncertified deaths were registered in Sheffield, Halifax, and Blackburn.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 18·2 and 18·6 per 1000 in the preceding two weeks, further rose to 22·1 in the week ending Nov. 6th; this rate was 4·0 above the mean rate during the same week in the twenty-eight large English towns. The rates in the Scotch towns last week ranged from 11·1 and 18·1 in Greenock and Dundee, to 24·0 in Glasgow and 24·7 in Edinburgh. The 545 deaths in the eight towns last week showed a further increase of 85 upon the number in the previous week, and included 21 which were referred to diarrhœa, 16 to scarlet fever, 15 to whooping-cough, 10 to diphtheria, 7 to "fever" (typhus, enteric, or simple), 4 to measles, and not one to small-pox; in all, 73 deaths resulted from these principal zymotic diseases, against 72 and 83 in the preceding two weeks. These 73 deaths were equal to an annual rate of 3·4 per 1000, which was 1·3 above the mean rate from the same diseases in the twenty-eight English towns. The deaths attributed to diarrhœa, which had been 46, 25, and 22 in the previous three weeks, further declined last week to 21, of which 7 occurred in Glasgow and 5 in Dundee. The fatal cases of whooping-cough, which had been 17 and 28 in the previous two weeks, declined last week to 15, and included 11 in Glasgow. The 16 deaths from scarlet fever showed a decline of 8 from the number in the previous week; 12 occurred in Glasgow and 4 in Edinburgh. The 10 deaths from diphtheria, on the other hand, showed a considerable increase upon recent weekly numbers, and included 4 in Glasgow, 3 in Edinburgh, and 2 in Paisley. The 7 deaths referred to "fever," of which 4 occurred in Glasgow and 2 in Edinburgh, also exceeded recent weekly numbers; and 2 of the 4 deaths from measles occurred in Glasgow. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 79 and 76 in the previous two weeks, further rose last week to 118, but were 2 below the number in the corresponding week of last year. The causes of 75, or nearly 4 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been 20·5 and 21·9 per 1000 in the preceding two weeks, further rose to 26·2 in the week ending Nov. 6th. During the first five weeks of the current quarter the death-rate in the city averaged 22·8; the mean rate during the same period was 17·0 in London and 18·4 in Edinburgh. The 177 deaths in Dublin last week showed a further increase of 29 upon the numbers returned in the preceding two weeks, and included 12 which were referred to diarrhœa, 8 to scarlet fever, 6 to "fever" (typhus, enteric, or simple), 4 to diphtheria, 1 to whooping-cough, and not one either to small-pox or measles. Thus 32 deaths resulted from the principal zymotic diseases, against 23 in each of the previous two weeks; they were equal to an annual rate of 4·7 per 1000, the rates from the same diseases last week being but 1·8 in London and 2·7 in Edinburgh. The 13 deaths attributed to diarrhœa exceeded the numbers in recent weeks, as did the 6 deaths referred to "fever." The fatal cases of scarlet fever, which had been 7 and 10 in the previous two weeks, declined again last week to 8, while the 4 deaths from diphtheria exceeded the number in any week since the beginning of May. Four inquest cases and 3 deaths from violence were registered; and 54, or nearly one-third, of the deaths occurred in public institutions. The deaths both of infants and of elderly persons showed an increase upon recent weekly numbers. The causes of 36, or nearly 20 per cent., of the deaths registered during the week were not certified.

Correspondence.

"Audi alteram partem."

DIRECT REPRESENTATION OF THE PROFESSION ON THE GENERAL MEDICAL COUNCIL.

To the Editor of THE LANCET.

SIR,—Having received circulars from Sir B. W. Foster, Messrs. Wheelhouse, Richardson, Glover, Dolan, Brown, and Carpenter, who are candidates for election by the profession on the General Medical Council, we deemed it advisable "on behalf of the Association of General Practitioners," to obtain categorical answers to the following questions, which are of vital importance to the general practitioner, and we now ask your readers to give them careful study and consideration before recording their votes.

Question 1.—Are you in favour of penal legislation directed against unqualified practitioners?

Question 2.—Are you in favour of the protection of the profession, by the Council, against unqualified practice?

Question 3.—Are you in favour of the abolition of the Apothecaries' Society?

Question 4.—Are you in favour of the scheme for granting a Doctorate in Medicine which is before the board of the conjoint Colleges?

Trusting you will favour us by inserting this correspondence. We remain, Sir, yours, sincerely,

H. W. VERDON, M.D., F.R.C.S.
W. GIBSON BOTT, L.R.C.P., M.R.C.S.

61, Kennington Park-road, S.E., Nov. 9th, 1886.

14, Temple-row, Birmingham, Nov. 4th, 1886.

MY DEAR SIRS,—I am very glad to answer the questions you send me on behalf of the Association of General Practitioners:—

1. I am in favour of penal legislation directed against unqualified practitioners, both in the interest of the profession and in the interests of the public at large.

2. I am in favour of the Council using all the powers they have, and also in favour of extending their powers against unqualified practice.

3. No, certainly not.

4. Yes. I have for years advocated some scheme for granting the Doctorate in Medicine to all practitioners able to pass the necessary examinations. I have myself felt the

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injury inflicted by our present system on men who may have chosen a medical school for their education unconnected with a university. I am, therefore, most strongly in favour of any scheme that will give the Doctorate to men who can pass the examinations irrespective of the school at which they have been educated.

I hope these answers are explicit enough for your purpose.

Yours very truly,

Messrs. Verdon and Bott. (Signed) B. WALTER FOSTER.

Hillary-place, Leeds, Nov. 2nd, 1886.

GENTLEMEN,—I am very glad, and I thank you, that you give me an opportunity to lay before the Association of General Practitioners my views upon the four questions submitted to me in your letter of this morning, and I shall be glad if, when the opportunity comes, you will make my replies known to the Association.

1. Yes, I am. During the whole time I have acted as a member of the Medical Reform Committee of the British Medical Association, and when any question of medical reform has been before Parliament, I, in combination with others, have striven to the utmost of our power and ability to secure adequate penal clauses under this head.

2. I am. I am in favour of the exercise by the Council of any power or authority of this kind that it possesses, but seeing that the Council is only the *exponent*, not the *maker*, of the Acts of Parliament it is set to administer, and that it does not possess any such power, except in an indirect manner, against such qualified practitioners as depute to unqualified assistants who have no licence to practise (and against whom I would use every available power), I do not see how much in this direction can be expected of any representatives. As I have said in paragraph 12 of my address, "I hold that the regulation of the organisation of the profession is the true work of the Council, whilst its protection against unqualified assailants is the duty of *Parliament;* but I none the less also hold that the Council should at all times be the chief adviser of the Government; and I would lose no opportunity that might ever arise to induce any Government to put a stop to illegal practice. Should it ever be in my power, as a member of the Council, to urge the necessity of protection of the qualified as against unqualified practitioners in any way upon Parliament, I would spare no effort either to do so or to make my voice heard.

3. No, I am not. I hold the licence of the Society myself, and for thirty-seven years have practised medicine on the strength of it, and to repudiate it now would be both mean and dishonest. I consider that the Society has been of great use and value in its day, and that it has done great things both for the cause of medical education and for the profession. I should be sorry to see the Society driven into existence as a separate and second portal of entrance into the profession, and I do not consider such course a necessity. My desire would be to see a righteous consolidation of the three now existing authorities—viz., the College of Physicians, the College of Surgeons, and the Apothecaries' Society—into one examining body, whose examinations, after proving a candidate to be satisfactorily qualified to practise medicine, surgery, midwifery, and pharmacy, should admit him to register as a "qualified general practitioner." By a second examination, before the same body but on higher lines, I would enable him to obtain a higher degree, say, his F.R.C.S., or, if he preferred a *medical* distinction, an M.D.; and then I am of opinion that foreign degrees would become so rare that, in union with a British qualification, and under proper guarantees, it might, in generosity, be admitted to simultaneous registration.

4. My last answer in a great measure covers this question. Rather than drive Englishmen to seek either foreign or Scotch or Irish M.D. degrees, I am; but I should much prefer the mode of granting such degree sketched above—i.e., as a higher qualification for an already registered general practitioner.

I am sorry my replies have run to so great a length, but I consider this letter a very serious one, and prefer their doing even that to leaving them in ambiguity.

I am, Gentlemen, yours very truly,

Messrs. Verdon and Bott. (Signed) C. G. WHEELHOUSE.

25, Manchester-square, W., Nov. 3rd, 1886.

DEAR SIRS,—I have pleasure in answering your questions in the order in which they come.

1. Yes.
2. Yes.
3. I do not think it would be just to the many holders of its licence to abolish the Apothecaries' Company. But I think that the Company requires to be reformed, and that it may then play as important a part in the future of medicine as it has done in the past.
4. Yes.

I am, dear Sirs, faithfully yours,

Messrs. Verdon and Bott. (Signed) B. W. RICHARDSON.

Horton House, Halifax, Nov. 2nd, 1886.

DEAR SIRS,—I enclose you copy of my address at Manchester; you will see my views clearly expressed:—

1. I am in favour of penal legislation and actions against unqualified practitioners.
2. I should, if returned, bring the subject before the Council.
3. If the Apothecaries' Society were suppressed, *our sole chance* of prosecution would be taken away. I should regard this as a calamity. As a licentiate of this Society, I should resist such a proposal.
4. As regards qualifications, I have always advocated the one-portal system; and now, with the absolute necessity of English students having a degree of M.D., support this Conjoint Scheme as far as it goes. I should like to see some retrospective legislation for the men now qualified, to obtain the degree of M.D. by examination or otherwise.

Yours very truly,

Messrs. Verdon and Bott. (Signed) T. M. DOLAN.

7, King William-street, E.C., Nov. 2nd, 1886.

DEAR SIRS,—In reply to your letter, to hand this evening, I beg to say—

1. That I am in favour of penal legislation directed against unqualified practitioners.
2. That I am strongly in favour of the General Medical Council protecting the profession against unqualified practice.
3. I am not in favour of the abolition of the Apothecaries' Society, unless under some comprehensive scheme amalgamating the various medical corporations, and then only if the penal clauses of the Apothecaries Act of 1815 are vested in some other body representing the profession.
4. I am in favour of granting a medical degree to all who pass a complete examination in medicine, surgery, and obstetrics.

I am, dear Sirs, yours obediently,

Messrs. Verdon and Bott. (Signed) GEORGE BROWN.

139, Stockwell-road, S.W., Nov. 2nd, 1886.

DEAR SIRS, In reply to your questions just now received—

1. I am in favour of such legislation as you name, but you will *not now get it.*
2. I am in favour of the protection you suggest *upon principle*, but practically it could not be carried out.
3. I am not in favour of the abolition of the Apothecaries Society. Nor is there the least fear that they will be abolished; on the contrary, they will, under the new Act, become a more powerful corporation than they now are.
4. I am not in favour of the *present scheme* of the conjoint Colleges for granting a Doctorate in Medicine.

I am, Gentlemen, faithfully yours,

Messrs. Verdon and Bott. (Signed) R. H. S. CARPENTER.

25, Highbury-place, Nov. 8th, 1886.

DEAR SIRS,—I am sorry that your letter got mislaid, and that I could not find it till now (midnight). My answer to the questions you propose is as follows:—

1. I am in favour of severe penal measures against all unqualified practitioners that pretend to be qualified, or in any way defraud the public.
2. I think the Council should be made responsible for prosecuting such cases, and would, in doing so, make good use of its accumulating funds.
3. I recognise in the New Act a new lease for the Apothecaries' Society, unless the other corporations incorporate it in their scheme, or by their action make it superfluous.
4. I am deeply alive to the necessity of creating facilities in London for medical graduation such as exist in Scotland. There should be established for this end a *teaching* university in London such as exists in *every other metropolis in Europe.* To give examining corporations a degree-granting power may become necessary, but this is not the scheme that would meet the competition of regular universities in other parts, nor one that seems to me the best.

Again apologising for my delay,

I am, Gentlemen, your obedient servant,

Messrs. Verdon and Bott. (Signed) JAMES GREY GLOVER.

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To the Editor of THE LANCET.

SIR,—In spite of your warning in THE LANCET (Oct. 2nd), which should not have been needed by a body of English gentlemen, the Council of the British Medical Association have passed a resolution in favour of *two of themselves*, and this resolution is being used to produce the erroneous impression that the two councillors have been nominated by the Association. So successful have been the misrepresentations made, that not only members, but even officers of the branches, have expressed their regret that the Association required their allegiance, or their annoyance at the pressure put on them. I went to Brighton expressly to see whether the Association wished to take part in the election, and was prepared, as another candidate said he was, to submit my views to the consideration of my fellow-members, or any committee they might appoint; but the general meeting refused to take any part in the election, and although the Council managed to get the question brought up at two separate meetings, the members would not, on either occasion, forego their independence or refer the subject to their Council.

Your columns have recorded how, after this, certain of these councillors held a private meeting in their hotel, developed into the Birmingham 32, who, after dwindling to 14 or 15, took a vote by 11 to 3. To say the least, candidates who were not consulted can scarcely be expected to regard these 11 ayes as representing the profession; while, as to the Association, they were not only without its mandate, but acting in direct opposition to its decision. It has been asserted that this "committee was formed under conditions involving the greatest publicity; for it was projected at an annual meeting of the Association, which was of the most public character." (!) This misstatement was at once flatly contradicted by Mr. Armstrong and others of your correspondents, and is completely at variance with the statements of Dr. Carter himself in your last issue. But my correspondence convinces me that it is still necessary to repeat that the committee was not formed until after the Association, in general meeting assembled, had refused to interfere in the election, after the proposal to refer the matter to the Council had been rejected amidst overwhelming expressions of dissent. We have since been told that the proposal to refer the matter to the Council "was brought forward at a time and under circumstances which made it impossible even fairly to discuss it." This, also, is a complete misrepresentation. The proposal was brought forward on two separate days, and, in spite of all the pressure that could be exercised, the members on both occasions declined to intervene. I should have supposed that no one actually present could have been deceived as to the determination of the members; but in THE LANCET of Oct. 30th Dr. Carter says his "own idea" is, that if a vote could have been taken at the "very large meeting" his proposal "would have been adopted with very few dissentients." But neither the candidates nor the other councillors laboured under such a mistake. As was remarked by more than one of the audience, "they dropped the proposal like a hot potato," and if they or Dr. Carter had stayed to listen to the denunciations which were afterwards freely expressed, there might possibly have been less need for subsequent protests. Both the meetings refused to support the gentlemen brought forward by Dr. Carter, and therefore they have no right to pose as the nominees of the Association, but only of the committee formed at their hotel by those who refused to accept the decision of the general meeting. After they had gathered their 300 they called themselves a "committee for ascertaining the wishes of the profession"; but on their own showing the utmost they did by the post-card poll of themselves was to ascertain their own wishes. They have since refused to publish the numbers of that poll, or give any information about it, so that there is much point in Mr. Hardy's remark, that we are asked to accept the decision of three persons as the voice of the profession. Nevertheless, Dr. Carter advertises in THE LANCET that his candidates were "selected" by his committee "*after an open vote!*" Dr. Glover declined the coalition so astutely "projected" for him, but his name is being used as if he had accepted it. If Messrs. Wheelhouse and Foster succeed in keeping up the delusion that they are the nominees of the Association, and thereby secure their election, they will be welcome to a victory obtained by such means.

I am, Sir, yours faithfully,

Nov. 3rd, 1886. M. PROSSER JAMES.

To the Editor of THE LANCET.

SIR,—In THE LANCET of to-day Dr. Henry W. Williams makes some statements that are not quite accurate. He says that the Brighton meeting "distinctly declined to take any part in the selection of candidates." No doubt this is his recollection of what took place at the meeting, but it is not the published record of the proceedings taken from the shorthand writers' notes (*vide British Medical Journal*, Aug. 14th, 1886, p. 336), nor is it my recollection of what occurred. The fact is that the meeting expressed no opinion whatever, for the very good reason that no vote was taken, and, as the record of the proceedings states, "the matter dropped." It did so because the resolution and the amendment were both withdrawn. Dr. Carter's resolution was as follows: "That it be an instruction from this meeting to the Council of the British Medical Association to select three names of gentlemen suitable for election to the General Medical Council by the medical practitioners of England, and to submit them to a future general meeting during the session of the Association in Brighton." Dr. Dolan moved the following amendment: "That inasmuch as it is inexpedient that this Association should appear in any way to interfere with the discretion of the profession at large to elect their direct representatives, the action of the Association ought to be strictly limited to obtaining from such of its members as desire to express their opinion a plebiscite upon the names of those candidates for the office who may submit their names for the purpose through the Council." Dr. Bernard O'Connor, another candidate, moved "that no action be taken in the matter," but this amendment was not even seconded, and Dr. Carter and Dr. Dolan having withdrawn their motions, the matter dropped and the meeting separated. This is the simple statement of what took place, and does not justify the construction advanced by Dr. Williams, nor in any way support the conclusion that Mr. Wheelhouse and Sir B. W. Foster are "acting in opposition to the expressed will of the general meeting." I hope he will therefore withdraw a statement which is unfair. In conclusion, I wish to point out that my committee have acted upon the very lines laid down in Dr. Dolan's amendment, and that the credit of our method of a plebiscite to select our candidates is due to him.

I am, Sir, yours truly,

Halesowen, Nov. 6th, 1886. HUGH R. KER.

To the Editor of THE LANCET.

SIR,—The letter of Dr. Joseph Rogers, which was inserted in your issue of the 30th ult., has had the effect of misleading many Poor-law medical officers, as it has since been re-printed in an isolated form and very generally circulated from Birmingham (as indicated by the post marks), with an appendage to Dr. Rogers' signature, which was not in your publication. I am sure Dr. Rogers never wished this letter to appear as if written by him in an official capacity—viz., as Chairman of the Poor-law Medical Officers' Association, and I believe he now regrets that he has given an opportunity for this construction to be put upon it. He has since signed my nomination paper, and thereby recommended me as a fit candidate for election to the Medical Council.

I am, Sir, your obedient servant,

Royston, Nov. 9th, 1886. D. B. BALDING.

To the Editor of THE LANCET.

SIR,—I feel it to be a duty to explain to my professional brethren, and especially to Poor-law medical officers, that a letter in reference to direct representation on the General Medical Council, which is now being extensively circulated, and bears the signature of Dr. Joseph Rogers, and may by many be supposed to emanate from the Poor-law Medical Officers' Association, has not been sanctioned by that body or its Council, but must be regarded as one from Dr. Rogers himself, and for which the Association or its Council takes no responsibility.—I am, Sir, yours truly,

JAMES CORNWALL, F.R.C.S. Eng.,
Senior Vice-president, Poor-law, Medical Officers' Association.

Fairford, Nov. 8th, 1886.

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DR. GLOVER AND FREEDOM OF ELECTION.

To the Editor of THE LANCET.

SIR,—It having just been brought to my notice by Sir Crichton Browne, the chairman of Dr. Richardson's committee, that there is an impression with some that Dr. Glover has attempted to influence the other two votes of his supporters, I have the authority of Dr. Glover to state that he has on no occasion attempted, directly or indirectly, to do so, and he begs me further to take this opportunity to inform his friends that he desires them to feel themselves perfectly free as regards the disposal of their other two votes. I am, Sir, yours truly,

HENRY J. STOKES, M.D.,
Chairman of Dr. Glover's Committee.

Compton-terrace, Highbury, N., Nov. 10th, 1886.

THE GENERAL MEETING AT THE COLLEGE OF SURGEONS.

To the Editor of THE LANCET.

SIR,—In reference to your comment that my speech lost much of its force owing to its being too long, and to the persistency with which I disregarded the evident impatience of the audience, may I be allowed a few words of explanation? My speech was calculated to last not more than twenty minutes, but owing to the interpolation of remarks in reply to Mr. Erichsen, whom I had been asked to follow, and to my not having taken the precaution to look at the clock when I rose, time was expended without my being at all aware of its amount. When, for the first time during my speech, I was interrupted, it was by the President concerning the Apothecaries' Society. The remarks which then remained would have occupied without further interruption precisely two minutes; and as the President's admonition had not been cheered by the audience, and as without a dissentient voice he requested me to proceed, I was naturally led to suppose that the meeting was quite ready to hear me out, and that the barometer did not indicate any sudden fall within that brief space of time. A minute later, which probably seemed longer in the close atmosphere of the place, I was checked, for a moment only, by a noise from the antipodes of the theatre. I proceeded with what I plainly stated was my last point, and was within sight of the winning-post, when the still distant and not at all intelligible noise broke out again. As I was in the middle of a sentence and had only three sentences more to deliver, embodying, as I thought, an important argument, and absolutely necessary to complete the sense of the passage, I felt justified in making an effort to outlive the jarring elements, which I did not recognise by any means as the sense of the meeting generally; but, the President intervening, I thought it would be ludicrous to have my unheard and unknown peroration put to the vote, unless he would read it to the malcontents, and therefore I resumed my seat. I now ask leave to quote the amputated sentences:—"You are approached by your professional brethren, who ask that their representatives may sit with you at the Council board. If you turn a deaf ear to that claim, if you say the bulk of the profession is not worthy of any such privilege, and your opinion is known in the high places of the land, what effect on the social standing of the profession must such a refusal have? The public will estimate the rank and file of the profession at the value placed on them by their acknowledged leaders, and, therefore, on the decision of this question by the Council rests the elevation or depression of the profession in the social scale." Ever since my medico-political education commenced with the perusal of reforming articles in THE LANCET I have taken a deep interest in questions relating to the representation of the profession in the Medical Council and the Corporations. The former I advocated twenty years ago, and both were advocated in my Carmichael Essay, and in my oration at the Hunterian Society in 1879. From long standing conviction, therefore, and from a sense of what is due to the Members of the College and to the profession at large, I have come forward again (and, as I am informed and believe, in opposition to my private interests) to aid a righteous and most important cause. Under these circumstances I hope I may expect that a casual error will be condoned, and I can only express regret if, by an accidental trespass, I excluded any more efficient champion, or unwittingly exhausted the patience of a few of those whom I intended to serve. I am, Sir, yours, &c.,

Nov. 8th, 1886. WALTER RIVINGTON.

To the Editor of THE LANCET.

SIR,—May we crave a fraction of space in your journal for a brief explanation of the amendment proposed and seconded by us at the General Meeting of the College of Surgeons on the 4th inst.? That meeting had already so far exceeded in its duration those of last year that Members of the College, drawn by the calls of busy practice, had for the most part left the theatre, and we therefore could not try the patience of those remaining by a lengthy exposition. The amendment suggested by us was that, in Mr. Paul Swain's resolution bearing upon the widening of the basis of the Fellowship, the word "first" be inserted before the word "method." This, the fourth resolution, thus amended, was subsequently carried as a substantive motion. Now for its effect. It is that the Council is apprised of the views of the Members—to wit, that they do not wish to obtain a Fellowship granted annually by election to ten Members of twenty years' standing; while they acknowledge with gratitude the concession made by the Council in exempting Members of fifteen years' standing from the ordeal of the Primary Examination in Anatomy and Physiology. The Members of the College are not hankering after a final decoration, as they do not desire the empty glory of a Fellowship acquired by an act of grace, or by nomination; an evil that originated, though in enormously greater proportion, at the time of the first creation of the Fellowship, and which they had hoped would die out with the natural term of life of the Fellows then fathered upon the College. The Members do not call for any change derogatory to the academic status of a distinction now most honourable in that it is acquired by examination. On the other hand, in the second of the two methods adopted by the Council, they perceive a wise attempt to meet the wants of a *few*. Members who have acquired superior skill in surgery and pathology, and who, while not sufficiently numerous to cause any anxiety to the exclusive character of the Fellowship, would yet be no mean compeers of men whose circumstances in early life have permitted them to enter at the usual epoch in their professional career the list of candidates for that honour. The Members recognise with thankfulness the consideration of the Council, herein shown, for those whose practical skill, as evinced by their passing the searching tests of the Second Examination for the Fellowship, should excuse them from the technical drudgery of undergoing a fresh training in the latest editions of the alphabet of their art.

We consider the first proposal of the Council, together with its late position in relation to the Society of Apothecaries, as fresh proof, if proof were needed, that without a few Members of the College of Surgeons sitting upon the College Council, that body, with howsoever goodwill, can never effectually keep touch with the majority of its diplomates. At present, though the Members would gladly work *with* the Council, they are forced by that body to act *outside* it; and the petition, a copy of which appeared on page 43 (advertisement) of your issue of Oct. 16th, will show in what direction their efforts must tend. At the risk of monotony, we still ask for further signatures, in order that our hands may be strengthened to the utmost in an undertaking the success of which appears to be almost within our grasp.—We are, Sir, your obedient servants,

WARWICK C. STEELE,
WM. ASHTON ELLIS,
Hon. Secs., Association of Members of Royal College of Surgeons, England.

Nov. 8th, 1886.

THE ENGLISH CONJOINT BOARD.

To the Editor of THE LANCET.

SIR,—On behalf of myself and colleagues, I beg to call your attention to the effect of the new regulations of the Examining Board in England on the recognised provincia hospitals.

By the present arrangement of the two Colleges, neither will give its qualification separately, and therefore the regulations issued by them conjointly must be obeyed by all those wishing to obtain the diploma of L.R.C.P. or M.R.C.S.

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Prior to this combination a student commencing his studies at one of the recognised provincial hospitals was allowed to count a year's hospital practice as one of the four years of study required to obtain his diploma—i.e., a student having spent his first year at a recognised provincial hospital entered at a medical school, and at the end of his second winter session at such school could present himself for his Primary College, now called the Second Examination. A year subsequently he was allowed to present himself for the Final, in virtue of having spent a year at a recognised provincial hospital. By the present arrangement, he is not permitted to present himself for his Final until *two years* after passing his Second Examination, and thus the student who did a year's practical work before entering a medical school is, as far as time goes, no better off than his fellow who came straight to such medical school without any previous training; in fact, the provincial hospital student has lost a year. It may be suggested that men can come into the country after their second year in London, but this would not take place for the following reason. By going into the country at that time, they would lose all position at their school as third-year's students, and consequently all chance of obtaining valuable appointments for which otherwise they would be eligible. Thus the large amount of valuable experience and practice obtainable at the provincial hospitals are lost to future students, whilst the loss of a working staff of students to such hospital itself is a very serious one. I would suggest that all candidates for election to the Medical Council be asked to give their support, in order to get the state of things complained of altered.

I am, Sir, yours truly,

JAS. BANKART,
Senior Surgeon to the Devon and Exeter Hospital.

Exeter, Nov. 9th, 1886.

*** Under the present arrangement, instruction in Chemistry, Practical Chemistry, Materia Medica, and Pharmacy may be given before the student's entry at a recognised medical school, in the first year of medical study after registration, and the student can spend his time during this period at no better place than at a provincial hospital. He can pass his final examinations in three years and a half after entering a medical school, and few students have ever obtained the diplomas of M.R.C.S. and L.R.C.P. in less time than this under the old regulations.—ED. L.

THE QUEEN'S JUBILEE: A SUGGESTION.

To the Editor of THE LANCET.

SIR,—I not infrequently hear it asked, "How is the medical profession going to commemorate the Queen's Jubilee?" Would you grant me space to make one suggestion? There is one medical corporation—the Royal College of Surgeons of England—that stands greatly in need of a "Hall," a building commensurate with the present position of the College, where Members and Fellows may hold their meetings; in which all collegiate entertainments might be given, rather than in the library and museum as at present; in which all the works of art might be placed. Nothing can be less fitting than the present position of the busts—a collection *nulli secundus*. The pictures as works of art, with a few exceptions, are not great; but they represent great men, and should be placed where all members of the corporation might have an opportunity of seeing them. The College is greatly indebted to the Queen for the gracious interest Her Majesty took in the new building on the Embankment, and it might be called the "Queen's Hall," and contain a statue of Her Majesty. It would also serve as an expression of the appreciation of the College of the great bequest we are about to receive. There would be little difficulty in finding within the precincts of the College the necessary space. I trust I may be pardoned for thus intruding myself on so important an occasion. It is singular that the position of the new Examination Hall in the Savoy is one of those suggested to Dr. William Hunter, when, in 1764, previous to building his school in Great Windmill-street, he offered the Government to build a school and museum at his own cost if he were granted the ground. This offer was refused, and that magnificent collection he brought together is in Glasgow.

I am, Sir, your obedient servant,

Athenæum Club, Nov. 9th, 1886. CHARLES HAWKINS.

"DEATH OF A PASTEUR PATIENT UNDER SUSPICIOUS CIRCUMSTANCES."

To the Editor of THE LANCET.

SIR,—A paragraph with the above sensational heading appeared in a number of newspapers in this district last Thursday, the announcement being slightly varied in some of them. The deceased, A. Wilde, was stated to have been bitten by an unfortunate man named Oates, who died of rabies at Rotherham some weeks ago, and whom he was assisting to nurse. Wilde subsequently went to Paris and was treated by Pasteur. Considering the serious character of the case, involving a possible (and probable) charge of failure against Pasteur's method, if not the conclusion being drawn that the treatment itself was the cause of death, I went at once to Rotherham, my object being to obtain some material from the deceased for test-inoculations to prove whether any, and what kind, of rabic virus was present. There is no difficulty in distinguishing whether the virus in such a case has emanated from a dog (even after passing through a human subject) or from the rabbit (which is the virus used by Pasteur). On arriving at Rotherham, I was not a little surprised to find that nothing was known about the startling news, and that no "suspicious circumstances" had occurred: in fact, it was evident that the thing was a cruel and improper *canard*. Dr. Foote, the medical attendant, told me the cause of death was acute congestion of the lungs, and that there had never been a symptom simulating rabes. Dr. Waller, who made the post-mortem examination, informed me that all the appearances were quite in consonance with the symptoms seen during life, and that there was absolutely nothing to support the sensational newspaper report. I accordingly felt it would be quite useless and unnecessary to make any inoculations, as the cause of death was clear. The reprehensible manufacture of such *canards* cannot be too strongly condemned.

I am, Sir, your obedient servant,

Bradford, Nov. 9th, 1886. THOS. WHITESIDE HIME.

P.S.—I may add that Wilde was not really intentionally bitten by the deceased, Oates. But in a struggle while trying to get that unfortunate man into bed he suffered an abrasion of the skin, quite justifying the anxiety which caused him to be sent to Pasteur for treatment.

INDUCTION OF LABOUR IN CASES OF ALBUMINURIA IN PREGNANCY.

To the Editor of THE LANCET.

SIR,—The letters from Dr. Donald and Dr. Cullingworth (Nov. 6th) satisfactorily dispose of the doubts expressed by Dr. Murphy and myself relative to the potency of the drugs, pilocarpine and jaborandi, used in the case recorded Sept. 18th. They prove that these two drugs are not infallible diaphoretics. They also lend support to the view that when sweating is produced and good done, it is probably the sweating rather than any specific action of the drug which does the good, for in this case no good was done and no sweating was produced. If Dr. Donald will read my letter again, he will see that I did not say that if the drug produces marked diaphoresis then good will follow. I think it very likely that cases may occur in which the pilocarpine causes the usual copious perspirations, without having any beneficial effect in cases like that of Dr. Cullingworth, or even in cases of puerperal convulsions. But believing that pilocarpine does good because of its diaphoretic properties, and not because of any of its other physiological effects, I am not surprised to find that in this case, in which, for some reason or other, no sweating was caused, no benefit resulted. Indeed, hot-air baths were tried without benefit, and it is not stated whether they produced sweating or not, but it is stated further on that the skin was very dry. With regard to the ecbolic action of pilocarpine, Massman of St. Petersburg appears to have accidentally found it out (*vide* THE LANCET, Feb. 8th, 1879) while using the drug in a case of pregnancy with dropsy. In my first case of puerperal eclampsia in which pilocarpine was used I did not pay attention to this point, but from subsequent experience I feel sure it was the pilocarpine which caused the death of the child by setting up tetanic uterine contraction. In my second case the contractions were quite remarkable after the use of pilocarpine. Dr. Donald says the weight of

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evidence lies quite on the other side, and refers to researches by Hyernaux and cases by Clay and Kleinwachter. On referring to these (*Lond. Med. Record*, Jan. 1879), I find that Hyernaux administered hypodermic injections of pilocarpine to two pregnant women. In the first case labour resulted, but enemata and vaginal injections and hip baths had been employed as well. In the second case labour was not induced, although sweating was caused. In Clay's case pilocarpine caused uterine contractions until the os was the size of a halfpenny, and labour pains were present at intervals of fifteen minutes. In Kleinwachter's case three injections of pilocarpine were given to induce labour. Uterine contractions set in an hour and a half after the first injection. An hour and a half after the second injection the membranes burst, but the pains went off during the night. After a third injection the pains again commenced. I submit that these cases of Clay and Kleinwachter afford positive evidence of the ecbolic action of pilocarpine. No doubt if the drug be given at long enough intervals the action may not be great; but if given at short intervals it will in most cases cause uterine contractions; but these are so prolonged that it is not desirable to employ pilocarpine for the induction of labour.

I am, Sir, yours truly,

St. Thomas's-street, S.E., Nov. 9th, 1886. P. HORROCKS.

To the Editor of THE LANCET.

SIR,—The experiments of Dr. Donald with the pilocarpine used in Dr. Cullingworth's case are very interesting, and dispose of the assumption that it was altogether inert; but that does not at the same time dispose of my contention, that the trial was not a satisfactory one, inasmuch as the characteristic diaphoresis did not take place. Now, from what we know of pilocarpine, it may be safely stated this was owing to causes either extrinsic or intrinsic to the patient; if the former, it does not concern me; if the latter, the failure was due to some cause peculiar to the patient as an individual, or to some feature of the disease. If due to an idiosyncrasy, we need not further discuss it; but if from his experience of this one case Dr. Cullingworth contends that there is a type of the albuminuria of pregnancy in which pilocarpine properly administered in full doses does not produce diaphoresis, I may, I think, in perfect fairness, ask him to admit that in this peculiar type, as far as he knows, convulsions never occur, and the termination is always favourable. I am, Sir, yours &c.,

Sunderland, Nov. 9th, 1886. JAMES MURPHY.

INFANT MORTALITY IN READING.

To the Editor of THE LANCET.

SIR,—Dr. Shea, medical officer of health for Reading, shifts the question of infant mortality in the borough, which was the subject brought by me before the Pathological Society for discussion, to that of the "vital statistics of Reading." He complains that I compare the thickly populated borough of Reading with the sparsely populated rural districts adjoining; and thus implies that the comparison is unfair to the borough, as these have a "greater area in acres." Density of population is not necessarily associated with as high a death-rate as that of Reading. For example, West Ham, in Essex, has a population of more than 150,000—i.e., nearly four times the population of Reading—and the same population to the acre as Reading; yet its death-rate is not so high this town. Other comparisons might be made not favourable to Reading; but this was not the object of my communication to the Pathological Society. The Registrar-General states that "healthy districts are all those registration districts in which the mean annual death-rate for persons (males and females together) was under 17 00 per 1000 in 1871-80." Reading during this period had a death-rate of 19·00, or, excluding the deaths in the Royal Berks Hospital, 18·00, so that the registration district of the borough of Reading is excluded from the Registrar-General's list of healthy districts. No one is more competent, by his knowledge and earnestness in the work, to effect a permanent reduction in the death-rate of Reading than Dr. Shea. But the period embraced by his statistics is too brief to bear comparison with that of the Registrar-General.

I am, Sir, yours obediently,

Nov. 10th, 1886. J. G. BARFORD.

INFANTILE DIARRHŒA.

To the Editor of THE LANCET.

SIR,—Your annotation on the above-named disease (?) in THE LANCET of Sept. 18th serves to awaken memories of the past. My interest in the subject began with my advent in Leicester at the end of 1876, and terminated with the meeting of medical officers of health at York on April 7th, 1881. To this meeting, which was specially convened to discuss Infantile Mortality from Diarrhœa, I was invited as one who had put on record his observations of the complaint in question both at Leicester and Nottingham. Drs. Ballard and Parsons represented the Local Government Board, and an interesting and instructive discussion ended with Dr. Ballard's announcement of his Commission of Inquiry into the causes of summer diarrhœa. Dr. Ballard had the honour of closing the debate in a speech, from which I extract the following:—"He had been at a great deal of trouble to cleanse, and sweep, and brush, and scour his mind from everything in the shape of a preconceived notion either as to what diarrhœa is or what its cause or causes." After such a declaration considerable expectations were naturally raised, and all present appeared inclined to yield the palm to a gentleman of such impartial views, and to await his promised report. Of that report I have never since heard, and my chief object in writing is to ask if any such report has been published. From the tone and wording of the annotation referred to, no progress appears to have been made since 1881, and therefore I assume that no such report has been issued from the central department of public health. It occurred to me at the York meeting that Dr. Ballard was too free in his use of the "broom," for there had been some very searching inquiries (both official and non-official) going on for several years at Leicester—where the disease is endemic—and elsewhere, my own line of inquiry being conducted in the following order: 1. What is the average quarterly and annual birth-rate of the given town or district in question, and what proportion does the infant population bear to the general population? 2. What are the habits and employment of the parents, and their physical and moral status? 3. What are the direct effects of heat on the human economy, and particularly on infants? 4. Will heat *per se* produce diarrhœa, irrespective of sanitary condition, and will insanitary conditions aggravate the disease when heat is present? 5. What increment of heat is necessary to produce epidemic diarrhœa? 6. Is summer diarrhœa a mild form of cholera, and are the Americans justified in calling it "cholera infantum"? 7. Is infantile summer diarrhœa a zymotic or a constitutional disease?

My actual experience of summer diarrhœa at Leicester and Nottingham, which has been published in detail, together with a review of the sanitary history of the former town extending over a period of thirty years, enabled me to arrive at certain definite conclusions which have never been traversed, and which time (the great avenger) has verified. For these and for kindred observations on infant mortality I have never received the shadow of acknowledgment from the medical press of this country. It is not so abroad; our French neighbours can and do appreciate voluntary effort in the cause of science and of humanity; but in England it appears to be necessary first to die in order to live! Do we not see it illustrated every day, and notably at present in your influential columns?

I am, Sir, your obedient servant,

ALEXANDER MCCOOK WEIR, M.D., &c.

Nottingham, Sept. 1886.

SOCIETY FOR THE PREVENTION OF HYDROPHOBIA AND REFORM OF THE DOG LAWS.—The General Committee of this Society held its fourth meeting on Friday last at the offices, 50, Leicester-square, London, W.C., to consider a programme which had been drafted by the Sub-committee and circulated among members and supporters. Mr. Victor Horsley, F.R.S., was elected a member of committee. Many letters were read expressing approval of the programme, and regretting that the writers were unable to attend. The Honorary Secretary having made a financial statement of a satisfactory nature, the Chairman, Colonel R. H. Rosser, briefly explained the care and time given by the Sub-committee to the programme, which was then discussed in detail, and ordered to be printed with some additions and alterations.

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MANCHESTER.

(From our own Correspondent.)

THE PREVALENCE OF SCARLET FEVER.

THE weekly returns of our medical officers of health have for some weeks past shown the greatly increased prevalence in Manchester and Salford of scarlet fever, more than a thousand cases having been notified during the last quarter, and at the monthly meeting of the Board of the Royal Infirmary it was stated that there were upwards of 200 cases of the disease under treatment in the fever hospital belonging to that institution. From returns published in other towns, it would almost seem as if an epidemic scarlet fever wave were passing over the country, as Liverpool, Dundee, Leeds, Aberdeen, Oldham, &c., all show a considerable increase of late of scarlet fever. At the last meeting of the Openshaw Local Board the propriety of taking steps to get the cases in that district reported by the medical practitioners was discussed.

THE MANCHESTER AND SALFORD SANITARY ASSOCIATION

at times act as a thorn in the side of our sanitary authorities. They have been drawing the attention of the latter to the need for increased supervision and inspection of our bakehouses. They have also been considering what steps can be taken for the better safe-guarding of the sources of our milk-supply, and have forwarded a memorial to the Privy Council asking for the inclusion of anthrax or splenic fever amongst the other contagious diseases in the Act relating to the same, as there has been recently loss of human life from this disease being transmitted from cattle to man. The necessary order has since been issued by the Privy Council.

THE VICTORIA UNIVERSITY.

"Degree day" was held on the 4th inst., and the ceremony took place in the Town-hall, instead of, as usual, in the College. There was a large attendance both of the general public and those taking part in the proceedings. Amongst the latter were the Bishop of Chester and Sir U. Kay-Shuttleworth, M.P. It was noteworthy as being the first occasion on which a doctor's degree has been conferred, and this was in the faculty of medicine. The gentleman who has gained this distinction is Mr. E. Gordon. In the afternoon of the same day, at a meeting of the University Court, Dr. Banks, of University College, Liverpool, was elected as the representative of the University in the General Medical Council. At the same meeting it was resolved to again apply to Government for a grant towards the expenses of the University, as the finances at present are not in a satisfactory condition.

HOSPITAL SUNDAY AND SATURDAY.

Yesterday, at the annual meeting for distributing the sums received at Hospital Sunday and Saturday collections, it was announced that the total received this year was only £7640, being £520 less than in 1885. Of this sum the Royal Infirmary gets £2850. It was urged that more support might fairly be asked from the surrounding towns, seeing how large a number of patients they send annually to our various medical charities.

DEATH FROM CHLOROFORM.

Another death from chloroform occurred on the 5th inst. at the Manchester Workhouse Infirmary. The patient, a man aged thirty-six, was being placed under chloroform, but before complete anæsthesia was induced or the operation commenced, he suddenly ceased breathing. At the necropsy no abnormal condition of the organs was discovered to account for the fatal result.

THE LOCAL MEDICAL SOCIETIES.

The Pathological Society, one of our last formed, is in a very satisfactory condition; its meetings are well attended, and it now counts nearly 100 members. Dr. Dreschfeld has been elected President for the present year. The Central Medical Society, which was established to a certain extent in opposition to the Medical Society of the College, is by no means behind the others, and appears full of life and vigour. Mr. F. H. Walmsley is President, and Drs. L. Jones and Woodcock Vice-Presidents, for the currrent year.

A GENEROUS BEQUEST.

The Royal Infirmary has received £1000 under the will of the late Mr. H. Boddington. This charity has not had of late any very large legacies. There will shortly be placed within its walls busts of three of its former eminent surgeons—viz., C. White, Joseph Jordan, and Thos. Turner.

Manchester, Nov. 9th.

NORTHERN COUNTIES NOTES.

(From our own Correspondent.)

NEWCASTLE INFIRMARY.

THE unsatisfactory state of the finances of the Newcastle Infirmary has been the subject of much comment and controversy in our local papers. Some of the writers would appear to be possessed of a spirit the reverse of friendly to this noble and beneficent institution. There can be no doubt, however, that some reforms in the management are called for, and indeed are urgent, before the public, and especially the artisan classes, can be expected to take their share of the burden of supporting the hospital. I give you a few figures which will show at a glance the work done, and the cause of its present embarrassment. The number of patients in the infirmary at the present time is 280. During the past year the number of in-patients was 2846, out-patients 4932, and casuals 27,811. The average cost of in-patients was £4 7*s.* 10½*d.*, and of each out-patient and casual 10½*d.* The receipts last year were £10,437, and the expenditure £13,947; but it is shown that if the infirmary is to go on at the rate of the last few years, there will be a deficiency annually of something like £7000, and that the funded property of the institution, already much trenched upon, will soon become exhausted. At a court of governors held last week, and presided over by the Earl of Ravensworth, the matter came up for consideration; but there is a feeling that there was rather too much set speech-making and too little free discussion. There were, however, some good and practical suggestions made. At first a motion was proposed to limit the in-patients to 200, and to make a proportionate reduction in the nursing staff, &c.; but this was not carried, the feeling being strongly against any curtailment of the work of the hospital, and as strongly in favour of increasing its income. Mr. R. H. Holmes, hon. sec. to our Hospital Sunday Fund, seemed in his few remarks to have a complete grasp of the financial difficulty and of the way out of this labyrinth. For instance, he showed that a systematic weekly collection of one penny over the year would produce £2400, and of another large company £4000 per annum. Besides giving the men a more direct interest in work and support of the infirmary, Mr. Holmes' plan has much to recommend it, and little or nothing can be said against it. As the success of the system has been already proved in Sunderland, Leeds, and other large towns, a special committee was appointed to confer with the house committee on the subject, and to report to the Governors.

A WOODEN-LEGGED COW.

Some eighteen months ago Mr. John Sharry, V.S., of Norton Malton, successfully amputated one of the hind legs for injury of a valuable and well-bred shorthorn cow, the object being to retain the cow for breeding purposes, while a wooden leg was affixed to the stump. Many will be pleased to hear that the object has been fully achieved; the cow is now a mother, and has a fine bull calf running by her side.

A CHEAP "MODE" OF PROVIDING FOR MEDICAL SERVICE.

Dr. J. C. Murray, now of Stranraer, N.B., but formerly an active practitioner in Newcastle, has been writing some racy notes from his life and experience, from which I extract the following: "I remember a hypochondriacal biped or nervous patient who used to hang about my neighbourhood for hours. There were doctors passing it every ten minutes, and a chemist's shop above and below. At last, when a stout, slow-walking doctor walked up in the direction of his home, he would follow him, and wait near each house he went into until he got to his home. Our friend's windows had command of the foot or outlet of five streets. From these he used to watch the doctor as he came down one and

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went up another until he went home to dinner, when our hypochondriac, feeling he had done his best by viewing or being near a medical man as long as possible in case of sudden seizure of agglomerated sickness, would then take his dinner and a smoke, and feel he had done a good day's duty."

MEDICAL STUDENTS' DINNER.

The Newcastle students held their annual dinner on last Wednesday at the County Hotel in this city. Nearly 100 students were present. Dr. Arnison presided, while the vice-chair was occupied by Mr. H. E. Armstrong, our medical officer of health. The proceedings were very harmonious, and the dinner, upon the whole, is said to have been one of the happiest and most social that has ever been held in the history of the college.

ALNWICK INFIRMARY.

At the late annual meeting of the Alnwick Infirmary, Earl Percy in the chair, it was stated that the number of patients in and out of the house had numbered 862, of whom 789 had been cured or relieved, 39 had died, and 34 remained on the books. The statement as to the financial state of the hospital was considered satisfactory as compared with last year. At the same meeting it was resolved that Dr. Wilson, who had sent in his resignation as honorary physician, be asked to reconsider his resignation.

Newcastle-on-Tyne, Nov. 9th.

EDINBURGH.

(From our own Correspondent.)

THE SECRETARY FOR SCOTLAND IN EDINBURGH.

ON the 30th ult., the Right Hon. A. J. Balfour, Secretary for Scotland, delivered an address, under the auspices of the Edinburgh School Board, to a large audience of the citizens. Eschewing most carefully all matters of party interest, Mr. Balfour discussed very fully the relations of primary and secondary education as at present constituted in Scotland, and took occasion to urge very forcibly the somewhat neglected claims of the latter, and to demand on its behalf a wider measure of individual and national support. In a few piquant apothegms he depicted the outcome of the present hiatus between primary and university education, and showed how deleteriously this lack of continuity acted upon the educational powers of the latter, by greatly reducing the range of their activity, and debarring them from the attainment of the highest possible practical results. Speaking of university reform, the right honourable gentleman confidently looked forward to the passing of the Bill which his predecessors have failed to push through the press of Parliamentary business. Of the provisions of the proposed Bill he did not speak more definitely than to infer that the measure as a whole might be termed "heroic"; but in dealing with another part of his subject, he expressed the view that there should be greatly increased facilities for the teaching of special branches of knowledge within the universities, and that the chairs so established should be liberally endowed, and the universities in this way should have their character raised from that of training schools for the professions to that of "seats of learning where the torch of human knowledge may be advanced." Mr. Balfour's visit to Edinburgh was primarily for the purpose of opening a Board school and addressing those interested in educational matters; but it is whispered that preliminary discussions with those most closely interested will take place, and that he will leave Edinburgh with the outline of the coming Universities (Scotland) Bill in his pocket.

THE ELECTION OF LORD RECTOR

resulted in the return of Lord Iddesleigh for a second term of office, which he is entitled to hold for the next three years. The Conservative candidate obtained the substantial majority of 347 votes over Sir Lyon Playfair, his Liberal opponent. There is no doubt, however, that this cannot be counted a party victory, for many other considerations besides party sentiment were at work in influencing the decision of the students.

ROYAL INFIRMARY.

A vacancy has occurred on the staff of surgeons attached to the infirmary, owing to the resignation of Mr. Joseph Bell. Each member of the present staff has been thus promoted one step, and in consequence an assistant-surgeonship has now to be filled up. Amongst the candidates already in the field are Dr. Hodsdon, assistant-physician to the Edinburgh Royal Hospital for Sick Children; Mr. Macdonald Brown, lecturer on anatomy in the Royal College of Surgeons; and Mr. A. W. Hare, senior demonstrator of surgery in the University. It is expected that other candidates will yet be forthcoming as the date of the election approaches.

Edinburgh, Nov. 9th.

IRELAND.

(From our own Correspondent.)

ROYAL UNIVERSITY OF IRELAND.

A MEMBER of the Senate will be elected next month, and already there are four candidates in the field for the vacancy —Mr. T. P. O'Connor, M.P., Dr. McMordie of Belfast, who was defeated on the last occasion, Major FitzGerald of Dublin, and Professor Stephen O'Sullivan, M.D., of Queen's College, Cork. The Graduates' Reform Association in Cork at a meeting appointed a deputation to wait upon the last-named gentleman, for the purpose of requesting him to withdraw his candidature in favour of Mr. O'Connor. The main object, it may be mentioned, of the Graduates' Reform Association is as stated by its president (Mr. O'Connor), to make the Senate and the Convocation of the University more representative of the mind and thought of the Irish nation. Professor O'Sullivan, however, decidedly refused to withdraw in favour even of the president of the Association. That this determination was only what might have been expected is shown from the following circumstances. Professor O'Sullivan, on October 15th, intimated to the members of Convocation of the Royal University his intention of becoming a candidate for the vacant seat on the Senate, while his opponent did not come forward until after the meeting of Convocation, which was held on the 27th ult. But leaving the priority of candidature out of the question, it is tolerably well known that the retirement of Professor O'Sullivan would not ensure Mr. O'Connor's success at the forthcoming election.

ACADEMY OF MEDICINE IN IRELAND.

The opening meeting of the Pathological Section of the Academy was held on the 5th inst., the presidential address being delivered by Dr. W. Smith. A rare specimen, that of a liver with two gall-bladders, was exhibited at the meeting by Dr. Purser.

DEATH OF DR. LONG, J.P.

Dr. P. Long died at his residence in St. Stephen's-green, Dublin, last week, aged seventy-three. He was in failing health for some time past, but his death was due to acute inflammation of the lungs. He was a member of the Corporation of Dublin for more than a quarter of a century, and for nearly twenty years performed the duties of assistant medical officer of the Dublin police. About three years since he was appointed to the Commission of the Peace for the city of Dublin.

Rev. Dr. Haughton has been elected President of the Royal Irish Academy for the ensuing year.

Dublin, Nov. 9th.

BELFAST.

(From our own Correspondent.)

OPENING OF THE MEDICAL SESSION: THE ROYAL HOSPITAL.

THE winter session began on Nov. 2nd, when Dr. John W. Byers delivered the introductory lecture at the Royal Hospital. After welcoming the students back, he spoke of the events of the past year which had affected the Belfast School of Medicine. These were the formation of the Medical Students' Association, the death of Dr. Thomas Andrews, and the resignation of Professor Gordon. He said they were proud of both, not only as able medical professors, but as distinguished Ulstermen, who by their writings have gained a wide reputation. Both descended from families well known in the north of Ireland, the career

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of each should be a strong stimulus to those present to industry and research. Their position with their brethren in Ulster was an exception to the rule that "a prophet has no honour in his own country." By the resignation of Dr. Gordon the school at Belfast loses the services of one who was connected with it for forty-four years, during thirty-seven of which he was Professor of Surgery in Queen's College, and for a lengthened time surgeon to the hospital. Dr. Byers said that as a boy he enjoyed peculiar opportunities of knowing Dr. Gordon, whom he had been trained to respect as a valued medical attendant. This respect for his great ability deepened while a student under him, and on all occasions on which he had met Dr. Gordon as a surgical consultant, Dr. Byers said he was proud to acknowledge he had learned something. They would long miss Professor Gordon's presence in the surgery lecture-room, and his well-known figure in the dissecting-room, where he was perhaps seen to the greatest advantage. There they all remembered how easy it was to find out that the kindly surgeon had stores of self-acquired information which he was ever ready to impart to the earnest student. His loss to the school was great, and one that they all deplored; but they rejoiced that the selection of his successor had fallen on one of the able surgeons of this hospital. Dr. Byers gave a rapid sketch of the history and growth of the Belfast Medical School, and especially of the College and the Hospital. He gave statistics showing that 454 Belfast medical students had graduated in the Queen's University, and 163 in the Royal, making a total of 617, in addition to many who had obtained qualifications at other examining boards. During the last winter and summer session, 252 students had attended the hospital, and it was most gratifying to those under whom they studied to know that the only students who obtained honours at the recent examination for the M. A. O. degree (Midwifery, Gynæcology, and Diseases of Children), received their education in Belfast. The second part of Dr. Byers' lecture was devoted to the special subject of Antiseptic Midwifery.

QUEEN'S COLLEGE.

The various medical classes were opened on Nov. 4th. In the afternoon a large number of students assembled to hear the introductory lecture of the new professor of surgery, Dr. Thomas Sinclair. On coming into the class-room Dr. Sinclair was very warmly received. He gave an inaugural address on "The Relation of the other Sciences to Surgery," giving in detail some of the more remarkable advances in biology and pathology in their bearing on modern surgery.

BALLYMENA COTTAGE HOSPITAL.

According to the medical report presented at the last annual meeting of this hospital, and signed by Dr. Kidd, Dr. Ross, and Mr. Fagan (consulting surgeon), forty-eight patients were admitted during last year, besides eight remaining over from the previous twelve months. There were only two deaths, and there were several severe accidents treated and operations performed.

BELFAST HOSPITAL FOR SICK CHILDREN.

From the third half-yearly report of this most excellent and popular charity, we learn that it continues to hold its prominent position among local institutions, and that it is doing good surgical and medical work. In both medical and surgical wards there have been many interesting cases. Further, the hold that this hospital has on the public is shown by the kindness of its friends. The donations have been both numerous and most acceptable, and the excellent matron (Miss Lennox) has been enabled, through the means placed at her disposal, to supply clothing to many poor children on leaving the hospital.

Belfast, Nov. 9th.

MEDICAL APPOINTMENTS IN THE PHILIPPINES.—Complaints are made in a Madrid medical journal that the official medical appointments in the Philippine Islands are almost all monopolised by military or naval medical officers to the exclusion of civilian practitioners, who feel much aggrieved thereby. A list is given of the professors in the faculties of medicine and pharmacy in the University of Manilla, which would seem to bear out the complaint, as of the ten professors and lecturers seven are military medical officers, one a naval medical officer, while two are military pharmacists.

THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

AT the ordinary meeting of the Council held on Thursday, the 11th inst., at which all but two members were present, the death of Lady Wilson, widow of Sir Erasmus Wilson, F.R.S., was reported to the Council.

It was agreed, on the recommendation of the Dental Board, that eighteen months out of three years' instruction in mechanical dentistry might be taken before the date of registration.

The President presented the report of the result of the meeting of the Fellows and Members held on the 4th inst., and a protest against the result of the meeting was presented from Mr. T. J. Vallance. Mr. Macnamara, by permission of the Council, proposed the following resolution, which was seconded by Mr. Lund, and carried:—"That means be taken to ascertain the opinion of the Fellows of the Royal College of Surgeons as regards (*a*) Members being allowed to vote for Fellows as members of the Council of the College; (*b*) the admission of Members of the College to seats on the Council."

It was referred to the President and Vice-Presidents to draw up a circular to the Fellows to give effect to the foregoing resolution, the same to be submitted to the next meeting of the Council.

THE SERVICES.

WAR OFFICE.—Army Medical Staff: Brigade Surgeon Robert Lewer to be Deputy Surgeon-General, vice R. Webb, placed on temporary half-pay. The undermentioned Surgeons-Major to be Brigade Surgeons:—Albert Augustus Gore, M.D., vice C. E. Smith, retired; Chas. Henry Young Goodwin, vice J. Davige, retired; and Thomas Maunsell, vice R. Lewer.

ADMIRALTY.—The following appointment has been made:—Mr. Walter John E. Sumpter to be Surgeon and Agent at Sherringham.

Obituary.

GEORGE MACKIE, M.D.

DR. MACKIE, whose death occurred at Insch on the 3rd inst., received his professional education at the University of Aberdeen, and in 1846 became a licentiate of the Royal College of Surgeons of Edinburgh, and a Bachelor of Medicine of his *alma mater* in the following year, the degree of M.D. being conferred upon him twenty years later. Thirty-eight years ago he settled in Insch, where he practised his profession up to the hour of his death. Dr. Mackie was secretary of the Garioch Medical Association, and medical officer to the Parochial Boards of Insch and Premnay. He took a warm interest in the Volunteer movement, and was for many years surgeon to the local company of Rifles, and afterwards to the 4th V.B.G.H. Sincerely respected throughout the district in which his life's work was done, Dr. Mackie leaves, in addition to many friends, a widow and ten children to mourn his death.

Medical News.

SOCIETY OF APOTHECARIES.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Nov. 4th:

Bridgman, Herbert Arthur, L.F.P.S.G., Belgrave-terrace, Willesden-green.
Conolly, Charles Hamilton, M.R.C.S., Church Hill Villas, Wood-green.

[In our list published last week of gentlemen who passed for the degree of Licentiate in Dental Surgery of the Royal College of Surgeons of England, for "Tibbs, John Arthur Seymour," read—Tibbs, John Arthur Somerset.]

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DR. JOHN GORDON and Dr. Hall are announced as candidates for the vacant chair of Materia Medica in Aberdeen University.

MEDICAL MAYOR.—Mr. J. Thornton Duncan, F.R.C.P. Edin., M.R.C.S. Eng., has been elected Mayor of Stamford for the ensuing Jubilee year.

ON the 9th inst., the new cottage hospital for Paulton and district was formally opened by the Lord Bishop of Bath and Wells.

MEDICAL MAGISTRATE.—At the West Suffolk Quarter Sessions on the 26th ult., Mr. H. Newman, M.R.C.S., L.S.A., of Hadleigh, was sworn in as a Justice of the Peace.

LAST week the Queen paid a visit to the Longmore Hospital for Incurables, Edinburgh. Her Majesty, who expressed satisfaction with the result of her inspection, has since given £50 to the funds of the institution.

WE have received from Messrs. Pratt a rubbing from a memorial brass which was erected on the 8th inst. in the garrison chapel at Woolwich to the memory of Surgeon-General Oliver Barnett, C.I.E., Army Medical Staff.

HYDROPHOBIA AT ODESSA.—It is stated by a St. Petersburg journal that the first experiences of the Odessa Pasteur Institute have been far from encouraging, five patients having died out of a very moderate number treated by Pasteur's method.

MUNICIPAL HONOURS.—No less than three members of the medical profession have just been elected to the Town Council of Leicester—viz., Mr. C. Crossley, surgeon to the Infirmary, Mr. Lankester, and Dr. Clifton. There are now five medical men at the municipal board.

THE ABERDEEN GRADUATES' CLUB.—In consequence of the recent accident to Dr. Alexander Bain, Lord-Rector of the University of Aberdeen, he will be unable to preside at the dinner of the Aberdeen University Club, London, on Wednesday next. Dr. James Alexander Campbell, M.P. for the University, has consented to take the chair on that evening.

SMALL-POX AT JAMAICA.—Intelligence has been received of the existence of an epidemic of small-pox at Kingston, Jamaica. On the 13th ult. there were no fewer than 362 cases under treatment, and the deaths had been exceptionally numerous. The inhabitants were leaving the town in very large numbers, as the disease was rapidly increasing.

NOTTINGHAM GENERAL HOSPITAL.—The 101st anniversary meeting of this institution was held on the 4th inst. During the past year 1602 in-patients and 8718 out-patients have been treated, at a cost of £6439. The income from annual subscriptions has fallen from £2448 in 1882 to £2314 in 1885, and the financial position of the hospital is far from being a satisfactory one.

THE LATE MR. CHILCOTE.—A meeting was held on the 4th inst. to consider what steps should be taken to perpetuate the memory of the late Mr. Chilcote, surgeon, of Babbacombe, and a committee was appointed to consider the form of the proposed memorial and to collect subscriptions. Three methods of commemoration were suggested—viz., the purchase of six almshouses, the foundation of a cottage hospital, and the erection of a dispensary.

POISONOUS MUSHROOMS.—It is reported that a very considerable quantity of injurious fungi is now finding its way into the markets as mushrooms, and in West Kent several cases of sericus illness, caused by the consumption of what appear to be button mushrooms, but which are really poisonous fungi, are reported. These poisonous mushrooms have a yellowish appearance when cut, but otherwise bear a great resemblance to the edible mushroom.

DEATH UNDER CHLOROFORM.—On the 9th inst. an inquest was held at the Huddersfield Infirmary on the body of a man who had died at that institution whilst undergoing under chloroform an operation for cancer in the mouth. Medical evidence was given that death arose from failure of the heart's action, brought about by the administration of the chloroform, and the jury found a verdict accordingly, adding that the chloroform was administered properly.

A CENTENARIAN.—A widow residing at Newtown, Montgomeryshire, has just attained her 102nd year, having been born in 1784. Her health is stated to be excellent, and her eyesight is so good that she is able to read and thread a needle without the use of glasses.

EPSOM COLLEGE.—Some Exhibitions, reducing the charge for board and education to £31 10*s.* a year, are to be competed for in December by sons of medical men. The successful candidates will enter the College in January. Application should be made before the end of November to the Secretary of the College, at the office, 37, Soho-square.

DERBYSHIRE GENERAL INFIRMARY.—The 77th anniversary of this institution was celebrated on the 4th inst., when the secretary stated that the number of patients admitted during the year was 3540, of whom 1312 were in- and 2228 out-patients, exclusive of 2000 casualty cases. The in-patients number 89 less, and the out-patients 318 more, than in the preceding year. The total receipts for the year were £6067, and the expenditure was £6594.

THE CODNOR SEWERAGE QUESTION.—A meeting of the ratepayers of Codnor was held on the 4th inst. to discuss a plan for dealing with the Codnor sewage. The scheme, which was proposed by Mr. Parkin of Nottingham, was adopted, its estimated cost being £3500, and it will forthwith be submitted to the Basford Rural Sanitary Authority. The village, which contains a population of 4500 is in a very defective and insanitary condition.

MANCHESTER AND SALFORD MEDICAL CHARITIES.—The report which was read on the 8th inst. at the annual meeting of the General Committee in connexion with the Manchester and Salford Hospital Sunday and Saturday Fund, stated that last year there was a net increase of £427 over the amount contributed in 1884. This year the sum raised showed a decrease of £522, as compared with that received last year. The Sunday collections for 1886 amounted to £4618, and the Saturday collections to £2924.

THE HOSPITALS ASSOCIATION.—This week's number of *The Hospital*, the new journal of the Hospitals Association, contains a contribution from his Royal Highness the Duke of Cambridge, who has intimated his intention of being present at the conversazione of the Members and Representatives of Hospitals and Asylums throughout the country, which will be held at the rooms of the Medical Society of London, 11, Chandos-street, W., on Wednesday, the 17th inst.

THE DOG REGULATIONS.—The statistics prepared by the police respecting the working of the dog regulations for the month of October were published on the 6th inst. During the month, 2157 dogs were seized, and 22 were killed as rabid. Of these last, however, only four were, on examination, pronounced to be affected with rabies. Since the new regulations have been in force, the report states that the number of rabid dogs found in the streets has rapidly declined. In 1885 the number was higher than ever before. In July of this year the number was 16, in August 13, in September 9, and in October, as above stated, 4.

THE MEDICO-PSYCHOLOGICAL ASSOCIATION.—The quarterly meeting of this Association was held at Bethlem Hospital on Tuesday, the 9th Nov., under the presidency of Dr. Savage. Mr. Hayes Newington read a paper on the tests which should be made use of in deciding as to the fitness of patients for discharge, especially dealing with the subject in its relation to cases of suicidal tendency. Dr. Savage followed with a paper on the question from the homicidal point of view, and a discussion ensued, in which Drs. Blandford, Rayner, Hack Tuke, and C. M. Tuke took part.

BEQUESTS.—Miss Lowe, a lady who died recently at Blackpool, has left amongst other legacies £4500 to the Bolton Infirmary, and £1000 to found an infirmary for Blackpool.—The late Dr. Grigor of Nairn has left £1000 each to the Universities of Aberdeen and Edinburgh for the purpose of founding a medical bursary.—The following bequests have been received by the treasurers of the Devonshire Hospital, Buxton, during the past week: under the will of John Slack, Esq., J.P., late of Bowden Hall, Chapel-en-le-Frith, Derbyshire, £136 18*s.* 1*d.*; and under the will of Richard Wheatley, Esq., late of Royds House, Mirfield, Yorkshire, £100.

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Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

BARKER, GLANVILLE, M.R.C.S., has been appointed House-Surgeon to the Central London Ophthalmic Hospital, Gray's-Inn-road.

GRIFFITHS, P. RHYS, M.B., B.S. Lond., has been appointed Medical Officer to Out-patients at the Glamorganshire and Mon. Infirmary, Cardiff.

HICKER, LEWIS, M.B.Dur., M.R.C.S., L.S.A., has been appointed Junior House-Surgeon to the Bury Hospital, vice J. H. Jones, promoted.

JONES, J. H., M.R.C.S., L.R.C.P.Lond., L.S.A., has been appointed Senior House-Surgeon to the Bury Hospital, vice T. T. Hamilton, L.R.C.S., L.R.C.P., L.S.A., resigned.

MALE, HERBERT C., M.B.Edin., M.R.C.S., has been appointed Medical Officer to the Training Ship *Shaftesbury*, Grays, Essex.

OWEN, H., B.A., M.B.Cantab., M.R.C.S., has been appointed Visiting Medical Officer to the Royal Pimlico Dispensary, vice F. M. Evans, M.R.C.S., resigned.

SHIRLEY, M. B., M.R.C.S., L.R.C.P., has been appointed Honorary Surgeon to the Batley and District Cottage Hospital.

STEWART, ROTHSAY C., M.R.C.S., L.S.A., Assistant Medical Officer, Peckham House Asylum, Peckham, S.E., has been appointed Assistant Medical Officer to the County Lunatic Asylum, Leicester.

WATTS, A. T. G., B.A.Cantab., M.R.C.S., L.S.A., has been appointed Resident Medical Officer to the Royal Pimlico Dispensary, vice H. Owen, B.A., M.B.Cantab., resigned.

Births, Marriages, and Deaths.

BIRTHS.

BRATTON.—On the 5th inst., at College-hill House, Shrewsbury, the wife of J. Allan Bratton, M.A., L.R.C.P., of a son.

MACLACHLAN.—On the 1st inst., at St. Blanes, Lockerbie, the wife of James MacLachlan, M.B., of a daughter.

SHILLINGFORD.—On the 2nd inst., at Hill-street, Peckam, the wife of Frank Shillingford, M.R.C.S., of a daughter.

SOUTAR.—On the 6th inst., at Barnwood, near Gloucester, the wife of James Greig Soutar, M.B., of a son.

MARRIAGES.

COOK—ROBERTS.—On the 2nd inst., at the Parish Church, Llangwstenin, North Wales, Henry S. Cook, M.R.C.S., L.S.A., of Birmingham, to Ethel Lydia, eldest daughter of the Rev. E. Roberts, M.A.Oxon., Rector of Llangwstenin.

PERKINS—CHAPMAN.—On the 9th inst., at St. Sidwell's Church, Exeter, Charles Steele Perkins, M.B.Lond., M.R.C.S., of Sydenham, to Lily Elouis, third daughter of Edward Chapman, Esq., of Forest-hill and Sydney, N.S.W.

PRATT—BEAKLEY.—On the 9th inst., at Thorney, Dr. Reginald Pratt, of London-road, Leicester, to Frances E. Beakley, daughter of Christopher Beakley, Esq., of Thorney, near Peterborough.

STARLING—HOWSE.—On the 5th inst., at Onslow Chapel, Kensington, by the Rev. J. M. Bergin, Edwin Alfred Starling, M.B., M.Ch., of Tunbridge Wells, to Helena Sarah, eldest daughter of the late Nathaniel Howse, of Witney, Oxon., and Grahamstown, South Africa.

WILSON—GUTHRIE.—On the 10th inst., at Marylebone Presbyterian Church, London, by the father of the bride, Charles Wilson, M.B., C.M., of Bath, to Annette, eldest daughter of the Rev. D. K. Guthrie, of Liberton, Midlothian.

DEATHS.

FARRE.—On the 10th inst., at Elsham-road, W., Frederic John Farre, M.D., aged 82.

HENRY.—On the 6th inst., at Dundrum, co. Dublin, Richard Henry, M.D., formerly of Lower Baggot-street, aged 38.

HOWE.—On the 24th ult., at Springfield House, Marple, John Howe, M.R.C.S.Eng., L.S.A., aged 70.

NAIRNE.—On the 5th inst., at Mossley, Beckenham, Robert Nairne, M.D., of Trinity College, Cambridge, F.R.C.P., Honorary Commissioner in Lunacy.

SHARPE.—On the 9th inst., at The Ferns, Oakleigh-road, Whetstone, Richard Sharpe, M.D., late of Wormley, Herts, aged 67.

SHAW.—On the 4th inst., at Baring-crescent, Exeter, after a long and painful illness, Henry Shaw, M.D., M.R.C.S.

STEWART.—On the 11th ult., at Venezuela, South America (of fever), Eliza Jane, the wife of William Stewart, M.D., late of London, and third daughter of Hilton and Alice Hallhead, late of Liverpool.

TUCK.—On the 8th inst., suddenly, at Seaford, Sussex, Buckmaster Joseph Tuck, M.R.C.S., aged 49.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, November 11th, 1886.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Nov. 5	29·58	S.W.	49	47	...	52	43	·02	Overcast
,, 6	29·93	W.	45	42	...	47	40	·42	Raining
,, 7	29·48	W.	43	41	...	49	40	·10	Hazy
,, 8	29·79	N.W.	37	36	...	56	35	...	Foggy
,, 9	29·82	E.	46	44	...	47	37	...	Overcast
,, 10	29·35	E.	47	46	...	48	44	·28	Raining
,, 11	29·52	N.E.	46	45	...	...	43	·24	Raining

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

We cannot undertake to return MSS. not used.

JOHN HUNTER.

As our readers are aware, the site of John Hunter's house at Earl's Court has recently been cleared for the erection of villas, and will in future be known as Barkston-gardens. A correspondent reports that it is now the great wish of the local medical and other residents that a statue of the great anatomist should grace the centre of the proposed gardens, which will mark almost the identical spot on which the house so lately stood. Otherwise, all trace of John Hunter's connexion with Earl's Court must for ever be locally obliterated. The owner of the property is in favour of the scheme, and a suitable appeal for funds will shortly be made to the public—an appeal which will no doubt fully realise sufficient to properly carry out the object in view. As preliminary expenses, however, are indispensable, gentlemen who are willing to join the initial committee, and to subscribe their quota to the expenses of starting the movement, are invited to communicate with Mr. F. P. Pelham, 172, Finborough-road, South Kensington.

Mr. W. Towers-Smith.—The physician in question would have done well to communicate with the practitioner in attendance, as the eminent surgeon whom he quotes does so constantly. Our correspondent is not, however, much the worse for the course taken by the friends; it has resulted in the endorsement both of his diagnosis and treatment.

THE APOTHECARIES' SOCIETY AND THE CONJOINT BOARD.

To the Editor of THE LANCET.

SIR,—I should feel much obliged and indebted to every Poor-law Medical Officer (whether belonging to our Association or not) if he would send me a post-card, directed to 3, Bolt-court, Fleet-street, London, with "Yes" or "No" upon it, after the name and address of the sender, "Yes" meaning the writer's approval of the Society of Apothecaries being admitted to the Conjoint Board.—I am, Sir, yours truly,

Nov. 10th, 1886. J. WICKHAM BARNES.

PARANOIA.

To the Editor of THE LANCET.

SIR,—In your issue of Oct. 23rd, p. 786, you comment on the term "paranoia," as used by the physicians attending the late King of Bavaria in designating the form of mental disease from which the unfortunate King was suffering. Will you allow me to point out to your readers that German alienists have for a few years past used the term "paranoia" for that kind of mental disease which they formerly mostly designated by the term "originäre Verrücktheit," and which English physicians would call "insanity with delusions," or which by some is called "monomania."

I am, Sir, yours faithfully,

Freiburg, i. Baden, Nov. 7th, 1886. C. BAUMLER.

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THE UNUSUAL COINCIDENCE AT ST. THOMAS'S HOSPITAL.

Mr. H. E. Armstrong.—Careful inquiries were made by the house-surgeon, Mr. Brockett, who visited the place where the patients lived, and also went to their friends, who did not know their former address. The house from which they had been removed was apparently in a good sanitary condition. All that could be learnt of their former residence was that their landlord was a man who sold cat's meat, much of which smelt badly. The patients removed because of bad smells.

Australian.—Amongst others, the *Australasian Medical Gazette*, which is published in Sydney. There are medical agents in the colonies, the publisher of the above-mentioned journal being one.

Mr. J. Williams (Llanberis).—Yes.

TREATMENT OF GUINEA-WORM.

To the Editor of THE LANCET.

SIR,—I beg to make the following suggestions about the mode of procedure in cases of burrowing guinea-worms through your journal in reply to your correspondent, "Reader."

In these cases, when the worm is seen below the skin, even in a short space, the best thing to do is to cut directly on the worm right through the skin till the cellular tissue is reached. The incision must be about a line or a line and a half in length. The best instrument for it is a sharp-pointed tenotomy knife or a narrow scalpel. Widen the wound with two hooks, one on each side; then raise the cellular tissue with tiny forceps, and remove it, and with it also the adipose tissue that may come in the way. By two or three slight touches of the knife the operator will come down upon the casement of the worm. While opening the casement take care not to injure the body of the worm; otherwise the contents would spurt out and inflammation would be set up from the ichorous nature of the fluid. On opening the casement the worm will come into view, which is recognised by its glistening appearance. Pass a probe below the body of the worm and, lifting it, pull gently and slowly, taking care not to break it. By this procedure at least one end will come out. When one end is out, wind it round an ivory peg or a bit of stick, and to keep it soft, tie over it a small leaf of some harmless plant smeared with a little salad oil, and change it every day till the worm is out. Try to pull it out every day by degrees. When the worm is very obstinate, throw a stream of water three or four times a day from a height of four or five feet on the part. To make sure of the presence of the worm, apply a little ether to the part, and a distinct hard cord will be seen and felt by the finger. This is from the experience I had at Oorun when in medical charge of that station. Oorun and places around it are well known for guinea-worms during the monsoons. I had the good fortune to remove some 500 worms during the short interval of three months.

I am, Sir, yours truly,

CONASJO PESTONJI, G.G.M.C.,
Medical Officer, Bombay Native Dispensary.

Bombay, Chundunwady, Oct. 19th, 1886.

TRIPLETS AND TWINS IN CONSECUTIVE PREGNANCIES.

To the Editor of THE LANCET.

SIR,—As a case of triplets followed by twins in the succeeding pregnancy must be uncommon, perhaps a short account of the case might be interesting to some of your readers.

On Jan. 13th, 1884, I delivered Mrs. B——, wife of a working malster, of three living children, two girls and a boy, the presentations being head, foot, and breech; there was but one placenta, and each child was contained in a separate sac of membranes. The children were small but not puny; they lived for seven months, dying within a few hours of each other of diarrhœa and convulsions. The mother made a good recovery. On Oct. 30th last, I delivered the same patient of twins, girl and boy; presentations head and breech. In this case there were two placentæ, which came away without any trouble at intervals of about five minutes. The children were of a good size, the boy being above the average. The mother's family history in an obstetric sense is interesting, one of her maternal aunts giving birth to twins four times, and another three times.—I am, Sir, faithfully yours,

WILLIAM B. HALLOWES, L. & L.M.K.Q.C.P.I.

Newark-on-Trent, Nov. 2nd, 1886.

WALTER MOXON MEMORIAL.

To the Editor of THE LANCET.

SIR,—In answer to Dr. Robert Harris's question in your last issue, I should be glad to be allowed to state that steps are being now taken to raise a memorial to the late Dr. Moxon. As so many outside the walls of Guy's Hospital knew and appreciated his talents, it has been determined not to confine the subscriptions to the Guy's *clientèle*. Sir William Jenner (as President of the Royal College of Physicians) has kindly consented to be president of the Fund. Sir James Paget, Sir William Gull, Sir Andrew Clark, Sir Henry Acland, Sir William McArthur, the President of the Royal College of Surgeons, and the Chairman of the late Dr. Moxon's Life Office, have agreed to act as vice-presidents. The matter will in the course of a few days be discussed by the staff of the hospital, and then it is probable that a meeting will be called to consider the form the memorial should take. Meanwhile I would be glad to receive the names of any desirous of joining in the movement.

I am, Sir, yours faithfully,

18, Finsbury-square, Nov. 8th, 1886. R. CLEMENT LUCAS.

JEWISH BURIAL.

MR. FREDERICK W. LOWNDES communicates to us a letter he has received from Mr. Barnard Levy, President of the Burial Board of the Liverpool New Hebrew Congregation, giving the following very interesting account of the simple and inexpensive manner in which the funerals of members of the Jewish persuasion are carried out:—

"About two hours after death the body is removed from the bed and carefully placed on the ground, with clean straw or shavings under it, and covered over with a clean sheet. It is then left for about thirty-six hours. On the expiration of that time the body (if its state permits) is washed by persons appointed for that purpose, who bring the necessary appliances. The shrouds, which cost for an adult about 17*s.*, are then placed on the body, which is then consigned to a common deal coffin (cost, 16*s.*). At the time fixed for the funeral the family and friends assemble. We have no scarves, plumes, or anything of the kind, and anything in the way of refreshments is unheard of. The cost of a hearse varies from 12*s.* 6*d.* to £1 1*s.*, and, as a rule, we employ very few black coaches. Personally, I do not approve of them, and I usually recommend the employment of cabs at a cost of 5*s.* 6*d.* each. On arrival at the burial-ground the coffin is carried on a hand-bier to the chapel, where the usual religious service is held, and thence to the grave, which is never bricked, and in which we never inter more than one body. The expenses, of course, vary with the number of coaches employed. In conclusion, I think I may say that the last services to the dead as conducted by my co-religionists are carried out in a reverential spirit, and will bear favourable comparison with those of any other sect."

Mr. F. Jeffree.—The title of the book is, "Students' Guide to the Diseases of Children."

PNEUMONIA.

To the Editor of THE LANCET.

SIR,—The case of the outbreak of an epidemic of pneumonia described in a letter by Dr. C. J. Denny, and published in your issue of Sept. 18th last, must have been read with interest by many; but it is a mistake to imagine that such cases occur only in malarious districts. Outbreaks of this nature have been known to occur in prisons, barracks, &c., which stood in districts to which the epithet "malarious" could hardly be applied. I think the infectious nature of at least certain forms of pneumonia is agreed upon by most pathologists; and the "micrococcus pneumoniæ crouposæ" of Friedländer has often been cultivated and studied, and mice have been infected with pneumonia and pleuritis resulting from injections from pure cultivations. We must rather be inclined to believe that wherever these micrococci find the conditions necessary for their existence (not to be found only in malarious districts) they will multiply and exhibit their pathogenic nature. It is a matter to be regretted that Dr. Denny did not search for them, or tell us how he coped with the evil; for these cases, though not of frequent occurrence, may come under the notice of any practitioner quite unawares.

I am, Sir, yours obediently,

Sept. 22nd, 1886. FREMDLING.

COCAINE.—BONE DRAINAGE-TUBES

To the Editor of THE LANCET.

SIR,—May I ask some of your readers for answers to the following two quest

1. Whether after using cocaine as a local anæsthetic by injection sub cutaneously they have noticed a tendency to recurrent hæmorrhage, the cocaine appearing for the time to constrict the vessels, and a corresponding reaction taking place? There is often free hæmorrhage from a surface where it had entirely ceased. I have noticed this in several cases.

2. What is the "life" of a decalcified bone used in a wound as a drainage-tube? I find that after twenty-four hours the tubes completely collapse, and lie in the wound like a piece of tape and fail to drain it at all. So quickly also do they appear to dissolve in the secretions that those I have used have also in twenty-four hours become as thin as tissue paper, and do not last nearly long enough to be useful. I may mention that I prepared the bones myself, using very dilute hydrochloric acid as the solvent. Is the period I have named the usual one for them to last? And is there any maker who supplies them?

I am, Sir, yours obediently,

H.M.S. *Bellerophon*, Halifax, Oct. 24th, 1886. A. G. P. GIPPS.

TREATMENT OF GONORRHŒA.

To the Editor of THE LANCET.

SIR,—I have lately had an opportunity of trying in two instances a plan I have wished to try. Two patients came to me with evidently incipient gonorrhœa; it was, however, quite in the first stage, and confined to the fossa navicularis. I gave each a flexible catheter, and a bottle with P.B. carbolic, one drachm, and olive oil, three drachms, and told them to anoint the catheter with the oil, and pass it into the urethra about an inch and a half every hour for five hours. The next day they returned without any symptoms of gonorrhœa, but the urethra feeling sore and tender, and there have been no symptoms since. Of course, this could only be used when the disease is detected at once. I think a milder application might have answered, possibly one in eight, but I wished to make sure.

I am, Sir, yours truly,

G.

London, November, 1886.

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THE VIENNA MEDICAL SCHOOL.

ACCORDING to the prospectus for the winter semester of 1886-87 the number of students (ordinary and extraordinary) during the last semester was 2289—2149 ordinary and 140 extraordinary. Those from the Austro-Hungarian empire numbered 2115, and those from abroad 174. The whole number of students in all departments of the University during the semester was 5358.

Mr. David Berry, M.B.—See THE LANCET for Oct. 27th, Nov. 3rd, and Dec. 22nd, 1883.

B.—Students generally consider the L.F.P.S.Glas. the easier examination.

VACCINATION AND ERYSIPELAS.

To the Editor of THE LANCET.

SIR,—On Jan. 21st of this year I vaccinated two infants, three and four months old respectively, from a healthy child of four months, with four typical vesicles with little or no areola. Two days afterwards the mother of one brought the child to show me its arm, which was in a state of erysipelatous inflammation from the shoulder to the elbow, and the same evening the father of the other infant came to say that it was so ill from the inflammation of its arm it could not be brought out and he was sure there was something wrong. I called next morning and found this child also suffering from acute erysipelas from the shoulder to the wrist. I immediately then called and saw the vaccinifer and found that infant in perfect health; the areola faded, the vesicles running a normal course, and the mother somewhat indignant at the idea of any disease being communicated from her offspring. These cases caused me considerable anxiety, but fortunately both recovered in a week or ten days. There was not the least attempt at the formation of any vesicles, and at the end of a week just a few marks of the scarification were all that could be seen. The homes of the infants were more than a mile apart, and I found nothing wrong with the sanitary arrangements. I need hardly say that the lancet was scrupulously clean, washed before and after use, and I subsequently vaccinated, but from other infants, fourteen children, all of whom did perfectly well.

In a record of over six thousand cases these are the only two in which I have seen erysipelas immediately follow vaccination. Ziemssen, vol. ii., page 436, mentions a case of transmission of erysipelas by vaccination, but there the disease appeared in the vaccinifer the day after the lymph was taken. The blame that I and the practice of vaccination incurred, I can assure you was by no means slight.

I am, Sir, yours truly,

Birmingham. H. FLAMANK MARSHALL, M.B. Lond.

"COMPULSORY ATTENDANCE AFTER REJECTION AT EXAMINATION."

To the Editor of THE LANCET.

SIR,—With regard to the article under the above heading in your last issue, I think it would be a most unjust proceeding on the part of the Colleges to compel all candidates to undergo a further course of study at a medical school. There are several men holding both medical and surgical qualifications who have extensive practices, and who may wish to become members of other Colleges. They present themselves, and through some mishap fail. I ask the question, How can these men leave their practices and attend school, according to your recommendation? I am, Sir, yours faithfully,

Nov. 6th, 1886. JUSTICE.

"FETID URINE."

To the Editor of THE LANCET.

SIR,—Referring to Dr. Neale's note in the last number of THE LANCET, and his use of boracic acid during the past two years, I beg to say that I have used boracic acid for upwards of eight years with good effect in many cases in which the urine becomes foul and ammoniacal; and I recommended it for this purpose at page 175 of the first edition of my work on "General Paralysis of the Insane," published in 1880; also recently, in the second edition, page 403. The drug is very useful in some of the urinary conditions arising in many forms of cerebral and spinal disease. Polli was, perhaps, the first to employ it in chronic cystitis. I am, Sir, yours faithfully,

London, Nov. 8th, 1886. WM. JULIUS MICKLE, M.D.

Mr. A. E. Robertson.—1. Yes, on receipt of six stamps in addition to cost of advertisement.—2. Uncertain.—3. Better write to the Secretary of the Court.

A CORRECTION.

To the Editor of THE LANCET.

SIR,—In your last number, page 901, it is stated that Lady Edwards has just given £750 to the Bradford Infirmary, to endow a children's cot in memory of her late husband. Will you allow me to correct this, and point out that it is the *Halifax* Infirmary which has received this donation—an institution in which the late Sir Henry Edwards always took the warmest personal interest.—I am, Sir, yours faithfully,

Halifax, Nov. 9th, 1886. H. WEST SYMES, M.D.

THE APPROACHING ELECTIONS.

MR. THOMAS LAFFAN writes to urge the absolute necessity for the presence of legal representatives of the different candidates for election to the Medical Council at the scrutiny of the votes.

A. de B. has not enclosed his card.

THE REPRESENTATION OF SCOTCH PRACTITIONERS.

A CORRESPONDENT, alluding to Dr. Pirie's letter, published in our columns on the 23rd ult., states (1) that it was Dr. Morton, in his Glasgow address, who first endeavoured to open the old wound between the Corporations and the Universities; and (2) that anyone looking at the list of Dr. Bruce's supporters can easily see he is not the nominee of the Universities, but of general practitioners. While it is quite true that Dr. Bruce was at one time examiner in Medicine at Aberdeen University, the fact is that he severed his connexion with that body about seventeen years ago, and even then he was an advocate of medical reform.

Rev. J. H. Wanklyn.—The communication is in the nature of an advertisement.

EXTRACTION OF CATARACT.

To the Editor of THE LANCET.

SIR,—In Dr. Wolfe's Introductory Lecture, published in your issue of Nov. 6th, I see that he thinks it very unfortunate that v. Graefe's last work, his method of extracting cataract, has not proved a success. In this I think he is mistaken; v. Graefe's extraction, somewhat modified, is employed by many London surgeons with great success, and I have had no inconsiderable experience of the operation. Since 1871 I have employed it in most cases of hard cataract which I have extracted in India; and in the only statistics which I happen to have by me—from January, 1882, until April of this year—I find that I extracted over 560 cataracts by this method. Dr. Wolfe mentions that he extracted twenty cataracts successfully in one month in presence of four of his colleagues. In January last I extracted twenty-three in the Bombay Ophthalmic Hospital, all of which were successful; and the previous ten were also successful. I have seen Dr. Wolfe and many other surgeons operate; and I believe that various plans of extracting cataract are equally successful, if a surgeon thoroughly understands, and is experienced in, his own favourite method.—I am, Sir, yours faithfully,

G. A. MACONACHIE, M.D.,

Blackheath, Nov. 8th, 1886. Surg.-Major, I.M.D.

PLACENTA PRÆVIA.

To the Editor of THE LANCET.

SIR,—Two or three years ago I placed on record in your pages a case of presentation of funis, arm, and leg, with the happiest results to both mother and child. Last week I was fortunate enough to save both mother and child in a case of placenta prævia at the seventh month. I had been engaged to attend Mrs. L—— of this parish about Christmas, but was sent for in a hurry on the 17th ult., as the woman was "flooding desperately," but without pain. On arrival I diagnosed the case as one of placenta prævia, but as the loss was not very great, I resolved to temporise awhile, ordering rest in bed, cool room and drinks, nourishing diet, acid astringents, but no stimulants. Affairs went on *statu quo* until the evening of Nov. 5th, when sharp labour pains came on, the placenta preceding the rapid birth of a seven months' child, apparently stillborn, but revived after protracted attention. Up to the present date both mother and child are doing well. I am, Sir, yours faithfully,

Cley-next-Sea, Norfolk, Nov. 10th, 1886. W. SUMPTER, M.D., R.N.

HEREDITY IN LOWER ANIMALS.

To the Editor of THE LANCET.

SIR,—I can confirm Mr. Hawkins-Ambler's remarks in your last issue regarding kittens sitting up untaught, having owned a cat trained to beg which produced three different lots of kittens, some of which sat upright without being taught, or directly copying their mother. (Mr. Darwin was much interested in this example.) Many years ago I saw a Skye terrier whose skull had been fractured by a spade. She subsequently produced epileptic puppies. I am, Sir, yours faithfully,

Malvern, Nov. 10th, 1886. STANLEY HAYNES, M.D.

MELANCHOLIA AS THE RESULT OF INOCULATION FOR RABIES.

Mr. J. R. Ware.—On inquiry we find no reason for the statement of our correspondent. Both the men have been on duty since the inoculation, neither of them having been placed on the sick-list. There have been no complaints either from them or the other members of the force.

Mr. J. A. McLeay might apply to Messrs. Moore and Son, Houndsditch.

COMMUNICATIONS, LETTERS, &c., have been received from—Mr. Haward, London; Mr. T. Bryant, London; Dr. Rayner, Hanwell; Mr. Thos. Smith, London; Mr. W. Rivington, London; Dr. Danford Thomas, London; Dr. Murphy, Sunderland; Dr. Stanley Haynes, Malvern; Dr. Maskew, Lindhurst; Dr. Richardson, London; Messrs. Essinger and Co., London; Mr. Lomas, Vaud; Mr. Strover; Mr. Johnstone, Glasgow; Dr. Haviland, London; Mr. Fuge, Taunton; Dr. Coomes, Bedford; Dr. J. Mickle, London; Mr. Longstaff, London; Dr. J. G. Hall, Aberdeen; Surgeon-Major Dobson, Exeter; Messrs. Street and Co., London; Mr. Gipps, Halifax; Mr. Mends, London; Mr. Percy Dunn, London; Mr. G. Crichton, Twickenham; Messrs. Harris and Co., Birmingham; Mr. C. L. Cunningham, Eastbourne; Mr. James Oliver, London; Dr. Ker, Halesowen; Mr. Christy, London; Mr. W. Curran, London; Mr. T. J. Vallance, London; Messrs. Verdon and Bott, London; Dr. Bampton, Plymouth; Mr. Pestonji, Bombay; Mr. Pelham, London; Mr. Towers-Smith, London; Mr. Wickham

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Barnes, London; Mr. Michelmore, Tiverton; Mr. Stocker, Fresh Gala; Mrs. Slater, Accrington; Mr. Bäumler, Freiburg; Mr. Clement Lucas, London; Mr. T. Laffan, Cashel; Dr. Maconachie; Mr. Kenrick Davies, Llandudno; Mr. J. Stewart, Dunmurry; Mr. W. Ashton Ellis, London; Mr. Raymond, Woolwich; Mr. Bickerton; Mr. J. T. Macnamara, Gort; Mr. Meadows, Hastings; Messrs. Harris and Co., London; Mr. Beedell, Tiverton; Mr. P. Dunn, London; Mr. F. Kerslake, London; Mr. G. Fleming, London; Rev. J. H. Wanklyn, London; Dr. Horrocks, London; Mr. Webster, Bootle; Messrs. Black, Edinburgh; Dr. Burnett, London; Mr. Collins, London; Dr. Harkin, Belfast; Mr. G. Lawson, London; Mr. Parkes, London; Mr. Gibson, Bromley; Mr. Marsh, Hindley; Mr. Davies; Mr. Bramwell, Newcastle-on-Tyne; Mr. Boyce, Shrewsbury; Mr. Garrard, Rotherham; Messrs. Bradshaw, Nottingham; Mr. Richardson, Birkenhead; Dr. J. Gordon, Aberdeen; Mr. James, Haverfordwest; Mr. McDonald, New Abbey; Mr. Hardman, Birmingham; Mr. Cornwall, Fairford; Mr. C. Hawkins, London; Mr. H. C. Burdett, London; Mr. H. D'O. Foote, Rotherham; Mr. D. B. Balding, Royston; Mr. J. G. Brown, Liverpool; Mr. Freeman, London; Mr. Twyford, Hanley; Dr. T. W. Hime, Bradford; Mr. Birchall, Liverpool; Mr. Keble, Margate; Dr. B. W. Symes, Halifax; Mr. Piggott, Preston; Dr. Lucas, Paris; Mr. Mayhew, Ipswich; Mr. Carmoul, Dumfries; Dr. Jacob, Leeds; Mr. Massiah, Manchester; Dr. Brookhouse, Nottingham; Dr. W. Sumpter, Cleynext-the-Sea; Mr. Littlewood, Leeds; Mr. J. N. Stark, Glasgow; Mr. Kendall, Hatfield; Mr. C. H. Scott, London; Mr. H. T. Wood; Bulbus; Inverness, Balham; L.R.C.P., L.R.C.S.; Beta, Sheffield; A. Z., Wrexham; Justice; Nurse; Carolus, Birmingham; A Sufferer therefrom; Medicus, London; Matron, Eastbourne; Northumbrian.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Harmer, Hawkhurst; Mrs. Twining, Dorchester; Mr. Bell, Dover; Dr. Jones, Pennsylvania; Mr. Munn, London; Mr. Ernst, London; Mrs. Gray, Banff; Mr. Wylie, Belfast; Mr. Morton, Highbury; Messrs. Bullock and Co., London; Mr. Potter, Manchester; Dr. Barclay, Grantown; Messrs. Beck, London; Mrs. Cocking, London; Messrs. Richards and Co., London; Mr. Coleburn, Darlington; Mr. Taylor, Cambridge; Mr. Morris, Swansea; Mr. Hayward, Grantham; Messrs. Wyley & Co., Coventry; Mr. Symons, Dumfries; Mr. Casella, London; Mr. Hume, Edinburgh; Mr. Lockwood, Sheffield; Messrs. Bates, Hendy, and Co., London; Mr. Williams, Much Hadham; Messrs. Porteous and Co., London; Mr. Horton, St. Leonards-on-Sea; Mr. Hyslop, Church Stretton; Mr. Woodcock, Bradford; Dr. Mason, Sheffield; Mr. Grant, Birmingham; Dr. Walker, Aylesbury; Mr. Burgess, Manchester; Mr. Taylor, Birmingham; Mr. Joslen, Workington; Messrs. Woolley and Sons, Manchester; Mr. Huggins, Melbourne; Messrs. Powneeby and Co., London; Mr. Howe, Sittingbourne; Messrs. Isaacs and Co., London; Mr. Aitken, Orton; Miss Hunt, Dublin; Messrs. Strain and Sons; Dr. Morrison, Hartlepool; Mr. Irwin; Messrs. Maythorn and Son, Biggleswade; Mr. Stewart, Liverpool; Dr. Cheeseman, Cape Colony; Mr. White, Selby; Mr. Sergeant, London; Mr. Crassweller, Highbury; Dr. McLean, Lairg; Mr. Pattison, Widnes; Mr. Vincent, Manchester; Mr. Blackburn, Burnley; Dr. Watson; Messrs. Read and Co., Bristol; Dr. Robinson, Bolton; Mr. Squire, London; Mr. Mason, London; Mr. Hazleton, Barnes; Mr. Naddin, Sheffield; Mr. Fenton, Wivenhoe; Mr. Davenport, London; Mr. Jenkins; Mr. Dickinson, Wrexham; Mrs. Griffiths, Southport; Medicus, Hammersmith; J. B.; Secretary, Bristol Royal Infirmary; R. H., Brockley; Secretary, Queen Charlotte's Hospital; Medicus, Kentish-town; Beta, Ventnor; Alpha, West Brighton; V. H. N., London; Secretary, Hereford; Medicus, Newport; Medicus, Windermere; R. D. S., Clapham; G. T. W., Harrogate; M.R.C.S.; Spes, Birmingham; Matron, Hertford; Assistant, Liverpool; Medicus; M.D. M.S., Bonchurch; Alpha; T. H.; E. L., Bristol; J. H. W.

Temperance Record, Chester Chronicle, Liverpool Daily Post, East Anglian Daily Times, West Cumberland Times, Western Times, Aberdeen Daily Free Press, &c., have been received.

Medical Diary for the ensuing Week.

Monday, November 15.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesdays, same hour.
CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2.30.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.
MEDICAL SOCIETY OF LONDON.—8.30 P.M. Dr. J. Hughlings-Jackson: A Rare case of Epilepsy.—Mr. Victor Horsley: Note on the Artificial Production of Epilepsy in Guinea-pigs, illustrated by Photographs on the screen with Lime-light.

Tuesday, November 16.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.
CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
PATHOLOGICAL SOCIETY OF LONDON.—8.30 P.M. Mr. W. R. Williams: Vegetable Tumours in relation to Bud Formation.—Dr. Hale White: Cerebro-spinal Meningitis leading to Œsophageal Abscess.—Mr. C. L. Hudson: Congenital Contraction of Stomach.—Dr. N. Moore: Aneurysm of Coronary Artery.—Mr. E. H. Fenwick: Carcinoma of Vesicula Seminalis.—Mr. D'Arcy Power: Two cases of Imperforate Anus.—Dr. H. Sainsbury: Cystic Tumour of Ileo-cæcal Valve. Card Specimens:—Dr. Savill: Meningeal Hæmorrhage.—Mr. Shattock: Chondrifying Sarcoma of Bladder.—Dr. Pasteur: Lung in Chronic Pleurisy.

Wednesday, November 17.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesdays and Thursdays, 1.30 P.M.
ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department, Mondays and Thursdays, 9.30 A.M.
ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.
LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.
GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.
KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; and on Friday, 2 P.M.; and Saturday, 1 P.M.
SOCIETY OF ARTS.—Opening Address by Capt. Douglas Galton, Chairman of the Council.

Thursday, November 18.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
HARVEIAN SOCIETY OF LONDON.—8.30 P.M. Dr. John Williams: Cancer of the Uterus (Harveian Lecture).

Friday, November 19.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
CHARING-CROSS HOSPITAL MEDICAL SOCIETY.—7.45 P.M. Mr. J. Astley Bloxam, F.R.C.S.: Bed-sores.

Saturday, November 20.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.

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Agent for the Advertising Department in France—J. ASTIER, 66, Rue Caumartin, Paris.

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An Address
ON
FINALITY IN SURGERY.

Delivered in the Surgical Section of the Academy of Medicine in Ireland, at the Opening Meeting, Nov. 12th, 1886,

BY SIR W. STOKES, M.D., M.CH. UNIV. DUB.,
PRESIDENT OF THE ROYAL COLLEGE OF SURGEONS IN IRELAND, ETC. ETC.

GENTLEMEN,—On the present occasion I have in the first instance to acknowledge the signal mark of confidence that has been shown me by this College in placing me in the position I now occupy—one that carries with it, as you know, the duty as well as privilege of presiding during the coming session over the deliberations and discussions in this section of the Academy. To be appointed to this office I deem one of the highest honours that can be conferred on any member of our calling, and that I am sensible of having been considered worthy of it is the truth. I shall ever remember with satisfaction that in the formation of this Academy, which was a welding together of all the Societies in this city connected with our profession, and a public declaration and recognition on our part of the unity of medical science, I took a not wholly inactive part, believing that from a vivifying contact of its branches would be derived a new and powerful impulse to its progress, and to the pleasure of finding that these anticipations have been more than realised is added for me the pardonable pride of having first been entrusted with the responsible duties of secretary to this section, and now with those of its president.

It is not my intention to make a retrospect of the surgical work done by this section since its formation, though such might be interesting and possibly of utility. That which was accomplished last session was, I think, a fair sample of what was done in the previous three sessions; and when we consider the range and importance of the communications made—On Dry Dressings in Antiseptic Surgery, by Mr. Kendal Franks; Perforation of the Membrana Tympani, by Dr. M'Keown; the Radical Cure of Hydrocele, by Dr. M'Ardle; Pharyngocele, by Mr. Wheeler; Ectopia Vesicæ, by Professor Bennett; Bone Drainage, by Professor T. Stoker; the Surgery of the Brain, by Dr. Coppinger; the Treatment of Scrofulous Cervical Glands, by Mr. Kendal Franks; Ununited Fractures, by Dr. Fitzgibbon; and the Treatment of Stricture by Electrolysis, by Dr. Hayes,—we can recall a group of papers that were at once comprehensive and practical, furnishing proof not alone of earnestness, ability, and zeal, but also no lack of power to sustain the reputation that has been won for the Dublin School of Surgery by our predecessors.

One of the great, in truth the chief, uses of societies such as this is to furnish opportunities for that mental friction, that touch of mind to mind, and contact with the spirit of work, which are such important factors in giving a stimulus to effort, fostering that union among workers which is not only a force in promoting scientific progress, but also one which leads to that kindly feeling and fellowship which should exist among all who honestly make effort to advance our science. These advantages, as well as others, must always follow fair, temperate, and earnest scientific discussion, and there are few now, if any, who would endorse an opinion I remember having heard expressed in the old Pathological Society, which was that one of its chief merits was the absence of all debate or discussion on the specimens exhibited or on the communications made thereon, a sentiment which was at the time received with loud applause. On another occasion I heard a somewhat similar utterance from one deservedly eminent in our profession, who, deprecating heated discussion on scientific matters and warning his hearers against it, reminded them that it is only when water is clear and tranquil that we are enabled to see the treasures that lie beneath it. But we have to do more than "see," and it must not be forgotten that it is only after the storm that the fairest shells are cast upon the beach, and the opportunity given us not alone to see them in all clearness, but to study, to learn from, appreciate, and treasure them. To Pericles are given the words: "Debate, we hold, does not mar action; the mischief is rather setting to work without first being enlightened."[1] But for discussion or debate to be fruitful, it is essential that there should be a rigid avoidance of all personalities, and a maintenance of that courtesy which characterises and distinguishes a scientific and intellectual aristocracy.

It has always been a source of regret to me since the formation of this Academy that so many members of our profession, both here as well as in the provinces, men of large and varied experience and unquestioned ability, have played so secondary a part in its practical working. Why this should be has always been inexplicable to me, for assuredly the necessity for conference, criticism, and mutual help is, especially in this section, owing to the area of surgery having of late become so widened, far greater now than it has ever been. Its life can best be maintained by the persistent recording of accurately observed facts, seen under many phases and circumstances, like the ever-varying pictures in a kaleidoscope; and the more earnest labourers that come into the field and volunteer for so good a work, the sooner may we hope for the realisation of what should always be our common aim and aspiration—the dispersion of error and diffusion of truth. It has been well said by our brilliant countryman, Bishop Magee, that no scientific student or teacher ever feels that he has a vested interest in the benefits resulting from any discovery or knowledge he may have acquired. He feels that the result of his toilful search is not his property alone, but belongs to all men, is revealed to him only that through him all men may become possessors of it, and that to conceal or utilise it solely for his own benefit is a miserly selfishness that carries with it its own Nemesis. At present there is all the greater necessity for co-operation in scientific research from the existence of many difficulties and chilling influences that in our profession beset us and that we have to contend against, among which may be mentioned the disturbed political condition that now unhappily exists in these countries; for assuredly the scientific advancement of a nation is always greatest when, instead of dissatisfaction and agitation, it has contentment and rest. This chilling influence is accentuated from the existence of a system of rule that, like all popular governments that exist or ever have existed, is not only careless and indifferent, but often distinctly antagonistic to scientists and their work. A different condition of things is observed among several of our continental neighbours, notably Germany and Austria; and the result is seen in the fact that of late years we look to a very large extent for light and leading to the great scientific centres in these countries, the Governments of which do so much to aid and foster original scientific research. Here a scientist, unless he happens to be among the favoured few possessed of private fortune, must dilute his work with what will yield more immediately a practical and tangible result. This must be regarded as a misfortune—one which is felt as such not only in a limited and local sense, but in a widely national point of view; for it has resulted in the too frequent transplantation of scientific laurels to countries and climes not our own. Again, there is the present epidemic of that combined hysteria, sentimentalism, and folly which has done so much to mar the intelligence and sap the judgment of so many men, as well as women, and which has resulted in the State placing cruel and senseless fetters on those whose aim and life-work have no objects but the advancement of our science and the welfare of mankind. It has been well said, "There are many years, but one sentiment, between the persecution of Galileo and the onslaught on vivisection." I need not dwell further on this, as the able and eloquent address delivered in this hall by our President, Dr. McDonnell, on "What Experimental Physiology has done for Surgery," is doubtless still fresh in the recollection of most of my hearers. Lastly, there is the existence of that class which is deserving of our heartiest contempt, the "critic-asters," as they were termed by Charles Reade—a class both in, I regret to say, as well as out of our profession, who apparently never tire of praising dead men at the expense of living ones, and who, because there may not be persons in it who stand out from their fellows in as bold relief as formerly was the case, hold that our profession must necessarily be in a state of decadence. There can be no doubt as to the baneful influence of these persons on many, for nothing is so destructive to honest effort as depreciation or discourage-

[1] Thucyd. ii., 40.

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ment, or, on the other hand, so healthy a stimulus to effort as a sympathy which is at once hearty and encouraging. There may not be apparent in our profession the commanding personalities, "the Tritons among the minnows," like Cooper, Syme, Crampton, W. H. Porter, and Colles—men who towered aloft above all, like forest trees among shrubs; but this is due not to deficiency of ability, industry, knowledge, or power of accurate and original observation in our ranks, as to there being a far higher standard of professional knowledge, which is aimed at by all and reached by many. "A high education is a leveller," are the words of Sir B. Brodie; but has this upward levelling had a beneficial or a pernicious effect on the progress of surgery? The answer can be best found by pointing to the fact that in the regretted days of the much-lauded and deservedly-lauded heroes I have mentioned, professional knowledge was, in comparison with what it is now, inaccurate and largely empirical, and its progress uncertain, fitful, and irregular. Now, on the other hand, it is advancing steadily, continuously, and with a rapidity which is as amazing as it is unexampled.

It is held by some that in certain of the principal supports on which surgery rests the condition of finality has been reached. I recently listened with deep interest to a surgical address by Mr. Erichsen, whose utterances must ever be regarded with the respect due to one who has aided so signally in raising the standard of British surgery to the high level it now occupies. In dealing with the lines of surgical advance made in our own time he specified operative surgery, surgical precision, and the development of those methods of scientific research which are carried on in the laboratories of the chemist and experimental physiologist. It was to me a matter of some surprise to hear, on the occasion I have referred to, the opinion expressed that the two former of these methods, which may be described under the title of the "art of surgery," have, it was held, like other arts (such as painting, sculpture, and architecture), reached a condition of finality, and that no further progress need be looked for in any of these directions.

In discussing this somewhat dismal view of the present, as well as the future, of these arts, we should consider the question in a twofold point of view—first, if any analogy exists between them and that which lies more particularly in our own province; and secondly, if there can be any finality in the other arts Mr. Erichsen mentioned. The aims and objects of those he drew attention to appear to me to be, without doubt, as widely different from surgical art as things can possibly be—the first two being essentially imitative, and the third constructive; and though it is hard to conceive a higher degree of perfection being ever reached in painting than the Sistine Madonna of Raphael or in landscape than Crossing the Brook by Turner, or in sculpture than the Venus of Milo the Dying Gladiator, or Thorwaldsen's Hebe, or in architecture than the Parthenon, or the Saracenic palace of the Alhambra, or the Gothic Cathedral at Seville, who can say with reason that finality has been reached in any of the arts of which the works I have mentioned are such splendid monuments? It is true that in these glorious creations the artists have succeeded in deeply touching a responsive chord in the minds of all who contemplate them, and that within the limits of their particular objects, they apparently leave nothing to be desired or looked for; and this result has been obtained in consequence of the great masters who produced them being faithful and earnest students of nature. But are their works indicative of finality? Nature is like an illimitable ocean which changes with every breath of wind and every passing cloud; and from the true artist who makes it—in its ever-varying aspects—his study and his guide, who is animated by the spirit that actuated the great workers of antiquity, may we not reasonably hope that in time, in other of her countless moods and aspects as yet unrepresented and untouched, we may look for works equal to, if not better even than, those bequeathed to us, and which, so long as they exist, must be regarded by those who contemplate and study them with heartfelt gratitude?

Mr. Erichsen illustrates his theory as to the final limit being now reached in surgery by examples drawn from the history of the imitative and the plastic arts, asserting that [illegible] be carried beyond a certain degree of excellence, which [illegible] once reached no further development need be looked for. But the theory of evolution and development in the history of man, and of the processes of the mind of man, must more or less apply to those arts in which that mind finds utterance, and will be evident in the symbols of successive ages in their infinite variety. No possible advance, he seems to think, can be made, or has been made, in sculpture since the execution of the frieze of the Parthenon, the Venus de Medici, or the Apollo Belvidere; yet when we look clear into the history of this one art we find new varieties of beauty evolving with human perception of spiritual and moral beauty. Even from the Parthenon and Pheidias to that of the younger Attic school—in Scopas and Praxiteles—there is a manifest development, a great step from the period of purely religious art to more human art, which two periods were united by the sepulchral monuments (such as those found in the street of tombs at Athens), of which Dr. Waldstein says:—"There can be no doubt that these works of sculpture bridged over the step from the art of Pheidias to the art of Praxiteles, that they were a stepping-stone from the religious sculpture to that which partook of a more human character."

If we look closely into the history of the other arts, I believe we will find clear evidence of analogous processes of progressive development. The doctrine of finality, for instance, might equally well have been promulgated in the time of Homer, and the view held then that poetry had reached its goal; but the production of the great epic of Greece—well termed the "sun of all ancient literature"—did not prevent or interfere with the subsequent appearance of the imperishable works of Shakespeare, Dante, or Goethe; and true as this is of poetry, is it not equally so of all other arts? But assuming, for the sake of argument, the existence of finality in these arts, and more particularly those indicated by Mr. Erichsen, is there any analogy whatever between them and surgery? I have already indicated some leading differences, but there are others; and chief among them is the fact that the aim and object of surgery are physical repair and restoration of disturbed or lost function to living tissue—tissue the complex nature of which cannot be regarded without awe. Therefore, even if the questionable doctrine of finality having been reached in the arts of painting, sculpture, architecture, or in any other of the arts was well founded, is there ground for supposing from any *a priori* reasoning that this view would hold good of surgery?

If proof were required of the want of finality in operative surgery, as well as surgical precision, I would recall the fact of the unsettled condition of opinion which exists in relation to the treatment of many forms of surgical injury and disease, a condition of unrest which is observable in very many instances that doubtless occur to you; for example, in the treatment of various forms of bone lesion, such as fractures of the lower end of the radius, shaft of the femur, and patella; also in the operative treatment of tuberculous disease of bone and malignant new growths. Why does this surgical unrest continue? Is it not in consequence of our observing that operative efforts are at times attended with disappointing and disheartening results, even when made apparently in the most suitable cases and with all the available care and skill of men in whom natural surgical proclivities and great manipulative dexterity are combined with the confidence derived from long, varied, and well-utilised experience? I might indicate many examples of this; but the instances in which I have witnessed such were chiefly in cases of tuberculous disease of bone, and in operations for certain malignant new growths, notably lingual cancer—a disease which, in truth, seems, in the great majority of cases, an enemy that may be vanquished for a time, but never conquered. Having regard to these vexed points, the question at once comes to the front, If we had anything like finality in either operative surgical treatment or precision in its application, would the condition of surgical unrest I have spoken of exist?

In addition to the essential differences between surgery and the other arts, indicated by Mr. Erichsen, it should be remembered that its functions and objects are not only widely different, but far higher and far nobler than those of any other art. Sir William Bowman, in his splendid address on surgery at Chester, quoted the pious saying of old, that the art of surgery is the "hands of God." The human hands that God permits to be "His instruments of succour to that earthly life and organisation which His power, wisdom, and love having first brought into being, still alone both sustain and cause to perish when their part is played; to that material organisation which dies every hour it lives, which indeed dies by living and lives by dying, and which wonderfully transmits even its own prerogatives and dark secrets to

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a succeeding life, destined apparently to remain a marvel and a mystery impenetrable to all generations." What has been the history of the three lines of surgical advance as indicated by Mr. Erichsen? Have we observed in their development that advancement or activity in the growth of any one of them has ever been attended with a corresponding stagnation or lagging behind of the others? There have been times in which the powers and resources of medical science have remained temporarily dormant, and empiricism has in consequence raised its head and reigned supreme, diffusing its blighting influence far and wide—a time when the battle of the orthodoxies and heterodoxies in medicine was as fierce, as irrational, as full of bigotry and dishonesty as it ever was in the analogous mischievous controversies of religion. This pernicious war, with all its senseless din, raged in the schools, until crushed and finally silenced by the unerring artillery of physiological experiment, as elaborated by the ceaseless toil and untiring genius of John Hunter.

Everyone even superficially acquainted with the history of our art is aware that the advancement, development, or strengthening of any one of its three great motive forces, already indicated, has been attended simultaneously with a corresponding advance in the others; and if, as is only too true, biological science has so materially strengthened operative surgery, has this result never been reciprocated, and has not precision in its fullest sense been found to be indispensable to advancement in both? It is, I think, contrary to all probability and experience that in future progress is only to be looked for in one of these three directions. Is it unreasonable to hope that with further developments in antiseptic practice—that boon to surgery for which mankind in all ages to come must ever be grateful to Lister—and which, in our time, has played by far the greatest part in widening the sphere of operative surgery, that regions hitherto barely touched by the operator may eventually become familiar ground for the exercise of his art? From what has already been done by experiment on the lower animals, and in thoracic disease in man—for example, in empyema, pulmonary abscess, pericarditis with effusion, and in vertebral and costal caries,—it is no wild flight of fancy to anticipate a time when a diseased lung may be found amenable to operative treatment. Although brain surgery is still, so to say, in its infancy, we may, having regard to the results already obtained by Professor Victor Horsley, Mr. Alexander, Dr. M'Ewen, Mr. Godlee, and Dr. Roberts of Philadelphia, and when a wider and more accurate knowledge of the localisation of brain injury and disease is obtained, not unreasonably anticipate an era when operations in many such cases may be regarded as well within the region of legitimate operative surgery; and these remarks apply with equal justice to renal, hepatic, and splenic disease. In order to ensure success in these directions we should steadily and fearlessly pursue our course, relying, not alone on biological research, but I should say also on improvement in surgical precision, and advancement of surgery in its operative aspects, and reject the disheartening suggestion that these latter have unhappily reached their *Ultima Thule*—finality. Into the regions where medicine so often has failed to recognise and arrest the progress of disease, surgery advances fearlessly to render aid—aid which happily is often reciprocated,—its followers full of hope, enthusiasm tempered by judgment, and confidence in the coming triumphs of our art.

It should be, and is, a genuine source of pleasure to us all—physician and surgeon alike—that we live in a time when we can view with satisfaction and content the destruction and grim ruins of those anachronistic barriers that in days gone by were erected by foolish men between medicine and surgery, barriers which were in so many ways fruitful of mischief, creating feelings of mutual jealousy and thinly-veiled dislike, and keeping us divided, powerless, and weak. They stimulated a conflict of selfish interests, obstructed the advancement of our common calling, prevented its elevation in public esteem, and in no small degree deepened the cold shade of official neglect. Under the influence of a happy reciprocity and overlapping of our work, aid mutually offered and mutually accepted, by slow but sure steps—steps gathering strength from the irresistible wave of human progress behind them, and guided by those whose undimmed lamps burn with no borrowed light—a sure advance is being made to that goal desired by all—unity in the science of medicine.

The fact that there have been, even in our own time, so many violent vibrations of the pendulum of opinion and practice in medicine and surgery has been often urged against our profession as a reproach. For example, it has been seen to swing from the almost indiscriminate use of blood-letting, to the deprivation from the system of a single drop of blood being viewed with apprehension; from the wholesale use of mercury in the treatment of syphilis to a period when, with more energy than discretion, it was stoutly held to be not only unnecessary, but injurious instead of beneficial, and finally stigmatised as an "accursed drug." Now again the pendulum, actuated by the motive force of common sense, has gone to a great extent back to its former position, and we acknowledge that the error made in the first instance related rather to the mode and time of the administration, and in the quantity that was given. Again, alcohol, in the memory of most of us, was given in febrile and other diseases with a liberality which in the present day would seem distinctly harmful; and among many other revolutions in practice may be indicated the various phases of opinion as regards wound dressing, and also the estimate of the therapeutic value of the operation of trephining. A century ago it was freely, doubtless far too freely, employed, not only as a means of relieving brain pressure, but also as a prophylactic to meningeal or cerebral inflammation. A reaction of opinion then set in, and for operative interference in these cases there was great indisposition. Now the operation has again asserted itself and is warmly advocated, and I believe rightly, in a far wider range of cases of injury and disease than it was at first. This result is doubtless the outcome of improvements in antiseptic practice, and the improved knowledge we have obtained of the localisation of brain disease, though it must be admitted that in this field of medicine we are only on the threshold.

But is there any justification for holding up, as has been done, our profession to scorn in consequence of these vibrations of the pendulum, or rise and fall in the tide of professional opinion? Is it not inevitable that such should occur in the application of a science which, without any reproach, can never be ranged among the "exact" sciences, to an art exercised on all sorts and conditions of men and women, varying in age, occupation, nationality, habits, social status, in wealth, in poverty, in health, and in disease? Again, is the doctrine of change of type in disease one wholly to be rejected? It finds, doubtless, but a limited acceptance among modern pathologists, but, notwithstanding, it is one firmly believed in by many of our more thoughtful physicians, distinguished alike on account of their great experience and exceptional powers of accurate observation. Among these I may mention my colleagues, our late President, Dr. Banke, and also Dr. Gordon, both of whom unhesitatingly accept the doctrine of change of type in disease. Graves, too, in his "Clinical Medicine," speaking of the variations in scarlatina and other diseases, as observed by himself and others, remarks that they "establish the real existence of a change in the constitution of diseases." Some forms of so-called surgical disease, formerly familiar to me in my student days, have disappeared, or are observed but rarely and in a mitigated form. I allude more particularly to the extensive and violently acute forms of syphilitic phagedæna, such as were described so graphically and vividly by that close and accurate observer, Mr. Wallace; phlegmonoid erysipelas, and acute gangrene—cases of which, during my student days, were too frequently the subjects of observation and treatment in the surgical wards of our hospitals; also instances of those often fatal forms of anthrax and cancrum oris, the latter relentlessly sparing no structure, and usually uninfluenced by treatment, however bold, rapidly pursuing its fatal career till checked by death alone. Of such cases little conception could now be formed by the surgical student were it not for the descriptions and illustrations which fortunately survive, and of which latter there are such signal examples in the museum of the Richmond Hospital by Conolly, who, as a faithful and trustworthy pathological artist, has never had a rival.

It is therefore, under all these circumstances, not surprising that there has been so much variation of opinion as well as of treatment, and they show how undeserved are the reproaches to which the profession has been so often subjected, unhappily furnishing excuses for the public being so often influenced by the reckless assertions of an unscrupulous empiricism. Among those whom we find blaming the profession for their frequent "change of front," we find even Professor Humphry, the eminent Professor of Surgery in the University of Cambridge. He has observed: "If the profession is thus liable to be beaten from pole to pole by the changing

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blasts of fancy and fashion, it is no wonder that the public are wavering in their confidence, and are capable of being attracted by the bold promises of empiricism under whatever form its head is raised."[2] But still, though we must regretfully acknowledge that there is a strong element of truth in the existence of many such unhappy consequences of much necessary instability in professional opinion, we can always get comfort as well as confidence in the ultimate triumph of medicine by bearing in mind one of the many wise as well as eloquent sayings of the great Nestor of our profession, whom all men revere and delight to honour—Sir James Paget,—who has said: "We may seem to move in circles, but they are the circles of a constantly ascending spiral; we may seem to sway from side to side, but it is only as on a steep ascent which must be climbed in zigzag."[3]

In the preceding remarks I have endeavoured to point out that progressiveness in all the arts, including our own, has ever been synchronous with the development and advance of human knowledge in all other directions, and that this development manifests itself, and will continue to manifest itself, in an infinite variety of ways. Having regard to the fact that the human family may be said to be still young on the earth, the future progress of all arts and sciences is as certain as that "we live, and move, and have our being." We may then feel assured that surgical art will, in all its branches and lines of advance, continue to progress, preventing us ever saying with Alexander, "Our fathers have left us nothing to do." In bequeathing to us so noble an inheritance of knowledge as they have done, the result of their untiring toil and genius, they have left us much to do. It is an inheritance carrying with it not alone a deep responsibility, but one which should make us determine not to let the wheels of progress which they set in motion end in a hopeless deadlock of finality; and also to stimulate an aspiration—one which should be common to us all—to accomplish "something ere the end"; something not unworthy the heirs of those who had—

> ". . . . . That strength which in old days
> Moved earth and heaven."

Address
ON THE
VALUE OF EXPLORATORY OPERATIONS IN THE PRACTICE OF SURGERY.

Delivered at the Inaugural Meeting of the Midland Medical Society, Birmingham, on Nov. 3rd, 1886,

BY THOMAS BRYANT, F.R.C.S.,
SENIOR SURGEON TO GUY'S HOSPITAL.

(*Concluded from page 913.*)

IN cases of purely *chronic obstruction* medical treatment should rightly have the foremost place, so long as no local cause can be made out by a rectal examination; although where acute symptoms are grafted upon the chronic the question of surgical interference should stand foremost, since such symptoms too surely denote changes of a serious nature in the intestine behind the seat of obstruction, and such changes as, if not checked in their progress, will prove fatal. Where, from the history of any given case chronic obstruction is made out, and by a digital rectal examination a stricture is detected, the line of treatment to be adopted is now fairly recognised and carried out. But where, in another case, although the general symptoms are the same, no such obstruction can be felt, and the exact seat and cause of obstruction is uncertain, how uncertain is treatment! The history of the cases may be the same under both circumstances; the existing symptoms may be the same—subacute symptoms of intestinal obstruction grafted upon chronic; and yet, because the finger fails to feel the seat of obstruction or stricture, the whole line of treatment too often becomes uncertain, irregular, and unscientific. Action is paralysed for want of certainty as to the exact seat of obstruction, and for want of action patients die. Is this right? Is it not now in a surgeon's or physician's power to diagnose with considerable accuracy the existence of mechanical obstruction of the large intestine? And, with the diagnosis of this probable fact, is not the surgeon bound, by an exploratory incision into the right or left lumbar region, according to circumstances, to give the patient relief by a colotomy, when from other reasons minor measures are inapplicable? I have no hesitation in saying again what I have said before, that the line of duty points in this direction; that the physician who, with the diagnosis of mechanical obstruction of the large intestine which has given rise to marked and severe symptoms, trusts to enemata and medicine, is trifling with life, and that the surgeon who consents to it is criminal. With this feeling I have on more than one occasion, in these cases, when called in consultation, refused to be a party to a procrastinating practice by going through the farce of further consultation, and of playing a deluding and delusive game, because I felt, as a surgeon, that medical treatment was mere trifling and playing with a life that could probably have been saved; and I regret to say that the result of these cases justified my action. At the same time I entirely exonerate my medical friends from any intentional error. I find fault with them for having too strong a confidence in the means at their disposal, and too little confidence in ours; because they will not realise fully the important physical fact that any force sufficient to overcome mechanical resistance can only succeed by injuring structure, and that injury to intestinal structure too generally means a fatal rupture. The usual report after delay is "sudden death," which means perforation. The most common report after surgical relief has been given late is "death from exhaustion." Where relief by colotomy is given as soon as obstruction becomes marked and troublesome, how different is the surgical record: freedom from pain almost immediately after operation; prolonged life in comparative comfort for months when the local disease has advanced far, and for years when otherwise; whilst, when death takes place, it is not attended with such agony as is commonly associated with that from obstruction, but results from asthenia, brought about, as a rule, by secondary deposit.

And here let me digress for a few moments to bring before your notice what must be described as a marked improvement in the operation of colotomy, which I have adopted during the last two years. I have employed the method in at least twelve cases, and the practice has been followed with most successful results. It is, however, only applicable where there is no great urgency in opening the bowel on account of obstruction. The method is as follows:—Having divided the abdominal parietes—say, in the left groin—with the oblique incision, and exposed and caught the bowel, I bring out by a careful loosening process as complete a knuckle of large intestine as I well can, and fix it *in situ* with two long hare-lip pins with flat heads introduced through the integument forming the lower lip of the wound, then through the whole diameter of the bowel itself, and lastly through the integument forming the upper lip of the wound. I cover the ends of the pins with cork. Even if the intestine be full of fæces or flatus, nothing escapes where the pins are passed. I then wash the whole wound with iodine water, throw in with a puff-ball plenty of iodoform (one part) and boric acid (three parts), finely powdered, into the deeper parts, and stitch up the wound in front and behind the projecting bowel, taking care to leave an opening at the posterior angle of the wound for drainage, into which I insert a tube when the patient is fat, or a strip of iodoform gauze when the patient is thin. I cover up the whole wound with iodoform gauze dipped into a mixture of terebene (one part) and olive oil (three parts), and a good sheet of Gamgee tissue, fixing the whole with an abdominal bandage. On the third, fourth, or fifth day, when the bowel has become perfectly adherent to the outside parts, the pins are removed and the bowel laid open, this part of the operation being absolutely painless. Should the soft parts about the pins ulcerate early, the pins should be taken out. On this account I have in two cases removed them on the second day; in two other cases from the same cause on the third day. In the others they remained four or five days. In no single case did the bowel fall back when the pins were removed, so that it seems tolerably certain that in two days the bowel becomes fixed to the external tissues. By these means I can record the convalescence of a lady aged seventy-five, operated on after ten days' obstruction, in two weeks; the same of a lady

[2] Hunterian Oration, by George Murray Humphry, M.D., F.R.S., 1879.
[3] Inaugural Address at International Medical Congress, 1880, by Sir James Paget, Bart.

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aged fifty-seven in two weeks, who, besides long obstruction, had the miseries of a recto-vaginal fæcal fistula; the same of a man aged fifty-six, in ten days, who was operated upon for relief from the agony of an obstruction associated with a large cancerous intestinal tumour; and many others. Indeed, I may say that by this method the operation is made safer and simpler than it was before; and I cannot too strongly urge the adoption of this practice.

I should here, before I leave the subject of intestinal surgery, bring before your notice a case in which an exploratory operation of right lumbar colotomy was undertaken under the impression that relief would be afforded by it, and that the seat of obstruction was lower down. In this surgery was wrong; for the ascending colon, when opened, was found to be quite empty. Nélaton's operation of enterotomy was then performed in the right iliac fossa, with marked relief; the patient, a lady aged seventy-one, dying on the tenth day simply from exhaustion. "I was asked on March 26th, 1886," wrote Dr. Cumberbatch, who was the patient's medical attendant, and the kind author of these notes, "to see a lady in Folkestone aged seventy-one, spare, slight, pale-looking, but fairly healthy. Two days before she had complained of pain in the abdomen, which she attributed to spasms, from previous attacks of which she is said to have suffered. Two days previously she had had a satisfactory action of her bowels. Dr. Lewis, who had seen her, had given small doses of opium and belladonna. When I saw her she had a quiet pulse and normal temperature. There was no vomiting, but an occasional slight retch, apparently more from flatulence than anything else. That evening she came home to London in an invalid carriage, none the worse from the journey. For the next few days she was in much the same state, had no pyrexia or vomiting, only abdominal pain at intervals, with great visible peristalsis, and prominent coils of intestine appearing everywhere. There was no special tenderness in the right or left iliac region. Free enemata brought away nothing, not even flatus. The treatment was 'opium and starvation.' Dr. Wilks and Sir James Paget saw the case with me, and as the symptoms persisted, and it was thought probable that the obstruction was in the colon, colotomy was thought to be the only means of giving relief. For this operation Mr. Bryant was called in on the 31st—that is, on the seventh day of the attack." When I saw her, coils of distended intestine were very visible and peristalsis marked. A rectal examination revealed nothing. The right lumbar region was selected for operation, as it was considered probable that the seat of obstruction was higher than the descending colon. The operation was performed as usual; the ascending colon found and opened, and when opened absolutely empty. Not a stain of fæces could be detected on the finger when introduced. Through the opening in the colon an obstruction was felt in the right iliac fossa. No relief being possible from this measure, it was determined, after discussion with Sir James Paget and Dr. Cumberbatch, that a tense coil of bowel which was prominent in the right iliac fossa should be opened, as in Nélaton's operation of enterotomy. This I did, having carefully stitched the coil of small intestine which presented through the opening made in the abdominal parietes to the edges of the parietal wound before opening the bowel. When the bowel was opened solid fæces escaped, and continued to do so for days with flatus. This escape gave great relief, and the abdominal distension subsided considerably. The patient, however, could never take much food—a very little nauseated her; and although no complications appeared, and the artificial anus became so rapidly established that all the sutures could be removed on the third day, she gradually sank on the tenth day from inanition, but free from pain after the day of operation. After death a necropsy was made by Dr. Goodhart, which revealed such an interesting condition of parts that I publish his report nearly in full:—

"*Volvulus of the Cæcum; Extreme Dilatation of the Cæcum, with Ulceration; Localised Peritonitis; Colotomy in the Right Loin; Enterotomy in the Right Groin.*—Inspection, April 12th, 1886: A lady seventy-one years of age. The body was very spare, but hardly emaciated. The wounds in the right loin and also in the inguinal region were still quite clean cuts, indicating a decided want of proper repair, considering that the operation had been performed on March 31st. The bowel in both wounds was, however, firmly adherent. The wound in the groin had some excoriation around it, as is usual around apertures into the small intestine. On opening the abdomen the abdominal wall was adherent to the bowel at the umbilicus or thereabouts, and again in the epigastric region to the left of the median line, and also towards the left flank, and further examination showed that in all cases the adhesions were to the cæcum, which now filled the greater part of the front of the abdomen, or, to speak more correctly, covered the remainder of the coils with a large flaccid apron or bag. The sac was found to be a much-dilated flaccid cæcum with very thin walls, which tore into a large hole when attempts were made to separate it from the surrounding adhesions. Some of these adhesions were organised and of firm texture; others, that near the umbilicus particularly, were still soft and lymph-like. The remainder of the cavity, as brought into view by turning back the abdominal parietes, was occupied by coils of rather contracted small intestine. No colon was visible anywhere, but on further search it was found in its proper position, nowhere larger than a ring-finger, and in the right loin running into a ring of something beyond which was the cæcum. Turning up the dilated sac of bowel (cæcum), the cæcal appendix was found on the under surface of the upper part of it. The cæcum was displaced from the right iliac region and turned over, so that the caput cæci pointed upwards to the epigastrium, in fact lay there and was adherent, and the anterior surface became the posterior. In addition to this displacement, a considerable twist had taken place at the neck of the cæcum, or in the early part of the ascending colon, which at the neck amounted to a complete revolution, and was only untwisted by turning the cæcum completely round, but which towards the fundus part hardly seemed to be much more than half a turn. The ileum joined the cæcum half way up at its right border, and ran, not, as naturally, to the left, but into the coils of small intestine occupying the right loin. It was not certain how far the displacement may have been aided or determined by it; but running into what now constituted the neck of the twist, above which the parts were dilated, below closely contracted, was a large branch of the ileo-colic artery, that formed a thick cord, which was probably present previously to the fatal obstruction, as a very loose cæcum and a comparatively fixed colon would be a condition of parts in which the fixed colon might form a *point d'appui* round which a twist might very readily have occurred. The cæcum contained a quantity of fæcal matter. The colon below the obstruction held a little milky material, probably the remnant of enemata. If so, it may be interesting to note that it extended the whole length up of the colon. In the colon above the obstruction was some thin brownish mucoid material. The stomach contained five ounces of beef-tea-like fluid. The gall-bladder was distended, and the common duct was very large: probably a gall-stone had passed at some former period. All the other viscera were quite sound, but of the stomach and intestine one would say that it was all remarkably thin, as if atrophied. At the neck of the twist the peritoneum was white and thick, as if the state of parts had been in existence for a long time." From this condition, and from the nature of some of the adhesions which kept the cæcum in its malposition, Dr. Goodhart was inclined to think that there had probably been some chronic distension of the cæcum leading to ulceration of its mucous surface, and that possibly the late symptoms may have been peritonitic rather than obstructive. If not, possibly some slight further twist occurred at the time of the onset of the symptoms which rendered an already partial obstruction complete. Dr. Goodhart considered that death was to be attributed to exhaustion dependent upon the ulcerative enteritis, of which he remarked that he had no doubt whatever, from other similar cases, that it is a very exhaustive and dangerous condition when once it supervenes. I may also state that the opening made at the operation of enterotomy was about one foot from the termination of the small intestine in the cæcum.

This case was doubtless, as Dr. Goodhart described it, one of volvulus of the cæcum, the twisting having been much facilitated by the congenital freedom of the cæcum and ascending colon. The surgery of the case on the whole, I maintain, was right, though only partially successful, since an exploratory operation in the region of the ascending colon gave promise of the best success. This measure was futile, as it turned out, since the bowel was thereby opened below the seat of obstruction. It nevertheless did no harm, and cleared the way for the operation of enterotomy which was performed, with the result of relieving the obstruction, and enabling the patient to die painlessly ten days later.

I would wish my surgical friends to look favourably upon

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the operation of enterotomy, since it enables a surgeon to give relief, as in the case just recorded, where no other means are at his disposal. It seems to be applicable to cases of acute strangulation in which the risk of laparotomy is rejected as being too hazardous, or where, on account of the age of the patient, any severe measure must be set aside; to cases of abdominal obstruction in which the clinical evidence points to the conclusion that the obstruction is high up in the large or low down in the small intestine; to cases in which laparotomy is inapplicable and lumbar colotomy is out of court; to cases of obstruction in which relief is urgently required, and a more exact method of giving it is not clear either from some difficulty in diagnosis or other cause. It is an operation that often gets a patient as well as the surgeon out of a perplexity, and is not difficult. I have now performed it four times, and on each occasion as much relief was given as could have been expected.

As a result of an exploratory abdominal operation in a man which, I maintain, failed because it had not been undertaken earlier, I should like to bring before you a case in which I removed a myxomatous lipoma from behind the mesentery which weighed 56 lb. The specimen is now in the museum of the Royal College of Surgeons. The diagnosis of the case before an exploratory abdominal incision was made was not clear, although there was enough to excite a suspicion of the nature of the tumour.

James B ——, aged sixty, was admitted into Guy's Hospital, under the care of Dr. Pavy, for enlargement of his abdomen, on October 20th, 1885. His father and mother were dead; the causes of death unknown. The patient was one of a family of four, two of whom were then living, and had always enjoyed good health; one was dead, the cause of death being unknown. There was no history of hereditary disease in the family, nor of tumour in any of the patient's relatives. The patient was a married man, without family. Twenty years previously he had had inflammation of the lungs, and ten years since bronchitis. With these exceptions he had always enjoyed good health. Fifteen months ago he first noticed an increase in the size of his abdomen, the swelling beginning at the lower part of the right side and across the middle line; the swelling was not painful. Ten months ago the patient had to give up work on account of shortness of breath. He was in Ipswich Hospital at Christmas, 1884, and was there punctured twice, but no fluid was found; he was next attended by Mr. Hibberd, of Walton, Ipswich, who punctured his abdomen in five places, but could find no fluid. For about the last four months the patient had had a hacking cough, and spat up a good deal of frothy phlegm. Three months ago he vomited on one or two occasions some material of a "coffee-ground" nature. His legs had lately become very swollen. The bowels had been fairly regular throughout; he had had no difficulty in micturition. On admission, the patient's abdomen was very much swollen, and his legs were highly œdematous. His cheeks were hollow, but his skin looked healthy and red. Temperature 97·4° F. His appetite was good; the bowels were rather constipated. The abdomen, much enlarged and tense, measured forty-eight inches and a half in circumference at the umbilicus. The enlargement was fairly uniform, perhaps a little greater and more prominent in the right lumbar and iliac regions. Its shape varied very little with the position of the patient. The margins of the ribs and ensiform cartilage were pushed up and everted by the enlargement. The abdominal parietes were extremely tense and œdematous. The skin was stretched and shiny, with large superficial epigastric veins showing through it. The skin around the umbilicus was thin and soft for about an inch. The scars of six punctures could be seen, two above and two below the umbilicus in the middle line, and one on either side of it. There was a small lipoma near the angle of the right scapula. There were also masses of fat, defined above, but becoming diffused below, on the inner and upper part of the thighs. Palpation of the abdomen detected little, as the parietes were very tense. On pressing deeply into the epigastric notch, the fingers came down on something hard. A wave of fluctuation could be felt from the middle line of the abdomen to either flank; but it was not well marked, and could not be obtained from flank to flank. There was a tympanitic note over the right lumbar and hypochondriac regions, and resonance also in the left flank. Over the umbilicus and left iliac region there was a peculiar kind of crackpot sound on percussion, suggestive of a hollow viscus immediately underneath the parietes. The respirations were 22 per minute, upper costal in character; the abdomen and lower ribs moved little during the respiratory act. There was hyper-resonance over the front of the right lung to the sixth rib, where the abdominal dulness began. The breath sounds were normal over the front of both lungs. Behind there were dulness over both bases from the eighth rib, deficient entry of air, and muco-crepitations and diminished vocal resonance over dull areas. A troublesome, frequent, hacking cough was present, and small quantities of frothy mucus were expectorated from time to time. The pulse was 64, good. The cardiac dulness existed from the fifth rib and from the left margin of the sternum to the abdominal dulness. The cardiac impulse was felt one inch vertically below the nipple in the fifth interspace. The first sound was followed by a faint systolic bruit; the second sound was normal. The urine was of orange colour, clear, acid, and sp. gr. 1010; it contained no deposit, albumen, blood, or sugar. The patient was put upon middle diet, and for his cough the following mixture was ordered to be taken three times a day: carbonate of ammonia, five grains; ipecacuanha wine, five minims; syrup of tolu, one drachm; water to one ounce. On Oct. 21st the abdomen was explored with a trocar and cannula of fine bore. One puncture was made in the median line rather nearer the pubes than the umbilicus, and another in the left hypochondrium. In the former place the trocar was thrust in about three inches and a half, and its end seemed free as though in a cavity. But no fluid came even with aspiration. In the latter position the trocar was thrust in to its hilt (about four inches and a half), and seemed to pass through something hard and gritty. Only a few drops of blood mixed with oil-globules came out. The oil was supposed to be that used for greasing the instrument before it was used. An ounce of a mixture of compound cascarilla was ordered to be taken every six hours instead of carbonate of ammonia, together with a draught at bedtime composed of ten grains of bromide of potassium and a drachm of syrup of chloral in an ounce of water. On the 22nd, as the bowels had not yet been opened since his admission, he was ordered to take at bedtime ten grains of colocynth and calomel pill, and in the morning an ounce and a half of magnesia mixture, with the result that on the following day the bowels were twice relieved; the stools were liquid, and of a dark-brown colour. On the 24th the abdomen was not quite so tense. A hard ridge could be felt running transversely across the abdomen, three inches below the margin of the ribs; and just below this were some rounded hard lumps. There was a little tenderness on palpation. The abdomen measured forty-eight inches around at the level of the umbilicus, each side contributing twenty-four inches. A cyrtometric tracing showed no difference in shape between the two sides. In the thorax there was dulness behind, and in the axilla from the sixth rib downwards on each side; muco-crepitations and impaired respiratory murmur, vocal resonance, and fremitus existed over the dull area. About 7 P.M. the patient was seized with a severe attack of dyspnœa, and had to sit in a chair, as he could not breathe whilst lying down. He made several attempts to return to bed during the night, but always had to sit up again. The cough was very troublesome, and much tenacious mucus was expectorated. On the 25th the patient was easier, but could not lie down. On the 26th dyspnœa and orthopnœa still persisted. A rectal examination revealed nothing abnormal. I saw the case with Dr. Pavy, and decided to explore the tumour. It was considered that it was probably a soft innocent tumour of myxomatous tissue, or some other variety of connective tissue, probably coming forward from behind the peritoneum. On the 27th the cough was troublesome; the patient could not lie down. An ounce of castor-oil was ordered to be taken at bedtime, and a soap enema to be administered in the morning. On the 28th the purgative acted well. The resonance of the abdomen was now present at only a small area over the liver. The lungs were in the same condition.

Operation.—Chloroform was administered. It was some time before the patient was fully under its influence. He coughed much during its administration. The pulse became weak and irregular during the operation. Two subcutaneous injections of brandy were given. Anæsthesia was maintained for two hours and ten minutes. I first made a vertical incision in the line of the right linea semilunaris, beginning it a little below the level of the umbilicus and extending it downwards four inches. The structures forming the abdominal wall were carefully divided, and all

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hæmorrhage was at once arrested by torsion. On dividing the peritoneum a hard mass was exposed, covered by a shining membrane; this membrane was then divided, but the mass within it looked so like large intestine, thickened and matted together, that the membrane was again united and supposed to be the serous coat of the intestine. Another incision, four inches long, was then made, at right angles to the former, downwards towards the iliac crest. The mass first seen still, however, filled the whole wound, and its limit could not be reached in an upward direction, although its lower end was turned out, and found to be lobulated on the surface, and to consist, on section, of fat and fibrous tissue. The incision was then enlarged upwards, so that its upper end was four inches below and to the right of the ensiform cartilage, and its lower end was four inches from the pubic spine. Still the tumour occupied the whole gap. In some places it was connected with the parietal peritoneum by loose cellular tissue, and large veins of the size of a finger coursed over its surface, some of which had to be ligatured and divided at the upper end of the incision. Some omentum and transverse colon appeared in the upper angle of the incision. Whilst the tumour was being manipulated, about thirty ounces of pus gushed out from a cavity in its centre; it was extremely fetid and mixed with blood, and was supposed to be caused by suppuration in the track of a former puncture. By pulling the tumour to the right and drawing the abdominal wall to the left, the tumour was after a while brought through the incision. It had no defined pedicle, but a large attachment to the back of the abdomen by loose cellular tissue, over which the peritoneum was stretched. In the peritoneum were numerous large veins, which were divided between a double ligature. The intestine and liver were all pushed up into the abdominal division of the chest; they looked pale and rather blue. There was no fat in the great omentum. The abdominal cavity was carefully sponged out, and all hæmorrhage arrested. The abdomen was then closed with silk sutures. No drainage-tube was used. The wound was dressed with gauze soaked in terebene and oil next the skin, then iodoform gauze, Gamgee tissue, and finally cotton-wool, the whole being firmly strapped. An opium suppository (two grains) was introduced, and the patient put to bed. Hot blankets and bottles were applied to the feet, the knees were supported by a pillow, and a cradle was placed over the abdomen. The extremities were warm. At 5.30 P.M. the pulse was 76, fairly strong. The respirations were 30, rather shallow. There was mucous gurgling. At 10 P.M. he was in no pain. Pulse 64, good; respirations 30; temperature 98·4°. The extremities were warm. He had a little cough, but could not expectorate mucus from his throat. At 11.30 P.M. he vomited some green bilious material. Ordered a grain of opium pill every six hours. On the 29th he became restless during the night; the pulse quickened but became weaker; the respiration grew more laboured. A tent was erected around the bed, and the steam from a kettle was directed into it. At 11 A.M. the breathing was very bad; loud mucous râles were heard all over the chest. The patient was easier when propped up with pillows. The stomach was distended with flatus. No discharge had come through the dressings. Temperature normal; pulse 104, weak and compressible. At 1 P.M. he was in great pain and distress. An injection of one-sixth of a grain of morphia was administered, and also twenty minims of brandy. In the afternoon he grew gradually worse, breathing only with difficulty. Temperature 102·4°. Ten ounces of brandy had been given in twenty-four hours. The pulse gradually became hardly perceptible, and injections of brandy (ten minims) and of ether (ten minims) were given; but he died at 3.20 P.M., twenty-four hours after the operation. The tumour weighed 56 lb. It measured in diameter twenty-two inches vertically, sixteen inches transversely, and eight inches and a half in the antero-posterior direction. It was composed of huge lobes, of which the principal appeared on the anterior surface, separated by a Y-shaped sulcus, varying from five to seven inches in depth; these lobes and those on the other surface were further subdivided into smaller lobes by more shallow sulci. The tumour was covered with loose cellular and fibrous tissue, and in part by peritoneum, in which coursed numerous large veins. Its substance consisted of large masses of fat and delicate fibrous tissue, mixed together in various proportion, and divided from each other by moderately dense fibrous septa. The pus which escaped during the operation (about a pint and a half) was of a peculiar foul odour, like suppurating hydatid, and mixed with much blood. Under the microscope, blood and pus cells were seen in it, the latter mostly containing globules of fat and much fine granular débris.

Post-mortem examination. — The incision looked very well; the stitches were all in good position. Both lungs were very œdematous, and almost solid posteriorly. Fluid streamed out on pressure. There was much hypostatic congestion; no pus in the tubes, but some emphysema in the anterior part of both lungs. The trachea and bronchi contained a quantity of clear fluid mixed with air. The heart weighed thirteen ounces; there was some hypertrophy of the right ventricle. The abdomen contained about a pint of blood-stained fluid. The inner aspect of the wound appeared to be quite healthy. There were no signs of peritonitis. The stump of the tissue from which the tumour had grown lay in the abdominal cavity. There was no bleeding, and the ligatures were all in good position. This stump consisted of loose cellular tissue and peritoneum, and appeared to be connected with the mesentery. The omentum and gut were quite free. In the mesentery were about eight small fatty tumours (the largest of the size of a hen's egg, and the smallest as large as a filbert); they appeared to consist of fine fat. Behind the peritoneum in the middle line and below the attachment of the mesentery was a large, soft, kidney-shaped, regular tumour, which must have pressed considerably on the vena cava, and probably was the cause of the extreme œdema of the legs. There was a fair amount of fat in the mesentery, but none in the omentum. There was no coagulum in the mesenteric or portal veins. The kidneys weighed 14½ oz. Both the arteries were thick, and the stellate veins well marked. There was a number of minute hæmorrhages on the surface, evidently recent, probably due to change in pressure consequent on the removal of the tumour. The cortex was slightly atrophied, the surface not granular. Both kidneys contained cysts, and in one they were large, the largest being of the size of a Tonquin bean, and consisting chiefly of a thin transparent covering, visible on the surface of the organ. They were lined by a thin fibrous-looking membrane, which could not be peeled off. Their contents were limpid, and not the thick material sometimes seen. Other organs healthy.

Exploratory operations in cases of suppuration of the kidney, in cases of suspected renal calculus, or in examples of growth in or about the kidney, are of somewhat modern origin, the operation being undertaken at first with diagnostic views, and secondly with curative intentions—that is, with the object of draining a suppurative cavity, of removing a renal calculus, or taking away a diseased kidney. And need I add that these exploratory operations have, as a whole, been crowned with great success. As a measure to drain a suppurating renal cavity nothing but commendation can be given; it is but carrying out a well-known principle of surgery, and it is only a wonder that the practice has been postponed until these recent times. The employment of anæsthesia has doubtless had much to do with its introduction, together with the confidence that surgeons now have in their primary treatment of wounds. I was first led to perform this operation by a lumbar incision made as in a colotomy in the year 1870, in a patient of my much-lamented friend and colleague, Dr. Moxon, and evacuated several ounces of pus from a pyo-nephritic organ. The man was much relieved, but died two months later with scrofulous disease of both kidneys. I have repeated this operation at least twenty times, and with excellent success. In half the cases, after the abscess was well drained pus soon ceased to flow with the urine, and the lumbar wound speedily or slowly closed. In four of these cases the discharge continued for so many months, and was the source of so much anxiety, that I at times was led half to regret that I had not taken the kidney away. Yet in all these four cases the wound subsequently healed without the necessity of having recourse to such a severe measure as extirpation of the organ, and the patients are now well and in good health. A little more impatience on my part, or importunity on the part of the patient or his friends, might have induced me to excise the organ. Had I done so, I should have performed four unnecessary operations, and should probably have had to record one at least fatal result out of the four good cases, which would have lowered greatly the value of the measure. In four other cases now living the lumbar fistula is still open; it is, however giving but little trouble, except in one case, in which there is doubtless tubercular disease of the other kidney, as well as of the genital organs. In this case the operation

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has kept the man alive for several years. In two cases a urinary fistula exists, one in a lady now aged thirty-seven. In this case it has lasted since 1876, when about three pints of fetid pus were evacuated from her loins, followed by a speedy convalescence. In 1885 she was, except for the fistula, quite well. The second case occurred in 1884 in the person of a widow lady aged fifty, from whom a pint of pus was let out, with immediate relief and a speedy convalescence. The inconvenience was so little in this case that the lady has since married.

I have been tempted to enter a little into detail in these cases of exploratory renal operations in order to show that for a suppurating kidney I have not yet attempted to remove the organ, and believe that such a measure can only be required in very exceptional circumstances. I think my cases demonstrate the expediency, as a rule of practice, of first opening, irrigating, and draining the abscess cavity, and in not being in any hurry to do more; and, secondly, that a urinary renal fistula is not of so troublesome a nature as to justify such a severe measure as renal excision. To know that in addition to one supposed good kidney there is a piece of a second to maintain the balance of health is by no means an unsatisfactory piece of knowledge. It may be added that to catch the urine a mechanical appliance can without trouble be applied. The operation of nephrolithotomy is one that can only be mentioned in words of praise. An exploratory lumbar incision for diagnostic purposes, where sufficient evidence exists of the presence of a stone, is always justifiable; and the question of the simple removal of the stone or of the kidney with the stone is one that can only be solved after the exploratory incision has made the true condition of the parts clear. The success that has attended these operations has been most encouraging; may the records in the future be still better!

Excision of the kidney for tumour disease has not hitherto been a subject of congratulation. I have been tempted but once to make an exploratory lumbar incision down to a kidney, with the view of extirpating the organ should I have found by the incision sufficient encouragement to proceed; but in the measure I was disappointed. Prudence suggested an abstention from the attempt, and subsequent reflection has satisfied me that I was right. The case is, however, worthy of record. It is one of sarcoma of the kidney associated with profuse hæmorrhage, the patient for days losing eight or ten ounces of blood, and then going for months without passing any. I had hoped after my incision to have found a calculus. The size of the veins about the kidney surprised me. On exposing the organ, veins as large as the iliac veins were found almost to cover its surface. A rupture of one of these would certainly have given rise to a fatal hæmorrhage. In removing a kidney for sarcomatous growth, the existence of these enlarged veins must be taken into account, since their presence would add greatly to the dangers of the operation.

Sarcomatous Growth of the Right Kidney, weighing 53 oz., attended with profuse Hæmorrhage; Death from Exhaustion brought about by Hæmorrhage.—Samuel H——, aged sixty, a draper, was sent to Mr. Bryant by Mr. Greaves of Stafford, and admitted into Guy's Hospital, under Mr. Bryant's care, on Aug. 18th, 1885. He was a married man, the father of five children alive and well. He had always enjoyed good health up to seven years before his admission, when he noticed some bleeding from the penis. He stated that he had to hold his urine whilst travelling on the railway, and was in great pain. He then called upon his medical man, who twice passed a catheter, but could not draw off any urine. The patient then went to bed and had a warm water enema, after which a quantity of clotted blood passed with the urine. He kept quiet for some days, and seemed to have quite recovered. Three years later he had another attack of bleeding, and was two or three weeks under the care of a medical man, and he again recovered. Some time after this he was in Birmingham and saw Sir Walter Foster, who carefully examined him and detected an enlargement on the right side of the abdomen. The third and last attack of hæmorrhage occurred on July 10th, 1885, when the patient passed, according to Mr. Greaves, at least eight or ten ounces of pure arterial blood, with great pain, for ten or twelve days. He was then free of pain and hæmorrhage for two days, when both recurred and lasted until about Aug. 2nd. This illness greatly weakened the patient; but he subsequently had no bleeding, his urine appearing, as usual, normal. On admission on Aug. 18th, he was blanched and feeble from loss of blood. There was a swelling in the right lumbar extending into the umbilical region, which moved up and down with the diaphragm. Dulness on percussion could be felt about one inch below the margin of the ribs, extending towards the middle line one inch from and half an inch below the level of the umbilicus. There was no fluctuation on touch. The tumour could be moved between the hands. The veins of the right side of the chest and abdomen were more distinct than those on the left. Urine: sp. gr. 1020; acid; gave a trace of albumen. The patient was ordered milk diet, and ten grains of colocynth and henbane pill at night, with a magnesia draught in the morning and a simple enema to prepare him for the operation. On Aug. 21st the urine was of sp. gr. 1020, acid, with a trace of albumen and blood. The patient was put under chloroform. Mr. Bryant made an oblique incision five inches long from the middle of the crest of the ilium to the erector spinæ muscle. Some vessels were ligatured, and a director was passed. After the tissues were cut through, he came down upon some very large veins which were embedded in the fat around the kidney. They were as large as the index-finger. The part about the kidney was then punctured with a trocar and cannula, but no fluid was drawn off. The swelling was clearly a solid growth, and could not be removed. The wound was accordingly stitched up and dressed with iodoform gauze. By this exploratory operation it was clear that the patient had a large sarcomatous growth in his kidney. On the 24th the wound was dressed. The patient seemed fairly well, but had pain in the right thigh. Hot fomentations were applied. The urine had a strong ammoniacal odour, and was alkaline, its specific gravity was 1025, and it contained blood. On the 25th the patient complained of pain in the hypogastric region and of difficulty in passing urine. A No. 9 catheter was used, and seven ounces and a half of urine were drawn off. The pain in the thigh was less. The wound was looking well, iodoform and powdered boric acid being applied to it. The specific gravity of the urine was 1020, and contained blood. On the 28th the patient was very weak, and felt very drowsy at times. His temperature was high (*vide* table). The patient died at 3 A.M. on Aug. 29th.

Temperature Table.

	A.M.	P.M.		A.M.	P.M.
Aug. 21st ...	97·8°...	98·4°	Aug. 25th ...	100·8°...	100·8°
„ 22nd ...	98·6 ...	100·8	„ 26th ...	98 8 ...	104·0
„ 23rd ...	100·0 ...	100·0	„ 27th ...	101·2 ...	103·0
„ 24th ...	101·0 ...	100·8	„ 28th ...	101·2 ...	—

Necropsy.—The right kidney was large, irregular in shape, and filled up the whole of the right side of the abdomen. It weighed 53 oz. On section the upper part was found to be yellow and caseating, with oily masses; the lower part was nodular, with recent hæmorrhage into cysts. The left kidney and other organs were healthy. Their weights were as follows:—Left kidney, 7 oz.; spleen, 7½ oz.; liver, 47 oz.; heart, 11 oz.

Time reminds me that I must now bring my remarks to a conclusion, otherwise I could have illustrated the advantages of exploratory operations in diseases of the thorax, bladder, and even from the surgery of the cranium and its contents. In this latter class of cases, however, my words would have been on the side of caution, for it has not yet been actually proved, as some would lead us to believe, "that it has become possible, by the observation of symptoms, not only to determine the fact of the existence of some morbid growth within the skull, but also to determine its precise position with such accuracy that it can be cut down upon and removed." It is not yet proved "that the necessary operations can be performed by the aid of certain precautions, with a very small degree of risk to life, and that considerable portions of brain may be removed without injury."[1] What has been proved is that in *exceptional* cases a diagnosis of the position of a tumour can be made with sufficient accuracy to justify a surgeon in cutting down upon and trephining a skull to search for the tumour with a view to its removal, but no more. It is to be hoped that these cases may become more numerous, but at present, if we are to be guided by facts, the surgeon must not be too bold or too sanguine. I should like my hearers to read upon this subject an able paper drawn up by my young, but able, colleague, Dr. Hale White, and published in the volume of the Guy's Hospital Reports for 1886. It contains an analysis

[1] The Times, Aug. 17th, 1886.

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of 100 cases of cerebral tumour, with reference to operative treatment, cause, mode of death, and general symptoms. A careful study of this paper will probably give ballast to any judgment which might otherwise possibly be over-stimulated by some brilliant success.

By way of summary, I think we may take it as proved that in surgery exploratory operations made for diagnostic purposes should in certain cases be systematically employed, and that in tumours of the breast and testicle the value of this practice is best illustrated; that such exploratory operations are most valuable when they lead up to treatment, as in cases of acute strangulation of the small intestine from whatever cause, and in those of deep-seated abdominal suppuration.

In conclusion, gentlemen, allow me to thank you for the kind attention you have given to my address. The subject I have brought before you is, I am convinced, well worthy of your consideration; and if I have failed to carry you with me in all my statements and arguments, I trust I may have excited sufficient interest in the subject to lead you to think it out for yourselves, when I feel tolerably certain that we shall eventually accord.

TRACHEOTOMY IN CROUPOUS DIPHTHERIA.

By GEORGE BUCHANAN,

PROFESSOR OF CLINICAL SURGERY IN GLASGOW UNIVERSITY.

At the meeting of the International Medical Congress in London in 1881, I brought before the members the importance of tracheotomy as a means of saving life in certain types and stages of diphtheria. Subsequent experience has confirmed my conclusions. Since that time I have not operated so frequently as in previous years, but my success has been more uniform. I believe I can now more readily than formerly select the cases which ought to be operated on from those where the operation is unjustifiable. It brings discredit on a useful proceeding if a surgeon undertakes it simply to give a child a *chance of life* when other treatment has failed. There are some conditions in which tracheotomy affords a very fair prospect of saving life when a child is obviously dying; there are others in which the operation is simply cruelty, without any hope of doing good. The points to be attended to in the diagnosis of suitable cases, and the precautions to be adopted during and after the operation, are so concisely stated in the paper referred to, that I have no reason to recapitulate them here; but the reader may refer to "The Transactions of the International Medical Congress," 1881, vol. iv. (Diseases of Children), p. 207. The following case illustrates every one of the particulars in the paper. It was the case of a patient of Dr. Crawford of Uddingston, who has carried out the after-treatment in three of my successful operations of tracheotomy for diphtheria.

Catherine B——, aged two years and seven months, was seen by Dr. Crawford on the evening of Sept. 23rd for a supposed attack of croup. The child, who had been out of doors the previous day, was seized at 4 A.M. with a croupy cough. The parents had considerable experience of such attacks in other members of their family, and they followed out their accustomed method of treatment, but as no improvement took place Dr. Crawford was sent for in the evening. At this time there was some stridulous breathing, and the tonsils were covered with diphtheritic patches. Dr. Crawford learned that the child had been more or less ailing for eight days, with want of appetite, restlessness, and soreness of the inside of the mouth, causing disinclination to take food, but no tendency to cough till the day mentioned. As soon as Dr. Crawford saw the case he recognised it as one of great gravity, owing to the rapidly increasing stridor and ringing cough, with occasional laryngeal spasms, and he intimated that if no relief came before morning the danger of suffocation would be imminent. In the morning the child was no better, and I was sent for and reached Uddingston at 12 o'clock noon.

I found the child feeble, restless, and feverish. The tonsils were covered partly with false membrane, and partly with unhealthy-looking matter from little ragged ulcers. The breathing was laboured and stridulous. On exposing the naked body of the child (a most important method of diagnosis), the efforts at inspiration were seen to be sufficiently powerful to drag in the more elastic parts of the chest walls—the ensiform cartilage, the intercostal spaces, and the hollows above the clavicles and between the sterno-mastoids. The chest percussion was clear, and the air was evidently entering the lungs so far as it could gain admission. There were no moist râles or any indication of implication of the smaller bronchial tubes; in fact, the signs pointed to a thirst for breath, a strong attempt at in-suction, and a diminished aperture of entrance in the trachea; but the child was much exhausted, cold, and depressed. I told the parents that Dr. Crawford and I had no doubt whatever that the child could not live twelve hours; that its weak state would make the operation somewhat hazardous; but it was just such a case as might probably be successful, and certainly the child would be for a time free from its struggles and distress. The parents urged me to endeavour to save its life.

The child was placed on a table near the window, with its head leaning over the edge of a pillow, so as to extend the neck. Dr. Crawford carefully gave chloroform. I made an incision from a little above the episternal notch about two inches in length, and repeated the cut several times in precisely the middle line, till I saw the white rings of the trachea. The isthmus of the thyroid gland came into view, as also a large bulging vein on the right side of the incision; but these were easily held aside by a blunt hook. There was no hæmorrhage. I here wish to state that I continue to practise the precaution I have stated in all my papers since my early experience: I never open the trachea till bleeding from the wound has been arrested. I know that this is not the teaching of many, but I also know from experience that the opposite teaching is wrong. In my early days of operating I was once urged by the medical attendant of a little patient in a case where there was bleeding and the blood dark and viscid, and where I was proceeding to check hæmorrhage, to plunge my knife into the trachea. I was told that the admission of air would relieve turgescence and check bleeding, and I yielded. But the blood trickled into the wound, caused coughing, failed to check hæmorrhage, and the operation was not successfully completed. I shall never a second time expose myself to this experience, which is now twenty years old. I take Trousseau's maxim: "Operate slowly, very slowly." See what you are doing, and hook up the clear white trachea with a hook before you use the knife.

This having been done, I plunged the knife into the trachea as far up as the hook, with its edge downwards, and made a cut half an inch long. I have read and heard directions to cut upwards, but I never do; I clear as much of the trachea as I wish to cut, and I cut no more. There is no danger of cutting anything you ought not, if the trachea is cleared and held up in view, to the extent of the incision to be made. I would strongly urge the observance of this rule on young operators. Tracheotomy in the living body of a child is a very different thing from the same operation on the dead body. It is to be remembered that the trachea of a child three years old is a very small tube, that it is in constant movement, and that at the operation it lies at the bottom of a comparatively deep wound; or rather that as soon as the incision goes through the superficial fascia the wound gets filled up with fat and pouting cellular tissue, often turgid veins bulging from the sides. Not unfrequently the thyroid gland invades the wound from above, though that can be held up with a blunt hook; often I have notched it, and sometimes divided the isthmus, tying whatever vessels required it. Not unfrequently the apices of the thymus gland protrude into the wound from below. All these obstacles, when they present themselves, must be held aside, and the clear rings of the trachea brought into view and held so till the opening is made. Use a thin sharp knife, and make a clean, quick plunge into the trachea. Avoid tracheotomes and other devices often advised as substitutes for the surgeon's hand. Anything else than a thin sharp knife is apt to push aside the trachea and pass beside it into the loose areolar tissue. If the space below the thyroid isthmus seems too limited, clear it away or divide it, and extend the cut up to or into the cricoid.

As soon as the trachea was opened to the extent of about half an inch or rather more, I put in a dressing forceps and opened the blades, when instantaneous relief occurred. A violent cough expelled a quantity of mucus and false membrane, and presently the child lay breathing with perfect

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calm. I held the tracheal incision wide open for some minutes, occasionally irritating the back of the trachea with a probe to cause a fresh cough, which had the effect of bringing out some more shreds of membrane. Finally I introduced a small silver tracheotomy tube, and secured it with tapes round the child's neck, after which the child woke up from the chloroform with a peaceful smile, and was placed in bed, breathing easily and quietly. As a rule, I now use the old-fashioned silver tracheotomy tube, with an inner one to remove for cleansing. If the case is going to do well, as will be indicated within the first twenty-four hours by the secretion being loose, muco-purulent, and copious, it does not matter what the tube is, and the simpler the better. If it is going to prove anxious and doubtful, as evidenced by the secretion being viscid, tenacious, inclined to dry and block up the tube, indicated by the well-known whistling sound in the tube, then any complication in the construction, as splitting or jointing to facilitate introduction, just offers so many points to which the viscous fluid adheres and soon becomes converted into a tough obstructive pellet.

The parents were instructed how to keep the tube clear. Nourishing food, milk, and soup were ordered; a plentiful supply of fresh air in the room was secured by causing the fire to be kept blazing, but not too warm, and the window to be kept open at intervals, the child being protected from a draught by a screen placed between the window and the head of the bed.

I have long ago given up the practice of keeping the child in a steam bath by a jet of steam from a kettle or other utensil, introduced under curtains arranged like a tent over the bed, and I am quite surprised to see in some places "tracheotomy cots" with tents over them for this purpose. I am perfectly certain that fresh air, properly heated by an open fire, is far more refreshing for the poor little child than the kind of atmosphere which exists within one of these tents. Even the attendants cannot remain very long within the curtains without coming out for a breath of fresh air. Theoretically, air moistened with steam is better for the lungs than dry air. Practically, I have found that warm fresh air gives better results.[1] If the secretion tends to become viscid and dry, the amount of moisture produced by steam from a kettle or boiler diffused through the surrounding air is of no avail to soften the plug. But I have found that this can be accomplished in part by placing over the mouth of the tube a bit of honeycomb sponge wrung out of hot water, and for the removal of the pellet a soft feather dipped in tepid water used as a mop to brush out the tube; this I have often known to be of great service in removing tough pellets. The whistling sound to which I have alluded causes anxiety from quite another source—viz., it is almost always caused by fresh inflammation, dryness, and viscid secretion further down the trachea; in fact, it may be looked on as evidence of spread of the disease from the trachea down into the bronchiæ. I have known a number of cases where recovery took place after this whistling sound was heard, but it always causes me the greatest anxiety.

In the case here related the recovery was uninterrupted and rapid. The tube was kept in as a precaution for eight days, and thereafter convalescence was rapid. I have now performed tracheotomy over sixty times with the result of saving the life of one out of every two and a half operated on; and the proportion of cures to operations has risen during the last half of my cases, owing, I believe, to rigid attention to the diagnostic signs alluded to in this paper.

Glasgow.

ACUTE RHEUMATISM COMPLICATED BY A BULLOUS RASH (PEMPHIGUS?).

BY F. L. BENHAM, M.D., B.S., M.R.C.P.

THE following is a curious and, I believe, rare example of a somewhat unusual form of skin disease, occurring in the course of rheumatic fever, and apparently a part of the disease.

G. G——, aged twenty-five, a man of short stature and not very robust constitution, had had an attack of rheumatic fever four or five years ago, which lasted five or six weeks, and had left some disease of the mitral valve. He had remained well ever since until the present illness. He had been ailing for the previous week or two, but had gone to his work in the City every day as usual. On returning home from work on Saturday evening, March 21st, 1885, the weather having suddenly become cold and wet, followed in the night by a fall of snow, he complained of pains in his limbs and became feverish. The pains got rapidly worse; he grew very restless, and went to bed, but could not lie there long together, preferring frequently to sit up, owing to severe pain in the back. This state continued much the same for the next three days. He was sleepless and even delirious at night.

The man was first seen by me on March 25th, and was then found in a state of active fever, with intense pain and distress. Temperature 102·5°; pain and swelling of all the joints of the limbs; copious perspiration; no rash on the skin, except some spots of acne on the face. A slight mitral systolic bruit was present. He was ordered to lie between blankets, and, after a purge of calomel and jalap, to take a mixture containing twenty grains of salicylate of soda and fifteen grains of bicarbonate of soda every four hours.—March 26th: Bowels had been moved once. Patient slept better last night than before, and was not delirious. Arthritic pains much less, and the perspiration very profuse.—27th: Temperature 101·4°. Rheumatic pain and swelling of the joints almost gone; copious sweating, especially on the face. A peculiar eruption has appeared, consisting of large, pale, soft, blunt, conical papules, the size of large peas, situated over the pectorales, backs of hands, inner sides of knees, and above the ankles. On the first appearance of the rash it bore much resemblance to urticaria, but the wheals did not vanish and reappear. Instead of this they were persistent, and gradually became broader, flatter, less raised, and bright red; it might now be called erythema papulatum, extensively distributed. To repeat the powder and mixture every six hours.—28th: The rash has spread all over the body; many of the oldest papules have become broader and flatter, the size of shillings or florins; the largest had quite subsided in the centre, the skin there being normal and surrounded by a more or less perfect raised red ring. The eruption was accompanied by a good deal of itching. Over the lower lip were patches of closely set vesicles like herpes; there were also large vesicles on the pinna of the right ear, and a very large bleb, nearly the size of a pigeon's egg, over the right elbow (patient lay chiefly on his right side); the rash was very abundant over the back, abdomen, and thighs, down to the knees and even below, but has quite disappeared from the backs of the hands. Temperature 101°. Tongue thickly coated. Rheumatic symptoms had quite left the joints, and the patient had slept better.—29th: In the same condition. No fresh papules, but more vesicles, large and irregular, on the face, especially the forehead. They had no inflamed base, and the contents were clear yellowish serum. On the trunk the red discs had come to form slightly raised narrow red rings, and often coalesced to form circinate shapes (erythema annulare and gyratum). The itching, which had been troublesome all along, was now less.—30th: Temperature normal, no articular rheumatism remaining. There were some large irregular low bullæ on the summits of the larger papules over the buttocks &c.; a few more vesicles on the face, others drying up, but none changing into pustules. For the next few days, subsidence of the rash slowly went on.—April 1st: Salicylate of soda replaced by mixture containing quinine and arsenic. The tongue became cleaner, though the bowels were always confined. Some solid food was allowed.—4th: Vesicles drying up; some burst, leaving superficial sores, which formed the patient's chief discomfort. The general eruption was reduced to a mere roseola, but a large bulla remained for several days at the umbilicus, and there was a vesicle on the side of the tongue. A slight return of the rheumatism took place in the finger-joints of the left hand.—6th: A fresh crop of large irregular blebs appeared yesterday, and to-day on right thigh and knee and left buttock. Patient feels very weak. Temperature 100°; tongue clean; bowels confined—7th: Slight return of rheumatism. Salicylate resumed.—13th: Temperature normal; tongue clean again. Some more blebs on thighs, and sores still remaining on buttocks.—20th: A few small blebs have come out from time to time, especially over the thighs; sores on feet and buttocks slowly healing. The patient was now practically well, and was able to walk as soon as the sores healed. Saline aperients were given for some time, on account of constipation; and meanwhile he recovered strength. There appeared to be no increase of the valvular disease during the attack. He remained well for some months, and then had another slight attack of rheumatism.

[1] Vide Dr. Ranke of Munich, Trans. Internat. Congress, 1881.

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Remarks.—The interest of this case lies chiefly in its rarity, no description corresponding to it being found, as far as I know, in works on medicine, either under the headings of "acute rheumatism" or "cutaneous diseases." The best account, I believe, is in Trousseau's lecture on Erythema Papulatum; but in the cases there narrated the rheumatic symptoms were slight and subsidiary to the eruption; in them, also, the eruption was less extensive and less severe, though he speaks of vesicles being sometimes developed on the top of the papules. Though in this case, unlike those of Trousseau, there was nothing like erythema nodosum present, yet it shows the intimate connexion between E. papulatum and rheumatism, and, moreover, the metastatic character of the skin affection, which alternated with the articular symptoms. The special feature to be observed, however, is that, besides the ordinary phases of development which the erythematous papules passed through, in this case it was the rule for them to pass on to distinct well-formed bullæ, having all the characters of pemphigus. Why should the case, therefore, not be regarded as one of acute pemphigus, in the existence of which Hebra disbelieved? Or if authorities on skin diseases (delighting in endless distinctions) object to this identification, perhaps the most appropriate title for it would "erythema bullosum," as a variety of erythema multiforme. Lastly, it may also be noticed as a somewhat uncommon feature of acute rheumatism that the symptoms set in suddenly with great severity, there being delirium (if the account given by the patient's friends is correct) on the very first night of the illness.

Note.—Since writing the above, I have come to think that the case might be reckoned as an instance of Bazin's "hydroa," though the symptoms do not exactly correspond; but I should regard it, all the same, as a species of erythema multiforme.

Elizabeth-street, Eaton-square, S.W.

A PRACTICAL HINT ON THE PERFORMANCE OF TRACHEOTOMY.

BY W. LEONARD BRADDON, F.R.C.S.E. (EXAM.)

UPON looking through various text-books and articles upon this operation I can find nowhere any insistance upon the following detail—one important, as I believe, at any rate to operators of not large experience, and valuable, as increasing greatly the facility, and therefore the success, of the operation. The operator is usually recommended, standing preferably on the right side of his patient, after first determining the exact relation of parts, to fix the trachea with the left hand, the fingers on one side and the thumb upon the other, at the same time stretching the skin at the site of incision. The direction is at least distinct, but the manipulation is usually in effect very different. In all of many cases which I call to mind there has been a little (the only) trouble in the operation, and in some, considerable danger, delay, or anxiety, consequent upon the way in which the attempt is made to keep the windpipe steady, as customarily taught and performed: four fingers on the left side and the thumb upon the right side of the larynx press with more or less force immediately backwards to hold the organ in place, with the effect of considerably aggravating the dyspnœa (especially if an anæsthetic is not being employed), of flattening the pipe against the vertebral column to some extent, of in all cases increasing the depth at which the part to be incised can be reached, and frequently of failing to secure fixity of the larynx, which, likely to move with the slightest change of pressure, is pushed still more out of reach by the increased pressure made to secure it. Any or all of this inconvenience is the result of pressing backwards with the fingers placed upon the skin immediately on either side of the windpipe.

The suggestion I have to make, and which, I have no doubt, many surgeons have long ago thought of or adopted, although hitherto I have never seen it noticed, is so simple as to provoke a doubt as to its value, but anyone who tries it will, I think, find it so effectual in practice as to have no more doubt than I have as to its advantage. Let the surgeon place his left hand, as widely expanded as possible, over the neck of a child in the position for tracheotomy; then resting the fingers upon one and the thumb upon the other side firmly upon the skin, as far to the side of the neck as they will reach, gradually draw in the thumb and fingers, and the skin (and loose tissue underneath) with them, towards the median line: as the sides of the windpipe are approached, a little more pressure, made in a backward direction, will place the ends of thumb and fingers in a position in which they almost meet behind the larynx, which is thus firmly held by the encircling hand in a position in which all the great bloodvessels &c. (which *have* been wounded) and the vertebral bodies (which, it is recorded, have *blunted a knife-point*) are far out of harm's way, the windpipe itself starting forward and standing out prominently under the skin, which is yet fairly stretched (and can be stretched more tightly) over the site of incision, and lying both as superficially as could be desired and as perfectly under control as possible. Lastly, and this I think is not altogether unimportant, this procedure may be adopted without producing more than the very slightest degree of discomfort in any ordinary child—the younger the more easily; and one is still able to make the skin as tight as possible; now, however, the necessary pressure is distributed all round, instead of acting directly backwards upon the tube so as to flatten or displace it. I have even been able without much trouble to make the thumb and fingers feel each other behind it by this means; while by the older method I have seen the production of undoubtedly a dangerous increase of dyspnœa. I may have overrated the danger, or underrated the utility of the usual method of fixation, but it has always seemed to me to be the only difficulty in an operation, which of course has none for experienced surgeons, but to others presents often some trouble, chiefly in consequence of the fact that the means adopted for fixing the part to be incised, being ill-devised though time-honoured, are not only not to be relied on to secure that end, but, as I have tried to show, they directly tend to increase the depth of the wound of the trachea from the surface and the distress of the patient; and in all the accidents I have read of, and some that I have witnessed, this method has shown itself marked sometimes by danger, often by inutility. As to the barbarity of the *hook*, is it not an insult to the fingers of the χειρουργός?

REMOVAL OF SUPERFLUOUS HAIRS BY ELECTROLYSIS.

BY JAMES STARTIN,

LATE SURGEON AND LECTURER AT ST. JOHN'S HOSPITAL FOR DISEASES OF THE SKIN; CONSULTING SURGEON TO THE SHEFFIELD PUBLIC SKIN HOSPITAL.

UNTIL the last two years, in England the removal of superfluous hairs from the face has been an unsatisfactory operation. Superfluous hairs that grow on the face, upper lip, and chin of women, and sometimes on the noses of men, are always a source of annoyance, and very naturally they desire to have them removed.

In the summer of 1884 my attention was turned to the removal of superfluous hairs from the face by reason of several cases coming under my notice, the patients in most instances complaining of the very unsatisfactory results obtained from the use of depilatories. In the autumn of that year, in answer to an inquiry in THE LANCET,[1] I recommended the process of destruction by electrolysis, having then had several successful cases. In consultation with my friend, Dr. W. Kilner, electrician to St. Thomas's Hospital, I devised the apparatus required; that is, I had made for me by Mr. Groves of Bolsover-street, a nice portable case containing a small twenty-cell bichromate battery, which can be regulated to three powers at will, two ordinary sponge electrodes, two yard-and-a-half wire conductors, and a needle-holder, devised much like an ordinary pen-holder. I found after considerable trial, that toughened gold, well sharpened, was the best material, and wore the best.

Now with regard to the operation. The application of the needle electrode cannot be made without more or less pain, varying much in different patients, no matter how the sponge electrode is applied. I then, after a prick or two of the needle electrode, brush over the part a 5 per cent. solution of hydrochlorate of cocaine, with good result, almost invariably deadening the pain. In one or two instances I

[1] Vol. ii. 1884, p. 715.

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have had an anæsthetic administered, but I find this is seldom necessary, as the pain is slight. The operation can now be proceeded with. The negative needle electrode is plunged into the root of the hair for about one-sixteenth of an inch, and the positive electrode sponge is applied in the immediate neighbourhood. The needle should be kept in for about the space of five seconds, then the sponge electrode should be removed and afterwards the needle electrode. To know that the operation is effectual the needle should produce slight frothing of the tissues. The hair destroyed can now be easily epilated with an ordinary pair of dressing forceps, and it should come out without the slightest adhesion. This operation applies more especially to hairs that are noticeable to the naked eye. Fine downy hairs can always be destroyed by the application of a properly made depilatory. A slight inflammation of temporary character occurs for an hour or two after the operation in the destroyed follicle; this can be controlled by the use of a soothing lotion. The operation, if carefully done with a battery in good working order, is invariably successful, especially if the hairs are few and of good size—from a quarter to half an inch long. If many hairs have to be removed, then several sittings will be required at intervals of about ten days. A hundred hairs can be removed at a sitting. The following cases may serve to illustrate the operation.

1. A young woman, aged thirty-two, consulted me on March 15th, 1884, with superfluous hair on the upper lip and chin; she had pulled them out herself, and there remained about a hundred short, dark, stumpy hairs. I removed in two sittings as many as I could see; for the removal of the remainder I prescribed a depilatory for her to use. I recently saw this patient, showing the result of the operation to be successful.

2. In August, 1884, a young lady, aged thirty, was sent to me from the north of England, who had had a superfluous growth of hair on the upper lip and chin for about five years. I removed all I could see in two sittings. I heard recently that the operation was successful.

3. I removed a patch of superfluous hair from the neck of a young lady last August, and I received a letter from her mother last week to say the operation was successful.

4. In October a young woman came to me to have a large quantity of hairs removed from the chin and upper lip. This was the worst case I have had, both from the numbers of the hairs, their depth of growth, and the extreme sensitiveness of the patient to electricity. I used the electrode with difficulty after painting the skin with a 5 per cent. solution of hydrochlorate of cocaine, and could only remove about fifty at a sitting. After seven sittings I have nearly accomplished their removal.

5. A gentleman consulted me in the summer of 1885 for a few superfluous hairs on the tip of the nose. I removed these at one sitting, the result being successful.

6. In July, 1885, I removed about fifty hairs an inch in length round the nipples of the breast of a young woman, also some from her upper lip. One operation proved successful.

Since I wrote this paper I had the honour to show my battery and electrodes in the museum, and demonstrate the process in the Surgical Section to the President and members, at the meeting of the British Medical Association in August last, in connexion with the destruction of the lupus nodule, moles, warts, and nævi, in a paper on the "Surgical Treatment of Lupus and Acne" I read at Brighton.

Sackville-street, W.

NECROPSY OF A CASE OF MYXŒDEMA.

By GILBERT BARLING, M.B., F.R.C.S.

By the courtesy of Dr. Suckling I had the opportunity of examining the body of a patient of his suffering from myxœdema. A clinical note of the case has been reported by Dr. Suckling in THE LANCET of May 15th, 1886.

The necropsy was made thirty-six hours after death. External appearances: The body of a very stout old woman; the lower lip much everted and swollen; cheeks of a bright-red colour; a well-marked arcus senilis. The legs, face, and arms pitted on pressure, but no fluid could be made out in the abdomen. Incision into the tissues did not reveal the mucoid appearance mentioned in other cases. Head: The cranial bones were very thick, especially in front, there reaching to nearly a third of an inch. The brain and its membranes presented no abnormal appearance. Weight of brain 2 lb. 10 oz. The pituitary body was reserved for microscopical examination, but no change was subsequently found in it. The cervical sympathetic showed no change to the naked eye, but it was not examined with the microscope. The thyroid body was small, especially the right lobe, and it was very tough to the feel, and so intimately blended with the cervical fascia that it was difficult to separate the two exactly. The weight of the organ was 155 grains. Microscopic examination showed a simple atrophy of the gland structure—in some places complete, in others only slightly advanced. If a fairly plump lobule were examined, it showed at its periphery the remnants of atrophying capillaries; next to this a zone in which the capillaries had not undergone marked change, but the meshwork formed by them, enclosing the alveoli, had lost its epithelial lining, as well as the colloid material found inside. In the centre of the lobule, capillaries, epithelium, and colloid material appeared in the relative proportions found in health. There was nothing to indicate that the disappearance of gland tissue was due to a formation of granulation tissue resulting in a cirrhosis. The submaxillary glands weighed one ounce. No abnormal condition was found in them either by the unaided eye or with the microscope. Thorax: The lungs were crepitant throughout, and presented a few caseous and calcified nodules scattered sparsely through them. The heart weighed fourteen ounces, and there was marked hypertrophy of the left ventricle. The valves were fairly healthy, but there was considerable atheroma of the aorta. Abdomen: On opening this cavity several ounces of glairy but clear fluid were found. Some of this collected and boiled became practically solid in the test-tube. The liver was adherent to the stomach, its capsule was much thickened, and microscopic examination showed a slight cirrhosis in places advancing from the surface. The gall-bladder was distended with about four ounces of pus, the cystic duct being plugged with a calculus which was solitary. Kidneys: The pair weighed ten ounces; the capsule was thickened and adherent, and the cortex rather narrow. Microscopic examination showed a moderate amount of interstitial nephritis. The spleen was firm and dark, and weighed three ounces.

Birmingham.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Procemium.

ST. BARTHOLOMEW'S HOSPITAL.

DISEASE OF THE KNEE-JOINT, SECONDARY TO SYNOVIAL CYST; AMPUTATION.

(Under the care of Mr. THOMAS SMITH.)

THE following case is one in which acute arthritis followed the formation of a large synovial cyst of the kind to which special attention has been drawn by Mr. Morrant Baker. Independently of the rarity of the case, the condition of the knee-joint, as found after removal, is of considerable clinical interest. Before amputation there was no swelling along the track of the cyst (which had been previously drained), the swelling of the joint was not excessive, and the temperature was normal. The extensive disease of the joint at the time of amputation was only foreshadowed by the excessive pain experienced by the patient on the slightest movement of the limb or even jarring of the bed; he was in a constant state of terror, unable to sleep, and begged for the removal of his limb. For the following notes we are indebted to Mr. H. E. Knight, dresser to the case:—

A. B——, aged forty-five, bootmaker, was admitted into Henry ward on August 2nd, suffering from a swollen left knee-joint. In June, 1885, he was in the hospital, and a synovial cyst of Baker (supposed before opening to be an abscess) was opened in the calf of his left leg; about one

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pint of clear synovial fluid was evacuated from it. This was done under antiseptic precautions, and the wound healed by first intention. He was discharged at the end of a month with his leg in a Martin's bandage, at which time there was no sign whatever of any disease of the knee-joint, neither had the cyst refilled. In December he came back again as an out-patient, and had a back splint applied, as he complained of pain in the knee, and this relieved him. In May, 1886, the patient took off the splint for two months, and then the knee began to get bad. The splint was again applied, with great pain to himself, and he came into the hospital. Family history good.

On admission, the left knee was much swollen and very tender; there was no heat or redness of the joint. The following measurements were taken: Round left knee, 13 in.; round right knee, 12 in.; above left knee, 11 in.; above right knee, 12 in. He says he has sharp shooting pains in the joint at night, which last for about three minutes and then subside, leaving a gnawing pain in their place. There is a large fluctuating swelling in the popliteal space; no lateral movement.

August 31st.—Various splints and extension have been tried, with only temporary relief. To-day liquor epispasticus is to be employed to raise a blister, and then savine ointment is to be applied to the knee.

Sept. 16th.—MacIntyre's back splint applied.

24th.—Pain is getting worse, and the application of cocaine only stops the jumping very slightly. Indiarubber springs have been put under the bedposts to deaden the vibrations of the footsteps in the ward.

Oct. 7th.—After consultation with Mr. Willett, Mr. Baker, and the assistant surgeons, it was decided to examine the joint under an anæsthetic prior to amputation. This was done, but led to no new discovery. The man has most excruciating pain in the joint and cannot bear it being touched, however lightly.

13th.—An anæsthetic having been administered, Mr. Smith amputated the limb just above the knee-joint by anterior and posterior flaps. An incision was first made into the joint and a large quantity of bloody fluid escaped, but no pus. On examination after removal the following conditions were discovered:—The under surface of the patella is carious, and the cartilage on it is ulcerating and mostly gone. The condyles of the femur and head of the tibia are in a similar condition. The large cyst at the back of the joint, which contained a large quantity of bloody fluid, communicated with the bursa between the inner head of the gastrocnemius and semi-membranosus muscles, and so with the joint. The shrivelled-up sac of the old cyst was found running along the inner border of the gastrocnemius for about an inch and a half. It communicated by a very narrow passage with that at the back of the knee. The ligaments were all loosened, though not destroyed. Cartilages almost entirely destroyed; synovial membranes pulpy. No pus found in the joint.

Nov. 3rd.—There has been no hæmorrhage, and the man is progressing fairly towards convalescence.

15th.—The temperature was quite normal up to the time of the operation; after the operation it was elevated for about four days. The wound is healing and the patient doing well, gaining flesh and strength. The operation has given very great relief.

GENERAL INFIRMARY, LEEDS.

TWO CASES OF RUPTURE OF THE BLADDER; REMARKS.

(Under the care of Mr. W. H. BROWN and Mr. M'GILL.)

FOR the notes of these cases we are indebted to Mr. H. Littlewood, resident surgical officer.

CASE I.—James L——, aged twenty-six, by occupation a professional cricketer, was admitted on Oct. 18th, under the care of Mr. W. H. Brown, with the following history. For the past few weeks he had suffered from constipation, and had taken a good deal of aperient medicine. During the last week he has complained of having to pass his urine frequently and in small quantities, the urine dribbling away at times. He had a slight gonorrhœal discharge. On Oct. 15th he took a large dose of castor oil, and whilst making violent efforts at defecation he felt something give way on the right side of the body lower down—i.e., the right inguinal region,—and immediately felt a burning sensation all over the abdomen, which was succeeded by severe pain. Vomiting shortly afterwards commenced, and he had not passed flatus or fæces since the pain began. On Oct. 17th he was seen at 11 P.M. by Dr. Hogg, Mr. Hayman, and Mr. Brown. His condition was as follows. He was vomiting fæcal matter, was much collapsed, pupils widely dilated, pulse small and thready, surface cold and damp, abdomen greatly distended and tympanitic, and respiration rapid. The rectum on examination was found empty. Prostate large and tender; beyond the prostate a hard elastic swelling could be felt pressing upon the rectum. A No. 10 silver catheter was passed, four ounces of urine drawn off, and immediately afterwards about one ounce of coffee-coloured liquid containing some portions of what appeared to be breaking-down blood clot. A long tube was passed about eight inches up the bowel and ten ounces of warm water injected, with a negative result. The man's surroundings were so bad, and he himself so ill, that it was thought advisable to postpone any abdominal exploration pending his removal to the infirmary. Mr. Brown then punctured the abdomen with a No. 1 trocar with a view of relieving the difficulty of breathing. A puncture was made midway between the umbilicus and pubes, with the result that fluid, apparently urine, escaped and continued to drain for upwards of an hour, in all about two pints and a half. The catheter was again introduced, but only a teaspoonful of urine came through. Before admission to hospital, and after the trocar had been withdrawn, the patient passed urine voluntarily. He thinks he must have passed nearly a pint. Bowels not open, but he has passed flatus. No history of blow or other injury to abdomen can be obtained.

State on admission.—The patient is a strong, well-nourished man, of fairly regular habits; complains of some pain in the lower part of the abdomen; says he feels more comfortable than he did last night; appears collapsed; surface of body clammy. Temperature 98·4°; pulse 100. Abdomen somewhat distended, resonant all over.

Soon after admission he was seen by Mr. Brown and Mr. M'Gill. A catheter was passed and about eight ounces of urine drawn off, which was slightly tinged with blood. A feeling of fluctuation was obtained in the hypogastric region; a trocar was put in, but no fluid escaped. On examining the rectum, the prostate was found enlarged and tender. A sixth of a grain of morphia was ordered, and the abdomen poulticed. Patient vomited at 12 and again at 3 P.M.; vomit offensive and green. Complains of hiccough. At 6 P.M. the condition was more favourable. At 12 P.M. a sixth of a grain of morphia was given hypodermically; after this he slept off and on until 4 A.M. Vomited twice between this and 10 A.M., the vomit being of the same character as before.

Oct. 19th.—10 A.M.: After consultation it was decided to open the bladder by the median perineal incision. This was done by Mr. Brown, the patient being under ether. On exploring the bladder with the finger a slight roughening was felt, but no rupture made out. A large tube was then put into the bladder. The patient did not recover from the operation and died suddenly at 1 P.M.; troubled a good deal with hiccough before death. The temperature was never above normal.

The necropsy was made by Dr. T. Wardrop Griffith. Body singularly well nourished; abdomen rather fully distended. On opening the abdomen, a quantity of fluid, dirty orange-coloured and somewhat opaque, but not purulent, escaped. The folds of the small intestine protruded from the wound, and the further dissection showed that they were all greatly distended, and adherent to one another and to the under surface of the great omentum. The adhesions were quite recent, and the intestines could everywhere be separated from one another with perfect ease. Towards the pelvis the amount of fibrinous lymph was greater there, also the intestines were more matted, and their arrangement was such that fluid was incarcerated in small amount between the adjacent folds. Especially was this the case about the seat of the abdominal puncture, the mark of which was seen midway between the umbilicus and pubes. In order to explore the pelvis the intestines had to be separated from the back of the bladder and from the sides of the pelvis. Here there was a large amount of lymph in soft masses, but no evidence in old adhesions of any antecedent inflammation. The posterior part of the bladder was coated with an extremely irregular covering of soft lymph, and about an inch below the reflection of the peritoneum from the upper part of the bladder, slightly to the right of the middle line, was an aperture that would admit one's forefinger with difficulty. The axis of this opening was vertical, and its margins were rough from the presence of a small amount of

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inflammatory lymph. The intestines were then examined, and found distended as far down as the splenic flexure. The sigmoid flexure contained more air than the descending colon, which differed from the rest of the intestine in not being injected. No mechanical block was made out. The pelvic organs were removed for further examination, and it was found that the interior of the urethra presented a perfectly normal appearance, there being no evidence of any catarrhal changes. The seminal orifices were slightly dilated. There was some matting of the tissues around the vesiculæ seminales and lower ends of vasa deferentia, so that much difficulty was experienced in dissecting the parts out. The matting was greater on the left than on the right side, and here the tissues formed a mass readily to be felt from the rectum. The tubercles of the vesiculæ were dilated, and contained some glairy fluid, which on microscopical examination was found to be pus, and did not contain spermatozoa. There was no pus in the matted tissues around the vesiculæ. The interior of the bladder was generally injected. At one point, one and a half inches below the rupture, was a roughened area, where the injection was most marked. Examination of the bladder at the point of rupture did not point to any ulceration or pre-existing disease. Other organs of body normal.

Remarks by Mr. BROWN.—That it is possible to have rupture of the bladder without injury, without stricture of the urethra, and without disease of the organ itself, is difficult to understand. The only case that I can find at all bearing upon the present one is recorded in THE LANCET of September 28th, 1873, by Dr. M'Ewen, and there the rupture was not suspected during life, as no opportunity occurred of observing the patient's symptoms, the man being moribund when taken to the hospital. Dr. M'Ewen refers to seven cases of "spontaneous rupture of the bladder" mentioned by M. Houël, and draws attention to the fact that in all these cases there existed "some mechanical impediments" to the outflow of urine, so that they can scarcely be said to come under the same classification as either Dr. M'Ewen's own case or the present one. The fact that the patient had the power of voluntary micturition up to the time of the perineal opening being made complicated the diagnosis, and indeed, so far as I can gather, this feature in the case is without parallel. Again, absence of any sign of disease within the bladder renders it a matter of difficulty to formulate a theory as to the cause of rupture which can be satisfactory. That the patient had had a gonorrhœa recently points to the possibility of the disease having been the starting-point of an inflammation which spread backwards, involving the structures round the neck of the bladder, thus causing retention of urine; and that the bladder giving way removed the pressure from the inflamed parts, and allowed of the passage of urine by the urethra once more, appears to me to be the most likely explanation of the course of events in this most unusual case.

CASE 2.—Martin B——, aged fifty-four, by occupation a publican, was admitted into the infirmary on Oct. 20th, under the care of Mr. M'Gill, in the evening, complaining of severe pain in the lower part of the abdomen and inability to pass urine. On Monday night, Oct. 18th, the patient was hurrying to catch a train and came violently into contact with an iron gate. The patient was knocked down and was carried insensible to a neighbouring house. Half an hour after the accident he regained consciousness and felt a "severe burning pain in the abdomen and bowels." The patient had been drinking a good deal in the afternoon. He remained in the house until the following morning, sleeping fairly well in spite of the pain, then returned home to Morley, taking a cab to the station and from the station at Morley home, and went to bed at once (midday). Dr. Clarke was sent for. Up to this date from the time of accident the patient had not passed urine. A hot bath was ordered; result *nil*. A catheter was then passed, and about a quarter of a pint of bloody urine drawn off. On Tuesday night and Wednesday morning the patient was again catheterised, when about the same amount of urine was drawn off, though there was rather less blood present. Bowels not moved since the accident, nor flatus passed.

State on admission.—The patient is a healthy-looking, well-nourished man, a little collapsed; has not passed urine since it was drawn off this morning; complains of pain in lower part of abdomen. Abdomen somewhat distended; resonant all over. No signs of fluid could be detected. Bowels not open, nor flatus passed. Temperature 100·4°; pulse 100. At 11.30 P.M. a soft catheter was passed and five ounces of blood-stained urine drawn off.

Oct. 21st.—The patient has suffered considerable pain the greater part of the night, and has slept a little at times. Temperature 98·4°. Mr. M'Gill passed a soft catheter and drew off thirty-three ounces of urine mixed with blood. At a consultation ruptured bladder was diagnosed, and abdominal section advised. At 3.30 P.M., the patient being under the influence of ether, Mr. M'Gill made an incision in the middle line, about four inches long, extending down to the symphisis pubis. All bleeding having been stopped, the peritoneum was opened; some urine escaped. The hand was then introduced, and a rupture in the bladder was found about four inches long, extending from about half an inch in front of the peritoneal reflection from the apex of the bladder down to the fundus, where the peritoneum is reflected on to the rectum. The abdominal incision was now enlarged for about two inches upwards. An air tampon was introduced into the rectum and distended, which brought the rent in the bladder into easy position for suturing. Nine chromic gut sutures were now introduced, care being taken not to include the mucous membrane of the bladder. The bladder was then filled with a weak solution of boracic acid, to ascertain if the wound leaked, and it was found to do so in two places. Two other catgut sutures were then introduced, and the bladder again injected. No leakage occurred. The tampon was then removed from the rectum. The peritoneal cavity contained about a pint of urine. (No peritonitis.) This was now thoroughly washed out with about two gallons of a 5 per cent. warm solution of boracic acid. The lower part of the incision into the peritoneum—i.e., the reflection from the apex of the bladder—was sutured by two catgut sutures. An incision about three quarters of an inch long was now made into the bladder (for the purposes of drainage) in front of the peritoneal reflection from the apex of the bladder, and a large drainage-tube was introduced and brought out at the lower part of the wound. The abdominal wound was now closed with wire sutures, transfixing the whole thickness of the abdominal wall, and bringing the two peritoneal surfaces in contact. The wound was dressed with iodoform and salicylic silk, except at the lower part, where a drainage-tube protruded. The tube was surrounded by a piece of jaconet (so as to prevent urine soaking the dressing), and a large pad of cotton-wool over this. The operation lasted one hour and four minutes. The spray and other antiseptic precautions were used. At 10 P.M. the patient seemed fairly comfortable; temperature 98°; pulse 130, small. A nutrient enema was given, consisting of two ounces of beef-tea, one ounce of brandy, and an egg.

22nd.—12.30 A.M.: Temperature 99·2°. Patient, feeling sick, asked for some milk and soda-water. After having it he vomited, and continued to do so at intervals till 1.30. Slept until 2 o'clock. Began to vomit again at 3.30. The vomit, which had been before of a dark-brown colour, was now almost black. Complains of burning pain at the bottom of the abdomen. 4 A.M.: Another enema given. 6 A.M.: Patient much weaker; pulse feeble, rapidity increased. Another enema given, but not retained. From this time the patient got gradually weaker, the pulse becoming almost imperceptible, and he died at 9 A.M. Some urine was secreted and soaked into the cotton-wool over the drainage-tube. This was changed two or three times.

A necropsy was made by Dr. Churton twenty-seven hours after death. The rent in the bladder, stitched up as described above, was seen; it was very nearly in the middle line. No fluid in the peritoneum; no signs of peritonitis. Lungs congested and œdematous. Nothing very abnormal was noted in the other organs.

Remarks by Mr. LITTLEWOOD.—The chief points to note in the case are in the treatment: 1. The introduction of the air tampon into the rectum; this greatly facilitated the suturing of the wound in the bladder. 2. The attempt to drain the bladder above the pubes by inserting a tube into an incision made in the vesical wall in front of the superior false ligament. Up to the time of death the urine was prevented from soaking into the dressing covering the upper part of the wound by means of the jaconet surrounding the tube, and by changing the cotton-wool, into which the urine soaked every hour. Mr. M'Gill's reasons for draining above the pubes were—(*a*) The experience of a case of ruptured urethra in which incisions had been made, both in the perineum and above the pubes; it was found that nearly all the urine came out through the supra-pubic wound. (*b*) To avoid making a second incision in the perineum.

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Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

Vegetable Tumours in relation to Bud Formation.—Cerebro-spinal Meningitis leading to Œsophageal Abscess.—Congenital Contraction of Stomach.—Aneurysm of Undefended Space.—Cystic Tumour of Cæcum.—Carcinoma of Vesicula Seminalis.—Imperforate Anus.

AN ordinary meeting of this Society was held on Tuesday last, Dr. J. Syer Bristowe, F.R.S., President, in the chair.

Mr. ROGER WILLIAMS read a paper on Vegetable Tumours in relation to Bud Formation. He treated the subject from the evolutional standpoint. In its simplest form bud formation is nothing but cell multiplication by fission or gemmation. In the Thallophyta buds are represented by simple proliferous outgrowth of the fronds. The simplest buds consist either of single lowly-organised protoplasmic cells, or of groups of such cells derived from simple cells. In the higher plants under ordinary circumstances a bud develops into a branch, but disturbances in nutrition may give rise to other formations—spines, tendrils, &c. Adventitious buds have been found on almost every part of plants; they may arise wherever undifferentiated cells are present. These anomalies in the higher plants may be ascribed to reversion to an original mode of growth. Darwin had described "sports" as bud variation. Vegetable tumours were described as essentially abnormal bud evolution from altered nutrition. These tumours of trees were divided into three classes:—1. Discontinuous or circumscribed, including the nodules on the bark of the beech, elm, oak, &c. They first appeared as globular bodies in the cellular tissue of the bark. 2. The continuous tumours or exostoses. 3. A group including those excrescences which present a surface thickly studded with shoots and stunted branches. Excess of nutriment was the chief etiological factor.—Mr. SHATTOCK thought that the subject was thoroughly threshed out. The chief interest was that the origin of the growths bore out Cohnheim's view of the origin of tumours in remnants of undifferentiated embryonic tissue.—Mr. STEPHEN PAGET referred to a paper by Mr. Jacobson in the Guy's Hospital Reports, in which tumours of the parotid region were shown clearly to favour Cohnheim's theory.

Dr. HALE WHITE showed a specimen of Œsophageal Abscess in a case of cerebro-spinal meningitis, from a girl who was in Guy's Hospital for a month with retracted head, arching of the spine, cephalic and spinal pain, and other symptoms of cerebro-spinal meningitis. About eighteen hours before death pus began to pour from the mouth, but no cause for this could be discovered. The pus trickled down into the lungs and the patient died. At the post-mortem examination it was found that the spinal and cranial bones, dura mater, and cerebral vessels were normal without any trace of tubercle; at the base of the brain and the posterior surface of the spinal cord there was abundant purulent meningitis. Opposite the cricoid cartilage, on its posterior surface, there was an oval ulcer, with its long vertical diameter measuring an inch and a quarter. At its bottom the cricoid cartilage was exposed, but not necrosed; opposite this ulcer was another, on the posterior wall of the pharynx. There was some bronchitis, and the mitral valve was thick. The rest of the body was healthy. The ulcers above described were probably due to an abscess, which had existed at the upper part of the œsophagus at its junction with the pharynx; this bursting had caused the discharge of pus noticed during life. It appeared that the cause of the abscess was the extreme retraction of the head, throwing the larynx backwards and the spine forwards, so that the friction of the cricoid against the spine during respiration set up the abscess. He thought that the case was of interest, as also possibly an example of a rheumatic meningitis, for the patient had had rheumatic fever twice, and there was no cause obvious on the post-mortem examination for the inflammation of the meninges. In reply to Dr. Bristowe, the author said that there was but a slight amount of pus.—Dr. BRISTOWE referred to a case of suppurative meningitis throughout the brain and cord, in which the pus escaped through all the inter-vertebral foramina; it would be conceivable that a retro-œsophageal abscess might be formed by an accumulation or extension of pus from inter-vertebral notches.—Dr. WHITE said the case was carefully examined, and nothing of that kind was found.

Mr. LEOPOLD HUDSON read a case of Hour-glass Constriction of the Stomach, taken from a single woman fifty-nine years of age, admitted into the Temperance Hospital under Mr. Pearce Gould with scirrhus of the breast. The stomach presented in its centre a constriction large enough to admit the thumb. On the smaller curvature proximal to the stricture was a small cicatrix, and distal to it was a callous ulcer. The cardiac sac was dilated. Twenty cases of hour-glass constriction were referred to; in nine of which the mucous membrane showed no sign of present or previous ulceration. The author regards the condition as congenital, and due to arrest of development at a site where temporary physiological constriction is common, the ulceration being secondary and caused by the irritation of the gastric contents when churned about by disordered peristalsis.—Dr. NORMAN MOORE thought it was possible that the specimen was a sort of reversion to that condition of stomach seen in several mammals. The œsophagus appeared to be perfectly normal, which rather went against this view.—Mr. W. R. WILLIAMS could not accept the view that the specimen had any resemblance to the ruminant stomach, nor did he accept Mr. Hudson's suggestion of the origin of the constriction.—Mr. F. S. EVE did not agree that the constriction was to be explained on the theory of evolution. He had dissected a fœtus in which constrictions existed in many parts of the intestines.—Mr. HUDSON, in reply, said that he did not believe that an intra-uterine band of lymph had caused the constriction, but he imagined that there was an arrest of development at the site of constriction, for the calibre at the obstruction was about the size of that of the primitive stomach.

Mr. D'ARCY POWER showed two specimens of Imperforate Anus. In one case the rectum opened into the prostatic part of the male urethra by a small aperture. The specimen came from the body of a child aged twenty-three days; lumbar colotomy had been performed three weeks before death. In the other it opened into the vagina of a newly-born child.—Mr. B. SUTTON asked if there were any evidence of the existence of a post-anal gut.—Mr. S. PAGET referred to cases by M. Bouchut and Mr. Horsley. In the case of the latter observer, there was a minute canal leading from the situation of the anus upwards in the direction of the intestinal sac.—In reply, Mr. POWER said there were no diverticula and no evidence of a post-anal gut.

Dr. HARRINGTON SAINSBURY showed a Cystic Tumour of the Cæcum from a subject dead of typhoid fever. It contained a thick viscid mucoid fluid. Externally it was covered with mucous membrane. Internally it was lined by a serous layer. It occupied and distended the first portion of the ascending colon, and appeared to spring from the anterior wall of the colon just at the level of the upper lip of the ileo-colic valve. The mucous lining of the cyst corresponded in microscopical structure to the mucous coat of the large intestine. Mr. Sutton's suggestion was adopted that the tumour was due to cystic dilatation of one of the lips of the ileo-colic valve. It was not an entero-cystoma.

Mr. E. HURRY FENWICK showed a case of Carcinoma of the left Vesicula Seminalis, which originated probably in the posterior part of the left lobe of the prostate and had involved the bladder and vesicula secondarily. The clinical history lasted nine months; there was great frequency, with finally incontinence, of the urine, and frequent and profuse attacks of vesical hæmorrhage. There was no evidence of the growth in the urine. There were no secondary deposits.

Dr. NORMAN MOORE showed an Aneurysm of the Undefended Space. The aneurysm projected as a three-lobed tumour into the right auricle just above the attachment of the tricuspid valve. The external opening was into the sinus of Valsalva, and not into the heart. It was taken from a man who died at the age of twenty-one years after six attacks of rheumatic fever. There was well-marked stenosis of the mitral valve, some stenosis of the tricuspid valve, and the aortic valves were partly destroyed and fringed with numerous growths. The aneurysm was clearly an acute one, since signs of endocarditis were present. The aneurysm was partly filled with fibrin, and had a roughened sac.—Dr. S. COUPLAND thought the aneurysm was rather of aortic than cardiac description.—Dr. ANGEL MONEY referred to a specimen of aneurysm of this space in the Museum of the Hospital for Sick Children: the walls of the aneurysm were formed of the opened-up layers of the septal cusp of the tricuspid valve.

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The following card specimens were shown:—Dr. Henry Maudsley: Embolism of Basilar Artery, with rupture of left posterior cerebral artery and copious extravasation of blood under the base of the brain, and extended on to the vertex. Mr. S. G. Shattock: Chondrifying Sarcoma of Male Bladder, papillomatous on the surface.—Mr. T. D. Savill showed a specimen of Unilateral Meningeal (Arachnoid) Hæmorrhage removed from a woman aged sixty-nine, in whom the symptoms during life were those of delirium and coma.

CLINICAL SOCIETY OF LONDON.

Extirpation of the Larynx for Epithelioma.

AN ordinary meeting of this Society was held on the 12th inst., Mr. Thomas Bryant, F.R.C.S., President, in the chair. Three important contributions to the surgery of the larynx occupied the whole of the evening. The attendance of members was very numerous, every available seat being occupied.

Mr. HENRY MORRIS read a case of Excision of the Whole Larynx for Epithelioma. The disease was confined within the larnyx. For over three years the man, aged fifty-nine, had suffered from increasing laryngeal obstruction, and tracheotomy had become necessary five months before the laryngectomy. From the downward extension of the disease, the tracheotomy tube became depressed, and was itself a source of never-ceasing irritation, though necessary for respiration. Under these extreme conditions the larynx was excised with the cricoid cartilage. Death followed the operation on the eighth day from exhaustion. At the post-mortem examination, the whole of the disease was found to have been removed, and there were no secondary deposits in any part. Mr. Morris thought that the total extirpation of the larynx ought to be done very seldom; and not until all less severe measures had been tried and failed. There were, however, two conditions which indicated and justified the operation: first, where the disease was entirely intra-laryngeal, and could therefore be completely removed; or, secondly, where, after tracheotomy, the sufferings of the patient were persistent, and suffocative cough and dyspnœa proved unrelievable by other means. Both these conditions existed in the above case, and though death was the final result the relief of urgent symptoms which was afforded by the operation was great and substantial.

Dr. FELIX SEMON read a paper on a case of Partial Extirpation of the Larynx for Epithelioma of the Left Ventricle of Morgagni. The patient was a barrister, aged fifty-two, whose only complaint was loss of voice, which had gradually developed within the course of a year from an originally slight hoarseness. On laryngoscopic examination nearly the whole of the left vocal cord appeared to be embedded in an irregularly longitudinal greyish-white warty tumour, of about the size and form of a small bean. Microscopic examination of a small fragment of the tumour, removed by intra-laryngeal operation, showed it to be a cornifying epithelioma. Extirpation of the left half of the larynx, with the exception of the cricoid cartilage, was successfully performed by Dr. Eugen Hahn. The tumour was found to spring with a broad pedicle from the left ventricle of Morgagni. The patient made a good recovery, which was only retarded by an extensive bronchial catarrh and slight pleuritic symptoms. These were probably due to the escape of some blood into the lower air-passages during the operation. At present—i.e., five months after the operation—the patient is quite well, swallows with ease, does not wear a tracheal cannula, is free from any trace of recurrence, and his voice has so surprisingly recovered, though he possesses but one vocal cord, that he wishes to resume his practice at the bar. Dr. Semon dwelt especially on the necessity of a thorough occlusion of the lower air-passages before the latter stages of the operation were proceeded with, and corrected a misapprehension of some observations he had made in the discussion on extirpation of the larynx during the seventh international Congress. He was, he said, by no means an opponent *a principio* to extirpation of the larynx in really suitable cases of laryngeal carcinoma, but he opposed the formulation of the indication that "extirpation of the larynx was required as soon as the diagnosis was clearly made," because in a large proportion of cases the diagnosis could only be established with certainty at a time when, in his opinion, the operation no longer offered any reasonable chances of success. This question was discussed at some length, and Dr. Semon finished by saying that he entirely agreed with Mr. Butlin's dictum, that in the immediate future extirpation of the larynx for carcinoma should be practised only for intrinsic carcinoma, which was still limited to the interior of the larynx. Hence *early* diagnosis, if possible, by means of intra-laryngeal removal and microscopic examination of a small fragment of the new growth was of the highest importance.

Mr. BUTLIN read a paper on a case of Epithelioma of the Vocal Cord, for which partial excision of the larynx was performed. The patient was a gentleman aged fifty, who suffered from hoarseness of two years' duration. He had a warty growth on the left vocal cord, which appeared to be non-malignant, although it presented some suspicious characters. At different times, during a period of six months, portions of the growth were removed with forceps. Recurrence took place, and the cord exhibited impaired mobility. After a consultation with Dr. F. Semon, it was decided to excise a portion of the larynx. The operation was performed by Mr. Butlin on June 26th. The left half of the larynx was removed, together with the true and false cords of the right side, for the disease had extended on the true cord and along its under aspect, so that it could not be perceived with the laryngoscope. Hahn's tracheotomy tube was used during the operation, and was left in for two days. At the end of two days it was replaced by a smaller tube. During the first few days after the operation the patient was fed through a tube by means of a syringe. The temperature never rose over 100°, and the pulse was, almost from the first, from 80 to 84. On the fifth day the patient began to swallow. On the seventh day the tracheotomy tube was permanently removed. Three weeks after the operation he drove to Wimbledon, and after spending a week there he returned to his home in the country. The chief, and indeed only, trouble from which he suffered was cough, which commenced as soon as the large tube was replaced by a smaller tube, but which gradually became less distressing, and finally ceased within a few days after the permanent removal of the tube. He was last seen by Mr. Butlin on September 28th, when the wound was healed, with the exception of a little sinus at the lower part. There was no sign of recurrent disease or of affection of the glands of the neck. His general health was excellent, and he was able to speak in a gruff whisper, very loud and distinct. The points to which the author drew attention were: the rarity of the operation in England; also, the reasons which had led him to perform the operation—namely, the intrinsic origin and limited extent of the growth, the absence of lymphatic affection, the good health of the patient, and the belief that the excision might be limited to half the larynx. Particular attention was directed to the fact that the soft parts were raised off the cartilage on the right side without removing the framework of the larynx. The cough which troubled the patient was attributed to the fact that the second tube was too small, and it was suggested that a larger tube would prevent the occurrence of such a cough in other cases. The manner of feeding the patient during the first few days was alluded to. And, lastly, the power of producing a hoarse whisper after removal of the true and false cords from both sides was mentioned.

The PRESIDENT remarked on the importance and interest of the papers, which dealt with a subject which would doubtless have startled the founders of the Clinical Society.—Mr. LENNOX BROWNE asked Mr. Morris at what part of the trachea tracheotomy was done. In his opinion the tracheotomy ought to be performed low down at the date of the operation for extirpation of the larynx, a few minutes merely intervening between the two operations. The value of careful and repeated microscopical examination of the growth was commented upon. It was possible that the nature of the cases changed after repeated intra-laryngeal irritation by operations for the removal of small portions. Mr. Butlin's case seemed to point in this direction. Sufficient time had not yet elapsed to say for certain that the cures were permanent in Dr. Semon's and Mr. Butlin's cases.—Mr. E. H. FENWICK had seen two cases of total extirpation of the larynx in the practice of Thiersch of Vienna. In one the man was able to make musical sounds by the aid of an artificial larynx.—Mr. T. PICKERING PICK had once performed the operation of total extirpation of the larynx. But he hoped never to be called upon to perform the operation again. It left an enormous chasm, and was a

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horrible sight. It was most important to select cases for operation. His own experience did not lend support to the value of conservative practice in the treatment of epithelioma of the larynx, as recommended by Mr. Butlin. In June, 1885, after a preliminary tracheotomy, he (Mr. Pick) scraped away the soft parts, including the whole of the epithelioma, from the larynx, but within three months the neoplasm returned and the case terminated fatally. The method of feeding was of paramount importance; he advocated the use of a soft gum catheter passed through the nostril into the gullet and left there for many days, as was done with great success in a case of cut throat in St. George's Hospital.—Mr. H. MORRIS, in reply to Mr. L. Browne, said that the first and second rings of the trachea had been divided; the high tracheotomy had advantages. As to the feeding of the patient, he had tried several soft tubes, but specially those known as Durham's tubes; but the patient had the greatest aversion to the use of any. Before the operation he had thought to put his trust in rectal alimentation. In this particular case he had not performed the operation for the cure of the disease, but it was because the patient urgently demanded relief from dyspnœa and its attendant distress. However, such a case might have ended differently had the patient been less exhausted. It was only by publishing failures as well as successes that any just estimate of the operation as a means of cure could be formed. The necropsy showed that there was no glandular enlargement and no secondary deposits, and that the whole of the disease had been clearly removed.—Dr. F. SEMON said that in his experience it was the usual thing for the patient to decline operation, for he always laid before them full particulars as to the risks to be run. He need hardly say that his publishing the case was not with a view to manufacture favourable statistics, but rather to show that the surgeon should carefully select cases for operation.—Mr. BUTLIN repudiated Mr. L. Browne's suggestion, and said that from the first he was of opinion that the tumour was not benign. His advocacy of conservative surgery for the larynx did not mean that a scraping operation should be done; but the scissors and knife should be used as in epithelioma of the lip, and the growth widely excised. Mr. Butlin's own opinion was strongly against the performance of total extirpation, and he considered there was no defence to this kind of surgery. There was but one case, of Hahn's, that lived four years after the operation, and only six or seven in which the patients were alive more than a year after it. Only thirty out of sixty-five cases of complete extirpation recovered from the operation, for thirty-five died of the operation itself. If a patient consulted a surgeon for epithelioma of the larynx, and there was nothing for it but excision of this organ, he would be bound to inform the patient, in answer to questions, (1) that it was a dangerous operation, the mortality of which was 40 to 45 per cent.; (2) that he would in all probability not be cured of the disease, for recurrence would probably take place in a comparatively short time; and (3) that he would not even experience much relief from distressing symptoms, for the difficulty in swallowing and breathing would be fully as great after as it was before the operation.

The following living specimens were shown:—Mr. R. W. Parker: (1) Congenital Double Talipes Calcaneo-valgus and Genu Recurvatum; (2) Girl, aged thirteen, from whom the Patella was removed for Primary Sarcoma of that bone; (3) A girl showing the result of an Arthrectomy for Tubercular Disease of Synovial Membrane. Mr. Pearce Gould: Congenital Fusion of Fourth and Fifth Metacarpal Bones, and Deficiency of Right Fibula. Sir Henry Thompson: A man from whom a Vesical Tumour had been removed. Mr. G. H. Makins: A case of Traumatic Cephal-hydrocele. Dr. Percy Kidd: Tubercular Tumour of Larynx. Dr. Samuel West: Epithelioma of Larynx.

MEDICAL SOCIETY OF LONDON.

A Rare Case of Epilepsy.—Epileptic Guinea-pigs.

AN ordinary meeting of this Society was held on Monday last, Mr. R. Brudenell Carter, President, in the chair.

Dr. HUGHLINGS JACKSON related the case of a boy, seven years of age, in whom Epileptic Fits were artificially induced by any unexpected touch on the head. When three days old the boy had a convulsion. At the age of two years and a half he had an "ordinary" epileptic fit. Of these latter fits he had had four attacks of the same kind, or rather *degree*. Ever since the first so-called ordinary epileptic fit some imperfect use of the left arm and leg was noticed, and has ever since remained. About the age of two years and a half the boy began to fall down, but these falls were really fits. He never "fell" unless the head or face were touched, but the fit would not occur if he knew he was going to be touched. Stoppage of respiration was very evident in the fit. The eyes were turned to one side, generally the right. Sometimes as many as fifty falls occurred in one day, and never a day passed without some. Touching any part of the head or face was effective. Several appeared also during sleep when he accidentally touched his face or head. These sudden inopportune falls had caused enlargement of the left frontal eminence, and also that of the right side. The left arm was slightly less in circumference, and its movements were clumsy; there was something like athetosis in the left hand when the right hand was engaged in drawing or writing. He limped with the left leg, which was also less in circumference than the right. There was no alteration in the knee-jerks, and no ankle clonus. Perhaps the left side of the head was more sensitive, but no one place could be made out to be more sensitive than another. At times the boy said his left arm felt "heavy." The fits were not opisthotonic, as happened in feigned fits. Dr. Jackson described three forms of epilepsy—(1) epilepsy proper; (2) epileptiform seizures; (3) due to nervous discharges in the pons Varolii or medulla oblongata. In the case above there was a local lesion somewhere, as the hemiplegia showed. The epileptogenous zone was less defined than occurred in Brown-Séquard's guinea-pigs. Nervous discharge in some part of the pons was the probable cause of the falls or fits.

Mr. VICTOR HORSLEY showed photographs, projected on the screen with lime-light, of Guinea-pigs suffering from artificially induced Epilepsy. The fit was essentially momentary in character, lasting but a few seconds, and so the photographs had to be of the instantaneous order. Hemisection of the spinal cord and exposing the sciatic nerve, nipping it, and closing the wound, were the artificial methods of induction employed. If the skin of the angle of the jaw or that behind the angle of the eye were touched, there was a momentary interval in which the animal seemed dazed or squeaked. This period was followed by a period of tonic spasm, beginning in the head and neck, which were turned towards the side on which the cord was divided. Complete pleurosthotonos followed. Then consciousness was lost, the animal fell on its back, and the limbs were agitated by rapid clonic spasm. If the sympathetic nerve on one side of the neck was divided no change was noticed in the fits, and if the vessels of the exposed cerebral cortex were watched no change was observed in them; so the fits were probably not due to the sympathetic nervous system. Again, vaso-motor conditions take an appreciable time to develop. So Mr. Horsley considered that the fits were due to a neurosis, which began first in the right side of the brain, explaining the left pleurosthotonos, and then passed over to the left side of the brain. — Dr. HADDEN related a case of epilepsy which was attributed to lesion of the sciatic nerve due to an injury. The fit began with pain in the cicatrix, which passed up to the head and then consciousness was lost. The pupil did not react to light, nor was the tongue bitten except once. Stretching the sciatic by forcible flexion of the thigh was accompanied by a fit; but the nerve was stretched, peripherally and centrally, after incision over it, and the fits ceased for eleven days and were not frequent afterwards, and later still had entirely disappeared.—Dr. HUGHES BENNETT related a case of severe and frequent epilepsy that began with a visual aura and maniacal attacks. There was an injury and scar which topographically corresponded to the angular gyrus. And sometimes spontaneously, and sometimes artificially, by pressing on the scar the fits came on. About four months ago Mr. Gould cut down on the angular gyrus, and probed it without detecting organic disease. There had been, however, no fits since the operation. In another case a woman had a peculiar sensation running up the arm, and here also Dr. Bennett could artificially induce attacks.—Dr. EWART related a case of fits having the same characters as those related by Dr. Jackson, though not artificially induced, occurring in a little girl in whom the presence of hemiplegia pointed to a lesion of the brain.—Mr. R. W. PARKER related a case of epilepsy induced

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by probing a diseased portion of the femur. Amputation of the limb was followed by complete recovery.—Dr. BEEVOR asked how it was that consciousness was lost if the nerve discharge occurred in the pons Varolii.—Dr. HUGHLINGS JACKSON, in reply, was of opinion that the pons was the seat of the discharge because the guinea-pig had fits after removal of the hemispheres, and also because rabbits could have fits after similar removal, on being bled to death, as Kussmaul and Tenner had shown. There was thus sufficient evidence to prove that the grey matter of the pons contained enough energy to produce a fit as the result of the rapid discharge of its energy.—Mr. VICTOR HORSLEY, in reply, thought that the sequence of latent period, tonic spasm, clonic spasm could rarely occur except when the cerebral cortex was the seat of the nerve discharge. Brown-Séquard had shown twenty years ago that stretching the sciatic nerve stopped the fits.

OBSTETRICAL SOCIETY OF LONDON.

A MEETING of this Society was held on the 3rd inst., Dr. J. B. Potter, President, in the chair.

The following specimens were shown:—Dr. Horrocks: A section from Cancer of Cervix Uteri, showing epithelioma passing into medullary carcinoma. Dr. Gervis exhibited some drawings from microscopical sections of the surface of a Fibroid Polypus, which showed that the epithelium is ciliated in positions where there is neither friction nor pressure.

Papilloma of the Fallopian Tube and the relation of Hydro-peritoneum to Tubal Disease, by Mr. ALBAN DORAN.—The discussion on this paper, read on Oct. 6th, was opened by Dr. ROUTH, who said that in a former paper Mr. Doran showed how disease of the Fallopian tube could be produced by extension of inflammation from the vagina (as in gonorrhœa), leading to endometritis, pyo-salpingitis, peritonitis, and death. He now had shown that the Fallopian tubes were liable to be affected with papillomata, and became a very painful disease. Dr. Routh thought that a similar propagation upwards could produce these papillomata, as the vulva, vagina, and neck of the uterus were liable to be studded with warts and cauliflower excrescences, and polypi were found in the uterus, all of which, when examined microscopically, were similar. Now from what source did these warts originally arise? In large quantity they existed either in married women or women who had had sexual intercourse. They were eminently contagious, and might possibly be caught as ordinary warts were. The contact of a warty secretion could produce a wart. Possibly they were sometimes sequelæ of venereal disease, like condylomata &c., and means which were found to cure syphilis often cured these warts completely. It would seem that according to the seat of these papillomata the secretion from them varied. In the vagina they gave rise to a very fetid secretion; in the uterus, to a sanguineous one; in the tubes, to a very acrid or but slightly irritating secretion. Fortunately, in the former case the violent inflammation produced closed the fimbriated extremity, and so prevented extension of the inflammation to the peritoneum. In the latter case the secretion resembled a mild catarrhal fluid; the irritation was insufficient to cause closure of the tube, and hydro-peritoneum, or more properly sero-peritoneum, resulted. It seemed highly probable that papillomata of the fimbriæ might give rise to papillomata of the peritoneum and ovaries. It has been affirmed that after operation papillomata of the peritoneum sometimes disappeared, while at other times they assumed a malignant type. Surely the explanation was that in the former examples there was no cancerous diathesis, while in the latter there was; and exactly as a blow or irritation may cause cancer in a person with cancerous diathesis, so benignant papillomata may become malignant. The conclusion to be drawn from these general principles was to enforce the treatment of these cases early, and so to prevent the extension of serious disease.—Dr. HORROCKS said that, *à priori*, disease of the Fallopian tubes should be rare, since they had such an easy function to perform. In a careful investigation made at his request in the post-mortem room at Guy's Hospital by Drs. Goodhart, Mahomed, and Carrington during the last three years, there was not one instance of papilloma of the Fallopian tube, and, considering the large number of post-mortem examinations, this affection must be looked upon as very rare; when it did occur it would be difficult to diagnose.—Dr. GERVIS gave some particulars of a case of pelvic papillomata he had recently operated on. The growths covered the tubes and ovaries on both sides, and were scattered about the peritoneal surfaces. The patient had been tapped for ascites six weeks before Dr. Gervis saw her. He removed a moderate-sized cyst and as much of the papillomatous outgrowths as was practicable. The patient made a good recovery, and now, between three and four months from the operation, there has been no recurrence of the hydro-peritoneum.—Dr. CHAMPNEYS had recently admitted a case into St. George's Hospital in which abdominal section had been done four years ago, and the peritoneum and liver had been found covered with papillomata springing apparently from the region of the tube or ovary. Till two months ago no symptoms had occurred, and then a soft swelling appeared in the line of incision. A little pus and serum was discharged, but no recurrence of the disease was found.—Mr. BLAND SUTTON observed that he had made a careful study of Fallopian tubes removed for various diseases, and had found that in cases of ovaritis due to extension of gonorrhœa a papillomatous condition of the mucous membrane was not infrequent, and he had found it possible to trace every gradation from simple or slightly branched villi to dendritic masses with narrow peduncles completely occluding the tube.—Mr. ALBAN DORAN, in reply, said that Dr. Routh's remarks could not be directly applied to the two cases upon which the paper was based. There was no probability of venereal taint—at least in the first case. With regard to hydro-peritoneum, he had explained how most diseases of the tube sealed up the ostium and saved the peritoneum from irritation; still, a mild catarrh of the tube, such as might be due to gleet, might fail to cause the ostium to be closed, and thus some discharge would escape into the peritoneal cavity and cause hydro-peritoneum.

On the Obstetrics of the Khyphotic Pelvis (second communication), by Dr. CHAMPNEYS.—The author referred to his first paper on this subject in vol. xxv. (for 1883) of the Society's Transactions, in which he arrived at the following conclusions:—*(a)* The head is usually more or less transverse at the beginning of labour, and not antero-posterior, as usually described. *(b)* During labour the occiput rarely turns forward, deep transverse position is common, and posterior rotation not uncommon. *(c)* The head sometimes (probably not commonly) passes out of the pelvis practically between the tubera ischii in front and the sacrum and coccyx behind, entirely neglecting the anterior part of the pelvis. These conclusions were directly contradictory of the received accounts. The author referred to the criticisms on his description of the mechanism, and sought to show that they were not founded on fact, and were self-contradictory. He then recorded an additional case carefully observed by himself, including the mechanism of labour, and the moulding of the fœtal head and its dimensions. He analysed two other cases recorded since his paper, making a total of thirty-five labours in twenty-two women. These cases entirely confirm the opinions expressed in the former paper. The cases on which the usual statements were based cannot be found if they ever existed.

A Case of Lupus, Stricture, and Atresia of the Female Urethra, by Dr. HERMAN.—The patient, aged forty-eight, had had one child. She had suffered from trouble in micturition and occasional attacks of retention of urine for twelve years. She had at one time had an abscess in the groin, and had some operation done which she described as the removal of a growth from the urinary passage. She came to the London Hospital suffering from retention of urine: no catheter could be passed, but a warm bath gave relief. Three days afterwards the retention recurred; not only was the bladder full, but the urethra was distended into a sausage-like swelling. The meatus was blocked with fibrous outgrowths, between which no channel whatever could be found, not even for a fine probe. There was hypertrophy of one labium minus and perforation of the other, but no visible ulceration; and Dr. Herman concluded that the complete occlusion probably resulted from adhesion of ulcerated surfaces closing the narrow tortuous channel between the outgrowths which blocked the meatus. The channel was reopened with a trocar, and kept patent by the passage of bougies. The patient had since remained free from all trouble for three years. The author remarked on the sausage-like dilatation of the urethra, which showed that

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the retention was due simply to blocking of the meatus, and not to swelling or spasm of the canal. He remarked on the rarity of stricture from fibrous outgrowths at the meatus, and quoted two cases, the only ones he had been able to find.

MANCHESTER PATHOLOGICAL SOCIETY.

THE annual meeting of this Society was held on Oct. 13th, J. Dreschfeld, M.D., President, in the chair. The reports of the treasurer and secretary were presented, and office-bearers for the ensuing year were elected.

Rhino-scleroma.—Dr. DRESCHFELD exhibited a section of tissue from Rhino-scleroma, and gave a brief sketch of the more recent researches on this subject. The section (for which he was indebted to Dr. Payne of London) showed the presence of numerous bacilli occurring in small masses in the midst of the tissue. These bacilli were smaller than the tubercle bacilli, less slender, and the extremities slightly thickened. These micro-organisms were unlike those shown recently at the Berlin Medical Congress by Paltauf, who describes the organism as similar, if not identical with, Friedländer's pneumonococcus, and who obtained pure cultivations which, as regards their form of cultivation, their microscopic appearance, and their behaviour when injected into mice, resembled the pneumonococcus.

Mycosis Fungoides.—Dr. DRESCHFELD also showed a section of Granuloma Fungoides prepared from a small Tumour, removed during life by Dr. Payne. Numerous sections had been made and stained after Gram's method, but neither in the bloodvessels nor in the tissues were any organisms seen. Dr. Dreschfeld remarked that Köbner's investigations have given equally negative results, and though the disease most probably is parasitic, it seems very doubtful whether the micrococci seen by Rindfleisch, Hochsinger, and Schiff are the pathogenic organisms of this disease.

Multiple Papilloma of the Larynx.—Dr. HODGKINSON showed several small Papillomatous Growths from the Larynx, coughed up at short intervals by a woman aged forty. When first seen, fourteen months ago, she was suffering from complete aphonia and dyspnœa. Laryngoscopic examination revealed the presence of three growths. Marked improvement resulted from repeated applications of the galvano-cautery, and the patient ceased to attend. After an absence of four months she was admitted into the Throat Hospital at Bowdon with such urgent symptoms that tracheotomy was performed by Mr. Hardie. Dr. Hodgkinson called attention to a point of great interest—viz., the steady diminution in the size of the growths under the influence of the physiological rest since the operation. Microscopically, the growths were of a simple character.

Cerebral Tumour.—Dr. ASHBY exhibited the brain of a boy of five years, who had suffered for three months before his death with paresis of his left arm and leg, and well-marked choreic movements of the arm. The contractions of the muscles of the forearm were rapid and irregular, closely resembling those seen in a severe case of chorea. The arm was mostly adducted, and held somewhat behind his back, the forearm pronated, and the fingers working vigorously. He died of tubercular meningitis. At the post-mortem a cheesy tumour about one inch in diameter was found in the right optic thalamus, compressing the internal capsule.

MIDLAND MEDICAL SOCIETY.

A MEETING was held on Oct. 20th, Mr. Lloyd Owen, F.R.C.S.I., President, in the chair.

Sarcoma of Tibia.—Mr. CHAVASSE showed a specimen of a mixed form of Central Sarcoma, originating in the Shaft of the Tibia of a Miner, aged sixty-seven. The signs of the neoplasm appeared six weeks after the limb was injured by falling coal. Amputation of the thigh was successfully performed.

Unilateral Progressive Facial Atrophy.—Dr. SUCKLING introduced a woman aged forty-two suffering from this affection. It commenced gradually when she was about eighteen years of age, the left side of the face being at that time noticed to be different from the right. The bones were atrophied on the left side; the horizontal ramus of the inferior maxilla was an inch shorter on the left than on the right side; the fat had almost completely disappeared, the eyeball being retracted and there being deep fossæ above and below the zygoma. The hair had disappeared over the left half of the front of the skull. There were two well-marked grooves on the left side of the forehead in the situation of the supra-orbital and supra-trochlear nerves. The temperature of the left side of the face was a degree higher than the right; sensation was unaffected and the general health unimpaired.

Cholecystotomy.—Mr. HASLAM showed some gall-stones that he had removed by cholecystotomy from a patient aged thirty-six. She had been suffering from jaundice, from obstruction to the bile-duct, and pain in the hepatic region, with emaciation, for nearly four months; the gall-bladder was much distended, and on opening this 223 stones were removed, several of the largest being nearly an inch in diameter. The incision into the gall-bladder was stitched to the margin of the wound; the operation gave great relief from the pain, but the obstruction was entirely unrelieved, no bile whatever being discharged from the fistula. She lived only two months, and on post-mortem examination the liver was found to be studded with malignant deposit, and the ducts in the transverse fissure completely blocked by new growth.

Malformation of Intestine.—Mr. WILLIAM THOMAS exhibited the stomach and intestines of an infant five days old, that had been operated on for obstruction. The stomach was of normal size; the duodenum became gradually enlarged as it reached its termination; the jejunum was very large, and formed dilated coils, which had distended the abdomen. It had been opened twenty-two inches from the pylorus for the relief of the obstruction, and ten inches further terminated in a blind extremity. The small intestine recommenced almost immediately between the layers of the mesentery, being about the size of an ordinary pencil; it formed several coils, and, extending for thirty-six inches, terminated in a well-formed cæcum, from which a perfect though contracted colon could be traced to the anus. The various parts of the intestine were so firmly matted together by well-organised bands of lymph, the result of previous intra-uterine peritonitis, that the relations of the parts could not be made out until the intestines were removed from the abdomen. The child was somewhat relieved by the operation, and lived for about eighteen hours after it.

Excision of Superior Maxilla.—Mr. BENNETT MAY exhibited specimens from recent cases of excision of the upper jaw; and a patient, a young woman, on whom he had recently performed the same operation for an osseous tumour.

Mr. LAWSON TAIT read a paper on the Operative Treatment of Peritonitis.

Reviews and Notices of Books.

Bright's Disease and Allied Affections of the Kidneys. By CHARLES W. PURDY, M.D., Professor of Genito-Urinary and Renal Diseases in the Chicago Polyclinic. London: H. K. Lewis. 1886.

THIS is a very good and readable book, written by one who evidently has thought deeply and studied closely the subject in hand. Dr. Purdy, before bringing his work to completion, visited Europe, and made himself acquainted with the views held by the foremost renal pathologists in this country and abroad. Thus, in England he spent a considerable time working in the pathological laboratory at Aberdeen with Professor Hamilton; at Edinburgh he attended the clinique of Professor Grainger Stewart; he visited Manchester in order to make himself acquainted with Sir William Roberts' views; in London for the same purpose he attended the hospitals visited by Drs. George Johnson, Dickinson, and Ralfe; whilst he made a special journey to Harrogate in order to become practically acquainted with Dr. Oliver's methods of urine testing, which were then beginning to attract attention. Such industry and earnestness of purpose have met their reward in the firm grip which the author has manifestly acquired of the various theories and practice of the different schools of renal pathology now existing, which enables him to state the various propositions tersely and correctly, and also helps him to a right judgment thereon. But not only has Dr. Purdy made himself per-

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sonally acquainted with the teaching of the different schools; he has also kept himself well abreast of current European literature up to the very date of publication. It must not, however, be supposed that the book is nothing but a mere collection of opinions; the author has views of his own, which he asserts modestly but firmly, whilst he has always a decisive word to say on any point he may happen to be discussing.

The first chapter deals with the nature and character of the different forms of albuminuria, which he divides into false and true—we prefer the terms functional and organic to distinguish between the albuminuria resulting from changes in blood or disturbance of the circulation, and that caused by organic disease of the kidneys themselves. He particularly emphasises the fact that intermittent albuminuria is common in the most grave of all forms of renal disease—viz., renal cirrhosis,—and that the fact of the albuminuria being intermittent is no reason for assuming that it is due to disturbance of function, and not to organic disease. This is a very important caution, because the tendency at the present time is undoubtedly to consider all irregular forms of albuminuria as purely functional, and therefore comparatively unimportant. The observations on the rival methods of testing for albumen in the urine are clear and to the point. The second chapter deals with the much vexed question of uræmia, and the most recent views are plainly stated. Speaking of the treatment of this condition, Dr. Purdy mentions among many other modes of treatment the practice, originally suggested by Scanzoni, of administering morphia subcutaneously for the relief of acute uræmic convulsions. Dr. Loomis of New York has recently revived this practice, and demonstrated that morphia can not only be used in these cases, but also with the happiest results in, arresting the muscular spasms, by establishing profuse diaphoresis and by facilitating the action of cathartics and diuretics, especially the diuretic action of digitalis. The range, utility, and safety of morphia in uræmia must be strictly confined to the acute convulsive seizures; its employment is improper in a state of pure coma, or chronic uræmia unassociated with convulsions. Chapters III. and IV. are devoted to the consideration of acute and chronic nephritis and renal cirrhosis, the pathology of the various conditions being illustrated by some exceedingly well executed engravings, which, unlike what we meet with in American editions generally, are original, and not taken secondhand (often without acknowledgment) from the work of some standard English author. The concluding chapters deal with the etiological varieties of nephritis—scarlatinal, puerperal, lardaceous, and cardiac. We regard the chapter on puerperal nephritis as a valuable contribution on a subject about which little is yet known, and which has not been studied with the attention it deserves.

In conclusion, we can heartily recommend this work. On its own merits it will find a worthy place among its contemporaries dealing with the same subject; and it will, from its thoroughness, simplicity, and clearness, attract readers who wish to make themselves acquainted with the most recent advances of renal pathology and therapeutics.

Annual Report of the Board of Works for the St. Giles's District.

THIS report consists of three parts, the first, by the clerk, being almost entirely limited to giving an account of recent legislation and to its application to local conditions. But with reference to Shelton-street area, which had been reported by Mr. Lovett, medical officer of health, to the Metropolitan Board of Works, he states that that Board had taken no action thereon. Subsequently the Home Secretary, accompanied by Mr. Stuart Wortley, M.P., inspected the area, and informed the Metropolitan Board that he endorsed Mr. Cubitt Nichols' report that the area should be dealt with under the Artisans and Labourers' Dwellings Improvement Act of 1875. This Board then referred the subject to a committee with the intention of the area being again viewed, but up to June of the present year nothing further had been done. The second part of the report deals with matters that came under the control of the surveyor, while the third part contains the report of the medical officer of health for the year ending Jan. 2nd, 1886. This report shows that the improvements which have been effected through the action of Mr. Lovett and his predecessors are still continued; as many as twenty-eight houses were reported under the Artisans and Labourers' Dwellings Act of 1868, the whole of this number being situated in Dudley-street. Altogether, Mr. Lovett says, "238 houses have been condemned by my late predecessor and myself, of which 152 have been demolished," affording good evidence of the results that follow where an efficient medical officer of health is supported by an intelligent authority. The death-rate of this district was 23·6 per 1000 of population, being almost identical with that of the decennial average. The whole district is, however, divided into three sub-registration districts, the death-rate being in St. George's (Bloomsbury) 18 per 1000, in St. Giles's (South) 34·5 per 1000, and in St. Giles's (North) 18·4 per 1000. The high death-rate in St. Giles's (South) receives some explanation from the large proportion of births in this sub-registration district, which amounted to 42·8 per 1000 of population, the rates in St. George (Bloomsbury) and St. Giles's (North) being 21·8 and 23·0 per 1000 respectively, giving a rate for the entire district of 29·1 per 1000. The death-rate in the Peabody Buildings was as high as 24·0 per 1000; and here the birth-rate was 53·8 per 1000. The zymotic death-rate in the whole district was 2·3 per 1000; scarlet fever was notably absent; enteric fever caused but ten deaths, while no case of typhus fever was known to have occurred during the year. Mr. Lovett comments on the fact that typhus used periodically to break out amongst the inhabitants of the courts and alleys in Great Wild-street and Great Coram-street, but since those areas have been cleared of their insanitary dwellings and new model buildings erected in their stead, this form of malignant fever has been absent from the district. This is a matter which concerns other districts than that of Mr. Lovett's, and all London may be grateful to St. Giles's and its officers for the benefit they have conferred on the metropolis.

The Hospital, Part 1, Vol. I.

We have received the first monthly part of *The Hospital*, which is described on the title page as "an Institution, Family, and Parochial Journal of Hospitals, Asylums, and all Agencies for the Care of the Sick, Criticism and News." Its policy is thus further indicated in the first editorial article: "It will strive to provide entertaining, instructive, and amusing reading of a popular kind, which will be gathered from the hospital field, using the word hospital in its widest sense, and making it to include all agencies of whatever kind which have for their object the treatment and cure of disease, or the care of the sick and injured all the world over. ..... Indeed, it has been started with the main object of largely increasing the support already given to hospitals, by awakening a personal and sustained interest in the work which they undoubtedly do for the whole community, and for each individual, from the highest to the lowest." Whilst, therefore, the single goal which this new journal desires to reach is the interests of the hospitals, it has, in order to attain it, to travel over wide and varied tracts of ground. Thus there are articles devoted to "Hospital Worthies" (the first of which consists of an appreciative

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notice of the work done on behalf of the hospitals by the late Dr. Wakley), to "Hospital Administration," to "The Story of the Hospitals"; there are "Notes and News," "Words of Consolation," "Prize Competitions," "*The Hospital* Charity Box," "The Children's Corner," and a serial story. An in-patient's and out-patient's hospital diary is also given. The work is of a popular nature and accomplished with enterprise and ability, and we trust that its founders will be successful in their advocacy of the great cause of the hospitals. *The Hospital* is also published as a weekly paper, last week's issue containing a short article by H.R.H. the Duke of Cambridge on the "Importance of Maintaining Medical Charities."

The Asclepiad, No. 12, Vol. III.

THE current number ends the third volume. Some practical notes on the Diagnosis and on the Ammonia Treatment of Fibrinous Obstructions of the Vascular System constitute a clinical review of thirty-six years of personal observation by Dr. Richardson. The reader will find here an instructive account of the subject in a readable form. But we do not think the author has succeeded in lighting up the dark parts of the field of diagnosis of this condition of fibrinous obstruction of the cardiac cavities. The physiology of historical repetitions is that kind of subject to which Dr. Richardson's genius naturally turns. Ambrose Paré and the Birth of French Surgery (with portrait) is excellent; so are also the Opuscula Practica. The Transmutation of Blood under Electrical Vibration requires the use of the term "transcendental," but not necessarily in a condemnatory sense.

Analytical Records.

VAPOUR CONES.

(NORTH HANTS CHEMICAL COMPANY.)

WE have examined and experimented with a large number of these vapour cones. There can be no doubt that the cones increase the number of effective agents available for sanitary and medical purposes. The cones naturally fall into three or more different classes, according to the materials with which they are provided, to the purposes they have in view, and to the efficiency with which their objects are carried out. A certain class of the cones are employed for perfuming purposes. Of this series we have tried the white rose and patchouli and they answered their purpose admirably. The "oxygen" cone we tested in the following manner. The contents of a close stool were exposed to the atmosphere of a small watercloset, the vapour cone was lighted, and the window and door shut: the closet was visited in thirty minutes, and without the observer perceiving any objectionable odour. The sulphurous acid cone is a more convenient method of fumigating a room with sulphur than the ordinary method in use. We have also experimented with carbolic acid, with aromatic acetic acid and carbolic acid, and with carbolic acid, camphor, and lavender. These cones yielded a very abundant supply of vapour, which appeared to possess all the properties of vapours produced by other modes in common use. The great heat evolved by the vapour cones did not in any of our experiments cause a decomposition of the material vaporised. The terebene cone is also a good one. The calomel cone certainly has many advantages over the ordinary method in use for administering a calomel bath. That the cones will prove of excellent service as deodorants, disinfectants, and fumigants there cannot be any doubt. The majority of the cones meant for medical purposes do not, however, appear to us to be possessed of properties superior to those methods of steam or hand spraying or inhalations already in use, though they cannot be regarded as inferior in point of quality and quantity of vapour supplied.

MEDICATED SOAPS.

(THE MILTON CHEMICAL COMPANY, BATH-STREET, GLASGOW.)

Several samples of soap manufactured by the above company have been examined by us and submitted to partial analysis. They are described with perfect correctness as iodoform soap, corrosive sublimate soap, blue gum-tree soap, and Yara-Yara perfumed soap. In each the basis is a neutral transparent soap of good quality. The iodoform soap is most obviously genuine, for the yellow scales shine through the clear soap. It should be most valuable in eczema and other skin diseases. The blue gum soap contains the fragrant eucalyptus oil, which is easily isolated by distillation with water. The Yara-Yara soap is similar, with the powerful and delicate odour of the oil. It is an admirable toilet soap.

BISHOP'S GRANULAR EFFERVESCENT HYDROBROMATE OF CAFFEINE.

(BURROUGHS, WELLCOME, & CO., HOLBORN VIADUCT.)

An interesting and well-made preparation, in which the active principle of tea and coffee (caffeine being, as is well known, the alkaloid common to both) is presented in combination with hydrobromic acid. The idea is to unite as cerebral stimulants and tonics the virtues of tea or coffee with those of the alkaline bromides. Analysis readily shows the presence of both the essential ingredients. The caffeine, extracted by sodic carbonate and chloroform, crystallises in the well-known feathery tufts. The preparation is certainly very valuable, and deserves careful trial in cases of mental exhaustion, nervous headache, and the like.

BROMO-CAFFEINE.

(CORBYN, STACEY, & CO., HIGH HOLBORN.)

This preparation appears to be substantially identical with the last. It contains both caffeine and hydrobromic acid, or rather the hydrobromate of the base, and in excellence of manufacture it leaves nothing to desire. We do not doubt that it will receive the attention of the medical profession.

HAY'S AERATED HOP ALE (NON-INTOXICATING).

(WILLIAM HAY, HULL.)

This is an excellent non-alcoholic beverage, which probably approaches as near to beer as is possible without the presence of alcohol. Our analysis showed the presence of the bitter principle of the hop in perfect solution.

HAY'S ORANGE QUININE TONIC.

(WILLIAM HAY, HULL.)

This is a good preparation, but we do not find in it any peculiarity that calls for remark. The presence of quinine is shown by the ordinary tests, and also by the characteristic fluorescence.

MEDICO-PSYCHOLOGICAL ASSOCIATION.—A quarterly meeting of this Association was held in the Hall of the Royal College of Physicians, Edinburgh, on Thursday, Nov. 11th. Dr. Byrom Bramwell showed a collection of photographs of brains in section and whole, and explained his speedy method of making microscopical examinations of that organ. Dr. Rorie (Dundee Royal Asylum) read a paper on the Recorded Treatment of the Insane sixty years ago, as illustrated by the Records of the Dundee Asylum; Dr. Maclaren (Stirling District Asylum) read a Psychological Study of Louis XVI.; Dr. Campbell Clark followed with details of an Asylum Service Provident Scheme, and Dr. Urquhart (Perth Royal Asylum) read notes of two cases of Syphilitic Insanity. There was a very good attendance of members, and considerable discussion was evoked by the papers read. In the evening the Association dined in the Edinburgh Hotel. The next quarterly meeting in Scotland will be held in the Hall of the Faculty of Physicians and Surgeons in Glasgow on the second Thursday of March.

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THE LANCET.

LONDON: SATURDAY, NOVEMBER 20, 1886.

THE APOTHECARIES' SOCIETY AND THE CONJOINT SCHEME.

In another column we give an account of a meeting, which was held on Tuesday in the Hall of the Society of Apothecaries, on the subject of the amalgamation of the Examining Board of the Society with that of some other medical institution having the power of granting diplomas in accordance with the new Act of 1886. The meeting was convened by the Master of the Society, but was by no means limited to its members; it may therefore be taken to fairly represent the large body of general practitioners upon whom the public have to depend whenever they have occasion to seek medical aid. The proceedings at this meeting are instructive. The Master, who presided, explained the course the Society had adopted in accordance with the provisions of the new Medical Act—a course which shows abundantly the desire of the Society to loyally carry into effect the intentions of the Act: that the serious disadvantage of the existence of rival examining bodies in the metroplis should be obviated. The Society has thus far behaved in a manner which will commend it to the profession on the one hand, and on the other to the public, in whose interest the law of the present year has been passed. In striking contrast is the conduct of the two corporate bodies, to which the Society has fruitlessly addressed itself. The Royal Colleges of Physicians and Surgeons have come to the conclusion, or rather the Councils of these bodies have decided, that it is not desirable that their examining boards should amalgamate with that of the Apothecaries' Society; and this in direct opposition to the recently expressed wish of a large number of the Members of the latter College. No reason touching the main question is given, and the joint communication, which the Society has received, was placed in its possession but an hour before the meeting on Tuesday was held, and some four months after the request had been made to the Colleges. The report which we give of this meeting may be taken as affording evidence of the judgment which the profession will pass upon the conduct of the Colleges, the result of which is that one of the primary objects of the Act has been rendered null and void, and that the hope that has been entertained that rival examining bodies would no longer exist in London has been grievously disappointed. We do not hesitate to express the opinion that the Colleges have, through their Councils, inflicted an almost irreparable injury on the profession, and have placed the public under serious disadvantage. The Apothecaries' Society has nothing to gain as a Society from the desired amalgamation; it has, indeed, much to lose; nevertheless, it has itself taken the initiative in conforming to the requirements of the recent Act. The Colleges are differently placed; their position in guarding at the same time the interests of the public and of the profession would have been materially strengthened by an alliance with a Society possessing important independent rights, while their control of all essentials in examinations would have been preserved, as may be seen by the tenour of the letter which the Society has addressed to them.

It is, then, no matter for surprise that the speakers at the meeting betrayed some exultation over the strengthened position which the Society now occupies, although the meeting as a whole deplored the contempt shown for the welfare of the public. Its continuance as an independent examining body is ensured; it will doubtless go through the form of addressing itself to other licensing bodies, and it will experience no discouragement from the successive refusals which it may meet. Finally, it will appeal to the Medical Council, and, if necessary, to the Privy Council, who will accord to it all the rights necessary to conduct independent examinations. The Society will then set itself to work to determine its future, over which it will have complete mastery. It will become a necessity to a large number of medical men whose aim in life will be to fulfil the requirements of an important section of the community, and it will protect the interests of its licentiates by exercising its power of prosecuting illegal practitioners.

THE ARTIFICIAL FEEDING OF INFANTS.

The letters which have lately appeared in our columns on the artificial feeding of infants show the great divergence of opinion which exists amongst practical and enlightened members of our profession on this most vital subject. The poor mother, unable to suckle her infant, has not alone to face the conflicting instructions of doctor and nurse—the first clinging tenaciously to his physiological doctrines in spite of the screams of the infant and its non-increase in weight, and the second maintaining the excellence of her patent foods and of her various "thickenings," regardless of the future rickets in store for the luckless child. But when doctors disagree, and especially doctors who speak with the authority of experience, the mother's bewilderment may well be great, and she is either tempted to fall back on the time-honoured rule of thumb, or take refuge in the hypothesis of compromise that the proper course lies sometimes with one, sometimes with the other, and sometimes between the two. We shall not presume to adjudicate between the diverging views of our correspondents. With the limited knowledge at present available on the subject, they seem to us alike too sweeping and dogmatic for universal acceptance. Let us attempt the humbler task of indicating some simple homely tests which ought to be applied in any given case before we conclude that the method which has been adopted in that case is a satisfactory one.

The first test depends on the quiet and comfort of the child and the increase in body weight. This increase ought to be from three to four ounces weekly or more. The weight test is, however, by no means conclusive if taken alone. Many a hand-fed child when twelve months old is fat and plump, but is found to be rickety to an extreme degree; and it is well known to experienced nurses that breast-fed healthy infants are often much less stout than those which are reared by hand. The advocate of any given method will not therefore settle the matter by simple weighings, although these count for a great deal.

The second test depends on the examination of the

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fæces. With regard to the frequency, there is a common belief that four to six is the proper number of daily evacuations for an infant during the early months of its existence. We hold this to be a mistake. Healthy breast-fed infants often pass not more than two stools a day after the first fortnight, and satisfactory hand-feeding ought to aim at a similar result. We hold that there is a presumption that an infant who passes regularly from four to six stools daily is passing a great deal of undigested food, and that so far the alimentation is imperfect. The wholesome fæces of a healthy breast-fed infant are of a bright gamboge-yellow, they are not unduly offensive, and they present very scanty traces of undigested casein. Now, in the majority of infants brought up on cow's milk, even diluted to the starvation point, the stools are distinctly offensive, and are largely made up of masses of white casein. When this occurs, to find fault with the liver and do nothing more than prescribe the inevitable grey powder appears to us the most absolute empiricism, and the antiseptic cleansing of feeding-bottles and the banishment of tubes, excellent as these measures undoubtedly are, will not solve the difficulty in question.

How can the casein be dealt with? There are several methods open to us. First, it may be predigested wholly or in part. The simplest and readiest way of accomplishing this has, in our experience, been brought about by the use of one of the preparations suggested by Sir WILLIAM ROBERTS, which, made with fresh milk, is practically a partly digested milk gruel. But it is doubtful whether this method, invaluable as we believe it to be in selected cases, ought to be tried as the first routine step in dealing with the difficulty in question.

Sir WILLIAM ROBERTS, in his lectures at the College of Physicians, referred to an observation of his own made whilst feeding a healthy kitten exclusively on predigested food. Without obvious or marked departure from health, the kitten nevertheless, in respect of body weight, fell behind another kitten fed on milk. It was suggested that some atrophy of unemployed glands might be responsible indirectly for this failure in nutrition. Now, in our problem, if we can get the infantile alimentary tract to digest for itself the casein masses, more will be gained than if the casein be predigested.

A simple, time-honoured method, which we think ought always to be tried, is the dilution of the milk in varying proportions with barley-water, which perhaps in a mechanical way facilitates the separation of the curd into more manageable masses. If this is found unsatisfactory, a very little malted food ought, we think, to be added to each bottle. That the whole character of the stools in respect of undigested casein may become altered after the adoption of this simple expedient we have satisfied ourselves again and again, as well as of the diminution in the actual number of the evacuations. But our physiological friends protest that this is using farinaceous food, that the infant's pancreas and salivary glands are rudimentary, and that its economy is unequal to the conversion of starch. To this objection there are several answers to be made. First, physiologically it is by no means proved that the sole agents in the conversion of starch are the pancreas and the salivary glands, and experiments to prove the absolute incapacity of the infantile alimentary tract to convert a small amount of starch are not forthcoming. Again, in a good malted food a great part of the starch has been already converted and rendered soluble. But let it be granted that even after boiling there is a small amount of unaltered starch; if the net result is that the fæces of the child are more wholesome and less frequent, that it does not suffer from vomiting, acidity, and flatulence, and that it is gaining weight, what evidence is there that the small amount of starch has done harm?

The employment of the term "farinaceous" has, indeed, brought us more or less under bondage in our directions as to infant feeding. To repeated meals of arrowroot, cornflour, baked flour, and the like, even when made with milk, the term farinaceous is properly applicable, and we are second to none in our condemnation of such methods of feeding infants; but a broad distinction ought to be drawn between them and the use of a very small quantity of malted soluble food added to milk. If even the malted foods be used in large relative proportion in early infancy, to the exclusion or great diminution of the quantity of fresh milk, we believe that serious risk is incurred in the direction of scurvy; and this is the more insidious because, with regard to the two tests which we have mentioned, the body weight may certainly increase, and the stools may be less offensive and less frequent than under a milk regimen. The proper use of the malted foods is that they should be employed in small quantity—not in any sense as a substitute for fresh milk, but as an aid to the digestion of the casein.

We have said nothing about the humanised milk and the cream and whey methods. Useful as these plans have unquestionably proved hitherto, they have been methods for the rich and not for the poor, and their discussion may be for the present deferred.

THE Medical Council met, we may hope for the last time in its imperfect form, on Tuesday last. The time, as we pointed out last week, is highly inconvenient. We are in the very middle of a general election by the profession. The voting papers which are to determine the election are coming in daily in hundreds, if not thousands, and this in a comparatively unprotected form. The most that can be hoped for is that the Registrar, whose time is fully occupied by Council business while the Council is sitting, will carefully receive and guard them until the 22nd, after which the serious work of counting will have to be done. Not only to the officials of the Council must this time for the meeting be very trying, but to the members. Many of these are engaged as teachers in distant cities of the kingdom, and to bring them to town in these dark days of winter must be very inconvenient. Probably the chief argument of those who defend the calling together of the Council at this time is that it is necessary in order to purge the Register of the new year of names that would discredit it. We see nothing else to constitute a justification of the meeting at present. But for this purpose a meeting before or after the election of Direct Representatives would have been quite sufficient. Be this as it may, almost the first work of the meeting was to pass a resolution ordering the erasure of the name of Mr. EDWIN WM. ALABONE from the Register. This subject was brought before the Council in the ordinary way by a communication from the Royal College

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of Surgeons of England, enclosing a resolution of the Council of the College, which will be seen in our report, and also by a communication from Mr. ALABONE himself to the Registrar, saying that he would be obliged if the Registrar would kindly erase his name from the Register. This is decidedly unusual, and we may take it as an admission on the part of Mr. ALABONE that his conduct was thoroughly indefensible. We have already expressed our opinion of Mr. ALABONE'S case, and have no wish to make his situation worse by further reflections of ours. His fate may be a warning to others that members of medical and surgical corporations are still bound by their own declarations and by the very nature of their position to "demean themselves honourably" and to maintain the dignity and welfare of the profession, and that failure in these undertakings or the open disregard of them may leave the bodies from which their diplomas are derived no alternative but to withdraw them.

A more difficult case for the judicial consideration of the Council, and one of immense importance to the profession, came up on the first day of the sitting, in the shape of communications laid before it by the Executive Committee. These had reference to a case which our readers will remember, in which an inquest was held on a man named GEORGE WADLEY, attended by Mr. DAY and his unqualified assistant, Mr. DAVENPORT. Mr. DAY signed the certificate of death, having once seen the man two days before his decease. The friends said the deceased had generally consulted Mr. DAVENPORT, and that they had always considered him a medical man who could give a certificate. The case came to the Medical Council from the Home Secretary, whose attention was drawn to it by Mr. A. BRAXTON HICKS, Deputy Coroner for Westminster. The Home Secretary first referred the case to the Registrar-General, who thought Mr. DAY entitled to grant a certificate, but considered that Mr. DAVENPORT should be dealt with by the Medical Council. The Medical Council thought the only person they had to deal with in these cases was the registered principal under whom the unqualified assistant acted, and on this view referred the matter for the present for investigation by the Branch Council for England. Here the matter will for a time rest; but the important thing for medical men to notice is that for the second time, and in a different Government, the Home Secretary has referred these cases to the Medical Council. The Medical Council, too, should take this fact into more consideration. We are in no way prejudging the present case; but the class of cases of which it is one is very large, and it is idle to think that the Medical Council can much longer refuse to take serious notice of them. All those who have valid and substantial facts illustrating the system by which branch dispensaries are practically left in charge of unqualified assistants, under cover of the name of a qualified principal, would do well now to communicate them to the Executive Committee of the Medical Council, who have received authority from the Council to communicate with the Home Secretary on the subject.

The second day (Wednesday) of the Council's sitting was mainly occupied by a discussion which might have been deferred till the Direct Representatives of the profession were elected, and which ought to have been so deferred. It had reference to the lengthening of the term of the medical curriculum on a proposal by Dr. MCVAIL to make the course of medical study after registration five years if the subjects of Elementary Physics, Chemistry, and Biology are included in that period. If the time of medical study is to be extended—and there is much to be said for this, as both Dr. MCVAIL and Dr. BANKS (the new member of the Council, as representative of the Victoria University), in an able maiden speech, showed—it is but fair to give the new representatives an opportunity of giving their opinions as to the best way of using the additional time. Besides, this very motion, or a similar one, had been passed only last year by the Medical Council, with no obvious effect up to the present time. It is this habit of the Council of discussing the same subject over and over again at short intervals which irritates the Examining Bodies and does not excite the respect of the profession.

THE clinical history combined with the post-mortem examination of the case of Measles and Myelitis related to the Royal Medical and Chirurgical Society by Dr. T. BARLOW at its last meeting constitutes a record of facts of which the neurology of fevers stood much in need. The course of the clinical history pointing to the spinal cord as the seat of the lesion was fully explained by the discovery after death of an inflammation that seemed certainly related to primary vascular disorder. That is a solid fact which may be employed for deductive purposes in other cases of the kind, whether fatal or less severe. It is plain, then, that measles does not preclude the possibility of myelitis. The two processes have worked together in the same organism. That they do not frequently coexist may be regarded as an argument against Dr. BARLOW'S view that the myelitis was as much a part of the measles as the skin rash and the bronchial catarrh. But the definitive settlement of the etiological question appears, indeed, to be yet far from being attained. If we gathered the threads of Dr. BARLOW'S case aright, there was nothing very remarkable in the appearance of the other phenomena of measles. It seems rather inexplicable, therefore, that the spinal cord should, so far as the measles was concerned, be the seat of an exanthematic vascular eruption. The spinal cord is of ectodermic origin, and if measles chooses for its *lieu d'élection* this set of tissues and those of hypoblastic origin too, we might see some force in the belief that the myelitis was as much a part of the measles as the skin rash and the bronchial catarrh. It is not thoroughly known whether the severe measles of Fiji is attended with spinal lesions; but it is certain that malignant measles, or any malignant acute specific fever, is accompanied by grave cerebro-spinal disturbance. The necropsy of such cases reveals great vascular engorgement of the nervous centres; but this fact is, rightly or wrongly ignored—at least as an argument that the measles "came out" in the deeper parts of the epiblast rather than in the more superficial. The pathology of the measles eruption, however, is not yet fully understood. Is it due to a topical action of the measles poison? or does the rash depend on some trophic disturbance of nerve centres? May not the cause of measles produce the cutaneous eruption by virtue of some action on the nervous centres? In malignant cases there is purpura.

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Is this purpura the equivalent, only in a more severe degree, of the papular eruption? It is no argument against the view to urge that the measles papule may be present side by side with the purpura; nor indeed to argue that, as the purpura appears earlier than the papules, therefore they cannot own the same cause; for it is conceivable that a poison acting with greater intensity may both alter the character of its effects and cause those effects to appear sooner. But we must not leave out of sight the other facts of the case described by Dr. BARLOW. The occurrence of measles in adult life, as also the fact that the man was an active member of the police force, and therefore exposed to the action of the weather—and this whilst the measles was incubating, and indeed actually evolving, for the man continued at work till the appearance of the rash,—render it possible that the myelitis accompanying the measles may have been at least partially caused by these somewhat unusual circumstances. Dr. BARLOW, indeed, admitted that such might have been the case, though he also mentioned that a brother policeman of his patient contracted the disease, which ran a usual course, without spinal symptoms. But we have pursued the possibilities of the case sufficiently far. Thanks to Dr. BARLOW, science has become possessed of a definite fact regarding the nature of spinal lesions which may occur in the course of measles. Such vascular lesions have been also discovered in small-pox by WESTPHAL. Now it does not follow that all paralyses occurring in the course of acute specific fevers are manifestations of spinal vascular lesions, and still less does it follow that the post-febrile nervous disorders have such a pathology. Indeed, when a considerable interval elapses before the gradual onset of nervous symptoms, we may reasonably conclude that the lesion is not a vascular one.

Whilst we may freely admit the etiological influence of acute specific fevers in the causation of paralysis, we must also confess that the already ascertained clinical facts do not yet receive that elucidation from pathological anatomy which is their scientific need. The suggestion that cases of acute ascending paralysis in which no lesion can be found may be due to the influence of an autogenetic alkaloid having paralysing effects on the spinal or peripheral nerve motors is a good one, though not one that satisfies the mind of the pathologist.

Annotations.

"Ne quid nimis."

THE IMPENDING ELECTION.

THE arrangements for the election are more or less complete. In Scotland and Ireland we understand the arrangements include provision for the admission at the counting either of candidates or of the agents or friends of candidates. In England the Branch Council has not seen its way to do this. The members of the Branch Council are quite satisfied that the method they have adopted will secure fair play and proper care. And nobody will doubt the desire of the Council on these points. But we strongly urge upon them the admission of representatives of the candidates. It is obvious that only three out of the fourteen candidates can be satisfied with the result. The others ought at least to be satisfied with the methods and the details of the process of election. We are glad to hear that plenty of counters are to be engaged and that the work of counting is likely to be completed quickly. The officials of the Council, who are much pressed with this business and with the work incident to the meeting of the Council, will have need of much extra help. But obviously the result of the election should be announced as soon as possible.

POLLING THE FELLOWS OF THE COLLEGE OF SURGEONS.

AT the ordinary meeting of the Council of the College of Surgeons held on the 11th inst., it was decided to poll the Fellows in order to learn authoritatively how far they are favourable to the admission of Members of the College (*a*) to vote for Fellows as members of the Council, and (*b*) to a seat on the Council. We must congratulate the Council on their concession, tardy though it is. Hitherto they have not deemed it expedient to grant either of these two points, chiefly on the grounds that it is neither wise on behalf of the College, nor just to the Fellows themselves, "by whom alone they have been elected to office as the governing body of the College," to diminish the privileges and status of the Fellowship. These arguments are specious rather than forcible, and savour of the ultra-conservatism which has so long characterised the proceedings of the Council. We shall look forward with confidence to the result of this poll, hardly doubting that the majority of the Fellows will be in favour of the two proposals. For our own part, we quite fail to see how the privilege of voting is lessened by being shared with others, and how the academic status of the Fellowship will be endangered by allowing Members to take part in the management of the College. So far, it is the Council who have lowered the academic status of the Fellowship, and who propose still further to widen the basis and facilitate the acquisition of this diploma. They have gone so far in this direction that, at the general meeting on the 4th inst., a resolution was passed by the Fellows and Members practically declining the distinction on the terms proposed. Fellows will do wisely to vote in favour of the two proposals, if only in order to bring the present deadlock to an end, for the Council will not be able to obtain the alterations in the Charters which they desire in the face of the organised opposition of the Members at large. Until they do so Fellows will not secure the proxy voting, which is one of the objects sought by the Council in their proposed new Charter.

MUSCULAR PERCUSSION REFLEX AS A METHOD OF CLINICAL INVESTIGATION.

WHEN the chest wall is subjected to a tolerably smart blow with the finger or percussion hammer, an elliptical elevation of the surface may frequently be observed for a few moments after the blow. This fact, which has been remarked by Mr. Lawson Tait, Dr. James Ross of Manchester, and others, has acquired some importance from the somewhat analogous observations of Westphal, Erb, and others on the tendon, osteal, periosteal, and muscular percussion reactions. Quite recently, too, a Russian author (Dr. V. V. Philipovich of Odessa) has investigated the conditions under which the phenomenon is produced showing that it may be made available like other reflexes for diagnostic and clinical purposes. In his observations he made use of a percussion hammer furnished with a spring and an index by means of which the force of each blow was registered. The pectoral regions of 100 presumably healthy young men were examined. The lowest force required to produce the phenomenon—which, by the way, Dr. Philipovich proposes to style "loco-tetanus," instead of "idio-muscular contraction," the term used by Dr. Ross—was 400 grammes, and the

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highest 2000 grammes. On analysing the observations, it was evident that the lower degrees of force were invariably sufficient in weakly and ill-formed subjects who had been either permanently or temporarily rejected by the recruiting authorities. Still lower figures were obtained on the examination of diseased persons, the lowest of all being afforded by phthisical patients. In all chest cases it was noticed that the "loco-tetanus" was more easily produced on the side where the disease was situated, or on that where it was the more extensive; thus in a case of dry pleurisy of the right side the figures obtained were—for the sound side, 550 grammes, and for the diseased side 150 grammes. The mean force required in the 100 healthy subjects was 750 grammes on the right side and 850 grammes on the left; and as the limit of that which could usually be borne painlessly by healthy persons with the instrument used (the head of which was a metal ball covered with gutta-percha) was about 700 grammes, it may be roughly assumed that if the contraction can be produced by a tap, the force of which is much below that which is sufficient to cause pain in a healthy subject, some pathological condition is probably present, or at least that the general state is below that of a vigorous man.

THE DISTINGUISHED SERVICE ORDER.

THE *Gazette* of Nov. 6th contains a notification of the creation by Her Majesty of a naval and military order of distinction under the title of "Distinguished Service Order." It has been founded "for the purpose of rewarding individual instances of meritorious or distinguished services in war," for which the means in existence are stated to be limited. We do not propose to discuss the question whether this multiplication of honorary distinctions for a zealous and efficient discharge of duty has not been carried to an injudicious length, or whether it may not be deemed evidence of the decadence of that grand old patriotic feeling by which our officers—naval and military—used to be actuated, and which produced heroes of whom the nation may well be proud. But accepting it as one of the changes which, for good or for evil, have been introduced into the naval and military services in our days, we find serious objections to the conditions on which this distinction is to be conferred. It is to be confined to commissioned officers whose "services shall have been marked by the especial mention of his name by the admiral or senior naval officer commanding a squadron or detached naval force, or by the Commander-in-Chief of the forces in the field, in despatches for meritorious or distinguished service in the field or before the enemy." This is quite in accordance with the military traditions which ignore all service but that in front of the enemy, and regard bulldog courage as the highest qualification in an officer. The meritorious work by which an army is maintained in a state of efficiency, the arduous services rendered at the base of operations by the officers in command of the depôt, the medical officers in charge of hospitals, and the officers entrusted with the important duty of providing the necessary supplies, are entirely ignored, and that alone is to be considered "distinguished or meritorious" which is performed in the field under the eye of the Commander-in-Chief. And yet how much of the success of a campaign depends upon the efficiency of the work done by these ignored branches, and when any hitch occurs how speedily are they remembered in the distribution of censure—often upon very insufficient grounds. We have always held, as regards medical officers, that the rewards conferred upon them for professional work have been very inadequate to the labour and responsibility involved in the efficient performance of it—in fact, have scarcely existed. We cannot but regret that in instituting a "Distinguished Service Order" Her Majesty has not been advised to make provision for the reward of medical officers who perform meritorious or distinguished service in the conflict with epidemics, and with those diseases which extinguish an army much more surely than the artillery and rifles of an enemy. A large number of them must be employed under circumstances involving much labour and responsibility, and they are necessarily kept, however unwillingly, in positions which preclude the possibility of this honorary distinction for "meritorious service" being conferred on them, at least under the regulations just promulgated. The limited means of rewarding distinguished services is the reason given for the creation of this new order; surely, judging by the rarity with which such rewards are bestowed, there is no branch of the service to which this description appears to be more justly applicable than to the officers of the Medical Department.

PARKES MEMORIAL PRIZE ESSAY.

IT must be a satisfaction to Dr. Andrew Duncan's numerous friends in England and on the Continent to hear of the generous and hearty welcome accorded to the news of his having been the successful candidate in the competition for the Parkes Prize Essay. All branches of the naval and military services bear ungrudging testimony to his merits and high qualifications, whilst his *confrères* of the Indian Medical Service are pleased that the prize has fallen to a member of their own body. Dr. Duncan has shown himself to be not only a gallant officer in the field—as when he received his wound before Cabul,—but a practical medical officer who thoroughly understands the duties appertaining to camps and campaigns. The establishment of the Parkes Memorial Prize ought to be an inducement for men of first-rate abilities to join the services, since one of the great objections raised by men of that stamp has been hitherto that merit was altogether thrown away in the military and naval service, that a man had no chance of bringing himself forward, and that those alone who took pains to keep in with the authorities had any chance of getting good berths. Much of that is still true; still, however, there is a better chance now of a first-rate man making his mark than when, say, Parkes first retired from the service in despair. The establishment of a medical school at Netley has been a great help to many, and there can be no doubt that the military medical service is gradually becoming more popular, and that an improved stamp of man enters its ranks every year. In order to increase and maintain this popularity it is incumbent on the authorities to encourage especially those officers who show signs of marked ability, and to reward reports of exceptional merit. A little more liberality and foresight in the past would have drawn many men to the service who have hitherto held back, feeling that they might not be permited a free expression of their views in the event of their taking up scientific researches in connexion with their duties.

THE PERILS OF FOOTBALL.

SCARCELY has the football season got into full swing ere our attention is again directed to the very dangerous nature of the game by a sad fatality. Daniel Houghney, a married man, whilst playing in the Football Cup Tie Match on Saturday last, near Glasgow, between his club, the Mearns Athletics, and the Howood Club, was struck in the abdomen by the knee of an opposing player. Houghney was carried off the field and died on the following day. It is also stated that three other players of the Mearns Club were injured. We are not acquainted with the particulars of this sad case, and do not know whether the play was unduly rough, but we do not hesitate to say that football nowadays too often degenerates into a species of "free fight." The number of broken legs and other accidents already sustained this season bears tribute to this. We have

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no wish to see the game done away with. It is enormously popular, and affords recreation and exercise to thousands, many of whom, were football abolished, might spend their spare time in a much worse manner. But we are strongly of opinion that it must be modified. Surely regulations could be devised which, whilst retaining the manly character of the game, would reduce the undue element of danger. It is regrettable that at some schools the playing of football by the boys is made a compulsory matter. At schools the game is played under the best conditions, the masters being able to check any unduly rough play, and the players being boys, not men. But no boy should be compelled to play such a game as football.

MOBILITY OF THE HEART.

DR. M. M. SHERSHEVSKI publishes in the *Vrach* a paper on the mobility or displaceability of the heart. The fact that the heart's position is liable to slight changes according to the position of the body has been recognised by Bamberger, Gerhardt, Luschka, and other observers, but they have none of them formulated the conditions under which it takes place. Dr. Shershevski gives details of the examination of forty persons, all of them free from cardiac and pulmonary affections, in whom he noted accurately the position of the heart's boundaries in the upright dorsal, left lateral, and right lateral positions. The chief mobility was towards the left side, but the heart was often quite perceptibly displaced to the right, as well as downwards and even backwards. The chief conditions under which this occurred were youth, nervous states, and freedom of the vessels from signs of sclerosis. Displacement backwards was found in nearly half the cases, and this shows that the heart ought to be examined in the upright posture. The writer specially remarks on this when the examination is made as a prelude to the administration of chloroform, whereas, as a rule, the stethoscope is applied when the patient is lying down and in a very agitated frame of mind, which latter condition always renders the organ more easily displaced; and the diminished diameter due to this may lead to erroneous conclusions if the measurements be not previously taken in an upright position. This has reference chiefly to young persons. In the case of subjects over sixty years of age, and of much younger persons whose arterial system had already begun to show signs of degeneration, there was little or no displacement produced in any position.

H.M. TROOPSHIP "EUPHRATES."

WITH the arrival at Portsmouth on the 16th inst. of the troopship *Euphrates* the episode of attempted quarantine at Suez of nearly 1300 men, women, and children, in addition to the crew, has come to an end. The British Government having threatened that unless the vessel were allowed to pass through the Suez Canal unhindered she would return down the Red Sea and make her way home by the Cape route, the authorities gave in, and she made her way home without touching anywhere between Suez and Portsmouth. The *Euphrates* left Bombay on Oct. 16th, and on the 18th two soldiers exhibited symptoms of cholera. The official report speaks of the symptoms as mild, but, notwithstanding all efforts to save them, the men died the same day. Every precaution was then taken to stay the spread of the infection, but in the meantime two more deaths occurred—one on the 20th and the other on the 21st. With these deaths the fatal attacks ceased, but two other non-fatal attacks also occurred. After the vessel had passed Perim no further indication of cholera manifested itself, and our Government refused to allow the troops, passengers, and crew to be subjected to the risk of detention at an unhealthy quarantine station on the shores of the Red Sea, where no proper arrangements exist for the decent accommodation of either sick or healthy. The result is that the vessel reached Portsmouth with a clean bill of health, and was at once granted free pratique and entered the harbour. Ample preparations had been made on board the two quarantine vessels stationed at the Mother-bank to receive any sick or suspected cases, had any such existed; but, as is usually the case, a sea-passage on board a healthy and well-kept ship turned out to be the greatest preventive against the spread of cholera. What the result would have been if the alternative method of landing the passengers and crew on the shores of the Red Sea had been adopted may be easily imagined; and we trust that the Government, having once made a precedent of the case of the *Euphrates*, will not again allow the Egyptian Board of Health to interfere with British vessels which, touching at no foreign port on their route, are sailing direct to British ports, where the sanitary authorities should be quite competent to look after their own interests. If the landing of any sick at a quarantine station is held to be requisite by the medical officers in charge of the troops or passengers in their own interests, it is a different matter. But even an infected vessel sailing straight to one of our own ports constitutes no source of danger to other nations, and as such should not come within the jurisdiction of any authority claiming international power.

HOSPITAL AUTHORITIES AND THE INSANE.

THE question has been once more raised whether hospital authorities can be held to be responsible for the safety of persons who having attempted suicide, are successfully treated in the wards or in an emergency room. A case in point has just occurred in connexion with the Middlesex Hospital, to which Arthur Cook Egan, the young man who recently attempted to kill his wife and then committed suicide, was taken after he had previously swallowed laudanum. It should be clearly understood that the officials and authorities of hospitals have no sort of responsibility for the safe custody of persons who are treated on their premises when they recross the threshold. These persons are brought to the hospital sometimes by policemen and sometimes by friends, and after being treated they leave or are taken away. The question now somewhat ungraciously reopened is a very old one, and it cannot be effectively answered without a little plain speaking. The responsible medical officers—we mean the salaried medical or surgical officials of these charities—ought to make it clear to the police and the public, and to coroners, who may perhaps censure them, that they expressly decline all responsibility in the matter. In the days when plainer speaking and more direct action were in fashion, we remember how this question was treated on its merits by more than one spirited official. Nothing so much conduces to the irregular discharge of official duty as the ludicrously short-sighted policy of coroners and juries who cast about censures as carelessly as scandal-mongers scatter aspersions. Let it be once for all understood that, whether the sick, or poisoned, or injured person brought to a hospital for relief be a criminal or a lunatic, the officials of the charity have no sort of concern with anything beyond the limits of their strictly professional duty. If he be criminal, they are neither constables nor gaolers, and he may depart when their work is done. If he be insane, it is not for them to take measures for his being placed in safe custody. Nor will hospital authorities undertake or permit their officers to perform any of the duties which it is sought to impose upon them. This, we take it, is the answer of the medical authorities of hospitals to such riders as that which the jury appended to the verdict in the case of the young man Egan, and it is one which ought to be generally

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understood. The simple and sole work of the hospital is to succour the *sick;* the law must provide for anything else that public prudence may demand.

THE LONDON UNIVERSITY CLUB AT MANCHESTER.

THE first annual dinner of the members of the London University Club at Manchester was held on the 13th inst. The Club, which has only recently been formed, has over 100 members, and there was a large attendance at the dinner. Sir Jas. Paget, Vice-Chancellor of the London University, was the guest of the members. The President, Sir H. E. Roscoe, proposed the toast of "The London University," giving a short account of the origin and progress of the institution, to which Sir James Paget responded. Both the proposer and seconder of the toast made some remarks as to the position of the University as a teaching body, and to these we shall probably refer at greater length next week. Sir James also proposed the toast of "Success to the Club," to which Dr. Leech responded. Sir W. Roberts proposed "The Sister Universities," to which Professor Ward replied; and Professor Greenwood gave "The Health of the Visitors," to which Mr. Lund and Mr. H. J. Roby responded.

DIARRHŒA FATALITY IN SHEFFIELD.

DR. SINCLAIR WHITE, in submitting to the Town Council of Sheffield a statistical report for the third quarter of the present year, takes the opportunity of referring in some detail to the question of infantile diarrhœa. The third quarter of the year is usually associated with the occurrence of this fatal infantile disease, and during the past quarter the effects have been, as described in the report, truly terrible. No fewer than 357 deaths have occurred from it, and of these 67 took place in one week. Of the 357 deaths, 330 were in children under five years of age. The seasonal influence in connexion with infantile diarrhœa is too obvious to need discussion; but, as Dr. White says, there is something more than season as a cause to consider, and he is convinced that the two additional causes which stand out most prominently are (1) improper feeding of infants, and (2) filth in its widest sense. The seasonal influence taken by itself does not cause epidemic diarrhœa, as has again and again been shown by contrasting neighbouring towns where heat and rain have been alike, but where the diarrhœa mortality has been altogether different; and, as is stated in the report, it is clear that this seasonal influence can only be dangerous where other favourable predisposing causes are present. Remove these and seasonal influence is practically inoperative for mischief. As regards the question of infant feeding, it is suggested that the Health Committee might with great advantage cause to be drawn up and printed for wide distribution simple hints which would be helpful to mothers and others. The filth difficulty is a greater one in a large borough, where the almost ubiquitous midden is in many places a serious nuisance. In the more crowded parts of the town these antiquated receptacles for filth, with their seething contents, are referred to as giving off offensive gases which pollute the air of the badly ventilated courts; and it is precisely such an influence as this that the sensitive organisation of childhood cannot withstand. From the remarks made in the report as to the small space about houses, it is quite evident that in many portions of the borough the ordinary midden-privy can only be properly replaced by some form of watercloset; and it is worthy of consideration whether some of the simple forms of this closet, which have recently been adapted to the needs of the poor and careless, might not, at least tentatively, be brought into operation in Sheffield. It is difficult to abolish a system to which people have been long accustomed, but there are now definitely recognised principles on which even midden-privies can be constructed with a minimum of risk to the people; and we fear that, although much has been done and is still doing in Sheffield, this subject has not yet been handled with determination. And, lastly, in addition to securing proper structures, with contents as dry as can be obtained, the authority should so arrange its scavenging department that no excreta and refuse should ever be left for many days in the vicinity of dwellings. A week should, in such a borough, be the outside limit at even the coldest times of the year, and a much more frequent removal of the filth causing such grave mortality should be insisted on during the diarrhœa season. We sincerely trust that Dr. Sinclair White's advice in these directions will be energetically followed, so that the amount of filth in Sheffield next autumn may be trivial compared with that which existed last year, and that in this way a prime cause of serious mortality may be effectually dealt with.

MR. FREDERIC HARRISON ON CITIES.

WE may not agree with Mr. Harrison on all questions, but it is impossible to dispute the intensity of his convictions. In spite of his fine pictures of ancient and mediæval cities, with their ample gardens and squares, their social life, and their State importance, we are disposed to be thankful that we live in modern London, with its comparatively pure water and pure air. But there is no need for too much complacency, and we may well lay to heart some of Mr. Harrison's criticism. We must, above all, have more room and open spaces. Not only must we jealously guard the spaces that yet remain in this monstrous conglomeration of towns which we call London, but we must create others, in which trees and flowers will grow for the revival of human spirits, and in which gymnasia may be established for the good of the young. The division of London into eight or ten separate counties, each with its own public libraries, public buildings, museums, baths, &c., may not be inconsistent with some common citizen life. The first condition and beginning of such a desideratum is the creation of intermediate spaces. And the time is favourable for this when ground is not so impracticably dear as it sometimes is.

MILK INFECTION: A SUGGESTION.

DR. JAMES F. ALLEN, medical officer to the Corporation of Pietermaritzburg, has written a very suggestive report on the causes of enteric fever in that city. Pietermaritzburg, he says, is in fair sanitary condition. It has a public water-supply, and the houses in which enteric fever made its appearance were not those in which any local condition of house construction could give rise to it. Last year this disease broke out round a small dairy on the outskirts of the town, the occupants of the farm entirely escaped, so far as he could ascertain. In this dairy specific enteritis among the calves had been very fatal; all the calves contracted the disease, and in each case it ended fatally, eight or nine dying altogether. The proprietor of the dairy states that the pasturage round his house is very unhealthy, and last year the calves were therefore kept tied up; nevertheless they did not escape the disease; but Dr. Allen notes that full-grown animals are exempt from it. As a rule, the calf disease made its appearance in this farm late in the summer, but last year the first calf must have died about the end of July or the beginning of August. Thirteen cases of enteric fever occurred altogether among persons resident in the neighbourhood—one in August opposite the affected dairy, the family of the sufferer receiving milk from this source. In another house five cases occurred among a household of seven. This household did not receive milk from the suspected dairy, but they used for fuel cowdung collected in the neighbourhood—not from

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the affected calves, for these were tied up; but perhaps from other animals suffering from the same disease. In another family two cases occurred, and in this house cow-dung was also used for fuel, the source from which it came being unknown. Another case occurred in the person of an infant at its mother's breast, but this child, the mother states, received no other milk than her own. Concerning the household, no distinct mention is made of the fuel used for burning. The remaining four cases were all in one house; milk was not received by this household from the suspected dairy knowingly at the time of the appearance of the first case, but during this child's illness this dairy supplied the milk for the rest of the family, but it was at this time regularly boiled. Later, however, this precaution was neglected, and three other persons then contracted enteric fever. There is to be found in these cases nothing more than a suggestion that the bowel discharges from the animals in the dairy may have been concerned in the production of some of the cases of enteric fever in the neighbourhood. Dr. Allen has omitted to state the total number of households using for fuel the material which he suspects has given rise to disease, and the whole facts are therefore not sufficiently before us to enable any positive opinion to be formed on the subject; but Dr. Allen's story is well worth bearing in mind in any further investigation into the etiology of this disease. In another report Dr. Allen insists upon the simultaneous appearance of enteric fever among the inhabitants of the neighbourhood of farms and the appearance of what he describes as specific enteritis among the calves. He states that he examined the mesentery and small intestine of one of these animals; that he found the mesenteric glands enlarged, and in the intestinal mucous membrane evidence of the same diseased action as is to be found in that of human beings after death from enteric fever—thus ulceration and patches of inflammation involving Peyer's glands are to be found in both diseases; and he asserts that the two disorders in Pietermaritzburgh at least are always found together.

TRAPS FOR PUBLIC ANALYSTS.

MR. W. E. TAYLOR, town councillor of Bedford, has obtained an unenviable notoriety by his attempt to throw discredit on chemical analysis. With motives which doubtless seemed excellent to him, he arranged with a gentleman whom he describes as a "chemist of standing in his profession," to put poison into beer which was, under the provisions of the Sale of Food and Drugs Acts, forwarded to the public analyst for examination. The public analyst naturally did not seek for or find the poison, and as he chanced to be a man equally distinguished in chemistry and toxicology he can well afford to laugh at the device of the town councillor, But as the same trick may at any time be practised upon a young and unknown analyst, it is desirable, although to our readers unnecessary, to point out its absurdity. Our task is rendered easy by the crushing comments which Professor Corfield and Messrs. Bernard Dyer and Otto Hehner, the honorary secretaries of the Society of Public Analysts, have printed in *The Times*. Let Mr. Taylor and other town councillors who may wish to emulate his notoriety understand that the detection and exposure of fraudulent adulterations under specific Acts of Parliament necessitate a procedure diverse from that required for the detection of criminal poisoning. No doubt commercial adulteration is sometimes of a noxious kind, as when red lead has been added to cayenne pepper; but that is a very different thing from the addition by accident, or for merely criminal purposes, of a definite poison. We have been foremost in denouncing adulteration as a trade fraud in all cases, and as a grave offence against public health when a noxious substance has been used; but we distinguish entirely between the addition of water to milk—additions made only for a fraudulent purpose—and the addition, say, of arsenic to beer or aconitine to tea. No doubt a milk vendor may introduce a deadly dose of arsenic into every pint of milk that he sells and escape detection by the public analyst. But such an addition would not profit the vendor, and would be purely malicious—an offence against the common law. The dealer could have no commercial object in view, and the Acts are directed against commercial offences. If public analysts were compelled to search for all possible poisons in every sample of food or drugs submitted to them, the laws in regard to adulteration would soon become dead letters.

CALOMEL AS A DIURETIC.

THE virtues of calomel have in these days come to be somewhat undervalued—a reaction doubtless from the indiscriminate prescription of former times. Dr. Mendelsohn (*Deutsch. Med. Woch.*, No. 45) calls attention to its value as a diuretic, especially in cardiac dropsy, basing his remarks upon papers recently published by Dr. Jendrassik of Pesth and Dr. Stiller. The former, having noticed the marked diuresis which ensued in a severe case of cardiac dropsy after the administration of jalap and calomel, found by further observation of other cases that this effect was due to the calomel, and not to the jalap. In the great majority of the cases the daily quantity of urine reached from two to five or more litres on the second to fourth day of calomel treatment. Stiller's experience is confirmatory of this, and Dr. Mendelsohn adds his own testimony to the value of the prescription. He says that when calomel is prescribed in doses of from 0·2 to 0·3 gramme (i.e., 3 to 5 grains) three times a day, diuresis occurs within eight hours. It is not necessary to induce salivation to get this result, which often takes place with surprising rapidity; the anasarca and serous effusions disappear, and the patient is much relieved. It is said even to be more effective than digitalis, squills, and other remedies in certain cases, especially when the pulse-tension is not very low. Calomel does not, however, act through the heart, and is often advantageously combined with digitalis.

THE MURDER IN CORNWALL.

THOMAS POLGLASE, aged forty-eight, miner, was charged with feloniously, wilfully, and of malice aforethought, killing and murdering Charles Shearman, at Breage, Cornwall, on July 19th, 1886. He was tried on Saturday, Nov. 8th, before Baron Huddleston. The main facts of the case, as presented to the jury, were as follows. The prisoner left his house in the early morning to examine a rick, near which was some loose hay; he observed what he seems to have believed to have been a human being, with the body partly covered. No answer was given to a challenge made and repeated by the prisoner, whereupon he repaired to his cottage, seized a turf-axe, returned to the rick, and still getting no reply, he forthwith smashed in the skull of his unfortunate victim. Shortly afterwards he went to the police and stated what he had done. Dr. Adams, medical superintendent of the Cornwall County Lunatic Asylum, instructed by the Treasury, examined the prisoner with a view to testing his state of mind, and came to the conclusion that, though of weak intellect, he was not insane—taking mainly, as we suppose, delusions as the test of insanity. At the same time Dr. Adams was of opinion that the prisoner was beside himself at the time the tragedy occurred, or that whilst committing the act under the influence of terror he was not aware of the probable consequence. The judge ruled that the opinion of a medical man as to the prisoner's state of mind at the time when he had no means of examining him was inadmissible as evidence. In his summing up, his Lordship followed the rules sanctioned by the law. He told the jury that if they thought that the prisoner knew what

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would be the result of the onslaught and that he was aware he was committing a wrongful act, he must be judged guilty of the crime of murder. The jury, whilst convicting the prisoner of the capital charge, unanimously recommended him to mercy. From a technical standpoint we have no desire to traverse the ruling of the judge. The law of England makes the knowledge of right and wrong the test of insanity. That it is utterly defective has been proved on more than one recent occasion. A man may know that he is committing a wrong act, but may be absolutely incapable of restraining himself. This is what is known as impulsive homicide. It seems to us that there was no actual premeditation or "malice aforethought" in the sense in which those terms are intended to be construed. From the time the prisoner discovered the deceased until the fatal blows were delivered his acts may be considered as one. He was evidently under the influence of over-awing fear that harm might come to himself, and prompted by the means of self preservation the deed was done. If the prisoner were of sound mind, it is obvious that the defence of excusable homicide could not be maintained, for there was no adequate incitement to kill. "Death by inadvertence or misadventure" is a theory wholly inapplicable to the case under consideration. We are unreservedly of opinion that the murder was committed under an irresistible impulse, and the condemned man must be held irresponsible for the act.

THE WORK OF THE COMBE TRUST IN SCOTLAND.

THE trustees of the late George Combe, as is generally known, have for some years past carried on a highly beneficent work in various districts of Scotland, in the shape of the delivery of courses of lectures on Physiology and Health. These lectures were inaugurated seven years ago, at the suggestion of Dr. Andrew Wilson, of the Edinburgh Medical School, who was consulted by the trustees regarding the manner in which the wishes of Mr. Combe could best be carried out. Dr. Wilson has conducted these courses since their commencement in the principal centres of Scotland, other lecturers having from time to time been occasionally engaged in the delivery of lectures in the north and west, while Dr. Stirling has lately undertaken a course in Manchester. At Dundee, Perth, and other towns audiences ranging from 1000 to 1800 in number have attended Dr. Wilson's instruction. During the present year eight towns are on the list for Combe Lectures. Thus the pre-Christmas courses include Kirkcaldy, Penicuik, Carluke, and Airdrie. In the spring of 1887 Dr. Wilson visits Grangemouth, Coatbridge, Bonnyrigg, and Dumbarton. To the teachers of Edinburgh and Glasgow Dr. Wilson will deliver, in the summer of 1887, his third annual course of lectures, the subject being "Health as related to the School and the Home." It is needless to add any word of commendation by way of approval of this humane work of the Combe Trust. Lessons of health, taught clearly and forcibly to the masses, are calculated in the long run to work an immense amount of good.

GUY'S HOSPITAL.

THE following changes have recently taken place in the Guy's Hospital Medical School:—Dr. Goodhart, having been appointed full physician, retains his lectureship on Pathology, but resigns the posts of Curator of the Museum and Senior Demonstrator of Morbid Anatomy; these are filled by Dr. Carrington. Dr. Pitt has been appointed to the post of Junior Demonstrator of Morbid Anatomy. Dr. Taylor lectures on Medicine, together with Dr. Pye-Smith, thus filling the lectureship vacated by the death of Dr. Moxon. Dr. Hale White lectures on Materia Medica in place of Dr. Taylor.

VOMITING DURING PREGNANCY CURED BY ARTIFICIAL ALIMENTATION.

DR. BRUNNICHE, in the *Nordiskt Medicinisk Arkiv*, relates the case of a woman who was in the hospital for two months with cardialgic symptoms. She had pain, particularly in the left side of the epigastrium, which was diminished by pressure. She could retain no food, not even milk, and sometimes vomited blood. Urine normal; no fever; temperature 37°. She was treated for a time for gastric ulcer. No symptoms of pregnancy could be found by external examination. The patient became greatly emaciated, vomited everything, and was greatly reduced after sixteen days. Strong suspicions of pregnancy were now entertained, and Dr. Brünniche determined to try artificial alimentation. A sound was introduced into the upper part of the œsophagus and milk poured through it. Other nourishment was also administered in the same manner. An attempt to dispense with the sound brought on another attack of vomiting. Artificial alimentation was therefore continued for three weeks. At the end of this time the woman had entered on her fourth month; she began to take food, and entirely recovered. Dr. Brünniche remarks that he got the idea from the treatise of Dr. E. Bull.

POOR-LAW MEDICAL OFFICERS AND THEIR FEES.

MR. E. A. PIGGOTT, L.R.C.P. Edin., medical officer for the Second District of the Risbridge Union (Suffolk), has found it necessary to take proceedings in the Haverhill County Court against the guardians of this union for the recovery of a midwifery fee, due to him by virtue of an order granted by the relieving officer for his attendance upon a woman immediately after childbirth; the case being one of post-partum hæmorrhage entailing long subsequent attendance. Payment of the fee (£2) was refused, the reason for such refusal being the fact "that the guardians did not consider that their medical officer was entitled to a fee under the General Consolidated Orders of the Local Government Board." The case was to have been heard at the November sitting of the court, but a few days previously to the date of hearing the defendants thought it expedient to pay the amount claimed into court, thus admitting their liability and avoiding the expense of costs, &c.

SYPHILITIC INFECTION BY THE RAZOR.

PROFESSOR FLEISCHER recently reported to the Kieff Medical Society a case occurring in his practice where a man had contracted syphilis from an infected razor in one of the best hairdressing establishments in Kieff. The society thereupon decided to call the attention of the sanitary authority to the subject, in the hope that it would make regulations to obviate a repetition of such an occurrence. Another case of the same kind has also been published lately. It was that of a soldier, who had been infected with a primary sore of the chin from being shaved in a public shaving establishment in Tiflis. This case was shown to the Caucasian Medical Society by Dr. Chudnovski.

THE TREATMENT OF DIPHTHERIA.

THE heroic treatment of diphtheria has once more come to the front. Dr. Bloebaum of Coblentz advocates the employment of the galvano-cautery by means of an apparatus which is constructed by Messrs. Buehl, of 75, Coleman-street; and Dr. Nix of Rude, Denmark, recommends a still more radical method of scraping away the false membranes daily with a sharp spoon. Both authors adhere to the view that diphtheria is primarily a local disease. The object of the first-named is to destroy by fire the micrococci of diphtheria, which are regarded as its cause; and the aim of the Danish

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physician is to extirpate the soil in which the cause of diphtheria is growing. We are glad to be informed of current attempts at improving the therapeutical art, and we wait patiently for the ultimate issue of such renewed attempts.

VAN HELMONT.

BRUSSELS is about to do honour to the University of Louvaine in the person of one of its most distinguished students of former times, Jean Baptiste Van Helmont, the celebrated doctor and chemist, to whom a statue is to be erected on the Nouveau Marché aux Grains. Van Helmont was born in Brussels in 1577, and at the age of seventeen had completed his studies of philosophy at Louvaine, and, it is said, appeared there as a public lecturer. He then set off on his travels and acquired a great knowledge of chemistry, to which he afterwards devoted himself. When in England he was presented at Court and invited to the brilliant entertainment given at Whitehall. He had already gained considerable reputation as a medical practitioner, and had introduced the use of sulphur, oil of vitriol, and other remedies. He was the first, in a work on the waters of Spa, to use the German word *geist* (ghost or spirit) to denote the air on which the properties of those waters depend—whence the modern word gas. Amongst his many other discoveries was that of the gastric juice. Van Helmont died in 1644, at the age of sixty-seven, of asthma and pleurisy, shortly after he had published his famous work on Fever.

DEATH OF BISHOP McDOUGALL.

WE regret to record the death, which took place on the 16th inst. at Winchester, of Bishop McDougall, Archdeacon of the Isle of Wight and Canon of Winchester. The deceased was born in 1817 at Sydenham and educated at King's College, London, for the medical profession, where he obtained the gold medal in 1837. He became a Fellow of the Royal College of Surgeons of England, and for some time acted as Demonstrator of Anatomy at King's College. In 1845 he was ordained, went with Sir James Brooke to Borneo in 1846, and four years afterwards was consecrated Bishop of Labuan, The deceased returned to England in 1868, and was appointed by the Bishop of Ely to the vicarage of Godmanchester, a canonry of Ely, and the archdeaconry of Huntingdon; and at Bishop Harold Browne's translation he took him to Winchester, where alike in the diocese, the chapter, and in Convocation his genial manners obtained for him high regard and esteem.

HONOURS TO THE MEDICAL PROFESSION.

ON the 16th inst. the Queen held an investiture at Windsor Castle. Amongst those who were introduced into the presence of the Sovereign were William Orange, M.D., and Arthur Mitchell, M.D., upon whose breasts Her Majesty affixed the decoration of the Civil Division of the Third Class of the Order of the Bath. Surgeon-General Michael Cudmore Furnell was afterwards introduced, and decorated with the Badge of a Companion of the Order of the Indian Empire.

NEW OPERATION FOR PROLAPSUS UTERI.

A MEXICAN medical journal gives an account of an operation practised by Dr. Malanco for the purpose of forming a kind of false uterine ligament in cases of prolapsus. It consists in passing a trocar from the anterior vaginal fornix to the abdominal wall (taking care, of course, to avoid the bladder), and in applying the actual cautery to the track by means of a thermo-cautery inserted through the cannula from the front. The proceeding, which was first proposed by Dr. Fenelon, of Mexico, is stated to have been employed several times with the most successful results.

THE DECLARATION OF THE POLL.

THOUGH one day is considered enough to count the votes, there is reason to fear that the profession may have to wait till the 29th for the declaration of the poll. This delay will be most unsatisfactory, and will be attributed by the profession, and justly, to the shocking waste of time by the Medical Council in its present fruitless sittings, which threaten to extend into next week.

"DESCRIBED AS A MEDICAL MAN."

IT is surely due to the honourable profession of medicine that officials of our police and other courts, and those responsible for reports in newspapers, should take steps to ascertain whether a prisoner "described as a medical man" has any legitimate claim to that title. A recent shocking case, in which a prisoner has just been sentenced to hard labour for twelve calendar months, is published as an "extraordinary assault by a medical man." The name of the prisoner in question does not appear in the Medical Register or in the Medical Directory; he is, we believe correctly, described in *The Times* as a "medical rubber." The honour of our profession, exposed as it is to the risk of false charges, cannot be too jealously guarded.

TESTING THE RABIDITY OF DOGS.

MR. VICTOR HORSLEY writes to say that Dr. Hime was not the first in this country to test the rabidity of a dog (that had bitten an individual) by Pasteur's method. On June 1st Mr. Horsley made an examination of a dead dog sent by Dr. Peart of North Shields to the Brown Institution. The dog had bitten a young lady. Mr. Horsley proved by the post-mortem appearances and inoculations of rabbits that the dog did not die of rabies. The young lady, though advised to go to Paris, declined to do so, and her refusal was scientifically justified, for the rabbits inoculated with the dog's medulla did not die.

STEPS are at length being taken at Cambridge University to provide Professor Michael Foster with additional accommodation for the teaching of physiology. Dr. Foster found himself confronted this term with a class of nearly 100, who were to receive practical instruction in a room capable of containing about 80. He accordingly laid before the University the alternative of diminishing his class by about half or providing fresh room. Naturally the latter alternative was adopted, and the Museum Syndicate have recommended the erection of a large lecture room on the east side of the Museum of Comparative Anatomy, at a cost of about £450.

OUR Belfast correspondent writes:—"Considerable discussion is taking place here in the papers and in private circles in reference to the vacant seat in the Royal University; indeed, it is exciting more interest than the election to the Medical Council of a representative. Many think that the fairest course is that which was taken by the Presbyterian Graduates' Association, who passed a resolution 'That, recognising the claims of the southern graduates and Cork College to a fair representation on the Senate of the Royal University, we do not see our way to nominate a candidate in opposition to the candidature of Professor O'Sullivan, M.D.'"

As the retirement from the Service of Brigade Surgeon James Keese, M.D., L.R.C.P.L., the Principal of the Medical College and senior medical officer to the General Hospital, Madras, is fast approaching, his numerous friends and past and present pupils have decided to perpetuate his name by founding a scholarship in connexion with the Madras University, of which he is a Fellow.

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THE latest reports from Jamaica state that the outbreak of small-pox at Kingston is increasing. The total number of cases under treatment since the commencement of the epidemic was at the time of the departure of the mail 422, and there had been over forty deaths. Kingston is reported to be in a very insanitary state, and the authorities seem totally unable to carry out the duties imposed on them. The epidemic in Colon is decreasing rapidly.

THE fortieth and concluding volume of the Dictionary of Practical Medicine and Surgery, which has been brought out by Dr. Jaccoud, Professor of Clinical Medicine in the Faculty of Medicine of Paris, has just appeared. The complete work, the production of which has occupied many years, contains 33,000 pages and 3600 illustrations.

AT a meeting of the Society of Medical Officers of Health this (Friday) evening, Mr. Mark Judge will make a communication on the subject of the Sanitary Registration of Buildings Bill for the purpose of discussion by the Society. The Bill is to be brought before Parliament during next session by Dr. R. Farquharson, M.P.

IN the High Court of Justice, Chancery Division, on the 13th inst., Mr. Justice North made an order giving the sanction of the Court to the alteration of an existing scheme by the enlargement of the number of, and the change in the mode of electing, curators of the Botanical Gardens and Museum at Oxford.

JOHN SYER BRISTOWE, M.D., F.R.C.P., F.R.S., has been re-elected Physician to St. Thomas's Hospital for a further period of five years. Joseph Frank Payne, M.D.Oxon., F.R.C.P., has been appointed additional Physician; and Mr. George Henry Makins, F.R.C.S. Eng., an Assistant-Surgeon.

THE Queen, with the advice of the Privy Council, has been pleased to renew for a further period of five years from the 29th inst. the appointment of Mr. Robert Dyers Lyons, M.B., as a member of the General Council of Medical Education and Registration for Ireland.

DRS. PEKELHARING and Winkler, of Utrecht University, have been commissioned by the Colonial Minister of Holland to proceed to the East Indies for the purpose of investigating the causes of Beri-beri.

THE cholera epidemic at Flinthen and Gonsenheim has come to an end. The limitation of the disease is attributed to the prompt and thorough manner in which sanitary measures were enforced.

THE *Birmingham Medical Review* continues to publish excellent articles on the Histology of Scarlatina by Dr. Crooke, and on the Spectroscope in its Biological applications by Dr. MacMunn.

MR. SHIRLEY MURPHY has been appointed Lecturer on Hygiene and Public Health at St. Mary's Hospital Medical School.

THE HOSPITALS ASSOCIATION.—On the 17th inst. a *conversazione* was held at the rooms of the Medical Society of London, for which invitations had been issued by the Hospitals Association to the presidents, chairmen, officers, and supporters of the metropolitan and provincial hospitals and asylums. Addresses were delivered by Sir Andrew Clark and Sir Sydney Waterlow.

THE GENERAL COUNCIL OF MEDICAL EDUCATION & REGISTRATION.

THE General Medical Council assembled on Tuesday the 16th, Sir Henry Acland, President, in the chair.

Dr. WM. MITCHELL BANKS, introduced by Sir D. Duckworth, took his seat for the first time as representative under the Medical Act, 1886, of the Victoria University, Manchester.

The PRESIDENT then delivered the following address:—

There appears to be no sound reason for questioning the opinion held by many members of the Council that a short autumnal meeting is necessary for the due discharge of its duties. This year forms no exception. The Register should always be corrected as late as possible for the printed issue in January, and questions affecting the removal of names from the Register should therefore, as a rule, be decided before the end of the year. It may also happen—as this year it does happen—that reports of committees may be advanced a stage, and work be prepared for further consideration at the longer meeting in the spring of the ensuing year. The remarks that it is my duty to make at this meeting will be very brief, because chiefly repeating an oft-told tale. Although much debatable matter will be laid before the Council, its deliberations thereupon may, if it so seem fit, be for the present brief also. The following subjects require your attention:—1st, Criminal Cases; 2nd, University Examinations; 3rd, Visitation of Teaching at Schools; 4th, The Pharmacopœia; 5th, Registration of Sanitary Diplomas; 6th, Combination of Examining Bodies; 7th, some particulars of the Medical Act, 1886.

1. Only two cases of a criminal character require your attention. One is the removal of the name of Mr. Alabone from the Register, he having been deprived of his membership by order of the Royal College of Surgeons of England. The second case is one of a class which has been often before you, and has already received careful and serious attention from the Council. The permanent Under-Secretary of State for the Home Department forwards from the Deputy Coroner of Westminster a letter and depositions taken at an inquest on a person who had been attended by the unqualified assistant of Mr. Day. Mr. Lushington gives no opinion on the case, but the coroner expresses to Mr. Lushington his conviction that the Council should prosecute Davenport; while the Registrar-General, to whom Mr. Lushington referred the case, states that Mr. Day was within his legal rights in respect of signing a death certificate for the deceased. The solicitor to the Council has had all the papers bearing on this difficult matter referred to him, and is fully prepared at your desire to give his opinion on the whole subject. In cases of misconduct of this description, the Council may express strong disapproval of the action of a registered practitioner. The only punishment, however, it can inflict is the erasure of the name from the Register, and this on previous occasions the Council has not thought fit to inflict, although it has pointed out in strong terms the wrong and the danger of the system, and the probable necessity of legislation upon the subject. As regards the unqualified assistant himself, the Council has no direct power under the Act. It can recommend the case to the consideration of the public prosecutor. All these circumstances are fully and clearly set forth in the report on the subject to be found in the twentieth volume of the minutes, together with the resolutions then arrived at by the Council. The powers of the Council in these cases were again brought before the Council in my address last year, after the fullest consideration with your solicitor. In the then state of public business legislation on this matter was impossible. Whether the Council will take the present opportunity of urging the Government to deal with the matter through the Home Office or otherwise will rest with the wisdom of the Council.

2. I will refer but very briefly to some other topics which demand immediate consideration. A further report of the Statistical Committee will be presented to you. It carries its interesting and elaborate investigations still further into the movements in life of those who enter the medical profession. The report will not, it is to be presumed, give rise to detailed discussion during the present session. The next report to be submitted to you is pregnant of more immediate

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results. Mr. Marshall's Committee on the Visitation of the Universities has prepared a document which, I will venture to say, is second in importance to none produced since the Professional Examination Report by Mr. Syme's Committee in 1869. It sets forth, by a careful and judicial analysis, some of the conclusions to be drawn from the reports on the Visitation of the Universities, and from the remarks of the universities thereupon. There is no detail of the higher examination system in medicine which it does not, directly or indirectly, touch. This report, and that by Mr. Teale, Professor Gairdner, and Sir William Stokes, taken together, give a clear insight into the merits, failings, and limits of variation of all the licensing bodies in Great Britain and Ireland. Whether the Council now take up this subject fully or not, I have reason to think that Mr. Marshall may draw your special attention to the conclusions at which the reporters have unanimously arrived. It is hardly possible that these conclusions can be adopted without considerable discussion. If, however, the conclusions be ultimately accepted, it may happen that the elaborate and reiterated visitation of examinations can have some respite. This will depend on the instructions given to future inspectors. It is not easy to see how the instructions can be more comprehensive than they have hitherto been. But the general method of visitation or inspection may be modified in various ways. It will be proposed to refer the whole subject to a committee. Now that every qualifying examination by every licensing body is to be complete in every part, the Council will have, no doubt, to see that this is virtually true in the case of any and every body that hitherto has only given a partial examination. At all events, after June 1st, 1887, no examination can be deemed to be qualifying or registrable concerning which the Council is not satisfied upon this cardinal point. It is a great relief to the Council that this vexed question, which Lord Ripon strove to settle sixteen years ago, and on which successive Governments have been repeatedly thwarted, is at length set at rest. It would be an error, however, to suppose that no difficulties and no pitfalls remain, before the actual working is fully established throughout the twenty separate or combined licensing bodies.

3. But if the examiners have thus some repose, the same fortune may not befall the teachers. The next report you will receive is in an incomplete state. It is one on the Visitation of Teaching; on its methods and its appliances. Time was when men seemed to take a melancholy, or, to speak more truly, a cheerful view of high percentages of rejections. A more instructive idea of the use of visitation is now occupying the minds of many men. They ask, Why do so many fail? And they desire to know, not so much what they are examined in as what they are taught; and not only what they are taught, but how, and with what appliances. It is not, however, to be supposed that this view has been neglected. Still, all persons who are interested in the progress of education will look with extreme interest on a full account of the appliances and methods of teaching the sciences at the foundation of medicine, and the means of acquiring knowledge in the practice of its several parts, as they prevail in the medical teaching institutions in the kingdom. These are known to vary much in their scope, as well as in their power and opportunities. It is possible that the less thoughtful portion of the public may wonder that labour should be expended at the end of the nineteenth century on a matter which would be supposed to be already well understood. No member of this Council, however, but feels the difficulty of blending into practical medical education the sciences, whose mass increases daily, and each of whose votaries has a tendency to claim the attention of students, if not exclusively, yet absorbingly, to the special work of his own life. You will be asked to receive the Committee's report on this matter, and to give further instruction with regard to it.

4. A report on the Pharmacopœia will also be presented to you, with important suggestions for its future management and progress. No part of the duties of the Council demands more philosophic attention than the transitional state of knowledge in regard to remedial agents and the science of pharmacy. A request having been made to me to deliver an address to the Pharmaceutical Society, it seemed to me a duty, considering the work done by that important body for the Pharmacopœia, to comply with their wish. A copy of this brief address has been forwarded to every member of the Council.

5. I can hardly conclude without some allusion to the short Act which passed in the last session of Parliament, giving certain additional powers to the Council, and adding eight to its numbers. The most important change in relation to education wrought by the Medical Act of 1886 with respect to the duties and powers of the Council is the giving to it the power and duty to which I have just referred—viz., to require that every person admitted to the Register should have passed an examination qualifying in every subject. The Act also enables certain qualifications in sanitary science to be entered in the register. On this a motion will be submitted to you by the Chairman of Business. I may here observe that several years ago an attempt was made by Dr. Storrar and myself to effect a combination between the Universities of Oxford, Cambridge and London for conferring a well-considered national diploma in Preventive Medicine before any such diplomas had been given by any in England. I grieve to say that this attempt failed, and the evil of a number of certificates given by various bodies without any agreement or combination is already rife in a wholly new subject. The same distinguished examiners examined lately one candidate at Oxford and two in London, at great cost and much labour and many appliances, in two consecutive weeks, and voluntary associations also are conferring the same titles. Cannot this misfortune be still remedied before it is too late, by some combination of the proper authorities for the purpose?

6. Communications from Ireland with respect to the combinations of the several corporations in Dublin for the purpose of forming one examining Board will be laid before you. The question of the power and rights given by the Act of 1886 in respect of combinations necessarily comes at once before the whole Council and need not be further considered now. It will recall to the minds of some the thought of the divisional boards of the Royal Commission in the Medical Act, and the protracted discussions on voluntary conjoint boards. If it were now fully discussed it might be necessary to discuss also some of the changes actually made or proposed to be made in London both as to combinations and to degrees.

7. These several powers, conferred under the Acts of 1886, have, I need hardly say, been long desired by the Council. But the nature of Parliamentary Government made any serious change in our educational procedure impossible, without at the same time a change in the executive that was to carry it out. Modifications in the examination system, once held to be of the first importance, and therefore of greater consequence than a change in the executive, are left untouched by the Acts of 1886. The licensing bodies all retain their respective and separate powers. I hope to revert to the significance of this result of sixteen years' delay on another occasion. The addition to the executive being now made, it is to be hoped that the Council may be able to pursue the even tenour of its way, with whatever force it may acquire by addition to its numbers. But into this subject also it would be premature to enter, till we reassemble in the early part of next year.

There remains but one more subject to be noticed as to our order of business. By the Medical Act of 1886 the members of the existing Council remain in it unaltered. An addition of five is made by general election in England, Scotland, and Ireland, of two by the Scotch Universities, and of one by the Victoria University, making the Council thirty-two in number. I am sorry to say it will hereafter lose one Crown nominee, and the president is to be a member of the Council. The number, therefore, will be thirty. The existing president was made by the Act the returning officer to carry out the election, unless you decided otherwise. Having to the best of my ability discharged this office, it will be, also by the Act, my duty and my privilege to summon the enlarged Council early in next year.

You will have noticed that I have now expressed no opinion as to the effect on the work of the Council of increasing the numbers of this deliberative and executive body. We have for twenty-eight years striven to do work which, as years have gone on, has in the nature of the case been much varied and has greatly increased. Its general character remains unaltered. I feel confident that the work will be undertaken with equal earnestness by those who will shortly be chosen to enlarge the body.

There are several other matters besides those which I have mentioned, some connected with the recent Act, which might be now referred to. But, as they do not at present press, I will not detain you longer from the work which lies immediately before us. Of this I will only say that at no period

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in the history of medical education has there been more need for that which the Council will certainly give, careful and impartial judgment—all the more careful and deliberate because the long-expected legislation has left every medical institution free to act its independent part for a great public end, subject, as heretofore, to our common consultative recommendation and supervision, and with the support and assistance of the Privy Council.

On the motion of Mr. MARSHALL, seconded by Sir. W. GULL, the address was ordered to be entered upon the Minutes.

Mr. Marshall, Dr. A. Smith, and Dr. Struthers were appointed to form the Business Committee.

The Army and Navy returns were received, and a vote of thanks passed to the Directors-General.

The following communication was read from the Royal College of Surgeons of England:—

Royal College of Surgeons of England, Lincoln's-inn-Fields, W.C.
October 21st, 1886.

SIR,—In pursuance of the provisions of Section 28 of the Medical Act of 1858, I am desired to forward to you, for the information of the General Medical Council, a copy of the following resolution, which was adopted by the Council of this College on August 5th last, and confirmed on the 14th inst.—viz.: "That Mr. Edwin William Alabone, admitted a member of the College on May 17th, 1870, has, in the opinion of the Council, advertised or published matters prejudicial to the interest and derogatory to the honour of the College, and disgraceful to the profession of Surgery, and has further been guilty of a breach of the declaration made by him on his admission as a member, whereby he undertook to demean himself honourably in the practice of his profession, and to the utmost of his power to maintain the dignity and welfare of the College, and that he accordingly be removed from being a member of the College." I am Sir, your obedient servant,

EDWARD TRIMMER, Secretary.

On the motion of Mr. MARSHALL, seconded by Dr. QUAIN, the Registrar was directed to remove from the Register the qualification of M.R.C.S. of England formerly held by Mr. Edwin William Alabone.

A subsequent resolution directed the Registrar to remove Mr. Alabone's name from the Register, and in reply to a letter from him requesting to have his name erased, it was decided to inform him that in consequence of a communication from the Royal College of Surgeons it had been done.

The report of the Pharmacopœia Committee was received.

The next subject considered was a certain addition to the standing orders suggested by the Executive Committee, and submitted to the General Council, pursuant to the following resolution passed by the Council on June 2nd—"That Mr. Muir Mackenzie's opinion (in regard to the removal of qualifications from the Medical Register on the withdrawal of such qualifications by the licensing bodies) be referred to the Executive Committee with a view to their proposing to the Council such form of standing orders as they may think desirable to provide for the procedure of the Council when dealing with questions of the kind."

Mr. MARSHALL moved that the standing orders suggested by the Executive Committee be standing orders of the Council:—"(*a*) When the General Council has received notice from a licensing body that any qualification or qualifications have been duly and legally withdrawn from a registered medical practitioner by such body, then the Councill shall, if it thinks fit, by formal resolution proposed from the chair, direct the Registrar to remove such qualification or qualifications from the Medical Register. (*b*) If, under the direction of the General Council, all the qualifications of any registered medical practitioner have been erased from the Medical Register, then the Registrar shall, without further direction from the Council, forthwith erase the name of such practitioner from the Register." He said the first standing order simplified the procedure of the Council only in this particular, that whereas he had that day moved a specific resolution for the removal of Mr. Alabone's qualification from the Register for the future, that motion would proceed at once from the chair. The second standing order would do away with the resolution, such as that which he had just proposed, that the name of the person be struck off the Register. The point about which the Council had to be careful was the removal of the qualification. The removal of the name, the qualification being gone, was a mere technical proceeding, and might be safely left in the hands of the Registrar to save the Council the necessity of proposing a second resolution. The proposed standing orders were not very grave or serious, but, at the same time, they simplified the proceedings in those delicate questions which constantly gave rise to discussion. Mr. Simon had suggested that they had better introduce in the first standing order a reference to the point in the Act which said that no man should be removed in consequence of adopting any particular theory, and that therefore it would be safer to introduce after the words "by such body" the words "and that such withdrawal was not on the ground of his having adopted any theory of medicine or surgery."

Mr. SIMON seconded the adoption of the first standing order as amended.

Dr. MATTHEWS DUNCAN did not like the words "if it thinks fit." He could not see that the standing order as it stood would facilitate the progress of business in the slightest degree.

Mr. MARSHALL said if it did not simplify the procedure, it directed what it should be. Previously they had had discussions, not only as to the merits of cases, but also as to how they should be dealt with, and by simplifying the procedure the standing order would facilitate their business.

Mr. FARRER (the solicitor to the Council) thought the first standing order would help the Council in the conduct of its business, because it would be a motion, of course, from the chair. The words "if it thinks fit" were put in in order to prevent it being even suggested that the Council had no power of dealing with this as it pleased, and they also appeared in the Act of Parliament. With regard to the second standing order, he must confess that he was very chary about removing a man's name from the Register without the express direction of the Council.

The motion for the adoption of the first standing order as amended was agreed to.

Mr. FARRER suggested, with regard to the second standing order, that it should follow the wording of the first and read: "If, under the direction of the General Medical Council, all the qualifications of any registered medical practitioner have been erased from the Medical Register, then the Council shall, if it thinks fit, by formal resolution proposed from the chair, direct the Registrar to remove the name of such practitioner from the Register."

Mr. MACNAMARA thought that a far better plan. It had been contended on more than one occasion that the Council had authority to retain a name on the Register when the qualification had been removed. The plan suggested by their legal adviser would leave their hands more or less untied, and would be far safer for them.

The standing order was then agreed to as proposed by Mr. Farrer.

Additions to the standing orders in similar words were also agreed to with reference to the removal of qualifications or names from the Dentists' Register.

The Registrar next read communications from the Secretary of State for the Home Department with respect to the evidence given at an inquest before the Deputy Coroner of Westminster on the body of a man named George Wadley. The coroner had drawn the attention of the Secretary of State to the conduct of Mr. Day and Mr. Davenport, the latter being an unqualified assistant to the former. The evidence given at the inquest was to the effect that Mr. Day visited the deceased on Sept. 27th last, and afterwards signed a certificate of death, Mr. Davenport having attended on other occasions.

Mr. SIMON moved that the recommendation of the Executive Committee be adopted, and "that it be an instruction to the committee to bring under the notice of the Home Secretary the resolutions passed by the Council in its session in 1883, on the subject of the employment of unqualified assistants, and especially the first of those resolutions." Three years ago the Council asked for "legislation to the effect that any registered practitioner practising for gain who knowingly and wilfully deputes a person not registered or qualified to be registered under the Medical Act, to professionally treat on his behalf, in any matter requiring professional discretion or skill, any sick or injured person, shall be subject to the same legal liabilities as a person who falsely represents himself to be a legally qualified medical practitioner, but with special proviso that such enactment shall not hinder any duly regulated training of pupils by qualified teachers, nor any legitimate action of nurses, midwives, or dispensers."

Mr. MARSHALL seconded the motion.

Dr. DUNCAN said that the subject of unqualified assistants was beset with difficulties. It would be a very great cruelty to the poor to be very strict about unqualified assistants.

Dr. CHAMBERS considered that the case referred to by the Home Secretary was a very bad one. The registered practitioner lived miles away, and employed an unqualified assistant to do his work.

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Dr. QUAIN said that the duty of the Medical Council was to superintend medical education, and registration, and not to act as criminal prosecutors. It was for the Home Secretary himself to take action in such cases.

Mr. MACNAMARA thought that the recommendations of the Council could not apply to Mr. Davenport. The persons to blame were those who employed unqualified assistants.

Mr. MARSHALL approved of the resolution, its object being, irrespective of any particular case, to get the Home Secretary to take action with regard to such matters.

The resolution was agreed to.

On the motion of Mr. SIMON, seconded by Sir WM. GULL, it was then resolved: "That the question of Mr. Day's professional conduct be referred for consideration to the English Branch Council."

Mr. MARSHALL brought up the third report from the Statistical Committee, which, as appeared from the opening statement, completed that part of the design of the Committee, which was to endeavour, by following the paths of the registered students of a certain number of years, to show whence and how the several ranks of the medical profession were recruited. The present report exhibited the results of a research comprising five years, and also included a comparison between the first and last years of the quinquennium. The investigation had included the tracing of the destinies of 6403 registered students, 4172 of whom were found to have gained a place in the Medical Register, and furnished on the most reliable data obtainable an analysis and record of facts such as nowhere else existed. The heaviest part of the Committee's undertaking was now accomplished, and it was hoped that in future a quinquennial analysis of a similar kind would be made and published. The investigation now completed served to illustrate the mode in which the medical profession was, as it were, built up piece by piece by the action of the individual units continuously added to it, but it was obviously desirable to endeavour to obtain a picture of it as it existed at particular intervals of time. It was proposed therefore to construct, so far as this could be done, what might be termed a census of the profession at two selected annual periods, and the years chosen for the purpose were 1881 and 1886. The former year constituted a suitable period to begin with, because it coincided with the date of the periodic censuses of the whole population of the United Kingdom, with which it would be most desirable to institute comparisons of various kinds, while the latter year, 1886, would serve to divide equally the decennial interval, and, moreover, it fortunately coincided with the date of the election of the direct representatives of the profession on the Council, which would again recur after another interval of five years. Such quinquennial censuses would clear up many most interesting points, such as the strength of the profession, its distribution, its fluctuations, migrations, and many other details relating to titles, qualifications, age, mortality, and so forth. In conclusion, he moved that the report should be received and entered on the Minutes.

Dr. A. SMITH seconded the motion.

Mr. SIMON, in supporting the proposition for a quinquennial census, suggested that once in every five years a circular should be sent to every member of the profession inquiring whether he had ceased to practise. No doubt there would be many who would fail to reply, and their names, according to the directions of the Act, would be left out of the Register for the year. The result would no doubt be a batch of letters correcting the Register to the last minute, and so they would get the maximum correctness possible.

Mr. MARSHALL said he was very glad to find that the efforts of the Statistical Committee were bearing fruit in this direction, that they would enable the Council to correct a charge which had been thrown in their faces over and over again as to the incorrectness of the Register. The Register was not so incorrect as some asserted, but of course it was not correct. He was very glad that the labours of the Statistical Committee would be reflected, as it were, into the path of making the Register as correct as possible.

Dr. DUNCAN entirely sympathised with Mr. Simon and Mr. Marshall, but he had a very strong impression that the subject required to be much more carefully considered. He thought the plan proposed, of a quinquennial correction, would lead to a great deal more inaccuracy than ever. The inaccuracies in the Register consisted mainly of change of address, and the result would be that in hundreds of cases, according to the statute, the letter not being answered within six months, the name would be erased from the Register. It would be better to let the Register alone, and leave it to the practitioners to correct it. If there were this quinquennial letter they would land themselves in a more incorrect Register than ever.

Mr. TEALE supported Dr. Duncan's view, and read a letter from a practitioner who complained that he had twice been struck off the Register without notice, although residing in the same place for the last twenty-four years.

The REGISTRAR said that cases of the kind did sometimes occur, and had been the subject of much correspondence. In one case which was laid before the Executive Committee the complainant at last came into the office, and said he found he had thrown the letter into the waste-basket, and no doubt the same thing had occurred in the case of Mr. Teale's correspondent. The letters were certainly posted to him.

The resolution for the reception of the report was then agreed to, and the Council adjourned.

On Wednesday, the 17th inst., Dr. Heron Watson proposed a resolution respecting the qualifications of candidates for commissions in the medical staff of the army and navy, which was seconded by Sir Dyce Duckworth, and agreed to. The report of the Pharmacopœia Committee was then presented and received. Mr. Marshall moved that the provisions of the Medical Act, 1886, concerning the registration of diplomas or certificates in sanitary science be forthwith carried out. Mr. Simon seconded the motion, and Dr. Quain, Dr. A. Smith, Mr. Macnamara, Sir Dyce Duckworth, Dr. Banks, and Mr. Teale took part in the discussion. The resolution was eventually agreed to. A motion proposed by Dr. McVail, respecting the duration of professional study, was, after long discussion and some modification, agreed to by 10 votes to 3, and the proceedings terminated.

At the meeting of the Council on Thursday, the case of a registered dental practitioner, Thomas Maden, was considered, the registration of whose name, according to the statement of the Dental Committee, had been incorrectly and fraudulently obtained. The Solicitor to the Council stated that upon the report of the facts by the Committee the Council had power to erase the name from the Register, and this was accordingly done. A discussion then took place on a motion by Dr. Banks, "That, subject to legal opinion, the title of 'holder of diploma in Public Health' be adopted as the heading in the Medical Register under which all practitioners duly certified in Sanitary Science may be placed, the sources of their titles being designated in each case." It was urged in favour of the motion that the holders of such diplomas were very desirous to have them registered under a uniform title; but it was contended by Dr. Humphry, Sir William Gull, and other members, that the Council had no right to enter the titles under any other designations than those given by the bodies conferring them. Ultimately, Dr. Banks withdrew his motion, the whole matter being left to the Executive Committee. Mr. Marshall then brought up a provisional report from the Visitation of Examinations Committee, embodying certain conclusions to be brought under the notice of the Council; but after some discussion the consideration of the subject was deferred. Dr. Heron Watson brought up a report from the Visitation of Schools Committee, which was ordered to be received and entered on the Minutes. The discussion on the subject of the adoption of the report was adjourned.

A full report of Wednesday and Thursday's proceedings will appear in our next issue.

THE LATE DR. BULL.—A tribute to the memory of the late Dr. Bull, physician to the Hereford Infirmary, and the author of the "Herefordshire Pomona," has recently been placed in the Hereford Cathedral. It consists of a marble tablet, and is affixed to the wall of the south-east transept. The inscription, surmounted by a gilt Maltese cross, is inlaid on white polished alabaster, in plain bold lettering, and is surrounded by a moulded and polished green marble border. The tablet has been obtained by general subscription, and the inscription refers to Dr. Bull's unwearied efforts for the relief of human suffering, to his perseverance in the pursuit and illustration of natural science, and to his zeal in all works of Christian charity and social improvement.

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THE APOTHECARIES' SOCIETY AND THE CONJOINT BOARD.

ON Tuesday last a meeting was held at the Apothecaries' Hall to consider the subject of the amalgamation of the Examining Board of the Apothecaries' Society with that of other medical institutions having the power of granting diplomas in accordance with the Act of 1886. The meeting was summoned at very short notice, and consisted of members and licentiates of the Society and of other gentlemen interested in the question of medical education. The proceedings were opened by Mr. W. Shillito, who occupied the chair and who gave an account of the action taken by the Society in compliance with the requirements of the Act of the present year. In July the Society addressed to the Presidents of the Colleges of Physicians and Surgeons a letter proposing that the Society should join these Colleges in the formation of one examining board, but, beyond the acknowledgment of the receipt of this letter, no communication was received till an hour before the meeting. The following is a copy of the correspondence :—

Society of Apothecaries, Blackfriars, E.C., July 21st, 1886.

To the President of the Royal College of Surgeons, and to the President of the Royal College of Physicians.

SIR,—The Medical Act of 1886 gives an opportunity for me, on behalf of the Society of Apothecaries of London, to address the following communication to you. In making it the Society are perfectly aware of difficulties which may be suggested, but they believe that these difficulties are capable of being removed, and that the Royal Colleges as well as the Society would greatly benefit by their removal. It is unnecessary to do more than refer briefly to the fact that a few years ago a combination was practically arranged under the provisions of the Medical Act, 1858, between the Colleges and the Society, and it will be admitted that its abandonment (from whatever cause) was not due to any action on the part of the Society. In the autumn of 1884 the Colleges formed under the Act of 1858 the combination under which they are now conducting a conjoint examination. Such a combination neither could or did prevent competition. It neither could nor did profess to give an exclusive or special right of being placed on the Medical Register, and in fact it only produced a result (at increased cost) which it was possible to attain by other means. But under the Medical Act of 1886 the Colleges will have to encounter a competition of a still more formidable character. Assume, for instance, that the Society is unable to combine, it will be in a position to ask for the appointment of assistant examiners. With that assistance it will be able alone to grant a statutory diploma in Medicine, Surgery, and Midwifery, and the result will be that within the distance of less than a mile two distinct authorities will, upon different terms, be granting the same statutory diploma. Such a competition should, in the interests of the public, be, if possible, avoided. Nor should it be forgotten that if the Colleges be unwilling to combine with the Society there is still open and possible to the latter a very formidable combination, which, in this alternative, would equally cause a very serious competition to arise to the prejudice of the Colleges. The Society are not shutting their eyes to the difficulty arising from the fact of the Royal Colleges being already in combination, but they insist that the advantages which would accrue to the Colleges and to the public by excluding unnecessary competition are such as ought to outweigh and overcome any such difficulty; in fact, that it is perfectly possible for the existing combination between the Colleges to be modified so as to bring the Society into it. Until the principle of combination with the Society is favourably accepted, it is premature to go into details; but it may be assumed that the Society will not ask for any terms which are not reasonable, and will give every facility on their part.

The Society would therefore urge on the Royal Colleges their careful and serious consideration of what has been placed before them.

I have the honour to be, your most obedient servant,
(Signed) EDWARD FURLEY, F.R.C.S., Master.

November 15th, 1886.

SIR,—We have the honour to inform you that your letter of the 21st of July last addressed to the President of the Royal College of Physicians of London, and also to the President of the Royal College of Surgeons of England, was submitted by them to the governing bodies of the two Colleges, and we are directed by the governing bodies of the two Colleges to inform you that the following resolution has been adopted by them:—"Inasmuch as the examination, conducted by the Examining Board in England, constituted by the Royal College of Physicians of London and the Royal College of Surgeons of England, is a complete qualifying examination in Medicine, Surgery, and Midwifery, conferring the right of registration under the Medical Act, a combination of the two Colleges with the Society of Apothecaries is for examination purposes unnecessary, and in the unanimous opinion of the Committee is also undesirable."

We have the honour to be, Sir, your obedient servants,
HENRY A. PITMAN,
Registrar of the Royal College of Physicians.
EDWARD TRIMMER,
Secretary of the Royal College of Surgeons.
To the Master of the Society of Apothecaries of London.

Mr. GEORGE BROWN (secretary of the Medical Defence Association) opened the discussion by asking whether the Society had determined upon the course it would follow.

Mr. WICKHAM BARNES, secretary to the Association of Poor-Law Medical Officers, then rose to propose a resolution, which he said he felt it his duty to put before the meeting, a duty which, as a Fellow of the College of Surgeons, was painful to him for the reason that the resolution expressed disapproval of the course which the Colleges had determined to adopt. The resolution was as follows:—"That this meeting, having heard the letter addressed by the Society of Apothecaries of London to the Presidents of the two Royal Colleges, and the reply thereto, signed by the registrars of the two Colleges on their behalf, regret to hear that such reply is so unsatisfactory, and to find that the Colleges have not duly considered the interests of the public in this matter."

Mr. STEELE, secretary of the Society of Members of the Royal College of Surgeons, seconded the resolution, and reminded the meeting that at a recent annual meeting of the Royal College of Surgeons a resolution had been adopted which was absolutely opposed to the resolution which the Colleges now communicated to the Society. It was undoubtedly the desire of the profession that there should exist only one examining body in London, and this desire had been disregarded by the Colleges.

Mr. PARKER YOUNG thought that it was not easy to determine upon a resolution at so short a notice. He questioned whether it would not be more dignified to receive the communications of the Colleges in silence. Such regret as would be felt concerning the decision of the Colleges would not appropriately come from the Society with regard to its own interests, for these were secure; but would come better from the profession generally and the public, whose interests had not been considered by the Colleges.

Mr. GEORGE BROWN also felt that so far as the position of the Society was concerned there was no reason to regret the action of the Colleges. The Society could confer far greater privileges than could the Colleges, and it had a future before it of more usefulness to the profession and the public. Among other courses, he thought the amalgamation with the examining board of a provincial university would be desirable.

Mr. CHABOT thought the meeting might not improperly express regret at the delay of the Colleges in replying to the letters of the Society. This reply, moreover, was not as courteous as it might be.

Mr. HART said that the meeting had to decide upon the course it should take in the interest of the public and of the profession, and he warmly supported the resolution Mr. Barnes had proposed.

Mr. YOUNG considered the meeting should request the Society to place itself in communication with other examining bodies, and in the event of no arrangement being arrived at then to apply to the Medical Council.

The meeting then unanimously adopted the resolution proposed at the beginning of the meeting. A further resolution was unanimously passed, to the effect "that a copy of this resolution, together with a copy of the correspondence and a statement of the facts, be published, and also circulated among the licentiates of the Society, and a memorial forwarded for their signature, expressive of their views on this important subject."

A vote of thanks was accorded to the Master, and the meeting terminated.

At a meeting of the Council of the Metropolitan Counties Branch of the British Medical Association, held last Wednesday, a requisition was presented signed by twenty members of the branch, calling for a special general meeting to discuss the questions of the exclusion of the Apothecaries' Society from a share in the Conjoint Examining Board in England, and also of the representation of licentiates and members on the governing bodies of the Colleges of Physicians and Surgeons. The Council, in complying with the requisition in accordance with the bye-laws, refrained from expressing any opinion upon the subjects to be brought forward at the meeting, which will be held at the School of Mines, Jermyn-street, on Dec. 3rd, at 8 P.M.

SANITARY INSTITUTE OF GREAT BRITAIN.—At an examination held on Nov. 11th and 12th, sixty-four candidates presented themselves—nine as local surveyors and fifty-five as inspectors of nuisances. Of the former class four, and of the latter forty-two, obtained certificates of competency.

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Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF INSPECTORS OF THE MEDICAL DEPARTMENT OF THE LOCAL GOVERNMENT BOARD.

Scarlet Fever at Wombwell, by Dr. PARSONS.—The district of the Wombwell Local Board of Health within the Barnsley Registration district has recently been inspected owing to a prevalence of scarlet fever. Like most of the reports issued from the department, the one under consideration deals at length with the character of the district and its population, both from a general and a sanitary point of view; and it is shown, amongst other things, that on a population varying from 8451 to 10,418, the scarlet fever rate per 1000 during the five years 1881-85 was 2·32 in Wombwell as opposed to 0·43 in England and Wales. All cases do not come within the knowledge of the medical officer of health, but in the latter half of 1884 he knew of 250 cases and 41 deaths, and in 1885 there were some 300 with 45 deaths; the disease continuing into 1886. In considering the causes which went to favour such a wide spread of infection, Dr. Parsons refers to houses being too thickly populated; to unpaved and uncleanly condition of yards; to a scarcity of water, leading both to uncleanliness and to a needless aggregation of children around the pumps where water was to be had; and to the absence of any means for isolating first attacks of fever. As regards the water-supply, we note that any difficulty as to the quantity needed has since been overcome by reason of a legal decision in favour of the Local Board; but the question as to a hospital is by no means a hopeful one for the authority are apparently convinced that it would not be used even if provided. Dr. Parsons recommends them to study this part of the question by the light of the official report on the Use and Influence of Hospitals for Infectious Disease, where it will clearly be seen that, in nearly every instance, all that is required to secure resort to hospital is to have a reasonably attractive small building maintained in a state of efficiency and readiness for actual use. In the absence of such provision the authority have trusted largely to a system which is in vogue in certain parts of Kent—namely, the employment of so-called "disinfecting nurses," who visit the houses, attend to the sick, and especially see that all needed measures of disinfection are taken. How far the system may have answered in individual cases it would be unfair to judge; and even as regards the whole epidemic nothing decisive can be said as to this, unless we knew the number of the nurses employed, and the date during the outbreak when the system first came into operation. But the mere fact that some 550 cases and 86 deaths took place in eighteen months would rather tend to show that, from some cause or other, the means taken to stay the spread of the disease practically broke down. The plan has also the additional disadvantage that the cost it involves has to be smuggled under some other name than nursing, which is not provided for, except at a hospital, under the ordinary provisions of the Public Health Act.

Scarlet Fever at Hindley, by Dr. PARSONS.—After a general description of the various sanitary conditions influencing health in the district, Dr. Parsons shows, by means of a statistical table, how high the mortality from scarlet fever has been in the district, the average annual rate for the past ten years being 1·68 per 1000, as opposed to 0·55 for England and Wales as a whole; the disease has also shown a tendency to recur in an epidemic form every four years, such recurrence doubtless being largely dependent upon the accumulation in the intervals of children who are susceptible of the disease through not having been protected by a prior attack. In 1877 there were 53 deaths from this disease, in 1880 there were 86, and in 1884–85 there were 57, in a population which in 1881 had reached 14,715. In seeking a cause of this prevalence, it was found to be quite useless to go beyond the agency of conveyance of the poison from sick to healthy by the channel of personal intercommunication, and instances are quoted to show the utter carelessness of the mining population in exposing the healthy to the sick. Yards and privies in common to more than one house tend also to the aggregation of sick and healthy children, and party walls between adjacent houses not being carried up to or through the roof-leads to a common space under the roof which is general to all houses in the row. Dr. Parsons also refers to the fact that a good many dwellings have sink-pipes through which drain air can come up into the houses, and he regards it as possible that water in which the person and clothes of scarlatina patients have been washed, and which will be impregnated with the scales from the skin, may give an infectious character to the drain air of such channels as receive this water, and that through this means scarlet fever may spread from one house to another. And, again, the Local Board of Health have no means for disinfecting infected articles, nor any means for the isolation of the sick. Under such circumstances they are obviously without the essential provision for performing their duty as a sanitary authority in checking infectious disease and death.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns 5854 births and 3407 deaths were registered during the week ending Nov. 13th. The annual death-rate in these towns, which had been 19·3, 18·5, and 18·2 per 1000 in the preceding three weeks, rose again last week to 19·5. During the first six weeks of the current quarter the death-rate in these towns averaged 19·0 per 1000, and was 1·9 below the mean rate in the corresponding periods of the ten years 1876–85. The lowest rates in these towns last week were 13·9 in Brighton, 15·1 in Sunderland, 15·9 in Derby, and 16·4 in Birkenhead. The rates in the other towns ranged upwards to 26·1 in Wolverhampton, 27·3 in Preston, 28·0 in Halifax, and 30·0 in Oldham. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had declined in the preceding nine weeks from 1202 to 368, rose again last week to 411; they included 91 from scarlet fever, 81 from measles, 80 from diarrhœa, 69 from "fever" (principally enteric), 46 from diphtheria, 44 from whooping-cough, and not one from small-pox. No death from any of these zymotic diseases was recorded last week in Blackburn, whereas they caused the highest death-rates in Cardiff, Halifax, and Wolverhampton. The greatest mortality from scarlet fever occurred in Liverpool, Sheffield, Salford, Oldham, and Bristol; from measles, in Portsmouth, Leeds, Wolverhampton, and Halifax; from "fever," in Halifax, Plymouth, Preston, Derby, and Cardiff; and from whooping-cough, in Oldham. The 46 deaths from diphtheria in the twenty-eight towns included 23 in London, 6 in Liverpool, 3 in Portsmouth, 3 in Birmingham, 2 in Nottingham, 2 in Manchester, and 2 in Oldham. Small-pox caused no death in London and its outer ring, or in any of the twenty-seven large provincial towns. Only 2 cases of small-pox were under treatment on Saturday last in the metropolitan hospitals receiving cases of this disease. The deaths referred to diseases of the respiratory organs in London, which had been 295 and 293 in the preceding two weeks, rose last week to 321, but were 118 below the corrected average. The causes of 95, or 2·4 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Preston, Blackburn, Bolton, and in four other smaller towns. The largest proportions of uncertified deaths were registered in Leicester, Bradford, Sheffield, and Halifax.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 18·2, 18·6 and 22·1 in the preceding three weeks, declined again to 20·1 in the week ending Nov. 13th; this rate was 0·6 above the mean rate during the same week in the twenty-eight large English towns. The rates in the Scotch towns last week ranged from 9·8 in Perth and 13·4 in Dundee, to 23·3 in Glasgow and 28·4 in Paisley. The 497 deaths in the eight towns last week showed a decline of 48 from the number in the previous week, and included 23 which were referred to scarlet fever, 21 to diarrhœa, 17 to whooping-cough, 11 to diphtheria, 7 to "fever" (typhus, enteric, or simple), 2 to measles, and not one to small-pox; in all, 81 deaths resulted from these principal zymotic diseases, against 83 and 73 in the preceding two weeks. These 81 deaths were equal to an annual rate of 3·2 per 1000, which was 0·8 above the mean rate from the same diseases in the twenty-eight English towns. The deaths from scarlet fever,

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which had been 24 and 16 in the preceding two weeks, rose again last week to 23, of which 16 occurred in Glasgow, 3 in Dundee, and 2 in Edinburgh. The 21 deaths attributed to diarrhœa corresponded with the number in the previous week, and included 7 in Glasgow, 7 in Edinburgh, and 3 in Dundee. The fatal cases of whooping-cough, which had been 28 and 15 in the previous two weeks, rose last week to 17; 11 were returned in Glasgow, 4 in Aberdeen, and 2 in Edinburgh. The 11 deaths referred to diphtheria showed a further increase upon recent weekly numbers, and included 5 in Glasgow, 3 in Edinburgh, and 2 in Aberdeen. The 7 deaths from "fever," including 3 in Glasgow and 2 in Edinburgh, corresponded with the number in the previous week. Both the fatal cases of measles occurred in Glasgow. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 79, 96, and 118 in the previous three weeks, further rose last week to 123, but were 3 below the number in the corresponding week of last year. The causes of 76, or more than 15 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been 20·5, 21·9, and 26·2 per 1000 in the preceding three weeks, declined again to 23·6 in the week ending Nov. 13th. During the first six weeks of the current quarter the death-rate in the city averaged 23·0; the mean rate during the same period was 17·2 in London and 18·8 in Edinburgh. The 160 deaths in Dublin last week showed a decline of 17 from the number in the previous week, and included 15 which were referred to scarlet fever, 3 to "fever," 3 to diarrhœa, 2 to whooping-cough, and not one either to small-pox, measles, or diphtheria. Thus 23 deaths resulted from the principal zymotic diseases, against 23 and 32 in the previous two weeks; they were equal to an annual rate of 3·4 per 1000, the rates from the same diseases last week being but 1·8 in London and 3·3 in Edinburgh. The fatal cases of scarlet fever, which had been 7, 10, and 8 in the preceding three weeks, rose last week to 15, and exceeded the number in any previous week of this year. The deaths from "fever" and diarrhœa, on the other hand, showed a considerable decline from recent weekly numbers. Three inquest cases and one death from violence were registered; and 46, or more than a quarter, of the deaths occurred in public institutions. The deaths of infants showed a decline, and those of elderly persons a further increase upon recent weekly numbers. The causes of 19, or nearly 12 per cent., of the deaths registered during the week were not certified.

THE SERVICES.

WAR OFFICE.—Army Medical Staff: Surgeon-Major Espine Charles Robert Ward has retired upon temporary half-pay, on account of ill-health; Surgeon Charles Henry Swayne, to be Surgeon-Major; Deputy Surgeon-General Samuel Fuller is granted retired pay, with the honorary rank of Surgeon-General.

ADMIRALTY. — The following appointments have been made: Fleet Surgeon Stephen Sweetnam, to the *Duke of Wellington;* and Fleet Surgeon Edward Doyle, to the *Penelope.*

ARTILLERY VOLUNTEERS.—1st Cheshire and Carnarvonshire: Robert Langford Jones, Gent., to be Acting Surgeon.—2nd Middlesex: Arthur Henry Robinson, Gent., M.D., to be Acting Surgeon.

ENGINEER VOLUNTEERS. — 2nd Tower Hamlets (East London), Robert Hugh Hodgson, Gent., to be Acting Surgeon. — The Volunteer Submarine Miners (the Severn Division): The undermentioned officer, amongst others, has been transferred from the 1st Gloucestershire (the Western Counties) Engineer Volunteer Corps:—Acting Surgeon John Hugh Rees, M.B., to be Acting Surgeon.

DEATH UNDER CHLOROFORM. — An inquest was recently held at the Manchester Workhouse, Crumpsall, on the body of a man who died while under the influence of chloroform, administered for the performonce of an operation. The jury returned a verdict of "Death from misadventure," and were of opinion that the drug had been skilfully and properly administered.

Correspondence.

"Audi alteram partem."

DIRECT REPRESENTATION OF THE PROFESSION ON THE GENERAL MEDICAL COUNCIL.

To the Editor of THE LANCET.

SIR,—I have read over my letter again, but find nothing in it "unfair," and cannot therefore accept Mr. Ker's suggestion to withdraw it. On the contrary, I consider it "unfair" of Mr. Ker to misquote my words. I did not mention Mr. Wheelhouse, I spoke of *the Committee* which Mr. Ker represents "as acting in opposition," &c.

The election is virtually over, and it is useless to enter into Mr. Ker's explanation. He acknowledges that "the matter dropped." Why? I say because anyone could see that the proposal was against the sense of the meeting. It was so on both days, and therefore the Council, I consider, was not justified in adopting a resolution which the general meeting could not be persuaded to sanction. If such proceedings are to be countenanced—and Mr. Ker and Dr. Carter took care to advertise this resolution in order to influence the election—we may as well hand over all matters to the Council and regard representation in the Association as a hollow pretence.

I am, Sir, yours obediently,
HENRY W. WILLIAMS, M.D.

Chapel-place, Cavendish square, W., Nov. 15th, 1886.

To the Editor of THE LANCET.

SIR,—May I ask you to find space for the subjoined letter, which I have addressed to Dr. Waters, respecting the enclosed circular which I have just received from him?

I am, Sir, yours truly,
FREDERICK J. GANT.

Connaught-square, W., Nov. 15th, 1886.

"Connaught-square, Nov. 15th, 1886.

"DEAR SIR,—With reference to your circular respecting the special qualifications of Sir W. Foster and Mr. Wheelhouse as candidates for election to the Medical Council, I think it due to yourself that I should acknowledge in some way the copy of the circular which I have just received.

"No man is so highly entitled as you are to influence the profession with regard to this question, although I suppose that in this, as in other matters, all thoughtful men will act for themselves. I feel strongly that the direct representatives of general practitioners in the Council should consistently themselves be general practitioners, that they may not only know, but be also personally identified with, their professional position, their claims, and their wants.

"In this light only can there be any justification for the enlargement of an already overgrown Medical Council, and which, chiefly on that account, is almost practically useless for the good of the profession.

"Believe me, dear Sir, very faithfully yours,
"FREDERICK J. GANT.

"Dr. E. Waters, Ex-President of the British Medical Association."

To the Editor of THE LANCET.

SIR,—It is greatly against my inclination to have even the appearance of a difference with an old friend whom I have known so long and so much respected as Mr. Balding, but the letter from him which appeared in your last week's issue places me in such a false position that I have no other alternative but to ask you to publish the subjoined.

On the 2nd or 3rd instant I received a copy of an address from Mr. Balding announcing that he was a candidate for a seat on the General Medical Council. It had been arranged to call a meeting of the Council of the Poor-law Medical Officers' Association on the 4th at 5 P.M., at my house, as I was too infirm to go out. At about 4.30 on that day Mr. Balding was announced. On expressing my surprise at his coming so early, he said he had left the College meeting, as he wanted to have a talk with me about the election, when I at once said, "You have no chance; you are too late. How much I regret you did not come out earlier; our Association would have supported you," He replied: "I have been prevented by sickness in my family, but I

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mean to go on now; indeed," said he, "I have called before the meeting, as I do not wish our friends to know I have asked you to nominate me," at the same time producing a nomination paper, on which I said, "I cannot do that; it would be inconsistant for me to do so, as I have publicly recommended Foster, Glover, and Wheelhouse." He replied, "I do not see that you cannot nominate me and still vote for your friends. I want your name." I again strongly objected, but on his stating that it would not be publicly known that I had nominated him, I reluctantly assented. At this conversation no regret was expressed by me that my letter to you of the 30th had been reprinted, and was in process of circulation, for the reason that the merest tyro in electioneering proceedings should be aware that when once a letter has appeared in a public journal, it is competent for anyone, whether friendly to the candidate or not, to deal with such letter as he or they may think fit, so long as the text is quoted correctly. At the subsequent meeting of the Council, no objection was raised to my having written such a letter, nor any insinuation made that I had abused my position as President in writing it, or had written in the name of the Association, as Mr. Balding's and Mr. Cornwall's letters would appear to infer. If such insinuation had been made, it would at once have been indignantly repudiated by

Yours obediently,

JOSEPH ROGERS.

Montague-place, Russell-square, Nov. 16th, 1886.

To the Editor of THE LANCET.

SIR,—I have just received circulars in the name of the British Medical Association, accompanied by the card of one of the secretaries to the Metropolitan Counties Branch, advocating the candidature of Messrs. Foster and Wheelhouse for the General Medical Council. I protest against any such use being made of the influence of the Association generally, or of that of its branch secretaries individually, as a cheap form of advertisement; it is undignified, and, as all the candidates are members of the Association, it is manifestly unjust. It is not a question of the Association candidates as against non-associationists, but of consultants *versus* general practitioners.—I am, Sir, your obedient servant,

Old Burlington-street, W., Nov. 16th, 1886. GEORGE STOKER.

*** Our correspondent is in error in stating that all the candidates are members of the Association.—ED. L,

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THE BRIGHTON MEETING AND DIRECT REPRESENTATION.

To the Editor of THE LANCET.

SIR,—I withdrew my amendment at the Brighton meeting and seconded Dr. O'Connor's proposal, and was astonished to read the account in the journal. Sir Walter Foster immediately left the chair without putting the resolution. It was unnecessary to do so, as the meeting was so evidently in favour of it. No one could anticipate the attempt now made to throw doubt on the result of the vote. It was understood by all present that the Association was pledged to neutrality. Mr. Ker states that his committee carried out Dr. Dolan's idea of a *plébiscite*. Surely not. I proposed taking the vote of over 12,000 members of the Association. Mr. Ker and his friends took a vote of 340, most of whom were members of the Council or friends of those who started the provisional committee. A vote from such a committee was a foregone conclusion as regards the independent candidates. Out of the 340 I should like to know how many actually voted. I remain, Sir, yours truly.

Halifax, Nov. 15th, 1886. T. M. DOLAN, M.D.

To the Editor of THE LANCET.

SIR,—As my name appears in THE LANCET of the 13th inst. in a letter from Mr. Ker in connexion with what he alleges took place at the recent Brighton meeting of the British Medical Association, with reference to the selection of candidates for direct representation on the General Council, will you allow me to state my very *distinct* recollection of what actually occurred at the general meeting on August 11th? Dr. Carter moved that three names be selected by the Council; after some discussion on this point, Dr. Dolan proposed an amendment which was practically a dilution of Dr. Carter's motion, to which so much opposition was shown by those present that Dr. Carter withdrew it *on the ground that the general feeling was against his suggestion*. Dr. Dolan's amendment then became the substantive motion before the meeting (which at this time numbered at least, if not more than, two hundred members), and as an amendment to it, I moved that the Association take no action whatever in the matter. This proposal was received with an outburst of cheering by those in the body of the hall. Dr. Dolan thereupon withdrew his resolution *in order to second my amendment, which was immediately unanimously carried*. The Chairman, Sir W. Foster—*not* Dr. Withers Moore, the President—said "That settles it," and the meeting then broke up.

Mr. Ker states that my amendment was not seconded! Assuming for a moment that this was so, *why* did Dr. Dolan withdraw his resolution? I remember reading, a few days after the meeting, the *British Medical Journal* report to which Mr. Ker refers. It struck me as being very meagre and not strictly accurate. Yours faithfully,

Nov. 15th, 1886. BERNARD O'CONNOR.

THE RELATION OF THE COURT OF EXAMINERS TO THE COUNCIL OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

To the Editor of THE LANCET.

SIR,—In the report of my speech at the recent general meeting at the College of Surgeons, I am represented as advocating the representation of every medical school by examiners *on the Council of the College*. Whilst in favour of the principle of representation of schools on the Boards and Court of Examiners, as well as of election of examiners, as one of the Charters of the Irish College of Surgeons has it, "without hatred, evil will, partiality, affection, favour, or fear," I have always held the view of THE LANCET, that the Council and Court of Examiners should be separated. No Fellow or member of the Senate of the University of London is eligible as an examiner, and at the Royal College of Surgeons in Ireland examiners are incapable of being elected members of the Council, and members of the Council are ineligible as examiners. The large sum annually divided amongst the members of the Court of Examiners increased, as it will be by the operation of Sir Erasmus Wilson's bequest, will render it practicable to deal justly and equally with all the medical schools, a few of which might be amalgamated with advantage. In expressing views of this kind *en passant* at the meeting, I did so in the capacity of an entirely independent Fellow, making observations strictly relevant to the report of the Council then submitted to the meeting for criticism, because this was the only occasion on which I should enjoy the opportunity of speaking openly and without reserve. My remarks would also have been quite relevant to the more immediate matter in hand if I had added, as I intended to do, that the presence of representatives of the Members of the College on the Council was shown to be desirable by the very obvious fact that on all such questions they would be absolutely impartial.

I am, Sir, yours, &c.,

Nov. 15th, 1886. WALTER RIVINGTON.

THE FUTURE POSITION OF THE SOCIETY OF APOTHECARIES.

To the Editor of THE LANCET.

SIR,—It is with both surprise and indignation that we hear that the Council of the College of Surgeons sent last Tuesday a letter to the Society of Apothecaries, expressing its adherence to the policy of excluding the latter body from the Conjoint Scheme. Previous to the memorable general meeting of the College of Surgeons on the 4th inst., a report was in circulation to the effect that the Council of the College would not view unfavourably such a resolution as that bearing upon the question of union with the Apothecaries' Society; and most decidedly that general meeting gave clear expression, by a vote carried *nem. con.*, to the views of the diploma-holders of the College, that it would be most detrimental to the interests of their *alma mater* should the Council still maintain its policy of exclusion. In the short interval of twelve days between the general meeting of the College and the transmission of its letter to the Apothecaries' Hall, the Council can

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neither have had the time nor the opportunity to collect evidence sufficient to justify it in its latest decision. Whose are the interests the most vitally concerned in this question: those of the select body of pure surgeons who sit on the Olympian heights of Lincoln's-inn-fields in a temple raised to other gods, or the general body of the profession which has been relegated to the outer courts? A clear and sharp issue was raised, and an emphatic decision arrived at on the 4th inst.; yet the Council persists in its suicidal resolve to lift no finger to avert an impending catastrophe. When a second corporation has been permitted to grant complete and competing licences in medicine, midwifery, and surgery, within a stone's throw of the College walls, the medical profession will not forget with whom to lay the blame. At the general meeting the Council was requested to report upon this matter "at a future meeting of Fellows and Members to be summoned for the purpose at an early date." That date must be at once.

We are, Sir, your obedient servants,

WARWICK C. STEELE,
W. M. ASHTON ELLIS,
Hon. Secs. Association of Members of Royal College of Surgeons.

P.S.—With reference to our letter appearing in your last issue, we have been asked as to where communications and signatures to the petition of the members of the Royal College of Surgeons should be sent. We take this opportunity of stating that all correspondence should be addressed to us at the Western Dispensary, Westminster, S.W.

To the Editor of THE LANCET.

SIR,—I have read most carefully the accounts given by you and by your contemporaries as to the dilemma in which the profession is supposed to be placed if the Colleges of Physicians and Surgeons do not admit the Apothecaries' Society to a partnership in the Conjoint Examining Board in England. Two questions have arisen in my mind, for plain answers to which I should be obliged, as I shall be materially influenced thereby in my attitude to many of the medico-political questions which are now being forced on our attention.

1. Is not a licentiate of the Society of Apothecaries, *who has taken no other diploma*, at the present time in every practical sense a practitioner of an inferior grade? I refer not to men of thirty or forty years' standing, when the L.S.A. stood in the fore-front, and was an honoured distinction; but to him who has acquired this one qualification only during the past ten or fifteen years, and practises his profession on this diploma only. If he is of an inferior grade, why make this noise? Let us reconcile ourselves to the fact.

2. Will the representatives of the Apothecaries' Society, if admitted to a Conjoint Board, endeavour to keep up the present standard or try to lower it? If the latter, they had better be excluded, and I am not aware that anyone has argued that their admission is necessary, or even advisable, for the former object.

If the Society must be admitted solely for the sake of the penal clauses of the Medical Act, as you seem to urge, then I can only lament over the loss of many well-considered Medical Bills, and the indecent haste with which, for the sake of direct representation only—a mere will-o'-the-wisp and caucus-driven absurdity—the new Medical Act has been rushed through Parliament by our medico-politicians. The lost Bills insisted on a one-portal system, which is the best guarantee for the future of our profession; this Bill has made it impossible.

Yours very faithfully,

Nov. 15th, 1886. L.S.A. (with other qualifications).

GERMAN MEASLES.

To the Editor of THE LANCET.

SIR,—I beg for insertion of the following account of an epidemic of German measles on the ground of its being a valuable contribution to the literature of the subject, and perhaps all the more valuable as the product of the observation of one who is not medical, and therefore not obnoxious to the suspicion of bias.

A friend of mine, a clergyman, the head master of a large country school, in a letter he wrote to me a short time ago, says: "We have had a course of epidemics lately: we began the year with mumps; the next term we had German measles; and this term we have common measles of rather a bad sort—31 cases, about half-a-dozen of them rather bad. We find that German measles is no protection against ordinary measles, but of all our cases of measles only one boy has had a second attack. Out of 105 boys 70 have had measles before; so far 69 have escaped. Of the remaining 35, 31 have got measles so far." Having lately seen a few cases of probable German measles, and being interested in the subject, as I have never had the opportunity of watching an epidemic of this disorder, I wrote to my friend for further particulars, especially inquiring as to the occurrence of measles in those who had had the German malady. I subjoin his answer *verbatim*, suppressing only names of persons and places:—

"What we had last term was said to be ordinary measles of a mild sort, but I, with great presumption, maintained that it was not, and called it German measles. When I was at —— school in 1868, we had a precisely similar epidemic, and I remember that —— (the doctor) called it 'spurious or German measles.' The boys were usually kept in for three or four days, and, just as in the epidemic here, none of them were ill. My reasons for believing the late epidemic here not to be ordinary measles were:—1. The boys were none of them really ill; the worst case out of forty was hardly as bad as the mildest case of ordinary measles. 2. In the majority of cases there was no cough, no sore-throat, no weakness of the eyes, no cartarrh; some few, however, of the patients had 'sneezing' for a day before the rash appeared, and when the rash came out their eyes were rather bloodshot, but not running. 3. The rash, judging from forty cases, is much smaller than the ordinary measles rash, but it is like it in form in the worst cases. (It consisted of very definite spots, round and crescent-shaped, which did not run into one another or form blotches). 4. There was none of the characteristic *smell* of measles which is always patent to my nostrils. 5. In a large number of cases the boys would not have known that they had any disorder if they had not been on the look-out for the rash. 6. The strongest point against the complaint being measles is that the period of incubation is much shorter. This is, of course, a difficult point to establish; but the time at which the boys came in one after another pointed to this; and one boy who came to school after the term began developed the rash *four or five days* after he came back. This last point, of course, is somewhat in favour of the scarlatina theory. One or two boys also had slight sore-throat. In one or two cases the eruption was suspicious, the spots being very small, and there being some slight appearance of a blush over the chest.

"Against the scarlatina theory I note:—1. That out of the forty cases there was not one severe enough to give a suspicion of scarlatina, apart from the appearance of the rash in two cases. 2. In one of those two cases there seemed reason to believe that the rash was different, as the boy had it twice during the term, and once again during the holidays, and his friends said that he had had it once or twice before in hot weather. 3. After the epidemic was over, one boy who had had the 'German measles' eruption did actually have scarlatina; that is to say, although he was not ill and had only a slight sore-throat, he had unmistakably the scarlatina rash. It was about as mild a case as could be, but yet it was in my opinion, and in that of the doctor, clearly different and distinguishable from all the cases of what I called German measles.

"To my mind the rash of German measles is as different from scarlatina rash as the rash of ordinary measles is. I have only twice come across German measles—in 1868 and in 1886. I believe I have seen a great many cases of measles and a fair number of scarlatina. To my lay observation it is different from both. The differentia of the German measles rash, as distinguished from scarlatina rash, is that the spots are clear and definite, and slightly raised, with white skin between them; and although scarlatina rash is spotty sometimes, the spots are not definite in the same way. I remember seeing it stated in the *Saturday Review* that German measles is 'a cross between scarlatina and the domestic variety of measles.' I am told that this is an exploded theory, but there is a great deal superficially in favour of it; at any rate, the complaint has some of the characteristics of both diseases. I believe it to be a disorder *sui generis*; but you will rightly discount all that a layman has to say on these points. Out of thirty-three

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boys who have now had measles, ten had German measles last term; and this is almost the exact percentage of cases in the whole school—viz., forty out of about 120. It seems evident that German measles is no protection against 'the domestic variety.' This is a long story, but, as you know, I have a weakness for dabbling in these matters."

I can endorse my friend's remark about the measles *smell*. I think in most cases it is highly specialised. I would add that the writer of the above letter has never studied medicine, nor read much in medical books. But he has been a very observant schoolmaster for many years, is of a thoroughly scientific turn of mind, and took honours in Greats at Oxford at a time when Mill's Logic was almost the Bible of the "ambitious." I am, Sir, yours faithfully,

London, Nov. 4th, 1886. H. B. DONKIN.

ARE SMALL-POX AND COW-POX ONE AND THE SAME DISEASE?

To the Editor of THE LANCET.

SIR,—For many years now, the medical profession in this country seems to be generally agreed that human variola and cow-pox are one and the same malady, the latter being merely small-pox modified through transference to the bovine creature. In books, letters, and lectures there is evidence of this belief, and the latest proof of its existence is to be found in the Harveian Oration recently delivered by Dr. Pavy, in which we find the following statement: "It may now be regarded as an accepted conclusion that vaccine lymph is the virus of small-pox, modified by transmission through the cow." If it be not rank heresy to throw doubts on a conclusion accepted by such high authorities in human medicine as Dr. Pavy represents, will you kindly allow me, a very humble student of animal medicine and comparative pathology, to dissent from this generally accepted conclusion, and to express strongest doubts, or even entire disbelief, as to the one malady being merely a modification of the other. The question would not, perhaps, be of so much moment had not at least three serious accidents resulted from carrying the above conclusion into practice; and as more disasters may yet be due to the same notion, I submit that it is high time the supposed facts upon which it is based should be examined, in order that the truth may be arrived at. The most notable authority for the statement made by Dr. Pavy, in this country at least, was my old friend, the late Mr. Ceely of Aylesbury, who reported that he had succeeded in producing cow-pox by inoculating a cow with small-pox matter. But it must be remembered that he, at the same time, was experimenting with vaccine lymph, and the great probability is that he employed the latter when he thought he was using the former. At any rate, he never afterwards succeeded in repeating his presumed success, though his subsequent trials were made under the most favourable conditions. The last attempt was undertaken not long ago, and only a short time before his death. On that occasion, twelve heifers were purchased by the Local Government Board and lodged in the Brown Institution, where they were inoculated by Dr. Klein, under the supervision and direction of Mr. Ceely; and though small-pox matter was literally poured into the incisions, and the greatest care was observed throughout, yet cow-pox was not developed in any of the animals. Similar failures have attended all other attempts, when these have been made openly and by two or more individuals. I may allude to those of the French Commission, which included some of the most distinguished members of the medical profession in Paris, with the able veterinary surgeon, Chauveau, as operator; and the Italian Commission, whose labours were carried on at Turin on a large scale and for a long time. All in vain, however, for small-pox could not be converted into cow-pox; and the conclusion arrived at was in direct opposition to that which Dr. Pavy asks us to accept.

Dr. Pavy speaks of the small-pox virus becoming attenuated in the cow, and that this attenuation manifests itself as cow-pox. But if inoculation of the former produces the latter, then I contend it is not attenuation, but absolute and permanent transformation of the most startling and complete description, and such as cannot be effected with any virus or microbes known. We are required to believe that by one remove of human small-pox—a most infectious, fatal, and generally eruptive disease—to the cow, we have produced a non-fatal disease, which can only be transmitted by inoculation, with an eruption quite localised at the points of inoculation, and otherwise widely different in its clinical and pathological features, especially with regard to the eruption. Most astonishing of all, however, is the circumstance that this modified or attenuated small-pox, when carried back to its original soil in mankind, never resumes its original characteristics; no matter though it be carried through countless generations of human beings, it remains for ever in its transformed condition. This does not happen with an attenuated virus, nor can any virus, by any artifice of man, become so utterly changed. Again, we all know how readily vaccine lymph, when inoculated in the calf or cow, will produce vaccinia. As I have pointed out, all attempts to develop the latter by inoculating these animals with variolous matter have resulted in failure, when made by those most competent to achieve success, if this were possible.

Surely for these reasons it is, to say the least of it, rash and dangerous to conclude that the vaccine lymph is the virus of small-pox modified by transmission through the cow. But if Dr. Pavy or anyone else will publicly demonstrate the identity of the two diseases by the most convincing of all evidence, then I, with the large number of medical men on the continents of Europe and America who hold the opinion I do, shall gladly reconsider my position in the discussion. In the series of papers on "Human and Animal Variolæ" which you did me the honour of publishing a few years ago, I stated that small-pox and cow-pox were different and antagonistic diseases, and nothing has transpired since then to cause me to change my views; on the contrary, the important discoveries which have been made in microbiology (if I may use the term) have confirmed them in every respect.

I remain, Sir, yours truly,

GEORGE FLEMING, LL.D.,

Nov. 8th, 1886. Principal Veterinary Surgeon of the Army.

CASE OF SPINA BIFIDA SUCCESSFULLY TREATED BY OPERATION: A REJOINDER.

To the Editor of THE LANCET.

SIR,—In THE LANCET of Oct. 2nd Mr. Barton of Dublin published the notes of a case with the above heading. Being absent from town at this date, I have only just read these notes, and beg permission to say a few words in reply. In the first place I would congratulate Mr. Barton on the success of his procedure as a surgical operation; but from every other point of view I consider the method adopted as the one of all others least likely to be of real service to a patient with spinal bifida. Mr. Barton quotes from my article in Heath's Dictionary of Surgery; he confirms by his case some of the diagnostic points there given between meningocele and myelocele, and further shows that the freedom from paralysis is not diagnostic of the latter condition. In describing the operation, it is stated that numerous small nerves passed "into the portion removed, which were of course cut across." I feel sure it will interest Mr. Barton to know that the nerves found within the sac do not pass *into* the sac wall, but that they *arise from it;* and that the median vertical portion of such a spina bifida as the one he describes represents the spinal cord—in fact, that it is the spinal cord modified by the pressure to which it has been subjected. Mr. Barton's operation was therefore equivalent to removal of a portion of the spinal cord. Under such circumstances ultimate success was impossible. I agree with him in his statement that "the treatment of spina bifida is still unsettled." The committee of the Clinical Society of London, which recently reported on this subject, also appeared to think that this question of treatment was not yet settled; but it was laid down by that committee almost as a canon "that any operation involving interference with or removal of the *median vertical portion* of the tumour should be abandoned."

I have written this less in criticism of Mr. Barton's procedure, which was eminently successful considered merely as an operation, than in the hope of dissuading others from following his example.

I am, Sir, yours obediently,

ROBERT WILLIAM PARKER,

Surgeon, East London Hospital for Children.

Old Cavendish-street, W.

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ASSOCIATION OF GENERAL PRACTITIONERS.

To the Editor of THE LANCET.

SIR,—We ask leave to inform your readers that active steps have been taken by the Association to assist general practitioners of this country to give combined and united force to their wishes and interest, especially in relation to the actions of the various corporations, and to the representation of the general practitioner thereon. We desire especially at this moment to assist the licentiates of the College of Physicians to give organised expression to their claim to a voice in the administration of the affairs of their College. We believe their claim to be so strong that adequate representations made by a strong body of licentiates duly organised could not fail ultimately to secure for the licentiates of the College of Physicians a just voice in the management of their own affairs, and in the government of the profession of which they constitute so large a proportion. We should be glad to hear from licentiates of the College of Physicians on this subject, and have names of those willing to take part in securing for themselves and fellows a less contemptuous and more honourable treatment than they now receive at the hands of the self-elected Council of that body. May we be allowed to add that we forwarded yesterday a requisition signed by twenty members of the Metropolitan Counties Branch to the secretaries of the branch calling for a meeting of the Metropolitan Branch to consider the action of the College of Physicians and College of Surgeons in respect to the Apothecaries' Society, which threatens to create a new and competing class of general practitioners throughout the kingdom? We have every reason to believe that that requisition will be favourably considered, and we trust that general practitioners will largely attend the meeting when summoned. Hoping to hear from all who sympathise with our efforts in the objects we have stated,

We remain, Sir, your obedient servants,

H. W. VERDON, M.D., F.R.C.S.,
410, Brixton-road, S.W.

W. GIBSON BOTT, L.R.C.P. and M.R.C.S,
414, Clapham-road, S.W.

Nov. 18th, 1886. Hon. Secs. Association of General Practitioners.

"DEATH OF A PASTEUR PATIENT."

To the Editor of THE LANCET.

SIR,—Will you kindly allow me to correct a statement in Dr. Hime's letter to you on a Pasteur patient (Wilde), the remarks being made in a postscript that Wilde was not really intentionally bitten by the deceased Oates. I emphatically contradict this hazy piece of information. *Wilde was savagely bitten by Oates*, and the latter had remarked that he should bite someone if they did not mind. I saw the lacerated teeth-marks. I had Wilde's own evidence and my own observations bore out the man's statement. I had several opportunities of questioning Wilde on this point; his statement was always the same. If there had been any doubt in my mind that it was an abrasion only in the struggle, he would never have gone to Paris. This interpolation of Dr. Hime's letter in your annotation also gives an utter misrepresentation of the facts of the case.

I am, Sir, yours obediently,

Nov. 1886. HARRY O'D. FOOTE, M.D.

THE MEETING OF GERMAN NATURALISTS AND MEDICAL MEN IN BERLIN.

(Concluded from p. 847.)

AT the first meeting of the Surgical Section Professor von Bergmann showed some interesting and rare cases. One of these was a young man who from a fall received compound fractures of the legs and fractures of both the thigh and the patella. In order to unite the fractured patella, some months after the accident, Professor Bergmann chiselled off the tuberosity of the tibia, and placed it between the two fragments of the patella, after which union took place. The patient can now extend the leg very freely, but the mobility of the knee is yet a good deal impaired. The other cases shown were two cases of Actinomycosis. At the second meeting, Krause spoke of the changes in the nerves and in the spinal cord after amputation, and afterwards demonstrated his specimens. The changes consist in atrophy of the medullary substance and subsequent atrophy of the axis cylinder in the sensory peripheric nerves; hence the changes spread to the spinal ganglia. As shown before by Dickinson and others, alterations were also seen in the posterior column and in the ganglia cells of the postero-lateral group in the anterior horn. The observations were made under the direction of C. Friedländer. Grünfeld showed an Endoscope of simple construction, which enabled him to make out the exact form, surface, and extent of bladder tumours. Madelung introduced the subject of Diffuse Lipomata, and an interesting discussion followed, in which several surgeons spoke of the neuralgic pains associated with these tumours and the recurrence of these tumours after removal. Madelung described an affection of the sole of the foot corresponding to Dupuytren's palmar contraction, and exhibited some casts. Of the other papers read in this section we wish briefly to notice one by Küster on Stenosis of the Trachea. The author distinguished between traumatic, diphtheritic, and syphilitic stenosis and the narrowing produced by new growths (sarcomata and carcinomata), &c., and recommended, whenever possible, removal of the granulations, dissection of bands, &c., and subsequent dilatation by means of instruments. In very severe cases, especially in cases of new growths, he recommends resection of the trachea. Baumgärtner spoke of the Cachexia following the removal of Tumours of the Thyroid. The cachexia is not present in all cases of thyrectomy, and in six cases no cachexia strumipriva resulted. In the discussion which followed, Semon of London gave an interesting account of Myxœdema, of the cases observed in England, and of Horsley's researches. This disease seems as yet to have escaped the notice of German observers. Bardeleben stated that in more than a dozen cases where the thyroid was removed no symptoms of cretinism followed. Others, however, such as Küster, were less sceptical, and advocated only partial removal of the thyroid, except in cases of malignant tumours. Böker related a case of Enchondroma springing from the cricoid cartilage, for the removal of which he extirpated this cartilage, with successful results. The case, which seems unique, has since been published in the *Deutsche Med. Wochenschrift*, No. 43.

In the Medical Section several interesting communications were given. Of these the more important ones were: Runeberg on Pernicious Anæmia produced by Bothriocephalus Latus; Finkler on the Principles of the Pathology and Therapeutics of Fever; and Immerman on Rheumatism. Lenhartz spoke of the antagonism between Morphia and Atropia. His observations and experiments did not lead him to look favourably upon the administration of atropia in cases of morphia poisoning. In 173 cases of opium poisoning 59 cases treated with atropia showed a mortality of 28 per cent., whilst in 73 cases not so treated the mortality only amounted to 15 per cent. In the discussion Freimuth and Lewin spoke in favour of atropia as an antidote in these cases, an opinion which agrees well with the results seen in English hospital practice, many of which are not published, and thus render the statistics of Lenhartz untrustworthy. Penzoldt reviewed the use of Digitalis in various diseases; this drug acts best in simple muscular insufficiency of the heart and in valvular heart disease, and in insufficiency of the right ventricle in emphysema; its effect is more doubtful in nephritis and in the acute diseases associated with weakness from the heart's action; it has little effect also when there is much fatty degeneration of the heart. Cantani gave an interesting communication on the poisonous properties of the Cholera Bacilli. Experiments on dogs showed that if pure cultivations of cholera bacilli in peptone gelatine after having been heated to 100° C. were injected into the peritoneal cavity, symptoms of cholera poisoning appeared; and he argued that the dead cholera bacilli, if absorbed, have a poisonous effect. As therapeutic agents he recommends enteroclysis with hot solution of gallic acid (which destroys the bacilli rapidly), and large hypodermic injections to increase the elimination of the absorbed poison. Strümpell spoke of Compression-myelitis, and expressed the opinion that in these cases there is simple compression of the cord and no myelitis, and often no descending degeneration.

In the Gynæcological Section a number of interesting specimens (preparations of Extra-uterine Fœtation, Ovarian Tumours, and Diseased Fallopian Tubes) were shown, and

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many interesting papers were read, such as the one by Rydygier on Vesico-vaginal Fistulæ (twenty-one cases, all but one cured), and E. Fränkel (Breslau) on the Mechanical Treatment of Retro-deviation of the Uterus. This author is against Alexander's operation, where, out of 118 reported cases, three deaths occurred; in fourteen cases no results; in others a pessary had to be permanently worn after the operation; and in many cases sufficient time had not elapsed to speak of a definite cure of the ailment by the operation. Several papers were read on Castration for Epilepsy, for Neuroses, and for Diseases of the Fallopian Tubes. These led to a long discussion, in which the best known German gynæcologists took part, and several (Freund, Olshausen, Schatz) were either opposed to castration for pure neuroses, or advised the operation only in those cases where all other means failed.

In many of the other special sections, such as those of Neurology, Laryngology, Diseases of Children, Forensic Medicine, and Hygiene, excellent work was done; but it is impossible to do justice to the communications in this short report. The most important papers will be published separately in the special journals, as the Association only publishes short abstracts.

In conclusion, a brief reference may be made to the exhibition of scientific instruments and drugs. Besides the usual collection of microscopes, microtomes, electrical apparatus—all by the best German makers,—the exhibition contained numerous physical and physiological instruments, geological charts, and collections of preserved animals, showing the value of new methods of preservation for museum purposes. The specimens exhibited by Prof. Semper (Wurzburg), were beautifully preserved, and the method seemed specially useful for class demonstrations. The exhibition, besides a practical, had thus also an educational value, and we can only recommend the adoption of a similar arrangement to the exhibitions held annually with our Association meeting. An excellent catalogue was prepared and edited by Dr. Lassar, of Berlin, who worked indefatigably for the museum, and took a conspicuous part in the arrangement of the social gatherings and amusements which passed off so successfully. The English visitors are especially indebted to him for the very cordial reception they received, and the assistance he rendered them.

LIVERPOOL.

(From our own Correspondent.)

HOSPITAL SUNDAY AND SATURDAY IN LIVERPOOL.

THE annual meeting in connexion with the Hospital Sunday and Saturday collections was held in the Town-hall on the 5th inst., the late Mayor, Sir David Radcliffe, presiding. As next January will witness the seventeenth anniversary of this movement in Liverpool, it may be regarded as a well-established institution. In further proof of this it may be stated that although the weather last Hospital Sunday was as unfavourable as it could be, and in spite of the depression of trade being then at its worst, the collections realised the total of £6217. In addition to this there were donations amounting to £158; while the Hospital Saturday boxes yielded a total of £3149, an increase of £500 over last year—a most gratifying proof of the increased interest taken in the hospitals by the working men. It was suggested by Sir William Forwood that the Committee should consider the advisability of changing the Sunday from January to May. There was a much larger meeting than usual, and considerable interest was taken in the proceedings.

THE ROYAL INFIRMARY: RESIGNATION OF DR. WATERS.

Dr. Waters, the senior physician to the Royal Infirmary, has resigned the office of physician, which he has held for a period of fifteen years, having been elected in 1871 in place of the late Dr. Inman, who resigned in that year. It is hoped, however, that the infirmary will not lose Dr. Waters' services entirely, but that he will, as consulting physician, be enabled to give the acting staff, students, and patients the benefit of his large experience. There is a growing feeling in favour of making the offices of consulting physician and consulting surgeon really useful, and not merely ornamental, as it must be confessed they have too frequently been. By this resignation Dr. Thomas R. Glynn, Professor of Physic at the Liverpool University College, becomes senior physician. Dr. Caton is at present the only candidate for the vacant office.

THE VICTORIA UNIVERSITY.

The election of Mr. W. Mitchell Banks as the representative of the Victoria University on the Medical Council has given general satisfaction here. Mr. Banks is well known as one who is deeply interested in all that relates to medical education, in which he has had considerable experience. He is essentially a practical man, and will make a valuable addition to the Council.

FALSE CHARGES AGAINST MEDICAL STUDENTS.

A report was published in the local papers that the medical students of the Liverpool School of Medicine had contributed to a disturbance at the Exhibition on the night of its closure. Mr. Paul, the Vice-Dean of the Medical Faculty, University College, made it his business to investigate the matter, and found that the statement was erroneous. Only three students were present during the evening, and they all left before the disorder commenced. Mr. Paul, in a letter which also appeared in the daily papers, alluded to the fact that the title of medical student is often assumed by young men who have no claim to it, and he describes the local medical students as being as well conducted as any other body of young men. Mr. Paul deserves the thanks of all for thus disproving a charge easily made and not always so easily disproved.

INFECTIOUS DISEASES IN LIVERPOOL.

A temporary hospital has been erected on ground adjoining the Netherfield-road Hospital for infectious diseases. The structure which has just been completed is admirably adapted for a fever hospital. It contains two commodious sick wards for six patients each, a room for nurses, and other accommodation. It is heated by two large ventilating stoves, and will be lighted by a new system of gas illumination. The hospital has been put up in a remarkably short time, and its erection has been superintended by Mr. Gerson Trier, manager of the English branch of the Dœcker Hospital and Hut Factory. It has been officially visited by the city surveyor, Mr. Shelmerdine, and Mr. Thompson, clerk of works.

Liverpool, Nov. 16th.

NORTHERN COUNTIES NOTES.

(From our own Correspondent.)

GATESHEAD CHILDREN'S HOSPITAL.

AT a meeting of the Committee of the Gateshead Children's Hospital, held at the Town Hall on Friday last, it was determined to advertise for tenders, and to proceed with the erection of the building as soon as possible, so as to make it at the same time a Jubilee memorial. The hospital is to be constructed on the pavilion principle, on a site of two acres generously given by Lady Northbourne as a free gift to the hospital.

THE NEWCASTLE HOSPITAL SUNDAY FUND.

The collections for the hospitals were taken on the 24th and 25th of last month, and so far it would appear from the lists of subscriptions published that there has been an increased interest taken, as shown by the amounts as compared with last year's.

THE VOTING IN THE NORTH.

A considerable number of practitioners in the north received their voting papers on last Saturday, most of which are as promptly returned to the offices of the Medical Council. I am no "prophet," but still we are "clannish" in the north, and very few scattered votes will be given; fully 75 per cent. of the voters are in favour of three candidates.

NEWCASTLE NATURAL HISTORY SOCIETY.

A very extensive, valuable, and important collection of land shells, Helices, Bulimi, &c., has lately been presented to this museum by Mrs. Angas, Norland-square, Notting-hill, London, collected in various parts of the world by her late husband, Mr. George French Angas, who was a native of Newcastle, but chiefly resided abroad, and was well known as a naturalist and a scientist. Mr. Angas's sketches of the natural history and inhabitants of Australia and New

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Zealand, of which at the time comparatively little was known, were exhibited many years ago at the Egyptian Hall, London, and were considered the "sensation" of the season. These sketches were afterwards published in imperial folio, under the title of "South Australia and the Zealanders Illustrated."

A MEDICAL CERTIFICATE OF NO USE.

At the North Shields police-court last week a landlady was charged with selling a bottle of spirits during prohibited hours. She pleaded in defence that the spirits were required for a case of emergency—namely, a confinement,—of which she could produce a doctor's certificate. She was severely cautioned, however, and fined. On the other hand, the kind-hearted landlady, although she has transgressed the laws of the land, may console herself with the thought that she has probably saved a life; for wherever alcoholic stimulants are required at a confinement, as a rule they are urgently wanted.

Newcastle-on-Tyne, Nov. 17th.

IRELAND.

(From our own Correspondent.)

SIR JOHN LENTAIGNE, C.B., D.L.

THIS gentleman died at an advanced age at his residence in Dublin, on Sunday last. Educated at Trinity College, Dublin, he graduated in Arts in 1825, and in medicine three years afterwards, and obtained the Fellowship of the Royal College of Surgeons in Ireland in 1884. His labours in relation with reformatory and industrial schools were well known and appreciated, and he fulfilled the duties of inspector of those institutions in Ireland in a thoroughly satisfactory manner. The deceased was a member of the Royal Irish Academy, ex-president of the Zoological Society of Ireland, member of the Board of Superintendence of Dublin Hospitals, a Justice of the Peace for the County of Dublin, and ex-president of the Statistical Society, &c.

THE PROPOSED CONJOINT SCHEME.

The College of Physicians, I am informed, have elected Mr. Greenwood Pim secretary to the Committee of Management for the conjoint scheme between the two Colleges. Considerable surprise has been expressed that the appointment was not conferred upon a medical man.

ACADEMY OF MEDICINE IN IRELAND.

The opening meeting of the Surgical Section of the Academy took place last week, when Sir William Stokes, President of the Royal College of Surgeons, delivered an address on "Finality in Surgery." A very interesting case was exhibited at the meeting by Mr. H. Gray Croly—that of a lad who by a fall last August lacerated the front of the knee-joint, and chipped off a piece of the cartilage of the internal condyle of the femur. The wound under antiseptic precautions healed satisfactorily, and the patient can now walk well.

CITY OF DUBLIN HOSPITAL.

On the 9th inst. Mr. Fitzgibbon amputated through the left thigh fordisease of the knee-joint. The patient for upwards of a year had been under the care of an unqualified man, who, it is stated, applied plasters as the sole treatment. When operated on, the knee-joint was in a fearful state of disorganisation. On the same morning Mr. H. Gray Croly performed a perineal section on a patient who had passed several pieces of phosphatic stone, and who could not retain his urine. The bladder was opened by Allarton's median operation, for drainage purposes, and to give rest to the bladder. Exactly a fortnight since a similar operation was performed by Mr. Croly, and the patient since has been greatly relieved. Mr. Croly also removed a revolver bullet from the chest of a young man who had been shot about a year since, while attempting to rob a house. The bullet had entered the under part of the shoulder, and had penetrated the chest, as shown by the emphysema and congestion of the lung which had ensued. The bullet, however, could not at that time be found. The patient, having served a nine months' imprisonment, was admitted into hospital, when it was found that abscesses had formed at the front of the chest, and a piece of his coat had come out of one of these abscesses. It was thought by some that a hard body could be felt to the left of the sternum, and accordingly Mr. Croly made an exploratory incision, and found the bullet embedded in one of the ribs. The bullet, it may be mentioned, was of the ·380 size.

LISMORE UNION.

Dr. O'Farrell, Local Government Board inspector, on Wednesday held a sworn inquiry as to charges of neglect and ill-treatment of the inmates of the workhouse. The evidence generally showed that there was no foundation for the charges of inhumanity. But the medical officer believed the pauper attendants were unsatisfactory; he had frequently to report them; while the want of proper night nursing was the great drawback at the fever and infirmary hospitals.

Rabies has been of late extremely prevalent in Lurgan, Banbridge, and other places in the north of Ireland; and at a recent meeting of the Banbridge guardians it was determined to send a girl who had been bitten by a mad dog to Paris, to undergo treatment by M. Pasteur.

At a recent meeting of the Commissioners Dr. J. W. Patrick was unanimously appointed coroner for the county of the town of Carrickfergus, in the room of Dr. Taggart, deceased.

Dublin, Nov. 16th.

PARIS.

(From our own Correspondent.)

THE TRANSMISSION OF NERVOUS PHENOMENA.

Two curious communications have been made at the Society of Physiological Psychology, and at the Biological Society, by Dr. J. Babinski, *chef de clinique* at the Salpêtrière, on the transmission of certain nervous phenomena from one subject to another by means of the magnet. Dr. Babinski states that all possible precautions were taken to exclude simulation and suggestion. In the first series of experiments practised upon hypnotisable hystero-epileptics, hemianæsthesia was transferred from one patient to another, and other symptoms induced in the first case by suggestion—such as flaccid or spasmodic paralysis, crural and brachial monoplegia, hemiplegia, paraplegia, coxalgia, and mutism—were disposed of in the same way. The results of these experiments show that the two subjects have the same relationship to one another as regards *transfert* as the halves of one body. In a second series of cases spontaneous hysterical paralyses were passed on to the hypnotised subject, the condition of the original patient being, as a rule, improved. The following observations lead M. Babinski to hope that these practices may be used as a mode of treatment. A young girl with spontaneous mutism was placed *en rapport* with a hypnotisable subject, who forthwith became speechless. No improvement was noted at the first *séance*, but after twelve experiments the speechlessness was replaced by extinction of the voice. The induced mutism was removed on each occasion by suggestion. A patient of the hospital remained hemiplegic and contractured after an hysterical attack. Placed *en rapport* with one of the subjects, the hemiplegia diminished, and disappeared after four sittings. In different cases of organic disease similar phenomena were observed. The person hypnotised was placed in the somnambulic phase of artificial sleep with her back (as in the other cases) to the patient. An infantile cerebral hemiatrophy, characterised by spasmodic hemiplegia and athetosis, was then dealt with, the effect being a sharing of the symptoms between the two, the patient keeping her athetosis and handing over her spasmodic hemiplegia to her companion. Another woman, with right hemiplegia and aphasia due to softening, retained her own troubles, but transferred a numbness to the subject which ended in hemiplegia. In a third case of disseminated sclerosis with paresis of the four limbs, trembling, and the pathognomonic pronunciation, the scapegoat developed all the symptoms, but in an exaggerated degree. I shall not stop to examine M. Babinski's views on the subject, but will contrast with these experiments those of one of the most experienced workers in this field at the same hospital. M. Jules Voisin has tried on two of his patients the action of medicines *à distance*, and also of metals and magnets. A number of dark bottles containing different drugs were sealed and numbered, the contents not being otherwise

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known. The subjects being placed in lethargy, somnambulism, or catalepsy, no medicinal effect could be induced. But when awake the production of the bottles was followed by hypnotism, with signs of nausea and vomiting. In this condition the mere mention of the name of any known drug was sufficient to give rise to a representation of its effects, manifestly due to suggestion and auto-suggestion. In the same manner, the subject being placed in one of the three higher phases of induced sleep, her state was in no way modified by the magnet. When awake, however, it produced an attack *if seen*.

THE TYPHOID BACILLUS.

In a recent number the *Gazette Hebdomadaire* gives an interesting account of a localised epidemic of typhoid fever manifesting itself in five members of the same family, and having its cause in the water used by the patients. The bacillus described by Eberth and Gaffky was found both in the water and in the blood removed from the spleen. MM. Dreyfus-Brisac and Widal point out that in a doubtful case the existence of typhoid may be easily determined by a harmless exploration and a simple laboratory experiment.

TANNIN IN TUBERCULOSIS.

MM. Raymond and Arthaud have made some comparative researches on the action of sulphide of carbon, iodoform, and tannic acid in tuberculous patients. Having found that when tannin had been administered to animals for a month, they were more refractory to the effects of the tubercular virus, it was used in more than fifty cases of human tuberculosis in doses of from two to four grammes daily. In less than a fortnight half the patients showed an increased weight, which continued during the treatment. In acute tuberculosis, both of the child and the adult, the symptoms amended, and the disease retrograded in some cases which had been looked on as hopeless.

Paris, Nov. 16th.

MONTREAL.

(From our own Correspondent.)

ENTERIC FEVER.

ENTERIC FEVER, which is endemic in Montreal, has this summer assumed an epidemic type. It generally begins to be more prevalent in October, but this year the increase in the number of cases began in August. This is shown by the number of cases admitted into the General Hospital. This institution is at present full, and the typhoid fever cases amount to 62 per cent. of the whole. There have never been so many cases of this disease in the hospital at one time before, and they come, not only from the city, but from the adjacent municipalities. To meet this increase in the number of patients, the governors of the hospital caused to be erected on the grounds at the rear of the building a hospital tent for the exclusive use of typhoid patients. This tent is oval in shape, forty feet in length by twenty in width, with a board floor four inches above the ground. To carry off any surface water a trench has been dug around the tent. By means of a stove the temperature inside the tent is kept between 60° and 70° F. It contains twelve beds, and is quite isolated, being supplied with separate nurses, orderlies, &c. At the rear of this tent a smaller one has been erected to serve for a kitchen. Although at first patients objected to being removed to the hospital tent, those who are there prefer it now to the wards. Notwithstanding the large number of cases of typhoid in and about the city, the mortality so far has been very low. The annual report of the hospital shows that collections from the city poor-boxes during the year amounted to $200.92, and that twelve churches took up collections in aid of the institution, the total sum collected being $497.54.

PLEURO-PNEUMONIA.

An attack of pleuro-pneumonia has unfortunately been doing considerable damage in the neighbourhood of the cattle quarantine at Levis, opposite Quebec. All available means have been taken to prevent its spread, and lately the Dominion Government purchased and slaughtered a number of suspected cattle belonging to farmers in the vicinity.

CANADIAN MEDICAL ASSOCIATION.

A very interesting meeting of this Association was held last month in Quebec, a large number of delegates from the different provinces being present. A number of valuable papers were read in the different sections, and a long discussion took place *in re* the quarantine stations below Quebec, in the course of which it was announced that the Government had decided not to appoint a port physician at Montreal, as they considered they had a sufficient establishment at Rimouski, Grosse Ile, and Quebec. The Government have, however, lately made some necessary improvements in the way in which these stations are managed.

The stipendiary magistrate has rendered judgment in the case of the Inland Revenue Department, *versus* a firm of coffee and spice manufacturers here. The court imposed a fine of $10 and costs, holding that the compound of coffee sold should have had the word "mixture" stamped on the packages.

A large new school building has just been completed by the Protestant Board of School Commissioners. It is 60 ft. frontage by 90 ft. deep, two and a half storeys high, and will accommodate over 600 children. It has been constructed with due regard to the latest advances in ventilation and hygiene generally, and cost upwards of $40,000.

Montreal has just commenced the plan of cremating all the garbage collected by the scavengers. From 170 to 250 cartloads are cremated every night. The work takes about six hours each night, and it is surprising how little of an offensive nature there is about the process.

Dr. R. P. Howard of Montreal, having resigned the vice-presidency of the International Medical Congress to be held in Washington, D.C., next year Dr. J. A. Grant of Ottawa has been appointed in his place.

Montreal, Sept. 30th.

Obituary.

FREDERIC JOHN FARRE, M.D., F.R.C.P.

BY the death of Dr. Frederic Farre, the Royal College of Physicians has lost one of its oldest Fellows and most honoured officers; for although at one time he was in active practice as a hospital physician, he had spent a large portion of his life in connexion with the College, and it is in this connexion that he will be chiefly remembered, as doubtless he himself would wish to be. He was the second son of the late John Richard Farre, M.D., who died in 1862 at the age of eighty-seven, having been for nearly fifty years physician to the Royal London Ophthalmic Hospital, of which he was one of the founders. Another son, perhaps better known to the profession, is Dr. Arthur Farre, who survives his brother Frederic. Frederic Farre was born in London on December 16th, 1804, and was therefore in his eighty-second year at the time of his death. He was educated at the Charterhouse, where he was Gold Medalist in 1821, and Captain of the School in 1822. He obtained a Foundation Scholarship at St. John's College, Cambridge, and sustained the reputation of that College by being classed a wrangler in the Mathematical Tripos. Having taken the B.A. degree, he chose medicine as a profession, and entered as a student at St. Bartholomew's Hospital. In 1830 he proceeded to the degree of M.A. at Cambridge, and in 1837 obtained that of Doctor of Medicine. In 1831 he was appointed Lecturer on Botany at St. Bartholomew's Hospital, and subsequently on Materia Medica. In 1834 he was elected Assistant Physician to the Royal London Ophthalmic Hospital, and also to St. Bartholomew's Hospital, where he suceeeded in due course to the full Physiciancy. On retiring from St. Bartholomew's he was elected a Governor of that institution. Dr. Farre was also Physician to the Charterhouse, and Medical Officer to the Rock Life Office.

His connexion with the Royal College of Physicians dates back to 1838, when he was elected to the Fellowship. He held the office of Censor in the years 1841, 1842, and 1852; that of Lecturer on Materia Medica, from 1843 to 1845; of Councillor, from 1846 to 1848, and 1866 to 1867; of Examiner, in 1861 and 1862, and in 1866 and 1867; of Treasurer, from 1868 to 1883; and of Vice-President in 1885. Thus during a period of nearly half a century Dr. Farre took a prominent and active part in the affairs of the College, and especially during his term of office as treasurer he was indefatigable in guarding its interests and promoting its welfare. As a testimony of his attachment to the College, it may be remembered that

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shortly before his resignation of the office of treasurer he presented the College with a manuscript history of the institution, which he had spared no pains to render full and exact. He was most punctual in the discharge of his duties, and his familiar presence and voice will be missed from the comitia meetings, which he never failed to attend. When last year he was nominated by the president to serve as one of the vice-presidents of the year, it was generally felt that no Fellow had a better claim to such a distinction.

Dr. Farre was editor of the first British Pharmacopœia, and of Pereira's Manual of Materia Medica. He also served as examiner in materia medica to the University of London. It is some time since he retired from professional practice, which he had carried on with much success when he resided in Montague-street, Russell-square. He married a daughter of the late R. Lewis, Esq., who survives him, as do also his two daughters, the eldest of whom is married to the Rev. Henry Spencer of Oxford. For the past five years or so he resided at Elsham-road, Kensington, and it was there that about six weeks ago he contracted his fatal illness —pleurisy,—in the course of which he was attended by Sir W. Jenner, and Drs. Brunton, Rayner, and Butcher. He died on the 9th inst., and was buried on the 13th at Kensal Green, where his father's remains also lie.

M. PAUL BERT.

THE death of M. Paul Bert, who has fallen a victim to the climate of Tonquin, has been the chief topic of conversation during the last week in scientific and political circles. M. Paul Bert was born at Auxerre in 1833, and received his early education in the department of the Yonne. His first preference was for engineering, and he entered the College of Saint Barbe with a view to preparation for the École Polytechnique, but, changing his mind, he commenced the study of the law, and passed successfully the examinations for the licence. He was on the point of entering the magistracy when he decided that the application of the Code was not his real vocation, and once more modified his course of study. Becoming acquainted with Gratiolet, then Director of Practical Anatomy at the Museum, he turned all his attention to original investigation, and obtained the doctorate in Medicine in 1863, and the doctorate of Science three years later.

After teaching zoology for some time at the Faculty of Sciences of Bordeaux, M. Paul Bert definitively came to Paris, acting as Flourens' substitute at the Museum, and succeeding Claude Bernard at the Sorbonne. At the same time, during the last few years of the Empire, he made himself conspicuous in the political world by his uncompromising republicanism, and at the fall of the Napoleonic dynasty, he was rewarded by Gambetta with the Prefecture of the Nord. In 1871, elected deputy, he became remarkable for his constant opposition to the religious congregations, which eventually brought about the decrees of expulsion against the Jesuits, Dominicans, and other orders. In 1881, he was made Minister of Public Instruction, in Gambetta's famous *Grand Ministère*, falling with his chief after an ephemeral exercise of power.

After the death of Gambetta, M. Paul Bert found his political influence on the wane, and partially returned to his former pursuits, obtaining a vacant seat at the Academy of Sciences. At the beginning of the present year, the attention of the French Government being forcibly drawn to the very unsatisfactory state of things in Tonquin, it was decided to send out a Resident General, invested with special powers, with a view to thorough reorganisation. The choice of the Ministry fell upon M. Paul Bert, who had always been a supporter of the present French colonial policy, and he left Paris for the East last February. The disorder in all the branches of the administration was so great that it required all the energy of the Resident General to set things right, a task which was rendered all the more difficult by the want of cordiality between the civil and military officials. It was this task that he seemed to be on the point of accomplishing when his health, already undermined by the deadly nature of the climate, gave way, and he died of dysentery on the 11th inst.

As a Member of Parliament, M. Paul Bert was instrumental in bringing about the changes that have been made of late years in teaching and education. In medicine, although a doctor, he was not a practitioner, his ideas on the subject of treatment being often prejudiced by an exclusive experience of the physiological laboratory. It was thus that he took under his patronage the pseudo-sciences of metallo-therapy and dosimetry, and caused some amusement in the medical world by his ardent advocacy of hæmo-pulvine. As a man of science, he was an original worker and an accomplished populariser. He took an interest in everything, and rapidly assimilated all that he studied. But, as a matter of fact, this extreme versatility prevented him from making more than a beginning in whatever he undertook, whether in politics, science, law, or mathematics, and it may be added theology. A striking anecdote of his intrepidity as a *savant* is related. Some years ago he visited Havre while a severe epidemic of small-pox was raging in that port. Noticing on his return to Paris that the mortality was daily on the increase, he began to entertain doubts as to the efficacy of vaccination as a prophylactic, and resolved to solve the problem to his own satisfaction by experiments on his own person. He accordingly got himself vaccinated, and going a fortnight afterwards to the Charité Hospital he had himself inoculated with the virus of a man who was dying from the small-pox. No ill effects having resulted from this terrible experiment, M. Paul Bert was completely won over to the cause of vaccination, which throughout the remainder of his life had no warmer supporter. Of his numerous productions we may mention "La Greffe Animale" (1863), "Notes d'Anatomie et de Physiologie" (1867-79), "Recherches sur le Mouvement de la Sensitive" (1867-70), "Leçons sur la Physiologie comparée de la Respiration" (his best work), and "La Pression Barométrique" (1878).

ARTHUR WYNN WILLIAMS, M.D. ST. AND., M.R.C.S.

ON Monday, Nov. 15th, at Brooklyn, West Drayton, Middlesex, Dr. Wynn Williams, aged sixty-seven, formerly of 1, Montagu-square, London, and consulting physician to the Samaritan Free Hospital for Women and Children, passed away. The following brief details of his life will be of interest to the many friends who now grieve over their loss. Dr. Wynn Williams was born at Bangor in 1819, and was a descendant from an old Welsh family, being great-grandson to John Freke, surgeon to Queen Anne. He was educated at Shrewsbury School, and, early determining to enter the medical profession, he was articled to the late Dr. Clements of Shrewsbury, and commenced his professional career at St. Bartholomew's Hospital and the University of St. Andrews, where he graduated as Doctor of Medicine. He married in 1849 Elizabeth Anne, daughter of the late W. Limell, Esq., of Dublin, by whom he had nine children. Settling in Carnarvon, he soon obtained an extensive practice, and became physician to the Carnarvon and Anglesea Infirmary, being beloved by all around him, especially the poor, to whom he was ever kind. He left Carnarvon owing to his health, and came to London in the year 1859, and started as a physician in the West-end; he soon gained distinction, and was appointed Physician to the St. George's and James's Dispensary, after retiring from which he was appointed Physician Accoucheur to the Western General Dispensary, and then became Physician to the Samaritan Free Hospital for Diseases of Women and Children, which post he held for over twenty years, and was finally appointed Consulting Physician to the above hospital, which appointment he held at the time of his death. As he found his duties were becoming too heavy for him, he decided to leave London and reside in the country, where he might enjoy a few hours' recreation, as he was a passionate lover of horticultural pursuits. He came up to London for consultation only—this he did for exactly one year; but at length, owing to having sustained severe bereavements in the loss of his son and daughter, both within a few months of each other, his constitution began to give way, and in spite of the skilful attention of several of his professional brethren, he died on Monday last of a somewhat obscure disease.

He was the author of many treatises, notably on the use of Iodine as an Antiseptic, and Bromine as a Remedy for Cancer, which led to their very general adoption by the profession. He invented a new method for operation on ruptured perineum, also a special uterine stem. His friends are

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scattered all over the world, and we are sure there is not one of them who will hear of the death of "poor Dr. Wynn" (as they used to call him in Wales) but will regret his sudden demise, and will sympathise with his widow and family in their sad bereavement. He leaves a son and also a son-in-law in the profession to mourn their loss.

Dr. Wynn Williams was a medical man of great ability, and a skilful physician and operator, especially in diseases of women. Being the possessor of a handsome face and a commanding presence, he was all the more capable, by his tact and powers in recognising disease, and his great success in treatment, to win the full confidence of his patients. These qualities made him eminently popular among both rich and poor, owing to their being accompanied by a heart truly kind and ready to help all those who came to him in sickness or distress.

ROBERT NAIRNE, M.D., F.R.C.P.

WE regret to record the death of Dr. Robert Nairne, the much-respected Commissioner in Lunacy, which occurred at his residence, Mossley, Beckenham, on Nov. 5th.

Dr. Nairne received his education at Edinburgh and at Trinity College, Cambridge, becoming M.D. of that University in 1832. In 1838 he was elected F.R.C.P. of London; in 1839 he was appointed Physician to St. George's Hospital, where he had previously studied, and to which institution he subsequently became senior physician and lecturer on Medicine. In 1857 he was made a Commissioner in Lunacy, which office he held till July, 1883, upwards of a quarter of a century, when, having judged it advisable to resign his office, Lord Shaftesbury (then Chairman of the Board) was pleased to appoint Dr. Reginald Southey, one of the physicians of St. Bartholomew's Hospital, to be a Commissioner in his place. Subsequently, Dr. Nairne was appointed by Lord Shaftesbury to be an honorary member of the Board of the Commissioners. He married in 1856 a daughter of John Gott, Esq., and has left a widow and four children to lament their loss. In person Dr. Nairne was tall and of commanding appearance. His classical features must have been well known to many passers-by in Whitehall, where he was ever constant to the office, unless engaged in the laborious duties of visiting asylums. Of rather reserved character, yet he was kindness itself to those in whom he took an interest. His politeness and polished address both to superintendents and patients were points which might well be copied by any official holding a Government appointment. Dr. Nairne was a great stickler for etiquette, both in his relations to those whose asylums he was bound to inspect, and also on the Commissioners' Board, where naturally his indefatigable labours and length of service rendered him an influential and experienced adviser.

About a year ago Dr. Nairne was knocked down by a cab, and it is quite possible that the shock which he then sustained may have indirectly led to the fatal result which we here regret to record. By his death the profession and the public sustain a great loss.

JOHN GRIGOR, M.D.

A MAN of distinctly prominent mark has passed away from the north of Scotland in Dr. Grigor, who died at his residence, Larkfield, Nairn, on Monday, the 18th ult. He had had a severe attack of hepatic congestion accompanied with profuse hæmatemesis and melæna in November of last year, and though he made a fair recovery he was never quite himself again. During the summer he suffered from successive small boils about the face and from much breathlessness on exertion. Some three weeks before his death a small boil on the upper lip developed rapidly into a facial carbuncle, involving the lip and a considerable portion of the left cheek. The carbuncle was attended with severe pain and depression, which, acting on a constitution already enfeebled, gradually brought about the end. He was skilfully treated by Dr. Cruickshank, reinforced in consultation by Professor Ogston of Aberdeen, Dr. Macnee of Inverness, and Dr. Cameron of Nairn, but without avail.

The son of an Elgin solicitor, Dr. Grigor was educated at the Academy there till he entered on medical study at Aberdeen and Edinburgh Universities, taking the Licentiateship, and later the Fellowship, of the College of Surgeons at the latter school, and the degree of Doctor in Medicine at the former. He began his professional career in 1835 by serving as surgeon in Indian and Chinese waters; then, in some two years' time, he settled in Nairn in general practice, and soon earned a high reputation as a sound and successful practitioner. About thirty years ago he decided on making Rome the sphere of his labours, partly induced by his fondness for the artistic society and the historical associations of the place. There, again, he rapidly gained the esteem of the Anglo-American community as a skilful medical adviser and genial friend, till advancing years counselled his retirement from active professional life, and in 1881 he returned to Nairn. Of that town he was the Mæcenas and a great deal more - heading every movement for its moral, intellectual, and social development, and munificently promoting at his own expense institutions of his special devising and founding. It is to him that Nairn owes her hospital as it now stands, her museum, her public swimming-baths, her public hall, her marine hotel, and many similar undertakings for the benefit of the town and district; while the wise and kindly spirit that animated him throughout life is perpetuated by his bequests. Among these—amounting to about £12,000—are £2000 to the poor of Nairn; £2000 to the Nairn Academy, with the addition of £1500 for bursaries; £1000 for an Edinburgh University medical bursary, and £1000 for an Aberdeen University medical bursary, both to be called after the name of their founder; with a number of smaller sums for local charities and interests.

Dr. Grigor was a type of the northern practitioner; robust in body and mind, hearty in address, and hospitable to all well-accredited comers; with an intellect clear yet not cold, and solid yet not hard. He had many friends among former patients and among professional brethren, such as the late Sir J. Y. Simpson, Dr. Stewart, and Dr. Arthur Mitchell, all of whom were bound to him not only as an able and energetic physician, but as sharing kindred tastes in archæology and art. His memory will long be cherished with affection and gratitude in the north, as well as in Italy and Rome, where many a meritorious painter and sculptor owes to him life and health and substantial aid in his career.

THOMAS MIDDLETON, F.R.C.S.

MR. T. MIDDLETON, who recently passed away in his seventy-fourth year, during an attack of angina pectoris, was a descendant of Hugh Oldham, Bishop of Exeter, the founder of the Oldham Bluecoat School. He began the study of medicine some fifty-six years ago, when he was apprenticed for five years to Mr. John Boutflower of Greengate, Salford, who yet survives him. He then attended the Manchester Infirmary, and afterwards studied a few years in London and Paris. On his return to England he married and settled in Salford, where he practised for a quarter of a century, until failing health caused him to retire to the clearer air of Didsbury. Here he lived for the last twenty years, his unostentatious benevolence and other estimable qualities winning for him the respect and kindly regard of his neighbours and friends. One who knew him well describes him thus: "He was a quiet, reserved, kind-hearted practitioner, greatly respected by his patients, and able in the management of his cases; his practice was never large, but it was select. During the latter part of his life in Salford he interested himself very much in Church matters, and was a constant attendant at Christ Church upon the ministry of his intimate friend the late Canon Hugh Stowell. In his dealings with his brother practitioners he was always scrupulously professional, and he commanded the esteem not only of his patients, but of all who were acquainted with him." He will long and sorely be missed in Didsbury, where he was a generous contributor to good and charitable objects.

CHARGES FOR DISINFECTING IN BERLIN.—A public disinfecting station has been established by the Berlin civic authorities, where as far as possible high pressure steam is employed. For such articles—leather goods, for example—as would be injured by this process, chemicals are substituted. The charge is 4*s.* for each cubic metre of space occupied in the disinfecting chamber, while the articles requiring chemical treatment are charged at the rate of 80 pfennings, or less than 1*d.* each per hour of treatment.

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Medical News.

UNIVERSITY OF LONDON.—The following is a list of the candidates who have passed the recent M.B. Examination:—

FIRST DIVISION.

Bright, Eustace Frederick, University College.
Burghard, Frédéric François, Guy's Hospital.
Carless, Albert, King's College.
Dobson, Leonard Charles Talbot, St. Bartholomew's Hospital.
Gabriel, Leonard Maurice, St. Bartholomew's Hospital.
Goodall, Edwin, Guy's Hospital.
Gow, William John, St. Bartholomew's Hospital.
Halstead, George Ezra, B.A., B.Sc., Guy's Hospital.
Johnson, Raymond, University College.
Kauffmann, Otto Jackson, Manchester, Owens College, and St. Mary's Hospital.
Permewan, William, University College.
Spencer, Walter George, St. Bartholomew's Hospital.
Trevelyan, Edmond Fauriel, St. Bartholomew's Hospital.
Voelcker, Arthur Francis, University College.
Washbourn, John Wychenford, Guy's Hospital.
Wild, Robert Briggs, Manchester and Owens College.
Young, Charles Wheeler Forrest, St. Bartholomew's Hospital.

SECOND DIVISION.

Alexander, Sidney Robert, Guy's Hospital.
Bahadhurji, Kaikhosro Nasarvanji, University College.
Burrell, Arthur William, London Hospital.
Carpenter, George Alfred, St. Thomas's Hospital.
Corbin, Eustace Rhodes St. Clair, University College.
Cox, Frederick Augustus, St. Mary's Hospital.
De Chazal, Edmond Lucien, University College.
Gardner, Henry Willoughby, St. Bartholomew's Hospital.
Gardner, William Thomas, St. Bartholomew's Hospital.
Hart-Smith, Franke Chamberlain, University College.
Horrocks, William Henry, University College.
Hutton, John Stuart, St. Thomas's Hospital.
Jones, Samuel Cromwell, University College.
Muspratt, Charles Drummond, Guy's Hospital.
Prall, Samuel Esmond, Guy's Hospital.
Rivers, William Halse Rivers, St. Bartholomew's Hospital.
Smith, John Anderson, St. Bartholomew's Hospital.
Taylor, Alfred Ernest, Guy's Hospital.
Toogood, Frederick Sherman, University College.

CAMBRIDGE UNIVERSITY.—At the biennial election of members of the Council of the Senate, Professor Michael Foster, Sec. R.S., and Dr. Donald MacAlister, F.R.C.P., were elected to hold office for four years.

At a congregation held on the 12th inst. the degree of M.B. was conferred on the following gentlemen:—

Adam Rivers Steele Anderson, Caius; Sydney Arthur Monckton Copeman, Corpus; William George Holloway, Sydney.

COLLEGE OF PHYSICIANS IN IRELAND.—At the November examinations the following obtained the licences in Medicine and Midwifery of the College:—

MEDICINE.—John Hornsey Casson, Louis Buggy, George Burkitt, Marcus Eustace, John Jollett, Maunton Meadows, Samson Hope Newland, Francis Glancy O'Donohoe, Alfred Ross, Francis Edward Thompson, Frank Thorpe, Arthur Thomas Wills.

MIDWIFERY.—Louis Buggy, Marcus Eustace, Francis Glancy O'Donohoe, Bartholomew O'Regan, Francis James Reid, Alfred Ross, Edward Johnson Williams.

The undermentioned have been admitted Members of the College:—

Joseph Duggan. | Gabriel O'C. Redmond.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—At a meeting of the Court of Examiners, held last week, the undermentioned were admitted Fellows of the College:—

J. B. Fishbourne. | Thomas Donnelly.

SOCIETY OF APOTHECARIES.—The following gentlemen passed their examination in the Science and Practice of Medicine, Surgery, and Midwifery and received certificates to practise, on Nov. 11th:—

Cory, Guy Chamberlin, Disraeli-road, Putney.
Frese, Carl, Oxford-street, All Saints', Manchester.
Garrett, John Henry, Kineton, Warwick.
Glanville, Mark, M.R.C.S., Fulham-road, South Kensington.
Graham, John, Lower-place, Endsleigh-gardens.
Jarvis, William Charles, Southampton-street, Camberwell.
MacCallum, James Metcalfe, Carlton-street, Toronto, Canada.
Martland, Charles, M.R.C.S., Standish, Wigan.
Smith, Henry Sandford, Leamington-road Villas, Westbourne-park.
Walker, Benjamin, Eagleseliff, Yarm, Yorkshire.

BEQUEST.—The late Alderman Thomas Rose, whose funeral took place on the 15th inst., has bequeathed £25,000 to Manchester charities, including £10,000 to the Royal Infirmary, £5000 to Salford Hospital, £2000 to St. Mary's Hospital for Women, and £1000 each to the Eye Hospital, the Lock Hospital, and the Clinical Hospital.

ANTHRAX has appeared on two farms in Kent, one being near Maidstone and the other near Canterbury.

MOSCOW WORKMEN'S HOSPITAL.—The Moscow Town Council has decided to discontinue the subsidy it has hitherto paid towards the maintenance of the syphilitic department of the Moscow Workmen's Hospital.

RUSSIAN FEMALE PRACTITIONERS.—The Council of the Military Medical Academy in St. Petersburg has decided that a female qualified practitioner is entitled to proceed to the higher degree of doctor.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The Library of the College will be closed on Thursday and Friday, the 25th and 26th inst., for the purposes of the final examination for the Fellowship, for which 28 candidates have entered their names.

EDINBURGH HEALTH SOCIETY.—The seventh session of this Society was opened on the 13th inst., when Professor J. Cossar Ewart, in the Free Assembly Hall, delivered a lecture, on "The *Rôle* of Bacteria in Health and Disease," to a large audience.

SALFORD AND PENDLETON ROYAL HOSPITAL AND DISPENSARY.—At the fifty-ninth annual meeting of the trustees of this charity on the 17th inst. it was reported that the income of the institution during the past twelve months had been £4429, and that the expenditure had amounted to £4119.

PASS AND PLUCK IN PRUSSIA.—During the past *annus medicus* in Prussia, of 434 candidates for the State examination for practitioners, the "one portal" to the profession, 175 were rejected, while 259 passed, 16 of them with the distinction "very good." Of 220 candidates for the pharmaceutical licence, 190 passed, 30 being rejected.

REMISSION OF SENTENCE OF BANISHMENT.—Dr. Busch, formerly a surgeon of high rank in the Russian Fleet, who was sentenced four years since to the loss of civil rights and to banishment to Tomsk in Siberia, has, on account of his age, which is more than seventy years, been permitted to return to European Russia, on condition of his avoiding the capital.

MUNICIPAL HONOURS FOR MEDICAL MEN.—Mr. T. Vincent Jackson has been chosen as Mayor of Wolverhampton for the current year, and Mr. R. R. Daglish has been re-elected chief magistrate for the borough of New Romney, Kent. For the first time in its history, the Town Council of Darlington has two medical men among its members—viz., Dr. Drury and Mr. R. T. Manson.

THE EDINBURGH GRADUATES' CLUB.—A very pleasant meeting of the Club, at its quarterly dinner, took place at the Holborn Restaurant on Wednesday evening. Mr. R. B. Finlay, M.P., presided, and well sustained his reputation as a speaker. There were present as guests: Mr. Maunde Thompson, Mr. Edward Scott, Dr. Norman Moore, General Silver, Dr. Stokes, and others.

NORTH-WESTERN ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.—A meeting of the members of this Association was held on the 11th inst., when Dr. Kenyon read a paper in which he dealt with the difficulty of legal action for the abatement of insanitary conditions in an old church in which interment had taken place for a number of years. A lengthy discussion followed the reading of the paper.

FALLING OFF IN THE ENTRIES IN THE MADRID UNIVERSITY.—The number of first-year's men who have just matriculated in the medical faculty of the University of Madrid is only twenty. This is probably mainly due to some recent regulations enforcing a year of preparatory study before entering the medical school, and rendering the knowledge of two living foreign languages obligatory. The leading Spanish medical journal remarks that the great falling off in numbers "shows that fathers of families and students have recognised, what we have so frequently insisted upon, the small hope of a prosperous future which is offered by a medical career to the large majority of those who enter upon it."

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By the will of the late Mr. Thomas Pope the Leeds General Infirmary has benefited to the extent of £750, and the Leeds Public Infirmary has received £300.

DONATIONS TO HOSPITALS.—Mr. Joseph Shaw has given £100 to the Meath Hospital; Mr. Gervas Taylor, £50 to Adelaide Hospital; and Mr. Richard Carey, £200 to the Convalescent Home, Stillorgan.

HUGHES *v.* LANGMORE, ARMSTRONG, AND HUGHES.—This case, to which we shall probably have to refer in our next issue, was concluded on Thursday last, when Mr. Justice Manisty gave judgment for the defendants with costs.

HOME-MADE WINES.—The drinking of home-made wines made in glazed earthenware vessels has, according to the testimony of medical practitioners in Alcester, Wilts, resulted in the serious illness of several of their patients.

ENTERIC FEVER AT BARNSLEY. — Enteric fever having been seriously prevalent in the district of South Yorkshire, it has been decided, on the recommendation of Dr. Sadler, that the suspected sources of water-supply shall be closed at once.

BRITISH HOME FOR INCURABLES.—The report which was read on the 11th inst., at the twenty-fifth annual meeting and election of this charity, showed that there were at present 49 in-patients and 280 out-patients dependent on the funds of the Home, while during the year six in-patients and 14 out-patients had died. The year's receipts amounted to £17,549, and the expenditure, after deducting the amount credited to the general trust fund, left a balance of £69. The number of candidates for election was 95, and of these 11 were selected.

HOSPITAL SATURDAY FUND.—During the past week the council of this fund have issued their yearly reminder circular to the various friendly societies, vestries, clubs, and such departments of the various railway companies and the Woolwich Arsenal as have as yet made no return, intimating that all outstanding amounts should be forwarded to the central office, 41, Fleet-street, before the 30th inst., the date fixed for the close of the fund for the present year, in order that the same may be included in their thirteenth annual report. So far this year 2400 receipts have been issued.

PRESENTATIONS.—On the 11th inst., at a public meeting, Dr. Morgan (Treorky), was, on the occasion of his departure for Llandilo, presented with an illuminated address, five cases of surgical instruments, and a microscope, subscribed for by the inhabitants of the upper part of the Rhondda Valley.—Mr. Webb (Blakeney) has been presented with a silver inkstand, two silver candlesticks, and an illuminated address by the residents in the Forest of Dean district as a token of their regard and their regret at his departure. A travelling clock was also at the same time presented to Mrs. Webb.

Medical Appointments.

Intimations for this column must be sent DIRECT to the Office of THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

BAILEY, J. JOHNSON, M.D., F.R.C.S.E., has been appointed Certifying Factory Surgeon for Marple District.

BEEVOR, Sir HUGH, Bart., M.B., has been appointed Sambrooke Medical Registrar to King's College Hospital.

BUCK, LEWIS A., M.R.C.S., L.S.A., has been appointed Sambrooke Surgical Registrar to King's College Hospital.

COHEN, A., M.A., M.D., has been appointed Honorary Physician to the Jewish Convalescent Home, Lower Norwood, vice A. Asher, M.D., resigned.

CURREY, R. H., F.R.C.S.Ed., L.R.C.P.Ed., L.M., M.R.C.S., has been appointed House-Surgeon to the Liverpool Royal Infirmary.

DRINKWATER, CHARLES, M.R.C.S., L.S.A., has been appointed House-Surgeon to King's College Hospital.

EVANS, W., M.R.C.S., L.K.Q.C.P.I., has been appointed House-Physician to the Liverpool Royal Infirmary.

EWENS, G. F., M.B., has been appointed Physician's Assistant to King's College Hospital.

GIFFORD, G. T., M.R.C.S., L.S.A., has been appointed House-Surgeon to King's College Hospital.

KELSALL, C. J., M.R.C.S., L.R.C.P., has been appointed House-Surgeon to King's College Hospital.

LISTER, C. E., B.A.Cantab., L.K.Q.C.P.I., L.M., has been reappointed House-Surgeon to the Liverpool Royal Infirmary.

MANNING, T. T., M.B., has been appointed Ophthalmic Clinical Assistant to King's College Hospital.

MARIETTE, E. T. A., M.R.C.S., L.S.A., has been appointed Assistant House-Accoucheur to King's College Hospital.

O'MEARA, F. A., M.R.C.S., L.R.C.P., has been appointed Physician Accoucheur's Assistant to King's College Hospital.

PITT, G. N., M.D., M.R.C.P., has been appointed Assistant Demonstrator of Morbid Anatomy at Guy's Hospital.

SANDWELL, EDWARD, L.R.C.P. Ed., M.R.C.S., has been appointed Public Vaccinator to the Westminster Union, vice J. Rogers, M.D., resigned.

SMITH, FRED. J., M.B.Oxon., M.R.C.S., L.R.C.P.Lond., has been appointed Medical Registrar to the London Hospital, vice Dr. James Anderson, elected Assistant Physician.

THOMAS, W. THELWALL, L.R.C.P.Ed., M.R.C.S., has been appointed House-Surgeon to the Liverpool Royal Infirmary.

WARKE, C. L., L.K.Q.C.P.I., has been appointed House-Physician to the Liverpool Royal Infirmary.

WHEATLEY, J., M.R.C.S., L.S.A., has been appointed Assistant House-Physician to King's College Hospital.

Births, Marriages, and Deaths.

BIRTHS.

FRASER.—On the 9th inst., at Romford, Essex, the wife of James Alexander Fraser, M.R.C.S., L.R.C.P., of a daughter.

HARRIS.—On the 14th inst., at 149, Cold Harbour-lane, S.E., the wife of Henry Harris, M.R.C.S.E., of a son.

SMITH.—On the 10th inst., at Christ's Hospital, London, the wife of Alder Smith, M.B.Lond., F.R.C.S.E., of a daughter.

THEW.—On the 14th inst., at 12, Bondgate Without, Alnwick, the wife of Edwin P. Thew, M.B., C.M., of a son.

WALLER.—On the 21st ult., at Abbey-road, N.W., the wife of A. Waller, M.D., of a daughter.

WILLIAMS.—On the 16th inst., at Greenhill, Sherborne, Dorset, the wife of W. H. Williams, M.R.C.S., L.R.C.P.Lond., of a daughter.

MARRIAGES.

BEALE—FIELD.—On the 16th inst., at Lillington, Warwickshire, E. Clifford Beale, M.B.Cantab., of Upper Berkeley-street, W., to Mary Elizabeth, daughter of A. Sidney Field, Esq., of Blackdown-hill, Leamington.

CUMMING—SWAN.—On the 17th inst., at St. Chad's Church, Far Headingley, Leeds, Alex. S. Cumming, M.D., F.R.C.P.E., to Florence, daughter of the late Thomas Cole Swan, of Morpeth, Northumberland.

DALBY—SHEPPERSON.—On the 10th inst., at St. Andrew's, Harberton, South Devon, Augustus William Dalby, L.R.C.P.Ed., to Kathleen Mary, youngest daughter of Allin T. Shepperson, Esq., of Winsland, Harberton.

FIELD—SHIELDS.—On the 16th ult., at Sidney, Nebraska, Charles Hampden Field, M.D. (U.S.), Assistant Surgeon U.P.Ry.Co., late of King's (Lond.), to Henrietta, youngest daughter of the late John Shields, Esq., of Ottawa, Canada.

FITZ-HENRY—COOPER.—On the 18th inst., at St. Margaret's, Westminster, William G. Fitz-Henry, M.R.C.S.Eng., son of the late Capt. Fitz-Henry, to Isabella, second daughter of John Cooper, of Snaresbrook, South Sydenham-park, Forest-hill.

HARDWICKE—TILL.—On the 10th inst., at the Parish Church, Wolstanton, Staffordshire, Richard Reece Hardwicke, L.R.C.P., M.R.C.S., to Marion Elizabeth, youngest daughter of Edwin Till, Esq., of Wolstanton, Staffordshire.

HILL—COMYN.—On Wednesday, the 10th inst., at St. Luke's, Westbourne-park, George William Hill, M.B., B.Sc.Lond., to Flora Hastings, daughter of Capt. David Robert Comyn, R.N.R., and late of the Ottoman Imperial Navy.

DEATHS.

BIDWELL.—On the 15th inst., at St. Leonards-on-Sea, Herbert Bidwell, M.R.C.S.Eng., L.R.C.P.Lond., youngest son of the late Charles Muriel Bidwell, of Ely, Cambridgeshire, aged 24.

FARRE.—On the 10th inst., at Elsham-road, W., Frederic John Farre, M.D., aged 62.

FENTON.—On the 2nd ult., at Sandy Point, Straits of Magellan, Thomas Fenton, M.D. (many years Medical Officer in charge of the Chilian Colony), aged 35.

M'DOUGALL.—On the 16th inst., at Winchester, the Right Rev. Bishop M'Dougall, Canon of Winchester and Archdeacon of the Isle of Wight, aged 63.

PHILLIPS.—At Jamaica (of congestion of the lungs), John Mortlock Phillips, M.D., Surgeon of H.M.S. *Goshawk*, aged 26.

SANKEY.—On the 10th inst., at Boreatton-park, Shrewsbury, Arthur Octavius Sankey, aged 34.

WILLIAMS.—On the 15th inst., at his residence, Brooklyn, West Drayton, Arthur Wynn Williams, M.D., late of Montagu-square, W., aged 67.

N.B.—*A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.*

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Medical Diary for the ensuing Week.

Monday, November 22.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.

ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesdays, same hour.

CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2.30.

HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.

MEDICAL SOCIETY OF LONDON.—8.30 P.M. Dr. John Lowe: A case of Sarcoma of Stomach and Pancreas extending from the site of the right kidney, which had been injured eleven years previously, and which was found to be obliterated.—Dr. Samuel West: On a case of Subacute Atrophy of Liver of probably Syphilitic Origin.

Tuesday, November 23.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.

CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8.30 P.M. Dr. T. Dixson: Ricinus Communis (communicated by Dr. Lauder Brunton).—Mr. Langton and Mr. Bowlby: A case of Multiple Embolism of the Arteries of the Extremities followed by the Formation of Aneurysms, with remarks on the relations of Embolism to Aneurysm.

Wednesday, November 24.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesdays and Thursdays, 1.30 P.M.

ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department, Mondays and Thursdays, 9.30 A.M.

ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.

LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.

GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.

KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; and on Friday, 2 P.M.; and Saturday, 1 P.M.

ROYAL MICROSCOPICAL SOCIETY.—8 P.M. Conversazione.

HUNTERIAN SOCIETY.—8 P.M. Dr. Stephen Mackenzie: On Pemphigus.—Dr. Herman: On Pessary Treatment.

BRITISH GYNÆCOLOGICAL SOCIETY.—8.30 P.M. Specimens will be shown by Dr. Bedford Fenwick and others.—Dr. Francis Imlach: The Relations of Digestive Disorders with Uterine Disease. Council at 8 P.M.

Thursday, November 25.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

Friday, November 26.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

CLINICAL SOCIETY OF LONDON.—8.30 P.M. Sir Henry Thompson: Six cases of Tumour removed from the Bladder during the last twelve months, with a brief *résumé* of their histories and results.—Mr. B. Pitts: Supra-pubic Cystotomy for Tumour two years after the removal of growth by the perineal operation.—Mr. B. Wainewright: A case of Vertical Fracture of the Head of the Radius, complicated by Fracture of the Coronoid Process of the Ulna, and possibly a Split between the Condyles of the Humerus.—Dr. Herringham: Two cases of Diphtheritic Paralysis. Living Specimens:—Dr. Hughes Bennett: A case of Severe and Long-continued Epileptic Attacks, with Mania; complete recovery after trephining the skull.—Dr. Savill: Multiple Peripheral Neuritis.—Dr. James Anderson: A case of Intra-cranial Murmur, with history of relapsing optic neuritis.—Mr. Mansell Moullin: Complete recovery from Gunshot Wound of Foot.

Saturday, November 27.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, November 18th, 1886.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radiation in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Nov. 12	29·55	S.W.	44	42	...	50	42	·47	Overcast
,, 13	29·49	W.	45	43	...	51	42	·09	Overcast
,, 14	29·52	W.	48	46	...	54	39	...	Cloudy
,, 15	29·59	S.W.	50	49	...	56	47	...	Overcast
,, 16	29·58	W.	49	46	...	51	46	·10	Overcast
,, 17	29·41	S.E.	47	46	...	55	42	·39	Raining
,, 18	29·91	W.	43	41	...	...	40	·07	Cloudy

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

We cannot undertake to return MSS. not used.

A GLIMPSE OF THE PAST.

"Vaccination was little practised, and seldom at the hands of a medical man. Mothers who sought it for their children generally kept them till the Rev. Mr. Nichol of Traquair came over on the Saturday of the Communion. He made a point of arriving a few hours before the service began, bringing lymph and inserting it. It was long believed that phlebotomy twice a year was conducive to health; and in spring and autumn, Mr. Ballantyne, Dryhope (old 'Phawhope' he was called) came an hour earlier to church with his lancet. Other great bleeders afterwards were old Robert Hogg, Yarrow Fens, and Mr. Morton, from Ettrick Bridgend, who continued the practice even after their hands had got shaky. Mungo Park gave Mr. Morton his lancet when he last left for Africa, and he presented it to the Rev. John Gibson, who became minister for Kirkhope."—JAMES RUSSELL, D.D., *Reminiscences of Yarrow.* (1886.)

A Constant Subscriber (Middlesbro').—We have no information on the subject beyond that comprised in our advertising columns.

THE APOTHECARIES' SOCIETY AND THE CONJOINT BOARD.

To the Editor of THE LANCET.

SIR,—Will you kindly notice in THE LANCET that I do not wish the decision of the Royal Colleges of Physicians and Surgeons to in any way stop replies being sent me from Poor-law medical officers. Up to the present time all the answers have been in favour of the Apothecaries' Society forming part of the Conjoint Examining Board.

I am, Sir, yours truly,

London, Nov. 17th, 1886. J. WICKHAM BARNES.

Mr. Wm. Berry.—1. Yes.—2. Probably, Maclehose, or through any medical bookseller.

SUNDAY AT OUR POST-OFFICES.

MR. ELLIS LEVER writes to suggest that, in celebration of the jubilee of Her Majesty's reign, the performance of Sunday labour by the post-office *employés* throughout the provinces be discontinued. He thinks that a little consideration for these useful and industrious public servants, and a small personal sacrifice on the part of the public, would lead to the total abolition of Sunday labour at the post-office, excepting in the telegraph department, and even this would be reduced, as the inclination to send telegrams is very frequently occasioned by the receipt of business letters.

Mr. T. L. K. Davies.—Without a copy of the rules of the institution it is hardly possible to give an opinion of value on the matter mentioned.

Mr. F. Treves.—In an early number.

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"ON THE TREATMENT OF SNEEZING, HAY FEVER, ASTHMA, &c., BY THE GALVANO-CAUTERY."

Mr. Lennox Browne, in a letter to us on the above subject, complains that Dr. De Havilland Hall, in our issue of the 13th inst., quotes Hack of Freiburg, but omits to state that in the *British Medical Journal* of June 21st, 1884, he (Mr. Browne) advocated, as the result of experience, the galvano-cautery for exactly the same symptoms as are described in the solitary case on which Dr. Hall bases his dicta regarding its value. Also that Dr. De Havilland Hall specially mentions having used Schech's *cautères*, which, Mr. Browne states, in no practical respect differ from those he exhibited at Manchester in August, 1877. Lastly, that Dr. Hall ignores the fact that more than ten years ago Mr. Browne published a formula for the preparation of the carbolised smelling salts recommended in the article referred to for use in coryza.

Mr. C. J. Stocker.—1. Catarrhal jaundice not infrequently affects several persons, especially children, in the same neighbourhood at the same time, and is then probably due to climatic causes.—2. It would be most unwise to give solid food in enteric fever, even if the abdominal symptoms are not severe.

Dr. Brookhouse.—1. We do not see any inconsistency in the admission of such a case under the rule quoted.—2. This is a purely legal question.

University College.—The fee mentioned does not seem excessive; but it would be better to agree with the executors than to go to law.

Bona Fides.—We fear the agreement is binding.

ENGLISH MEDICAL CLASSICISTS.

To the Editor of THE LANCET.

SIR,—Allow me to supplement your list of these worthies with the names, *inter alios*, of Gideon Harvey, M.D., whose book on the "Morbis Anglicus, or The Anatomy of Consumption," appeared in 1666; William Salmon, whose "Compleat System of Physick" appeared in 1686; and Daniel Turner, whose book, "De Morbis Cutaneis," appeared in 1714. This last was recommended to me many years ago by the late Mr. Startin, who highly prized it; and, if we except the terminology and the therapeutics—portions of which, however, are still retained in practice,—it does not appear to me that it has been so very much improved upon, as some of our jaw-breaking dermatologists of the present day would assert or imply. To these I would venture to add Mead on the Plague, 1720; Erasmus Darwin's Zoonomia, 1794; and Cheselden's Osteology (the date of whose publication I have mislaid). And should any of your readers be willing to adopt your suggestion, and bring out an edition of Sydenham's Treatise of the Gout, I would strongly advise him to incorporate with it Cheyne's Essay, 1720, and Cadogan's Dissertation, 1771. Were I such an editor, I would use as a motto for such a publication the well-known line of Horace—

"Vixere fortes ante Agamemnona multi,"

and, believing as I do that there is nothing new in either the technique or in the literature of our art, I would clinch this with the following forcible words from Ruskin:—"There are few thoughts likely to come across ordinary men which have not already been expressed by greater men in the best possible way; and it is a wiser, more generous, more noble thing to remember and point out the perfect words than to invent poorer ones wherewith to encumber temporarily the world."

I am, Sir, your obedient servant,

Cedars Club, West Kensington, W., Nov. 15th, 1886. WM. CURRAN.

CONCERNING PHARMACOPŒIAS.

THE *British and Colonial Druggist* of Nov. 13th has the following:—France has 2000 medicines in its Pharmacopœia; Spain and Belgium, 1500; Russia, 1080; Greece and Switzerland, 1040; United States, 1010; Great Britain, 815; Sweden, 748; Denmark, 720; Holland, 665; Germany, 606; Austria, 560; Hungary and Roumania, 545; Norway, 530."

Mr. O. B. Shelswell.—The attention of the Colleges should be directed to the matter.

M.R.C.S., L.S.A.—What would graduates say to such a proposal?

A. E. B.—We have no information.

MEATH HOSPITAL AND COUNTY DUBLIN INFIRMARY.

To the Editor of THE LANCET.

SIR,—Some time ago you kindly inserted a letter in THE LANCET informing all old students of the Meath Hospital, no matter in what quarter of the globe they were, that I was about to publish a Medical History of the Meath Hospital, and intended to insert therein the names of all former students who would favour me with the following information—viz., full name, address, date of study, present and past medical appointments. Former students who are serving in the army, navy, civil, and colonial services are earnestly requested to attend to this notice, if they have not done so already. As the work will soon be published, former students omitting to send me the information required may be annoyed by finding their names left out.

I am, Sir, yours truly,

L. HEPENSTAL-ORMSBY, M.D., F.R.C.S.,
Surgeon to the Meath Hospital.

92, Merrion-square West, Dublin, Nov. 16th, 1886.

"TWENTY DOCTORS."

WHO that has suffered from the recurrent worries of long-standing gout or rheumatism, or has even witnessed their tyranny in others, could withhold his sympathetic attention from the narrative of one who during seventeen aching years fought an uphill battle with the forces of "rheumatic gout." Such a narrative is afforded us, wherein the author in a short paper describes in a free and humorous style, without prolixity and with good sense, and the intelligence of one who has carefully watched the tactics of his enemy, and has been abundantly primed with skilled opinion, the painful course of that battle, which is now for him no more than a memory. A good deal of shrewd advice is informally conveyed in this little pamphlet as to diet and other considerations which are now part of the routine regimen of the disease. The remarks on the value of exercise (which the author used in the form of tricycle-riding) in restoring freedom of movement where joints have been stiffened by chronic rheumatic changes are well put, and have been justified in this case, as in many others, by the happy effects of what some may think heroic treatment. The little paper which bears the above curious heading is singularly free from the presumption of empiricism, and shows what a gouty man can do for his own comfort if he will consent to live by the rule of his constitution.

Dr. Ingle (Cambridge).—Placenta prævia: Behm, "Zeits. f. Geburtsh. u. Gyn.," Band ix., Heft 2, S. 373. Lomer, "Amer. Jour. Obst.," Dec. 1884, p. 1233. Cæsarean section: Säuger and Leopold, recent numbers of the "Archiv für Gynäkologie."

Nemo.—The best text-books are mentioned in the article "On Books" contained in our Students' Number published in September last.

Dr. Mackay (Huelva).—The paper has been received.

CRUELTY TO CHILDREN IN THE STREETS OF LONDON.

To the Editor of THE LANCET.

SIR,—I would desire to draw public attention in the journal of the late lamented Dr. Wakley, the humanitarian medical journalist, who wielded his powerful pen for the good of his fellow-creatures, to the cruelty inflicted on children by wilful exposure to inclement weather—the cold and wet which now prevail—by lazy and intemperate men and women, who take them about the streets of this, the world's greatest, metropolis, and by playing on a concertina and singing excite the sympathy of the passers-by and residents on the spot for the baby in arms or children by the side, who, by the way, very often are not their own, but borrowed on payment for the purpose of begging. Ought not the Legislature to step in and put a stop to such gross cruelty—a cruelty which not infrequently produces disease, and is a direct cause of death? Begging generally is not permitted in the capitals and other cities of continental countries, and it is time it should be put a stop to in this country by prosecution of these idlers and punishment for the offence. It would be a good thing if the public were to abstain from giving alms to such persons, as thereby they put a premium not only on the cruelty, but likewise on idleness, not to speak of the intemperance to which such idleness leads. These people, after getting a certain bag of coppers, adjourn to a neighbouring public-house for the purpose of imbibing gin and other alcoholic beverages, instead of food for themselves and children. It is to be trusted that your contemporaries will take the matter up.

I am, Sir, yours truly,

London, Nov. 12th, 1886. JOHN LUCAS, M.D.

THE BOSTON COTTAGE HOSPITAL.

CERTAIN of the statements made use of by the speakers at the annual meeting of the subscribers of the above hospital on Oct. 8th have caused considerable indignation amongst some of the members of the medical profession in the town. It was injudicious for the secretary to say "that their present staff included the three best medical men in the town;" but such a statement should be looked upon as expressing the complete satisfaction which the governing body felt in those officers who attend the institution. We do not know what the circumstances were "which if they had been repeated would have damaged the reputation of the hospital," and cannot therefore say anything about this part of the speech made by Dr. Adam. But it was certainly unwise, as well as unkind, to say in a public meeting that there were "doctors and doctors," when the statement could only be applied to the disparagement of a brother practitioner. We are informed that several of the clubs in the town attended by one gentleman are anxious for him to be placed upon the working staff of the hospital. This is but natural; it shows their entire confidence in him, and their desire to continue under his care. But it appears to us that the subscribers of the hospital have the right to determine the question.

Mr. F. Raymond, F.R.C.V.S.—We do not think there was a breach of professional etiquette in the case, though it would perhaps have been better for the physician to have had the corroborative testimony of a veterinary surgeon.

Mr. J. P. Thomson.—We cannot extend our exchange list at present.

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EXPENDITURE FOR MEDICAL AND SANITARY SERVICE IN RUSSIA.

MANY of the provincial governments in Russia have evinced of late years an increasing desire to attend to the health and sanitary condition of their respective populations. In the thirty-four provinces into which "provincial institutions," or local governments, have been introduced, the sum expended on medical and sanitary matters has gradually increased from £200,000 in 1871 to £850,000 in 1883. The sums expended for this purpose are about 25 per cent. greater than those expended on education; but it must be remembered that all the population are benefited by the sanitary service, while only children require instruction. In seventeen of these provinces the mortality has diminished; in eight it has remained stationary, while in seven it has increased. It is instructive to compare the sums expended for medical purposes in the provinces with and without local institutions. In the former class of provinces the sum expended per head varied in the different governments from 2*d.* to 9*d.*, while in the latter the maximum was 2*d.*, and the minimum a farthing!

Hector is justified in withdrawing from the club appointment, after reasonable notice, seeing that he took it under misapprehension.

D.—A certain sum per day during the session and travelling expenses.

ALBUMINURIA IN PREGNANCY.

To the Editor of THE LANCET.

SIR,—Whilst the controversy is going on as to the value of the induction of labour in cases of albuminuria in pregnancy I would wish to call the attention of the profession to the administration of small doses of iodine of potassium as an almost certain remedy. I can speak from practical experience, and would strongly urge its claims to be tried before induction of labour is attempted.

I am, Sir, yours faithfully,

Harrogate, Nov. 10th, 1886. THOS. BRITTON, M.D.

COCAINE ADDICTION.

DR. J. B. MATTISON, of 314, State-street, Brooklyn, New York, asks us to state that he will be obliged if any of our readers who may have met with a case of cocaine addiction would send him the fullest possible details.

LUNACY IN KENT.

THE returns relating to lunacy in the county of Kent, which have just been presented to the Court of General Sessions by the medical superintendents of the Barming and Chartham asylums, show a large increase in female insanity in the county. At the present time there are in the two asylums as many as 1225 females to 882 males.

Cutis Parasitici.—We have no recollection of the treatment having been recommended in our pages, though we believe it has been adopted by experienced practitioners, sometimes with success.

Mr. G. J. Williams and *D. P. S.*—Mr. Worthington G. Smith has written a useful book on the subject, published by Hardwicke and Bogue.

Northumbrian.—The holder of a commission only is entitled to the affix.

A Glasgow Surgeon is referred to THE LANCET of last week.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Mr. Pugin Thornton, London; Dr. Hughlings-Jackson, London; Mr. T. Bryant, London; Dr. Halo White, London; Dr. Thorburn, Manchester; Dr. J. Rogers, London; Mr. W. Curran, London; Dr. Whitelegge, Nottingham; Mr. J. F. Gant, London; Prof. Humphry, Cambridge; Dr. Britton, Halifax; Mr. Chesshire, Birmingham; Mrs. King, Upper Clapton; Dr. Mattison, Brooklyn; Mr. W. Fowler, London; Mr. W. Jago, Brighton; Dr. Quinlan, Dublin; Dr. Dolan, Halifax; Dr. John Lucas, London; Dr. F. Dale, Scarborough; Mr. Lever, Manchester; Mr. W. M. Pearce, Bromley; Mr. Shelswell, London; Mr. Lennox Browne, London; Rev. Arthur Robins, Windermere; Dr. Arthur Farre, London; Dr. Downes, Tiverton; Dr. Collie, London; Mr. W. Gem, London; Mr. W. Carter, London; Mrs. Cuff; Messrs. Simpkin and Co., London; Mr. W. Rivington, London; Mr. Bullen, Barnard Castle; Mr. P. D. Turner, London; Mr. Whittell, Leeds; Dr. Kent Spender, Bath; Dr. H. D'O. Foote, Rotherham; Dr. B. O'Connor, London; Mr. E. Nock, London; Mr. Callaghan, London; Dr. Seymour Taylor, London; Dr. H. W. Williams, London; Mr. Hislop, Church Stretton; Mr. A. Clerk, Glasgow; Dr. Walker, Liverpool; Mr. G. J. Williams, London; Mr. C. J. Bond, Leicester; Mr. C. S. Murray, London; Mr. W. G. Bott, London; Mr. Knight, Worthing; Dr. C. F. Knight, Dublin; Mr. Abbott, Stowmarket; Mr. Maw; Dr. Murphy, Abbeyleix; Mr. Colman, Cardiff; Mr. Henry, Landore; Mr. Morris, Camberwell; Dr. Ward, Birmingham; Mrs. Pratt, Cardiff; Mr. Pool, Shrewsbury; Mr. Stenhouse, Glasgow; Mr. Dunsing, Bournemouth; Mr. Greenwood, Liverpool; Dr. Ormsby, Dublin; Mr. R. T. H. Webb, London; Dr. Urquhart, Perth; Mr. Brockatt; Mr. Startin, London; Mr. Easterbrook; Dr. Menzies; Mr. Johnston, Lincoln; Dr. Edgar Flinn, Kingstown; Dr. Illingworth; Mr. Brooks, Hull; Mrs. Whyte, Lambeth; Mr. Young, Newcastle-on-Tyne; Mr. Heaton, Birkenhead; Dr. Malden, Montreux; Messrs. Sell and Co., St. John's Wood; Mr. Eastes, London; Mr. Barron, Manchester; Dr. P. S.; A. Z.; Medicus et Parens; A. B.; Emeritus; M.R.C.S., L.S.A.; University College; Surgeon, Derby; Bona Fides; Fairplay; B. P. L.; M.B., Notts.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Bond, Gloucester; Mrs. Holloway; Mr. Jolly, Leicester; Messrs. Burgoyne and Co., London; Mr. W. Kimpton, London; Messrs. Christie and Co., London; Mr. Ralph, Gorey; Mr. Lowes, Durham; Mr. Lloyd, London; Mr. Carter, Glasgow; Mr. Ward, Birmingham; Messrs. Gale and Co., London; Mr. Robinson, Sunderland; Mr. Knight, New Zealand; Mr. Everton, Birmingham; Mr. Williams, Shrewsbury; Mr. T. Cooke, London; Mr. Holman, Hampstead; Messrs. Slinger and Son, York; Messrs. Bennett and Co., London; Messrs. Hunter and Co., Aberdeen; Mr. Lomas, Vaud; Mr. Claxton, Ely; Messrs. Head and Son, Chertsey; Mr. Phillips, Kidderminster; Messrs. Sharpe and Co., Glasgow; Mr. Campbell, Dundee; Mr. Thomas; Mr. Heyden, Ben Rhydding; Dr. Hillier, Harrow; Mr. Craig, Dumfries; Mr. Brodie, Stirling; Mr. Robson, Newcastle-on-Tyne; Mr. Lyster; Mr. Hunt, Hull; Mr. Robertson, Edinburgh; Mr. Mitchell, London; Mr. Fage, Taunton; Mr. Thomson, Shrewsbury; Mr. Collie; Messrs. Holbrook and Son, Portsmouth; Mr. Wardley, Buxton; Messrs. Austin and Son, Clifton; Miss Thomson, Sittingbourne; Messrs. Schweitzer and Co., London; Mr. Mulliner, Leamington; Dr. Gasquet, Brighton; Mr. Menier, London; Mr. Moring, London; Mr. Cox; Mr. Thwaites, Bristol; Dr. Park, Glasgow; Dr. Seaton, Sunbury; Mr. G. Lawson, London; Dr. Murchison, Mull; Mr. Wilding, Liverpool; Mr. Taylor, London; Mr. Williams, Sherborne; Mr. Davis, Worcester; Mr. Field, Leamington; Mr. Stone; Dr. Newell, Macclesfield; Mr. Lathbury; Mr. Brown, Tredegar; Mr. Laban, West Bromwich; Mr. Hill, Bayswater; Mrs. Taylor, Richmond; Mr. Pattison, Widnes; Dr. Williams, Sheffield; Mr. Hebron, Northallerton; Beta; M.D., Hereford; W. G.; Medicus, Montrose; Alpha, West Brighton; Premium; S. Z.; LL.D., Leeds; S., Landore; Medicus, Liverpool; R. W. J.; Secretary, West Kensington; Physician; L.S., West Malling.

St. James's Gazette, Manchester Guardian, Western Morning News, East Anglian Daily Times, Manchester Examiner, English Churchman, &c., have been received.

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Agent for the Advertising Department in France—J. ASTIER, 66, Rue Caumartin, Paris.

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A Lecture
ON
DISLOCATION OF THE HIP.

Delivered in the Cambridge Medical School,

BY G. M. HUMPHRY, M.D., F.R.S.,
PROFESSOR OF SURGERY.

GENTLEMEN,—Here are two specimens of dislocated hip which we have recently had the opportunity of examining, and which will be placed in the Pathological Museum.

The first occurred in the practice of Mr. Balding of Royston, who was good enough to present it, and it has been dissected by Dr. Anningson. A boy aged thirteen was riding on the back of a horse drawing an empty cart. He lost control of the horse, and, so far as could be ascertained, fell astride the shaft to the left, with his *right* lower limb between the shaft and the horse. Dislocation of the right femur on to the dorsum of the ilium was recognised by the shortening of the limb, the position of the thigh across the lower part of the opposite thigh, the prominence caused by the head of the bone in the gluteal region, the fixity of the limb, and the intense pain caused by attempts to move it. Under chloroform reduction was soon effected by manipulation. The lad was suffering at the same time from bleeding from the right ear and the nose, and though he soon recovered from the effects of the chloroform, he became unconscious, convulsed, and died in two days. Fracture was found through the base of the skull. There was much extravasated blood beneath the gluteus. The gemellus inferior was torn from its attachment to the ischium. The obturator internus and quadratus femoris were lacerated, and the obturator externus was also lacerated and bruised. There was a valvular rent in the under and back part of the capsule, commencing just behind the pubo-femoral ligament, midway between the acetabular and the femoral attachments, as a single tear which divided and extended upwards and backwards to the tuber ischii, and upwards and forwards to the trochanter near the attachment of the obturator externus; or it might be described as a tri-radiate rent, the rays diverging from the apex of the valve, which was situate opposite the lower part of the tuber ischii. There is no fracture and no injury of the cotyloid ligament. The round ligament has been torn through obliquely, one part remaining attached to the femur and the other to the ischium. The ilio-femoral ligament was intact.

The second specimen is from a lad aged thirteen, who was admitted into Addenbrooke's Hospital, on July 30th, in a state of profound collapse, having been run over by a heavy cart a short time previously, sustaining serious injuries to the chest and abdomen, as well as a dislocation backwards of the left hip, the symptoms of which were as usual. He died in three hours, no attempt having been made to reduce the dislocation. The hip has been dissected by Mr. Francis. The displaced head of the bone was situated below the level of the pyriformis and obturator internus muscle on a level with the upper part of the tuber ischii, the sciatic nerve being pressed backwards between it and the tuber. The pyriformis and gluteus maximus and medius are intact. Some fibres of the middle part of the gluteus minimus are torn. The upper gemellus is much torn at its middle, and the lower gemellus is torn nearly through. The fibres of the internal obturator are slightly torn within the pelvis about an inch from the small sacro-sciatic notch. The quadratus femoris is torn quite across at the middle, and the external obturator is also torn across at a little distance from its tendon. Some of the superficial fibres of the pectineus are torn near the attachment to the os pubis. The three adductors, the gracilis, the ilio-psoas, and the tensor vaginæ femoris, are intact. There is a large valvular rent in the capsule, commencing at the pubo-femoral ligament as a single tear, about midway between the acetabular and the femoral attachments, and diverging into two, one running backwards and inwards towards the upper part of the ischial region of the acetabulum, the other backwards and outwards towards the femur near the attachment of the obturator externus. These enclose between them an angular or valvular portion of the capsule, which was reduced to shreds at its extremity. The round ligament has been torn from the dimple of the femur, and has carried with it a scale of the bone and a thin film of the cartilage. The ilio-femoral ligament is intact and quite lax in the dislocated position of the bone; but there are some small rents in the under part of the capsule near the thigh-bone, between the ilio-femoral and the pubo-femoral ligaments. The bone was easily replaced in the acetabulum by the ordinary method of manipulation.

A third example of backward dislocation of the hip which I have here—a dried specimen from the museum—is from a strong well-made man, aged thirty-four, brought to Addenbrooke's Hospital, many years ago, having been knocked down by a railway bank, which he was excavating, falling upon him. There was dislocation of the left femur backwards, which was reduced by the method then usually adopted—viz., traction across the opposite thigh, accompanied by slight inversion of the limb, without difficulty, the man being in a much depressed condition. Indeed, he had received injuries to the abdominal viscera, of which he died three days afterwards. On dissection I found that the head of the bone had occupied a position behind the acetabulum near the upper part of the great sciatic notch, in a cavity formed in the gluteus maximus by laceration of its fibres. The pyriformis was partly torn. The gemelli were both much torn, and the tendons of the obturator internus were torn from the muscle and hanging from the great trochanter. The quadratus femoris and obturator externus were intact, as were also the muscles in front of the hip. There is a great vertical rent along the back of the capsule nearer to its femoral than to its acetabular attachment, extending from the pubo-femoral ligament to the level of the fore part of the great trochanter, and there is a transverse rent under the position of the gemellus inferior running from the vertical rent to the cotyloid ligament. The ligamentum teres is torn through near its attachment to the femur. There is a fracture of the pelvis traversing the bottom of the acetabulum.

I think it is certain that, in each of these three cases, the head of the thigh-bone passed out of the acetabulum, not at the notch where the capsular ligament is weakest and the resistance to its escape is least, but further back, opposite the tuber ischii, at the part where the rent in the capsule radiates in three directions, and where, accordingly, the first strain upon the capsule must have been greatest. In the first and second cases this was just below the level of the obturator internus and the gemelli. In the third case it must have been rather higher—i.e., beneath the obturator internus, the tendons of which were torn away from the muscle by the force of the head of the bone thrust out beneath it. All three cases were, in short, examples of direct dislocation, and in none of them was the cotyloid ligament or the margin of the acetabulum injured. It has lately been maintained, upon insufficient grounds I think, that the dislocations of the hip backwards are always, or almost always, indirect, that the head of the bone escapes from the acetabulum close to the transverse ligament, and is then, if the limb be in an inverted position, carried backwards and, perhaps, upwards. Furthermore, it is held that the accident occurs during the *ab*ducted position of the limb. I quite grant that the capsule is weakest and least supported by muscles in this situation, and that dislocation is easily caused here, in the dead body, by forcible abduction of the limb. But it is to be remembered that the capsule is weakest here because, in the living body, it is least liable to be strained in this direction. It may be observed with regard to some other joints, that the dislocations do not commonly take place in the direction in which they may be most easily produced. Notably is this so with the ankle. The configuration of the surfaces, which are wedge-shaped, the greater width being in front, and the disposition of the ligaments in that joint, are such as especially to resist the dislocation of the foot *backwards* and to permit its displacement *forwards*. Nevertheless, the former more commonly happens than the latter, because the direction of the forces which act upon the part, more especially when the foot is planted on the ground, are usually such as are calculated to drive the leg forwards upon the foot rather than backwards, so causing dislocation of the foot backwards. In the case of the hip-joint, the resistance of the acetabulum and the capsular ligament to displacement of the femur is greatest at the upper and back

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part, which is the part where strength is most required for the purpose of resisting the pressure and impulses in standing, walking, and running; and it is least at the under part because resistance to displacement in all ordinary positions and movements is there least required. The ligamentum teres comes into service when the thigh is flexed and adducted; the pubo-femoral ligament is put on the stretch when the thigh is abducted in any position of flexion or extension; and the strong ilio-femoral ligament is tight when the thigh is extended, its chief office being to prevent the rolling of the pelvis backwards, and so to give steadiness to the frame, in the erect position. It may be here remarked that the construction of the several joints and of the skeletal framework generally is such as to withstand the *naturally* applied forces—the forces resulting from muscular contraction and the ordinary movements and impingements upon the ground—rather than the forces which are extraneous, unusual, and accidental. These last, indeed, could not be provided against without encumbering the frame with an amount of material which would involve, in too great a degree, the sacrifice of lightness, and with it of ease and celerity in movement.

Now, the natural and almost constant inclination of the thigh from the pelvis, in standing, lying, and in movements, is inwards—that is to say, the thigh is almost always *ad*ducted (whether in standing, walking, or running); and accordingly an external, driving, or wrenching force is far more likely to come upon it in that position than in the state of *ab*duction. This is especially so when the limb is bent, for the tendency to adduction is then increased by the coördination of the adductors with the flexors; and it is in the bent position that the hip is commonly dislocated. In the fully erect posture the hip-joint may be said to be hyperextended, for it is then slightly bowed forwards, rendered convex in front, and the ilio-femoral, which is the strongest ligament in the body, being now on the stretch, bears the brunt of the weight, and of the forces that would increase that extension; and a driving force sufficient to overcome its resistance in that position is hardly ever applied, hence this ligament is very rarely torn. Indeed, the hip-joint is seldom subjected to much violence in any way in the extended position. It is in the more or less flexed state that injuries are generally sustained. In this position, as I have said, the thigh is not often *ab*ducted, and it is still less likely to be *ab*ducted and *in*verted, for *ab*duction is naturally and usually associated with eversion, as adduction is commonly associated with inversion. A force applied to the limb or the pelvis, with the thigh so flexed—i.e., abducted and everted—could not throw the head of the bone behind the joint, but would throw it forwards into the obturator hole, or forwards and then upwards into the os pubis, and the pubo-femoral ligament would necessarily be ruptured. Indeed, a dislocation by *ab*duction in the flexed position, whether the limb be inverted or everted, must be attended by rupture of that ligament, which, be it observed, has not taken place in any of the specimens I have shown you. The probabilities, of course, are that a limb will be in a habitual or natural position when an accident occurs; and the position of flexion, *ad*duction, and *in*version is both a habitual position, and is the one in which the head of the femur is pressed against the part of the capsule (the under and back part); and this is the part which gave way in the specimens before you. A violent strain in this position, and in this direction, increasing the adduction and inversion and carrying the knee across the opposite thigh, would throw the head of the bone, through such a rent in the capsule as we see in each of these specimens, into the position it occupied, and would be likely to be productive of such laceration of muscles as we have found to have taken place in them. If in either of the more recent specimens the head of the bone be replaced in the acetabulum, it can easily be thrown out again when the femur is flexed, adducted, and inverted; whereas, if the femur be abducted, the dislocation is resisted by the pubo-femoral ligament, and the more the joint is flexed, the more obvious does this resistance become. In our third case, and in all the cases in which, as in it, the obturator internus is torn across, and also in those in which the head of the bone is placed under that muscle, the dislocation must have taken place beneath it, and must have been effected in the adducted position of the limb. I am of opinion, therefore, that the view formerly entertained is correct—namely, that the backward dislocations of the hip, whether accompanied by fracture of the edge of the acetabulum or not, are commonly direct, and produced by force applied to the limb in its flexed, adducted, and inverted position. And although it may be said that there is a natural tendency for the head of the femur to be displaced during abduction of the thigh, owing to the shallowness of the acetabulum and the weakness of the capsule at the under part of the joint, it must be added that there is not a tendency for forces to be so applied during that position as to drive the head of the bone backwards; and such displacement could scarcely be effected by muscular action. I find, in most of the described cases in which the manner of the accident could be ascertained and the position of the person and the limb is given, that the thigh is stated to have been adducted at the time of the dislocation. According to the direction of the force, the head of the femur will be driven to some extent upwards, with more or less laceration of the muscles and other tissues, the limitation of its course that way, and also backwards, being given chiefly by the untorn part of the capsule, and partly by the stretched muscles and other tissues. But it is not probable that in this or other dislocations of the hip, or in dislocations of other joints, further displacement, with the necessary attendant laceration, is effected by muscular action. I mean that the amount of displacement and of damage to the parts involved is proportionate to, and due to, the first shock of the injury, and that the immediately following, or subsequent, contraction of the surrounding muscles does not produce much, if any, additional displacement. The effect of muscular action in this respect in producing so-called secondary dislocations or displacements has, I think, been much overestimated, not only in this joint, but also in the shoulder. For instance, the subcoracoid dislocations of the shoulder are by some believed to be primarily subglenoid, the head of the humerus, according to that view, being first thrust through a rent in the lower part of the capsule and subsequently drawn up beneath the coracoid process. That this view is not correct is proved by the fact that in the ordinary subcoracoid dislocation the head of the humerus occupies a position beneath the subscapular muscle, between it and the inner surface of the scapula, a position into which it could scarcely be drawn by muscular action from the subglenoid region. The position of the limb in the dislocation of the hip we are considering—shortened, adducted, flexed, and inverted—is therefore that, or nearly that, in which, as I believe, it is when the accident occurs, and it is maintained by the head of the femur being placed behind and above the acetabulum, and held there by the pressure of the surrounding soft parts rather than by the tension of the ilio-femoral ligament, which, as seen in our specimens, may be quite lax. The points of attachment of that ligament—the fore part of the trochanter and the os pubis—may be rather approximated in the dislocated position. The flexion is maintained by the tension of the ilio-psoas muscle, which causes an increase in the lumbar arch if an attempt be made to straighten the limb.

Among the many and great improvements which the last half century has introduced into surgery is that of the treatment of dislocations, especially those of the hip, by manipulation under anæsthetics. I remember the case of a man, aged twenty-eight, in the Norwich Hospital under the care of the then well-known surgeons Dalrymple and Crosse, who was treated the day after he had incurred a backward dislocation of his hip by wrestling. Pulleys were applied, the limb being drawn across the opposite thigh, and force amounting from four hundred to four hundred and fifty pounds, as indicated by the dynamometer, was applied for two hours and a half, during which the man was bled to thirty ounces, and five or six grains of tartar emetic were given, with the view of producing faintness, before the dislocation was reduced. A large extravasation of blood took place into the buttock; but the patient ultimately did well, and recovered a useful limb. The following sadder case, at the same hospital, made a deep impression upon my youthful mind. A man aged twenty-six fell whilst carrying a sack of potatoes with his right leg doubled under him, and was brought to the hospital the next day. There were the ordinary symptoms of dislocation backwards, upon the dorsum of the ilium as it was considered. The usual means for reducing it were resorted to with and without pulleys, for four hours, during which time thirty-six ounces of blood were taken from the arm, and twelve grains of tartarised antimony were given without inducing faintness, and with no good result. Each of the surgeons present tried in vain; and, finally, the attempts were desisted from. The position

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of the bone it was thought was altered; but reduction of the dislocation could not be effected. Subsequently, abscesses formed and burst. The man was removed from the hospital, and died soon after. No post-mortem examination was made. These cases occurred before the blessings of anæsthetics were dreamt of. Under that influence the muscles would have been relaxed far more quickly, as well as more effectually, than by antimony and the lancet; and, with the methods of manipulation now adopted, it is probable that in both these cases reduction would have been easily effected by the able surgeons under whose care, with the appliances and knowledge of that time, the treatment was so severe and so prolonged, and in one of the cases so disastrous.

By the method of flexion, adduction, circumduction, abduction, and rotation in succession, under an anæsthetic, now commonly used, the following ends are attained. By flexion the head of the femur is carried down near to, or opposite to, the rent in the capsule; and, at the same time, the chief flexor of the hip—the ilio-psoas—is relaxed, and some of the extensors—the hamstring muscles—are relaxed at the knee, the relaxation thus produced in these muscles at the time more than compensating for the tension given to them by the flexion at the hip. By circumduction, abduction, and rotation outwards, the limb being at the same time lifted forwards by the hand under the knee, the head of the bone is brought to and slipped through the capsular rent into the acetabulum, which result is facilitated by the relaxation of the glutei and the external rotators. Moreover, by the tension given to the ilio-femoral ligament during abduction the trochanteric part of the femur is held firm and made to act as a fulcrum, while the head of the bone is carried under it, over the edge of the acetabulum, into the socket. Thus the reduction may, under an anæsthetic, often be effected with ease. But I must not lead you to suppose that this is invariably so. Difficulties which are not always easy to account for may occur, and may require patience and varied manipulation. The aperture in the capsule through which the head of the bone has been driven may be too small to admit of its easy return, or the head of the bone may be carried by the efforts at reduction to some other part at a distance from the opening in the capsule, or a torn muscular tendon may intervene and require modifications of the process. Moreover, the method is not altogether without risk to the integrity of the structures, and instances have been recorded in which the neck of the thigh-bone or the shaft of the bone has been broken in the forcible manipulatory efforts to reduce dislocations. Such events are, however, rare, especially in cases of recent dislocation, and are less likely to ensue from this method than from the severe procedures formerly adopted; and recorded cases show that a failure to effect reduction is less frequent under anæsthetics and manipulation than it used to be before those measures were resorted to. After the dislocation has been reduced there is no fear of its being reproduced while the limb is extended, whether it be abducted or adducted. In several instances the bone has been thrown out of the socket again during examination made to ascertain whether the dislocation was completely reduced. This is especially likely to occur when the dislocation has been left unreduced some weeks, not in the case of the hip only, but in dislocations generally, and most especially in those of the shoulder; the reason being—first, that the return of the bone into its socket is in such cases often not recognised by the usual snap or sound, and therefore more examination is needed to satisfy the surgeon respecting the reduction; and, secondly, that the parts have become adapted to, and more readily resume, the abnormal position. After the reduction of an old dislocation, it is therefore necessary to beware of this, and to use more care to prevent a return of the displacement than it is when the accident is of recent occurrence.

The points in connexion with the backward dislocations of the hip, to which I have wished more especially to direct your attention in this lecture, are—1. The position of the rent in the capsule through which the head of the bone escapes from the acetabulum—viz., at the lower and back part, behind the pubo-femoral ligament, therefore not at the lowest part, although the weakness of the capsule here may seem to predispose it to give way in this latter situation. 2. That the dislocation occurs commonly, not, as recently suggested, when the limb is abducted, but when the thigh is adducted, flexed, and inverted. 3. That the dislocation is not indirect, but direct, the head of the bone being driven through the rent in the capsule at the lower and back part of the joint, and then carried up to a variable extent by the force which caused the dislocation. 4. The *rationale* of the reduction by manipulation. 5. The liability to reproduction of the dislocation in cases which have remained unreduced for some weeks.

We must not allow ourselves to infer too much from experiments on the dead body, seeing that the conditions differ in so many respects from those in the living. In each of two strongly made male subjects I dislocated the left hip in the position I have referred to—viz., with the limb adducted, flexed, and inverted. This is not so easy as with the limb abducted and straight, because there is less leverage to work with, and it is less easy to fix the pelvis. However, with the aid of two men, I did it without any great difficulty. In both the bone was returned to the acetabulum before dissection.

In one, which was dissected by Mr. Francis, it was evident that the head of the femur had been driven out through the back of the joint under the obturator internus. A quadrilateral flap had been formed at this part of the capsule, the rent reaching from the trochanter, near the ilio-trochanteric ligament, to the back of the acetabular notch and extending along the edge of the circular ligament. The flap thus formed was found wedged into the joint between the head of the bone and the acetabular surface. The ligamentum teres was torn across near its acetabular attachment. The obturator internus was torn through within the pelvis; and its tendons, together with the trochanteric parts of both gemelli, which were torn nearly through, were wedged into the joint together with the flap of the capsule. The pyriformis was torn nearly through, and the obturator externus was torn through near its attachment to the pelvis. The upper edge of the quadratus femoris was slightly torn. The hinder edge of the gluteus minimus was much torn, and that of the medius slightly. The gluteus maximus was intact.

In the second, which was dissected by Dr. Griffith, the head of the femur had escaped from the joint rather lower down, passing through a rent in the capsule, which extended from the hinder margin of the notch, one-third of the circumference of the joint, near the cotyloid ligament, which was itself also partially detached from the edge of the acetabulum. The gluteus medius was slightly torn; but the gluteus minimus, the obturator internus, and the gemelli were intact. The obturator externus was torn from its pelvic attachment, and a portion was in the joint between the head of the femur and the acetabulum. The upper fibres of the quadratus femoris were also torn; the ligamentum teres was torn from the acetabulum, and remained attached to the head of the femur.

In one of these instances, therefore, it appears that the head of the bone passed in what may be called the favourite direction—in the interval between the obturator externus and the gemellus inferior,—which also took place in Cases 1 and 2 that I have given. In the other instance, as in my third case, the head of the bone passed out at a higher level under the tendon of the obturator internus.

It is noteworthy that in both these instances portions of the torn muscles, and in one the flap of the capsule, became entangled in the joint between the head of the bone and the acetabulum during the process of reduction; and I may remark that this was so in my second case, in which also the reduction was effected after death, and in which the trochanteric portion of the torn obturator externus was found in the joint. It is quite probable that a similar event may occur in the living subject, and account for some of the inconveniences which are now and then felt after reduction; and one can suppose that it is more likely to take place when reduction is effected by manipulation under an anæsthetic.

In both these instances the ligamentum teres was torn near its cotyloid attachment. This was so in Case 1, whereas in Case 3 it was severed near to the head of the femur, and in Case 2 it was torn out of the dimple in the head. In all dislocations of the hip this ligament is severed or detached. In a dislocation downwards, the traction upon it being in a direction the reverse of that which it is constructed to bear, it is, in common with other ligaments and tendons, likely to be detached or torn away from the bone; and I thought therefore that this might enable us to distinguish, after death, the downward dislocations from others. I found, however, by experiments upon the dead body that it is not

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a reliable test; for, in some of the instances in which by forcible abduction I produced dislocation into the obturator hole, it was seen the ligament had not been torn out of the dimple, but had been severed at some point between its two attachments.

Lectures
ON
DISEASES OF THE LACRYMAL APPARATUS.

Delivered at the Royal College of Surgeons.

BY HENRY POWER, F.R.C.S.

LECTURE III.—PART III.

IN now proceeding to give a short account of the mode of treatment that may with most advantage be adopted in cases of complete obstruction of the lacrymo-nasal passages, I place before you in the first instance a synopsis of the different plans that have been at various times devised and practised, from which it appears that they may be reduced to four principal methods—viz.:

1. Obliteration of the natural passages.
   (1) By cauterisation.
      a. With actual cautery.
      b. With potential cautery.
   (2) By excision of sac.
2. The formation of a new passage.
   (1) Through os unguis.
3. Restoration of the natural passages.
   a. By antiphlogistic means.
   b. By injections.
      α. Into conjunctival sac.
      β. Through canaliculi.
      γ. Through slit canaliculi.
      δ. Through fistula or artificial opening into sac.
   c. By compression.
   d. By seton passed through duct.
   e. By catheterism.
      α. Downwards from the eye.
      β. Upwards from the nose.
   f. By incision of sac.
   g. By excision of outer wall of sac.
   h. By gradual dilatation (laminaria and other probes).
   i. By rapid dilatation, slitting up canaliculus, and immediate introduction of large probes.
   j. By lacrymotomes, after slitting up canaliculus.
4. Removal of the lacrymal gland, either wholly or in part.

The first method of treatment—that, namely, by obliteration of the natural passages—is of very ancient date; it is, in fact, described by Celsus, who lived, and probably practised, in Rome in the first years of the Christian era. He used the actual cautery, and the same proceeding was adopted by Paulus Ægineta 700 years later. It was again revived by Nannoni at Florence in 1748, and spread thence to Germany and France. It was commonly practised by Desmarres and by Jobert de Lamballe; and M. Blot, writing in 1865,[1] states that it was then in general use at that date in France. Reference need only here be made to the very clear accounts given by the two first-named writers, as their works are in everyone's hands. The alarm which this method excites in the patient's mind, as well as perhaps its apparent roughness and want of precision, cause it to be seldom practised in this country, though it is certainly effective, and in the few cases in which I have tried it the results have been very satisfactory.

Hirschberg[2] has recently recommended the use of his galvano-cautery for the cure of fistula of the lacrymal sac. In one case which had lasted for two years, and which might fairly be regarded as incurable, Paquelin's thermo-cautery led to an instant and permanent cure. The mode in which it was employed was that a metallic sound was introduced into the lacrymal duct in the ordinary manner from above, and a special burner, bent at right angles and ending in a pointed beak, was inserted into the capillary opening of the fistula until it touched the sound, when the current was passed.

Extirpation of the sac by means of the knife has been practised in some rebellious cases, and in modern times by such distinguished surgeons as Berlin and by v. Graefe. If determined upon, it is important to remember that the whole sac must be removed, or there is a risk that a cyst will form. The dissection should be conducted with care. Time should be given that the bleeding following the first cut should subside, and the sac should be separated as far as possible without injury from its surroundings. After it has been removed as completely as possible the interior of the naso-lacrymal duct should be well scraped with a Volkmann's spoon.

The chemical caustics that have been employed for the purpose of effecting complete obliteration of the sac are numerous. Amongst others are nitrate of silver, caustic potash, zinc chloride, antimony chloride, Vienna paste, and Canquoin's paste. The objection which naturally presents itself to the obliteration of the sac or to the complete artificial occlusion of the canaliculi is obvious. It is that it may naturally be expected to lead to permanent epiphora, and that it destroys the last chance of ultimate recovery. Passages lined with mucous membrane are notoriously difficult to close. The distal portion of the intestine, of the urethra or of the duct of a gland, into which a fistula opens, and which never transmits any of the normal contents of the tube, remains pervious for years, ready to resume its functions when the fistula is closed, and the course of the contents is no longer diverted from their natural channel; and it may well be, therefore, that in cases of epiphora, when the inflammatory trouble has subsided, to which the overflow of tears is due, the canal may once more become pervious, and the whole apparatus resume its functions. By obliteration of the canaliculus or of the sac this hope is abolished, and if the operation prove unsuccessful the patient is doomed for life to suffer from the disease for the cure of which he has applied to the surgeon. The reply that is given, however, by those who advocate this method of treatment is not unreasonable, and is to this effect: By abolishing the ducts which convey the tears to the nose, the reflux of unhealthy secretion, inspissated tears, and mucus through the puncta is also prevented; the conjunctiva is consequently freed from a permanent source of irritation. Moreover, after such obliteration, the lower part of the sac and the naso-lacrymal canal, no longer discharging their functions as ducts, become atrophied.

Considerations of space render it impossible that I should describe in detail the various methods of restoring the communication between the conjunctival sac and the nose. The plan proposed by J. L. Petit, the great French surgeon, who as a boy dissected so deftly that at the age of twelve he was made a prosector, was to plunge a bistoury into the sac through the skin below the tendon of the orbicularis; a channelled sound was forcibly pressed down the duct into the nose, after which a conical wax bougie was introduced. This plan was adopted by Lecat, Desault, and Boyer, in France, and I have often seen it practised by both the Guthries, who generally left a style in the duct with the head resting on the cheek. The results were not very satisfactory. The edges of the wound were inflamed, and much discharge took place from them. Mejean passed a needle armed with a thread through the canaliculus and down the duct, thus forming a kind of seton. Bianchi,[3] and after him Laforest and Allovel, endeavoured to clear the passage by attacking it from below; but the difficulties that present themselves to this operation from the varieties in the anatomical disposition of the parts are almost insuperable, and were strongly insisted on by Morgagni, who was opposed to this plan.

The method now commonly practised was introduced by Sir William Bowman, and has scarcely been modified since the time when his memoir on the subject appeared in the first volume of the Ophthalmic Hospital Reports. It consists essentially in passing a small probe grooved for the last half inch of its length into the canaliculus, and slitting it up along its whole length, converting the canaliculus into a groove or channel; room is thus afforded for the introduction of a large probe into the sac and duct, and all treatment by injections and by dilating instruments can be much more easily applied.

[1] Thèse de Paris, 1865. [2] Archives of Ophthalmology, 1879, p. 369.

[3] De Ductibus Lacrymalibus Novis. Turin, 1775.

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The introduction of a probe into the lacrymal sac and down the duct with normal canaliculi is often spoken of as a common and proper proceeding; in reality it is exceedingly difficult, and can only be accomplished by a very delicate and very practised hand, and not always by even the most skilful surgeon. The first part of the act is easy enough, and the recognition of the patency of the puncta and canaliculi requires no special skill; but to conduct the probe down the nasal duct without inflicting harm on the mucous membrane is a rare feat. The difficulty arises from the sudden change in direction which is required at the point where the canaliculi open into the sac. By stretching the lower lid outwards the canaliculus can be rendered nearly straight; the punctum is dilatable, and with a little management probes from one-twenty-fifth to one-tenth of an inch in thickness can be made to pass along the canaliculus till it strikes against the mucous membrane lining the groove of the os unguis, but its further progress is generally barred. A veritable *tour de maître* has to be performed: the upper part of the instrument has to be brought upward and inwards till it is from 4 to 6 mm. to the inner side of the supra-orbital notch, and then gently pressed into the duct. It will be found in practice, however, that the point of the instrument becomes engaged in one of the folds of the mucous membrane; and if the finest probes be used no force can be exercised, since they can be felt to bend against the obstacle; whilst if one of the rather thicker, but still fine, probes be used, although more pressure can be exerted, yet it can be felt that the point is not making its way down the axis of the tube, but that it is impinging on the mucous membrane, and that there is imminent danger of perforating it and producing a false passage, a result which not unfrequently betrays itself by hæmorrhage and pain. There can be little doubt that considerable damage is often done by forcible and injudicious attempts to introduce fine probes, the mucous membrane being riddled with false passages, and the bone being in parts stripped of its periosteum, whilst the whole proceeding is productive not only of intense pain and discomfort to the patient, but of very little after-benefit to recompense him for the suffering he has undergone. I quite admit that in some cases the most satisfactory results follow the adoption of the plan suggested by Sir W. Bowman. I have no doubt that such instances as this might be quoted from the in-patient book of every ophthalmic hospital: F——, aged forty-four, eight years ago suffered from a lacrymal abscess on the right side. Has had repeated attacks of inflammation on this side since, with constant epiphora. Admitted into hospital on Nov. 14th. The lower punctum was slit up, a probe was passed, and a style retained for one day in the duct. This patient returned to the hospital one month afterwards quite well.

But is it not also true that there are many cases of failure to record—many cases in which, after the canaliculus has been slit up, and a probe, even a large probe, passed, or even when a style has been retained for many days, and the passage appears to be perfectly free, epiphora still continues? Do we not sometimes, instead of improving our patient, do him positive harm? I think I have seen force enough used to cause an ordinary probe to penetrate the membrane of the sac or duct. I think I have heard the os unguis or the maxillary bone crack. I am sure I have seen inflammation and caries follow injudicious attempts to introduce a probe. What has happened to me might, I imagine, happen to others. I remember an instructive case in this respect. A gentleman called on me complaining of epiphora. I found the eyelids, the teeth, and the refraction healthy. I was able to pass a fine probe into the sac along the canaliculus of the lower lid. No improvement resulted, and a few days afterwards I slit up the canaliculus and attempted to pass a Weber's probe down the duct. I was unable to find the bony canal, and in searching for it, and pressing the point of the probe here and there without, as I thought, undue violence, I have no doubt I perforated the mucous membrane and made a false passage. The result of this was that an abscess formed in the lower lid, which was opened and gave exit to some pus. The patient was not relieved of the epiphora by these proceedings, and I have no doubt felt, and felt truly, that he had gone through much suffering with very little advantage. It may be said I ought not to have made a false passage, and this is very true, but I would appeal to every ophthalmic surgeon whether it is not, in some instances, extremely difficult to strike the opening of the duct. An examination of some of the skulls in the College collection will show that the direction of the passage and the extent to which the forehead projects render it almost impossible to pass a probe in the usual direction. The failures, which we must admit not unfrequently occur, are probably sometimes due to want of patience both on the part of the surgeon and of the patient in the application of remedies; we expect to cure, and he expects to be cured of an affection that has been slowly developing, and which has produced profound structural changes in the course of a single, or at least of a few sittings. Many cases present themselves of the kind which I have here extracted from our in-patient book: "F——, aged thirty-one, admitted Oct. 20th. Three years ago, swelling at right inner canthus; two months ago, abscess at inner angle of eye, which slowly matured and burst one month ago. The opening healed, but tears have continued to run over the cheek since this time. The canaliculus was slit up, and a style was introduced. Nov. 14th: there is still trouble at the inner canthus; the canaliculus wound has closed. It was again slit up, and style passed. There was but little improvement on Nov. 30th, and the patient, declining to submit to further treatment, left the hospital." Here the disease was of three years' date. The walls of the sac and duct were probably greatly thickened and their cavity distended, and, although styles and probes could easily be introduced, a long course of injections and of remedies, both local and general, would probably have been required to effect a permanent and perfect cure.

When a style is used, care should be taken that it does not slip into the nasal duct or antrum, since in both instances it is extremely difficult or even impossible without a very serious operation to extract it. The accident is, to a certain extent, guarded against by the head or hook with which the upper part of the instrument is provided; but additional precaution should be taken by fastening a thin piece of silk or catgut to the neck, and fixing the thread on the forehead by a piece of sticking-plaster. I have seen one or two instances where the style has disappeared altogether—I have little doubt into the antrum, as the patient stated afterwards that he could feel it moving about when he ran or moved quickly; and I have once or twice myself lost the instrument in the duct, recovering it again with the greatest difficulty. I remember a case in which Mr. Guthrie (senior) laid open the sac and upper part of the duct, exposed the head of a style, and had to apply very considerable force to extract it. When removed, it was thickly coated with calcareous salts. Considerable diversity of practice exists, if I may judge from personal communication, in regard to retention of a style in the duct after it has been slit up. Some merely pass one and immediately withdraw it, directing the patient to return for a few days, and on each occasion separating the edges of the wound. Some keep the style in for a few days, and some for a much longer period. Each plan has some advantages and some very considerable disadvantages. If the style is retained for some weeks in the duct, there is no doubt that the channel is kept patent, which, it may be said, is the main object of the whole operation of proceeding; but, on the other hand, the upper opening into the sac becomes strangely misplaced towards the inner canthus, and although a probe may easily be passed down it the tears do not readily drain away from the conjunctival sac. Moreover, a kind of fungous granulation rises round the head of the style, and in former days, when leaden styles were used, the skin was often discoloured around it. If the style is immediately withdrawn, it is requisite that the patient should return for several consecutive days in order that the lips of the little wound should be separated, as they have a strong tendency to reunite. When the patient is unable to return, the plan suggested by Mr. Haynes Walton of snipping off a small portion of the posterior edge of the divided canaliculus may be practised with advantage.

The simple forms of obstruction should always be treated gently and tenderly at the outset. In many instances relief or a cure may be obtained by removal of carious teeth, and by the simple proceeding of injecting a little pure water into the sac by means of an Anel's syringe, the nozzle being introduced into the punctum lacrymale. Mr. Myrtle, the late house-surgeon of the Royal Westminster Ophthalmic Hospital, took infinite pains with a series of cases of obstruction, and effected in some cases great improvement and in others a permanent cure by this means, and has given me the notes of several patients where these results were obtained. Nevertheless, it must be admitted that the treat-

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ment of lacrymal obstructions is, and must always remain, a difficult and unsatisfactory part of ophthalmic practice. The great variety in the proceedings that have been suggested by a multitude of practical and unpractical surgeons is sufficient evidence of the truth of this statement. I have adduced and exhibited drawings taken from the works of more than twenty authors, which, however, are for the most part only worthy of a passing notice, as they have passed into oblivion and are not likely to be resuscitated; but I may remark, in conclusion, that the larger my experience has been, the less disposed I am in trifling cases to resort immediately to the knife. Slight overflow of the tears is not a very great evil to endure, and conditions may be present which are absolutely incurable. Thus, in the first head which I brought to the College, the lacrymal organs of which have been beautifully dissected out by Mr. William Pearson, though there were no external marks of injury or any indication of disease, the nasal duct throughout its whole length was converted into a fibrous cord. What would incisions and the introduction of probes have effected here? In severe cases, especially where a fistula is present, the canaliculus should be slit up on Sir W. Bowman's plan, and a probe of moderate size passed down the duct. If this prove impracticable, the sac may be opened and the cause of the obstruction sought; but under these circumstances neither surgeon nor patient should be too sanguine of success, though this may sometimes be obtained by perseverance and skill on the part of the surgeon and by obedience and patience on the part of the patient.

ON

RHYTHMIC CONTRACTION OF THE PUPILS AND MUSCLES OF THE LIMBS WITH CHEYNE-STOKES RESPIRATION.

BY ALEX. ROBERTSON, M.D., F.F.P. & S., GLASGOW,
PHYSICIAN TO THE ROYAL INFIRMARY AND CITY PAROCHIAL ASYLUM, AND CONSULTING PHYSICIAN TO THE TOWN'S HOSPITAL, GLASGOW.

IT is well known that evanescent contractions and dilatations of the pupils may be induced by many other agents besides light and darkness. A sudden blow on the general surface of the body will cause a momentary widening; so sometimes will a powerful muscular effort. The same effect may result from violent mental emotion, and in a less transient form it may accompany dyspnœa, particularly if it has set in rapidly. These illustrations indicate how intimate and widespread are the connexions between the nerve-centres that control the movements of the iris and the great encephalic ganglia. With the exception of the last one, they are drawn from a state of health, but similar associations are present in many morbid conditions. My object in this paper is to direct attention to a marked instance of this relationship in the rhythmic movements of the pupils and even of the limbs, which in some cases accompany the peculiar modification of breathing that bears the name of two eminent physicians of this country, Drs. Cheyne and Stokes. Two patients have been under my care in both of whom this combination of symptoms existed in a typical form. I shall give a short account of their cases.

CASE 1.—T. S——, aged twenty-three, soldier, of drunken habits, was admitted into the Town's Hospital on Nov. 3rd, 1883, with a history of ague and suffering from rigor. On the night of his admission he became unconscious, and he was so next day about 12 o'clock, at the time of my visit. The respiration was then distinctly Cheyne-Stokes in its character. When I began to examine him both his arms and his legs were extended and rigid, but they did not continue in this condition, as they soon relaxed, though directly afterwards they again got stiff. I noticed that it was only when the breathing was fullest and most vigorous that the contractions were maintained, and that during the brief cessation of the respiration the muscles were soft and the limbs quite supple. These combined rhythmical movements continued during all the time of my examination of the patient—about twenty minutes. The state of the pupils also attracted my attention. When the breathing was full and laboured the pupils were distinctly dilated; as soon, however, as the descending process had fairly set in, pupillary contraction began, and it continued to progress *pari passu* with the descent of the respiration, until, when the latter temporarily ceased, they had become obviously but not minutely contracted. His pulse was 70, and regular; it was not observed to change with the alterations in the breathing, as has been noted in some cases. The temperature in the axilla was 102·6°, and he perspired profusely. The tâche cérébrale was well marked. There were no râles in the chest. At 6 P.M. the ascending and descending respiration was very typical, the interval of abeyance being longer than in the morning. With a view to test the strength of the morbid dilating action on the pupils, I exposed them to the bright light of a candle while the breathing was ascending, and found that, instead of contracting under light, their width continued to increase till the acme of the breathing was reached. On the other hand, during the descent of the breathing the contraction of the pupils went on even when the eyes were shaded. I watched these rhythmic movements during many successive cycles. At this visit the contractions and relaxations of the extremities, synchronous with the breathing, were still present, but were much more decided in the arms than in the legs, which did not altogether relax even during the pause of the respiration. He crunched his teeth when his limbs contracted. There was no retraction of the head. At 10 P.M. he was much worse, and the special phenomena had disappeared. He died the same night at 3 A.M. At the necropsy the cerebral pia mater was found to be injected everywhere, but particularly at the sides and the base. The chief lesions were two sanguineous effusions in the right hemisphere. The larger was about the size of a walnut, and was situated just external to the anterior extremity of the corpus striatum. The seat of the smaller, which was about half this size, was an inch and three-quarters from the anterior extremity of the right frontal lobe, near the longitudinal fissure. The heart weighed thirteen ounces and a half; there was no valvular disease, but there was hypertrophy, apparently concentric, of the left ventricle.

CASE 2.—M. A—— aged seventy-eight, was admitted into the Town's Hospital on Dec. 7th, 1883. Her friends stated that this her second attack of palsy on the right side set in three days previously. The day following its onset she became unconscious, and has continued so ever since. On admission, all the ordinary symptoms of right hemiplegia were well marked. Her breathing at first was quiet and regular, but on the 10th it became Cheyne-Stokes in character. At the same time the power of swallowing was greatly impaired. I extract the following entries in my note-book, chiefly respecting the pupils:—1 P.M. (10th): "The pupils gradually dilate during the ascending stage of the breathing, and contract when the respirations become shallower. These changes are best marked in the right pupil. The dilating pupils contract under strong light, unlike the case of T. S——." In the latter case the breathing was more typically ascending and descending than in the present one. 2.50 P.M.: The respiration was found to have become regular, but in about five minutes after this observation was made the previous rhythmic irregularity accompanied by the pupillary changes recurred. "The pupils become very small when the breathing gets feeble and dies away, and gradually dilate as it becomes deeper and more pronounced. While they are wide, light causes an immediate contraction. 7 P.M.: Cheyne-Stokes breathing and associated rhythmic movements of the pupils still present." 11th, 12 noon: I found her lying on her side breathing quietly and regularly, the respirations being 30 per minute, the pulse 100, hard, and the axillary temperature 100·2°. The pupils were wide, and responded feebly to light. I caused her to be turned on her back, and immediately the Cheyne-Stokes breathing and also the pupillary movements returned, though not in so marked a form as previously. She was again put on her side, but the rhythmic irregularities of respiration and pupils continued. Patient's condition now got gradually worse, and she died next day (12th) at 3 P.M. A post-mortem examination was not obtained.

Remarks.—Since these two cases occurred I have seen a number more in which the Cheyne-Stokes respiration was present, both in my own practice and that of medical friends whom I had spoken to about the associated pupillary movements. In only one, however, was there rhythmic contraction and dilatation of the pupils, and the symptom was not so well marked as in the cases I have here described. I had hoped to have met with others by this time, and that together they might have yielded some indication of the

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special morbid condition in the brain on which this peculiar combination of symptoms is directly dependent; but I have been disappointed, and now put the above cases on record so that the attention of other observers may be directed to the subject. The first of the two has the additional interest, that the disposition to rhythmical contractions was not confined to the pupils, but also affected the muscles of the limbs. It was certainly very striking to notice, while the breathing was ascending to its acme, the limbs gradually become more and more rigid and the pupils more and more dilated; and, on the other hand, in its descent, the limbs slowly relaxed and the pupils steadily contracted.

GENERAL NEUROSES HAVING AN OPHTHALMIC ORIGIN.[1]

By H. BENDELACK HEWETSON,
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IT is now some years since I first observed symptoms, many and varied, occurring in neurotic persons who were also the subjects of uncorrected optically defective sight. In investigating more particularly the relationship between the various optical errors and sick headache, or simple headache, I was occasionally startled by the apparent direct relationship between the long uncorrected disorder (with all its immediate train of nervous disorders) and general conditions of ill-health which seemed to be the direct outcome of a thus already demoralised nervous system. It is now well established that many cases of migraine or sick headache are directly attributable to the reflected irritation of the brain (and thence the gastric functions and heart's action) from some uncorrected optical state, chiefly on the side of hypermetropia, and always in a neurotic subject. It is also well proven that many of these cases are entirely relieved from their periodic attacks by the use of properly selected glasses; or, having passed an age when the activity of the accommodation ceases more or less, and the eye becomes presbyopic, the severity of the headache or migraine becomes greatly modified. It is further well known that a patient the subject of hypermetropia is liable, according to varying circumstances, such as extent of defect and use of the eyes, to more or less constant "head pains," not necessarily associated with very obviously defective vision or aching eyes, but always peculiar in their position and character, and aggravated by close application of the sight. Although I have very fully published my observations some time ago on the relations between sick headache and optical defects, and utilised what was previously discovered as to the relation between headache (broadly defined as such) and hypermetropia, I had not felt my footing sufficiently to enable me to bring forward that which it is now my desire to show—viz., that the neuroses growing and arising from congenital optical error are more subtle in their nature, more varied in their distribution, and more demoralising to the right evolution of the nervous system than I was at first led to suppose.

The most common forms of headache associated with that optical error known as hypermetropia are—either simply a heaviness or pain over the brows (this may or may not be combined with general headache), or very frequently a tender place on the top of the head, making it particularly painful to dress the hair—such a pain as occurs after a lock of hair has been "slept on the wrong way," in common parlance; there is also frequently pain at the back of the head. All these pains may be present together, or they may exist singly, but they all occasionally occur in conjuction with severe neuralgia at the back of the neck. This I have frequently noticed, and where it occurred, whether associated with the other head pains or not, it, as well as they, soon disappeared with the systematic use of accurately adapted correcting glasses. This symptom of pain at the back of the head and neck is not one which has long been associated with optical defect, but I have now seen a sufficient number of cases to show without doubt that such may be safely regarded as one of the symptoms of (frequently latent) optical error, perfectly remediable by the use of glasses, and, when such, by glasses only.

Dr. Lauder Brunton writes me that he has seen several cases of neuralgia of the back of the neck cured by glasses. It would not appear to need demonstration that with symptoms so severe and depressing to the general nervous system as are the various forms of headache—vertigo, which is associated with astigmatism; vomiting; possibly, as I have noted, palpitation, or neurotic dyspepsia between the attacks of migraine—other conditions should arise as a sequel in many constitutions. One which I particularly wish to draw attention to is insomnia. This particular symptom I observed in one or two cases, the subjects of astigmatism. In one instance in particular, where the eyes had given much trouble during the examination period of an Oxford man's life, it was particularly remarked to me that after the astigmatic trouble was corrected by suitable glasses, *with an equal amount of work*, the insomnia disappeared and the whole physical and nervous state of the gentleman improved greatly. One object of my paper will be to show what an important factor these optical errors are in, as it were, moulding during childhood and early life the nervous and constitutional state of the individual. As a proof of this I will quote two cases, both in ladies of education and refinement, which seem to give us some sort of clue to the possible effects on the constitution of persons who conscientiously struggle through a severe scholastic career with important optical errors entirely uncorrected.

The first case was that of a lady aged twenty-two, whom some few years ago I found to be the subject of confirmed hypermetropic astigmatism. Her health was not good, but she particularly complained of headache and general feelings of malaise. I corrected the astigmatism after very patient testing, since here great nervousness made it a very trying process for myself as well as the patient. There were other symptoms such as would be ordinarily covered by the convenient but too easily accessible term hysteria, which showed itself in subjective pains at the back of the neck, tenderness of the spine, and frequently of the skin generally. There was no apparent lesion in any important organ, and she appeared to be the possessor of a greatly demoralised nervous system, which was easily overwrought, no matter what amount of moral pluck appeared to be put forth to resist an attack. After wearing the glasses for three years constantly her whole being seemed to change, so great was the relief. All headaches and difficulty in obtaining sleep disappeared, the appetite improved, and she became more companionable at home. But there was evidently with all this improvement a disordered state of the nervous system not yet removed, the tenderness of the spine remained more or less, and the health was still subject to variable and unaccountable fluctuations. I made up my mind that though the head pains had been so far recovered by the use of glasses, yet the long struggle in pain and toil of educational work had so far damaged the peripheral nerves that some other means of cure must be attempted. I may say that drugs had long since been given up as useless. It occurred to me that a course of medical rubbing would probably be productive of some good in the form usually called "massage." I accordingly sought and obtained a consultation with Dr. Fletcher Little at Ben Rhydding in the early part of last winter, and, although the weather was so severe, we decided that the patient should undergo this treatment under Dr. Little's supervision at Ben Rhydding, and I have greatly to thank that gentleman for assisting me to obtain the excellent result, for in two months she went home perfectly well, and I may also add she remains so.

I have in the second case received great encouragement from the treatment above adopted, but its expense necessitated an early abandonment of the massage, yet I have heard that the patient is much improved in general health.

I could multiply instances in which varying degrees of this kind of nervous demoralisation occurred; but generally there is either nerve-resisting power or neurotic recuperation sufficient to enable the individual to recover, if the sight be fully corrected, without having to resort to the massage treatment for the rest. I am perfectly convinced that until the sight had been corrected all such treatment as I have indicated would be useless. If carefully looked into, this appears to me to suggest some very important conclusions in relation to the community at large. I see children driven to do their work although suffering from defective sight, constant headache, and restless nights, which result

[1] Read before the meeting of the Yorkshire Branch of the British Medical Association held at Bradford.

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in great exhaustion of the nervous system, disturbance of the various functions of the body, and a disinclination to innocent and beneficial child-play, all of which is with perfect ease set to rights by a correction of the optical defect which causes it. But supposing that a naturally nervous subject grows up under these conditions, the right evolution of some of the nervous system is undoubtedly endowed with morbid action, as well as the formation of the character disturbed. The causes are evident; the consequences, I believe, will be found in some of the neuroses which I have endeavoured thus imperfectly to describe. As the practical outcome of these observations, I trust it may not be considered a superfluous precaution to suggest that all children's sight should be tested by the ophthalmoscope before they commence their educational career.

Leeds.

FATAL CASE OF "MUSHROOM" POISONING.

BY H. HANDFORD, M.D., M.R.C.P.,
PHYSICIAN TO THE NOTTINGHAM GENERAL HOSPITAL.

E. W——, aged thirty-two, a fitter, gathered about a quarter of a pound of what proved to be Agaricus (Amanita) phalloides (Fries) on the afternoon of August 20th. On returning home he fried them in fat and ate them, about half an hour after taking his usual meal of tea and bread-and-butter at 7.30 P.M. (These apparently trivial details are mentioned for the following reasons. First, thorough cooking appears to weaken or destroy the poisonous active principle of many kinds of fungi. Secondly, it has been stated that in the closely allied Agaricus (Amanita) muscarius the action of water is necessary to produce the active principle muscarin, which does not exist preformed, and therefore cannot be extracted by alcohol. As no water was used in cooking, the time required for the production of muscarin by the action of the watery fluids of the stomach may account for the delay in the onset of symptoms. And thirdly, the presence of an undigested meal in the stomach may also partially account for the slow onset of symptoms.) While eating the "mushrooms" he gave *part of one* to his little daughter, aged three years and a half. He went to bed at 10 P.M., and slept well all night. He got up at 5 A.M. and complained of a weight and sense of constriction at the chest; he had pain in the bowels, and passed an ordinary motion. He went to work at 6 A.M., and between then and 8.30 vomited three times. At first he brought up the "mushrooms" very little changed, and afterwards a yellowish mucous fluid. He was purged several times. Sweating was profuse. His sight was not affected. He had some tea, but no solid food for breakfast, and worked on till 11 A.M. The vomiting and purging had continued, and he felt weak and faint, but was able to walk home after taking some brandy. The sweating continued, and in the afternoon his sight became dim, and he suffered from headache. He lay on a sofa all the afternoon, and, becoming worse, came to the General Hospital about 8 P.M. on Aug. 21st, and was admitted under my care.

On admission he complained of pain in the abdomen. His pulse was very small, and he was in a condition of collapse. He was given an emetic of sulphate of zinc, followed by mustard and warm water, and vomited freely. He then had an ounce and a half of compound senna mixture, with a small dose of tincture of opium to relieve pain, and three ounces of brandy. He passed a restless night, vomiting and being purged continuously, and I saw him for the first time at 11 A.M. on Aug. 22nd. He was then extremely exhausted. His voice was husky. Pupils equal, of normal size, and reacting readily to light and accommodation. The skin was moist, but the sweating had ceased. The pulse was only just perceptible at the wrist, and could not be counted. The heart beats were weak, but regular, and the rate 92 per minute; respiration 17 per minute, and sighing. He complained much of pain in the abdomen, especially in the left lumbar region, which was tender on pressure. He lay on the right side, with his knees drawn up, and was very drowsy. His temperature was 97°, though he complained of feeling hot and threw off the clothes. He had passed a small quantity of urine with his motions twice since admission, so that it could not be examined. For the last thirty hours of his life he passed no urine. A catheter was introduced into the bladder at 9.30 P.M., but the bladder was empty. [At the necropsy the bladder contained only half a drachm of urine.] He was ordered to have warm fomentations to the abdomen, and to have the extremities, which were rather cold and clammy, kept warm by hot-water bottles, and to take brandy and milk. After the application of warmth his pulse improved in volume very slightly, but could not be counted with certainty; heart beats 88 per minute. As I considered the case to be essentially one of muscarin poisoning, I gave him, at 12 noon, atropine (gr. $\frac{1}{100}$) hypodermically. An hour later the pulse was still difficult to count; the heart was beating regularly, 136 to the minute. He was less drowsy. The pupils were unaffected.—3.30 P.M. (three hours and a half after the first dose of atropine): Pulse much better and easily counted; 104 per minute. Pupils slightly dilated, but react to light. Patient has slept for a short time, and says he feels much better. The abdomen is flat and somewhat retracted, and he still complains of pain. He has vomited once, and the bowels have been moved twice since 1 P.M. His face, which in the morning looked pale and pinched, has improved in colour. He was ordered to have a second dose of the atropine (gr. $\frac{1}{100}$) hypodermically, and to take twenty minims each of spirit of ether and aromatic spirit of ammonia every two hours.—8 P.M.: Patient became rather worse at 5 P.M. He was restless and slightly delirious. The diarrhœa and vomiting continued. The pupils were slightly dilated, but reacted to light. He has passed no urine. He vomited each dose of the ether and ammonia medicine, and it was consequently discontinued and an increased dose of brandy substituted. Pulse very small and wiry, 128 per minute.—9.30 P.M.: Catheter passed; no urine in bladder.

Aug. 23rd.—10 A.M.: Patient passed a very restless night; the pupils are not dilated; the face is slightly flushed; temperature subnormal; tongue moist, and coated with a thin yellowish fur. Bowels moved twice during the night. Vomiting has ceased, and he has taken the brandy well. Urine still suppressed. Abdomen retracted, and pain in bowels worse; tenderness on palpation in both lumbar regions. Pulse cannot be counted at the wrist; heart beats 104. He was ordered a hypodermic injection of one-sixth of a grain of morphia. No morphia had been given before because of his drowsiness, but this had now disappeared and the abdominal pain was extreme.—2 P.M.: Patient was not so well. Pulse could not be felt at the wrist at all; heart beats 84 per minute.—2.30: Heart beats 120; respiration sighing.—4 P.M.: Death.

On Aug. 24th, at 2.30 P.M., a necropsy was made, twenty-two hours and a half after death. Rigor mortis well marked. Punctiform ecchymoses on the surface of the left lung, scattered about under the visceral pleura, and grouped together in large numbers where external support was least, especially along the margins of the base. Lung substance congested, but crepitant. Right lung so firmly adherent as only to be removed piecemeal; base and posterior part of upper and middle lobes in a condition of hypostatic pneumonia. Punctiform ecchymoses numerous under the visceral pericardium, especially along the interventricular septum and at the roots of the large vessels. Weight of heart 11¾ oz.; muscular substance pale; left ventricle firmly contracted, empty; the right contained a small quantity of recent black clot; valves healthy; abundant post-mortem staining. The liver weighed 4 lb., and was in an advanced condition of fatty infiltration; weight of right kidney 4 oz.; capsule easily stripped; section pale and *anæmic*. The left kidney weighed 4¼ oz.; capsule easily stripped; pyramids not quite so pale as right; weight of spleen 6 oz. The bladder contained scarcely half a drachm of urine. The stomach contained about three ounces of milk curd and brown-coloured fluid. The mucous membrane was covered with tenacious mucus, and was much congested. There were numerous points of capillary hæmorrhage, and at the cardiac end numerous superficial excoriations about the size of a millet-seed. The whole of the small intestine was slightly congested, and this condition was very marked in the lower two feet of the ileum, where the solitary glands were very conspicuous, and stood out prominently like millet-seeds. The contents of the small intestine were chiefly mucus and intestinal fluid, with a very little curdled milk. The large intestine contained some fluid consisting chiefly of mucus and milk. The brain was not examined.

On the evening of Aug. 20th a little girl, aged three years and a half, the daughter of the above patient, ate part

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of one of the "mushrooms." She was a delicate child, suffering from rickets, and had never walked. She was taken ill and vomited at 10 A.M. on the next morning, and complained of thirst. She was purged, but did not suffer from abdominal pain. There was no sweating, no suppression of urine, or drowsiness. She was seen by Mr. T. E. Lovegrove (to whom I am indebted for many of these details) about midnight, and died at 1 A.M. on Aug. 22nd, about twenty-nine hours after eating the "mushroom." The necropsy was made at the General Hospital at 4 P.M. on the 24th, sixty-three hours after death. Decomposition was commencing. The left ventricle of the heart was contracted and empty; the right ventricle and auricle contained recent black blood clot. There was much post-mortem staining, but no punctiform ecchymoses, such as were seen in the previous case. The bladder contained only a few drops of urine. The kidneys were much congested. There were no definite signs of gastro-intestinal irritation. There was abundant evidence of rickets. The brain was not examined.

Remarks.—Though alarming symptoms from "mushroom" poisoning are common, a fatal result is not usual. Agaricus (Amanita) phalloides has previously caused fatal poisoning, notably in some cases at King's Lynn a few years ago. It is most closely allied to Agaricus (Amanita) muscaria, from which the active principle muscarin is obtained. The symptoms, on the whole, so closely resembled those produced by muscarin, that I assume that this was the chief noxious principle. The following points are worthy of attention. Neither salivation nor lacrymation was observed in these cases. Though muscarin, topically applied, at once arrests the frog's heart and slows the heart of mammals, the pulse in this case was not slowed. This corresponds with its action as previously observed in human beings by Morshead and Ringer. Neither was the rapidity of the respiration affected, agreeing again with the experience of Ringer. A more important practical point is the antagonism of atropia. Ringer[1] says, muscarin arrests the heart in diastole, diminishes the blood pressure, depresses the circulation, causes strong contraction of the intestines, and bladder, lessens urinary secretion, even to the point of suppression, and contracts the pupil. In all these particulars atropia promptly antagonises muscarin. Schiff believes that poisonous mushrooms produce other symptoms than can be accounted for by the action of muscarin, and he is led to believe that they contain two active ingredients, one having an opposite and the other a similar action to that of atropia. Lauder Brunton, in his Text-book of Pharmacology, recommends from two to four minims of liq. atropiæ, to be injected hypodermically in cases of mushroom poisoning. In this case one minim was injected twice at short intervals, and after the second dose the physiological effects of atropia were evident. The chief benefit was on the pulse, but the improvement was so slight and transient as to be very disappointing. It is true, the atropia may have been used too late, and that had I had an opportunity of trying it earlier the patient might have had a better chance. The pale, anæmic state of the kidneys shows that the suppression of urine was not due to renal engorgement, notwithstanding the lumbar pain. Whether it was due to contraction of the renal arterioles, to the specific action of muscarin on the renal epithelium, or, as is more probable, to the excessive drain of fluid from the blood by the inordinate watery purgation, I cannot say. I have previously tried atropine injected subcutaneously as an antidote in two cases of opium poisoning, but in each case without success. It is true that both cases were very unfavourable from the length of time that had elapsed before treatment could be commenced. Had they been less serious, probably atropine would not have been used.

[1] Handbook of Therapeutics, Eighth Edition, p. 489.

EDINBURGH MEDICAL MISSIONARY SOCIETY.—The annual meeting of this Society was held on the 18th inst., Mr. William Brown, F.R.C.S., president, in the chair. The accounts submitted showed that the income for the year, including £7024 of a balance from the previous year and legacies amounting to £3472, reached the sum of £15,902. After paying all expenditure, there remained an invested fund of £11,036, which had thus increased by £4012. The secretary, the Rev. John Lowe, afterwards submitted the annual report, which stated that steadily and manifestly the work of the Society continued to prosper.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

A CASE OF TRANSVERSE FRACTURE OF THE SCAPULA BELOW THE SPINE.

BY G. E. DOBSON, M.A., M.B., F.R.S.,
SURGEON-MAJOR, ARMY MEDICAL STAFF.

BOMBARDIER G. J——, Royal Horse Artillery, was admitted to hospital suffering from pain in the right scapular region, increased by motion of any kind, and especially so by motion of the right arm outwards and forwards. While engaged in assisting to move a heavy iron target he slipped and fell, and was immediately conscious of a sharp pain in the back of the right shoulder-blade, so much increased when he attempted to move the right arm that he was unable to continue to perform his duties. He was quite sure that the target had not fallen on him; while helping to carry it he had slipped on some round stones, and he believed that the weight of the target on his arm when he tried to prevent himself from falling had caused something to give way behind his shoulder.

On examination there was not the slightest sign of a contusion, or of any external violence. The form of the right shoulder and scapular region did not differ from that of the corresponding parts on the opposite side. The patient was able to place (though with pain) the fingers of the right hand on the left shoulder. On moving the right arm outwards from the side loud crepitus could be heard in the right scapula, and this with the aid of a stethoscope could be easily localised to the infra-spinous fossa. The case was diagnosed as a transverse fracture of the body of the scapula below the spine.

The right arm was supported in a sling and fixed by a bandage to the side of the body. A piece of gutta-percha, softened in warm water, was closely applied to, and accurately moulded over, the scapula and shoulder, and maintained in position by a bandage. Fourteen days afterwards the bandages and gutta-percha were removed, when some slight crepitus could still be detected with the aid of a stethoscope. The gutta-percha and bandages were replaced and allowed to remain for ten days, at the expiration of which period the crepitus was found to have altogether ceased; the patient had full use of the limb without pain, and he was discharged to duty.

The injury in question was evidently occasioned by muscular force. The patient slipped when engaged in sustaining a heavy weight, and in trying to make good his foothold and also sustain the weight the latissimus dorsi muscle was brought suddenly into violent action, when the inferior angle of the scapula, across which it extends, was also forcibly moved outwards and backwards against the tense body of the muscle, and, the upper part of the bone being fixed, fracture took place at a point between the opposing forces.

Exeter.

PUERPERAL ECLAMPSIA TREATED WITH PILOCARPINE.

BY T. COKE SQUANCE, M.D., F.R.M.S.,
SURGEON TO THE HOSPITAL FOR WOMEN AND CHILDREN, SUNDERLAND.

EARLY on the morning of September 8th I was called to attend Mrs. L——, aged twenty-two, in her first confinement, her ordinary medical attendant being from home. I was informed that the "pains were slow," that she had been very sick, and complained of severe "pain in the head." On examination I found the os well dilated, head presenting, and membranes (which were very tough) unruptured. I ruptured the membranes and applied a binder, but after waiting for some time the pains became very feeble, and the patient showed such signs of exhaustion that I proceeded to deliver her with the forceps, subsequently removing the placenta, which was partially adherent. There was no hæmorrhage worth speaking of, and half an hour after the patient expressed herself as "feeling well." Her pulse when

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I left her was 72. Later on I received a message to the effect that she was "going from one fit into another." On my arrival I found her quite unconscious, face flushed, pupils widely dilated, skin harsh and dry, abdomen tympanitic, bladder empty, feet œdematous, pulse 120 and full, and temperature 100°. Her friends informed me that she had had about a dozen exceedingly severe fits, during some of which they thought she was dead. During the "fits" she had passed fæces and urine. As an attack was evidently just commencing, I gave her a hypodermic injection of pilocarpine (¼ grain). The head was then being turned from side to side, the eyelids and eyeballs were moving rapidly, the mouth was drawn up towards the right ear, and the head turned towards the right shoulder, the countenance being of a livid hue. The fingers and thumbs were then flexed on the hands, the latter being strongly flexed on the arms, which were also somewhat flexed, the trunk and legs became rigid. The left leg was raised from the bed, and remained extended for fifteen seconds. There was a peculiar hissing sound on respiration, with convulsive movements of the larynx, the face becoming blue-black in colour, and the patient seemingly on the verge of suffocation. The rigidity, which lasted for fifteen seconds, was followed by clonic convulsions, the face was frightfully distorted, and large quantities of frothy foam slightly tinged with blood came from the mouth. Respiration became restored and the convulsion ceased, with the exception of a little twitching, at the end of three minutes, by which time the patient was in a profuse perspiration. The attendant told me that this attack was barely half the duration of the previous ones. There was no further seizure until shortly before I saw her the next morning, when there was a slight attack. I repeated the pilocarpine then and once subsequently, and no further seizures occurred. She remained unconscious for three days, during which time urine was passed in large quantities. There was an abundant secretion of milk. When I terminated my attendance at the end of a week, her own medical attendant having returned home, she was making most favourable progress. In addition to the pilocarpine, I ordered her a mixture containing chloral hydrate and bromide of potassium, and pessaries of eucalyptus and perchloride of mercury per vaginam.

Sunderland.

REMARKABLE SEQUELA OF MEASLES.

By HARWOOD CASSON, L.R.C.P. LOND.

A BRIEF record of a case personally interesting to myself, as it happened to my own child, may be of sufficient rarity to allow of its insertion in THE LANCET, and prove of interest to others.

L. C——, a tall, well-grown boy of twelve, after a rather severe attack of measles, during which a temperature of from 104° to 105° was maintained for three days, presented symptoms of decided mental aberration, culminating quickly in a condition of dementia. An active, happy, intelligent lad, a companion and comfort to his parents, before this attack, he now wandered about the house in a listless, aimless manner, seizing and consuming anything eatable or drinkable that came within his reach, never speaking unless spoken to, and then in a monosyllabic whisper. His memory was quite gone; and after some absurd reply to a question, when emphatically urged to "think," he would apparently make some weak and transient mental effort, and become exhausted in a moment. His muscular actions were steady and strong, and coördinative power perfect. As a proof of this I may state that he purloined a bicycle (52 in.) which had been left outside, mounted it unaided, and rode it round a stable yard (though in an erratic manner), when a groom ran up and dismounted him. The extraordinary part of this feat is that he had never previously ridden a bicycle of any description (as he now tells us). He slept soundly at night, and had an afternoon *siesta* of two hours daily. On Oct. 5th, twenty-eight days after the appearance of the rash, after remaining in this demented condition for a fortnight, he woke from his afternoon nap, when his voice had become sonorous, his mind clear, and his memory perfect with regard to all the events of the past fortnight, which he imagined himself to have dreamed. At first somewhat frightened to find his late dreams had been actual occurrences, he soon found amusement in recalling all his absurd actions and the equally absurd motives which guided them. He remains well.

The points of interest here seem to be: the abnormally acquired balancing power which enabled him to steer a bicycle without accident; and the sudden and complete recovery of voice, mind, and memory—not least, the recollection of all that had been said to him during his condition of somnambulism (for I scarcely know what else to call it).

Worksop.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. THOMAS'S HOSPITAL.

PUNCTURED WOUND OF BRAIN; REMOVAL OF BONE; HERNIA CEREBRI; DEATH FROM DIPHTHERIA SIX WEEKS LATER; NECROPSY.

(Under the care of Mr. MACKELLAR.)

IN small punctured wounds of the skull in children it is not always easy to say at first sight whether the soft bone beneath has been penetrated or not, and the following case shows the importance of careful examination with the view of determining this point, even though the history of the injury may not point to anything so serious. In cases such as this, where the wound is inflicted by a dirty instrument, it is not always possible to clean the damaged part so thoroughly as to prevent suppuration. In the subjoined case the suppuration of the wound was followed by hernia cerebri, and later for a time by the oozing of a thin watery fluid from it. At the time of death, which unfortunately occurred from diphtheria, the child had apparently recovered from the effect of the injury for which she was admitted. For the following notes we are indebted to Mr. Cameron Kidd, late house-surgeon:—

Emily J——, aged two years, was brought to the hospital at 11.45 on the night of July 6th, 1886. The parents stated that at about half-past eight that evening a wooden paling had fallen down on the child, inflicting a wound on the forehead. They consulted a doctor, who put a simple dressing on the wound and sent the child home. On their return, a neighbour, who had been examining the paling, pointed out to them that on a projecting nail in the fence there was sticking a piece of blood-stained bone; being alarmed at this, they applied at the hospital. The piece of bone produced measured three-quarters of an inch long and nearly half an inch wide, and consisted chiefly of the inner table of the skull, with a much smaller area of the outer table.

On examination, the child, who appeared not to be suffering in any way from the effects of the injury, presented on the left frontal eminence a small wound measuring less than half an inch in its longest diameter; the wound had the appearance of having been caused by a pointed instrument. There was a piece of brain substance presenting, and from its centre a small spicule of bone protruded. This being extracted with forceps was found to be a small plate of bone, apparently the inner table, measuring a quarter of an inch by one-third of an inch. A second fragment, a little smaller than this, was then seen and removed. When this had been done, lacerated brain substance was distinctly seen at the bottom of the wound. Two hours after admission, with a view to removing all fragments, Mr. Mackellar enlarged the wound in two directions under chloroform, and removed several small splinters of bone, at the same time chipping off the roughened edges of the fracture. The wound was well washed with carbolic solution (1 in 40), closed with catgut sutures, and dressed with iodoform gauze and salicylic wool. During the operation the dura mater was seen to be punctured, and brain substance was protruding through it.

July 7th.—Slight sickness after the chloroform. Child quite quiet all day. Passed urine and motions in the bed.

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The temperature rose steadily all day—was 102° at noon, and 105° at 8 P.M. In the evening the pulse was 200, and the respiration 60. Taking three grains of grey powder three times a day.

8th.—Slept well; sat up this morning and took some milk voluntarily. Temperature in the evening 102°; pulse 150. Wound dressed; quite healthy.

9th.—Slept well. Temperature normal in the morning; 103° at 8 P.M. Child seems wonderfully well, sitting up in bed and asking for milk. Pulse 116, good, regular; respiration 20. Urine and motions still passed in bed.

11th.—Child keeps well. Temperature 100° in the evening. Stitches have given way and the wound is suppurating. There is slight hernia cerebri.

15th.—Child is looking pale and is fretful at times, but sleeps well after being given five grains of bromide of potassium occasionally. Takes about a pint of milk and some infants' food.

19th.—The temperature has kept normal since the 11th. Wound suppurating freely and gaping more, but hernia not more prominent.

23rd.—Wound still suppurating freely; hernia cerebri no longer protrudes; wound smaller. To-day the temperature rose to 102·8°. Bowels not open for two days. Three grains of grey powder ordered. Takes bread-and-butter, custard pudding, and beef-tea; appetite good. Has not needed bromide for some days.

25th.—Temperature normal again. Hernia almost disappeared.

28th.—Wound dressed daily; healing slowly; granulations just level with the surface; it pulsates freely.

Aug. 3rd.—Wound dressed with sulphate of zinc lotion; granulations healthy.

11th.—Wound healing well; no pulsation.

12th.—Temperature went up to 102·6° at midday. Child seemed ill, not taking food so well as usual. Wound looks glazed, and pulsates again slightly.

13th.—Morning temperature 102·8°. Child restless; wound looks more glazed, with a slight discharge of thin watery fluid. Pulsating distinctly. Temperature in the evening 105·2°. No rash. Three grains of grey powder given at night. Ice-bag to head.

14th.—Morning temperature 104·2°. Breathing rapid and shallow. Some enlarged and tender glands in the neck. Tonsils found to be covered with yellowish sloughs. Wound discharging watery fluid more freely. Temperature in the evening normal. During the day the hands were noticed to close spasmodically without cause.

17th.—Extremely restless all day, screaming, picking the bedclothes, and tossing about. Wound still discharging watery fluid, and pulsating. Right eyelid distinctly drooping, but she can fully open the eye with an effort. Temperature normal.

19th.—A good night after ten grains of bromide of potassium. Throat much better. Temperature normal.

21st.—Better in every way. Temperature normal. Not restless. Wound still pulsates.

23rd.—The temperature yesterday rose to 100·4°, and again to-day. Wound pulsating freely. Some watery discharge this morning.

26th.—Temperature 101·4°. Breathing embarrassed; whitish membrane seen on the tonsils. Transferred to diphtheria ward in the evening.

27th.—Breathing still embarrassed. Temperature 100° to 101·6°. Wound in much the same condition.

28th.—Worse. Considerable retraction of ribs this morning, with lividity of face. The child was placed under the influence of chloroform and tracheotomy performed. Her urgent symptoms were at once relieved. Next day the temperature was 101·8°, but the respirations were again embarrassed, and there was evident obstruction below the wound. She lived until the afternoon of the 30th, and then died from extension of the mischief, the temperature being 102°.

Necropsy.—At the post-mortem examination, the larynx, trachea, and larger bronchi were found completely blocked by a uniform lining of diphtheritic membrane. The wound in the forehead was found almost healed under a scab, the hole in the skull being about the size of a shilling, with irregular outline. The dura mater was generally attached to the interior of the skull. The tip of the left frontal lobe was adherent to the dura mater at the site of the wound, but it was perfectly healthy, though a little pigmented. The rest of the brain was free from disease.

GUY'S HOSPITAL.

CASES OF RENAL SURGERY.

(Under the care of Mr. CLEMENT LUCAS.)

THE following short account of two cases, which have been recently operated on, will prove of interest to our readers. They are illustrative of the renal surgery of the present day, and the fact that they are reported so briefly proves that these operations are becoming more frequently performed.

On Sept. 29th Mr. Clement Lucas operated in this hospital upon a married woman, aged thirty-seven, who had been suffering for some years from a painful movable right kidney, which of late had incapacitated her for household duties. She was sent to London by Mr. Cockell of West Hartlepool. The kidney was exposed through the loin, and stitched to the lumbar aponeurosis. The immediate effect of the operation was to completely remove the pain. The wound healed primarily, except at one spot (where a stitch afterwards escaped), and she remained free from pain up to the time she left the hospital.

On Oct. 29th Mr. Lucas performed nephro-lithotomy upon a patient sent by Mr. Waller from Sydenham. She was an unmarried woman, aged thirty-nine, who had suffered from symptoms of renal calculus for six or seven years. A conical stone, seven-eighths of an inch in its two longest diameters, was extracted from the pelvis of the right kidney. The wound is now healed, and the patient convalescent. Since the operation the amount of urine has doubled, indicating that previously the conical stone was acting as a stopcock to the top of the ureter.

CHICHESTER INFIRMARY.

COMPOUND COMMINUTED AND DEPRESSED FRACTURE OF THE FRONTAL AND PARIETAL BONES; TREPHINING AND RECOVERY.

(Under the care of Mr. SKAIFE.)

IN THE LANCET of October 16th, page 723, we published a case somewhat similar to the following, in which the patient recovered, and with which it may be compared. The cause was alike in each, and also the extent of damage produced by the injury, the chief difference being in the position of the fracture which in the former was situated over the occipital bone. For the notes of this case we are indebted to Mr. J. Rushworth Kull, house-surgeon.

F. L——, a sharp, intelligent boy, about eight years of age, was admitted into the infirmary on June 14th, 1886. It was stated that whilst running after a ball he was struck by a large swing boat. When first seen, the boy was quite conscious and able to give his name. His extremities were cold; pupils equal and acting to light. He had not vomited.

On examination two punctured wounds were found over the lower and left portion of the frontal bone, close to the anterior inferior angle of the left parietal bone, but rather above. A distinct rounded depression could be felt about an inch and a half in diameter. There was a fair amount of hæmorrhage.

The patient being put under chloroform, an incision was made down to the bone connecting the two punctures. The bone was then found to be split into three triangular portions, the pointed ends projecting into the brain. Though there were no direct symptoms of compression, it was thought absolutely necessary to elevate the depressed portions. Accordingly a semilunar piece of bone was removed by the trephine, and a triangular loose piece with an elevator. A small piece of brain matter half the size of a pea came away; otherwise the dura mater was intact. The wound was now thoroughly washed out with a solution of carbolic (1 in 40), the edges drawn together, four wire sutures introduced, and dressed with green protective, salicylic wool, and gauze (carbolised). The edges were powdered with iodoform. The patient was sick twice during the operation. On being put to bed, milk and ice in minute quantities were ordered, but the former making him sick it was discontinued. He was ordered a powder consisting of three grains of calomel one hour after operation. Pulse 68. Looks comfortable. Temperature 99·4° at 11.45 P.M.

June 15th.—Passed a fair night. Wound dressed under spray; looking healthy. No action of bowels. Ordered

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three grains of calomel and ten grains of compound jalap powder. An ice-bag was kept applied to the back of the head for the first three days. Takes a teaspoonful of Brand's essence every two hours, with ice at intervals. Morning temperature 98·4°; evening, 100·4°.

16th.—Had again a good night, with a fair amount of sleep. Wound dressed. Patient says he suffers no pain whatever. Bowels acted twice after the powder. Evening temperature 98·4°.

17th.—Wound dressed. Slept well. Takes milk in small quantities. No headache or sickness. Evening temperature 100·4°.

18th.—Wound dressed. Bowels acted freely after simple enema. Evening temperature 99·2°.

21st.—Wound dressed; a little more discharge, otherwise healthy. Had some minced chicken for dinner.

23rd.—Continues to make an uninterrupted recovery.

29th.—Temperature rose to-day to 102·2°; no ascertainable cause. Says he feels quite well.

30th.—Temperature normal.

July 30th.—The wound is now almost healed. A small piece of exfoliated bone was removed.

Aug. 10th.—Wound quite healed. A cast of the head in plaster was now taken for the purpose of providing the patient with a celluloid plate (over the unprotected portion of the brain), which he now wears.

Medical Societies.

ROYAL MEDICAL & CHIRURGICAL SOCIETY.

Ricinus Communis.—Embolic Aneurysms.

AN ordinary meeting of this Society was held on Tuesday last, Mr. G. D. Pollock, F.R.C.S., President, in the chair.

Mr. THOMAS DIXSON contributed a paper on Ricinus Communis (communicated by Dr. Lauder Brunton, F.R.S.) The object of the present paper was to throw light on the connexion between the activity of the seeds and that of the oil. The published accounts of poisonings and of investigations into the nature of the seeds were recorded. The author gave the results of experiments on rabbits made with the seeds in their natural state, and with an extract prepared after Bübnow's method. It was pointed out that post-mortem examination showed that when the rabbit was poisoned by castor-oil diarrhœa invariably occurred, death never took place before the second day, and the intestine did not show any trace of congestion or inflammation; but after poisoning by the seeds death might occur in twelve hours without positive diarrhœa, and the intestine always showed excessive vascular engorgement. A description of the castor-oil cake as prepared by the author was given, and it was suggested that as this is highly albuminous, and by cooking becomes harmless, it might be useful as an article of food in India in time of famine.

Messrs. JOHN LANGTON and ANTHONY A. BOWLBY contributed a case of Multiple Embolism of the Arteries of the Extremities followed by the Formation of Aneurysms, with remarks on the relations of Embolism to Aneurysm. The authors described the case of a girl, aged twenty, who was admitted into St. Bartholomew's Hospital, suffering from aneurysmal swellings at the bend of the right elbow and in the right popliteal space, respectively of three and four weeks' duration. The heart was diseased, and the aneurysms were considered to be of embolic origin. After a trial of treatment by rest and pressure, which at first appeared to be beneficial, the swelling in the arm rapidly increased in such a manner as to render it probable that the aneurysm was becoming diffused. On this account the brachial artery was tied above the bend of the elbow, the vessel being secured by two ligatures and divided between them. The operation was followed by cessation of pulsation and slight diminution in the size of the aneurysm. Within a few days the popliteal swelling also began to extend; the superficial femoral artery was therefore tied in Scarpa's triangle, in the same way as the brachial, and with similar good results. Six weeks after admission, the patient had a sudden attack of left hemiplegia, with pain in the right thigh and leg, followed by complete cessation of pulsation in all the arteries of the right lower extremity. The aneurysmal swellings gave no further trouble and slowly decreased in size. The patient became weaker and died eight weeks after admission. A post-mortem examination showed that the heart was the seat of ulcerative endocarditis, and that it had been diseased for a considerable time before death. The aortic valves were covered with vegetations and calcareous matter. The sinuses of Valsalva were dilated so as to form aneurysmal pouches. The aorta at one spot was almost completely ulcerated through. The spleen and kidneys were scarred from the lodgment of emboli. Several of the cerebral vessels were plugged by recent emboli. The swelling at the right elbow was found to be an aneurysmal sac formed by condensation of the soft tissues and by blood-clot. It communicated with the brachial artery by an ulcerated aperture, plugged with clot, situated just above the bifurcation of the vessel. The radial and ulnar arteries immediately below the opening contained calcareous emboli. The right common iliac artery contained a calcareous embolus. At the seat of the embolism the arterial wall was ulcerated, thinned, and expanded. The posterior tibial artery of the right leg opened by a small ulcerated aperture, filled by recent clot, into the sac of a large false aneurysm in the calf, formed by condensation of the soft tissues and by blood-clot. The left external iliac artery presented an aneurysmal dilatation, apparently of recent date. Lower down, both this vessel and the common femoral were entirely occluded by calcareous matter and old decolourised clot. The authors consider that the specimens clearly show that the lodgment of emboli has been followed by the development of aneurysms. They point out that the aneurysms are not formed by dilatation of the artery walls above the embolus, but by inflammation of the coats at the place where they are in contact with the embolus. This inflammation has in some vessels resulted in ulceration, in others in softening and dilatation. After alluding to the published cases in which aneurysms have been attributed to embolism, the authors show that in almost all of them there has been present that form of heart disease which is associated with development of large fungating granulations, and frequently with ulceration of the valves; and they argue that the aneurysms in question only occur in connexion with this special form of heart disease, and are dependent upon the specific characters of the emboli. They give their reasons for believing that vessels never become dilated as a result of their mere mechanical obstruction by an embolus or a ligature, and in conclusion submit the following propositions:—1. Embolism may undoubtedly cause the formation of an aneurysm. 2. The aneurysm is developed at the seat of obstruction, and not above it. 3. The aneurysm may be due to an inflammatory softening and consequent dilatation of the artery, or to its ulceration and the subsequent formation of a sac by the surrounding soft tissues. 4. Aneurysms only occur when the emboli are derived from a heart the valves of which are affected by a special form of disease, resulting in the production of fungous growths, and often of ulceration and destruction of the valves themselves.—Mr. G. D. POLLOCK related the particulars of a somewhat similar case. The patient was a boy aged fourteen. There was heart disease. An aneurysm developed at the bend of the right elbow; it became diffuse, and pressure was employed. The necropsy showed a heart in an entirely similar condition to that shown by the authors. He asked whether these aneurysms were not more frequently seated at the division of arteries.—Dr. PERCY KIDD thought that the most sceptical would now be convinced of the connexion between aneurysm and embolism. He referred to two cases of aneurysm of the cerebral arteries in which there was "warty" or ulcerative endocarditis. The chordæ tendineæ were ruptured in the first case. The orifice of the middle cerebral artery in the aneurysm was distinctly narrowed, and pointed to cicatricial contraction at that seat. There was another embolus in the carotid artery of the cavernous sinus. In the second case, in the right frontal lobe there was a large spherical clot; but no aneurysm could be found of any kind there. A small aneurysm the size of a pea was found in the parietal lobule; the arterial tunics were replaced by inflammatory growths. He considered that there could be no doubt at all that the aneurysms were due to emboli derived from the diseased valves. A calcareous embolus was not a *sine quâ non*. But Ponfick's third point, that the artery blocked must be situated in soft tissues, was important. The first case of embolic aneurysm is usually attributed to Tuckwell, but perhaps Kirkes had anticipated him. The

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position of arrest of the embolus was laid stress on by Ponfick as being at the distal end of the bifurcation of an artery. But cases of embolic aneurysm were to be found on the proximal side of bifurcation.—Dr. GILBART SMITH said that the embolic theory of aneurysm did not commend itself to him. He thought that there was something beyond the septic condition necessary to the causation of these aneurysms. He had seen blockage of arteries and gangrene in chronic cases of valvular disease. He suggested that the size of an embolus might have something to say in the matter.—Mr. R. BARWELL still held the view that mere mechanical obstruction of a healthy artery could not cause aneurysm. He found himself in almost complete accord with the views of the author. He inquired for the presence of micro-organisms in the coats of the diseased vessels.—Dr. GOODHART said that the septic endocarditis was of the most variable intensity, and could not be judged of solely from a clinical point of view. An aneurysm would require some time to form. Death might occur before they could develop. He had never yet found a case of calcareous embolus, so the condition found in the case narrated by the authors was rare. Ponfick's views on this point he did not accept. The proof in favour of aneurysm from embolism was complete.—Mr. R. W. PARKER thought that the paper did not add much to Dr. Goodhart's theory that the emboli were septic. A proof was still wanted of some septic agency being at work in the formation of the aneurysm. He could not believe that calcareous formations were either septic or of acute character. Was it possible to suppose the presence of an arteritis of primary origin and co-ordinate with valvular cardiac changes? Might not some local condition be present and active in many arteries in the case of the boy related, and neither embolism nor septicity be the cause of the aneurysms?—Mr. LANGTON said that the aneurysms were mostly situate above the division of the main vessel. That a sharp point in the calcareous embolus was not necessary to the formation of aneurysm was evident from the specimens shown. He did not maintain that all such emboli resulted in aneurysm. The case read demonstrated the action of the embolus itself in the formation of the aneurysm, and thus supplied a missing link in the chain of evidence.—Mr. A. A. BOWLBY thought that septic infection of the aortic valves might be in progress without any clinical signs. He did not agree with any of Mr. Parker's observations. He claimed that the calcareous formation was old and the ulceration and granulations new. Except in immediate connexion with the emboli, the vessels were free from disease. Micrococci had been found in the diseased arterial areas, but he did not attach much importance to their presence.—Dr. GILBART SMITH explained that he did not question the embolic origin of the aneurysms in the particular case narrated.

MEDICAL SOCIETY OF LONDON.

Sarcoma of Stomach and Pancreas.—Cancer of Pylorus.—Subacute Atrophy of Liver.—Villous Tumour of Rectum.

AN ordinary meeting of this Society was held on Monday last, Mr. R. Brudenell Carter, President, in the chair.

Dr. LOWE read a paper on Sarcoma of Stomach and Pancreas, in which the right kidney had become obliterated as the result of an accident eleven years before the last illness began. The patient, a gentleman aged sixty-two, of temperate habits, consulted Dr. Lowe for symptoms of indigestion in July, 1882. During the eleven years since the accident the patient had complained of aching and shooting pains in the right loin, but only at times. At first no physical signs were detected, but later a firm round tumour was felt in the left hypochondrium, and a loud bruit could be heard over it. At first aneurysm was thought of, but it was clear that the pulsation was due to transmission of impulse from an artery to the tumour, which was apparently connected with the stomach. Later still, the tumour became softer and an abscess was suggested. But Dr. Lowe, taking into consideration the great wasting and debility without rigors or sweating, diagnosed sarcoma. The patient suffered much pain, the tumour grew in extent, and death followed. The necropsy was made by Mr. Lindeman, of the West Norfolk and Lynn Hospital. A large solid nodular tumour was found, involving the stomach and omentum; many glands were also enlarged. The pancreas was indistinguishable from the rest of the new growth. The growth was composed of dense fibrous nodules and large cribriform masses. Much lymph was thrown out in the peritoneum, which also contained a purulent fluid. It was believed that the sarcoma originated in the injured kidney and spread to the stomach and pancreas. Dr. Lowe considered that the kidney must have been extensively damaged and its ureter blocked in order to explain the appearances found at the necropsy, for this structure had become converted into a soft pultaceous mass of small size. The left kidney was enlarged, but not diseased. Microscopical examination showed that the growth was a round-celled sarcoma.

Dr. PURCELL read notes of a case of Cancer of the Pylorus with Adhesions to the Abdominal Wall, in a woman aged sixty-two. Another case of Stenosis of the Pylorus by a cauliflower cancer was read.—The PRESIDENT narrated the case of a girl aged ten, from whose orbit he removed an indurated lacrymal gland. The new growth recurred in five years, and was then found to be colloid in character. In two years more there was further recurrence, and then the tumour was discovered to be a spindle-celled sarcoma; the whole orbit was cleared out, including the eyeball. Further recurrence took place, and the patient died ten years after the first appearance of the tumour.—Mr. F. B. JESSETT suggested that the growth began in the stomach, and spread across towards the right kidney.—Dr. SAMUEL WEST supported Dr. Lowe's view of the case by the narration of a case of cancer, which began in the gall-bladder and yet was most abundant and extensive at a distance from its site of origin.

Dr. SAMUEL WEST read a case of Subacute Atrophy of the Liver. The case might clinically be called one of malignant jaundice. It was that of a woman, aged twenty-eight, whose illness began with matutinal vomiting five months before admission. Jaundice had lasted one month, and delirium had been present two weeks. She had been married seven years, and five times pregnant; was a barmaid, but not addicted to habits of drinking. Profound prostration was a marked feature. The urine was albuminous and scanty; it contained much bile pigment, but no tyrosin or leucin, and no bile acids. There was some fever, but the temperature was not above 101°. Delirium was more and more continuous, and finally the patient became almost unconscious. At first there was enlargement of the liver, wtih some tenderness. The blood was found to be normal. A typhoid state ushered in the fatal termination, which occurred nineteen days after admission. The liver weighed fifty-three ounces, and appeared smaller than natural. Microscopic sections showed stained and unstained areas in hæmatoxylon preparations. The unstained areas were composed of a kind of connective tissue. A small-celled interstitial growth appeared to have been the essential hepatic process, and its tendency to degeneration was suggestive of gummata. Many of its cells had undergone granular atrophy; others a cystic change.

Mr. ALLINGHAM, jun., read a case of Polypoid Growth of the Rectum in a man aged seventy-three. Frequent defecation and passage of slime, with great debility and sensations of numbness down the legs, were the chief symptoms. The tumour was sessile, and had the dimensions of a fœtal head. It was removed by Mr. Allingham on Nov. 17th by means of ligatures. The growth was not malignant; microscopically it consisted of hyperplasia of the rectal crypts.—Mr. JAMES BLACK had seen a similar specimen, but there was considerable hæmorrhage.—Mr. WALTER PYE asked how the ligatures were inserted.—Mr. BENTON had assisted at an operation for a similar large-sized growth in a woman.—Mr. J. H. MORGAN remarked that the shrinking of the tumour was to be explained by the escape of mucus from its follicles.—Dr. C. H. F. ROUTH mentioned a case of a small hard polypus.—In reply, Mr. ALLINGHAM said that the whole tumour was drawn outside before the base of the tumour was ligatured.

OPHTHALMOLOGICAL SOCIETY.

President's Address.—Tumour of Optic Nerve-sheath.—Proptosis with Pulsation.—Acute Glaucoma.

AN ordinary meeting of this Society was held on the 11th inst., Mr. J. Whitaker Hulke, F.R.S., President, in the chair.

Mr. HULKE, on taking the presidential chair for the first time, expressed regret at not having been able to be present at the first meeting of the Society. He hoped that a brief sketch of the changes which had occurred in

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ophthalmic practice within his own recollection would be of interest. In the days of his pupilage, the opportunities of studying eye diseases were but few; of the general hospitals, Guy's alone had a special department. The Royal London, the Westminster, and the recently instituted Central London were the special hospitals. The ophthalmoscope was then unknown, and its discovery a little later caused a revolution in the treatment of diseases of the eye; and he well remembered the pleasure with which he first saw the fundus through Helmholtz's original ophthalmoscope. Later on, there appeared the instrument of Anagnostakis, and subsequently Zehender's combination of a convex mirror and collecting lenses. Guthrie was the leading surgeon at the Westminster Ophthalmic Hospital when he began his studies in 1848; he was a strict disciplinarian, a clear-headed man, and an energetic, prompt, and dexterous operator. His method of treating severe trachoma by nitrate of silver and lard was widely known, the preparation being called Guthrie's black ointment. For entropion he used to make a scar parallel to the diseased lid with fuming nitric or sulphuric acid. In those days, amaurosis, or one form of it, was supposed to be due to constriction of the optic nerve by the muscle at the apex of the orbit, and accordingly tenotomy of all the recti was performed for its relief. The old operation for squint was very different from the subcutaneous method of modern days. Cataracts were then always treated by discission—an operation that was modified by Dr. Jacob of Dublin. Keratonysis had from very early days been the recognised operation for the soft cataract of early life, and still held its ground. He inclined to the belief that these cataracts were congenital rather than infantile. Extraction was regarded as the test of dexterity in an operator; and, as then performed, required far more dexterity than in the operation of their own days, the linear extraction of von Graefe. Amongst other operations, he mentioned iridesis and iridodesis, which, as performed by its inventor, the late Mr. Critchett, was a beautiful operation, but in other hands had not proved a great success, and had fallen into disrepute on account of the danger of iridocyclitis. A. von Graefe's great discovery of iridectomy as a means of permanently reducing the tension in glaucoma was referred to as the greatest advance of modern times, which would make Graefe's name famous for ages to come. A brief account of the old method of excising the eyeball, and of the changes which have followed the introduction of anæsthetics, brought this interesting address to a close.

Dr. BRAILEY showed a microscopical preparation and drawing of Sarcoma growing from the Dural Sheath of the Optic Nerve. The patient was a woman aged forty-two, whose left eye protruded for three-quarters of an inch directly forwards. Both lids were large, flaccid, and doughy, apparently from enlargement of the subcutaneous veins. The conjunctival vessels on the outer side were also enlarged. The eye-movements were much limited to the inner side, and still more so in other directions. The pupil was without direct reflex or associated action, but the indirect reflex action was present. Perception of light was wanting. The optic disc was rather raised, slightly ill-defined, and whitish; its vessels were enormously tortuous, lying in loops on its upper portion. Some small white striated inflammatory patches were found just beneath the disc margin. The other eye and the rest of the body showed no evidence of any morbid condition. The mass was excised together with the eyeball. It was found to surround the optic nerve, and to be much thicker on its outer side. Posteriorly the nerve tapered off to a fibrous tract in the substance of the tumour. The growth measured about an inch and a quarter in each diameter, and occupied the space within the recti muscles, from the apex of the orbit close up to the eyeball. It was firm and pretty smooth, and but scantily provided with blood-vessels. Microscopically, it was connected in its origin with the extreme peripheral part of the dural sheath. Fibrous trabeculæ started from the latter, and formed by their anastomosis loculi, in each of which was embedded a rounded abundantly nucleated mass. The nuclei were large and oval, and were embedded in a scanty finely fibrillated basis substance. They had a whorled arrangement, as if they had been originally deposited round the sheath, or in the place of a bloodvessel. Two similar rounded, nucleated, whorled masses had extended into the optic nerve in the place of the central artery and vein respectively. Passing further from the dural sheath, the trabeculæ generally became slighter, and the nucleated masses larger and more rounded. The author thought that any tumour of the optic nerve-sheath was a rarity, and he never remembered to have seen one presenting this character. It must be described as a fibro-sarcoma. Its history, commencing eight years previously, with very gradual proptosis and early loss of sight, and afterwards marked by gradual painless increase, appeared to him remarkable in connexion with the abundantly nucleated character of the mass, and the absence of deposits in other parts.—Mr. HULKE gave an outline of a similar case that occurred in a young woman aged twenty-two. There was marked proptosis. The tumour grew from the dural sheath of the nerve within the orbit. It was of sarcomatous structure, with the fibrous tissue element rather predominant. The tumour had grown very slowly (fourteen years).—Dr. SEYMOUR SHARKEY had seen one case in which the tumour grew into the frontal lobe of the brain. Billroth had also pictured this variety of tumour in his "Surgical Pathology."

Mr. G. E. WALKER (Liverpool) showed some patients illustrative of the Treatment of Glaucoma. The first was a man, aged forty-three, who was seized with acute glaucoma in August, 1885. His illness commenced with chill, pain in the left side of the head, and in the left eye. He was treated for two months with drops, during which time his sight deteriorated, but pain became less. A second attack was also similarly treated for other two months, after which sight was completely lost. In April he came under Mr. Walker's care, when his sight had been extinct for a fortnight, and the eye stony hard; eserine was dropped into the eye, and cyclotomy done with the narrowest possible knife; the pain was stopped at once, and finally. On the third day after the operation, and subsequently, eserine drops were used. There had been no pain since, and the tension of the eye was almost normal. Mr. Walker then proceeded to refer to two cases of glaucoma treated by convex lenses that he had brought under the notice of the Society in April, 1886. One of them was seen in Dublin on the 30th of August, and was found to be quite well then, and is so still. The other who was shown was the same patient who had been brought to London at the time of the former meeting, but who had an attack of glaucoma on the evening of the meeting, and could not be shown. His symptoms had been relieved by his wearing a convex glass of 2 D.—Dr. BRAILEY admitted that the man had improved, but it was not an original treatment. Convex glasses doubtless prevent glaucoma up to a certain point, but it would not always be effective. He mentioned the case of a lady who was greatly benefited by convex glasses, which did not, however, entirely prevent attacks of glaucoma.—Mr. NETTLESHIP had examined the right eye of the case shown. The disc was cupped and the retinal veins engorged. He could not consider that the man was altogether free from increased tension.—Mr. MCHARDY considered that the man still presented all the ordinary symptoms of chronic glaucoma in the right eye. Charts of the field of vision ought to be given. The left eye may have reached a very bad state before iridectomy was performed; so that bad result need not be attributed to the operation. The further history of the case would doubtless prove most instructive.—Mr. JONATHAN HUTCHINSON could not agree that convex glasses were sufficient to cure all cases of glaucoma; for it was the custom to give glasses to correct hypermetropia in cases of threatened glaucoma.—Mr. WALKER, in reply, said he should be happy to give the sequel of the case in due course. The cases showed the correctness of his view that excessive action of the ciliary muscle was the cause of glaucoma. It was not the iridectomy that did good, but the sub-conjunctival fistula which frequently resulted from the incision in the sclerotic. He advocated extraction of cataract without iridectomy by an incision across the upper part of the cornea. As to the question of originality raised by Dr. Brailey, he had conceived the idea more than ten years ago, and had spoken of it at Moorfields again and again, and it was in print eight years ago. If anyone could show a claim prior to this, he would abandon his.

Mr. G. E. WALKER also showed a boy, aged sixteen, with a certain degree of Unilateral Proptosis of the right eye. His history was that he had slipped down some stairs, and had struck his head so as to render himself unconscious for three days. There had been no bleeding from the ears or nose, or other proof of fracture. On recovering consciousness he noticed a swishing noise in his head, and five months later his right eye had become engorged and protruded, the left also was for a little while unduly engorged. The disease had been slowly progressing since it was first noticed.

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The diagnosis lay between a communication between the artery and the cavernous sinus and a true aneurysm. He had been in favour of tying the common carotid artery, but Mr. Hutchinson and Mr. Holmes had advised delay, and he was anxious to hear the opinion of the members of the Society.—Mr. JONATHAN HUTCHINSON thought the probable nature of the case was one of communication between the carotid artery and the cavernous sinus. The degree of turgescence in the conjunctiva and in the central vein of the optic disc was noteworthy.—Dr. BRAILEY referred to a case in Guy's Hospital of a boy aged sixteen in whom the pulsation and proptosis developed after an injury to the head.—Mr. EALES related a case of head injury in a coal-miner, which was followed by the development of an orbital aneurysm. Both pulsation and thrill existed. Ligature of the carotid artery was being considered when the humming in the head suddenly ceased. This was a case, therefore, of spontaneous cure. In some cases digital pressure might be followed by relief.—Mr. ADAMS FROST mentioned the case of a man aged forty-three who had fractured base at the age of ten. The signs of pulsating tumour still continued, but without increasing.—Mr. HULKE spoke of a case of the kind in which the left common carotid artery was ligatured with a good result at first, but the signs reappeared. It was not certain, therefore, that ligature would lead to a permanent cure. Nélaton had shown that a continuous hum was a feature of the arterio-venous aneurysm, and this was the probable nature of Mr. Walker's case. Such cases often made very slow progress. Thrombosis of the cavernous sinus may cause all the signs of aneurysm. The case of a woman who sustained a blow in the face and in whom proptosis and pulsation followed was related. The common carotid artery was tied, but secondary hæmorrhage and pyæmia resulted in death. There was no communication between any artery or vein, and the only lesion that would explain the clinical phenomena was thrombosis of the cavernous sinus.—Mr. WALKER has since made a prolonged and careful examination, and finds that the sounds under all conditions of the heart's action are divided by a distinct pause—so that the aneurysmal view seemed to be favoured.

Mr. W. LANG showed the following living specimens:—Rodent Ulcer, in a man aged sixty, on the upper eyelid at the inner canthus; Lupus of Conjunctiva in a girl aged sixteen; Recurrent Sarcoma of Orbit in a girl aged ten.

Reviews and Notices of Books.

Lays of the Colleges: being a collection of Songs and Verses by Members of the Æsculapian, Medico-Chirurgical, and other Professional Clubs in Edinburgh. Edinburgh: Maclachlan and Stewart. 1886.

MEDICINE and literature are old allies. The most human of all vocations has ever taken kindly to the "humanities." So it was in ancient and mediæval times; so it was at the Renaissance; so it is in the nineteenth century. An instructive essay might be written on Carlyle's thesis, that the physician, even more than the jurist or the theologian, can develop into the man of letters—ay, even "into the singer." From Goldsmith in the last century to Oliver Wendell Holmes in this, how many figures in literature and poetry recur to the memory as having risen out of the healer's training and career! Scotland alone could furnish examples enough to prove the twinship of the two callings, medical and literary. At the Renaissance and for a century after, when Latin was the favoured medium of prose and verse, she could point to Arthur Johnston and Archibald Pitcairne as at once physicians and poets of European renown. In Smollett as a master of prose fiction, in Mackintosh as a pioneer in historical and political philosophy, she has produced "instantiæ prærogativæ," in Baconian phrase, of the close relation as to culture and authorship between medicine and literature. In all her seats of learning she has maintained the healthy tradition; and even throughout the post-Reform Bill or Mechanics' Institute period, when a *bourgeois* utilitarianism tried hard to expel the graces from school and college, she outrode the materialising storm, and kept faithful to the precept of the brothers Humboldt—"Cherish the beautiful; the useful will take care of itself."

These "College Lays" are yet another proof of this kindly fusion of science and poetry—of culture's "two-celled heart, beating with one full stroke." The volume, as the preface to it reminds us, perpetuates the pleasant custom of more than a hundred years of professional, particularly medical, life in Edinburgh—the custom, to wit, of relieving by literary symposia the strain and stress of work in class-room, in hospital, or by bedside. At least four clubs of this kind are represented by these Edinburgh "deipnolyrists," and, significantly enough, the best songs and verses come from the medical. The editor, however, should have remembered the counsel of the prince of the lyric craft—Pindar's counsel—and put at the head of his choral procession the most worthy of the band, instead of reversing this order, and leading off with Dr. Andrew Wood, mounted on a pony Pegasus that sorely wants clipping. As THE LANCET has shown ere this, the worthy Doctor had no ear for rhythm, and not much for rhyme, while his humour seldom rose above the nadir of the humblest verbal antitheses. It is but fair, however, to admit that in his serious vein Dr. Andrew Wood could reach something like the solemn impressiveness of a hymn—witness the touching quatrains on the death of his son (p. 22), and those entitled, "The Time is drawing near." Very different as to his "mount" and its management is the next performer, Sir Douglas Maclagan, a born troubadour, equally at home in Latin, English, or Scotch, in academic chaunt, or gay sporting song, or stirring war stave, or pensive threnody. For genuine "lilt" and "go," few poems of their kind can be classed with his "Saumon," or his "Heather," which, sung to the appropriate airs of "Cauld Kail in Aberdeen," or "Roy's Wife," will long be favourites at winding-up banquets on the eve of exchanging infirmary ward or sick room for rippled stream or enpurpled moor. As a translator, too—particularly from the German—Sir Douglas is not a whit inferior to the great master in that *métier*, Sir Theodore Martin, his renderings of Freiligrath, Hauff, and Vogt (pp. 43–7), being quite models of fidelity, felicity, and force. We need not dwell, however, on merits which have long been recognised, and for the same reason we may pass over Professor Blackie's characteristic "Song on Geology," or his still better, "Capped, an' Doctored, an' a'."

Equal in humour, if inferior in finish, to Sir Douglas are the next two contributors, Drs. J. G. Gillespie and John Smith, whose prolific vein suffices between them to fill two-thirds of the volume. "Et cantare pares, et respondere parati," these rival minstrels leave us pretty much in the dilemma of Palæmon between Menalcas and Damœtas in the eclogue, unable to award the palm of superiority. "The Sulphur Cure" of Dr. Gillespie, remarkable for spirit and sly allusion, and winding up with a highly felicitous pun, may be taken as a specimen of his most effective manner; and yet we are not sure that the majority of readers might not prefer to it Dr. John Smith's "Medical Maid"—surely the happiest of all satires on the curious zeal, or rather zealous curiosity, of many an aspiring "Minerva Medica." Occasionally, however, these phenomenally fluent lyrists touch the lower levels of the music-hall, and no justification drawn from the fact that their effusions were meant to be sung, not read, can make admissible such rhymes as "Nisbet" and "kismet" (p. 92), or as "integrity" and "intrepidity" (p. 161). On such easy terms as they often allow themselves a child might versify! At p. 199, moreover, there is an attempt to render "Comin' through the Rye" into rhyming Latin, which reminds us of Father Prout's caustic saying: "The Scotch are more given to boast of Buchanan than to read his writings." Certainly it is not from compatriots of the "Poetarum Seculi sui facile Princeps," as Henry Stephens called the matchless translator of the Psalms, that we

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should expect anything so unutterably faulty in concord, syntax, and prosody.

The late Dr. James A. Sidey was a poet and humourist of remarkable powers, to whom fate assigned the routine work of a respected general practitioner. His "Irish Schoolmaster" if well sung, or still better if well recited, never fails to evoke demonstrative merriment; and his "Burnie that wins to the Sea," for the melody of its cadences and the liquid curves of its movement, is equal to the best lyric of the Ettrick Shepherd. Tennyson's "Brook" is not more picturesque, and the concluding lines—

"Till wi' lang fetchin' breath
Thro' the saut faem to death
Warstles the burnie that wins to the sea,"

recalls the lovely "fessas erroribus undas" of Ovid.

Among the other contributors to these "College Lays" the best is undoubtedly Dr. Andrew P. Aitken, whose "Flowrie," "Newhaven Fish Dinner," and "Our Kail Yard" flow in the happiest of metres to the most rollicking of tunes. The "Fish Dinner" particularly, as leading up to and culminating in the "remorse of a guilty stomach," is a peculiarly felicitous performance. A word of praise is also due to Dr. Batty Tuke's renderings and adaptations of German originals, which we much prefer to his "Heart's Autobiography," with its eccentric rhymes of "Ratke" and "dark, sirs," or "avail me" and "ovale," which look as if the accomplished alienist had been plagiarising from some verse-producing patient. Dr. Robert Lawson, Deputy Commissioner in Lunacy, suggests no such literary larceny, whilst warbling agreeably enough on "Modest Aims" and the "Song of the Spores." The volume, as a whole, is a welcome addition to the library of *vers de société* or, rather, *vers de circonstance*—doubly welcome for its demonstration that high medical proficiency and steady devotion to practice are not incompatible with the opportune indulgence of a genial humour conveyed in effective lyrical form.

Manual of Pathological Histology. By CORNIL and RANVIER. Second Edition. Translated by A. M. HART. Vol. II., Part 2. London: Smith, Elder, and Co. 1886.

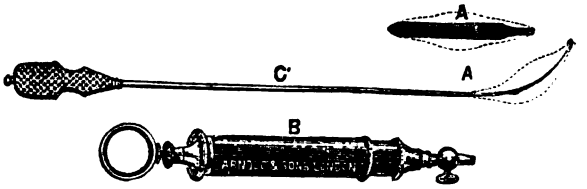
WE are glad to find that this excellent translation of a justly celebrated work has been completed. At a time when pathological histology was in a fragmentary and somewhat chaotic state, MM. Cornil and Ranvier earned the gratitude of pathologists by their clear but ample descriptions, which did a great deal to stimulate study on the subject, and the influence of which is perceived in many contributions upon it from all quarters. The handy little volumes have given way to a more imposing work; and it is this second edition which the English student has now the advantage of perusing. The section before us comprises such important subjects as the Pathology of the Liver, Spleen, Genito-urinary Organs, and the Skin. All who are interested in the progress of science have only to compare these chapters with those of the first edition to be assured of the fact that the advance is real and extensive. Take, for instance, so well-known a topic as cirrhosis of the liver, the topographical anatomy of which has been greatly elucidated by Sabourin, whose instructive diagrams are reproduced in the text. The authors enter minutely into the changes observed in vessels and ducts in this disease. They discriminate several varieties—e.g., malarial, cardiac, hypertrophic (including biliary cirrhosis, fatty hypertrophic cirrhosis, and hypertrophic cirrhosis of diabetes), and atrophic. It is suggested that the last-named may sometimes be the outcome of the hypertrophic form—a doctrine which used to be almost universally taught. The complication of cirrhosis with adenoma receives detailed description. It is singular to find such eminent authorities stating that amyloid degeneration consists, even in its early stages, of a transformation of the liver cells; for we believe the contrary to be the case, and that the statement of Ziegler that "the liver cells are usually passive throughout the process, or at least they rarely become amyloid themselves," is the more correct. In their remarks on Bright's disease, the authors point out that the hard-and-fast distinction between parenchymatous and interstitial nephritis is one which cannot be sustained on anatomical or clinical grounds. They hold it to be more correct to say that the lesions are always combined with a predominance of one or the other. The classification adopted is that of—(1) diffuse nephritis; and (2) systematic nephritis, which includes the granular kidney. The pathological anatomy of the uterus and ovaries, especially of the former, is fuller than usual in text-books of this class, whilst the chapter devoted to diseases of the skin is of great value; it includes much new matter, and will doubtless be largely referred to by dermatologists.

New Inventions.

A NEW CERVIX UTERI DILATOR.

DESPITE the conviction of such an eminent authority as Mr. Erichsen that surgical instruments have reached a state of perfection beyond which they are unlikely to advance, there are few thoughtful practitioners who will not for scores of years to come see the necessity of improvement and modification. For as the treatment of disease is being placed on more scientific bases, so must the art correspondingly advance; and although the armamentarium of the modern surgeon is astounding in magnitude, how short-lived are most of those instruments which but yesterday were considered marvels of ingenuity and effectiveness! How clumsy seem the contrivances of our forefathers. The advancement in surgical art has scarcely kept pace with the mechanism of other arts around us; and the very number of new instruments continually brought out, although in many cases showing more ingenuity attaching to ambition than to intrinsic worth, shows also that there are few instruments universally satisfactory, and few destined for a permanent existence. This is mostly true of special departments—notably, gynæcology and urethral surgery.

In connexion with the former, a good cervix uteri dilator would probably be the most needed of all instruments; and



those who resort most to the operation of dilatation of the cervical canal will be foremost in recognising the *raison d'être* of such an instrument. There are three contrivances at present used for the more or less complete dilatation of the uterine canal—(1) Dr. Barnes's bags, (2) Mr. Tait's dilators, and (3) tents; not to mention others—for instance, that of Dr. P. Smith and Dr. Jones's admirably shaped ones, which, however, are not intended for the condition now in question—viz., a full and complete dilatation. Without in any way trying to disparage Dr. Barnes's means, which are highly efficacious at certain stages of the process, we must refer to the very considerable difficulty attending their use at other stages, and assert that the means of introduction permits of great improvement. Mr. Tait's dilators require an amount of time in use, which cannot often be well spared. Tents are open to the same objection, and, besides, are said to be attended with risk. Moreover, both lack an important provision—viz., elastic force. After a tolerably

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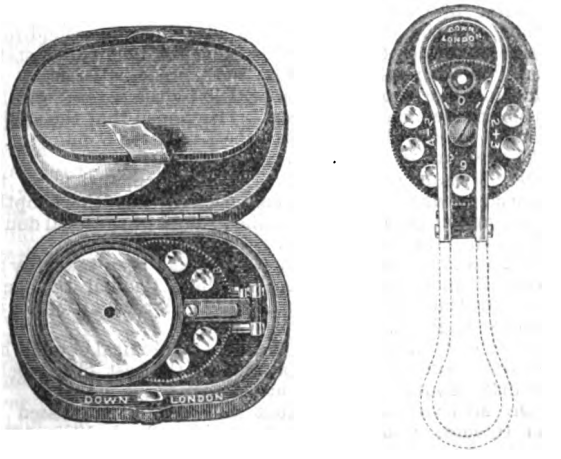
fair trial, and thinking over the matter with the help of Mr. Arnold, of Smithfield, we hereby offer an instrument which we think will be accepted by the profession as answering the requirements of a dilator more fully than those hitherto employed. It is simple in construction, easy of application, and has proved in our hands a promising contrivance. (See engravings.) It consists simply of an ordinary hollow sound, which sound can be used for general purposes, over the extremity of which elastic covers (A) of varying capacity slip on. These are easily inflated by the force-pump (B). The surgeon has complete command of the instrument, and may dilate slowly or rapidly as he likes. Mr. Arnold has got up the instrument neatly and well, and can, we are sure, supply it at a very reasonable price. Wetting the sound will make the bags slide on easily. The cut shows one of them *in situ* partly dilated. If any difficulty arise in the introduction of the first bag, we advise Dr. Smith's dilator to be first used; but this will scarcely be necessary. When the dilating process is commenced, the sound must be held firmly and gently in its place.

JAMES MACMUNN.
JOHN MACMUNN.

Finsbury-park, N., September, 1886.

NEW FORM OF OPHTHALMOSCOPE.

A MOST convenient and compact ophthalmoscope has been forwarded to us by Messrs. Down of St. Thomas's-street, Borough, S E, which they have made at the suggestion of Mr. Charles Oldham of Brighton. The instrument can easily be carried in the waistcoat-pocket, as the case which contains it is only 2¼ in. by 1½ in., and its weight



is only two ounces. It is fitted with a revolving diaphragm containing five convex and four concave glasses — viz, +1, 2, 3, 4, and 6, and −1, 2, 4, and 8. The hole in the mirror is of reasonable size, and the movement of the diaphragm with the glass is exceedingly smooth and easy. The handle folds, but is quite steady. We have used it repeatedly, and have been quite satisfied with its action.

HARBOROW'S BRITISH WOOL UNDERCLOTHING.

THERE can be no question that from a health point of view wool is more suitable than any other material as the next covering of the skin. The manufacturers claim for the articles submitted to our notice that, having conducted experiments for some time past, they have secured command of a yarn which is perfect in its quality, and beautiful in finish, and that no colouring or deleterious dye of any kind has been employed. The material of the specimens sent to us is fine, soft, and elastic, and well adapted to furnish comfortable and healthy underclothing. The garments can be obtained at Harborow's, 15, Cockspur-street, S.W.

A NOVELTY IN SHOES.

MESSRS. DOUGLAS FRASER & SONS, of Arbroath, have submitted to our notice specimens of their jute and canvas shoes, which appear worthy of attention. They are suitable chiefly for house wear, but may be used with advantage out of doors in warm, dry weather, as they readily absorb perspiration and favour a firm foothold. Their remarkable cheapness renders them especially eligible for in-door workers, such as factory operatives, by whom, we understand, they are coming to be much in request in the north. The stout jute sole also will recommend these shoes to persons who suffer from coldness or tenderness of the feet.

THE "DESIDERATUM" THROAT COMPRESS.

THE throat compress sent us by Messrs. Marriott and Co. of Hastings, is a useful though luxurious application. It has all the properties necessary to constitute an efficient cold or tepid wet compress. It is hardly adapted for hot fomentations, as the compress has to be fixed by being slipped beneath strips of braid.

THE GENERAL COUNCIL OF MEDICAL EDUCATION & REGISTRATION.

WEDNESDAY, NOVEMBER 17TH.

SIR HENRY ACLAND, PRESIDENT, IN THE CHAIR.

THE Minutes having been confirmed,

Dr. HERON WATSON moved: "That the Directors-General of the Medical Departments of the Army and Navy be respectfully requested to afford information on the statement of the degrees, diplomas, and licences of the candidates who presented themselves for examination for commissions in the medical staff of the army and navy respectively, which they have so kindly furnished to the General Medical Council in former years; whether a candidate holding several qualifications on the Medical Register is in these returns entered again and again according to the number of qualifications which he holds, or only under a single qualification; and if entered under more than one qualification, whether he is entered under each qualification he holds or only under two qualifications; and that in asking for this information it be explained to the Directors-General of the Army and Navy Medical Departments that the aim of the General Medical Council is to enable the Medical Council to enforce upon the different licensing bodies the important facts emerging from these reports bearing on the large number of candidates at these examinations who failed to pass, and more particularly as to the special subjects in which they were found deficient." The object of the motion was that the Council might be furnished with some further information to enable them to rightly interpret the tabular returns, which hitherto had not been very clear.

Sir DYCE DUCKWORTH seconded the motion, which was agreed to.

The following report was brought up from the Pharmacopœia Committee.

The Pharmacopœia Committee have to report to the Council that the first issue of 20,000 copies of the work have been disposed of, and that a reprint has been issued, consisting of 3000 copies, from the stereotyped plates, of which 730 have been already sold. The opportunity has been taken during reprinting of introducing into the body of the work such corrections as were found to be necessary. It may be noted that a list of these corrections can be had, without charge, from the Registrar, or from the publishers, by those who have purchased copies of the original issue. The Committee further report that they have arranged with Professor Attfield to prepare an annual report on the revision hereafter of the Pharmacopœia. The following is the plan submitted by Professor Attfield for carrying out this intention, and approved by the Committee:—"Broadly, a reporter should present (annually) to the Pharmacopœia Committee of the Council an abstract of the published researches and opinions which are or may become of importance in connexion with any future revision or edition of the Pharmacopœia—researches, opinions, &c., published by therapeutists, pharmacologists, pharmaceutical chemists and chemists-and-druggists, scientific and analytical chemists, and botanists. Secondly, while leaving purely original experimental researches to the workers in the various public

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and private laboratories where such researches are conducted, a reporter should perform such experiments as may be necessary for the application of those original researches to the exact purposes of the Pharmacopœia. Thirdly, as regards suggested improvements of official processes, whether synthetical or analytical, a reporter should, when necessary, obtain experimental confirmation, or otherwise, of the suggestions before reporting them to the Committee. All this work, both literary and experimental, should be done regularly year by year; for the large and numerous areas of knowledge laid under contribution in revising a Pharmacopœia are fast getting too extensive to be properly investigated in any short period preceding the issue of a new Pharmacopœia. As for the classification of the annual reports, I think it should pretty much follow the division of matter in the Pharmacopœia itself. That is to say, questions of general construction and literary arrangement, and questions relating to weights and measures, to chemical and general nomenclature and notation, to the uniform disintegration of drugs, to temperature, &c., may be treated first. Then would follow the consideration of new remedies and compounds proposed for addition to the Pharmacopœia, and of old remedies and compounds proposed for omission from the Pharmacopœia. Any suggested alterations in the names of official articles and preparations would next be discussed. Suggested alterations respecting any of the alphabetically arranged articles or monographs in the text and appendix of the Pharmacopœia—nearly 1000 in number—would form the concluding portion, and indeed the bulk, of the annual reports—alterations relating to (*a*) leading names and associated synonyms, (*b*) definitions of articles of the materia medica, (*c*) descriptive characters of those articles, (*d*) mode of preparation of compounds, (*e*) characters and qualitative and quantitative tests of those compounds, (*f*) doses, and (*g*) additions to, omissions from, and alterations in, the cross references. There may also be some matters of importance to be considered which do not fall within either of the foregoing classes of subjects, as, for one example, the question as to whether or not any changes—and, if any, what changes—can be effected in a future British Pharmacopœia to better adapt it to Indian and colonial requirements. The annual reports should, of course, contain clear references to all sources of information; so that the Committee, future editors, and all persons interested in the subject could readily refer to all data. Finally, the hands of the reporter or reporters would be strengthened, and the reports would come before the Committee with greater weight, if draft reports, before presentation, were carefully considered by the three editors of the British Pharmacopœia, 1885, who for this purpose should be regarded as consultants. The designation of a reporter would be, probably, 'Reporter on the British Pharmacopœia to the Medical Council,' the instructions to any such officer being, I presume, to report annually, on some such lines as the foregoing, to the Pharmacopœia Committee of the Council."

RICHARD QUAIN, M.D., Chairman.

Dr. QUAIN moved that the report be received, entered on the Minutes, and adopted. He heartily congratulated the Council on the success which had attended the work of the Committee. It had a most extensive circulation. It had been subjected to some very rigid criticism, and though they might complain of some of the criticism being hypercriticism, the work would be none the worse. Careful notes had been taken of every word and criticism that had been passed, and would be available for revision. He also congratulated the Council on the very satisfactory report presented by Professor Attfield.

Dr. A. SMITH seconded the resolution, which was agreed to.

Dr. LYONS brought forward the subject of the medical examination of women, which was considered in the absence of strangers.

Mr. MARSHALL moved, "That the Executive Committee be requested and empowered to take such steps as may be required in order that the provisions of the Medical Act, 1886, concerning the registration of diplomas or certificates in Sanitary Science, may forthwith be carried out." He thought that, considering the amount of business probably coming before the Council, it would be desirable to ask the Executive Committee to carry out the duty named in the resolution. It was mainly an administrative matter, involving no inquiry except one—viz., whether particular diplomas deserved recognition in the Register. It was certainly desirable that the diplomas should assume a common form in the Register.

Mr. SIMON seconded the motion.

Dr. QUAIN hoped that the Council would express an opinion on the proper amount of fee for registration.

Dr. A. SMITH said that the holders of the diplomas would be grievously disappointed if they did not appear in the Register next year. As to the amount of the fee, he thought that as the diploma was a supplemental one 5*s.* would be a sufficient fee.

Mr. MACNAMARA, while thinking that the matter might be referred to the Executive Committee, was of opinion that there were some points on which an opinion ought to be expressed by the Council—viz., as to where the diplomas should be registered, what the title should be, and what should be the amount of the fee. As to the place of registration, it should be remembered that the different Branch Councils had separate sources of income, and therefore the fees, however small, should be paid to the Branch Council in that division of the kingdom from which the qualification was obtained. As to the title, it would certainly be desirable that there should be a common one, but the holders would desire that the place whence the qualification was obtained should distinctly appear on the Register. The question of the amount of the fees should not be left to the Executive Committee, but should be decided by the Council itself. His own opinion was that the fee should be a moderate one; and that if the diploma was registered at the same time as the other qualifications, there should be no additional charge beyond the £5.

Sir DYCE DUCKWORTH said this was a matter which the Executive Committee might fairly be trusted to determine.

Dr. BANKS concurred. He did not consider that the question of the name was so important. The Council should decide on the name which was to appear on the Register and then it was not of very much importance if there was a difference in the name adopted by the qualifying bodies.

Mr. TEALE asked whether the Council had power when one form of title was brought forward to put another form of title on the Register.

Mr. SIMON said it was not a question of the Council inventing a title, but of using the title which had been given by law. He thoroughly agreed with the sentiment expressed against troubling themselves needlessly with trumpery distinctions. Let them use the broad language of the statute. He thought that the term "Public Health" was most convenient. Let them use that, and if each body liked to have a title extending to three, six, or ten lines, or that would cover three brass plates, it might amuse them and would hurt no one.

Dr. QUAIN asked Mr. Marshall if he would accept as a rider that the fee be 5*s.* for the insertion of this diploma.

Mr. MARSHALL replied that the fact that 5*s.* was the existing fee would be a guide to the Committee in fixing the fee for the insertion of this new qualification.

Dr. HERON WATSON thought the course suggested was a safe one, since he believed the Committee would in the first instance take the opinion of counsel in regard to the exact meaning of Clause 21 of the new Act. He was a little in doubt as to the prudence of their adopting the second resolution of which Mr. Marshall had given notice, which stated that "the Council would view with great satisfaction the adoption of a common form of title by the several medical authorities which confer them." He hoped that the subject would be generally remitted to the Executive Committee.

The resolution was agreed to.

Mr. MARSHALL withdrew the next resolution on the subject, of which he had given notice (urging the adoption of a common form of title) on the ground of the legal doubts which surrounded the subject.

Mr. MACNAMARA asked what steps had been taken by the Privy Council or the General Medical Council to decide whether the several diplomas deserved recognition in the Medical Register.

The PRESIDENT said that the General Medical Council had certainly taken no such steps, and to the best of his belief the Privy Council had not done so.

Dr. MCVAIL moved, "That the resolution passed by the General Medical Council on May 22nd, 1885—'That the course of medical study after registration should occupy at least five years, if the subjects of elementary physics, chemistry, and biology are included in that period, or at least four years if a satisfactory examination in these subjects has been passed previous to registration,'—be made compulsory in the case of all students who shall be registered on and after January 1st, 1887; and that the word 'biology' in the resolution shall be held to include zoology or natural history and botany." He thought the Council had taken a great step in advance in passing the resolution mentioned in his (Dr. McVail's) motion, and he had hoped that the universities in Scotland would carry out the recommendations therein contained. The specified time in those universities was still four years—four winters and three summers. The custom was for the student to begin in May, beginning a summer session, and then take botany and zoology; taking chemistry in the following winter. Indeed, during the first winter and first summer session the attention of the student was almost exclusively occupied with subjects that bore only in a somewhat indirect manner on his medical course. Even if the student passed the first examination successfully, the time for professional training was diminished; but a considerable number (about 40 per cent.) did not pass the first examination, and then they had to carry on the subjects into subsequent sessions. Then, again, the subjects of hygiene and mental disease were required in the latter part of the course,

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which still further shortened the period available for the subjects of anatomy, physiology, surgery, midwifery, and forensic medicine. He maintained that the subjects of botany, zoology, and chemistry should be taken before the study of medicine, and that the resolution of the Council ought to be enforced.

Dr. MITCHELL BANKS, in seconding the resolution, said the first point to be considered was, what was best in the interests of the public in general. The supply of candidates was quite equal to the demand, and it was not necessary that the licensing bodies should offer any inducements. It was their business not to make the standard of education as light as possible, but to raise it. No doubt there were men who could do all in four years that was proposed to be done in five, and also that many poor men would be prevented from entering the profession if they were obliged to stay for five years. But the question was, were the interests of a comparatively small number of men to be set against the interests of the great mass of medical students? He thought not. It was of advantage to the students themselves, because the process of passing the curriculum of five years in four was only carried on at a great cost of brain power, and might give rise to future mischief. He believed that it was not possible to carry out such a system.

Dr. BANKS said he had long advocated the principle that five years ought to be the minimum devoted to medical study. In the university which he represented there were four years of exclusive medical study. The elementary subjects must be learned in the first year, and then the four years were exclusively for medical study.

Dr. MATTHEWS DUNCAN, while concurring in the proposal, said there was one point which Dr. McVail had forgotten, and which was the cardinal point in the matter—viz., that the Scotch universities could not do it. The recommendations were only made last year, and, so far as he knew, the Scotch universities were very anxious to adopt them.

Dr. HUMPHRY pointed out that the Council had already passed a resolution in accordance with Dr. McVail's views, but they were now asked to do that which they had no power to do do—namely, to make it "compulsory."

Dr. MCVAIL said he would withdraw the word "compulsory," and would put the resolution in the form of a recommendation.

Dr. STRUTHERS said the question was discussed very elaborately last year, and he was unwilling it should be raised again. He agreed in the abstract that the course of study should be as long as possible, but, as a teacher of long experience, he thought the fifth year should be put at the end of the curriculum, and not form part of the curriculum.

Sir W. GULL thought it would be better for the Council to wait a little longer before passing such a resolution.

Dr. HERON WATSON said that the Council had already given a distinct declaration on the subject. The motion passed by the Council was undoubtedly so framed as to cover the case of students like those of Trinity College, Dublin, whose studies did not follow quite the same course as that adopted in most other schools. He hoped that the modified motion of Dr. McVail would be agreed to. It would not interfere with the state of things existing in Ireland.

Mr. COLLINS considered that the first year spent by students with an apothecary was in many cases the most important part of medical education. For general practitioners, at any rate, it was far more important than studying such a subject as zoology. Many eminent men in Dublin had expressed to him their belief that the very best way in which a young man could commence was in a respectable apothecary's shop, where he might every day see cases of measles, whooping-cough, scarlatina, bronchitis, and the like, thus learning the rudiments of the profession as well as the rudiments of pharmacy, and also learning how to keep his books as a general practitioner.

Dr. MCVAIL, in reply, said the question for the Council to consider was whether the resolution was a good or a bad one. If it was a good one, it could not come into operation too soon. Had the universities specially affected done anything in the way of preparing to carry out the recommendation of the Council? If such steps had been taken in Aberdeen Dr. Struthers would have mentioned it, but he had not done so. If the Universities of Glasgow, St. Andrews, and Edinburgh had taken any steps, the Council would have been informed with reference to them, but no such information had been given. The fact that nothing had been done in the required direction was a sufficient reason for urging both universities and corporations to begin.

The PRESIDENT, in putting the amendment of the "previous question," adopted the method of submitting the question in the House of Commons, putting from the chair "that the question be now put," and explaining that those who supported the amendment would vote in the negative. On a show of hands being taken, the President declared the "previous question" carried. Several members protested that they had voted under a misapprehension, and after some considerable discussion on the peculiarities of the "previous question," and the various modes of putting it, the President said that there had evidently been a misapprehension on the part of some members, and in order to get over the difficulty he would take a distinct vote, aye or no, upon Dr. McVail's modified resolution—viz., "That it be a recommendation to the licensing bodies to give effect as soon as possible to the resolution of May 22nd, 1885, as follows:—'That the course of medical study after registration should occupy at least five years, if the subjects of elementary physics, chemistry, and biology are included in that period, or at least four years if a satisfactory examination in these subjects has been passed previous to registration be made compulsory in the case of all students who shall be registered on and after the 1st January, 1887; and that the word biology in the resolution shall be held to include zoology or natural history and botany.'" The resolution was then put and declared to be carried, 11 members voting for it and 7 against. On the names being taken down, however, the numbers were declared to be—for, 10; against, 3.

THURSDAY, NOVEMBER 18TH.

SIR HENRY ACLAND, PRESIDENT, IN THE CHAIR.

On the customary motion for the confirmation of the Minutes, the Council spent some time in discussing the mysteries and perplexities of the "previous question," which had been moved on Wednesday, but of which no entry appeared on the Minutes. It was finally resolved that an entry should be made simply recording the fact that a vote was first taken on the previous question, and that some of the members having voted under a misapprehension, the sense of the members was taken on the original motion instead.

The Council then proceeded to the consideration of dental business.

Mr. FARRER (the solicitor to the Council) presented a report from the Dental Committee with reference to the case of Thomas Maden, the entry of whose name in the Dental Register was said to have been obtained fraudulently and incorectly. The practitioner was alleged to have been articled to Samuel Haworth, dentist, of Mill-end, New Church, near Manchester, the articles expiring on Jan. 28th 1879. Maden was born on Oct. 4th, 1865, and was therefore but eleven years and four months old at the time he was alleged to have been articled, and thirteen years and four months old at the expiration of the articles. During the greater part of the two years of his alleged articles he attended as a scholar at a national day-school, and for another portion of the time he was working at a cotton manufacturer's. Mr. Farrer pointed out that under the Dentists Act the Council had power to erase a name the entry of which had been fraudulently and incorrectly obtained, and that the report of a committee of the Council on the facts of the case might be deemed conclusive for the purpose of exercising such power. It was the opinion of Mr. Muir Mackenzie that the name could be erased without citing the practitioner. Mr. Maden's father, a Yorkshire labourer had been applied to on the subject, and his simple answer was, "Let them as put it on take it off." (Laughter.)

The Council deliberated upon the case in private, and passed a resolution directing Mr. Maden's name and qualification to be removed from the Register.

Dr. BANKS moved: "That, subject to legal opinion, the title of Diplomate in Sanitary Science be adopted as the heading in the Medical Register under which all practitioners duly certified in sanitary science may be placed, the sources of their titles being designated in each case." He thought that the name "diplomate" was the most suitable for the holders of the degrees in question. If the sources of the titles were designated in every case, there could be no objection on the part of those who held diplomas conferred by universities.

Sir DYCE DUCKWORTH seconded the motion. The matter

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was one which had excited a good deal of attention, and a great desire had been expressed that a uniformity of nomenclature should be adopted. The names given to the diplomas by the different bodies conferring them were very various, and it would be difficult to get all the bodies to adopt a similar title; but the Council might have a general heading for them in the Register.

Mr. TEALE supported the motion.

Mr. SIMON agreed with the principle of the motion; but he ventured to suggest that "diplomate" was not an English word, and he thought that "holder of diploma" would be better. The question of nomenclature ought to be left to the Executive Committee.

Dr. BANKS said he was willing to accept the term "holder of diploma."

Mr. SIMON said the question would next arise whether the diplomas should be in "State Medicine," "Public Health," or "Sanitary Science." The three terms could not be regarded as exactly equivalent. There was also the question of whether a diploma was worthy to be registered. Such diplomas would be mainly required as qualifications for public office, and that might be a test in deciding the question of registrability.

Sir DYCE DUCKWORTH said that it was the opinion of the Society of Medical Men qualified in Sanitary Science that "Diploma in Public Health" would be the most suitable title.

Dr. HUMPHRY thought that the Council had no right to alter in the Register the titles given to the diplomas by the different bodies conferring them. The diplomas should be entered under the titles in which they were given.

Dr. BANKS said he would alter his motion to "Holder of Diploma in Public Health."

Sir WM. GULL said it was incumbent on the Council to follow the Act, and designate the diplomas by the titles given by the bodies conferring them.

Dr. HERON WATSON said that the question had been already decided by the motion passed on the previous day referring the matter to the Executive Committee. The language of the new Act was peculiar. The words were—"if such diploma appears to the Privy Council or to the General Council to deserve recognition in the Register." There were difficulties in the way, and he thought that legal opinion should be taken in the matter. He moved as an amendment: "That this matter be referred to the Executive Committee along with the whole questions emerging out of the Interpretation Clause 21 of the Medical Act (1866), with the sanction of the Council to take a legal opinion upon any matter connected with it."

Mr. MARSHALL seconded the amendment. There was so much uncertainty in the matter that he thought the Council was not prepared to act at once in the way suggested. He thought that under all the circumstances the Council would be compelled to register the titles under the names given to them by the bodies. Up to the present time 235 of such qualifications had been given; 125 had been given under the term "certificate," 28 under the term "diploma," and only 3 under the term "qualification"; 60 employed the term "public health"; 142, "sanitary science"; 6, "hygiene"; and 37, "State medicine."

Dr. BANKS said that under the circumstances he would withdraw his resolution, being quite willing that the whole matter should be referred to the Executive Committee.

The resolution was accordingly withdrawn.

A Provisional Report was presented by the Visitation of Examinations Committee.

Mr. MARSHALL said that the subject was so extensive that the Committee had only been able to present a provisional report. His idea had been to bring up a complete report, which should be worthy of the money that had been expended (£2000 or £3000) in collecting the materials. He had devoted a great deal of time to the subject, and had circulated a draft report confidentially among the members of the Council, asking for suggestions and improvements. Some of the members had complied with his request, but others had not, and he felt that it would be premature to present his report during the present sitting of the Council. The object of the report was not to correct immediately any abuses or suggest any immediate improvements. If the Committee had been ordered to sit upon the conduct of certain universities, and if they were anxious to have the decision of the Council upon the matter, it would be a different thing. The object of the Committee, however, was to take the reports of the visitors as to the different bodies concerned and endeavour to collect out of them such facts and materials as would be useful for all time. The amount of material was very great, and it required to be very accurately sifted before it was presented to the Council.

Sir WILLIAM GULL said he was not present at the last meeting of the Council, or he should have remarked on the ignorance displayed by the visitors in their report with reference to the London University. He was glad that Mr. Marshall had agreed that the consideration of the subject should be referred to a future meeting. The object was to ascertain what amount of knowledge all students possessed, and not how many lectures they had attended.

Mr. TEALE thought the matter ought not to be gone into prematurely. Between the present sitting and the next the Council would have the opportunity of studying the conclusions presented by the Committee, and would be in a much better position to come to some decision with respect to them.

Dr. MCVAIL thought that the sooner things could be set right the better, and if the matter were allowed to stand over, he hoped it would be with the distinct understanding that the report should be ready for the next meeting of the Council. He should have a good deal to say with regard to the report on the university to which he belonged.

Dr. BANKS said that the report upon Dublin University was in some respects a most unfair one; he did not, however, wish to imply that there had been any wilful misrepresentation. There had been certainly a want of care and attention in regard to some of the statements made.

Dr. HERON WATSON objected to the entry of the provisional report upon the Minutes, which, he said, would have the effect of making it public before any discussion could take place, If the report were entered upon the Minutes, the only proper course would be to proceed at once with the discussion. It would be better, however, that the whole matter should be first well sifted, which, it appeared, could not be done during the present sittings of the Council.

Mr. MARSHALL thought that the general principles embodied in the Provisional Report, in the nature of "conclusions," might be at once made public, no censure being passed upon any member of the body. With regard to the full Draft Report the case was different.

Dr. HERON WATSON said the conclusions were founded upon the report.

Dr. STRUTHERS said that the visitors to the London University were men of the very highest eminence, and the remarks that had been made with reference to them were, he thought, irregular and improper.

Sir WILLIAM GULL said that at the last meeting of the Council, when the matter was discussed, Dr. Quain did not, as he thought, sufficiently defend the position of the London University, and that was the reason why he (Sir William Gull) had referred to the matter.

Mr. MACNAMARA said that, as one of the visitors, he was quite willing to submit to any imputation that might be thrown upon him for crass ignorance; indeed, he accepted it as a kind of commendation coming from the lips of Sir William Gull. There was an old legal maxim, "When you have a bad case, abuse the opposite attorney," and that was the course adopted by Sir William Gull. The visitors were quite prepared to stand by every statement that they had made, and they might perhaps have an opportunity of convincing Sir William Gull of the accuracy of their statements, many of which were derived from the records of the London University itself. He was quite sure that Sir William Gull would regret having charged men of distinction with crass ignorance.

Sir WILLIAM GULL.—I did not say crass ignorance; I said ignorance. (Laughter.)

Mr. MACNAMARA.—"*C'est le ton qui fait la musique.*" With regard to the proposal of Mr. Marshall, there could be no doubt that it was desirable that the consideration of the subject should be postponed until a complete and accurate report could be presented.

After some further discussion the motion and amendment were both withdrawn, and the following entry was ordered to be made in the Minutes:—"The Committee on Visitation of Examinations stated that they had prepared a provisional report, and they were requested to continue their labours till the next meeting of the Council."

Dr. HERON WATSON presented the following report from the Visitation of Schools Committee:—

The Committee on Visitation of Schools appointed on June 4th, 1886, are enabled again provisionally to report that in conformity with their former report of June 7th, 1886 (page 92 of Minutes of Council for June

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9th, 1886), adopted by the Council on June 10th, the proposed letters (Minutes, pp. 93-94) to (1) each of the licensing bodies, and (2) to the several medical schools, and to individual teachers not connected with schools whose courses qualify for the curricula of the various licensing bodies in the United Kingdom, were despatched to each of these bodies and individuals on the 28th of June; that replies have been received in answer to these circular letters from all the licensing bodies, from medical schools willing to receive visitors, from hospitals stating that no medical school exists in connexion with them, from private lecturers and extra-mural schools willing to receive visitors, and from the school of St. Bartholomew's Hospital, respectfully declining to receive an official visitation from the Medical Council. Your Committee further beg to report that, having considered the means of arranging for the proposed visitation, they are of opinion that, before developing a scheme of visitation, it may be well to place the matter before the Branch Councils, with the request that they will take the method of conducting these visitations into their consideration and furnish reports thereon to the General Medical Council. Your Committee further beg to suggest that counsel's opinion be obtained upon the legality of an expenditure of any part of the funds of the General Medical Council on the visitation of schools.

Nov. 17th, 1886. P. HERON WATSON, Chairman.

It would be observed, he said, that there was but one body that had thrown any obstacle in the way of the proposed visitation. He proposed, "That the report of the Visitation of Schools Committee be received and entered on the Minutes, and that the suggestions therein contained be approved; that the reports from the Branch Councils on a scheme or schemes of visitation, as well as the opinion of counsel on the question of the application of the funds and the expenses of the visitation of schools, be remitted again to the Committee, with a direction to bring up a further report at the next meeting of the Council."

Sir WILLIAM GULL seconded the motion, and said he hoped that Dr. Heron Watson would press the matter. He had hoped that a great institution like St. Bartholomew's Hospital would set an example to the whole of the medical world and open its doors to a full inquiry into all the matters of education. He did not say that there was any deficiency, but at present their doors were shut. If he were asked to give a reason, he might say something very severe. He was challenged to say it, and he would therefore say that in the year 1856 he was a member of the University of London and on the Senate, and he then proposed that no degree should be given in England unless the man was examined at the bedside clinically. He canvassed all the hospitals personally, and St. Bartholomew's stood out against him for some time.

Sir DYCE DUCKWORTH asked that the reply received from St. Bartholomew's Hospital might be read.

The letter was read, and was as follows:—"In reply to your letter, I am desired to say that the medical officers and lecturers of St. Bartholomew's school are not satisfied as to the public utility of the visitation of schools by the General Medical Council; they must therefore respectfully decline to receive an official visitation from the Medical Council, but desire to add that the school of St. Bartholomew's may be seen by any member *(sic)* of the Council who wished to inform themselves about it, whenever it suits them to come, and I forward a year-book which contains the names of the teachers, the hours of teaching, and other details of the work of the school." The letter was signed by Dr. Norman Moore, the secretary of the school.

Dr. HERON WATSON observed that the letter was rather obscurely worded.

The discussion on Dr. Heron Watson's motion was adjourned at the rising of the Council.

FRIDAY, NOVEMBER 19TH.

SIR HENRY ACLAND, PRESIDENT, IN THE CHAIR.

The adjourned debate on the motion by Dr. Heron Watson with reference to the provisional report of the Visitation of Schools Committee, was resumed.

Mr. MACNAMARA thought that the first thing to be done was to take counsel's opinion as to the application of funds to the purpose in question. Then it would be necessary to consider what the amount of the expenditure would be. Each school would have to be visited in both winter and summer in order that the visitation might be a complete one; the expenditure would therefore be formidable; and it was a serious question whether the funds at the disposal of the Council would be sufficient. Their funds, he thought, would soon be exhausted if even one such visitation were attempted, and he doubted whether the game would be worth the candle. The great point to ascertain was whether the schools were discharging their duty, and the onus of that might be thrown upon the colleges receiving the certificates.

Dr. DUNCAN deprecated any check being placed upon the progress of the visitation of schools. Mr. Macnamara's objections to such visitations might be raised with still more force against the visitation of examinations. It might or might not be an expensive affair, but he did not know how the money could be better devoted than to the proposed inquiry. The Council was specially charged with the subject of medical education, and that was of much more importance than medical examination.

Dr. QUAIN said that the Council had no authority to interfere with the course of education. It was impossible that it could do what was suggested, even if it had treble its present amount of funds. It would be sufficient for the Council to direct the attention of the licensing bodies to the importance of seeing how the schools were conducted.

Mr. SIMON said that the merits of education and examination were often differently estimated by critics according as they were educators or examiners, and that was perhaps to some extent illustrated by the remarks of Dr. Duncan. He agreed that it was extremely important to see that the education in the schools was efficient, but how was it to be secured? The Council was not in a position to secure it except indirectly. The responsibility rested on the different examining bodies, and in so far as the Council interfered with them it diminished that responsibility.

Dr. HERON WATSON, in reply, said that all that the motion asked the Council to do was to approve of the suggestions contained in the Provisional Report, and to remit the reports from the Branch Councils to the Committee with a direction to bring up a further report. The Committee had not developed any scheme at present, it only suggested that the questions should be referred to the Branch Councils for consideration. The question of expense would depend upon the reports received from the Branch Councils. He hoped that the Committee might be allowed to continue its duties, and that the various reports received might be brought before the Council at an early period.

The motion was then put, and carried by a considerable majority.

The perplexing subject of "the previous question" was again considered by the Council, on a motion of Mr. MARSHALL, seconded by Mr. SIMON—namely: "When in reference to any motion before the Council, a member moves 'the previous question,' the form of the motion put from the chair shall be: 'That the Council (instead of proceeding to vote on the question originally proposed) do pass to the next order of the day.'"

Dr. HUMPHRY maintained that "the previous question" was well understood, and that there was no necessity for any alteration.

Dr. M. DUNCAN moved "the previous question." (Much laughter.)

After some discussion on the subject, the PRESIDENT put Dr. Duncan's amendment of "the previous question" in the usual form: "That the question be now put," explaining that those who supported the question would vote in the negative.

A show of hands was taken, and the amendment, "That the question be put," was declared to be carried.

Mr. Marshall's proposal for a new standing order was then put and agreed to.

Dr. MCVAIL moved,—"That it be a recommendation to the licensing bodies that, in admitting candidates to professional examinations, care be taken that attendance on courses of study prescribed for any second professional examination shall qualify only if made *after* the first examination has been passed, and generally that attendance prescribed for any subsequent examination must be made after passing the immediately preceding examination." To the average student, he said, it would be a dreadful mental strain to keep up all the subjects to the end of his curriculum, and to pass them all at once. All the bodies, therefore, now divided the examinations into at least two parts, some into three, and some into four. That worked well in the case of the average student, who was able to pass the examinations exactly when they ought to be passed. But when a man failed to pass his first examination, if he still continued his studies and took classes leading up to the second examination, all the time he was preparing for the second examination he was also working for the first, and he could not give his undivided attention to the work of the senior examination. About 40 per cent. of men failed in the first examination. The great majority of them, however, did not at once

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set about working up for that examination, but took classes in the next session as if they had passed the first examination, hoping to scramble through both examinations together. The resolution would inflict no injury on the student who did his work properly, and it would enormously aid the weaker students, or those who had not given proper attention to the early subjects.

Mr. MACNAMARA, in seconding the motion, said that the principle advocated by Dr. McVail had been for some years in force in the Royal College of Surgeons in Ireland.

Mr. TEALE thought that the proposal was a retrogressive one. The Council was disinclined to pass minute regulations like that brought forward, and on that account the motion was objectionable. It would, besides, inflict a hardship on some students who failed to pass examinations from causes for which they were not altogether responsible.

Dr. BANKS said it would be a great pity to interfere in the way suggested with the course of education.

Dr. W. M. BANKS would be unwilling to see anything done that would be unfair or cruel to medical students. He sympathised very much with Dr. McVail in what he had stated. There were, however, cases in which a student very nearly attained the amount of knowledge required to pass, and only just failed to pass; and in such a case it would be a great hardship to put the student back as proposed.

Dr. HERON WATSON also thought that a hardship would be felt by many students if the proposed regulation were adopted.

Dr. STRUTHERS said that students were often found attending lectures as a matter of form, while they were giving all their attention to other subjects in which they had previously failed. Most of the rejections referred to were due to idleness; really stupid students were generally stopped at the preliminary examinations. A certain proportion of students were always idle, but if they were rejected they were able to go at double pace the next year, and an extra year's study would be too severe a penalty in such a case. He thought it would be a better plan to lay down a definite interval—say two years—between the early examination and the final one. He ventured to suggest that Dr. McVail's proposal would be unworkable, and hoped that he would withdraw it.

Sir DYCE DUCKWORTH also thought that the recommendation would be unworkable, and its adoption would therefore be very undesirable.

Dr. MCVAIL said he was content to have introduced the subject, and would be willing to withdraw it if Mr. Macnamara consented.

Mr. MACNAMARA declined to consent to the withdrawal of the motion.

Mr. SIMON thought that this was specially a case in which "the previous question" or a proposal to "pass to the next order of the day" might be advantageously moved. The principle of the motion was right, but it would be undesirable to adopt at the present time an additional regulation.

Dr. PETTIGREW said he would second "the previous question" moved by Dr. Heron Watson.

The PRESIDENT said he should upon that question (according to the standing order just passed) put the motion —"That the Council do pass to the next order of the day."

Mr. MACNAMARA regretted that the Council had not the courage of their opinions. If Dr. Heron Watson's motion were passed the subject would be shelved without any expression of opinion on the subject, and he protested against that course being adopted.

Dr. HERON WATSON's amendment of "the previous question" was then put and agreed to—viz., "That the Council do pass to the next order of the day."

Dr. STRUTHERS moved: "That it be a recommendation to the licensing bodies to give effect as soon as possible to the General Council's resolution of May 22nd, 1885, as follows—'That at least four winter and three summer sessions should be passed at a school or schools recognised by any of the licensing bodies mentioned in Schedule A of the Medical Act.'" He said that as the Council had passed the motion proposed on a previous day by Dr. McVail, he thought it was still more necessary to pass the motion which he now proposed, seeing that the recommendation of the Council referred to in it was one of extreme importance. There were some bodies like that represented by Dr. McVail that had not adopted the recommendation. The bodies which he represented had long since adopted the system of four winter and three summer sessions.

Dr. PETTIGREW seconded the motion.

Dr. MCVAIL supported the motion. He thought that it had been included in the motion which he had previously brought forward, but if not, he certainly desired that the same course should be followed with reference to the recommendation as to four winter and three summer sessions.

The motion was agreed to, ten members voting in its favour.

A communication was received from the Scotch Branch Council recommending the recognition of the preliminary examinations of the Ontario College of Physicians and Surgeons. It was stated that the examinations were recognised by the Canadian Universities, and it was also stated in a memorandum by the General Registrar that "The Trinity Medical School of Toronto *advises* its students before entering to become matriculated students of the Medical Council of Ontario, and become so matriculated students must pass either the late High School Intermediate Examination or the third-class Non-Professional Examination with Latin. These examinations include the following *compulsory* subjects:—English Grammar, English Literature, Composition, Dictation, History and Geography, Arithmetic, Algebra, Euclid, Latin (which may be taken separately); and as an *optional* subject, Elementary Mechanics."

Dr. STRUTHERS proposed that the preliminary examinations be accepted, the certificates to include all subjects required by the Council.

Dr. HERON WATSON seconded the motion.

Mr. SIMON said it was questionable whether the Council should accept preliminary examinations by a medical body in Ontario. It would be initiating a new policy.

Dr. DUNCAN said that there was no preliminary examination by the College of Physicians in Edinburgh.

Dr. HERON WATSON said that the preliminary examinations of other similar bodies had already been admitted, and it was unintelligible that the present application should be refused.

The motion was agreed to.

Dr. HERON WATSON asked whether a representation to Her Majesty in Council with regard to Clause 21 of the Medical Act, 1886, be or be not one of those duties which it is *ultra vires* of the General Medical Council to delegate to the Executive Committee appointed out of their own body in accordance with the provisions of Section 9 of the Medical Act, 1858.

The PRESIDENT stated that the question was one of legal construction, and he would take counsel's opinion upon it.

The Council then adjourned.

SATURDAY, NOVEMBER 20TH.

SIR HENRY ACLAND, PRESIDENT, IN THE CHAIR.

On the motion of Dr. QUAIN, seconded by Dr. BANKS, Mr. Marshall was added to the Dental Committee.

Dr. QUAIN moved, "That the attention of the Council be directed to the resolution adopted on April 21st, 1883, as follows (Minutes, vol. xx, p. 71):—'That the Council record on its Minutes, for the information of those whom it may concern, that charges of gross misconduct in the employment of unqualified assistants, and charges of dishonest collusion with unqualified practitioners in respect of the signing of medical certificates required for the purposes of any law or lawful contract, are, if brought before the Council, regarded by the Council as charges of infamous conduct under the Medical Act.' That steps be taken with a view of making public the above resolution." He said that the resolution referred to had been practically a dead letter, and he thought that publicity should be given to it.

Dr. HERON WATSON seconded the motion, which was agreed to.

On the motion of Mr. MARSHALL, seconded by Mr. SIMON, the scheme for constituting an Examining Board in Ireland by the King and Queen's College of Physicians and Royal College of Surgeons in Ireland was received and ordered to be entered on the Minutes.

Dr. A. SMITH moved that the scheme be sanctioned by the Council. He said that the scheme was on the same lines as that of the Conjoint Board in England, and a great deal of time had been bestowed on its consideration. He hoped, therefore, the sanction of the Council would be given to it.

Mr. MACNAMARA seconded the motion.

Mr. SIMON said the Council was now an expiring body ("No, no"); not as a corporation, but as regarded the particles of which it consisted, they were a condemned set of particles (laughter), and they were not really in a

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position to pass a measure of the importance of the one now proposed. Technically they could do so, but morally speaking they could not at the last minute of their existence adopt a revolutionary measure. Within six weeks the representatives of the profession introduced by the new Act would be entitled to express an opinion on the subject, and in the meantime the Council ought not to settle a question of such immense importance. He was not an indiscriminate eulogist of the mode of election provided in the Act, but it was the law of the land, and they were bound to obey it. If the scheme were adopted, the Apothecaries' Hall of Ireland would be excluded. The Medical Council could under those circumstances appoint assistant examiners; and in that case there would be in Ireland a competing body with the two Colleges, which would be a serious departure from what the Council had hitherto desired. The question was an extremely grave one, and required serious consideration. He did not express any disapproval of the scheme, but he would move, "That the proposal of the Irish Royal Colleges to constitute an examining board in Ireland under Section 19 of the Medical Act, 1858, be not considered by the Council until after Jan. 1st, 1887."

Sir DYCE DUCKWORTH supported the amendment. The question, he said, constituted a pivot, upon which a still larger question would turn, as to which there had been a good deal of agitation. It would be much better discussed in the modified Council of the future. He did not agree with Mr. Simon in his description of the existing Council. He never approved of the introduction of new blood, because he never considered it to be necessary, since the existing members represented the general practitioners throughout the country. The new members introduced would only be a part of the Council; but under the circumstances, so large a scheme as that proposed ought not to be entered into until after those new members had been elected.

Dr. BANKS said that the question was a most momentous one, and on the last day of their sitting it would be highly inexpedient to enter upon its discussion.

Dr. QUAIN said that the question was not a new one. It had been previously discussed, and he saw no reason for the postponement of the subject, except that that was the last day of the sitting of the Council. That was perhaps a sufficient reason for the postponement, and he would therefore not oppose it. As to the scheme itself, he wished to call attention to Clause 15, which contained the extraordinary provision that "the Committee of Management shall annually elect a secretary, the remuneration of whose services shall be *shared* equally by the Colleges." (Laughter.)

Dr. HUMPHRY said he did not think that the Council was prepared under the present circumstances to give full consideration to the scheme. There were some points in it that would require explanation and modification before it could be finally accepted. It would therefore be better to postpone the matter till after Jan. 1st, as proposed in the amendment. It would be remembered that after June 1st no incomplete qualification could be accepted, and steps therefore should be taken to settle the question finally before that date. That ought to be done at a meeting early in the year.

Mr. MACNAMARA said that the arguments that had been adduced were really in favour of the present consideration of the scheme of the Council. If the Council met in January to discuss the subject, the scheme would probably be remitted to the Colleges for reconsideration, and it was hardly likely that the President would summon another meeting of the Council before the month of June, by which time only complete qualifications would be accepted. In that case the College of Physicians and College of Surgeons would be virtually disfranchised. As to the present being the last day of the sittings of the Council, that was the fault of the chairman of the Business Committee, who might have had the subject brought forward on the first day instead of the last. He appealed to the members of the Council to discuss the subject, even though it should require another day's sitting.

Dr. QUAIN said that no body could be disqualified except by the Privy Council.

Dr. A. SMITH supported the amendment. The matter might be fully discussed at an early meeting next year, and that would no doubt be the proper course to adopt. When the time came the College of Physicians in Ireland would have some strong observations to make on the subject.

Mr. COLLINS said that the scheme presented had been reluctantly agreed to by the College of Surgeons. A communication had been received from that College stating the Council regretted that their efforts to secure the co-operation of Apothecaries' Hall in the projected Conjoint Scheme examination in Ireland had not been attended with success. It was the opinion of the Royal College of Surgeons that the union of the three medical corporations would be advisable, so as to reduce the number of licensing bodies in Ireland. He hoped that the matter would be referred back to the Colleges. He should prefer to have a union with the two other bodies, but if that were not carried out application would be made to the Medical Council or the Privy Council to appoint assistant examiners.

Dr. STRUTHERS supported the amendment. The matter ought not to be decided till the new members had been elected. There was a larger question depending on the result of the present motion. He thought that the English Conjoint Scheme ought to have included the Society of Apothecaries. The Council was now placed in a very serious position, and ought to pause before doing anything which would lead to the country being flooded with an inferior order of practitioners.

The amendment was then put, and carried by a majority of sixteen against two. It was also adopted as an original motion.

Mr. MARSHALL said that that concluded the business of the Council.

Dr. STRUTHERS said it was important to members living at a distance to know when they were likely to meet again.

The PRESIDENT said he desired to say a few words before the Council separated. In the first place, he wished to thank the Council for the great forbearance and kindness they had shown to himself and to the other officers of the Council in the conduct of the business of the session. He did not wish to magnify the small difficulties attendant upon an entirely new condition of things. But if members supposed that there had been no such difficulties they were under a misapprehension. When the Act of 1886 was passed, there were many things to be considered. First, he had to consider whether it was his duty to summon the Council for the purpose of deciding whether or not they would appoint a particular returning officer, or whether the President should take the initial responsibility, the Act stating that unless the Council decided otherwise the President was to be the returning officer. At the time he had to undertake the duty his valued friend, the chairman of the Business Committee, was not in England, and the solicitor for the Council was not immediately at hand. Various questions of great nicety arose. Letters of a most varied description, some serious and some very sprightly, were sent to the Registrar and himself with regard to numerous details concerning the mode of conducting the election. They had led to repeated consultations between the solicitor and his partner and himself (the President), and also to correspondence and interviews with the Government. By the kindness of the Secretary of State for War, it turned out to be possible to send voting papers to the large and valued body of professional men in the army, navy, and Indian services. That was not a matter for the General Council, but one which had to be undertaken by the Council's representative, and all he could say was that their representative faithfully did his best. He had refused to fix anything with regard to dates and arrangements, or any other subject connected with the election, except on the advice of the solicitor. He desired next to thank the Branch Councils for their kindness in accepting the arrangements that had been made, and carrying them out with the utmost courtesy and without cavil or question. One difficulty had arisen with regard to the meeting of the Council itself. He held the opinion, which he had expressed on former occasions, that the Council was bound to carry on its work just as if no Act had passed until the day when the additional members were added to it; and he should have been a traitor to their cause if he had not persistently endeavoured to continue the proper work of the Council until that date arrived. If the service of the profession and the country required it, he should not hesitate to summon the Council again before the 1st of January, but no such case was likely to arise. An objection had been taken to the meeting being held at that particular period. Various questions, however, might have arisen, legal technicalities, and so on, during the election, and it would have been most improper on his part to endeavour to carry on the election without enabling the Council without inconvenience to be on the spot in case any such legal

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difficulties arose in completing the election. Voting papers had to be counted, and if there happened to be a very close election a scrutiny of votes might be required. It was necessary that an adequate time should be allowed for the counting of the votes before the declaration of the poll, and he believed the shortest time that could be safely allowed had been provided. All the votes would be counted by the end of the next week, and on Nov. 29th it would be his duty to receive the decisions of the Branch Councils and to declare the results. He next desired to express his grateful thanks to Mr. Marshall, the chairman of business, upon whose judgment he implicitly relied, and who was at all times accessible; to the Registrar, who had been indefatigable under circumstances of great difficulty; to the printers, Messrs. Spottiswoode; to all the officers who had been engaged in the work, especially in the later days; and to Mr. Farrer, the solicitor, for the thoughtful assistance he had rendered. With regard to the next meeting of the Council, he could not decide the exact date, but he would do so at as early a period as possible. Before concluding, he wished to say that they were at present ignorant, and intentionally so, as to the gentlemen whom they would meet when they next sat round the Council table. If the present meeting had been delayed a little longer, they would have sat for the transaction of business after the election to the Council of gentlemen who could not sit at it; and one of the reasons which made it necessary for him to fix the particular date he had done was that they might carry on their deliberations without knowing who their future colleagues were to be. They were therefore careful that the business of the session should be concluded before they knew whom they would meet when the enlarged Council sat.

The session then terminated.

IRISH HOSPITALS AND MEDICAL SCHOOLS.

SESSION 1886-87.

Royal College of Surgeons: Medical School.—Professor FRASER said he would claim their attention for the time at their disposal while he endeavoured to unfold to them the lines along which scientific anatomy had developed to its present importance, forming as it did with its sister sciences of physiology and pathology, the basis of scientific medicine. It had followed particular nationalities—the Greek, the Roman, the Arabic; each of these had what was called a canon of medicine taught and disputed upon in the schools down to about a century or so ago. From the Italian its study radiated into France, England, and the Netherlands; passing through the latter, the Italian influence had been inherited and intensified by the German universities of to-day. Galen, the most celebrated of the Roman physicians, studied at Alexandria; and the Arab physicians, of whom the most noted were Rhazes and Avicenna, obtained their anatomy from him. Frederick II. founded the famous Universities of Bologna, Padua, and Pisa. It was in these that modern anatomy was instituted by Andreas Vesalius, born 372 years ago. Pupils of his, direct or indirect, were the teachers of the famous Harvey, the discoverer of the circulation of the blood. Anatomy had been advanced in England also by the two Hunters, by Huxley, Darwin, and the late Francis Balfour. In France the best known among its cultivators were Bichat, Lamarck, St. Hilaire, and Cuvier. In the Netherlands the names of Ruysch, Albinus, and Boerhaave were the most widely celebrated. From their German pupils, Haller, Lieberkühn, and Liebold, the present distinguished teachers of anatomy in Germany dated their origin.

Richmond Hospital.—Dr. NUGENT, in the course of his address, the subject of which was "Fever and Fever Hospitals," said fever was *par excellence* the disease of Ireland. After giving a sketch of successive outbreaks since the year 1731, Dr. Nugent went on to recount the great good done by the Hardwicke Hospital. Striking an average for the last forty years, it had annually admitted 1367 patients, and recently, when no special epidemic was supposed to exist, there had been seventy in it at once. In such a hospital students had facilities for studying fever unparalleled by any other clinical hospital in Ireland. That some students were nervous in the presence of fever he was aware, but he believed them to be an exception, and in a very small minority. The lecturer quoted figures to show that the mortality of Irish medical officers was very large.

Meath Hospital.—The address at this hospital was delivered by Mr. Ormsby, and published at length in our issue for the 6th inst.

St. Vincent's Hospital.—Mr. MCARDLE, having detailed some cases of joint disease in which he had obtained very marked results by the use of electricity, entered on the discussion of the influence of electricity on the micro-organisms which cause suppuration and other troubles. He noted the results of experiments which he had conducted in reference to this subject, and exhibited an instrument for introducing medicines through the skin without puncture by means of an electric current passed through it. He next referred to the question of admitting women to the medical profession, and held the belief that, as their engaging in such studies did not infringe any of Nature's laws, a carefully conducted course of medical training would in no wise influence the female character unless for good.

Adelaide Hospital.—Mr. HEUSTON, having given the history of the germ theory of disease, said that the pathogenic bacteria are specific beings, originating from and bringing forth their own peculiar species, gifted with unchangeable attributes, has been now proved by Gaffky; that they do not exist in healthy tissues, as stated by Koch, was proved by Hauser; while Tyndall has shown that no micro-organisms exist in the highest strata of the atmosphere, having exposed culture grounds for as long as twelve months on the higher Alps without their being contaminated. George Klemperer, an undergraduate in the Berlin University, made an important advance in this theory by proving that no suppuration occurs without the presence of micro-organisms. This has been quite recently further elucidated by Dr. Krautzfeld of St. Petersburg, who shows that it was always possible to detect micro-organisms in the pus of acute suppurations both by means of cultivations and direct observation, and the culture of those in the tissues he considers to be the most important factor in the etiology of acute suppuration. In a large number of cases of local acute suppurations the micro-organisms obtain admittance by means of an external wound. Abscesses due to the staphylococcus pyogenes are generally situated near the locality in which the micro-organisms enter, such as is the case in most of the ordinary acute abscesses, while those due to the streptococcus pyogenes are found at a distance from the place of injury, along the course of the lymphatic vessels, as is ascertained to be the case in pyæmia. The bacillus anthracis, described by Pollender in 1855, is the largest of the bacilli met with in disease, and is also the most virulent and difficult to destroy, it withstanding most antiseptics for a long period. Those micro-organisms are to be found in large numbers in the blood of animals dead of malignant anthrax, which affection in the human being is popularly known as woolsorters' disease, the usual method of infection being by inhalation of spores. The bacillus tuberculosus was discovered by Koch in 1882 in connexion with phthisis, but since that period it has been proved to exist in a large number of tissues, and has been shown by Demme to be present in lupus. This bacillus may be demonstrated in the sputum, blood, and urine of those affected. The micrococcus erysipelatosus was found by Fehleisen in 1883 to exist in the lymphatics of the superficial layer of the corium and areolar and fatty tissue beneath, but was not to be detected in the capillaries or bloodvessels; this micrococcus is in character a streptococcus, but is distinct from the streptococcus of ordinary suppuration. Fehleisen has inoculated six cases of inoperable tumours with cultivations passed through many generations, and typical attacks of erysipelas resulted in three of the cases; one of lupus, one of cancer, and one of sarcoma. The result was beneficial to the patient. Pyæmia and septicæmia have for a long period given rise to a number of different theories as to the nature of their micro-organisms, some stating that they were bacilli and others micrococci, a number of both being present; but the weight of evidence now points to the supposition that both those affections are due to the streptococcus pyogenes, single, and diplococci, with the occasional presence of staphylococci. The study of these minute organisms opens a new page in scientific surgery, the importance of which we are only commencing to appreciate, and it is probable that succeeding generations of our profession will find ample occupation in their investigation, and the practical application of the knowledge thus obtained to the alleviation and treatment of diseased conditions.

Mr. Heuston's lecture was highly interesting, being illustrated by photographic transparencies and diagrams shown by a magic lantern.

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THE LANCET.

LONDON: SATURDAY, NOVEMBER 27, 1886.

AFTER having been allowed to slumber through the long vacation, the movement for a degree is again making progress among the London teachers, and the profession in general is beginning to show an interest in the question. The University of London declared through its Registrar in 1881 that its object, so far as degrees in medicine are concerned, is "to establish and maintain the highest attainable standard of professional acquirements. To increase the number of those who might seek the degrees of the University has been, in the estimation of the Senate, quite subordinate to the maintenance of the high qualification of its graduates." At the inaugural dinner of the London University Club in Manchester on the 13th inst., Sir JAMES PAGET, as Vice-Chancellor of the University, most definitely restated the same principle as the present standpoint of the University. "It was bound, not only for its own sake, but in fairness to the Government and the people, to maintain always that its degrees in the future, as in the past, shall constitute *distinct honours*, and that no one who had a degree from its hands should be able to point to it and say that it was not an evidence that he had passed *no ordinary examination*." The average student is still to be ignored, and only the exceptional one is to be considered. The practical outcome of these views was shown in our last issue. Thirty-six candidates only obtained the degree of M.B. Lond. at the recent Pass Examination, and but seven London schools are represented in the list. In 1881–82, the year in which most of these candidates would have commenced their medical education, more than 800 students began their medical studies in the English schools. Less than 5 per cent. of these therefore have obtained the degree of M.B. at the University of London. Can it be seriously argued that this is a due proportion of graduates, considering the ability and industry of the students, the teaching capacity of the professors and lecturers, and the wealth of clinical material and scientific apparatus at their command? No statistics or arguments could more conclusively prove the justice of the present demand for degrees for students in London on equitable terms with those in the other medical teaching centres. This demand is shown to be the more reasonable, and its justice becomes clearer, when we find that in the Scotch Universities 80 per cent. of the students entering in 1871-75 obtained degrees in the years 1876-80. We should also take into consideration that considerably more than 60 per cent. of those who have recently obtained medical degrees from the University of Durham have been educated (except for a year) in the London schools, and that many go from London to Brussels for degrees. The Victoria University has not been in existence sufficiently long for many of its pupils to have passed to the M.B. degree, but it is obviously so planned as to be attainable by every industrious student of average intelligence, and is not intended to be an honours degree.

The only objections that we have heard honestly raised against the institution of a new degree for London students are:—1. That any such degree would be confounded with the existing London degree. This difficulty might be easily obviated by the adoption of a distinctive name, such as M.B. Albert University or Westminster, or some similar title. Nobody mistakes the degrees of Trinity College, Dublin, for those of the Royal University of Ireland, though both are conferred in the same city. 2. That the curriculum of the London student is an inferior one to that required by the Universities. In medical studies, properly so called, the requirements of the Conjoint Examining Board in England and the severity of its examinations are quite equal, and in some respects even superior, to those demanded by some of the Universities; and we question if any candidates pass this Board in anatomy, physiology, materia medica, surgery, medicine, and midwifery who would be rejected in those subjects by the examining boards of the Scotch Universities. In the subjects of general education the present minimum should be increased, and a synopsis of the demands and limits in natural history should be added to the scientific part of the curriculum, and then no exception could reasonably be taken to either the thoroughness of the education or the completeness of the examination tests. These points are sure to be attended to by the authorities if a degree be granted. 3. That a degree can only be properly given by a University. In this, which will be found the most powerful objection to the proposed scheme, there is more sentiment than reason. Words are made to do duty for facts. If a stringent B.A. course and examination of the old style were still a necessary preliminary to a medical degree, as was until lately the case at Oxford, we could appreciate the argument. But now even at Oxford and Cambridge candidates can substitute for classical and mathematical training scientific subjects which have a direct bearing on their medical curriculum. In the Scotch Universities the medical department is simply a large medical school, and, except for the necessity of having passed a preliminary examination, a student has no necessary connexion whatever, except when he is capped, with the other Faculties. The University of Durham, except on paper, is quite unknown to the medical student at Newcastle-on-Tyne. Similarly at Liverpool and Manchester he may be ignorant of the name of the principal, or even of a professor in the Faculty of Arts of the Victoria University, and their existence is only made known to him at his matriculation examination, and at the ceremony at which his degree is conferred. The advantage, therefore, of the culture derived from contact with the other Faculties by a residence and training at most of the Universities in the case of a student in medicine, when contrasted with his London competitor, is quite fictitious. Culture and habits depend in both cases on the student himself, his previous education, and his choice of associates, and can be no more claimed as exclusively belonging to the Universities of Edinburgh, Glasgow, and Aberdeen, than to University or King's Colleges, or to St. Bartholomew's or Guy's Hospitals. Not only are the medical and other Faculties quite distinct in our modern Universities, but, even in the starting of a new University, unless it is to spring forth fully equipped, some one Faculty must be first formed, and around this the other Faculties must be afterwards

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congregated. We hope to see a teaching University in London, as in our other large cities, but the only hope for this seems to us to lie in the vigorous prosecution of the present movement by the London Colleges. If, through inertia or a want of a clear understanding as to their needs and position, the teachers of arts and science in London fail to combine into other Faculties, as at present appears only too likely, a distinct advance will at any rate have been made if this proposal for the establiishment of a London medical degree should be successful. An admitted want will thus be supplied and an evident injustice remedied, and no further justification can be required for the scheme and its energetic prosecution.

MR. JUSTICE DENMAN recently gave judgment in a case where the plaintiff was a person who had been confined in a lunatic asylum under a certificate drawn up and signed by the defendant. Malice, of the sort which consists in neglect, was alleged in support of the plaintiff's plea; but on investigation the allegation was reduced to one of inaccuracy of a very slight character in the particulars set forth in the form; and even this plea was unsustained except by the evidence of the plaintiff, who spoke from recollection of what she had done and said eight years previously. The plaintiff was practically nonsuited on the ground that the action was not commenced within twelve months after the commission of the act alleged—that is, the giving of the certificate,—or even within twelve months of the discoverture of the plaintiff by the passing of the Married Women's Property Act; but in some technical way the case was brought under the cognisance of the jury. The jury failed to arrive at a verdict, the Court was moved to give judgment for the defendant, and Mr. Justice DENMAN complied without calling upon the defendant's counsel to argue in support of the plea. It is therefore a specially valuable judgment that was obtained. On the question of malice in respect to the giving of a certificate, Mr. Justice DENMAN adopted the view taken in the recent case of CLARK *v.* MOLYNEUX—namely, that "that which may be a mere want of recollection or inaccuracy ought not to be considered evidence of malice, but only that which exhibits a bad mind and wrong motive in the matter." This is so obvious as to carry the force of truth in its expression. There is, however, one point in the judgment to which we must, with great respect, beg to take exception. "It is not," proceeded Mr. Justice DENMAN, "at all a sound view that if a man is deceived or takes a wrong view in giving a certificate of lunacy, the person who is certified is confined to his or her harm or evil. They are confined for their good, and in this case it would have been for the plaintiff's good to be confined." In so far as this is another way of saying that the end justifies the means, we must take leave to differ from Mr. Justice DENMAN. It may be not harmful, but advantageous, on certain grounds, to a man or woman to be confined in a lunatic asylum. For example, he or she may benefit by rest and relief from work or worry; mind or body, or both, may be advantaged, and yet the means by which this advantage has been gained may be unjustifiable either by fact or inference. It is no justification of a false conviction that the prisoner has benefited by the discipline and moderate diet of life in prison. If Mr. Justice DENMAN really intended to express this view, we are quite sure that on reflection he will perceive that it is erroneous and untenable. Meanwhile we hail the frank and clear utterance of the judge, limiting the forensic, if not the legal, idea of malice to genuine *mala fides*, as most opportune and useful.

Judgments like this are greatly needed; and if practitioners are not to be driven by fear of vexatious actions at law to refuse the giving of certificates, something must be done to clear away the clouds of doubt and jeopardy which render it perilous to take any step in a case of lunacy, and do not only prompt, but compel, all but the specially bold or reckless among us to stand still. How very undesirable this position of affairs really is will appear when we reflect that *not* to place an insane person promptly under treatment is scarcely, if at all, less opposed to the best interests of the individual and of society than to consign a sane but eccentric person needlessly to confinement. We have counselled and must continue to advise practitioners to decline to give certificates in all but the most obvious cases of madness—in those, in fact, in which certifying is a mere formality—until the question of responsibility is finally settled in such a manner as to secure every medical man who acts honestly and to the best of his ability from the persecution of the convalescent. As the matter now stands, it is coming to be regarded as a point of honour on the part of a certain class of patients to endeavour to rehabilitate what they conceive to be a ruthlessly or recklessly damaged reputation for sanity by taking proceedings against the medical men who signed the certificates on the strength of which they were confined. Anything more mischievous than this position of matters it would be difficult to imagine. It is nothing to the point to say that those who bring actions vexatiously generally lose their suits. The medical man persecuted is injured in mind, body, and estate by the treatment to which he is subjected, and it is a scandal to the cause and interests of public justice that actions of this class are allowed to be brought without the *fiat* of some official whose duty it should be to see that at least a *primâ-facie* presumption of malpraxis or neglect actually exists. No pecuniary award can possibly compensate for the pain and strain inflicted on the practitioner assailed. Something effective must be done to protect the medical profession against this sort of thing, if the very clumsy and dangerous system of "certifying" which at present so strangely satisfies the public and political sagacity is to be maintained in all its elaborate fertility. Until a really radical change is made, we trust practitioners will at any cost or trouble, simply decline to place themselves in peril, and refuse to give certificates at all, leaving the lawyers to find a way out of the difficulty created as best they may.

In another case of wholly groundless action against a medical man who had signed a certificate, Mr. Justice MANISTY has expressed himself in forcible terms against the wrongfulness of the law which permits the bringing of these actions without even adequate security for costs. It was a terrible thing for a gentleman in the position of the signer of the certificate "to be called on to defend himself from a charge of this sort on the chance of a party being able to get something out of him, and with the certainty that, if successful he could only get his taxed costs, and

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would be still out of pocket." Everyone will agree with Mr. Justice MANISTY, though whether the way sketched out by the judge for getting out of the difficulty is the best that could be devised is a debatable question. "He thought it would be well if the Court had a discriminating power to order security for costs to be given in such cases." We venture to think it would be better if, as suggested above, the *fiat* of some public official representing the Secretary of State were made the preliminary condition of proceedings against the medical man, or men, signing the certificate. The question involved is not one of money solely, but of character and professional credit, which are of more than financial importance to the majority of practitioners. There cannot be any doubt on the mind of any observer of the working of our very defective Lunacy Laws, that they need immediate and thorough reconstruction in the interest of all classes of the community, whether sane or insane, to which their influence extends.

IN an article published last week we drew attention to the precipitate act by which the Councils of the Royal Colleges of Physicians and Surgeons have broken off negotiations with the Apothecaries' Society on the subject of a conjoint examination. We mentioned some of the untoward consequences which are likely to follow this high-handed proceeding. Emanating as it does merely from the influential oligarchies of the Colleges, it can represent only in part, if at all, the opinion of the large body of practitioners whose views have been thus summarily anticipated. The Members of the College of Surgeons had recently an opportunity afforded them of publicly expressing their wishes on the subject. They did so in a most reasonable and temperate manner. A resolution was passed in the presence of the President and Council without any evidence of dissent, any expression of opinion, or any information being vouchsafed. Meantime, however, resolutions were adopted and confirmed in the Councils of both Colleges of an entirely contrary effect. It is not surprising, then, that the general practitioners have determined to act for themselves. They can only do so effectually by combining; and it cannot be doubted that an "Association of General Practitioners" such as that which is in process of formation will afford the best and most effectual means of giving organised expression in the future to their wishes.

A full consideration of the whole question must therefore constitute the work of the next general meeting of the Fellows and Members of the College of Surgeons. It is, in the circumstances, only fair to them that a special general meeting should take place at an early date; and it is to be hoped, alike in the interest of the public and of the profession, that the too hasty decision of the Colleges will not prove irrevocable. Meanwhile, the temporary lull in operations affords a fit opportunity for reviewing the relative positions of the parties in this question. The services which have been rendered to medical education in the past by the Society of Apothecaries are undoubtedly considerable. At a time when the Colleges of Physicians and Surgeons were each absorbed in the fascination of its own department of practice and careless of the educational needs of the general practitioner, the Society, alone of London corporations, afforded its *alumni* what was for that day a wide and clear, though imperfect, perception of the field of professional duty. Since then changes have come about. The pattern, modelled with some fidelity on the system pre-existing at the universities, has been recast in a more substantial form in the licensing course exacted by the Colleges; while new and powerful forces have been directed to the same purpose by the University of London and various schools of recent growth. It is therefore, perhaps, not to be wondered at that medical opinion, not confined by any means to leading members of the profession, had come to regard the licensing function of the Society as a power which had done its work, had become unnecessary, and, not without respect, had practically passed away.

It appears certain that one result of the exclusion of the Society will be to excite in it the instinct of self-preservation. At present it is willing to play a part, and a modest part, in the scheme of medical education. Debarred from uniting with the Colleges, it may be relied upon to seek at the hands of the Medical Council,—or, in default of that body, of the Privy Council—the addition of such examining powers in surgery as would legally justify its existence as a separate licensing authority. These powers it would in all likelihood obtain without question. Then we should find that another body of legally competent practitioners, attracted by the cheapness and facility of the revived curriculum, would be annually ushered into the already well-contested field of general practice. Nor can we pretend that such a competition would be ineffective. Had we everywhere a discriminating public, able to estimate the relative value of qualifications in medicine, and, on the other hand, a general agreement as to charges on the part of practitioners which would adjust itself to the varying necessities of our population, then perhaps the influence of a less ambitious qualification might be disregarded. Such a Utopian condition unfortunately does not exist, nor is it likely to appear for some time to come. In the meanwhile the probable effects of a reconstitution of the Society's powers in such a form as we have indicated should not be underestimated. The readiest, and indeed the only visible, way of escape from the dilemma is that the Colleges should reconsider the offer of the Society to join its examining function to theirs before it is too late. If we look at the question from the point of view of the Colleges themselves, we fail to see that their professional dignity or their fitness to qualify under the present arrangement is necessarily impugned by the measure we are advocating. Granted that together they are quite efficient for the work, it is still apparent that several subjects included in medical education fall within the sphere of the Apothecaries as much or even more than within their own. Such are Chemistry, Pharmacy, Materia Medica, and part of Medical Jurisprudence. This ought to show that a further division of the labour of education is possible, as well as in the present case advisable. The importance of a thorough and early training in Materia Medica and Pharmacy is not to be ignored. These studies do not now, as in olden times, it is true, form the representative front of Medicine. Scientific training of more immediate consequence, and the great

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extension of clinical knowledge itself, have placed them in the background. With a great many practitioners in this country, as on the Continent, the tendency is to leave Pharmacy behind in the stage of studentship, and the tendency seems rather to increase than to diminish. There is on that account, in our opinion, all the more reason why education in this branch should be thorough both in theory and in practice; and why not entrust it, with allied matters, to the Society of Apothecaries? We shall not now, however, pursue this part of the subject further. A good deal has been said of the power of prosecution for unqualified practice, which at present rests largely in the hands of the Society. We do not profess to be satisfied with this arrangement, and regard it as only reasonable that adequate powers should be vested in higher authorities for the protection of the profession in this respect. Still, facts as they stand must be considered, and it should not be forgotten that the Colleges, in refusing combination with a body which exercises its defensive privilege more successfully than the purely medical corporations, are depriving their Members and Licentiates of a useful barrier against unfair competition and imposture.

It is just twenty years since Dr. P. H. WATSON of Edinburgh performed the operation of excision of the larynx for the first time. BILLROTH soon after repeated the operation with a fairly successful result. He was followed by the late Dr. FOULIS, whose successful case excited much attention in this country. Since this the operation has been frequently performed in Germany, and the total number of cases now nearly approaches a hundred. Four cases were related at the last meeting of the Clinical Society, which are the first that have been recorded by London surgeons. In two of them—Mr. MORRIS'S and Mr. PICK'S—the operation was performed for advanced malignant disease of the larynx, and in the former of the two a palliative tracheotomy has been found no longer effectual in relieving the dyspnœa. In two other cases—Dr. SEMON'S and Mr. BUTLIN'S—the operation was undertaken for earlier malignant disease, as a means of its total removal, with the hope of securing long if not permanent immunity from the disease. These cases both ended in rapid recovery, and at the present time the condition of the patients is satisfactory. The record of these cases will no doubt again direct the attention of British surgeons to an operation that has not hitherto been regarded with much favour by them; and while it is to be hoped that it will not lead to a frequent repetition of the operation, it may well conduce to the formation of a truer estimate of the worth of this procedure.

Like every other novel form of treatment, this operation must pass through an experimental stage before surgeons can determine exactly its perils and its worth. By experience it will be made evident what cases are suitable to submit to it and what are not, and although *a priori* reasoning should guide surgeons to some extent, its value must be put to the test by experiment. The early statistical results of excision of the larynx are therefore not a true guide to its dangers. They will reveal failure from an improper selection of cases, and from the neglect of due precautions against certain dangers. But although this is so the early operations are those which really form the basis for an intelligent and wise opinion and their value is not to be under-rated.

Already we have learned some important facts about excision of the larynx. Apart from an improvement in certain technical details of the operation itself, it has been shown that one of the chief dangers lies in the liability to septic broncho-pneumonia. This can be largely, if not entirely, obviated by taking care not to allow any blood to find its way into the lungs, and also by the use of an antiseptic material to plug the wound. It has been shown, too, that excision of the entire larynx is a much more dangerous procedure than removal of a part—say of one-half. It also seems clear that only a small proportion of cases of laryngeal cancer are suitable for this operation; these are those in which the disease is strictly intra-laryngeal in origin, and has not extended at any part beyond the limits of the organ of voice. Mr. BUTLIN seems to think that in some, if not in many, of these cases it would be sufficient to split the anterior border of the thyroid cartilage—thyrotomy—and then to remove with knife and raspatory the soft parts within the larynx, while leaving the cartilages in their place. What we want further information on is the real mortality of the operation, what its dangers are, what immunity from recurrence it offers, how far it can be regarded as a curative procedure, and what degree of mutilation it inflicts. Dr. SEMON'S patient was very soon able to take food in the ordinary way, and within a few months of the operation could speak in a loud whisper, and desired to return to his duties as a barrister. Evidently the last word has not yet been spoken in reference to the necessity for wearing an artificial larynx. Mr. BUTLIN'S practice of excising the soft parts of the larynx and leaving the cartilaginous framework behind must be tested. We shall hopefully await experience on these points. The feasibility of the operation has been well demonstrated; the conditions that favour its immediate success are known, and those that determine its ultimate success seem to be clear. Advancing on the lines thus worked out, we may hope that before long our estimate of the real value of this operation will be corrected and established.

THE ill-timed meeting of the Medical Council came to an end last Saturday. Besides purging the Register, and making provision, under the Act of this year, for the registration of diplomas in Sanitary Science, it would be difficult to point to any work which can be regarded as worth the expenditure of time and money which it involved. There was such a dearth of serious business that much time was occupied in discussing points of form and in humble imitations of the House of Commons. Nevertheless, there were significant incidents in the proceedings which may advantageously occupy a few minutes of our time and that of our readers. The first of these was the Address of the President, and particularly that part of it referring to the Medical Act of 1886, under which an election of Direct Representatives has just taken place. This election and its effects are to be the subject of more specific attention hereafter, the President only venturing to presage that those about to be added to the Council will not be less earnest in its work than the existing members. We cannot doubt that the President's forecast will be justified by the Direct Representatives.

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It is more instructive in our view to notice the significant words of the President in reference to the great defects of the Act of 1886. We have never thought of it otherwise than as a very faulty and defective piece of legislation, which could never have been proposed but for one of two reasons: either, first, that, as the President says, "the nature of parliamentary government makes any serious change in our educational procedure impossible,"—in which case we say so much the worse for parliamentary government, and for all who are ruled by it; or, secondly, that the Government was misled by those who should have known better, and were induced to believe that the mere grant of Direct Representation would so satisfy the profession as to make it indifferent to other and even older objects of medical reform. It is satisfactory to us to remember that we were never under any such delusions, but fully sensible of the fact that the Bill did not pretend to grant what all reformers have wished and all recent Bills attempted to secure—namely, a consolidation or conjunction of the licensing authorities. But let us see what the President says about this feature of the Bill: "Modifications in the examination system, once held to be of the first importance, and therefore of greater consequence than a change in the executive, are left untouched by the Act of 1886. The licensing bodies all retain their respective and separate powers." The gravity of such an admission by the President of the Council cannot be exaggerated; nor is it abated by remembering that the President never thought it worth while to call the Council together to consider this Bill, or to point out to Sir LYON PLAYFAIR and the Government that they were ignoring the principal recommendations of their own Royal Commission and the principal wishes of all statesmen and medical reformers who had given any attention to the subject. But it may be said this is a mere theoretical piece of criticism, and has no practical bearing. No one will venture to say so who allows himself to consider what may happen under such a clause as Clause 5. The special object of this clause has been thought to be the preservation of the Apothecaries' Societies in England and Ireland—a preservation which cannot be condemned in the present state of medical politics. But it is easy to see that it may be wrested by every corporation of each division of the kingdom to its own uses, and lead to all sorts of fantastic bodies, or that under Clause 3 and its subsections a number of new combinations might arise, which, while satisfying the fundamental requirements of the Act—that of a triple qualification in medicine, surgery, and midwifery,—would imply a competition in degrees and diplomas exceeding that which led to the demand for legislation, and has at times amounted to a scandal.

We can only rejoice that the present imperfect Medical Council had the good sense to defer the consideration of a scheme for the combination of two Irish corporations, leaving out a third, till the next meeting of the Council. It is an open secret that one of the great Irish corporations was willing to include the Apothecaries, and that only a small majority of the other was unwilling. But, nevertheless, it is so far left out in the cold, with the power to come to the Medical Council and ask for the appointment of assistant examiners in surgery. It will then enter into competition at more reasonable charges with the two Royal Colleges, which in their turn may be induced to entertain similar arrangements or other alliances, with results that no one can exactly forecast.

The registration of Diplomas in Sanitary Science is a noteworthy event. It marks the importance attached by us in England to that branch of medicine which endeavours to prevent disease, as distinguished from that branch of the profession which contemplates its cure. It has ever been the credit of the medical profession to be before the public in attempts to remove the very causes of disease—to prevent its occurrence. This has been the peculiar glory of English medicine, led by SIMON, RADCLIFFE, FARR, and others; and it is but fit that English legislation should have made provision for the registration of diplomas or degrees in this branch of science. An attempt was made to register them under a uniform title, but this did not succeed, Dr. HUMPHRY and Sir WILLIAM GULL maintaining that only the bodies which granted the diplomas could regulate the titles attaching to them. This is sound reasoning, but the bodies themselves should consider the question of title and try to agree on certain principles.

St. Bartholomew's School, always distinguished, was questionably so during the recent meeting by its unfavourable reply to an overture from the Medical Council proposing to visit it and all the other schools of the country. This led to a slight passage of arms between Sir WILLIAM GULL and Sir DYCE DUCKWORTH, which, however, as might be expected with such generous and courteous belligerents, soon ended amicably. The competence of the Council to make these visits is still undecided. But it would be a pity for the sake of students if they are not made, and a greater pity still if a leading school like Bartholomew's were to set the example of resistance to the Medical Council. When such heavy batteries are manufactured against the student's chances, it would seem but fair to him to ascertain the efficiency of his schools and their appliances.

SOME hope has been expressed that Mr. RITCHIE, the President of the Local Government Board, will shortly be raised to the rank of a Cabinet Minister. The reasons that have led to the existence of this expectation are not stated in the journals which discuss the subject; but we may assume that Mr. RITCHIE'S undoubted ability has indicated the desirability of including him among the chief State councillors. However this may be, it is probable another thought has also had weight in suggesting this important change. Mr. RITCHIE, as President of the Local Government Board, holds an office which is second to none in its influence on the prosperity and happiness of the country. The large subject of Poor-law relief is immediately under his control; the education of an important section of the community, and all questions of local government generally, come within the scope of the Board over which he presides. No doubt Cabinet rank would not be considered necessary for the chief of a department dealing with many of these subjects, but among the questions of local government with which Mr. RITCHIE is associated is that of public health. For this it may safely be pleaded that it is not merely the concern of a number of local authorities. Public health is, indeed, an imperial

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question. Upon its preservation is dependent the prosperity of the nation. The relations of this country to others, especially in regard to trade interests, are intimately bound up with questions concerning the prevention of epidemic disease; there are therefore reasons of the highest importance why public health considerations should have due weight with Her Majesty's Government, and the Minister who represents this vast interest should have all the opportunity for influencing the decisions of the Government that is accorded to other high officers of State. But we have before expressed a strong opinion that public health, even under these circumstances, is insufficiently represented. So long as it is allied and in many ways subordinated to Poor-law administration full justice cannot be done to the health interests of the nation. It is now twelve years since we urged the necessity for the creation of a separate Ministry of Health, and from that time until the present the idea has gradually grown until it has come to be accepted by an increasing number of people.

Eight years ago Dr. B. W. RICHARDSON read a paper at Stafford on the Constitution and Functions of a Minister of Health for the United Kingdom; his proposal was that the Registrar-General's office should be the nucleus of a ministry which should deal with all health questions throughout the British Isles, and he considered that it ought to be essentially educational and expository, but not administrative. We ventured to dissent from this view; it is difficult to say whether in the future local authorities may be trusted with complete independence of action in all matters relating to public health. Certainly the central authority would always have as its chief function the duty of obtaining information which could be utilised by local boards, but for many years to come some supervision over their action will be necessary. If we might foreshadow the development of an internal administration, it would include not only the enlargement of many powers of local authorities, but the creation of a service of the State that would bring local officers into more intimate relation with those whose duty it would be to advise a responsible minister. Such a service would ensure the employment of a higher ability than that which is now brought to bear upon local work, and would promote the independence which is necessary for the proper fulfilment of duty. Under such a system the still young subject of public health would develop at a much greater rate than it can do under existing circumstances. Public opinion is ripening for such a change, and successive statesmen have recognised the growing importance of the health-welfare of the people. Lord BEACONSFIELD created hopes which are still waiting to be realised, and Mr. RITCHIE'S promotion to the Cabinet would show us that his late chief's paraphrase was not altogether forgotten. The position which the President of the Local Government Board occupied in a late Administration proved of material value to the country, and we would fain hope that the able statesman, who would thus be brought into closer contact with his colleagues, may have opportunity of helping further in the attainment of the end we desire.

AN examination for twenty-eight appointments as surgeon in Her Majesty's Indian Medical Service will be held on Feb. 14th, 1887, and following days.

Annotations.

"Ne quid nimis."

THE VICE-CHANCELLOR OF THE UNIVERSITY OF LONDON AT MANCHESTER.

AT the inaugural dinner on the 13th inst. of the London University Club, which has been recently formed at Manchester, Sir James Paget, in replying to the toast of "The London University," made some important statements with regard to the prospects of the reform movement in the University. Sir Henry Roscoe, M.P., the President of the Club, dwelt most felicitously on the past history of the University, and showed that it had always been to the front in educational matters—as in abolishing religious disabilities, in establishing the highest class medical degrees, in granting degrees in science, and in admitting women to degrees. As Manchester has seceded from London, that it might become a Teaching University, it was certainly very magnanimous on Sir Henry Roscoe's part to say that "self-taught men, who by their own endeavours had obtained a knowledge sufficient to pass the examinations, were deserving of University recognition." The authorities of the Victoria University, however, take care that this recognition should be given, not by themselves, but by some other University. Sir James Paget, as Vice-Chancellor, referred to the various schemes now suggested for increasing the value of the University in the future, although he offered but little encouragement to their promoters. Its degrees are to be obtained on no easier terms, and it will never narrow its field of work. The London University is therefore to remain an Examining Board for the English-speaking world, and its portals are to be open to all. Examinations themselves, even if they did engender cramming (and are not Cabinet Ministers crammed?), are most potent instruments for teaching. "In that way they could determine what should be taught, how it should be taught, and what measure of learning a candidate must arrive at." Undoubtedly; but this very power in the hands of an irresponsible Senate, elected for life, with scarcely an actual teacher now among its number, has rendered possible all the mischief attributed by teachers to the University, and was the one reason (non-local) advanced by the professors of Owens College in support of their application for a new Charter. As regards the change into a Teaching University, Sir J. Paget thought "the greatest probability was that the teachers in London and the principal teaching institutions of the country would be invited to arrange plans by which they might have a more considerable influence in the University itself, by which they might be represented on the Senate, become members of the body of teachers who would guide and advise what should be the course of teaching in the University." These intimations must be widened very considerably, before they will do away with the agitation for internal reforms which are thought necessary, or satisfy the aspirations of the London teachers or the graduates of the University.

THE PROPOSED CONVALESCENT SMALL-POX HOSPITAL.

THERE is a serious difference of opinion between the Local Government Board and the managers of the Metropolitan Asylums District as to the desirability of building a permanent hospital for convalescent cases of small-pox at Darenth. It will be recollected that in 1884 both Boards agreed that further provision should be made for cases of small-pox, and that a permanent hospital should be built for this purpose at Darenth. Subsequently, however, before the work could be commenced, the managers were compelled to

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erect on the site a number of tents and huts to meet the exigencies of an epidemic; the building of the permanent hospital was therefore postponed, but the managers are now desirous of giving effect to the decision at which both Boards have arrived. The Local Government Board has since changed its mind, and now declines to sanction any other erection than one of a temporary character. The reply of the managers is that the difference between the amounts of money expended for the two purposes is apparent rather than real, and that the cost of repair and of heating, and the increased expense of administration of the temporary hospital, would soon lead to as great an expenditure of money as if a permanent building were erected. We do not doubt that the Local Government Board sees the necessity of future small-pox hospitals being constructed very differently from those which have given rise to small-pox in their neighbourhood, but this ought to be definitely stated, and the managers should be given the opportunity of determining without loss of time how small-pox hospitals must in future be built. The Central Board has by its reference to the uncertain state of medical knowledge indicated the need for further knowledge; and if this need really exist, it is certainly the duty of one or other body to see that its acquisition is undertaken with as little delay as possible. If the opportunities afforded by past epidemics had been fully utilised, there would have been no need for the experience derivable from other outbreaks of disease. As it is, London has the satisfaction of throwing away some £60,000 or £80,000 because a few hundreds have not been expended in obtaining the medical knowledge which is now held to be necessary before a permanent hospital can be provided.

FURTHER RESEARCHES ON CHOLERA.

THE epidemic of cholera which has been prevalent in the north of Italy during this year has offered the occasion for a study of the disease, which has been made by Drs. Tizzoni and Cattani of Bologna, the results of whose researches are contained in a recent number of the *Centralblatt für Med. Wissensch.* It is interesting to find that Koch's researches are confirmed and extended. The authors' chief conclusions are contained in the following propositions: (1) The bacilli which were present corresponded in biological and morphological character with those described by Koch, Ermengen, and others as the comma bacillus, and they were constantly present in the twenty-four cases examined. (2) They were found in the alimentary canal and the dejecta, and were capable of cultivation, so that when present in small numbers this method permitted their presence to be ascertained with greater certainty. (3) Of these twenty-four cases in which the bacilli were found, one was a case of the prodromal diarrhœa, and three were cases of cholera typhoid, which succumbed respectively on the sixth, seventh, and fifteenth days. (4) That the comma bacillus is of the utmost importance for the differential diagnosis of Asiatic cholera. (5) Even after large doses of calomel, quinine, thymol, and ethereal extract of male fern, bacilli were found in the intestines and dejecta, capable of cultivation. The bacilli were found in the vomit and contents of the stomach in several cases, and were capable of cultivation. In a case where they were absent the vomit was sour. (6) The blood-serum taken during life from the arm and in the cadaver from the right heart was always alkaline. (7) The bacilli were present in the serum and in the white blood corpuscles in small quantities, but were incapable of cultivation. (8) The subarachnoid fluid, which is much increased in cholera, also contained them, but only once was a successful cultivation obtained, when the weather was warm and the necropsy was made about two hours after death. (9) The comma bacilli are capable of multiplication and growth not only in the soft parts of fruits but also on the "skins." (10) Flies probably play an important part in the propagation of the disease, as they were found to be capable of conveying by their feet the microbe from a cultivation to a suitable medium, and flies removed from the wards and "cultivated" gave a crop of micro-organisms, among which the comma bacillus was predominant. The importance of the results here catagorically stated is obvious, as a confirmation of many points which had been previously ascertained; but we should like to call attention to one fact which has a practical bearing—viz., the incapability of the bacillus to live in an acid medium, such as the gastric secretion, in times of health. Assuming this fact to be true, and that the chief mode of entry of the bacillus is by the digestive organs, it is obvious that it can only affect the body when the acidity of the stomach is very much lessened or reduced to *nil*, so that it behoves everyone in times of the epidemic to exert more than usual care to prevent any disturbance of the functions of the stomach or the lower alimentary tract, and to abstain from succulent fruits, which, besides the property they possess of deranging the alimentary canal, can also act as direct means for the introduction of the bacillus.

LIVERPOOL HOSPITAL SUNDAY FUND.

WE are sorry to have to record a Hospital Sunday collection in Liverpool this year less than in 1885 by £179 8*s.* 10*d.* Exclusive of donations it was £319 12*s.* 1*d.* less. The result is explained not only by the depression of trade, but by the very unfavourable weather. The Hospital Sunday is placed, with doubtful advantage, in January. We are glad to say that it is under consideration to transfer it to May. Many churches and chapels still fail to make any collection for this purpose. Fortunately there is an increase in the Saturday collection. The sum raised in this way is chiefly given by artisans and working people. It is £3147 7*s.*, as against £2603 3*s.* 6*d.* last year. Credit is due for this to the officials and members of the Working Men's Committee. Though we do not think the contributions of the working classes at all in excess of their obligations, or even equal to them, it is serious to note that the church collections are very far short of them—the opposite of the London case, where Sunday so far exceeds Saturday. This is a holy cause, in which one class may well provoke another to good works. The claims of eighteen charities to a participation in the Fund were submitted and paid, with the exception of the Hospital for Women in Shaw-street. In this case the committee thought the award should be withheld pending investigation now in progress.

RECENT OUTBREAKS OF SMALL-POX IN LIVERPOOL.

DR. E. W. HOPE, assistant medical officer of health, and lecturer on Public Health at University College, Liverpool, has discussed in a pamphlet recently issued, the behaviour of small-pox in Liverpool during the last twenty-five years. In this period there were ten years in which the number of deaths from this disease exceeded fifty: in one year, 1871, the deaths amounted to as many as 1919; in each of the remaining fifteen years the deaths amounted to less than fifty. Dr. Hope estimates that 8 per cent. of the total population, or 46,905 persons, altogether escaped vaccination, and after allowing for such of them who have contracted small-pox, he concludes that fully 46,000 persons remain who are in no way protected against this disease. To these must be added those adults who have not been vaccinated since infancy, and still younger persons who have been badly vaccinated in infancy. He contends from this that Liverpool contains a large amount of susceptible material. The opportunities for the importation of small-pox are considerable; apart

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from those cases which come by land, vessels arriving in the port not infrequently become centres of infection; thus Montreal, which last autumn was the seat of a severe epidemic of small-pox, contributed eleven cases. In discussing preventive measures, Dr. Hope argues against domestic isolation, and gives instances of the evil results which follow from the adoption of this plan. With regard to hospitals, he says that there was considerable spread of small-pox from two of them, which are each situated in populous districts; concerning the third hospital, which is several hundred yards from any dwelling, no cases of small-pox have occurred near it, although upwards of 600 patients have been treated in it. Dr. Hope does not enter into detail as to the exact distribution of the cases surrounding the hospitals. We would commend the subject to him as well worthy of the closest investigation. His own opinion is that a space of three or four hundred yards between the hospital and the nearest inhabited street is sufficient, but it is quite possible he might modify this opinion if the incidence of the disease were studied on the same lines as was that of small-pox round the Fulham Hospital by Mr. W. H. Power. The small-pox statistics which illustrate the paper teach the same lesson as those of other hospitals for this malady.

OUR MILITARY PRISONS.

THE report of the Inspector-General of Military Prisons for 1885 is characterised, like its predecessors, by the very small amount of information it affords respecting the health of the prisoners. In one of the tables appended to the report the number of hospital cases which occurred in each of the prisons is given; but no reference is made to the deaths, if there were any, or to cases sent from prison to the Station Hospital. In another table eleven men, five at home and six abroad, are returned as "disposed of" for causes unspecified, but whether any of them died is left to conjecture. Nor do we find any information deserving the name in the few brief extracts from the reports of the medical officers of the home prisons, except from Gosport, in which it is stated that "the use in the prison of water from the Gosport Water-works Company for cooking and drinking purposes, in place of that from the well in the yard, has been followed by the most satisfactory results as regards the prevalence of bowel complaints among the prisoners. Diarrhœa, which formerly was frequent, is now of rare occurrence." The proportion of hospital cases in the various prisons at home ranged between 80 per 1000 in Limerick and 477 in Cork; in the English prisons, the highest ratio was 274 per 1000 in Brixton, and the lowest 90 in Chester. These differences, though by no means so great as those shown in previous reports, are still sufficiently marked to deserve an inquiry into the causes upon which they depend. In the military prisons abroad they are even more striking than at home, for the cases range between 133 per 1000 in Bermuda and 1772 in Halifax, N.S. A return of the diseases which came under treatment would be interesting, and might possibly furnish a clue to the causes of this marked difference. At Alexandria the cases amounted to 455 per 1000, but this high ratio was the result of local insanitary conditions. The medical officer states that "owing to the excessive number of fever cases which occurred during the early part of 1885, the building underwent a complete sanitary organisation; the old and foul latrines, with their choked-up pipes and ancient cesspits, were completely removed from the interior, and the dry-earth system substituted in the adjoining yard. Also the water arrangements, which were found to communicate with the above pipes, were set right. The cells and corridors were better ventilated and better lighted. ..... Average number of sick less than half what it was before the above recommendations were carried out." The number of committals to military prisons from the army at home amounted in 1885 to 7018, being in the ratio of 7·8 per cent. of the strength. In proportion to the numbers serving of each nationality, the Irish furnished 12·9, the Scotch 10·4, the English 6·4, and foreigners 4·7 per cent. It is to be regretted that little progress has been made in providing suitable industrial employment for the soldiers in military prisons. In conclusion, we must express our disappointment that the information given in the Inspector-General's report regarding the health of the military prisoners should still continue to be so meagre and unsatisfactory.

RUPTURE OF THE BLADDER.

IN THE LANCET of Oct. 2nd, p. 634, we mentioned the case of a labouring man who had been successfully treated for intra-peritoneal rupture of the bladder by abdominal section and suturing of the wound. Another patient has also been operated on by the same surgeon, Sir William Mac Cormac, in St. Thomas's Hospital, and with an equally satisfactory result. Although we hope to publish shortly a full account of these two cases, still it will be interesting to our readers to learn some of the main facts about this second patient. He was a stout, healthy man aged thirty-six weighing about fifteen stones, and the injury was caused by a fall of nineteen feet from a scaffold on some soft clay; he alighted in a sitting position. The man had passed urine about an hour before the fall, but none was afterwards voided until relief was obtained by catheter on admission to the hospital a day later. The symptoms were, briefly, abdominal pain and tenderness, chiefly in the hypogastric region, general slight distension of the abdomen with evidence of fluid in the peritoneal cavity, a slight amount of urine of a muddy, smoky appearance found in the bladder when the catheter was passed, and a history of ineffectual attempts at micturition. There was a bruise over the left ilium, the patient looked anxious, had a quick pulse, and complained of nausea. At the operation, which was performed about twenty-seven hours after the accident, a rent of an inch and a half in length was found near the upper part of the posterior surface of the bladder, the peritoneal wound being larger than that of the mucous membrane. Twelve interrupted silk sutures were used. All the urine was washed out of the peritoneal cavity with boracic acid solution, and the wound closed without the insertion of a drainage-tube. There was dribbling of urine for a day after the operation; it then became offensive, and was passed frequently with scalding pain. The temperature on the 18th rose to 101·4°, but has been normal since the 20th; on the 21st the urine was clear; on the 23rd the bowels acted naturally; all the sutures were removed on the 24th, when the wound had healed, and the condition of the patient was most satisfactory.

THE INUNDATIONS IN FRANCE.

THE inundations in the south of France have not only caused heavy loss by the destruction of life and property, but serious epidemics may ensue if energetic precautions are not adopted at once. Fortunately M. Lockroy, the Minister of Commerce and Industry, seems to have acted with due promptitude. He has called upon the prefects and mayors of all the districts affected to create a special medical service. The local councils of hygiene were also to be convoked to take extraordinary measures suited to their particular neighbourhood. The general instructions issued are carefully framed, and would doubtless prove effective if rigorously applied. According to these official instructions, the inhabitants must not be allowed to return to their houses till these have been cleansed. A trench should be dug round each house, so as to facilitate the draining away of the water; all the doors and windows must be opened; and wherever organic matter has been deposited within dwellings

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by the waters of the flood, the walls, floors, &c., must be scrubbed with a disinfectant; a 5 per cent. solution of sulphate of copper is recommended for this purpose. The walls must be well scraped, and all adhering matter removed. Bedding which has been immersed must, if possible, be destroyed. All well water must be treated as contaminated if near to manure-heaps or cesspits. The bodies of drowned cattle must be buried at once and well covered with quick-lime. Fodder that has been damaged by the floods should either be destroyed or used only for manure. Further orders have been issued forbidding the men employed in such works to commence their labours till an hour after sunrise, or to remain on the spot after sunset. They should also be dressed in woollen materials, never work without first taking food, and the consumption of black coffee should be encouraged. As far as possible the men should be frequently relieved, and made to rest on some elevated spot to the windward of the inundated district. We have not suffered from floods in England to the same extent as have the inhabitants of France, but similar precautions would be useful at home if occasion required. Their application would be on a smaller scale, but none the less beneficial, and we congratulate the French authorities on the wise forethought they have displayed under the present trying circumstances.

CHOLERA IN JAPAN.

Some history of cholera in Japan has recently been published by the Director of the Sanitary Bureau for the empire. According to this authority cholera is known to have appeared in Japan in 1822, commencing at Nagasaki, the only port then open to foreign commerce; and at the same time the disease is known to have prevailed in China. Another epidemic took place in 1858, but no statistical information is available as to either of these outbreaks. But since the empire has been freely open to foreign vessels cholera has been much more frequent. It entered in 1876, and in 1877 it caused 7967 deaths. The next epidemic was in 1879, when 105,786 fatal attacks were recorded. After this there was a cessation until 1885, during the course of which 7152 deaths occurred; and, as we have from time to time noted, the disease has extended into the present year. Cholera is admitted to be, in Japan as elsewhere, generally associated with the prevalence of local filth, and great efforts are being made by the Sanitary Bureau to effect improvements in this respect. Cleanliness, coupled with certain limited quarantine restrictions and the removal of the sick to hospital, are the main remedies relied on.

THE LIMITATION OF INFECTION.

AT its meeting last week, the Society of Medical Officers of Health had under consideration two subjects which specially concern the inhabitants of the metropolis—viz., the disinfection of street cabs, and the desirability of contract between the local sanitary authorities and the Metropolitan Asylums Board for the admission into the Board's hospitals of persons suffering from infectious disease and who are not paupers. On the first point the Society readily adopted a resolution to the effect that street cabs which had conveyed cases of dangerous infectious disease should be disinfected by the sanitary authorities without charge; but as to the manner of disinfection there was some difference of opinion. Finally, however, the Society, guided by its president, Dr. Alfred Hill, determined to recommend the use of chlorine. On the second point there was little discussion, the Society being practically unanimous that the adoption of the managers' proposal that the vestries and district boards should contract with them would create serious administrative difficulties. The question, it was feared, would constantly arise as to whether the individual suffering from infectious disease, and whose removal to hospital was sought, was a pauper or not, and as a result he would be bandied from one authority to the other, thus giving rise to serious delay before that removal to hospital would be effected. The obvious course, the Society thought, was that every patient whose disease was certified by a medical practitioner should be removed on the order of the medical officer of health as well as on that of the relieving officer, leaving the charges incurred to fall upon the common poor fund. This irregular method has already been in force in some districts and has worked exceedingly well, and there is no doubt the managers will be aiding in the work of preventing infectious disease if they do not insist too closely on the enforcement of legal requirements. The rest of the evening was devoted to a discussion of papers by Dr. Willoughby on School Lighting and Mr. Mark Judge on the Sanitary Registration of Buildings Bill.

PUBLIC ANALYSIS IN PADDINGTON.

MR. ALF. W. STOKES, the Public Analyst for Paddington gives in his quarterly report some interesting facts about druggists, and the way they do their work. He seems also to be anxious to have the run of all the private surgeries. He estimates that in London there are 4600 medical practitioners, many of whom dispense their own medicines, and from whom inspectors cannot procure samples for analysis. He admits that, to the honour of the medical profession, mistakes in dispensing are rare, though occasionally dispensers are untrained, and he avers that occasionally an advertisement for the country districts may be seen, "Wanted, a Coachman who can Dispense." Certainly his account of the dispensing by druggists is satisfactory. In no case did he find any ingredient omitted, or one drug substituted for another. Variations in weight of the drugs prescribed were unimportant—the greatest difference being one grain in excess of iodide of potassium, a substance difficult to weigh accurately from its tendency to absorb moisture. Mr. Stokes gives a valuable hint against using tinned meats after the first day of opening them. In one case, brought under his notice by Dr. Danford Thomas, the coroner, death followed the eating of a somewhat stale sample of tinned lobster.

REVISION OF THE MEDICAL CURRICULUM AT MELBOURNE UNIVERSITY.

AT a recent meeting of the Senate of the University of Melbourne, certain alterations in the curriculum proposed by the Medical Faculty were received and referred for report to a Committee of the Senate. The changes proposed are of an important character, and if carried into effect will considerably raise the standard of the Melbourne degree. It is necessary that the curriculum should be recognised by the General Medical Council in England. The first proposal is to substitute, in the student's first year, lectures on elementary biology with practical work thrice a week during three terms, instead of structural and physiological botany, and comparative anatomy and zoology. In the first examination it is proposed to examine students in French and German, in addition to the subjects upon which they have been attending lectures, but, seeing that what was demanded was a knowledge of medical literature of these countries, we cannot but agree with Professor Allen as to the undesirability of such an innovation, which would be found impracticable. It appears that at the matriculation Greek and Latin are compulsory, and it would be better to make one or other of these subjects optional, to be replaced by a modern language, than overburden the student in his scientific course with the study of literature. In the second year therapeutics is to be made more elementary, and a first course of dissections is to be compulsory. Advanced thera-

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peutics is to be specially taught in the fourth year—an alteration which might well be made in the medical curriculum of the mother country. Obstetric medicine and the diseases of women and children have been taken from the fourth and placed in the fifth year. The final examination will be made more thorough and wide. It is to include medicine, surgery, obstetric medicine and the diseases of women and children, forensic medicine, and the elements of insanity. It is also to be more practical, especially as regards the surgical part of the examination, for heretofore the candidate was simply required to produce a certificate from a surgeon showing that he had a knowledge of the uses and application of instruments and appliances. Hospital practice and teaching is to commence in the second year, so that the student may have two full years of surgery and two of medicine, instead of, as by the previous arrangement, being allowed three years in all for both subjects. Only senior students are to act as dressers, and there is to be a compulsory course of operations on the dead subject and on vaccination—subjects which have been made compulsory for the first time.

A CORONER CONDEMNS MEDICAL CLUBS.

AT a recent inquest at Birmingham, the borough coroner made some unfavourable remarks about the way in which the poor were served who joined medical clubs, on the strength of what happened in the particular case. Here a poor woman, who was a member of the London and Manchester Industrial Insurance Society, sent for the surgeon, Mr. Kenny, at five o'clock in the evening, who could not promise to see her before the morning. Unfortunately she died the same night, and before a surgeon who had been called could see her; he gave as his opinion that if a medical man had seen her at five o'clock she might have been relieved. We regret that the deceased was not seen; but, as we have often pointed out, these industrial associations often expect the impossible of their medical officers, and then pay very little for it. We must blame the associations, and not their unfortunate officers. But, on the other hand, we must not blame all forms of provident medical clubs, where the work is reasonable in amount and is adequately remunerated.

SURGEON-GENERAL W. C. MACLEAN, M.D., C.B.

ON Saturday last (20th inst.) the interesting ceremony of presenting to Mrs. Maclean the *replica* of the original portrait of Surgeon-General W. C. Maclean, M.D., C.B., late Professor of Medicine in the Army Medical School, took place at Dr. Maclean's residence in Southampton. A deputation consisting of twelve subscribers to the Testimonial Fand, headed by Surgeon-General W. S. Murray, Principal Medical Officer at Netley, waited on Mrs. Maclean, and, the deputation having been introduced by the honorary secretary to the Testimonial Committee, the duty of presenting the *replica* was performed in a felicitous speech by Dr. Murray, which was responded to by Mrs. Maclean, who afterwards entertained the company to the number of eighteen at luncheon. On the following Monday the original portrait of Dr. Maclean was presented to the Army Medical Staff Mess at Netley by the honorary secretary to the Testimonial Committee in the name of the Committee, representing subscribers from the Army, Navy, and Indian Medical Services. A large number of ladies and gentlemen who were assembled to witness the presentation were, after the conclusion of the ceremony, entertained at luncheon in the mess-room by Surgeon-General Murray and the officers of the medical staff. The portrait, a three-quarter length by Mr. W. R. Symonds, is an admirable likeness, and in the opinion of spectators does credit to the accomplished artist, who also painted the portrait of the late Sir William Muir, to which it forms an excellent pendant. Surgeon-General and Mrs. Maclean were present, and were warmly congratulated by the numerous friends invited to meet them. The project of a testimonial to Professor Maclean on his retirement after long and honourable connexion with the Army Medical School was only started about eighteen months ago, but was so heartily responded to that within this short time it has been most happily carried out. This portrait will long adorn the walls of the Medical Staff Mess, and be handed down as a heirloom to future generations of medical officers, who, although no longer stirred by the eloquence of the first Professor of Medicine at Netley to go forth with confidence to engage in the contest with disease in tropical climes, will still have the privilege of availing themselves of the valuable results of his experience stored up in his published works.

THE LIABILITY OF FRIENDLY SOCIETIES FOR EXTRA MEDICAL ASSISTANCE.

AN important question for friendly societies is under consideration at Nottingham. The question is this. When a medical officer of a friendly society sends for another doctor, is the latter entitled to claim his fee from the society? The judge in the case at Nottingham County Court has given an opinion in favour of Dr. Collins, who was sent for by Mr. O'Mullane to operate in a case of hernia. According to one witness, the committee had the power to decide in such cases, as to whether the second doctor should be paid. According to another, a patient is entitled to have two doctors of the institution if necessary, and both Dr. Collins and Mr. O'Mullane were officers of the Friendly Societies Medical Institute, of which the patient was a member. We trust sincerely that the judge's ruling will be sustained. The case was one of life or death, and friendly societies should be liberal with medical men in such cases.

CUTANEOUS REFLEX EPILEPSY.

THE remarkable case of epilepsy read before the Medical Society of London by Dr. Hughlings Jackson, and an abstract of which may be found in our columns last week, calls for special consideration. When Dr. Hughlings Jackson, with an experience of such long duration and wide extent in neurology, confesses that he has never seen another case of the kind, the profession will understand that there is something of an altogether unusual character in the case related. To put the matter in a nutshell, it would seem that the case is an almost exact parallel to the epileptic guinea-pigs of Brown-Séquard. In the guinea-pig there is an organic lesion of some part of the nervous system, either induced by a hemisection of the spinal cord or by an injury to the sciatic nerve. In the boy whose case Dr. Jackson related there was persistent left hemiplegia, not absolute, but sufficiently obvious, and, like children's cerebral hemiplegia, associated with diminished growth of the weak and imperfectly used limbs. In the guinea-pig there is an epileptogenous zone, usually limited to one side of the head, and best defined about the angle of the jaw and behind the angle of the eye. In the boy the epileptogenous zone was apparently coextensive with the head and face; it was doubtful whether the one side was more efficient than the other in provoking a fit. The slightest excitation of this epileptogenous area was sufficient to make the boy fall down, with stoppage of respiration and conjugate deviation of both eyes, usually towards the right side. The nervous discharges, Dr. Jackson thought, took place from the grey matter of the pons Varolii and medulla oblongata. He is of opinion that in all cases of epilepsy there is an epileptogenous area situate at some internal or external peripheral surface of the body—that disturbance of the part of the periphery

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most especially represented in the "discharging lesion" may provoke a fit. On this luminous theory we may suppose that an epileptic, whose aura is always referred to the gastric distribution of the vagus, may have a fit evoked by gastric derangement, however originated. Clinical experience with us teaches that gastro-enteric disturbances are, if not provocative of a larger number of fits in an epileptic, at all events related in some close and intimate way to an increased frequency and severity of epilepsy. A therapeutical argument may also point the same way, for it is the common experience that some simple medicines directed towards the amelioration of the abdominal organs (such as a mixture of rhubarb and soda) will lessen the number and abate the severity of epileptic attacks. Another interesting feature in the case consists in the fact that if the boy knows that his epileptogenous area is about to be touched the "fit" or "fall" does not occur.

NAVAL MEDICAL SERVICE.

IN an article on "The Royal Navy from the Accession of Her Majesty the Queen," in the *Army and Navy Magazine* for November, Mr. O'Byrne gives a summary of the changes which have been introduced into the medical branch of the service during the last fifty years. From this paper it would appear that during the period included there were no fewer than seven Orders in Council issued regulating the pay, allowances, rank, and retirement of the department generally, besides nine minor ones affecting only certain grades. The Orders in 1855 and 1865 were issued "in consequence of the great and increasing difficulty of obtaining properly qualified medical officers," and some of the others were for the purpose of assimilating the position of the naval with the army surgeon. The paper may be interesting to the past and present medical officers as a brief record of the changes which have taken place in their days, and to intending candidates for the service as affording information regarding the status, pay, rewards, and retirement to which they may look forward in the event of their gaining admission to it.

THE BEAUMONT TRUST.

AT a meeting of the trustees on the 23rd inst. the following resolutions were passed:—"That the Beaumont trustees will not apply for a licence for the sale of intoxicating liquors," and "That on completion of the People's Palace the trustees will open the library and reading-rooms, the swimming-baths, and the grounds of the institution during certain hours on Sundays." This decision must meet with general approval, and it is, we are convinced, in thorough accord with the terms and spirit of the Trust. Without doubt the trustees will meet with opposition in the course they have marked out for themselves, but adherence to their resolutions will gain for them the sympathy and support of all who have at heart the alleviation of the condition of East-end toilers.

INTEMPERATE TEETOTALERS.

THE "Benjamin Hatfield" Lodge of the Original Grand Order of Total Abstinent Sons of the Phœnix appeared to a summons in the Westminister Police-court for withholding £5 from the funeral fund of the lodge, due to the father of a deceased member, named George. The authorities of the lodge refused the money because the deceased, at the instance of his doctor, had taken some port wine, which they alleged was contrary to his undertaking to abstain. The magistrate asked one or two questions which show how shocked he was at the action of some societies. "Was the deceased," he asked, "to abstain perhaps at the cost of his life?" Surely not. "Surely," said Mr. Partridge, "a doctor could order what physic he thought best." How innocent in Mr. Partridge to think so, when every week supplies an illustration of the fact that a certain set of teetotalers think that they know more of disease and of the remedies for it than those who devote their lives to the study. The case was not settled by Mr. Partridge, but the defendants agreed to consent to the jurisdiction of the County Court which they had previously repudiated. Such tactics do not advance the cause of true temperance.

THE PERILS OF FOOTBALL.

ANOTHER fatal football accident is recorded. William Colsey, aged twenty-two years, died at Oldbury, on Sunday, from the effects of injuries sustained the previous day whilst playing in a football match between the Langley-green Victoria Club and the Kidderminster Harriers. During a match at Burslem between the Burslem and Bootle teams, A. Simpson came into collision with one of his opponents and had his leg fractured in two places. At Glasgow, on Saturday, Claud Lambie, of the Clyde club, was seriously injured, and at first reported to have succumbed to his injuries, but we are glad to hear this contradicted and that he is on a fair way to recovery. At Stoke-upon-Trent on Monday, during the progress of a football match in which the Stoke and Aston Villa Clubs were engaged, Yates, a member of the latter club, came into violent contact with a player on his own side and fractured his shoulder-blade. At Grantham, on Tuesday, a compositor named Fulbeck, while playing at football, fell and fractured his leg in two places. The game is still only too well described by an old writer as "Footeballe, wherein is nothing but beastlie furie and extreme violence, whereof procedeth hurte." Something will have to be done, and that before long. English monarchs have ere now prohibited and protested against football. It will surely not be necessary in the fiftieth year of the reign of Her Majesty Queen Victoria to suggest repressive measures. The method of playing was not always so rough as that now in vogue. We can endorse the following testimony borne by the writer of an article on sport in a contemporary:—

"Week by week accidents in the football field become more serious and frequent. Without doubt most of the worst are the result of pure accident; but it is quite certain that a proportion of all accidents are the result either of indifference to other players' safety or something much worse. Old footballers who have by chance not assisted as spectators at a match for some years, are almost always struck, when they do renew acquaintance with the pastime, with the unnecessary roughness now practised. All players know that to play the game either according to Rugby Union or Association rules considerable risk must be run. This, in great measure, used to be neutralised by sportsmanlike understanding among the opponents. Nowadays, especially in the Association game, a good deal of the damage is virtually malicious. One of the worst practices allowed is charging a player not on the ball; that accounts for many accidents, and is altogether against the spirit of the game."

Football is too good a pastime to be "ended"; but it is imperative that it be "mended."

THE BROWN INSTITUTION.

PROFESSOR VICTOR HORSLEY, F.R.S., will deliver the annual course of "Brown" Lectures on Dec. 1st, 3rd, 6th, 8th, and 10th, respectively, in the theatre of the University of London, Burlington-gardens, commencing each day at 5 P.M. precisely. The subject of the first two lectures will be the "Pathology of the Thyroid Gland," that of the remaining three being "Epilepsy, the Theories of its Pathology, and Experimental Researches bearing on the same."

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MEDICAL MEN AS CONFESSORS.

THE question of confidence between patient and medical adviser has been again raised, and has been under discussion in the columns of a clerical contemporary, *à propos* the relations between priests (Roman or Anglican) and those who accept them as spiritual directors. We do not think the two functions, that of spiritual and that of medical adviser, are comparable. It is the privilege of our profession to deal with ascertained facts—pathological, physiological, or psychological. We do not of course mean to imply that the subject matters of belief among religionists are not verities. It is outside our province to determine whether they are or not. Towards the peculiar tenets of the various sects the only legitimate position of the scientist as such is agnostic. Meanwhile, all that lies within *our* province is fact, and this we can treat as the data of a profession which is—or ought to be—strictly logical and rational in its aims and influences. We do not think priests should allow themselves to wander beyond the limits of the unknown. Their function is wholly spiritual, and they ought not to deal with the known and material except in so far as it may directly relate to what they conceive to be spiritual. It is neither expedient nor safe for those who are not thoroughly versed in a subject to treat it practically. Morals properly so called are practically outside the ken of the priest in proportion as they are, in a complementary sense, within the province of the physician. Let them leave the physiological moral of life to us. In touching it they play with edged tools, and no wonder if they wound themselves and the sensibilities of their more intelligent friends and disciples.

THE RESULT OF THE SCOTTISH ELECTION.

IT is very satisfactory to us to notice the defeat of the attempt to seize the new seat for Scotland for the Faculty of Glasgow—an attempt which we do not like to characterise. Dr. Bruce of Dingwall has been returned by a good majority. He will have a long way to travel to meetings of the Council, but he is well known and much respected as a practitioner in the extreme north of Scotland, as well as in connexion with the subject of medical education. These are the kind of men that should fill the new seats. We regret that Dr. Sinclair of Dundee should be disappointed, but he will rejoice with us in the election of Dr. Bruce. The numbers of votes were as follows:—Bruce, 661; Morton, 610; Sinclair, 444.

THE ASSOCIATION OF GENERAL PRACTITIONERS.

WE have received a proof of the prospectus of this Association. Its objects are "to advance the interests, support the rights, and promote the welfare of the general practitioner; and especially also to obtain for him a voice in the management of his own affairs upon the various legislative councils of the profession." The names of the officers and council will be found in a letter from the hon. secretaries published on another page.

HYDROFLUORIC ACID IN TUBERCULOSIS.

DR. SEILER has treated tuberculous patients by means of inhalations of hydrofluoric acid. The acid was inhaled once a day for the space of one hour. The process consists of passing the air that is to be breathed through the mixture of acid and water contained in a gutta-percha bottle by means of a pair of bellows. One hundred and fifty grammes of water and fifty of the acid are the proportions of materials contained in the bottle through which the air is forced. The air charged with the vapours of the acid is ejected into the atmosphere of the chamber wherein the patients are sitting. The proportion of vapour is said to be ten litres per cubic metre of space. It is said that the shortness of breath has been relieved after from one to ten sittings; the paroxysms of coughing have been altered in character, so that they become less distressing and of much shorter duration; night sweats disappear after the sittings have extended to fifteen in number; the expectoration is modified; the appetite is regained when previously lost; the weight of the body is increased; the organic and functional derangements of the respiratory passages diminish slowly, it is true, but the amelioration is nevertheless indubitable.

THE ELECTION IN IRELAND.

THE result of the scrutiny of votes for the Irish seat on the General Medical Council had not at the time of our going to press been made known. It was understood, however, that Dr. Kidd's position on the poll was considerably in advance of that of either of his opponents. We are informed that many voting papers were rendered invalid by want of proper care in filling them up; some, for example, having no signature attached to them; others being destitute of the initials of the voter opposite the name of the candidate it was desired to support.

TYPHOID FEVER AT MESSING.

THE sanitary state of the villages of Messing and Tiptree in Essex, is to be brought under the notice of the Local Government Board. In Tiptree diphtheria prevailed last year. But a somewhat serious outbreak of typhoid fever is now prevailing at Messing, and part of it at least is associated with the use of polluted water. The sanitary defects of Messing seem to be very obvious, including nuisances from drains, excreta, and piggeries, besides polluted water. There seems no case for special inquiry when such conditions are well known to exist, and unless the inhabitants wish to make definite complaint of default on the part of the authority, their best plan would be to return as their members such guardians as would secure the needed improvements by the rural sanitary authority.

THE VACANT CORONERSHIP.

PENDING the appointment of a coroner for East Middlesex in place of the late Sir John Humphreys, Dr. Danford Thomas, the coroner for North Middlesex, will undertake the duties of the office. The names of Dr. M'Donald, M.P., Dr. Forbes Winslow, Mr. George Collier, Mr. Wynne Baxter, and Mr. George Hay Young, are announced as candidates for the vacant post.

CHOLERA IN ITALY.

THE prevalence of cholera in Italy as an epidemic is now regarded as at an end. Even in Genoa, whence the latest extension was reported, the disease is rapidly abating. A statistical report recently published in Rome shows that up to the present date the recorded attacks in different parts of the kingdom during 1886 have amounted to 48,000, of which nearly half terminated fatally.

AT the meeting of the Metropolitan Counties Branch of the British Medical Association, to be held at the Jermyn-street School of Mines on Friday evening next, resolutions will be moved protesting against the exclusion of the Apothecaries' Society from the Conjoint Board, and the creation thereby of a new class of competing general practitioners owing no allegiance to the two Colleges. Further resolutions will claim for the Members of the College of Surgeons and the Members and Licentiates of the College of Physicians the right henceforth to a voice in the administration of the Colleges so far as it affects their professional rights and interests.

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AT the last meeting of the Liverpool City Council a letter from the Local Government Board was read, in which several alterations in the plans for proposed hospital for infectious diseases were suggested. The committee made known their willingness to meet, as far as possible, these suggestions, and expressed the hope that the Local Government Board would give their immediate consent to the corporation borrowing £15,000 to enable them to proceed at once with the work.

ON the 18th inst., at a meeting of the Northwich Local Board, the medical officer of health reported that, in regard to infant mortality, Northwich compared unfavourably even with Salford. Of the actual death-rate, 46 per cent. were infants under one year of age. This infant mortality indicates the existence of conditions calling for every kind of remedial influence.

AT the Oxford Assizes last week, Mr. Boughton, a medical man, was acquitted of the charge of having criminally assaulted a married woman who had come to his house to request him to visit her husband. We congratulate our *confrère* on successfully proving his innocence of the accusation made against him.

LETTERS received on the 23rd inst. from the West Coast of Africa state that Her Majesty's ship *Racer*, which is now on that station, had been visited by a serious outbreak of fever amongst her officers and crew, no less than twenty-five, amongst whom was the doctor, being attacked, some of them seriously.

THE death is announced of Dr. Albert Burckhardt-Merian, Professor of Otology in the University of Bale. The deceased, who was only forty-four years of age, had for a long time suffered from a painful malady.

DR. D. FRANCISCO TORRALBAS Y MANRESA has been appointed to fill the vacancy in the Supreme Sanitary Council of Cuba, caused by the death of Professor Vargas Machucha.

THE death is announced of Dr. D. Pedro Martinez Sanchez, formerly professor in the Medical Faculty of the University of Habana.

THE Russian Order of St. Stanislaus (1st Class) has been conferred on Professor Leyden of Berlin.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Chelsea.—Dr. Seaton's annual reports to the vestry of Chelsea bid fair to constitute an interesting chapter in the history of the health of the metropolis, dealing as they do with important matters affecting the community as a whole, in addition to constituting a record of health in the parish primarily concerned. During 1885 the birth-rate of Chelsea was 34·6 per 1000, and the death-rate 21·7. Under five years of age the mortality is seen to be about the same as that of the English Life Table, whereas in some provincial towns the rates for the same period of life are in excess of that in the Table by as much as from 15 to 20 in the 1000. The causes of this excessive rate in the textile manufacturing districts are stated to arise, in the main, from the deplorable maternal neglect of infants. Diphtheria produces a large amount of death in Chelsea, and we fancy Dr. Seaton goes a little beyond the lines which should limit him by enforcing his conclusion that defective house-drainage has very little to do with the production of the disease. It is true, as he says, that the disease is more fatal in country districts than in towns, whereas drain nuisances are more common in the latter; and we do not doubt the fact, recently reported by a Government inspector, that in Tottenham less than 20 per cent. of the houses affected by this disease had any definite sanitary defects. But this hardly justifies the belief "that defective house drainage and diphtheria cannot be said to stand in the relation of cause and effect." The fact is that diphtheria, once prevalent, tends to spread, in the main, by means of personal infection, and hence in by far the majority of cases the question of house sanitation becomes a secondary one as regards causation, when once the infection has been set on foot; but the earliest attacks are, we believe, often associated with defective sanitary circumstances, and it appears to be the very existence of such circumstances that often determines the question whether a given sore-throat shall remain a simple one, or shall put on those characters, including infectiveness, that specialise diphtheria. In the latter part of his report, Dr. Seaton enters at considerable length into the question of the special fatality of small-pox in the metropolis as compared with the provinces, and he publishes some interesting statistics showing how large the incidence of that mortality is on London. He is evidently desirous of impressing on his readers the fact that, in the matter of small-pox in London, measures of prevention do not take the same high rank as they would in a provincial town, and he refers to the so-called "success" of the Metropolitan Asylums Board, which means that they have managed to receive into their hospitals great numbers of the sick, whereas provincial sanitary authorities, aiming above all things at prevention, would only regard their action as successful when they had been able by the several means adopted—including isolation—to prevent the occurrence of large number of cases. When we remember that in London the guardians of the poor see to vaccination and revaccination, the vestry look after the disinfection of the affected premises and clothing, and the Metropolitan Asylums Board have to isolate the patients, the wonder is that we manage as well as we do. Dr. Seaton in this portion of his report suggests as a suitable question for discussion—"Since the establishment of the present system of so-called 'isolation' and treatment of small-pox in hospitals established by the metropolitan poor authority, has small-pox diminished or increased in London?" Here he touches the kernel of the matter he has been discussing. We have often contended that the answer is to the effect that there has been an increase, and we believe that the points of difficulty involved in the question cannot be much longer shelved.

Hampstead.—According to Dr. Gwynn's report, the year 1885 exhibited the lowest death-rate but one that is on record in St. John's, Hampstead—namely, a rate of 11·5 per 1000. Scarlet fever caused some mortality in the district, the outbreak being due to the infection of milk in connexion with the Marylebone outbreak, which was investigated by Mr. Power and Dr. Klein. The epidemic of small-pox in the metropolis, which ceased in the latter half of last year, mainly affected Hampstead between May, 1884, and July, 1885. During the latter year 59 cases were recorded in Hampstead. The area within a quarter of a mile of Hampstead Hospital contributed 18 cases, between a quarter of a mile and half a mile there were 3 cases, and between half a mile and a mile there were 18 cases. In July, 1885, the managers of the Asylums Board, apparently recognising the danger which the metropolitan hospitals constituted, resolved on moving cases direct to the hospital ships at Long Reach. The Hampstead Hospital was then closed, and this step is reported to have been associated with the termination of the epidemic in Hampstead. The Housing of the Working Classes Act, 1885, in so far as it brings tents, vans, &c., used by gipsies and others under inspection and sanitary control, has been found to be very useful in dealing with an encampment near Platt's-lane. A Ransome disinfecting stove, which was erected some time back, has unfortunately been destroyed by fire. The stove is fitted with an apparatus intended to work automatically, which shall prevent excessive heat, and even extinguish a fire which may commence. It appears to have failed, and the apparatus has now been replaced by a Washington Lyon's high-pressure steam disinfector. We may note that whenever hot air is used as a means of disinfection it is important to turn all pockets inside out, for there is reason to believe that when fires have occurred during the process, this has been due to lucifer matches being left in some coat pocket.

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VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns 6098 births and 3329 deaths were registered during the week ending Nov. 20th. The annual death-rate in these towns, which had been 18·2 and 19·5 per 1000 in the preceding two weeks, declined again last week to 19·1. During the first seven weeks of the current quarter the death-rate in these towns averaged 19·0 per 1000, and was 2·2 below the mean rate in the corresponding periods of the ten years 1876-85. The lowest rates in these towns last week were 13·8 in Portsmouth, 14·3 in Brighton, 15·9 in Birmingham, and 16·8 in Nottingham. The rates in the other towns ranged upwards to 24·9 in Bolton, 26·4 in Blackburn, 27·1 in Leeds, and 27·8 in Norwich. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had been 368 and 411 in the preceding two weeks, declined again last week to 402; they included 103 from measles, 95 from scarlet fever, 62 from diarrhœa, 54 from "fever," 49 from whooping-cough, 39 from diphtheria, and not one from small-pox. The lowest death-rates from these zymotic diseases were recorded last week in Nottingham, Bolton, Birkenhead, and Cardiff; while the highest rates occurred in Blackburn, Leeds, and Wolverhampton. The greatest mortality from measles occurred in Leeds, Halifax, and Wolverhampton; from scarlet fever, in Bristol, Hull, Salford, and Blackburn; from "fever," in Blackburn; and from whooping-cough, in Huddersfield and Sunderland. The 39 deaths from diphtheria in the twenty-eight towns included 26 in London, 3 in Portsmouth, 3 in Liverpool, and 3 in Manchester. Small-pox caused no death in London and its outer ring, or in any of the twenty-seven large provincial towns. Only 2 cases of small-pox were under treatment on Saturday last in the metropolitan hospitals receiving cases of this disease. The deaths referred to diseases of the respiratory organs in London, which had been 293 and 321 in the preceding two weeks, further rose last week to 346, but were 104 below the corrected average. The causes of 75, or 2·1 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Leicester, Blackburn, and in five other smaller towns. The largest proportions of uncertified deaths were registered in Sheffield, Bolton, Oldham, and Sunderland.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 22·1 and 20·1 per 1000 in the preceding two weeks, rose again to 21·4 in the week ending Nov. 20th; this rate was 2·3 above the mean rate during the same week in the twenty-eight large English towns. The rates in the Scotch towns last week ranged from 13·2 in Greenock and 15·5 in Leith, to 23·7 in Glasgow and 27·8 in Paisley. The 529 deaths in the eight towns last week showed an increase of 32 upon the number in the previous week, and included 24 which were referred to scarlet fever, 19 to diarrhœa, 19 to whooping-cough, 6 to "fever" (typhus, enteric, or simple), 5 to diphtheria, 4 to measles, and not one to small-pox; in all, 77 deaths resulted from these principal zymotic diseases, against 73 and 81 in the preceding two weeks. These 77 deaths were equal to an annual rate of 3·1 per 1000, which was 0·8 above the mean rate from the same diseases in the twenty-eight English towns. The fatal cases of scarlet fever, which had been 24, 16, and 23 in the previous three weeks, rose again last week to 24, of which 16 occurred in Glasgow, 2 in Edinburgh, 2 in Dundee, 2 in Aberdeen, and 2 in Paisley. The 19 deaths attributed to diarrhœa showed a decline of 2 from the number returned in each of the preceding two weeks, and included 6 in Glasgow, 5 in Dundee, and 3 in Edinburgh. The deaths from whooping-cough, which had been 15 and 17 in the previous two weeks, further rose last week to 19, of which 17 occurred in Glasgow. The fatal cases of "fever" and of diphtheria were fewer than the number in the previous week; 3 of "fever" occurred in Glasgow and 2 of diphtheria in Edinburgh. Three of the 4 deaths from measles were returned in Aberdeen. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had increased in the preceding four weeks from 79 to 123, further rose last week to 137, but were 4 below the number in the corresponding week of last year. The causes of 75, or more than 14 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been 26·2 and 23·6 per 1000 in the preceding two weeks, rose again to 24·5 in the week ending Nov. 20th. During the first seven weeks of the current quarter the death-rate in the city averaged 23·2; the mean rate during the same period was 17·2 in London and 18·9 in Edinburgh. The 166 deaths in Dublin last week showed an increase of 6 upon the number in the previous week, and included 10 which were referred to scarlet fever, 4 to diarrhœa, 3 to "fever," (typhus, enteric, or simple), 2 to whooping-cough, 1 to diphtheria, and not one either to small-pox or measles. Thus 20 deaths resulted from these principal zymotic diseases, showing a further decline from the 32 and 23 returned in the previous two weeks; they were equal to an annual rate of 3·0 per 1000, the rates from the same diseases last week being but 1·9 in London and 1·6 in Edinburgh. The fatal cases of scarlet fever, which had been 10, 8, and 15 in the preceding three weeks, declined again last week to 10. The deaths from diarrhœa showed an increase of one, while those of "fever" and whooping-cough corresponded with the numbers in the previous week. Three inquest cases and six deaths from violence were registered; and 56, or more than a third, of the deaths occurred in public institutions. The deaths both of infants and of elderly persons showed a considerable increase upon the numbers in the previous week. The causes of 23, or nearly 14 per cent., of the deaths registered during the week were not certified.

VITAL STATISTICS OF QUEENSLAND.

The Registrar-General of Queensland has issued his twenty-sixth annual report on the vital statistics of that colony, dealing specially with the figures for 1885. The estimated mean population of Queensland during last year was 318,415 persons, in the proportion of 59 males to 41 females. This estimate is calculated by the addition to the enumerated population of 1881, of the annual increase by excess of births over deaths and by excess of immigration over emigration. Censuses are taken in Queensland quinquennially, therefore the report for the current year will be based upon the results of the enumeration which was taken on the night of May 1st last. The population of this colony includes, it should be stated, more than 12,000 Chinese, of whom only 49 were females, and nearly 11,000 Polynesians, including only 1000 females. This fact appreciably affects the proportion of males to females, as well as the marriage, birth, and death rates. The report shows that the marriage-rate of the Queensland population was equal to 17·86 persons married per 1000, scarcely differing from the recorded rates in the preceding two years, and considerably exceeding the rates in any of the other Australasian colonies. It is pointed out that the proportion of signatures to the marriage register shows a further improvement in the educational standard of the population. The birth-rate of the population was 36·66 in 1885, or, if the Chinese and Polynesians be excluded from the calculation, the birth-rate was equal to 39·62 per 1000. The death-rate was 19·58 per 1000 in 1885, against rates increasing steadily from 13·59 in 1880 to 22·97 in 1884. Again, if we exclude the Chinese and Polynesians the death-rate becomes 17·06 for 1885, and, as affording a standard for comparison, it is pointed out that in six of the Australasian colonies the death-rate in 1885 ranged from 10·61 in New Zealand to 17·75 in Western Australia. The recorded mortality of the Polynesians reached the terribly high figure of 98·84 per 1000, as compared with 147·74 in 1884; among the Chinese, however, this rate did not exceed 7·63 in 1885, against 8·13 in 1884. The more than decimating mortality among the labourers imported from the Pacific Islands affords the most conclusive argument against this kind of labour traffic. Infant mortality in Queensland was equal to 14·85 per cent. of the registered births, showing a further increase upon the proportions in preceding years. With regard to the causes of mortality, the death-rates from the various diseases require correction for the abnormal age-constitution of the population. For instance, the death-rate from phthisis is given as 1·86 per 1000, but this figure would bear still more favourable comparison with the rates from this disease in European countries if correction were made for the exceptionally large proportion of young adults in the population. Again, the high death-rate from diarrhœa, 1·14 per 1000, is probably in part due to the large proportion of young children in the population. From a sanitary point of view, the most unsatisfactory feature of

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the report is a death-rate of 1·41 per 1000 from "fever," including typhoid and simple or undefined fever. The report, on the whole, is to be commended for its excellent treatment of the varied statistics with which it deals.

THE SERVICES.

ADMIRALTY.—In accordance with the provisions of Her Majesty's Order in Council of April 1st, 1881, Staff Surgeon Alexander Flood has been allowed to withdraw from Her Majesty's Naval Service, with a gratuity.

The following appointments have been made: Fleet Surgeon R. Hay, to the *Eagle;* Fleet Surgeon W. D. Wodsworth, to the *Minotaur;* and Fleet Surgeon J. P. Courtnay to the *Devastation.*

YEOMANRY CAVALRY.—Westmoreland and Cumberland: Thomas Drummond Sanderson, Gent., M.D., to be Surgeon.

ARTILLERY VOLUNTEERS.—3rd Middlesex: Surgeon and Honorary Surgeon-Major E. G. Purcell, M.D., resigns his commission; also is permitted to retain his rank, and to continue to wear the uniform of the corps on his retirement.

RIFLE VOLUNTEERS.—2nd Cambridgeshire (Cambridge University): Surgeon E. Carver resigns his commission; also is granted the honorary rank of Surgeon-Major, and is permitted to continue to wear the uniform of the corps on his retirement.

Correspondence.

"Audi alteram partem."

THE APOTHECARIES' SOCIETY AND THE CONJOINT SCHEME.

To the Editor of THE LANCET.

SIR,—The Apothecaries' Society by its action under the present crisis is setting an example to all corporate bodies; it has sunk all private and selfish interests, and is appealing to its licentiates throughout the kingdom to express their opinions on the point at issue—whether to still endeavour to obtain its proper and legitimate position in the Conjoint Examining Board, or whether to obtain powers from the Privy Council to institute a complete examination entitling to practise in all branches. The Society has thus broken the ground in seeking counsel from its members, and the time is not far distant when the Royal Colleges of Physicians and Surgeons will have to do likewise. It seems preposterous that in the year 1886 an important question like the present, affecting the whole community, should be settled by a small sub-committee of the two Colleges, by men who have little in common with the general practitioner, and who know very little of the public requirements, but yet who, through their exalted position in the profession, have great power for good or evil. The time has now come when those in high places should hear the other side of the question from the general body of the profession, who on this particular subject are far more able to give a better opinion and sounder advice. Trusting that all members of the profession will shake off their apathy on this occasion (which I think they are doing, from the letters I am receiving), and join heart and soul in supporting the Society of Apothecaries during their present struggle,

I remain, Sir, yours truly,

Nov. 24th, 1886. J. WICKHAM BARNES.

To the Editor of THE LANCET.

SIR,—I cannot say how pleased I was to read the letter of "L.S.A., &c.," in your last issue. He asks, "Is not an L.S.A. (*solus*) a practitioner of an inferior grade?" Inferior to what? I presume a surgeon. My answer is, "Certainly not." An apothecary, on historical grounds, is higher than a surgeon. I will try to prove this. If your correspondent will go to the British Museum, he will obtain access to a scarce and most interesting book entitled "Memorabilia," written by Mr. Wadd, surgeon to William IV. Let him turn to page 9. He will there read, "1617, Society of Apothecaries made independent of the Grocers." Let him turn to page 52, he will find, "Edward III. in the year 1461 granted the Charter of Incorporation to *Barber*-Surgeons, and the barber and surgeon continued in the same firm for *three centuries.*" Further, Mr. Pott, the eminent surgeon, after their separation, "being desirous of exercising his franchise, presented himself as a barber-surgeon liveryman. 'No, no,' said the scrutineer, 'you may still be a *shaver*, Mr. Pott, but you have not been a barber these five years.'" "Would heart of man e'er think it?" said Abernethy; "even I myself have doft my cap to barber-surgeons." That is to say, whereas the apothecaries repudiated the grocers as far back as 1617, the surgeons were associated with hairdressers and shavers till 1761.

The fact is the College of Physicians has made a blunder. They, to be consistent, should have said to the surgeons what they now say to the apothecaries: "Inasmuch as the examination conducted by the Royal College of *Physicians* of London, is a complete qualifying examination in medicine, surgery, and midwifery, conferring the right of registration under the Medical Act, ... a combination with the College of Surgeons is unnecessary." The proper persons to amalgamate with the apothecaries is, on historical grounds, the surgeons; and the physicians having created a precedent by an "unnecessary" combination with the surgeons, they can (and should) extend the same hand to the equally important apothecaries. In any case the "Hall" is master of the situation. They can exercise their undoubted rights of preventing physician and surgeons and unqualified persons from practising *pharmacy*—i.e., selling medicine to patients at a profit; and they can also refuse to protect the practices of persons who do not hold their licence from the incursions of quacks.

I am, Sir, your obedient servant,

Nov. 18th, 1886. "YE HUMBLE APOTHECARIE."

To the Editor of THE LANCET.

SIR,—Looking at the important position that the Apothecaries' Society is likely to hold in the future as a separate examining body, would it not be a graceful act if in the year of Jubilee it promoted all its licentiates of ten or fifteen years' standing, upon payment of a nominal fee, to the degree of members? Such a step would not only give great satisfaction, but also prove a financial success. Hoping this suggestion may call forth the opinions of other licentiates,

I am, Sir, yours obediently,

Nov. 1886. L.S.A.

ASSOCIATION OF GENERAL PRACTITIONERS.

To the Editor of THE LANCET.

SIR,—Will you allow us to state, in answer to inquiries which have been made, addressed to us in reference to the letter which you were good enough to publish in your columns of last week, that this Association has been formed for the purpose of advancing the interests and supporting the rights of the practitioner, and that in now taking steps to enlarge its organisation we are acting in no spirit hostile to any existing association, but desire to afford the practitioners a platform from which to maintain their own interests and those of the profession in relation to the great body of practitioners and their public and personal duties and rights. Among the work already in progress is the organisation of meetings to consider the course recently pursued by the Royal College of Surgeons and Royal College of Physicians in excluding the Apothecaries' Society from combination in the joint examining board for England and Wales; thus, without any consultation with their Members and Licentiates, creating under the Medical Act of 1886 a new and competing class of general practitioners, fully qualified as they will be under this Act by the Apothecaries' Society in medicine and surgery, and taking medical and surgical titles. Under any circumstances, it seems to us that in so momentous a matter, affecting deeply the interests of the whole body of general practitioners, they had a right to be consulted. We, in common we believe with the great body of the profession, feel that general practitioners ought no longer to be excluded from a voice in the management of their own affairs, but it is only by combination and force, which association gives, that they can assert those rights and give them effect. Self-help lies at the basis of independence, freedom, and just principles, and it is only by combination that general practitioners can relieve themselves from having their most

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momentous interests dealt with by small and irresponsible councils, self-elected, or elected by some small constituency, of which the general practitioners, who form the immense majority of the profession, and who are the backbone, have no share. We should add that Mr. C. G. Wheelhouse of Leeds has consented to act as president, and that Dr. Alfred Carpenter (Croydon), Dr. Dolan (Halifax), Mr. Hugh Massey, Mr. George Ord (Brixton-hill), Mr. Wickham Barnes, Dr. Danford Thomas, Dr. Richard Paramore, Dr. Richard Neale, Mr. G. W. Crowe, Dr. Morris (Spalding), Mr. Gubb (London), Mr. Corner (Poplar), and Dr. Maurice Davis, are among the first members of council. It has not been thought advisable to complete the list of officers at this comparatively early stage of proceedings, but these names, among others, will afford adequate assurance that our objects and methods of proceeding will be guided by a single eye to the welfare of the profession.

We earnestly hope to be favoured by the personal adhesion of all who concur in these views.

We are, Sir, your obedient servants,

H. WALTER VERDON,
410, Brixton-road, S.W.
W. GIBSON BOTT,
Nov. 1886. 414, Clapham-road, S.W.

THE MICRO-ORGANISM OF BERI-BERI.

To the Editor of THE LANCET.

SIR,—Having read in the *Medical Press and Circular* of July 28th that Dr. Wallace Taylor, in Japan, has recently discovered in the blood of many sufferers from kakké, or beri-beri a micro-organism which he cultivated and inoculated, or administered internally, in monkeys, rabbits, rats, dogs, &c., producing in these animals the symptoms of kakké, and as it appears that these facts have been received as a novelty, I judge it my duty to recur to your journal to show that such facts, demonstrative of the cause of beri-beri, have already been produced by me in Brazil since 1883. I not only isolated the micro-organism from the blood of beri-beri patients, but cultivated it according to the methods of Koch and Pasteur, and, inoculating it in animals such as monkeys, rabbits, and guinea-pigs, I saw appear in these animals the symptoms of beri-beri, all dying after a greater or less time. Proceeding afterwards to a histological study of the viscera by the methods of colouring of Weigert and of Gram, I demonstrated the existence of the same micro-organisms in great quantities in the nerves, spinal medulla, heart, liver, spleen, and kidneys. In 1883 I published my first paper on the subject under the title of "Etiologia et Genesis de Beri-beri," which was the subject of a verbal communication to the Academy of Medicine of Paris by Dr. Jules Rochard, in the session of Jan. 29th, 1884. The *Journal d'Hygiène* of Paris of Feb. 7th, 1884, published a leading article on the subject of that communication, giving at the same time an analysis of my work. In order to continue my investigations on beri-beri, I shall start in a few days, at the head of an official commission, for the northern provinces of the empire—the principal centres of the disease in Brazil.

In presenting these facts and documents, Mr. Editor, I have only in view to save my right of priority in the discovery of the true cause of beri-beri.

I remain, Sir, your obedient servant,

J. B. DE LACERDA,
Director of the Laboratory of Experimental Physiology at the *Museo Nacional* of Rio de Janeiro.
Rio de Janeiro, Oct. 27th, 1886.

THE SANITARY SCIENCE CERTIFICATE AS AN ADDITIONAL REGISTRABLE QUALIFICATION.

To the Editor of THE LANCET.

SIR,—I see the Medical Council have been occupied in discussing the desirability of having a uniform title for the certificate in Sanitary Science, so as to register the same as an additional qualification. I do not think their time was unprofitably spent in doing so. I think it is desirable to have some uniformity in registering this qualification, and would suggest that Sanitary Science Certificate is the most convenient and the most elegant form. Certificate in Public Health does not abbreviate so easily; and besides, we have already the first term in common use by the Cambridge Sanitary Science Certificate holders. For instance—S.Sc.C. Camb.; S.Sc.C. R.C.P. Lond. or Edin., as the case may be; S.Sc.C. Fac. Glasg., or S.Sc.C. F.P.S. Glasg., and S.Sc.C. Durham. All these are much neater than Cert. Pub. Health Lond., or R.C.P. Lond., as the case may be. Then for the B.Sc. Edin. or Glasgow, you would have it as follows: B.Sc. Ed. (S.Sc.), or B.Sc. (S.Sc.) Edin. There would be no difficulty for the corporations to change their certificate from Public Health to one of Sanitary Science; and we have the additional advantage of the Cambridge men using this form for the last ten years.—I am, Sir, yours truly,

Wigan, Nov. 22nd, 1886. WM. BERRY.

THE CHARTER OF CHARLES I.

To the Editor of THE LANCET.

SIR,—It appears that some Members of the Royal College of Surgeons of England believe that they have a right to the collegiate electoral franchise under the provisions of the Charter granted by Charles I. in 1629 to the Company of Barbers and Surgeons, and that this right has since then been, and still is, unjustly withheld from them. From this reading of the Charter I entirely dissent. But the point is a purely legal one—for lawyers, and not for medical men, to decide upon. I would therefore suggest, as the most reasonable way of speedily and definitely settling this question, that those Members who believe that they are entitled to this right under the Charter of the 5th Charles I. should petition the Council of the College to take counsel's opinion on this point, or, better still, should institute a friendly suit against the College for the restitution of the alleged right.

I am, Sir, yours &c.,

Nov. 20th, 1886. JOHN ERIC ERICHSEN.

THE DENTAL CURRICULUM.

To the Editor of THE LANCET.

SIR,—Will you kindly allow me in your pages to call the attention of all those interested in dental education to the recent decision of the Council of the Royal College of Surgeons, which materially affects the dental curriculum. At the last meeting of the Council it was resolved, on the recommendation of the Dental Board, that eighteen months of the three years' mechanical work required of candidates for the "L.D.S." may be taken before registration as dental students—i.e., before the preliminary examination has been passed. It, however, makes no change with regard to the four years' professional work required in the schedule, which must still be taken subsequently to registration. Under the old regulation the three years' mechanical work had to be taken subsequently to registration, and candidates who had through error done that work previously to passing the preliminary examination had to do it over again, but now one half of it will be recognised and the other half only has to be taken after registration. This is an important concession, and affects a large number of dental students, and will enable in the future those candidates who are unsuccessful at their "preliminary" to proceed with their apprenticeship during the time they are preparing themselves for re-examination.

I am, Sir, your obedient servant,

MORTON SMALE.
Dental Hospital, Leicester-square, Nov. 21st, 1886.

THE ENGLISH CONJOINT BOARD.

To the Editor of THE LANCET.

SIR,—In your editorial note to my letter in your issue of Nov. 13th, page 949, you say: "A student can pass his final examination in three years and a half after entering a medical school." The rules do not permit a student to enter for his second examination until he has spent eighteen months' professional study at a medical school; and these are sessional months, and take up two winter sessions of six months each, and two summer sessions of three months each, or, together, two educational years. These two years must elapse before the student can go up for his final examination, thus making four years' study at a medical school. This any student can do who goes direct to a London school at the commencement of his studies. We contend that a first year spent in work as dresser at a large provincial hospital, during which time he gets more practical work than four-fifths of the London dressers, is worthy of

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recognition; and we complain that this, which has hitherto been allowed by the College of Surgeons, has been suddenly and arbitrarily taken away from us, and with it the inducement for students to come here. The recommendation of the Conjoint Board for students to do this work in the middle of their course of study in London is impracticable, and would be discountenanced by their London teachers.

I am, Sir, yours truly,

Southernhay, Exeter, Nov. 17th, 1886. JAS. BANKART.

*** Eighteen months do not mean sessional months, but two winter and one summer sessions. The time spent before entering a medical school may be most profitably employed in a provincial hospital, where, in addition to practical dressing, a student can be taught chemistry, botany, materia medica, and pharmacy.—ED. L.

THE L.S.A. QUALIFICATION.

To the Editor of THE LANCET.

SIR,—With your permission I should like to put a question to "L.S.A. (with other qualifications)."

What proportion do L.S.A.'s bear to the M.D.'s, M.R.C.S.'s, L.R.C.S's, L.R C.P.'s, &c., who are flooding the country with sixpenny, ay, fourpenny, dispensaries? When he has ascertained this fact, I think he will have less difficulty in making up his mind about the "inferior grades" in the profession.

I am, Sir, yours truly,

Nov., 1886. L.S.A. (with no other qualifications).

NORTHERN COUNTIES NOTES.

(*From our own Correspondent.*)

TYNEMOUTH INFIRMARY SCHEME.

AN Art and Industrial Exhibition in aid of the funds of the projected infirmary at Tynemouth was opened last week under favourable auspices. The Mayor presided. It was stated to be the intention of the Duke of Northumberland to grant a site for the erection of a building, and before the meeting separated the member of Parliament for the borough (R. S. Donkin, Esq.) headed the subscription list with 200 guineas.

THE VOTING FOR THE MEDICAL COUNCIL.

We were rather surprised to hear that there was a prospect of a light poll, seeing that, in the north at least, the greatest interest has been taken in the election from the very first, and I believe that by to-day (the 22nd) very few papers of northern voters—I mean from the large centres, such as Newcastle, Sunderland, &c.—will have failed to reach the office of the Medical Council. Still the result will be looked for here with curiosity, and yet with a confidence that in our voting we have all done our best in the broad interests of the profession.

CURIOUS POOR-LAW CASE.

At a late meeting of the Tynemouth Board of Guardians one of the relieving officers brought a rather peculiar case under the notice of the Board. It is that of a master mariner who died early in this year, leaving £355 3*s.* 1*d.* cash in the National Bank of Scotland, and also considerable property in the Orkney Islands. In 1863 his wife was removed from North Shields to the Morpeth Lunatic Asylum, and is now a resident therein. Over a period of twenty-two years the Tynemouth guardians have been responsible for her maintenance. Her husband, however, willed the whole of his estate to a niece and nephew. On learning these facts, the officer, on the part of the guardians, laid claim for the maintenance of the wife, and as the executor had not put in the usual statutory notices, it was considered that the guardians had a good case at law, and they gave directions to have it presented. The amount due to the guardians will be considerable, based on her average cost of 11*s.* per week for maintenance ranging over twenty-three years.

SCARLATINA AT WALKER.

At a late meeting of the School Board it was mentioned that sixty-six children were absent, either suffering from scarlatina or having it in their homes. Mr. Hurst, surgeon, stated he had conclusive proof of the insanitary condition of one of the schools by the presence of rats on the premises, which, as he pointed out, was a proof of connexion with sewers, and that consequently bad smells and sewer-gas would exist.

NEWCASTLE JUBILEE EXHIBITION.

It may interest many of your readers to learn that up to the present considerable progress has been made with the buildings required for the Jubilee Exhibition to be opened next year in Newcastle-on-Tyne. At a late meeting of the Council, the necessity of extending the space was considered and decided upon. A letter was also read from the treasurer of the Prince of Wales, stating that it would give his Royal Highness much pleasure to send from his collection several works of art to the Exhibition.

BATHS AND EPILEPTICS.

A sad event took place this week in one of our suburbs, by which a young lady aged nineteen, who was subject to epilepsy, lost her life in a bath. When discovered, she was quite dead, and had evidently had a fit and had been suffocated in about two pailfuls of water.

Newcastle-on-Tyne, Nov. 22nd.

EDINBURGH.

(*From our own Correspondent.*)

THE LATE DR. A. H. BALFOUR.

EDINBURGH has lost one of its best-known general practitioners by the sudden death of Dr. Balfour of Portobello, which took place last week. Dr. Balfour settled in Edinburgh nearly forty years ago, after gaining a wide experience of practice in Oriental countries; and ever since he has been known here as a most successful and much-esteemed medical practitioner, and as an influential citizen. Of late years he has been assisted in his extensive practice by his two sons, Drs. A. H. and J. H. Balfour.

UNIVERSITY LECTURES ON BIOLOGY.

Mr. G. J. Romanes commenced this week his annual course of six lectures on the Philosophy of Natural History, which has received the title of the Rosebery Lectures, from the lectureship having been endowed by the late Foreign Secretary. In the present course Mr. Romanes proposes to trace the history of biological speculation from the earliest times down to that of Charles Darwin. The opportunity of hearing so interesting a topic ably discussed has been embraced by a numerous body of students, and in that respect the new lectureship may be pronounced an entire success.

Edinburgh, Nov. 23rd.

ABERDEEN.

(*From our own Correspondent.*)

THE ROYAL INFIRMARY.

IN the Bill to be brought before Parliament in the forthcoming session, the managers of the infirmary seek powers "to rebuild, remodel, or alter the existing infirmary, asylum, and convalescent hospital buildings, or to erect and manage new infirmaries, asylums, or dispensaries for the cure of the sick in mind or body," and to provide for the inclusion, under the new Corporation, of all such institutions already established, or hereafter to be established, in Aberdeen, and in particular the Hospital for the Relief of Incurables, the Ophthalmic Institution, the Dispensary, and the Hospital for Sick Children. The directors of the Dispensary, at a meeting held to consider this proposal, declared against the amalgamation of the Dispensary and Infirmary, because they were of opinion that the two institutions would best fulfil their functions apart. It has been suggested that Aberdeen would best celebrate the Queen's Jubilee by building a hospital worthy of the city, and it is rumoured that two gentlemen have promised to subscribe £15,000 for this purpose. When appointed Assistant Physician to the Infirmary, Dr. Blaikie Smith resigned the office of chloroformist to the institution, which he held for eleven years. Drs. Booth, MacGregor, and Ruxton are

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candidates for the vacant post, which is to be filled up at the quarterly meeting of managers in December. The fact that this appointment is in the hands of the general managers, numbering between 300 and 400, is one of the many examples of the absurd manner in which the institution is at present managed.

THE HOSPITAL FOR INCURABLES.

At a meeting of the Committee of Management held on the 18th inst., Dr. George Edmond was appointed Physician to the Hospital for Incurables, an office rendered vacant by the death of Professor Dyce Davidson. Before proceeding to the appointment the Committee, on the motion of the Chairman, resolved to record their sense of the great loss the institution had sustained through the death of Dr. Davidson, who for upwards of thirteen years had discharged with unvarying courtesy and kindness the duties of medical officer to the hospital; and they directed an extract of the resolution to be transmitted to Mrs. Davidson as an expression of their sympathy with herself and her son.

THE MEDICO-CHIRURGICAL SOCIETY.

At the annual meeting of the Medico-Chirurgical Society, held on Thursday, the 18th inst., the following office-bearers were elected for the ensuing year:—President, Dr. Rodger; vice-president, Dr. Smith-Shand; secretary, Dr. George Edmond; recording secretary, Dr. Macgregor; treasurer, Dr. Beveridge; librarian, Dr. William Fraser; members of council, Drs. Booth, Garden, Gordon, Jackson, and Struthers; representatives to the North of Scotland Medical Association, Drs. M'William and Theodore Thomson.

Aberdeen, Nov. 26th.

IRELAND.

(From our own Correspondent.)

ROYAL UNIVERSITY OF IRELAND.

THE Senate at a recent meeting enacted that the following regulations concerning the courses of medical studies for degrees in this University shall come into operation in the autumn of next year:—1. Medical students shall not enter upon their regular professional studies until the completion of their obligatory non-professional studies. 2. The *first year's* course of medical studies shall include Natural Philosophy, taught experimentally; Systematic and Practical Chemistry; Botany, a three months' course; Zoology, six months' course. 3. Students who have already taken the degree of A.B. in any of the subjects named for the first year's course of medical studies shall, upon the production of the necessary certificates, be exempted from attending any further lectures or passing examinations in such subject or subjects; and any such students who have passed in Natural Philosophy, Systematic and Practical Chemistry, and Biology, shall be reckoned to have completed the first year's course of medical studies, and shall be entitled at once to enter upon the second year's course of medical studies. 4. The *second year's* course shall include Systematic and Practical Anatomy, Systematic Physiology, Pharmacology (Materia Medica), and attendance at a medico-chirurgical hospital for six months. 5. In the *third year* the medical studies shall comprise Advanced Systematic and Practical Anatomy; Advanced Systematic and Practical Physiology and Histology; Medicine, including Therapeutics and Pathology; Surgery, including Therapeutics and Surgical Pathology. 6. The *fourth year's* studies shall comprise the remaining subjects of the medical curriculum, viz.—Midwifery and Diseases of Women and Children; Mental Diseases, three months' course; Medical Jurisprudence, with Hygiene; Ophthalmology and Otology, three months. 7. The examination for the M.B. degree shall take place at the conclusion of the fourth year of medical studies, and will comprise all the subjects prescribed above for the third and fourth years of medical studies, with the exception of Anatomy and Physiology and Histology. 8. Candidates for the degree of Master of Surgery must have attended a course of operative surgery. In future candidates, prior to admission to the first examination in medicine, will be required to produce a certificate of their registration as medical students.

DUBLIN HOSPITALS COMMISSION.

Many months ago this Commission sat, and week after week it was thought that the report would be published. Month after month, however, has gone by, and now, when the subject has almost faded from the minds of those interested in the matter, it is stated that the report is nearly ready, and will shortly be issued. It is rumoured that the Commissioners have recommended that the Government grant shall in future be distributed *pro rata* among the several hospitals in the city.

DUBLIN UNIVERSITY BIOLOGICAL ASSOCIATION.

The opening meeting of the winter session was held last week in the Museum-buildings, Trinity College, presided over by Dr. C. B. Ball. The inaugural address was delivered by the incoming president, Mr. Cunningham, the subject being "Muscular Homology." The variations which occurred in muscles were, he thought, indications either of advance or retrogression. According to the Heidelberg school, there was a continual relationship between the nerve supply and the muscular homology throughout the entire animal series; but the nerve supply could not be looked upon as an infallible guide.

ACTION BY A MEDICAL PRACTITIONER.

Law is proverbially uncertain, and an example is now at hand. In the Common Pleas Division last week, the case of O'Callaghan *v.* Vigors came before the Lord Chief Justice and two other judges. The plaintiff, who is surgeon to the County Carlow Infirmary, brought an action against Mr. Vigors for alleged libel, in reference to the treatment of a boy who had been under Dr. O'Callaghan's care. The case was tried last June in Dublin, when damages to the extent of £500 were awarded to the plaintiff. A conditional order having been obtained to set that finding aside the matter was now argued, and, as a result, the verdict has been set aside. One of the judges was for upholding the verdict and two were against it.

TYPHOID FEVER IN DUBLIN.

Typhoid fever for some time past has been unusually prevalent in this city, and a good many deaths have taken place, chiefly among the well-to-do classes. Cases of fever for the past few years have occurred in some of the Dublin Barracks, more especially the Royal Barracks, and it was believed that they were due to defective sanitation, but the authorities, including the medical officers, have denied that there were any grounds for this assertion. Whether the alleged contamination of the Vartry water has anything to do with the matter it is impossible to say; at all events, the fact remains that enteric fever prevails to a considerable extent in Dublin at present.

An election for a coroner for the Tipperary district took place last week. There were six candidates, five being medical men, and one a solicitor, Dr. Moloney, who was the successful candidate, the voting being as follows:—Moloney, 518; Morrissy, 437; Ryan, 421; Conway, 381; Humphries, 320; Frewen, 325.

Sir George H. Porter, J.P., Surgeon in Ordinary to the Queen in Ireland, has been appointed a Deputy Lieutenant for the County of Wexford.

Mr. John P. Nowlan, for upwards of thirty years medical officer to No. 1 North City Dispensary Dublin, died this week, aged fifty-four years.

Dublin, Nov. 23rd.

BELFAST.

(From our own Correspondent.)

THE ROYAL HOSPITAL.

AT the annual meeting of the supporters of this charity, held on Nov. 15th, I learn from the reports that 2134 intern patients were treated during the year, of whom 897 were medical, the rest surgical; while in the extern department 14,750 new cases have been treated, and of these 2125 were medical, the remainder, 11,339, surgical. The average daily attendance was abont 106. The internal and external cases together numbered 16,884. Clinical instruction has been given in the wards to 159 students during the winter, and to 83 during the summer session. Turning to the finances, I find that the receipts during the year amounted to £8370 11*s.* 6*d.*, and the expenditure to £9418 19*s.* 8*d.*, leaving a deficit of £1048 8*s.* 2*d.*, but when two special items for expenditure are deducted (for building a laundry and for

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additions to the fever wards) the actual excess of expenditure is £797 12*s.* 10*d.* Special expenses have been incurred during the year owing to the lamentable and protracted riots, and owing to the terrible railway accident at Portadown. No doubt the Great Northern Railway Company will recoup the hospital in connexion with the latter matter, but it is to be regretted that the Government did not see their way to make a grant towards the special and altogether unforeseen expenses incurred in the treatment of patients injured during the riots.

THE CONSUMPTION HOSPITAL.

During the year the Consumption Hospital has been completed and opened at the Throne, and through the generosity of Mr. Forster Green and the kindly co-operation of other friends, an endowment of £5883 10*s.* was raised, so that eight beds are supplied for consumptive patients. Dr. Lindsay has been appointed medical attendant. Important alterations and additions have been made in connexion with the fever wards, and the place is now equipped in the most complete manner for the separate treatment of the different fevers; and further, a much-needed improvement has been made in the laundry department. Special reference was made at the meeting to the great services rendered during the past year by the medical officers, especially by those of the surgical staff, whose energies were often overtaxed during the past riots. Other matters referred to in the report were the presentation of a stained-glass window to the hospital by Dr. Whitla (one of the physicians), and a portrait of Mr. Lyons, whose services to the hospital have been so useful and so prolonged. At the meeting Mr. Lyons, D.L., was appointed President of the Hospital in the room of the late Lord Shaftesbury, and a resolution was passed that a strenuous effort should be made to wipe off the deficiency on this year's account.

ULSTER MEDICAL SOCIETY.

The opening meeting of this Society was held in the Museum on the evening of Nov. 17th, when the inaugural address was given by the President (Dr. Whitla). After having referred to the loss the Society has sustained in the deaths of Dr. Henry MacCormac, Dr. Andrews, and Dr. Purdon, Dr. Whitla proceeded to give a rapid survey of the present position and prospects of therapeutics, with a glance at its relation to some of the neighbouring departments of medical science. At the conclusion of the address a vote of thanks was passed to the President.

THE MEDICAL STUDENTS' ASSOCIATION.

The opening meeting of this young Society was held last week in the Natural Philosophy Lecture-room of Queen's College. The chair was occupied by the Rev. Dr. Porter, President of Queen's College, who delivered a very suggestive and interesting address, showing the great interest he takes in the welfare of the students. After Dr. O'Neill, Dr. Byers, and the new assistant to the Professor of Anatomy (Dr. Chambers) had spoken, a discussion arose in reference to the Medical School, &c., and a very pleasant reunion was brought to a conclusion.

DEATH OF SAMUEL M. MALCOMSON, M.D.

It is with extreme regret I have to announce the death of this talented young medical man, at his residence in Belfast, at the early age of twenty-nine. After studying at Belfast and graduating in the Queen's University in 1879, he was appointed one of the resident staff in the Union Infirmary, where he gained a wide clinical and pathological knowledge. A few years ago he began private practice in town. He was a capital microscopist, and did some very original work in connexion with the Foraminifera. He was a member of the Naturalists' Field Club, and at the meetings of that society his preparations excited great interest. He commenced a class on Microscopy, which was largely attended by the medical students. About a year ago symptoms of pulmonary consumption set in, from which he finally died. His death is much regretted by a large circle of friends, both within and outside the profession.

Belfast, Nov. 24th.

THE PHARMACEUTICAL CHEMISTS IN HAVANA.—The Pharmaceutical chemists in Havana are complaining bitterly of a new regulation of the Spanish military authorities ordering the pharmaceutical department to arrange to supply all military men and their families with medicines of all kinds at cost price.

PARIS.

(From our own Correspondent.)

MERLATTI.

WHATEVER question there may be as to the propriety of sanctioning such experiments as those now being made by Merlatti, it is useless to ignore an accomplished fact, and I have no doubt that some of your readers will be glad to learn the real facts of the case. Some five or six weeks ago, when the daily press was discussing the arrival of Succi in Paris and his proposal to renew his thirty days' fast under the surveillance of a French committee, Dr. Philip Maréchal, a contributor on scientific subjects to the *Voltaire*, was prominent in scouting the possibility of success. It appears that, in consequence of one of these articles, a number of candidates begged to be submitted to the test—a favour which was naturally declined; but one young man, an Italian (Stefano Merlatti), declared that he had fasted for lengthened periods previously, and ultimately succeeded in inducing Dr. Maréchal to form a committee for the purpose of conducting another experiment. Dr. Maréchal made known his acquiescence in a note to the *Voltaire*, in which he anticipated that the attempt would be abandoned at the expiration of a fortnight. He also gave the names of the members of the committee, with whom lies the responsibility of the experiment, and who vouch for its genuineness. These are Dr. Audhoui, physician to the hospitals, M. Victor Meunier, Dr. Dutrieux-Bey, Dr. E. Monin, Dr. de Montplaisir, Dr. P. Combe, and Dr. P. Collin. Merlatti is said to have been in robust health without any physiological peculiarity; the heart normal; somewhat thin, and weighing sixty-one kilogrammes. By way of preface to the proposed fifty days' abstinence, Merlatti partook of a farewell meal, consisting of the whole of a fat goose, *including the bones*, a couple of pounds of roast beef, enough vegetables for two ordinary men, and dessert comprising, amongst other dainties, walnuts, which he ate *with their shells*. I thought of these details this afternoon when Merlatti, in whose mind the delicacy was no doubt associated with my nationality, confided to me his intention of making up for lost time, later on, with plum-pudding. Since this meal, just four weeks ago, Merlatti has lived entirely upon pure filtered water, and has been subjected to the strictest surveillance, for the effectiveness of which the committee vouch. His weight, temperature, pulse, and respiration have been noted daily, as well as his strength, spirometric capacity, and excretion of urea. I had not seen him until four days ago, when, in consequence of a report that his prostration and emaciation were extreme, I asked to be allowed to take some sphygmographic tracings, and received a courteous permission from the committee to examine their subject. Upon my first visit I was struck with his satisfactory condition, quite the reverse of what would have been anticipated. The arms, bared for the application of the sphygmograph, were well nourished, and I remarked that there was no particular prominence of the malar bones—a remark which did not, however, meet with the concurrence of those present. The only sign of fatigue was dilatation of the pupils. Merlatti was calm and cheerful, and exhibited no signs of restlessness or agitation. Had not the genuineness of the fact been endorsed by the committee, and confirmed to a great extent by the quantitative analysis of the urine, I should have considered the whole affair an imposture. The tracing on this occasion is one of low arterial tension, with a deep aortic notch, preceded by a rapid fall from the apex. I took another tracing this afternoon, which, together with the information afforded by auscultation, seems to give a very serious indication of the danger of pushing the experiment much further. The tracing of the pulse of the twenty-fourth day shows about seventy-six beats to the minute, low tension, but a well-filled artery; that of the twenty-eighth day, eleven beats only in one-sixth of a minute, making sixty-six per minute. The heart, which was normal a month ago, now gives a reduplication of the second sound, which, however much the subject of discussion in its causation, I take to be in this case from want of ventricular harmony, due to defective innervation. The line of descent comes down gradually during the whole of the systole, which is evidently taking place under high cardiac pressure, and ends with a diastolic plateau indicating an empty condition of the artery. Merlatti's appearance is also much changed. Although still in excellent spirits, the loss of flesh

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is very marked since my first visit, and the features have become haggard. The excretion of urea has fallen to 8 grammes per day, being an average of 3 grammes to the litre; and the loss of weight amounts to just 22 lb.

Paris, Nov. 24th.

PUBLIC HEALTH DIPLOMAS.

AT present there seems great difficulty in securing similarity in the nomenclature of qualifications and the subject qualified in, and in arranging for some distinctive conventional abbreviation by which those qualified specially in Sanitary Science or Public Health may be known, now that such diplomas are registrable. The following table shows at a glance the great diversity which obtains:—

University or medical corporation.	Designation of qualification.	Designation of subject, &c.
Royal College of Physicians, London	Certificate	Hygiene
Royal College of Physicians, Edinburgh	Certificate	Public Health
King and Queen's College of Physicians, Ireland	Certificate	Sanitary Science
Faculty of Physicians and Surgeons, Glasgow	Certificate	Public Health
University of Oxford	Certificate	Public Health
University of Cambridge	Certificate	Sanitary Science
University of Durham	Licence	Sanitary Science
University of London	Certificate	Public Health
University of Edinburgh	Bachelor and Doctor of Science	Public Health
University of Glasgow	Qualification	Public Health
University of Dublin	Diploma	State Medicine
Royal University of Ireland	Diploma	Sanitary Science

Of the twelve diploma-giving bodies, seven give certificates, two diplomas, one a degree, one a licence, and one a qualification.

Obituary.

SIR JOHN HUMPHREYS, J.P., D.L.

BY the death of Sir John Humphreys, which occurred on Saturday last, the Coronership for the Eastern Division of Middlesex is rendered vacant, and the county has sustained the loss of one who for nearly twenty-eight years discharged the duties of his responsible office with marked ability, dignity, and circumspection. On the death of the late Mr. Serjeant Payne, Sir John was elected to the presidency of the Coroners' Society of England and Wales, and he was consulted by the late Government on the Bill dealing with the office and duties of coroner brought in by them. In our opinion, a medical man rather than a lawyer is better adapted for the duties of a coroner, but in Sir John Humphreys we recognise a rare exception. His eminently judicial mind, coupled with an excellent knowledge of surgery (a fact not generally known) peculiarly qualified him for the post. To these must be added his strong practical sense and his untiring industry. Besides the duties of his office as coroner, Sir John held the post of chief clerk to the Commissioners of Income Tax, and for many years took an active interest in liberal politics. Many members of Parliament obtained their seats in the House from the organising powers and energy he displayed in the conduct of elections. He was more than once invited to seek Parliamentary honours himself, but he always preferred assisting others to obtain them. He usually enjoyed vigorous health, but in the spring of 1885 he had a severe attack of pleurisy and pneumonia. At one time his life was despaired of, but he pulled through after a long and trying illness. Last summer he resumed his duties, but some weeks before his death his former complaint returned, and he was tapped in the chest at Braemar, where he was staying for the benefit of his health. Soon after he returned to 20, Devonshire-street, his town residence, where he remained, under the care of Dr. F. Spurgin, until his death. He was in his seventy-third year, and leaves his widow, a son, and a daughter to mourn their loss. He was a J.P. and D.L. of the Tower Hamlets, and in the autumn of 1881 received from Her Majesty the honour of knighthood.

THE ELECTION OF DIRECT REPRESENTATIVES.

OWING to the unfortunate delay in counting the votes and holding the meetings of the Branch Councils, we are at present unable to give our readers definite information as to the state of the poll either in England or Ireland. That of Scotland has been known for two days. The aggregate vote is understood to be a large one, and to reach nearly 13,000.

Medical News.

SOCIETY OF APOTHECARIES.—The following gentlemen passed their examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received certificates to practise, on Nov. 18th:—

England, Guy Fuller Ashbridge, M.R.C.S., Winchester.
Lewis, David Thomas, Brunswick House, Stoke Newington-road.
Walsh, Robert Wm., M.R.C.S., The Priory, Lincoln.
Warlters, Walter Scott, M.R.C.S., Chepstow Villas, Bayswater.

A RATHER serious outbreak of typhus fever is reported to be raging in Leeds.

ON the 21st inst. a demonstration was held at Trowbridge in aid of the local cottage hospital.

WOMEN DOCTORS.—The Orel district authority has decided that it is impossible to allow female practitioners to discharge the functions of district surgeons.

A FAMILY of four people are reported to have been poisoned at West Bromwich through eating tinned salmon. One of the cases has terminated fatally.

AT a meeting of the Society of Arts held on the 24th inst., Mr. William Anderson, M.I.C.E., read a paper on "The Purification of Water by Agitation with Iron and by Sand Filtration."

The Hospital for the current week contains an article by Lord Salisbury, in which he gives his views of the general depression of the times and the public duty involved in the adequate support of the hospitals.

VACCINATION GRANT.—Mr. John Winnall George, public vaccinator of the Upton and Leigh districts, Worcestershire, has been awarded the Government grant for efficient vaccination (third time).

A SALE of work in aid of the St. Mary's Hospital extension fund was opened at Manchester on the 19th inst. The bazaar remained open until the evening of the 20th, and was highly successful.

AT the concluding meeting of the Leeds Musical Festival Committee, on the 19th inst., it was reported that the total receipts amounted to £10,500, and the expenditure to about £8000. The balance will be distributed amongst the medical charities in the borough.

MEASLES.—In consequence of the great prevalence of measles at Tadcaster, Yorks, the School Board at a special meeting on the 19th inst. determined to close the schools for a period of five weeks. At Lichfield also the disease is said to be extensively prevalent.

PRESENTATION.—On the 18th inst., Mr. Thomas Odell, who has recently resigned his post as one of the honorary medical officers of the General Infirmary at Hertford, after holding that office for the long period of twenty-four years, was presented with a silver salver and a purse of fifty guineas.

LEEDS MEDICAL CHARITIES.—The second of a series of ward meetings in aid of the movement for increasing the contributions of the working classes to the Leeds medical charities by means of regular weekly or monthly subscriptions was held on the 16th inst. A resolution was adopted approving of the formation of the Workpeople's Committee, and pledging the meeting to support the organisation.

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SCARLATINA IN ODESSA.—The number of patients suffering from scarlatina who have asked for admission into the town hospital of Odessa is so large that a special building has had to be erected for their reception.

PUNISHMENT OF A RUSSIAN QUACK.—A quack in Moscow, who was formerly a soldier, recently gave a syphilitic patient a mixture which caused vomiting and acute gastritis, which was ultimately followed by death. The quack was brought before the local court of justice, which sentenced him to two months' imprisonment and ecclesiastical penance.

FATAL MISTAKE IN A POLICE LAZARET.—In a lazaret attached to a Moscow police-station an attendant recently administered by mistake a tablespoonful of a strong solution of carbolic acid to four patients, who at once complained of a burning sensation in the throat, and soon presented all the symptoms of carbolic acid poisoning. The surgeon managed to save all except one of the victims, who died the next day.

AFTER-CARE ASSOCIATION FOR POOR FEMALE MENTAL CONVALESCENTS.—H.R.H. Princess Christian having graciously accepted the office of patroness, and Lord Brabazon that of president, the committee intend at once to commence active operations and open a convalescent home, for which about £1000 is required, and help most urgently needed. The secretary is Mr. H. Thornhill Roxby, Emblewood, Osbaldeston-road, London, N.

VOLUNTEER MEDICAL STAFF CORPS.—An amateur dramatic performance will be held at Toole's Theatre on Friday, December 17th, at 2 P.M., in behalf of the fund for raising new headquarters for the corps. The performance is under the immediate patronage of the honorary commandant, the surgeon-commandant, and officers of the corps. The plays to be performed are "The Wonderful Woman" and "Checkmate," the parts to be taken by members of the corps.

SEWER REFUSE AS MORTAR.—The inspector of nuisances of the parish of Bermondsey recently reported to the vestry that sediment taken from the public sewers was being used as mortar in the construction of houses. Owing to the offensive smell arising from the stuff, the inspector, considering it injurious to health, ordered its removal. The vestry instructed the clerk to write to the Metropolitan Board of Works upon the subject, and the Board has replied to the effect that steps have been taken to prevent a repetition of the objectionable practice.

THE STURGE PRIZE ESSAYS.—The Rev. Canon Clarke, Hon. Conrad Dillon, and Mr. J. S. Wood, who were appointed adjudicators by Mr. George Sturge to determine the three best Essays on "The Causes of the Financial Depression in the London Hospitals," have just given the following awards:—1st prize (£25), Dr. H. N. Hardy; 2nd prize (£10), Mr. B. Burford Rawlings; and 3rd prize (£5), Dr. R. Rentoul of Liverpool. There were a very large number of competitors. The successful essays will, we understand, appear in *The Philanthropist*.

Medical Appointments.

Information for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

BURRELL, A. W., M.B.Lond., M.R.C.S., L.R.C.P., has been appointed House-Surgeon to the London Hospital.

DUNCAN, THOMAS, M.B., C.M.Edin., has been appointed Medical Officer for the Parish of Udny, Aberdeenshire.

EVANS, C. S., M.R.C.S., L.S.A., has been appointed Resident House-Physician to St. Thomas's Hospital.

GODFREY, A. B., L.R.C.P., M.R.C.S., has been appointed Resident Accoucheur to St. Thomas's Hospital.

HAILES, CLEMENTS, M.D., &c., Edinburgh, has been appointed Medical Officer to the Redland Branch of the Clifton Dispensary.

JONES, S. H., M.R.C.S., L.S.A., has been appointed Assistant House-Surgeon to St. Thomas's Hospital.

KIDD, PERCY, M.D., F.R.C.P., has been appointed Medical Officer to the Rock Life Assurance Company, vice Frederick J. Fane, M.D., F.R.C.P., deceased.

LICHFIELD, JAMES WILLIAM, L.R.C.P.Lond., has been appointed Junior Assistant Medical Officer to the Hants County Asylum.

MONTAGUE, A. J. H., L.R.C.P., M.R.C.S., L.S.A., has been appointed Non-resident House-Physician to St. Thomas's Hospital.

MOXON, HENRY J., L.D.S., has been appointed Dental Surgeon to the Schools of the Westminster Union.

NAIRN, R., L.R.C.P., M.R.C.S., has been reappointed Ophthalmic Clinical Assistant to St. Thomas's Hospital.

NICHOL, F. E., L.R.C.P., M.R.C.S., has been reappointed House-Surgeon to St. Thomas's Hospital.

PRATT, REGINALD, M.D., M.R.C.S., L.S.A., has been appointed Assistant Surgeon to the Leicester Infirmary.

RITCHIE, E. D., M.B., B.C. Cantab., M.R.C.S., L.S.A., has been re-appointed House-Surgeon to St. Thomas's Hospital.

SMYTH, H. J., L.R.C.P., M.R.C.S., has been appointed Clinical Assistant in the Skin Department of St. Thomas's Hospital.

SOLLY, E., M.R.C.S., L.S.A., has been appointed Clinical Assistant in the Ear Department of St. Thomas's Hospital.

STABB, E. C., L.R.C.P., M.R.C.S., L.S.A., has been appointed Clinical Assistant in the Throat Department of St. Thomas's Hospital.

STAVELEY, W. H. C., L.R.C.P., M.R.C.S., has been appointed Assistant House-Physician to St. Thomas's Hospital.

TOTSUKA, K., L.R.C.P., M.R.C.S., has been appointed Assistant House-Surgeon to St. Thomas's Hospital.

WHEATON, S. W., L.R.C.P., M.R.C.S., has been appointed Resident House-Physician to St. Thomas's Hospital.

Births, Marriages, and Deaths.

BIRTHS.

ASHTON.—On the 23rd inst., at York, the wife of Brigade-Surgeon Wm. Ashton, M.B., Medical Staff, of a son.

BECKINGSALE.—On the 17th inst., at Cordova-street, Vancouver City (late Granville), British Columbia, the wife of D. Loftus Beckingsale, M.D.Ed., of a son.

DAVIDSON.—On the 19th inst., at the residence of her father, The Dingle, Sydenham-hill, the wife of D. C. Davidson, L.R.C.S., L.R.C.P.Ed., Indian Medical Service, of a daughter.

KERNOT.—On the 18th inst., at Bishnauth, First Avenue, West Brighton, Sussex, the wife of C. N. Kernot, M.D.St.And., M.R.C.S., of Calcutta, of a daughter.

TAYLOR.—On the 16th inst., at Highgate, Kendal, the wife of B. R. Archer Taylor, M.R.C.S., of a son.

TINKER.—On the 22nd inst., at Brookland House, Hyde, Cheshire, the wife of Frederick Howard Tinker, L.R.C.P., M.R.C.S., of a son.

MARRIAGES.

BOLTON—HAY.—On the 18th inst., at Nottingham, Joseph S. Bolton, M.D., M.R.C.S., of Nottingham, to Jeanie, daughter of the Rev. J. Hay.

COX—ELLIS.—On the 23rd inst., at St. Matthew's, Ealing, Staff-Surgeon Henry Thompson Cox, Royal Navy, to Emma Louisa, elder daughter of Staff-Commander John H. Ellis, Royal Navy.

GREENHILL—PERMAN.—On the 20th inst., at the Cathedral, Calcutta, Edward Fowler Greenhill, M.R.C.S., L.R.C.P., to Florence Ellen, second daughter of Thomas Perman, of Stoke Newington, London.

PARSON—COLMAN.—On the 20th inst., at St. Giles'-in-the-Fields, Charles Jenner Parson, M.R.C.S., L.S.A., to Susie, third and youngest daughter of Frederick Charles Colman, of Cumberland House, Kew, Surrey.

RUDD—HARRISON.—On the 17th inst., at the Parish Church, Great Yarmouth, Charles Frederic Rudd, M.R.C.S., L.S.A., to Clara Florence, youngest daughter of the late Henry Harrison, of Great Yarmouth.

SLOMAN—PAUL.—On the 17th inst., at St. Giles' Cathedral, Edinburgh, Herbert Sloman, L.R.C.P.Lond., M.R.C.S., to Bessie, elder daughter of the late William Paul, Banker, of Glasgow.

DEATHS.

BALDING.—On the 23rd inst., at St. Alban's, Mortimer Balding, B.A., M.D.Cantab., M.R.C.S.Eng., youngest son of the late James Balding, M.R.C.S., of Barkway, Herts, aged 36.

BALFOUR.—On the 17th inst., at East Brighton-crescent, Portobello, N.B., Andrew Howden Balfour, L.R.C.S.Ed., in his 68th year.

SURRAGE.—On the 19th inst., at Saville-place, Clifton, James Surrage, M.D.Ed., M.R.C.S., late of Wincanton, Somerset, in his 75th year.

SUTTON.—On the 19th inst., at Denbigh-street, Warwick-square, S.W., John Sutton, M.R.C.S., in his 77th year.

WILME.—On the 13th inst., at Northumberland-place, Bayswater, Richard Wilme, M.D., late of Manchester.

N B.—*A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.*

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METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, November 25th, 1886.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Nov. 19	30·25	W.	39	37	...	54	35	...	Foggy
,, 20	30·35	S.W.	51	50	...	56	37	...	Overcast
,, 21	30·37	W.	51	50	...	52	48	...	Cloudy
,, 22	30·49	E.	42	41	...	48	40	...	Foggy
,, 23	30·60	S.E.	35	35	...	44	33	...	Foggy
,, 24	30·73	N.E.	40	39	...	44	34	...	Foggy
,, 25	30·62	N.	44	43	...	47	39	...	Foggy

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

We cannot undertake to return MSS. not used.

"ADVICE GRATIS.—MEDICAL."

UNDER the above heading our old friend, *Mr. Punch*, is wisely, as well as wittily, caricaturing "newspaper therapeutics." His "Own Fellow of the Royal College of Physicians (Chattanoogs)" gives advice as follows:—

"*Sufferer.*—You will find petroleum a very good substitute for best Brittany butter, if you cannot afford the latter. Read my book, 'Dyspepsia, its Cause and Cure.' *A. S. S.*—A cold in the head is usually symptomatic of an inflammatory condition of the upper part of the air-passages. It will no doubt materially assist you to get rid of the one you have got, and which you say has lasted without intermission since 1818, to know that its scientific name is 'coryza.' This is as much information as you deserve without forwarding my fee, which, I may remind you, is far less than you would have to pay if you consulted any respectable local medical man. *W. E. G.*—1. Read 'Dyspepsia, its Cause and Cure.' 2. Of course, if you wish it, I should have no objection to meeting Sir A—— C—— in consultation. My fee would be three-and-sixpence. N.B.—Please do not write on post-cards."

W. C. (Chester).—1. We have no means at hand of ascertaining the point.—2. The title was given in the case mentioned more from social considerations than on account of length of service.

Dr. J. B. Russell (Glasgow).—The lecture was delivered at Toynbee Hall, Whitechapel, on the 13th inst., and a brief abstract of it was published in some of the London newspapers on the 15th.

Enquirens (Kensington).—The information could be obtained only by canvassing the whole profession.

MEDICAL CELEBRATION OF THE QUEEN'S JUBILEE.

To the Editor of THE LANCET.

SIR,—It is almost time that we of the medical profession should be considering in what way we may best celebrate the jubilee year of the Queen's reign. Permit me to suggest that it would be a suitable opportunity for a great and united effort on our part to place the funds of our own particular Benevolent Institution in a better state, or to raise a separate fund towards providing a school for the daughters of medical men, who, I observe, are not included in the existing arrangements. On such a memorable occasion (if the suggestion I have made should be taken up in influential and favourable quarters) I feel sure that we would all of us subscribe according to our means, and that there would be many real jubilee subscriptions of fifty guineas each.

I am, Sir, your obedient servant,

F. WILMIE BURMAN, M.D.Edin.

Ramsbury, Hungerford, Berks, Nov. 23rd, 1886.

ACUTE RHEUMATISM COMPLICATED BY A BULLOUS RASH (PEMPHIGUS?).

To the Editor of THE LANCET.

SIR,—Dr. Benham's case has interested me very much, but I think it admits of more than one explanation. Thus, it may (1) be a *bonâ-fide* complication of acute rheumatism, as the author suggests; (2) occurring for the first time after three days' "copious perspiration," it may result from extreme functional excitement of the sweat glands; or (3) after eighteen twenty-grain doses of salicylate of soda, given at intervals of four hours, it may be merely a medicinal rash, comparable to those following the administration of iodide or bromide of potassium, of belladonna, or copaiva. The first point has been sufficiently discussed by the author, though his conclusions can scarcely be said to be proven. With regard to the second point, excessive activity of the sweat glands, with its accompanying hyperæmia, may not improbably give rise to œdema of the tissues surrounding the sweat-duct, thus mechanically occluding it and setting up what may be termed deep pseudo-vesiculation. This may make its way to the surface by abnormal channels, particularly if it be true that there is free communication between the lumen of the sweat-ducts and the periglandular lymph spaces, and thus produce vesicles of any size, from that of a pin-point to the bullæ described. The fact that on the 5th of April a "crop of large irregular blebs appeared," seemingly at about the same time as the "slight return of the rheumatism in the finger-joints of the left hand," does not disprove, but rather tends to support, this view, for with the return of the rheumatism there would be renewed activity of the sweat-glands. The breaking down of the vesicles proves nothing, for any vesicle may do that, while slow healing would result from the pathological pressure to which the parts had been subjected. Concerning the third point, the large repeated doses of salicylate of soda may account for the whole of the skin phenomena. Therapeutic idiosyncrasy may in this case have much to answer for. When a patient taking copaiva during treatment for gonorrhœa develops the typical copaiva rash, one scarcely attributes the rash to the complaint, rather do we assign the development to its true cause, and call it a medicinal accident. May we not blame the drug in Dr. Benham's case? That the phenomenon has not been previously noted counts for little. A single dose of iodide will occasionally induce all the symptoms of iodism, but how many people take repeated doses of that drug without any sign of coryza?

This solitary case, then, can scarcely be admitted as strong evidence of an "intimate connexion between E. papulatum and rheumatism." Coincidence of the rash with the rheumatic symptoms (April 5th) would be explained by (2), while alternation might readily be caused by increase or wane in the physiological influence of the drug employed. Are we justified, therefore, in adding yet another burden to the already all but interminable list of skin diseases? The sudden access of severe symptoms would easily explain the inability of the several glands to discharge the unexpectedly increased duty thrust upon them and the consequent development of all the local phenomena. Lastly, I am not acquainted with any reason why Bazin's hydroa should not occur independently during the course of acute rheumatism, and, indeed, Dr. Benham's case closely resembles (excepting the rheumatism and high temperature) the two cases of true hydroa that I have been fortunate enough to examine.

I am, Sir, faithfully yours,

Pall-mall East, S.W., Nov. 20th, 1886. ARTHUR HARRIES, M.D.

To the Editor of THE LANCET.

SIR,—On reading the paper headed as above, by Dr. Benham, in THE LANCET of the 20th inst., it occurs to me that the administration of the salicylate of soda, especially in the doses stated, may account for the development of the rash. Some years ago I had under treatment a severe case of rheumatic fever which had resisted the ordinary remedies, and as the salicylate of soda treatment was at the time coming into vogue, I prescribed the latter treatment, with the result that after several doses had been given, the patient, a stout female, was covered over with a rash, not unlike what is described in Dr. Benham's patient. There was, however, no remission of the rheumatic pain or swelling of the joints, and I had reluctantly to discontinue the remedy. There was also present much delirium, which caused me considerable anxiety. I have seen it stated in medical periodicals that this rash has been noticed in connexion with the administration of salicylate of soda in some constitutions, and I think that this point should be definitely settled.—I remain, Sir, your obedient servant,

JOHN COCHRANE, L.R.C.P.Ed., &c.,
Medical Officer of the Parish of Strath, Skye.

Broadford, Skye, Nov. 22nd, 1886.

Doubtful.—We do not see that our correspondent has any claim, and feel pretty sure that the suggested application would simply entail the unpleasantness of a refusal.

A. Z. is referred to the reply given to "Dr. Ingle" last week, page 1009.

PRACTICAL HINT ON THE PERFORMANCE OF TRACHEOTOMY.

To the Editor of THE LANCET.

SIR,—If Mr. Braddon will look at page 39 of the third edition of "Surgical Emergencies," he will find directions for the performance of the operation of tracheotomy which to all intents and purposes coincide with his suggestion.

I am, Sir, yours faithfully,

Plymouth, Nov. 20th, 1886. PAUL SWAIN.

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OUTBREAK OF ANTHRAX IN CATTLE.

To the Editor of THE LANCET.

SIR,—The history given by Mr. Fraser in your issue of the 9th ult. is very interesting. It points strongly to the fact that in this disease, as in all others due to the absorption into the blood of infective material, that fluid is to a greater or less extent deprived of its fibrin-forming power. During my term of office as a civilian surgeon attached to the Army Medical Department in South Africa in 1879 I had many opportunities of observing the course of that terrible scourge called "horse sickness," and I dissected many horses and mules which had died of it. In this disease the blood becomes so fluid that the liquor sanguinis passes into the air-cells and bronchi, and the animal dies with the frothed-up serum running out of its nostrils—drowned by its own blood. On dissection the pleural cavities, pericardium, and bronchi are filled with serum, whilst the parenchyma of the lungs and the subcutaneous tissues are infiltrated with the same fluid. In mules the subcutaneous tissue is more affected than in horses, giving rise to a thick-headed appearance, called "dikkop" by the Dutch—one of the names by which the disease is known. There are no signs of inflammatory action anywhere. There is no looseness of the bowels. In the mesenteric glands I found numbers of small worms, which must, I think, have passed from the intestines in the embryo form. It is to their presence that I attribute the development of the disease. Horses are believed to take it more readily when allowed to graze whilst the grass is wet with dew. In malignant scarlet fever, blue measles, hæmorrhagic small-pox, &c., we also see the development of extreme fluidity of the blood, giving indications to us for treatment by hæmatinics, such as the strong preparations of iron. The symptoms in the case of Henry P——, recorded by Mr. Fraser, point, in my opinion, not to pneumonia, but simply to extreme fluidity of the blood, caused by the poison of anthrax, and giving rise to passive congestion of the lungs from the effusion of bloody serum into the air-cells. The symptoms were, of course, aggravated by the well-marked heart disease. Those cases reported as being under the care of Mr. McKenzie are interesting, in that they show the value of absolute phenol as a local application. With full doses of iron internally much more may, I think, be done in the treatment of such diseases. On this principle I have treated cases of malignant scarlet fever and measles with large doses of the perchloride every hour, and have seen rapid recovery follow in cases which seemed hopeless. In typhoid and puerperal fevers also I have found iron to be the best of all medicines. Hence my advocacy of the "iron treatment" of all diseases due to infective absorption from any source whatsoever. I am, Sir, your obedient servant,

Clayton-le-Moors, Oct. 14th, 1886. C. R. ILLINGWORTH, M.D.

Enquirer (Cheltenham).—1. It is better to follow the custom of the place.—2. Yes.

Luke.—With much respect.

CONSULTANTS AND GENERAL PRACTITIONERS.

To the Editor of THE LANCET.

SIR,—Just lately the parents of a child whom I have been attending wished for a second opinion, and I suggested a London consultant of good standing, and wrote to him detailing the case, treatment, &c., and an appointment was made through me. After seeing the case, the consultant advised the parents and gave a prescription for medicine suggested; and then wrote to me stating what he thought of the case, saying that he had given the parents his prescription. The net result of which is that through recommending the patient to him I lose all further benefit of the case, as the medicine is obtained at the druggist's, and my attendance is no longer required (at any rate for the present). I shall be rather chary of consultants (so-called) for the future, and would be glad to know if such be the usual practice with consultants. I was under the impression that the consultant's opinion and suggestions as to treatment, medicine, &c., should be given *only* to the medical man in charge of the case, and at whose suggestion the particular consultant is usually chosen; as, if not, the poor "G. P." commits a suicidal act by ever wanting another opinion. Also, is it allowable to the consultant to see a patient, who has been sent by the ordinary medical attendant the first time, further times in the progress of the same case, without the ordinary medical attendant's sanction?

I am, Sir, yours faithfully,

Nov. 17th, 1886. FAIRPLAY.

*** We agree with "Fairplay" that the consultant in the above case should have communicated with the general practitioner, and suggested to him the medicine to be prescribed. There would be very much more beneficial intercourse between consultants and family practitioners if the reference to them took the form of a consultation, instead of having the appearance of superseding the ordinary adviser. This involves a little more trouble, we admit, to men whose leisure is often very limited; but the curious thing is that the busiest men are often the most exemplary in this matter.—ED. L.

W. B.—The matters to which our correspondent refers are purely legal, and he should be advised by his solicitor. As to the advertisement, it should be sent to the body from which the gentleman obtained qualification.

B. A. Cantab.—We regret we are not in a position to answer the question.

COEXISTENCE OF MEASLES AND SCARLATINA IN THE SYSTEM.

To the Editor of THE LANCET.

SIR,—The following will be of interest as showing how two diseases may be developing at the same time. Early this year I was requested by one of my patients to call and see two of the family, female twins aged four years. Upon examination, I found No. 1 child suffering from a well-developed attack of measles, accompanied by severe bronchitis, throat and tonsils highly congested, but no diphtheritic or ulcerative patches. No. 2 child had a well-marked eruptive scarlatina rash covering the whole body, and a decided diphtheritic throat. By the fourth day the measles rash had disappeared from No. 1 and an eruptive scarlatina rash was appearing, the throat assuming a diphtheritic appearance. During the next three days the rash fully developed with serious throat complications. No. 2 child during this time was suffering from a severe form of anginosa scarlatina, but at the end of five days the scarlatinal rash had disappeared, throat symptoms considerably improved, and the measles rash at once coming out, but not so well marked as No. 1, and without chest complications. Both children desquamated freely, and at the end of six weeks had made a good recovery. Although I am constantly amongst these two diseases, I cannot call to mind any case where the evidence has been so decided that the two diseases may coexist so closely in the same system. Neither could I obtain any proof that the children had been exposed to either of the infectious poisons, as no other cases were known to be in the neighbourhood.

I am, Sir, yours faithfully,

Everton, Liverpool, Nov. 1886. CHAS. J. R. LAWDAY.

Balbus.—Unless the friends were determined in wishing B to see the case over a length of time, and to operate, he was to blame. Where there is any chance of removing a mammary tumour by medical means surgical ones should be postponed, and it is legitimate to temporise. But B could surely have secured the necessary delay and trial of remedies by communication with A, and certainly should not have taken the case without such communication.

Mr. W. A. W. Jameson and *others.*—The publishers of "Twenty Doctors" are Messrs. Hamilton, Adams, & Co.

UNQUALIFIED ASSISTANTS.

To the Editor of THE LANCET.

SIR,—I see by the report of the Medical Council that it is desired by some that steps should be taken to stop the use of unqualified assistants. Before doing so, I would like them to consider the effect of suddenly stopping a long-established custom. Many of these men have acted as assistants the best part of their lives, and by natural aptitude and study have made themselves safe and efficient advisers. They are also many of them married and support themselves and families creditably. What are such men to do? No doubt many unqualified men are totally unfit for their posts, but can we say that all qualified men are fit to be trusted? In consequence of puplage being abolished, it is now almost impossible to get a man who is just qualified who is fit to turn into a private practice; he knows nothing of how to gain and retain the confidence of his patients, and his treatment is theoretical and often impracticable. If the Council determine to abolish unqualified assistants, let them give due notice of their intentions, allow all men who can produce evidence of a certain standard of experience to be registered as unqualified assistants, register no one after a certain date, and subject anyone who uses a non-registered unqualified assistant to a penalty. In this manner this class would be done away with without hardship or injustice, as a man entering the study of medicine would know that he must qualify if he wants to live by it.—I am, Sir, yours truly,

November 23rd, 1886. M.R.C.S.

Mr. C. J. Bond (Leicester).—Dr. Shershevski does not seem to be acquainted with our correspondent's paper on the influence of the body on the position of the heart. The address of the editor of the *Vrach*, who we believe understands English, is Professor Manassein, Simbirskaja, 12, St. Petersburg; and that of Dr. Shershevski—or "Scherschewskij," as generally transliterated—is given in the Directory as Galeerenstr., 24, St. Petersburg.

Mr. Alfred H. Whittell.—A paper was read at the Academy of Medicine of Ireland in February of last year by Dr. Walter Smith (see THE LANCET of June 6th, 1885), in the discussion of which one or two speakers expressed their belief in the infectiousness of pneumonia.

A. B.—Such a charge would be undignified in a Fellow of a College of Surgeons, but would not necessarily lead to the withdrawal of his diploma.

CRACKED OR FISSURED TONGUE.

To the Editor of THE LANCET.

SIR,—I have a case that has resisted every form of treatment. The patient, with the exception of occasional attacks of nervous depression, is in good health. There are no stomach or liver troubles to speak of. The tongue is clean, but deeply fissured. Solution of perchloride of iron painted well into the cracks appears to give the most relief. I shall be obliged if any brother practitioner who has been successful in a similar case will give me a hint as to further treatment.

I am, Sir, yours faithfully,

Nov. 20th, 1886. A YOUNG PRACTITIONER.

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COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Mr. Chauncy Puzey, Manchester; Dr. Kendal Franks, Dublin; Mr. J. E. Erichsen, London; Dr. Poore, London; Dr. Fairbank, Doncaster; Mr. Jordan Lloyd, Birmingham; Mr. Eastes, London; Mr. Lawrence, Tunbridge Wells; Mr. J. Cochrane, Broadfield; Dr. Nicholson; Dr. Wilkie Burnham, Hungerford; Mr. H. J. Bailey, Blackheath; Dr. Dyce Duckworth, London; Dr. Handford, Nottingham; Mr. W. H. Day; Miss Hompes; Herr Vetlesen, Hamar; Mr. Fripp, London; Dr. J. W. Murray, Manchester; Mr. L. G. Smith, Tottenham; Mr. Hutchings, Baltimore; Dr. O'Neill, Belfast; Mr. Berry, Wigan; Dr. R. Park, Glasgow; Mr. Everitt, London; Dr. Oldham, Manchester; Lady John Manners, London; Dr. Swaby Smith, London; Mr. Heydon, Ben Rhydding; Mr. Wigan, Manchester; Dr. James, Winslow; Mr. Rose, London; Mr. Paul Swain, Plymouth; Dr. Harries, London; Mr. J. Rothschild, Paris; Dr. Blakeney, Brisbane; Messrs. Burroughs and Wellcome, London; Dr. Goodridge, Bath; Surgeon-Major Dobson, Southampton; Mr. Hardman, Birmingham; Dr. Lacerdo, Rio de Janeiro; Mr. Lawday, Everton; Mr. Calvert, Gothenburg; Mr. W. Curran, London; Mr. Wheeler, Manchester; Messrs. Bennett and Co., London; Dr. Kerwen, Galway; Mr. Watson, London; Mr. Lea, Notts; Dr. Welding, Liverpool; Mr. Derry, Leeds; Messrs. Farwig and Co.; Messrs. Walford; Mr. Ryley, Leicester; Dr. Branthwaite, Twickenham; Capt. Clark, Southsea; Mr. Tinker; Messrs. Smith and Son, Manchester; Mr. Coleman, Cardiff; Mr. Meredith, South Bank; Mr. Taylor, London; Mr. Bolton, Notts; Mr. Nash, Weston-super-Mare; Messrs. Johnston, Edinburgh; Messrs. Leoflund and Co., London; Mr. Davis, London; Mr. Beach; Messrs. Isaacs and Co., London; Dr. Hillier, Harrow; Dr. Taylor; Messrs. Tudsbury and Son, Newark; Mr. Twyford, Hanley; Mr. Unsworth; Messrs. Lee and Nightingale, Liverpool; Dr. Adam, West Malling; Messrs. Smith and Son, Birmingham; Mr. Williams, Sunderland; Messrs. Lee and Martin, Birmingham; Mr. White, Wolverhampton; Mr. Blenkarne, Leicester; Dr. Ridge, Enfield; Dr. Balding, Royston; Mr. Gilbert, Hammersmith; Mrs. Binks, Chelsea; Mr. Bruce, Dingwall; Mr. F. J. Patton, London; W. B.; M.R.C.S.; Luke; R., Bayswater; B.A. Cantab.; Doubtful; M. O. H.; M. N., Leeds; Ye Humble Apothecarie; A Young Practitioner.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Powell, London; Mr. King, Linton; Mr. Davies, Pontfaen; Messrs. Savory and Moore, London; Dr. Tate, Notts; Dr. Barr, Glasgow; Dr. Coates, Sirhowy; Mr. Stenhouse, Glasgow; Mr. Heap, Liverpool; Mr. Fulton, Toronto; Mr. Fenton, Wivenhoe; Mr. Hague, London; Mrs. Piggott, Preston; Mr. Gallahier, Leigh; Mr. Ellis, Snaith; Mr. Cockle, West Hartlepool; Mr. Brocklehurst, Matlock; Messrs. Mackay, Edinburgh; Mr. Knight, Worthing; Capt. Blount, Chelsea; Dr. Connan, Blackburn; Mr. Trubshaw, Mold; Dr. Murray, Kendal; Messrs. Bell and Co., Edinburgh; Mr. De Fraine, Aylesbury; Mrs. Robinson, Bury St. Edmund's; Mr. Evans, Oswestry; Dr. Proctor, Shifnal; Dr. Wall, Peterboro'; Mr. Jones, Glamorgan; Mr. Nadin, Sheffield; Mr. Wigan, Maidstone; Mr. Charlton, Darlington; Mr. St. Dalmas, Leicester; Mr. Davis, Worcester; Messrs. Cassell & Co., London; Myoma; Lady Superintendent, Southsea; Medicus, Burnley; Superintendent, Leeds; T. M., Sandbach; A. C., Tredegar; A. X. Z.; L. M., Southport; Upsilon, Newcastle; Medicus, Sheffield; Omicron; Matron, Canterbury; A. C. D.; Bonus.

Leeds Mercury, Liverpool Courier, Oxford Times, West Briton and Cornwall Advertiser, &c., have been received.

Medical Diary for the ensuing Week.

Monday, November 29.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesdays, same hour.
CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2.30.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.
SOCIETY OF ARTS.—8 P.M. Mr. Lewis Foreman Day: The Principle and Practice of Ornamental Design (Cantor Lecture).
MEDICAL SOCIETY OF LONDON.—8.30 P.M. Clinical Evening. Mr. H. Allingham: Lateral Displacement of Patella les Gigas, with Congenital Malformation.—Mr. Edmund Owen: Children after Knee-joint Abscess.—Dr. Stephen Mackenzie: Paralysis of Extensors of one Forearm.—Mr. Bruce Clarke: Case of very obstinate Cystitis treated by Constant Current; and other cases.

Tuesday, November 30.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.
CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

Wednesday, December 1.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesdays and Thursdays, 1.30 P.M.
ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department, Mondays and Thursdays, 9.30 A.M.
ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.
LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.
GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.
KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; and on Friday, 2 P.M.; and Saturday, 1 P.M.
CHILDREN'S HOSPITAL, GREAT ORMOND-STREET.—Operations, 9 A.M.; Saturday, same hour.
SOCIETY OF ARTS.—8 P.M. Adjourned Discussion on Dr. C. Meymott Tidy's paper on Sewage Disposal.
OBSTETRICAL SOCIETY OF LONDON.—8 P.M. Specimens will be shown by Mr. Doran and others. Dr. Dakin: Mercurialism in Lying-in Women.—Dr. Pedley: Midwifery among the Burmese.—Dr. Gibbons: Case of Galactorrhœa.

Thursday, December 2.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

Friday, December 3.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
WEST LONDON MEDICO-CHIRURGICAL SOCIETY.—8 P.M. Pathological Specimens by Mr. H. Percy Dunn. Dr. Savill: Ichthyosis Sebacel, Melanoderma, Tubercular Syphilide.—Mr. Edwards: A case of Excision of the Rectum.—Mr. Whitmore: Stricture of the Rectum, with cases.—Dr. Venn: A case of Inversion of the Uterus during Parturition treated as a Polypus and Ligatured.—Mr. H. A. Reeves: Cases, with Remarks, in Gynæcological and Orthopædic Surgery.

Saturday, December 4.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.

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The Bowman Lecture

ON THE

PARASITICAL DISEASES OF THE EYE.

Delivered at a Meeting of the Ophthalmological Society,

BY WILLIAM VON ZEHENDER,

PROFESSOR AT ROSTOCK IN MECKLENBURGH.

MR. PRESIDENT AND GENTLEMEN,—The invitation which I received last year from the Council of your Ophthalmological Society was, I must say, a very welcome one. I value very highly the great honour which this invitation brings with it, the more so as this lecture has been instituted with the design of gratefully commemorating the services which Sir William Bowman has rendered to science. I am fully conscious of the honour of being allowed to speak in commemoration of a man so greatly esteemed all over the Continent, and especially in my own country, because of his pre-eminent scientific position. But, having in the first moment cheerfully and decidedly consented to accept the honour conferred upon me, I afterwards felt the whole weight of my responsibility, and began to fear that I should not be able to discharge the duties which I had undertaken. It is a well-known fact that in treating of difficult matters it is not always easy to find the right words and the proper expressions, speaking even in the mother tongue; and I venture to speak before you in a language, not quite different from the German in its earliest origin, to be sure, but very different in its later development. I beg to apologise for all incorrectness of speech and deficiency of elegance; indeed, I feel sure you will overlook them.

The aim of my lecture will be to lay before you an account of the parasitical diseases of the eye—diseases very little known in earlier times, but now more and more occupying the attention of the scientific world.

The late Dr. Mackenzie, in his "Practical Treatise of the Diseases of the Eye," had only one short chapter treating of the entozoa of the organ of vision. At the present day, in consequence of the investigations of modern science, this chapter ought to be greatly enlarged. The entozoa of the human eye, mentioned in the fourth edition of that treatise, which was at that time the most valuable and the most complete work on ophthalmology, are almost all visible with the naked eye—namely, (1) filaria, (2) monostoma and distoma oculi humani, (3) echinococcus hominis, and (4) cysticercus cellulosæ. Let us see what is known at the present time of these species of entozoa.

Von Nordmann may be looked upon as the first observer of the natural history of minute living creatures in the eye. He examined an immense number of eyes of fishes, amphibians, birds, and mammals, and found therein several specimens of different entozoa. Examining the human eye, he and Gescheidt and von Ammon found in its crystalline lens also several parasites. In the extracted lenses of an old man von Nordmann found two specimens of a filiform worm, and a similar one in the cataractous lenses of an old woman. As it was impossible to give an accurate description, he named it filaria oculi humani. In another lens of an old woman he found eight specimens of monostoma, which showed some slight motion after being put in lukewarm water. Gescheidt and von Ammon also found in the cataractous lens of an old man three extraordinarily slender worms, which they closely described and judged to be the same filaria seen by von Nordmann. In a child of five months, which died of atrophia meseraica, they found between the opaque crystalline lens and its capsule four specimens of distoma oculi humani, of which they gave a detailed description. It is to be presumed that this distoma might have been an incompletely developed specimen of distoma hepatis (Leuckart). Von Nordmann as well as Gescheidt were, in the branch of helminthology, very eminent investigators and strictly truthful in their accounts. There can be no doubt that what they saw in the human eye and what they described was really that which they deemed it to be. But it is most astonishing that ever since neither monostoma nor distoma has been found in cataractous lenses, though the microscopes of to-day are much more powerful than those of fifty years ago, and though a very great number of cataractous lenses have been very closely examined.

These observations belong, therefore, to what I may call a traditionary period of the history of parasitical diseases. Nearly the same may be said of the filaria in the human crystalline lens; whereas filaria in other parts of the eye, especially under the conjunctiva, according to Guyot, is a very common disease among the negroes of Congo. This worm seems to live only in the west of Africa, in Guinea, on which account it has the name Guinea worm; but a certain number of zoologists do not think it to be quite the same as the filaria medinensis. It has, therefore, been called filaria loa, the word loa being the name of the worm in the language of the inhabitants of Congo. It is, as far as I know, only observed in the eyes of negroes;[1] and it is said that no case has been recorded in America since slavery has been abolished.[2]

Echinococcus in any part of the human body is, except in Iceland, a very rare disease. Mackenzie refers to two cases of echinococcus in the orbit, but there have been published about forty. Echinococcus has never been found in other parts of the eye except in the orbit. It causes, to be sure, more or less protrusion of the eyeball; but it does not impair the sight in any other way, and may be easily removed by operation.

Cysticercus.—Mackenzie quotes only the few cases of cysticercus cellulosæ known at the time of the edition of his book. The fourth and last edition was published in the year 1854, a few years after the discovery of the ophthalmoscope in the year 1851, and I might have said "the invention of the ophthalmoscope," but Helmholtz himself has repeatedly said that it was much more a discovery than an invention, and so I cannot but use the same expression. The discovery of the ophthalmoscope signalises the beginning of quite a new period of our special science. The internal diseases of the eye were up to that time, we may say, quite unknown. The ophthalmoscope enlightened the darkness in which internal diseases of the eye were hidden, and, respecting the entozoa of the eye, showed that the cysticercus cellulosæ does not only reside under the conjunctiva, or in the anterior chamber, or in any other part visible with the naked eye, but even in the retina and in the vitreous body, where it cannot be seen otherwise than with the aid of the ophthalmoscope; in fact, it chooses its domicile more often in these parts than anywhere else in the organ of vision.

It is very remarkable that the cysticercus has been seen at Berlin, and in some other places in the north of Germany, in a much larger proportion of cases than elsewhere. Von Graefe of Berlin was the first to observe a cysticercus with the ophthalmoscope in the internal parts of the eye, and was the first to extract it by an operation. He had already seen a considerable number of cysticerci before the first was seen at Vienna in the autumn of 1865. This curious fact is difficult to explain. At first one could deem it probable that the use of the instrument was better understood at Berlin than at Vienna, because it was in use at Berlin almost six months or more before it was known at Vienna. But its practice was very quickly acquired, and I need not say that Eduard Jaeger of Vienna was one of the most accurate observers with this instrument, and was the first to publish pictures of the fundus oculi of an admirable and unsurpassed exactness. It is necessary to look for another explanation. Since the experimental investigations of Küchenmeister and Leuckart, it has been well known that there are two different species of tapeworm residing in the digestive tube of the human body—the one with a crown of hooks round its head, the other without it. The first stage of these tapeworms, the cysticercus, exists likewise in two different forms—the one with hooks, the other without them. These crowned tapeworms in their first stage—the cysticercus—live especially in pigs, sometimes in an exceedingly great number, and in some other animals, and also in the human body. The cysticercus without hooks lives in the body of cattle, but never in the body of pigs. This fact has been sufficiently proved by feeding experiments. It is worth notifying that this cysticercus without hooks, living

[1] Leuckart: Die Parasiten des Menschen und die von ihnen herrührenden Krankheiten, 2 Aufe, Bd. II., p. 620. Leipzig, 1886.

[2] Bisnsbard: La Filaire sous Conjonctive. Le Progrès Méd., No. 39, 1886, p. 611.

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in cattle, has never been found in the human body, neither in the eye nor elsewhere. It seems to be nearly certain that pork is consumed to a much larger extent in the northern than in the southern countries, and that the tapeworm with hooks is much more common in the north than in the south; the consequences of this will be that the cysticercus (with hooks) must also be much more frequent in northern than in southern countries.

But the more one studies this question the more one finds that both tapeworms, the tænia solium and the tænia mediocanellata, exists in a nearly equal proportion everywhere, and therefore the before-mentioned question is far from being satisfactorily answered. Let me quote only a few figures to prove what I have just said.

The late A. von Graefe of Berlin found one cysticercus, visible with the ophthalmoscope, in the internal parts of the eye among about 1000 patients; his cousin, Alfred Graefe of Halle, found them in about the same proportion; whereas Dr. Berlin of Stuttgart found one cysticercus among 40,000 patients; Dr. Hansen-Grut of Copenhagen, only one cysticercus among 70,000 patients; Dr. von Wecker of Paris, only one cysticercus among 60,000 patients; and Dr. Mauthner of Vienna, not one among 30,000 patients. The first and only intraocular cysticercus in Belgium was seen last year (1885). This is, indeed, a very remarkable disproportion, well worthy of being more closely investigated. Another equally remarkable fact is, that cysticercus in the internal eye is not nearly so rare as in any other part of the eye. The late A. von Graefe of Berlin only once saw a cysticercus in the crystalline lens (this being the only time that one has ever observed it in this structure), once in the orbit, three times in the anterior chamber, five times under the conjunctiva, in contradistinction to more than eighty times in the retina and in the vitreous body. Similar observations have been made by Alfred Graefe, the professor in Halle, who in his large practice sees four or five cases of intraocular cysticercus annually, and he saw only one in the anterior chamber during a period of eight years.

The brief history of cysticercus in the human body is this: Eggs of the tapeworm enter in one or other way into the human stomach. The thin covering of these eggs is dissolved by digestive action, and the living little cysticercus appears. To be sure, it has not yet been really observed, but it hardly seems possible that there could be any other means for it to reach the eye than that this minute animal passes through the wall of a bloodvessel, entering thus into the circulatory system. Carried along with the blood it may be stopped somewhere—for instance, in the choroid,—and then it creeps out, like a white blood corpuscle in a case of inflammation. Its behaviour in this place is different. It seems that the worm has a tendency to get into the vitreous body, and this action is performed with more or less impetuosity. If seated in the choroid, or under the retina, the moving of the worm gives rise to a large detachment of the retina, and sometimes one has observed that it really creeps through the retina into the vitreous. This process cannot be performed without causing the patient great discomfort. It often excites a vehement inflammation with unsupportable pain, and produces dense opacities in the vitreous, so that the minute animal can hardly be distinguished with the ophthalmoscope. If seated in the retina the little worm does not do so much harm, and generally gets more easily into the vitreous, without exciting such disagreeable sensations. Then, the vitreous remaining clear, it can be perfectly well seen with the ophthalmoscope. In a few cases one could distinctly see the crown of hooks and the movements of the animal. According to the difference in the behaviour of intraocular cysticerci, different modes of treatment are required. If the cysticercus is very unsteady and rambling, it will be necessary to perform enucleation of the eyeball directly; if it behaves quietly, and if the patient does not suffer much pain, it may be allowed to remain for a time. But, so far as we know of this very rare disease, periods of quietness and periods of restlessness are constantly alternating; and, finally, the eyeball shrinks, and sight will almost always be entirely lost. That is the reason why some operators do not think it advisable to wait at all, but to perform the operation in any case in which the presence of a cysticercus is well established. This being so, it will be the best plan to operate as early as possible when there are no inflammatory symptoms.

Instead of enucleation, one has successfully tried to extract the little animal from the eyeball. This was first performed, as I have already mentioned, by A. von Graefe. He first made a large iridectomy, and afterwards extracted the worm with cannula forceps through a scleral wound made about two lines behind the corneo-scleral margin. Many other oculists have since that time successfully, as well as unsuccessfully, tried to do the same by more or less similar operations. What has been done in this way by Alfred Graefe of Halle is of much interest. No oculist has performed an equally large number of operations for cysticercus. In his last publication[3] on this subject he refers to forty-five eyes afflicted with intraocular cysticercus, operated upon by him in the eight years 1877–1885. The immediate result of these forty-five operations was completely satisfactory. In thirty cases the parasite was caught and extracted, in only one of which an unusually profuse loss of vitreous followed. In fifteen unsuccessful operations, the want of success in extracting the worm was due to dense opacities of the vitreous not allowing an exact determination of its seat, or to an unsteadiness of movement, the animal being in the middle of the vitreous and floating about in all directions. The best chance for a successful extraction is when the worm is steadily seated between the retina and choroid. Twenty-four out of the successful cases Albrecht von Graefe had the opportunity of seeing again some time afterwards. In almost all these twenty-four patients, pain and other inflammatory symptoms had entirely subsided, and the eyeball had preserved its natural form, though in some cases it was weaker than normal. The sight of the patients had increased, and in one or two of them to a considerable degree. In the fifteen cases in which it was impossible to dislodge the animal, it afterwards appeared necessary to remove the whole eyeball or the anterior part of it, an operation which is obliged to be performed when pain and other inflammatory symptoms arise. These are the results of forty-five operations performed by Professor Alfred Graefe of Halle. Few of our special *confrères* have had the opportunity of performing this operation, and only a very small number of these have performed it more than once.

From the rarity of a cysticercus residing in the interior of the eye, this disease is, in a practical sense, of no great importance, but scientifically it is highly interesting. The course of life of any living parasite in the living human body cannot be studied with less trouble and with greater exactness than that of a cysticercus living in the eye. These are almost all the parasites of the organ of vision visible with the naked eye. But there is another series of microscopical parasites, belonging to the vegetable kingdom, practically of much greater importance. Of these we have now to treat.

These micro-organisms are the lowest forms of life we know, but by no means the most indifferent for our bodily welfare. They are such small objects that it is impossible to see them unless we use the strongest magnifying power of microscopes of the very best construction, but by their enormous multitude and power of propagation they can nevertheless do us very great harm. Pasteur has demonstrated that the air owes its property of decomposing organic substances to minute particles suspended in it, which are the germs of various low forms of life, long since revealed by the microscope, but not previously shown to be the essential cause of putrescence and decomposition of organic substances. This fact was primarily only a theoretical one, but Sir Joseph Lister was the practical man who succeeded in making the knowledge of this useful for the benefit of mankind, in giving the impulse to scientific studies, which originated thoroughly new ideas of diseases and of the means of curing them. You know better than I possibly can tell you the great merits of Sir Joseph Lister with respect to his antiseptic method; I wish only to mention that he, bearing in mind that all the mischief in healing wounds arises from the vitality of these atmospheric particles, and directing his attention especially to the subject of suppuration, found carbolic acid well adapted for the treatment of open wounds. Some years passed away before the profession began to trust in these new ideas, and I remember perfectly well the first trial made with a great deal of incredulity at Rostock, and the general astonishment in observing what a remarkable retardation of suppuration was the result of this treatment. Ophthalmology, always attentively looking round for some possible advancement, did not wait very long in applying the principles of this

[3] Albrecht von Graefe's Archiv für Ophthalmologie, Bd. xxxi., Abth. 4, p. 33. Berlin, 1885.

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treatment to eye diseases, especially to the after-treatment of cataract extraction. The members of this Society who were present at the International Congress held in London in the year 1881 will well remember the communication on the antiseptic method in ocular surgery made by Professor Horner of Zurich, in which communication he said that loss of eyes following a perfectly normally performed extraction of cataract had long been known, and that an exact analysis of all the cases of primary suppuration after cataract extraction leaves no doubt that it depends on infection. The most complete analysis of the results of cataract extraction shows a loss of 10·1 per cent. by the flap operation, and a loss of 4·8 per cent. by the linear operation, which loss has been reduced at Zurich to 1·5 per cent. by strictly observing the measures of antiseptic treatment. This is a wonderful practical result of what is rightly called Lister's antiseptic method.

But Lister's method was not only fruitful in a mere practical sense; it has greatly contributed to thorough investigation of all those living germs which occasionally invade the human body; it gave rise to the question, What are these living germs? The profession in all parts of the world has earnestly tried, and is still trying on a large scale, to give an answer to this question. This research has originated quite a new science, called bacteriology. Bacteriology has already determined a great number of different species of these micro-organisms, and has described their forms, their food, their manner of living, &c.; but it is impossible (and in the meantime useless) to give here an exhaustive account of the systematical differences of these microzoa, and of the multitude of names given to them. Some of them, there is no doubt, are very dangerous to health; some are, perhaps, innocent; and some (why should it not be so?) may be of a salutary influence. For our purpose it will be sufficient to divide them into only two classes, the pathogenic and the non-pathogenic microzoa. For this distinction we can only refer to experiments made on animals. If there is an effect produced by any microzoon on the eye of an animal, then it may be argued that a similar effect may be expected upon the human eye. Rabbits are the most docile and the most patient of animals, and therefore are mostly used for such experiments. Hence any microzoon will generally be called "pathogenic" which leads to infection in the rabbit's eye, and will be called "non-pathogenic" if in the rabbit's eye it does no harm, so that what results in the rabbit's eye will show us what is to be expected in the human eye under similar circumstances. But here we are on uncertain ground. These conclusions evidently are correct only on the assumption that the tissues of the rabbit's eye and the tissues of the human eye are absolutely identical. This, to be sure, is not the case. There are some microzoa very dangerous to rabbits and relatively innocuous to the human body, whilst others are dangerous to human health and relatively innocuous to rabbits. Gonococcus and staphylococcus aureus, for instance, the most dreaded of all microzoa because of their great tendency to provoke suppuration, are in the rabbit's eye relatively indifferent micro-organisms. The conjunctiva of the rabbit and the conjunctiva of the human eye are therefore not equally good abodes for certain microzoa. It is the same with other animals; each one has its own idiosyncrasies for nourishing and for starving micro-organisms. But not only is the difference of the same tissue in different animals the reason of a different behaviour of the same microzoon; the tissue itself in one and the same individual may change under different conditions of life, and may consequently not be identical during the whole lifetime. It is quite possible that changes may take place during life, unknown perhaps to ourselves, but very important to the respective micro-organisms. I will only allude to vaccination, which evidently changes the nutrient soil so that the microzoa of small-pox can no longer live in it; they no longer find nourishment, and the vaccinated body remains unaltered by an infection which would have been fatal to it if unvaccinated. These views introduced concerning small-pox by Dr. Jenner are now about to be generalised for nearly all infectious diseases. It may be ascertained, as a matter of observation, that certain micro-organisms cannot live in an animal when certain others have already taken possession of its body, whereas they may be pernicious to it when certain others are not present.[4] But it has not yet been ascertained whether they change the nutrient soil into a sterile one, or whether they devour or kill each other.

There is one other remark to be made—that is, that the quantity of microzoa invading the human body is also of great importance. Just as poison has its poisonous property only with respect to the quantity, and can be a wholesome remedy when taken in right proportions, although deadly when taken in too large a dose, so a small quantity of pathogenic microzoa, assaulting the human body, may be innocent, whereas the danger increases with the increasing quantity.

If it is true that not every nutrient soil is equally well adapted to every microzoon, one microzoon developing better in one soil than in another, it must consequently be true that one or other nutrient soil is exceedingly well adapted to a certain species of micro-organism. Supposing this to be a fact, some authors have formed the idea that an exceptionally well-nourished and well-developed microzoon might show some difference from the same microzoon when badly nourished, and might, for instance, grow larger and thicker, or even change somewhat its original feature, or change its character in so far as its pathogenic activity might be lessened as well as strengthened. This idea is, to a certain extent, analogous to what daily experience teaches with respect to plants and animals. Plants put in a favourable soil may grow excessively well, and may, to a certain extent, change their colour, smell, and other qualities, but, put in a bad and unfavourable soil, they will fade and die.

Concerning the microzoa this may be the same, but it has not yet been sufficiently proved by facts. We will now briefly consider some of the microzoa which produce diseases of the eye.

The Normal Conjunctiva.—The surface of the normal conjunctiva is covered with a fluid, which is composed of pure water secreted by the lacrymal gland, and of some fat and slime secreted by the minor glands of the conjunctiva. The germs of all living microzoa floating in the air can every moment drop into the open eye and remain on the surface of the conjunctiva. Hence it cannot be astonishing that one finds in every normal eye plenty of germs of all possible kinds of micro-organisms. Of two persons with quite normal conjunctivæ it has been found that almost always one eye contains pathogenic germs.[5] Why does not the eye, then, become inflamed every moment? Conjunctivitis is, as you know, a very common disease. That it is not much more common than it really is, and that it does not arise every moment, may partly be explicable by the passing of these germs through the lacrymal canals into the nose, where they probably may be innocuous; partly by the qualities of the conjunctival tissue itself, it being, in some people, a bad soil for nourishing and feeding germs, in others a good one. The most common of all forms of conjunctivitis is the phlyctenular, called by the authors of a more remote period conjunctivitis scrofulosa. This is a form arising chiefly in children, and only exceptionally in adults. The research in finding a particular microzoon in these phlyctenules has not yet been successful—it would require very delicate manipulation; but in the fluid which moistens the conjunctiva there have been found seven or more different forms of microzoa, partly pathogenic, partly non-pathogenic. The authors of a more remote period, who preferred the adjective "scrofulosa," thought this disease to be a blood disease, which occasionally comes out and subsides. There has never been the least doubt in the mind of any practitioner that this disease is nearly always combined with some other symptoms of scrofula, that it arises chiefly in scrofulous children, and that in these children it often becomes so dangerous that the eye is lost. We are far from exactly knowing the connexion which exists between scrofula and phlyctenular conjunctivitis; but it may be that these infectious germs find an easier and better nourishment in an unhealthy conjunctiva than in the conjunctiva of a quite healthy child, the unhealthy conjunctiva being uneven and perhaps better fitted for sheltering micro-organisms. The same argument will explain the frequent recurrences of scrofulous or strumous ophthalmia. As to the treatment of this disease, powdering the eye with calomel is nearly universally adopted as the best remedy, and its use quite harmonises with the bacteriological theory. Calomel, not soluble in distilled water, turns soluble by the addition of some salt. Tears containing a small quantity of salt, the powder of calomel brought into the eye will be, and is chemically proved to be, dissolved into small quantities, and changed into chloride of mercury, this being an excellent

[4] Emmerich: Tageblatt d. 59. Versammlung deutscher Naturforscher und Aerzte, 18 bis., Sept. 24th, 1886, p. 149.

[5] Gifford: Archiv für Augenheilk., Bd. xvi., p. 197.

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antiseptic solution. A weak solution of chloride of mercury was formerly a frequently used collyrium for the same eye disease. It is now almost entirely displaced by the sub-chloride of mercury or calomelas, perhaps because *in statu nascendi* the chloride of mercury may have a still better effect than a weak solution of it has.

Conjunctival Blennorrhœa, or Purulent Ophthalmia.—Another very dangerous parasitical disease of the conjunctiva is blennorrhœa. The micro-organisms residing in the gonorrhœal matter, first discovered by Neisier, and named by him "gonococcus," is identical with the micro-organisms found in purulent ophthalmia. The etiology of blennorrhœa in new-born children is well known, and the discovery of the gonococcus in both diseases further supports their mutual relation. Nitrate of silver is an excellent antiseptic, and it has long ago proved, in various ways, to be well adapted for curing blennorrhœa, or, to speak in modern terms, it is well adapted for killing the gonococcus. It is not only suitable for curing blennorrhœa, but even for preventing it—that is to say, for killing the gonococcus before it has damaged the eye. For preventing this disease, Credé of Leipzig gave the advice to drop one minim of a 2 per cent. solution of nitrate of silver into the eyes of every new-born child. With this preventive treatment he succeeded in reducing the high percentage of 12 per cent. and more of ophthalmia neonatorum in his lying-in hospital to ½ per cent., and even to less than that. I am not sure if it will be advisable to adopt this treatment as a general rule, but its adoption in lying-in hospitals will very likely save a very great number of eyes, especially in those hospitals in which cleanliness is an unknown thing. At the meeting of the Imperial Surgical Society of Paris, on February 21st, 1866, M. Giraldès[1] reported that in the Hôpital des Enfants Trouvés the loss of eyes (sometimes even of life) by blennorrhœa neonatorum reached the enormous number of 80 to 90 per cent.; to-day we are not very far from reducing the number of eyes lost by this pernicious disease of new-born children to zero. This, within twenty years, is really a respectable progress of science.

Trachoma.—That trachoma is caused by micro-organisms seems to be a well-established fact, though all authors are not of the same opinion on this point. The microzoon, described under the name of diplococcus of trachoma, is, as regards its form and configuration, very like the aforesaid gonococcus, only it is much smaller. It represents a very small ball, cleft by a tiny line, which line can only be seen by the most powerful microscopes. This diplococcus can very well be cultivated in different nutrient soils, whereas gonococcus, can only be cultivated in serum of blood; in other nutrient soils it does not grow. The diplococcus of trachoma has its seat inside the trachoma follicles, but outside the cells; whereas gonococcus lives in the cells or at the outside of the conjunctiva—at least, does not enter deeply into this membrane. Diplococcus of trachoma cannot be successfully inoculated into the conjunctiva of rabbits; but it is said that it has more than once been successfully inoculated into the human conjunctiva. Gonococcus, one of the most dangerous microzoa of the eye, is very easily transferable to the mucous membranes of any animal. As to the treatment of trachoma, a variety of drugs has been successively recommended, but sulphate of copper is the one that is most generally in use. In comparison with nitrate of silver it may perhaps be preferable, because it is less energetic and does not act so superficially. Its action certainly proceeds deeper into the tissue, and may therefore be better adapted to reach the diplococcus, which is seated, not on the surface, but in the follicles of the conjunctiva. The method of squeezing, or cutting, or scratching out the follicles has practically proved useful, and is, bacteriologically, quite correct.

Saccus Lacrymalis.—The lacrymal sac is like a reservoir for the fluid secreted by the conjunctiva. This fluid, always more or less loaded with micro-organisms, is stopped by the least impediment on its way to the nose, the sac being thus stuffed with microzoa. Fortunately, they may not be altogether pathogenic; but some of them, or a great part of them, being pathogenic, it will be a very dangerous group in the neighbourhood of the eye. When the sac is filled up, the outlet to the nose being closed, the fluid may occasionally regurgitate into the conjunctiva, and can greatly endanger the safety, being innocuous only when it contains [illegible] organisms alone. The presence of a stricture in the lacrymal duct, and a filling up of the lacrymal sac with matter, have long since been considered a dangerous complication. Practically, it will always be advisable to pay great attention to this complication, the relative quantity of pathogenic and non-pathogenic microzoa being changeable. The least wound of the cornea, the least loss of its epithelium, as well as any operation, opens an entrance into the deeper layers of the cornea, and allows of the immigration of micro-organisms. The result of this, the microzoa being pathogenic, will be a grave suppuration.

There exists a form of keratitis, called ulcus serpens and keratitis-hypopyon, whose dangerous course, well known to the profession, can hardly be explained except by infection.

Keratitis Mycotica.—The first time we met with the term "keratitis mycotica," which means inflammation of the cornea, caused by micro-organism, was in the year 1875. At the ninth meeting of the Ophthalmic Society, Professor Horner of Zurich demonstrated the cornea of a patient who died in consequence of a facial erysipelas, having suffered in the last days of his life from a large ulceration in the lower part of the cornea. The microscopical sections of this cornea seen with the naked eye showed a great number of fine straight lines running out from the ulcer in a centrifugal direction; seen under the microscope, this network of straight lines proved to be dilated lymph canals of the cornea filled with numerous minute spherical bodies, all of about the same size. The members of the Society who were present were persuaded that this case was really of a mycotic character, and that the spherules seen in the cornea were specimens of the coccus of erysipelas.

There are still other diseases of the eye probably depending on parasitical infection. Microzoa have been found in a chalazion; they have been seen in the internal parts of the eye—in the iris, in the choroid, in the ciliary body, in the optic nerve; local and general tuberculosis have been successfully produced by inoculating the bacilli of tubercle into the anterior chamber of a rabbit's eye; it has even been tried to prove that sympathetic inflammation is produced by the wandering of micro-organisms along the optic nerve and through the chiasma to the other eye; but all this is not yet sufficiently explained, and much laborious and long-continued work is still required. Bacteriology is at the present time a very young and incompletely developed science; it cannot yet answer all the numerous questions arising every day.

The result of all this long-continued work may be that some day the etiology of human diseases and bacteriology will be found to be nearly identical sciences. Everywhere one finds micro- and macro-zoa persecuting, vexing, and killing each other; everywhere one finds parasitism; and, in the material sense of the word, the human race itself is nothing less than a parasite on the surface of the earth. For saving his own life, for nourishing his own body, the human being destroys and kills every creature—plants as well as animals—if he deems it proper for his own welfare. And he is allowed so to do by the words of the Holy Bible. This state of things in the material world corresponds exactly to what your great philosopher Hobbes calls a "bellum omnium contra omnes." But in a moral and intellectual sphere this sentence is out of place, and has to be altered into "pax omnium inter omnes," for in the moral and intellectual sphere there exists no personal interest, no parasitism; the single person being an integral member of the great body of mankind, who has, as such, to seek for knowledge of the works of our Creator, and consequently to admire and to love Him.

[1] L'Union Méd., Nos. 8, 23, *et* 26, 1866.

GUILD OF ST. LUKE.—A service in connexion with this Guild will be held in St. Thomas's Hospital chapel on the 7th inst., at 5.30 P.M. This is the first of a series of services which the Council is anxious to organise for the purpose of putting forward amongst medical men and medical students the objects of the Guild and its medical missionary work. The sermon will be preached by the Bishop of Lincoln, and no tickets are required for admission.

THE SMALL-POX EPIDEMIC AT JAMAICA.—Despatches were received at Plymouth on the 28th ult. to the effect that the small-pox epidemic at Kingston, Jamaica, is greatly on the increase. The authorities are now adopting stringent measures to check the disease, and infected houses are placarded with yellow bills notifying the fact. The disease has been stamped out in Colon, which is reported to be very healthy.

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A Clinical Lecture

ON THE

PATHOLOGY AND TREATMENT OF CHRONIC CONSTIPATION IN CHILDHOOD, AND ITS SEQUEL, ATONY AND DILATATION OF THE COLON.

Delivered at the Hospital for Sick Children, Great Ormond-street,

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GENTLEMEN,—There is, I imagine, no disordered condition of the body which is so frequently the subject of medical treatment as constipation. Not only are doctors called upon to prescribe for it daily, but every chemist's shop does a brisk trade in aperients; and the public use largely the hundred quack pills in vogue, and dose themselves with these and domestic remedies approved by household tradition. And usually, if there is no mechanical obstruction to the intestinal canal, nothing is easier than to force a free passage through it by calomel and colocynth, or castor oil, or jalap, or croton oil. If one purgative will not do it, another will; or an enema will wash out the *cloaca maxima*—the colon. But this is not the whole question. The exhibition of purges is a very limited portion of the management and cure of constipation. The temporary relief of the bowels is a small matter. If the constipation is only a chance and exceptional difficulty, a free purge may end the trouble and cure the complaint, and this is indeed the usual event; but if the constipation is recurrent, chronic, or habitual and obstinate, it is necessary to go deeper in order to effect a cure—to alter the conditions which give rise to the torpidity of the bowels. The temporary relief afforded by a brisk purge, moreover, if frequently repeated, tends to defeat its own end. The purgatives lose their power after a time. Stronger and stronger drugs have to be used, the position becomes more and more difficult, and the last state of the patient is apt to become worse than the first.

Now the permanent cure of constipation is of great importance to health and to the comfort of life. It may seem a small thing, but even with adults habitual constipation and the necessity for constant resort to drugs are always sources of trouble; of worry, of disordered function in other organs, of chronic fæcal poisoning, of pain and discomfort, sometimes of grave anxiety, and even of fatal complications—e.g., obstruction, ulceration, and perforation from pressure of hard fæces. In children the question is in certain aspects more serious still, for it affects not only present health and comfort, but future development and the working conditions of the alimentary canal for the whole of after-life. There is this difference, further, between the two cases. Injudicious treatment may render constipation confirmed in the case of the adult. In the case of the child it may do this also, but it may do far more, as I shall show presently. It may, and often does, cause such serious injury to the bowel itself that it recovers only after long and careful management, even if the damage inflicted be not permanent and incurable. As a general proposition, it may be said, perhaps, that adults suffer most from the consequences of neglect of constipation, children from the too vigorous and mischievous treatment of it. The treatment of constipation in childhood, then, is a subject of considerable importance. To be successful it must comprise something more scientific and comprehensive than the mere administration of aperients. It is not enough to open the canal when blocked, or sweep it clear of accumulations which have lodged there. The essential point is to establish such a habit of daily evacuation that accumulation of the noxious waste and its evil consequences may not recur—to modify the condition permanently. In order to do this the causes which give rise to it must be thoroughly understood—must be removed, or neutralised, or compensated.

There are many different factors concerned in the production of constipation, which act in varying degree in different cases. 1. Deficient fluid in the intestinal canal, caused by deficient supply in food, excessive waste, or deficient secretion from the intestinal mucous membrane. 2. Deficient peristalsis, especially of the large intestine, from defects of diet, or from atony due to over-stimulation by purgatives or to degeneration of the muscular coat. 3. Inhibitory influences of the nerve centres of the brain and cord, probably affecting both peristalsis and secretion of fluid. 4. Deficient bodily exercise and movement. 5. Dilatation of the intestine, especially the colon, due to debility of the intestinal wall or to actual dilatation by accumulated fæces, gaseous distension, repeated enemata, or laxness of the abdominal wall.

Such are the chief causes which give rise to constipation. They are not all met with in the case of children, however—at least not in equal degree. Thus, weakening of the muscular fibre of the intestine by the deterioration of age, mental depression, deficient bodily exercise, or astringent food rarely can be credited with the production of deficient peristalsis in early life. Putting aside malformation, such as atresia more or less complete, peritonitis, intussusception, and the like, the causes which are chiefly operative in childhood are:—1. Food which leaves little residue; very completely digestible food—e.g., milk; fæcal matter too small to duly excite peristalsis. This is a common cause in very young children, and in like manner a too great uniformity of food fails to excite peristalsis. 2. Deficiency of liquid in food, not enough to drink, is another not infrequent cause in children: causing too dry fæces. 3. Deficient biliary secretion, "acholia": unstimulating fæces. 4. Deficient secretion of glands of mucous tract: dry fæces. 5. Over-stimulation and consequent atony of intestine: loss of excitability and loss of power, caused—(*a*) by coarse foods, (*b*) by frequent purgatives, (*c*) by too frequent use of enemata. To these may be added the dread of evacuation from pain caused by hard stools. The latter is frequently operative in children. Instead of aiding the evacuation of the bowels, the child resists it with all its might. This resistance to the passage of fæces, partly voluntary and partly reflex, is caused by the pain of extrusion through the sphincter of a hard rough mass, or the existence of a fissure or sore of the anus. When once constipation has occurred this is an important cause of its continuance, to be overcome only by inducing absolute liquidity of stools for a time.

Now, the symptoms produced by retention of fæcal waste in the intestine vary remarkably. In some cases, especially in very young milk-fed children (and the fresher and better the cow's milk the more constipating is it—i.e., non-fermenting, not acid), there may be absolutely no derangement of general health. The child eats well, sleeps, is hearty and robust—the picture of health. There appears to be no fæcal poisoning by reabsorption of foul matter from the intestine. The chief difficulty is the pain caused by the passage of the hardened dry fæces. This causes the child to resist all attempts to go to stool. It screams and cries, and dreads the action, and thus, refusing to assist by its own efforts, the bowels remain closed for days perhaps, until a good dose of castor oil or other domestic medicine compels evacuation. In addition to this there may be restlessness and night terrors; but the tongue is usually clean, and digestion and nutrition good. Let me give a few examples of this simplest form.

CASE 1.—H. P—— came to me in December, 1880. He was a plump, rosy, sturdy boy of one year and nine months old. Nothing could have been more perfect than his development and nutrition. His limbs were straight, his body well formed, and his flesh hard as wood. He was brought for advice with regard to constipation, from which he had suffered since he was three months old. He was restless and fidgety, had disturbed sleep, waking up crying or screaming. He had been brought up largely on cow's milk. The stools were light, hard, and dry. All kinds of medicine had been given from time to time—castor oil, rhubarb, senna, jalap, scammony; with stimulating articles of diet—porridge, prunes, fruit. Sometimes the bowels did not act for three or four days together. After a time the bowels were never opened without medicine, stronger and stronger doses

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being required. For the last two or three weeks medicines had been found to produce so little effect that enemata had been resorted to. The child dreaded the action of the bowels, and could not be induced to try to relieve them. He screamed and struggled violently if made to attempt it. He screamed when the motions passed. He dreaded the enemata too. Sometimes these were retained and did not act. The abdomen was full and distended, but no fæcal accumulation could be felt, nor was the colon obviously dilated. The case was one of constipation, due in the first instance to the digestible ingesta leaving a small residue, and thus exciting imperfect peristalsis; partly also to defective intestinal secretions, made worse by stimulating purgatives, and aggravated still further by frequent enemata. As the bowels had not acted for four days, it was necessary to relieve them at once. For this purpose I gave a grain and a half of calomel and four grains of compound jalap powder. But the essence of the treatment consisted in securing daily action by means of some unstimulating aperient. The plan adopted was this: a solution of carbonate of magnesia (two drachms to the ounce) was ordered, and one, two, or three teaspoonfuls, or more, as might be necessary, in milk, once or twice a day every day until the bowels became relaxed. The result was satisfactory. The bowels began to act regularly; the treatment was continued for three or four months. Then the medicine was omitted altogether, and after a time a relapse came. A mixture of strychnine, iron, and sulphate of magnesia was then given as the child grew older, and it became steadily better, and ceased to attend. Thus by simple means, without the use of any strong purgative, except a dose of calomel and jalap at first, and a single dose of calomel (three grains) afterwards, a satisfactory cure was effected in a most obstinate case of long standing, where previous treatment had failed. Of such cases I could quote any number, but I will give only one more.

CASE 2.—Mrs. T. S——'s baby, a fine healthy child of six months, brought up on cow's milk. The food agreed perfectly, but constipation had been obstinate from birth. This was treated at first by occasional doses of castor oil. Then enemata were resorted to. They became required more and more frequently, and larger and larger ones given, until the parents, becoming alarmed, brought the child to me. There was no malformation; there were no symptoms except screaming from passing hard dry fæces. Think of this poor little baby of six months old having its intestine steadily dilated by enemata daily. A solution of carbonate of magnesia (ten grains to the ounce) was ordered, as many teaspoonfuls to be given as necessary to render the bowels relaxed. This was accomplished in six days. The medicine was gradually reduced, and the constipation did not return. Six months later the child remained well.

In other cases, again, there is some disorder of health, slight, but significant and persistent, and due no doubt to chronic fæcal poisoning—such as general cachexia, a sallow complexion, somewhat coated tongue, foul breath, loss of appetite, languor, general torpidity and sleepiness, with disturbed nights, dreaming and restless, and in young children moaning and night terrors; of this the following are examples.

CASE 3.—C. J——, aged thirteen, an anæmic girl of delicate appearance, came to me in August 1885, suffering from constipation of the most obstinate kind. The bowels had not been open for ten days. The trouble commenced nearly four months previously, after an attack of mumps. The bowels did not act for three or four days at that time. Castor oil was given, which produced free evacuation. The bowels, however, did not act again for the next five days, when a doctor was consulted, who prescribed more purgative medicine. This ceased to have effect, although various aperients were tried. Then galvanism and regular enemata were given, with varying and temporary benefit. Other medical men were consulted. Various remedies were given, with stronger purgatives. She had been taking jalap chiefly. But for some days no action whatever had followed. The medical man under whose care she was stoutly declared that the girl was imposing upon the credulity of those round her, and that the bowels really had acted, but that she had concealed it. The girl was delicate, slightly made, and rather pallid. Her tongue was fairly clean, but she was extremely languid and had no appetite; this had been so ever since the mumps. She was quiet and sensible, and the governess who accompanied her had observed nothing suggestive of hysteria. The catamenia were established, and had appeared regularly for the last twelve months. On examination the abdomen seemed normal in most respects, but a soft doughy mass could be felt in the left iliac region—clearly accumulated fæces. This was an instance in which the tonicity of the intestine had been lowered by the debilitating influence of mumps, causing deficient peristaltic action. The condition had been increased by the free and long-continued use of stimulating purgatives and enemata. An ounce of castor oil was ordered immediately, to be followed by an oil enema if necessary; after that a mixture of strychnia (three minims) and belladonna (quarter of a grain), with the sulphates of magnesia and soda, twice a day after food. The oil acted freely next day. The mixture produced an action every two or three days. The sulphates of soda and magnesia were persistently increased until the bowels acted freely—until, indeed, an opposite condition of slight diarrhœa was established. Then the amount of medicine was slowly reduced. In a week or two the patient was able to give up medicine altogether. Her health returned, appetite came back as the regular action of the bowels was re-established, and a visit to Brighton confirmed the cure. I saw this girl only a few days ago. She has remained absolutely well.

In this instance the affection of health was only slight. In the next I shall relate the cachexia induced was more marked, and disappeared in like manner with the removal of constipation.

CASE 4.—M. L——, aged ten, a small delicate boy, came to me in April, 1883, suffering from frequent attacks of nausea, giddiness, headache, loss of appetite, and languor. He was a quick boy, fond of school, but unable to work there often on account of headache. Physical examination showed nothing wrong, except that he was lean, sallow, and cachectic-looking. The abdomen was not distended. The heart and lung sounds were normal. There was no albumen in the urine. The tongue was a little coated. The only previous illness of importance was an attack of diphtheria; but this was not severe, and there had been no sequelæ. The bowels were always confined, being open only every other or every third day. The stools were hard and dry. The constipation was habitual; it had existed more or less for years. It had been relieved by occasional purges and frequent enemata. The boy was an only son of French parents, indulged by too luxurious living, taking meals with his parents, and partaking of rich dishes and pastry, of which he was inordinately fond.

This was a case in which there was defective peristalsis, not traceable to any definite cause. Possibly the diphtheria may have been one factor by lowering the tone of the intestinal muscle, although it could not be certainly traced to this cause; or the condition may have arisen in simple neglect to empty the bowel daily, and it had been aggravated no doubt by the use of strong purgatives and frequent enemata. The cachectic state and failure of appetite, too, had been increased by injudicious feeding, and this, again, had reacted in increasing constipation by inducing malnutrition and debility of muscle of bowel. The headache was a striking feature in this case. It must be referred, I think, to fæcal absorption. The great majority of so-called nervous headaches in children are of this kind. Even in neurotic children constipation is constantly a chief factor in their production. A mixture of sulphate of iron, magnesia, and soda, with nux strychniæ, were given twice a day after food. The diet was most strictly regulated, and fresh fruit made an important item of food. The saline aperients were increased until a free daily action was secured, and in three weeks all headache and nausea had passed away, appetite returned, and the child was well, except for a little restlessness and grinding of the teeth at night. It was thought that this might be due to the presence of a worm, and a dose of santonine and calomel was given, with the result of bringing away a single round worm. This removed the last signs of disorder. The laxative was gradually diminished, and ultimately left off altogether at the end of two months. The boy continued well until the following December—i.e., six months later, when the constipation returned, and with it the old symptoms of languor, loss of appetite, and headache. A pill of aloes, nux vomica, sulphate of iron, and extract of henbane was now ordered twice a day after food. The bowels acted again, and the child got well without further trouble. There has been no return.

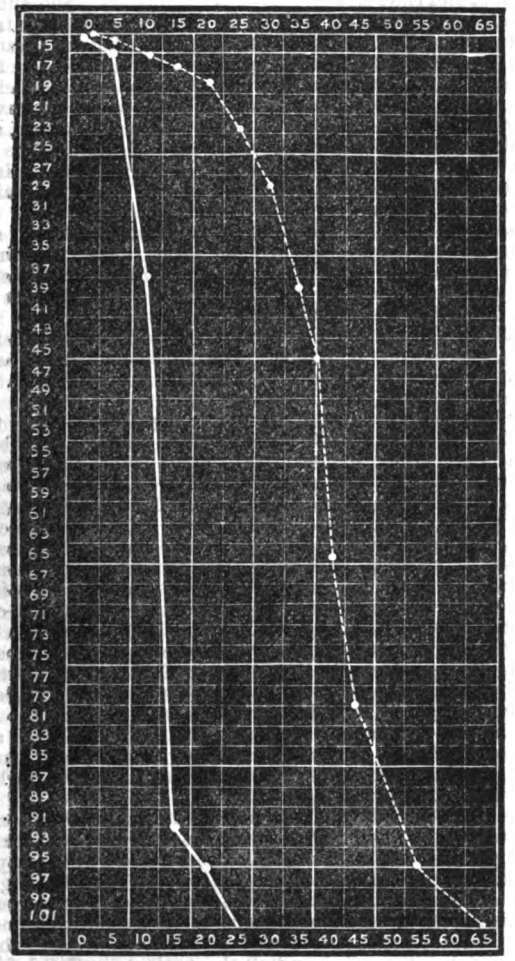
(To be concluded.)

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ON THE MYDRIATIC PROPERTIES OF HYDROBROMATE OF HYOSCINE.

BY JOHN TWEEDY, F.R.C.S.ENG.,
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THE researches of Ladenburg have shown that three different mydriatic bodies are contained in the atropaceous alkaloids—namely, pure atropine in belladonna and stramonium; pure hyoscyamine (crystalline) in belladonna stramonium, hyoscyamus, and duboisia; and lastly, hyoscine, which is associated with hyoscyamine, in hyoscyamus. Pure duboisine is identical with pure hyoscyamine. The relationship which scopoline, another atropaceous mydriatic obtained from Scopolia japonica, bears, chemically and physiologically, to those just mentioned, has not, I believe, up to the present been precisely determined. Though atropine,



hyoscyamine, and hyoscine are isomeric, they possess somewhat different physical, chemical, and physiological properties. The last named, hyoscine, is the most recent of these therapeutical agents, and appears to have been little used in England. In America, on the other hand, it has been extensively employed, chiefly on the recommendation of the very elaborate experimental and clinical investigations of Professor H. C. Wood of Philadelphia. In the current (November) number of *The Practitioner*, Dr. Mitchell Bruce has called attention to the remarkable efficacy of hyoscine in controlling "those conditions of cerebral excitement variously known as delirium, mania, and insomnia, with restlessness." The prompt and satisfactory results which Dr. Mitchell Bruce had obtained suggested a special trial of hyoscine as a mydriatic.

In commerce there are three crystalline salts of hyoscine: the hydriodate, the hydrobromate, and the hydrochlorate. The first occurs in large prismatic orange-coloured crystals, which are not freely soluble in water; the hydrobromate in small crystals, which are readily soluble in water. Partly on this account, and partly because the hydriodate might contain free iodine, the hydrobromate seemed better suited to ophthalmic purposes. The experiments whose results are here recorded were made with a solution of the latter salt of the strength of 1 in 200, prepared by Mr. Martindale of New Cavendish-street. The solution proved to be a rapid, powerful, and unirritating dilator of the pupil alike in the healthy and in the inflamed iris, and a paralyser of the accommodation. Notwithstanding its great activity when given internally or subcutaneously, I have not yet met with an instance of its producing toxic effects such as occasionally follow the use of duboisine, though this contingency may be possible with stronger solutions. Having tested the general mydriatic action of the drug in healthy and in diseased states of the eye, I asked Mr. E. T. Collins, senior house-surgeon at the Moorfields Ophthalmic Hospital, to undertake some comparative observations with a solution of atropine of corresponding strength. The results of his observations are shown in the annexed diagram. The horizontal rows of figures indicate the time of action in minutes, the vertical column the position of the nearest point of distinct vision (*pp*) in centimetres. The effect of the hyoscine is represented by the continuous line; that of atropine by the broken line.

Before applying the solutions, the "nearest point" was ascertained to be at 15 centimetres in both eyes. Hyoscine was applied to the right eye, and atropine to the left. Hyoscine removed the nearest point to 38 centimetres in ten minutes, whereas it took the atropine thirty-five minutes to do this. In twenty-five minutes the accommodation was completely paralysed by hyoscine, the nearest point having receded to 100 centimetres; whereas with atropine this was not attained for sixty-five minutes. Similarly, the pupil was fully dilated by hyoscine in fifteen minutes, while it required twenty-five minutes to produce an equal effect. (See diagram.) Further, the effects of hyoscine also last longer than those of atropine, and are not so easily counteracted by eserine.

The indication seems to be that, if hyoscine is to have a place in ophthalmic therapeutics, it will be chiefly in cases of iritis and in other conditions where it is desirable to produce as much dilatation of the pupil as possible and for as long a time as possible. It is worthy of note that the application of hyoscine to the eye does not seem to cause the unpleasant taste and feeling in the throat which often follows the use of atropine. This circumstance accords with the observations of Dr. Bruce and others, that when given internally it does not produce unpleasant dryness of the throat and skin like atropine.

Harley-street, W.

SOME CASES OF LOCAL NUMBNESS OF THE EXTREMITIES,

WITH COMPARISONS BETWEEN LOCAL SYNCOPE AND "NIGHT PALSY."

BY J. EDWARD SQUIRE, M.D. LOND, M.R.C.P.,
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CASE 1.—E. G——, aged eighteen, tailor, came under my care in March, 1884, complaining of numbness or deadness of the fingers and of giddiness. He is a tall, broad-built, well-developed lad, with thick lips, fair complexion, and light wavy hair. The numbness of his hands is not constant, but occurs about once every day, generally about midday. It appears to be induced by washing in cold water when the hands are already cold. Although he washes his hands in cold water when he gets up, this does not make them "go off," as, having just got out of bed, they are then warm." At several of his visits I had the opportunity of seeing his hands in the condition for the relief of which he applied, and the following was their appearance on one occasion: "The middle finger of the right hand is quite white to the centre joint; the rest of the hand, with the

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other fingers, is dark blue, the whole feeling intensely cold to the touch. A needle-prick in the white finger is not felt, and there is no bleeding; in the blue part of the hand the prick is felt. He can move the hand and fingers, but has no feeling in the white part and tingling in the rest. Pulse 60, and fairly strong at the wrist. Soon the blue colour in the back of the hand becomes mottled with bright red (vermilion); this marks the commencement of the return of the hand to its natural condition. The red points enlarge and coalesce, and soon the whole hand is a good colour again, and warmer." During the return to warmth the hands perspire and tingle and feel burning hot. Both hands "go off" in this manner; usually all the fingers are affected, and also the thumbs to a smaller extent. The fingers, when I first saw the patient, never became absolutely white and bloodless above the middle joint. The wrists and all the rest of the body are warm during the attacks. The numbness lasts usually from five to fifteen minutes, and his arms seem weaker for a time after an attack. Between the attacks both the hands and axillæ perspire very freely. The attacks only occur in cold weather. There is no history of nervous diseases in the family, and the personal history of the patient is very good; he states that he has hardly had a day's illness that he can remember. He is the eldest of seven, his parents having been married probably two or three years before his birth. His teeth are notched. When at school he used to have urticaria, but never has that now; and three years ago he had attacks of "fainting brought on by cold air." He thus describes these attacks: first he felt cold on the brow, everything seemed red and then black, and then he lost consciousness and fell. Physical examination: The chest is long, with acute costal angle. The breath-sounds are weak, and the heart-sounds are plainly heard over the right side. The upper border of the cardiac dulness is in the fourth space, and the apex beat is low, being two inches below the nipple and an inch and a half to the inside. The beat is natural and distinct, not by any means heaving, and the sounds are clear and without murmurs. There is no *bruit de diable* in the neck. Spleen not enlarged, and no signs of inter-thoracic tumour. There is no *tache cérébrale*. Temperature 97·6°. Urine very pale (sometimes dark-coloured), free from albumen or sugar; boiling with Fehling's copper solution gives a reddish discolouration with a flocculent precipitate on standing, but no reduction of copper. Under treatment, in which iron was prominent, his condition improved, and on May 7th I made the following note: "He can now generally keep the hands from 'going off' by beating them across the chest, like a cabman, as soon as they begin to get numb; his thimble seems to press on the finger and to start it off on the body side of the rim. The fingers perspire much when he is out walking." The weather continued cold, and it was not till the beginning of June that he was free from the attacks of numbness for the summer. About the beginning of September he had an attack on the weather changing from very hot to chilly. Early in October the middle and ring fingers of the right hand "blistered" during the night. They were bad a week, and when at the worst the fingers were numb. Also on a cold day, when the wrists became numb, an old scratch on the right wrist broke out again, and was bad some days. By October 24th, although the weather was much colder, he reported that his hands were almost always in a glow, and that he felt much better. The fingers kept well, in spite of very cold weather, till November 14th, when the middle finger of the right hand became numb round the old wound after washing. On Dec. 29th, the patient reported that twice during the week he had had an attack of giddiness and partial insensibility. His hands did not "go off," but his feet did. On Jan. 14th his hands became quite numb from the finger-tips to the metacarpo-phalangeal joints. Shortly after this I lost sight of him.

CASE 2.—J. F——, aged sixty-five, tall, thin, and of nervous temperament. Suffers from neuralgic pain, and lately vertigo. Is dyspeptic, with a red fissured tongue. Urine sometimes deposits uric acid. No articular swellings. Knee-jerk well marked. Pulse always slow, mostly below 60. Bowels easily acted upon. Sleep fairly good, but easily disturbed. In June last, while dressing one morning he was alarmed with sudden loss of feeling and power of movement in the index, ring, and middle fingers of the left hand. He rubbed, pinched, and moved them about, but they were, as he said, "as dead as a doornail." Soon they were slightly numb, and then all right again.

CASE 3.—H. M——, aged thirty-four, a clerk, height 5ft., weight 6st. 4lb. Weak and neurotic; feels giddy while dressing; the limbs tremble; he fears to move lest he should fall. He has a numbness in some parts of his legs and feet; this sensation soon goes. He often wakes with numbness of one hand, mostly the left; this will sometimes come on in the morning, so that he has to pause in his work, fearing also lest he should put the wrong letters into envelopes. No weakness of the right hand in writing. He has defective teeth, phosphatic urine, and often has hay-fever in the summer; has no headache; sometimes hæmorrhage from piles.

CASE 4.—Miss E. B——, aged thirty-two, tall, dark, and pale. Suffers occasionally with neuralgic pain and pulsating noise in the left ear. She has an anæmic bruit, and her teeth are defective. Menstrual period regular, but painful, and for one or two days only. At the end of October, during an attack of neuralgic pain of the left intercostals and in the right arm, one day the right middle finger suddenly became numb and useless, so that she could not hold a plate or feel it distinctly. During the winter she had faceache on the right side and pain down the right arm, which aches while writing, and she fears it may become useless. She suffers much from close desk-work in the summer, and from neuralgia, and wakes up in the early morning with numbness of the right hand and arm, which makes her fear writer's cramp. She has to have the hand rubbed before attempting to get up. This ceased when the health improved, after the removal of some bad teeth on the right side, and on obtaining rest from work and change of air; and she has since continued her duties at the desk without any failure, but has at times temporary fulness of the tonsil, migraine, or facial neuralgia, with photophobia.

CASE 5.—Miss E. S——, aged fifty, stout, florid, and robust. Menopause after typhoid fever three years since. Some flushing of face and fatigue in walking. Good appetite and regular bowels. Suddenly roused in the night by "deadness" of one thumb. This caused alarm, and the thumb was bitten severely "to bring it to." The bite left a mark, but was not felt at the time. This recurred so as to negative the idea of its being the result of pressure on the arm during sleep.

CASE 6.—M. C——, milliner, single, aged forty-nine, tall and dark, neurotic, but otherwise strong and robust. Troubled with constipation. Menopause last year; before that always dysmenorrhœa. Pain in left side and shoulders most days; sometimes it extends down the arm. At times the fingers of both hands become dead half-way up, so that she is obliged to stop work. Sleeps badly, and sometimes is awakened by numb pain in the left arm or in both hands. Before the deadness and the numbness occur she often notices that the fingers look blue. She is conscious also of a numbness round the lips at times, both by day and in the night; and is sometimes told that she has turned blue in the face when this sensation occurs. The heart is healthy. She has seen the lips sometimes pale with this dark look round them; they then look and feel withered, and she has to rub them before they return to their natural sense and colour. She often wakes up in the night with both hands going dead along their ulnar aspects up to the wrist, or half way up the left arm.

Remarks.—All the above cases have a common symptom—viz., temporary numbness of the upper extremity—occurring in most of them paroxysmally. Cases 1 and 2 are examples of local syncope or dead fingers, one severe, the other slight: both occurring in men. In the remaining cases, the occurrence of this numbness at night justifies their classification under what has lately been described as "night palsy." In three of these also (Cases 3, 4, and 6) the patients suffered from paroxysmal attacks of "dead fingers" during the day. Slight cases of "dead fingers" are not uncommon. In these, generally on exposure to cold, the finger tips become white and numb, regaining warmth and feeling after a variable time, the return to the natural condition being accompanied by tingling similar to that of chilblains. Such cases, however, rarely attain sufficient importance to cause the person to seek advice for that alone, as was done by the boy whose case I have detailed (Case 1). These cases of "dead fingers" are most commonly found amongst hysterical and emotional women. In one lately under my care the finger tips became numb every morning, and feeling did not return for about two hours. The condition is evidently due to spasm of the arterioles, the cause of this spasm being more difficult to determine. The chief interest in such cases comes from

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their relation to some more obscure nervous affections and to those more severe conditions in which the spasm of the arterioles is more lasting, if less complete, so that the continuance of bloodlessness leads to impairment of vitality in the part, or to absolute local death. Such cases are known as "Raynaud's disease," the most severe showing symmetrical gangrene. M. Raynaud, in his thesis,[1] from which much of our knowledge of these conditions was derived, uses the term "local syncope" to describe the temporary bloodlessness and loss of sensation seen in such cases as the one detailed. The condition, in which there is partial stasis, but with sufficient passage of venous blood to prevent complete loss of warmth, he calls "local asphyxia." It is with this latter condition that his name is usually associated, though the essential character of both is the same. In some remarks on a case contributed by him to the Clinical Society, Dr. Barlow says, "The essential clinical note of Raynaud's disease, at all events primarily, is the paroxysmal character of the circulatory disturbance." That will apply equally to local syncope and to local asphyxia. One recorded case of Raynaud's disease was attended with paroxysmal hæmaturia, and in several the urine was dark-coloured or contained blood. In some there has been spasm in the arterioles of the retina, affecting the eyesight, and distinguishable by ophthalmoscopic examination. These indicate vascular spasm in various parts, and probably the same primary cause produces all; but what the condition may be which sets up spasm of the arterioles has still to be determined. The other cases I have described were attended with a peculiar paroxysmal numbness and paresis of the hands, described by several observers lately, and called "night palsy," which has some analogy to these conditions. It is said to occur chiefly during the night, and in women of emotional disposition, or at the menopause, when neurotic phenomena are so common. Its occurrence in men has been noted, and is exemplified in Case 3. The patient wakes up to find the hand numb and cold, with tingling "pins and needles" or absolute pain. There is loss of power, and sometimes blueness and swelling of the hand, due to distension of the veins. Narrowing of the calibre of the radial artery has been described. The condition is always relieved by rubbing. One observer finds it always associated with disorded stomach—a neurosis, be it observed, common at the menopause, another sees it only in anæmic persons; and in several cases overwork is traced as a possible cause. Dr. Liveing mentions the occurrence of a similar numbness of the extremities associated with megrim, as in one of these cases (Case 4). Night palsy then occurs under similar conditions to those found in the subjects of "dead fingers," and like the latter it is paroxysmal; in its severer forms it produces coldness of the affected part with diminution of the arterial calibre. Dr. Ormerod,[2] when describing night palsy, mentions its similarity to Raynaud's disease, and emphasises the points of difference. I should be inclined to look upon night palsy, local syncope (or "dead fingers"), local asphyxia, and even symmetrical gangrene, as phases of one and the same morbid condition, the severity of the case, or the time at which the symptoms occur, determining for each under which name the neurosis shall be described.

Seymour-street, W.

THE PROSTATE MUSCLE.

By REGINALD HARRISON, F.R.C.S.,

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IN previous communications[3] I have drawn attention to the nature and causation of prostatic hypertrophy. There are one or two points arising out of these to which I should like to refer.

We have been too much accustomed to regard the prostate from its post-mortem aspect—that is to say, as a mass of muscle about the size and form of a chestnut, in which is contained some secreting tissue. It will be as well clearly to understand that under no circumstances during life, save the rare and momentary one when the bladder is absolutely empty, does the healthy prostate present such a form as that referred to; on the contrary, the muscular fibres of which it is largely composed are spread out like a funnel, so as to form an ample support for the bladder and its varying amount of contents. The degree to which it is spread out is, of course, relative to the contents. Hence the action of the prostate may be said to be just as continuous as that of the heart. This is a point which can be readily determined by examining persons in different bodily positions, and under varying circumstances so far as the contents of the bladder are concerned. If a person is examined by the finger in the rectum when he is in a semi-erect position, with a healthy prostate and some urine in the bladder, it will be found that the limits of the prostatic area are bounded on either side by a marked ridge of muscular fibre in a state of more or less tone, whilst the centre of this area is softer and more yielding to the touch. In making an examination of this kind for the first time, and taking our idea from what we have previously learnt in the dissecting-room, we naturally expect to find the converse of this—namely, a rather hard centre, which gradually loses its definition as the finger passes towards the sides. It is a matter of common remark that, unless the prostate is diseased, a surgeon has to examine it a good many times before he thinks he can realise what he has learnt as a part of his anatomical studies.

We may, I think, conclude that the primary function of the prostate is that of supporting and controlling the outlet of the bladder. Where there is no such function to fulfil, the prostate muscle is only met with in a rudimentary form, as we see in cases of extroversion of the bladder where there is no receptacle for the urine. In advanced life, so far as I have been able to ascertain, hypertrophy of the prostate in these malformations never occurs.

That this is the principal function of the prostate is further indicated by what follows wounds inflicted on the urinary tract from the bladder downwards. The only incision that renders a person absolutely incontinent for a time is when the prostate muscle is involved. Openings made into the membranous urethra, either for exploration or for median lithotomy, are not followed by incontinence unless the prostate has been temporarily paralysed by over-distension with the finger. In lateral lithotomy the continence of the bladder by the action of the prostate is maintained to the last moment of the deep incision, when the gush of urine will often carry the stone into the jaws of the forceps. Nor does continence return until sufficient time has elapsed for healing to take place.

I have met with several cases where stones in the bladder have occupied unusual and somewhat remarkable positions relative to what may be regarded as the laws of gravity. I refer to those instances where the calculus is lodged in a sort of space hollowed out above the pubes. On two or three occasions I have had to reverse the blades of the forceps to extract stones from this position, and I have twice recently met with instances where the sound passed beneath calculi thus placed without giving a clue, and thus causing errors in diagnosis which this knowledge enabled me to correct. From my observation of calculi in the bladder I am disposed to connect their occasional supra-pubic position with the upheaving movement of the floor of the viscus, which is constantly, though imperceptibly, going on, principally through the medium of the spread-out muscular fibres of the prostate. From the dissecting-room standpoint it would seem almost impossible to understand how a healthy prostate could influence the position of a stone in the bladder in the slightest degree; when, however, we learn to recognise how differently the muscle is disposed and occupied during life from what we previously believed, it is not difficult to see that a vermicular movement of the muscular floor of the bladder, which is constantly going on, might tend to lodge and fix a calculus above the pubes. It is quite clear, however, that a stone independent of sacculation, occupying a resting-place in the anterior wall of the viscus, must have been put and retained there by some agency. These points will, I think, be found to have their bearing upon the practical surgery of the parts referred to.

[1] De l'Asphyxie locale, et de la Gangrène symmétrique des Extrémités, Paris, 1861. [2] St. Bartholomew's Hospital Reports, 1883.
[3] THE LANCET, March 6th and Aug. 28th, 1886.

VICTORIA UNIVERSITY. — The Manchester City Council on the 1st inst. passed a resolution in favour of a Government grant to Victoria University. It was stated that not a penny had been contributed by the Government either to Owens College or Victoria University, both of which were in need of financial assistance, and it was thought that in view of the fact that the Government had paid £12,000 to small colleges in Wales, Victoria University had some claim.

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A CASE OF ALBUMINURIA;

DEATH RESULTING FROM ACUTE ŒDEMA OF THE BRAIN.

BY HENRY WILCOX, M.B., M.R.C.S.

THE following case, which came under my notice while returning from my holiday trip to New York, may be worth publishing, as the carefully recorded temperature throws some light upon the etiology of uræmic coma:—

S. T——, aged fifty-one, a gentleman of spare appearance, florid complexion, looking somewhat older than his age, occupied the seat opposite to me at the saloon table. From my observations, and from several conversations we had together, I found he was in a shattered state of health; his habits were those of a man who for a long time had drunk freely of spirits, giving me the impression that he was suffering from chronic Bright's disease, accompanied by the usual dyspepsia and want of appetite. On the morning of the fourth day of our voyage he appeared to be in better health and spirits than during the previous three days; his skin was clearer and he ate more; later in the day, however, he complained of severe occipital headache. He was not alarmed at this symptom as he had frequently had it before in a milder degree, when it generally passed away in a few hours. He declined to apply for the advice of the surgeon of the ship. Towards the middle of the day, his headache still continuing, he retired to his stateroom, with the intention of "sleeping it off," as he expressed it. Nothing more was seen of him until 4 P.M., when the bedroom steward finding him to be sleeping soundly left him undisturbed. At 6 P.M. he was still sleeping, and the attention of the surgeon was called to him. This gentleman (Dr. Coffey) soon afterwards asked me to visit the patient with him. We found he was in a state of profound coma. Our combined efforts failed to rouse him in the least. His breathing was stertorous; face dusky, slightly œdematous; pupils fixed, insensible to light, and the left larger than the right; carotids pulsating strongly; no abnormal sounds about the heart's action; pulse 72, hard; temperature 97°; legs and feet slightly œdematous. We were fortunately able to make an examination of the urine, which, so far as we could learn, had been normal in quantity and general appearance; it was highly albuminous, and we estimated roughly that the deposit, after boiling and the addition of nitric acid, was one-third of its bulk. From these evidences we concluded that the patient was in a state of uræmic coma. Dr. Yarrow of Philadelphia, who was also a passenger on board, endorsed this opinion, and watched the case to the end with us. The treatment we employed was first wet cupping over the loins to twelve ounces; there was no jaborandi on board, but we administered hydragogue cathartics by enemata, subcutaneous injection of digitalis, mustard sinapisms to the nape of the neck and calves of the legs, and occasional nutritive enemata with a little brandy. In spite of our efforts the patient showed no signs of improvement, the coma becoming more profound; convulsive fits came on at intervals, greatly exhausting his vital powers. He died after a severe paroxysm about four o'clock in the morning. During the few hours that we were in attendance we were able to make careful observation of the temperature, which we took constantly in the axilla at intervals of about half an hour from nine o'clock at night until the time of his death. Early in the evening there appeared an initial lowering of the temperature; at 7 P.M. it was 97°; the pulse 72, full, incompressible; carotids strongly pulsating. At 9 P.M. a slight rise in the temperature was noted; it was then 99°. At 10 P.M. it was 100·2°; at 11 P.M., 101·4°; at midnight, 102°; at 1 A.M., 103·4°; at 2 A.M., 105°; at 3 A.M., 107°; and at 4 A.M., 109·2°. The last record of temperature was taken both in the axilla and rectum. The thermometer in the rectum was expelled in the death struggle; it indicated 109·2°, the same as that in the axilla; had it remained longer, a higher temperature would probably have been recorded. As the temperature began to rise the pulse assumed a different character, becoming faster, smaller, and easily compressible; shortly before death it was 135 per minute, and the respiration 38.

The point of interest in this case is the remarkable rise of temperature preceded by a stage of initial lowering, and between these two conditions there was a stationary period from 7 to 9 P.M., in which the temperature was normal. The presence of urea in the blood, or even its product of decomposition—carbonate of ammonia,—may account for the coma and convulsions, but they have not been found to produce this influence upon the temperature. Variations of temperature, however, in the apoplectic state accord so well with the above that we may fairly assume that our patient died not so much from the toxic state of his blood as from a sudden acute œdema of the brain, with perhaps effusion into the ventricles. This view of the case is, I think, supported by the following considerations:—1. The secretion of urine at the time of seizure was normal or increased in quantity. 2. The sudden onset of cerebral symptoms preceded by intense occipital headache. 3. The strongly pulsating carotids, and full incompressible pulse at the beginning of the attack. 4. The variations of temperature were the same as those observed in cases of cerebral hæmorrhage, in which death occurs in from ten to twenty-four hours.

Woolwich.

LITHOLAPAXY IN MALE CHILDREN AND MALE ADULTS.

BY SURGEON-MAJOR D. F. KEEGAN, M.D. DUB.,
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DURING the past two years I have published four papers[1] giving details of a considerable number of litholapaxies performed on male children and male adults at the Indore Charitable Hospital, Central India. At a time when the treatment of stone in men, women, and children is attracting so much attention in Europe, by reason of the revival of the "high" operation, perhaps it may not be amiss if one who has enjoyed considerable opportunities of treating stone in India were to place before his professional brethren in England his experiences of litholapaxy in male children and male adults. I advocate litholapaxy in preference to lateral lithotomy in the treatment of the great majority of stones we meet with in male children, principally for two reasons—viz., rapidity of cure and absence of a cutting operation. Litholapaxy as applied to the treatment of stone in male children, being a new departure in surgery, must undoubtedly be submitted to the accumulated experience of practical surgeons in all parts of the world before a positive conclusion can be arrived at as to its practicability and value. I therefore beg to submit to the judgment of surgeons in Great Britain the record of a considerable number of litholapaxies performed on male children in India. Having discussed this operation in its application to the treatment of stone in boys, I shall subsequently deal with some points of interest connected with its performance in the adult male. Believing, as I do, that Bigelow's operation will, in the near future, supersede to a very large extent lateral lithotomy in the treatment of stone in male children, I am all the more anxious on that account that my predecessor at Indore, now retired, Deputy Surgeon-General T. Beaumont, should obtain the credit of having originated the idea of the feasibility of practising litholapaxy in boys. I, however, was the first to put his ideas on this subject into practice. He had performed six lithotrities successfully on male children at Indore prior to my succeeding him, and had ordered to be sent from London lithotrites and evacuating catheters suited to the performance of litholapaxy in boys a few months before he left Indore for Hyderabad in the Deccan. He was not the first to perform litholapaxy in boys, simply because he had not an opportunity of doing so at Hyderabad; but had he remained on at Indore he would undoubtedly have put his ideas into practice at the first favourable opportunity. Soon after my joining my present appointment at Indore the lithotrites and evacuating catheters suited to the performance of litholapaxy in boys arrived from London, but I must confess that for some time I hesitated to use them. Like many surgeons practising in India, lateral lithotomy in male children had hitherto proved a very successful operation in my hands, and therefore I was naturally somewhat loth to change it for any other method of removing a stone from a boy's bladder. However, in December, 1881, I performed

[1] Indian Medical Gazette, May, 1884, June and September, 1885, and June, 1886.

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TABLE

SHOWING PARTICULARS OF FIFTY-EIGHT LITHOLAPAXIES PERFORMED ON BOYS AT THE INDORE HOSPITAL FROM DECEMBER, 1881, TO MARCH, 1886.

Cases.	Age.	Caste.	Date of operation.	Time occupied by operation, in minutes.	Time occupied by crushing, in minutes.	Time occupied by evacuation, in minutes.	Time occupied by manipulation, in minutes.	No. of lithotrite used.	No. of catheter used.	Number of times lithotrite was introduced.	Number of sittings.	Composition of stone.	Duration of disease, in months.	Weight of stone, in grains.	Number of days in hospital.	Result.
1	5	H.	15-12-81	No record	No record	No record	No record	10	9	No record	1	No record	5	No record	25	Succ.
2	8	H.	21-4-82	Do.	Do.	Do.	Do.	10	9	Do.	1	No record	15	Do.	14	Do.
3	7	M.	11-10-82	Do.	Do.	Do.	Do.	10	9	Do.	1	No record	No record	30	9	Do.
4	8	H.	7-2-83	45	Do.	Do.	Do.	10	9	Do.	1	Phosphatic	Do.	15	2	Do.
5	2½	H.	16-3-83	No record	Do.	Do.	Do.	7	9	1	1	No record	Do.	10	3	Do.
6	5	M.	28-6-83	35	Do.	Do.	Do.	10	9	No record.	1	Uric acid	Do.	17	12	Do.
7	4	H.	26-9-83	30	Do.	Do.	Do.	10	9	Do.	1	Uric acid	Do.	55	3	Do.
8	7	H.	27-9-83	No record	Do.	Do.	Do.	10	9	Do.	1	Uric acid	Do.	5	3	Do.
9	8	H.	9-10-83	20	Do.	Do.	Do.	10	9	Do.	1	Uric acid	Do.	13	10	Do.
10	5	H.	9-10-83	70	Do.	Do.	Do.	10	9	Do.	1	Uric acid	Do.	84	9	Do.
11	4	H.	15-12-83	No record	Do.	Do.	Do.	7 & 10	9	Do.	3	Phosphates growing round tilli stalk	10	35	16	Died.
12	10	H.	17-12-83	Do.	Do.	Do.	Do.	10	9	Do.	1	Phosphates	No record	200	9	Succ.
13	5	H.	29-12-83	60	Do.	Do.	Do.	10	9	Do.	1	Uric acid	6	158	11	Do.
14	3	H.	26-1-84	38	Do.	Do.	Do.	10	9	Do.	1	Uric acid	12	104	7	Do.
15	5	H.	16-2-84	30	Do.	Do.	Do.	10	9	Do.	1	Urate of ammonia and uric acid	6	51	12	Do.
16	12	H.	3-3-84	55	Do.	Do.	Do.	10	9	Do.	1	Earthy and triple phosphates	24	240	11	Do.
17	2	H.	10-3-84	4	Do.	Do.	Do.	7	9	Do.	1	Uric acid	4 days	7	2	Do.
18	1¾	H.	27-3-84	32	Do.	Do.	Do.	7	7	Do.	1	Uric acid	4	18	4	Do.
19	7	M.	12-5-84	60	Do.	Do.	Do.	10	9 & 12	5	1	Phosphates	24	180	15	Do.
20	3½	H.	26-5-84	67	Do.	Do.	Do.	7 & 10	9	5	1	Phosphatic	12	75	8	Do.
21	2½	H.	29-5-84	70	Do.	Do.	Do.	7	7	5	1	Uric acid	24	24	3	Do.
22	6	M.	3-7-84	60	30	27	3	10	9 & 11	6	1	Uric acid and oxalate of lime covering	48	210	8	Do.
23	4	H.	22-8-84	53	No record	No record	No record	8	7 & 9	4	1	Uric acid	10	38	13	Do.
24	11	H.	20-11-84	112	45	41	26	8	12	7	1	Oxalate of lime	12	308	14	Do.
25	2	M.	10-12-84	20	10	4	6	7	7	3	1	Lithic acid	12 days	5	10	Do.
26	8	H.	30-1-85	104	55	39	10	8	9	9	1	Phosphatic	60	285	5	Do.
27	10	H.	30-1-85	85	54	20	11	8	9	7	1	Phosphates and uric acid	24	170	6	Do.
28	9	H.	19-3-85	78	33	20	25	8	7 & 9	6	1	Uric acid	12	90	5	Do.
29	10	H.	27-3-85	10	5	3	2	8	9	1	1	Oxalate of lime	24	43	2	Do.
30	5	H.	5-4-85	58	26	21	11	8	9	6	1	Phosphate of lime	6	140	4	Do.
31	7	H.	11-4-85	31	11	9	11	8	9	3	1	Mulberry with slight covering of phosphates	48	57	4	Do.
32	11	H.	13-4-85	67	29	14	24	8 & 10	12	6	1	Pure mulberry	48	236	9	Do.
33	10	H.	28-4-85	90	41	30	19	8	9	6	1	Oxalate of lime	24	200	5	Do.
34	7	H.	30-4-85	43	16	14	13	8	9	4	1	Oxalate of lime	36	140	3	Do.
35	10	H.	2-5-85	80	31	25	24	7 & 8	7 & 9	8	1	Phosphatic and uric	4	91	11	Do.
36	4	H.	7-5-85	41	14	13	14	7 & 8	7	4	1	Mulberry with phosphatic covering	9	27	3	Do.
37	10	H.	27-5-85	94	47	35	12	8	9	6	1	Urates and phosphates	72	360	8	Do.
38	2½	H.	9-6-85	17	7	3	7	7	7	4	1	Uric acid	3	11	4	Do.
39	2½	M.	9-7-85	31	14	10	7	8	7	5	1	Uric acid	2½	32	3	Do.
40	8	H.	1-8-85	57	18	16	23	8	7 & 9	6	1	Oxalate of lime	No record	28	4	Do.
41	2	H.	16-8-85	21	7	6	8	7	7	2	1	Uric acid	3	8	5	Do.
42	5	H.	9-9-85	62	22	17	23	7	7	9	1	Uric acid and phosphates	6	41	4	Do.
43	3	H.	15-9-85	18	8	4	6	8	7	3	1	Phosphates with nucleus of oxalate of lime	5	12	3	Do
44	9½	H.	19-9-85	182	94	37	51	11 & 15	13 & 14	26	1	Uric acid, nucleus oxalate of lime with phosphatic cover	24	700	10	Do.
45	8	H.	29-9-85	38	17	10	9	10	11	6	1	Uric acid and phosphates	12	176	8	Do.
46	12	H.	30-9-85	62	32	14	16	11 & 14	12 & 13	9	1	Oxalate of lime	12	344	4	Do.
47	8	H.	1-11-85	30	15	10	5	7 & 8	7 & 9	5	1	Phosphates	24	72	9	Do.
48	5	H.	4-11-85	24	10	6	8	7 & 8	7 & 9	4	1	Uric acid	12	32	10	Do.
49	13	H.	8-11-85	48	27	11	10	11	12	7	1	Uric acid and oxalate of lime	48	272	12	Do.
50	2½	M.	11-11-85	30	10	8	12	7	7	4	1	Uric acid with slight phosphatic cover	3	16	4	Do.
51	6	H.	17-11-85	12	5	2	5	8	8	2	1	Mulberry and uric acid with slight phosphates	6	28	3	Do.
52	4½	H.	16-12-85	45	24	10	11	8	8 & 10	4	1	Uric acid	10	118	5	Do.
53	3½	H.	6-2-86	37	10	5	22	8	8 & 9	4	1	Uric acid	12	70	8	Do.
54	14	H.	12-2-86	60	31	22	7	8 & 11	9 & 10	6	1	Fawn-coloured uric acid	24	248	11	Do.
55	3½	H.	23-2-86	10	5	2	3	7·75	7	2	1	Oxalate of lime	18	19	4	Do.
56	14	H.	27-2-86	10	3	1	6	7·75	9	1	1	Phosphates	4	19	2	Do.
57	6	H.	26-2-86	56	16	20	20	7·75	8 & 9	5	1	Uric acid and oxalate of lime nucleus	6	105	9	Do.
58	6½	H.	25-3-86	39	11	12	16	7	7	6	1	Uric acid and phosphates	8 days	14	5	Do.

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litholapaxy successfully on a boy aged five years. In the succeeding year I operated on two boys by this method. During the years 1883 and 1884 ten and twelve boys respectively were subjected to litholapaxy at the Indore Hospital. During the year 1885 we performed twenty-seven litholapaxies on boys; and between January 1st of the present year and the end of March, when I left India on furlough, six boys were operated on by Bigelow's method at this hospital. We have therefore performed fifty-eight litholapaxies on boys at Indore since I began this operation on male children at the close of 1881, and we have lost one case. Cases 12 and 13 in the table appended were performd by my assistant Mr. Gunput Singh; and my friend Surgeon-Major Caldecott, during my absence from Indore, performed nine operations of this series, beginning at No. 41 and ending at Case 49. Case 11, the only unsuccessful one, was operated on in the first instance by my assistant, and on two subsequent occasions by me. All the other cases in this table were performed by me alone. That litholapaxy is capable of dealing successfully with stones of considerable size occurring in male children is, I think, proved by the facts detailed in the accompanying table; and from what I have already stated it will be seen that I practised litholapaxy in male children very tentatively at first, and as time went on, and I had gained more experience, I gradually increased the scope of this operation.

Now, what are the conclusions at which I have arrived after nearly four and a half years' experience of litholapaxy in the treatment of stone in male children? I may at once answer this question by stating that, with my present experience of this operation in boys, I would almost as soon think of performing lateral lithotomy on an old man the subject of a small, uncomplicated stone as I should think of performing lateral lithotomy on a boy whose urethra would readily admit the passage of suitable lithotrities and evacuating catheters, and whose stone was neither abnormally hard nor large. The only cases of stone in male children which I nowadays reserve for lateral lithotomy are those in which litholapaxy is contra-indicated by reason of the existence of a very narrow urethra or the presence of an unusually hard or large stone. I am well aware that in advocating litholapaxy in the treatment of stone in male children I am running counter to the cherished opinions and judgment of many eminent lithotomists, and I know that some high authorities consider my views on this subject heterodox and dangerous in practice. But facts and figures are on my side, and I can therefore, perhaps, afford to disregard the adverse opinions of those who have never practised this operation in boys. I am anxious to draw a very marked line of demarcation between lithotrity and litholapaxy as applied to the treatment of stone in male children. I hold that lithotrity is an uncertain, tedious, and often dangerous method of disposing of stones in boys, because the surgeon in performing it can never be perfectly sure that he has reduced the stone in the bladder into fragments sufficiently small to pass of themselves readily through the urethra along with the urine, and thus a second operation, with all its train of suffering and dangerous complications, is often a necessity. Indeed, I consider that the success and safety of litholapaxy as applied to children depend in a very great measure in not leaving, if possible, the smallest fragment of stone behind in the bladder. Lithotrity at many sittings, the lithotrity which preceded Bigelow's operation, is happily dead and buried, and is even less suited to the treatment of stone in male children than it is to the treatment of stone in adult males.

The chief objections which have been raised against the performance of lithotrity and litholapaxy in boys, are, as we all know, the undeveloped condition of the genito-urinary organs, the smallness of the bladder, the extreme sensitiveness and liability to laceration of the mucous membrane of the bladder and urethra, and the narrowness or small calibre of the urethra. Let us examine these objections. If by the undeveloped condition of the genito-urinary organs in boys is meant an undeveloped condition of the prostate, this is for the surgeon a decided advantage, as recently pointed out at the Medical Society of London by Mr. W. J. Walsham, when detailing the history of a very instructive case of litholapaxy performed on a boy aged ten. The smallness of the bladder in boys is, in my opinion, not a valid objection to the performance of litholapaxy. The bladder of a boy of even only three or four years of age is, as a rule, quite roomy enough to permit of the efficient working of a small lithotrite; and if a medium-sized aspirator be used in the removal of fragments of stone, or a full-sized aspirator be gently worked, no injury can be done to this organ by over-distension. The bladders of boys suffering from stone are as a rule healthy, and will stand more distension proportionately to their size or capacity than the bladders of old men. The next objection we come to is the extreme sensitiveness of the mucous membrane of the bladder and urethra. With regard to this objection, I would merely remark that, as litholapaxy is always performed on patients under the influence of an anæsthetic, this objection may be safely disregarded; and I would add, in passing, that it has yet to be proved that the urethra of a boy, say of six years of age, is more sensitive than the urethra of a youth approaching puberty. Indeed, I am inclined to think that the urethra of the latter is the more sensitive of the two. We now come to the liability to laceration of the mucous membrane of the bladder and urethra in boys. Theoretically this may appear a very plausible objection; but in practice it may also be safely disregarded, if the surgeon employs suitable instruments, and is careful and skilful in their use. I have performed nearly fifty litholapaxies in boys, and, as far as I can judge, I have never damaged the mucous membrane of the urethra and bladder; and even if I have done so, no untoward consequences have supervened. We come at length to the last objection to the performance of litholapaxy in boys—viz., the narrowness or small calibre of the urethra. Now, if it were a fact that the size or calibre of the urethra in male children is generally very small, this would, of course, be an insuperable objection to the performance of litholapaxy in these young patients. *But it is not a fact* that the calibre of the urethra in boys of six or eight years of age is, as a rule, very small. On the contrary, the calibre of the urethra of boys of only three or four years of age is sometimes very large, as I shall show later on by citing examples of this fact from the pages of my case-book. True it is that the meatus of the urethra in male children is sometimes very small; but let the orifice be incised, and it will then be generally found that a lithotrite of considerable size will pass readily into the bladder. It may seem somewhat strange that a false estimate of the normal size of the urethra in male children should have existed until very recently; but it is really no more strange than that surgeons should have believed up to the date of the discovery of Otis that the calibre of the adult male urethra was much smaller than it really is. I think that the chief reason why an erroneous estimate of the normal size of the urethra in boys has hitherto prevailed is, that in performing the old operation of lithotrity in male children the meatus of the urethra was seldom divided, and thus the true calibre of the normal urethra in boys was ignored or not noticed. I certainly was unaware of the normal calibre of the urethra in boys until I had practised litholapaxy amongst this class of patients, and doubtless, like other lithotomists, I had failed to recall to mind several occasions on which I had been able to pass staffs of large size into the bladders of young boys preparatory to performing lateral lithotomy. Now, what does the annexed table prove regarding the size or calibre of the urethra in boys? Speaking generally, for there can be no hard-and-fast rule laid down on this point, it shows that the urethra of a boy from three to six years of age will admit a No. 7 or a No. 8 lithotrite (English scale), and that the urethra of a boy of eight or ten years of age will admit a No. 10, a No. 11, and even sometimes a No. 14 lithotrite (English scale). With a No. 8 lithotrite and a No. 8 evacuating catheter it is, I find, quite feasible to crush and dispose of a mulberry calculus weighing between two and three hundred grains in an hour's time. Experience has taught me that there is as great a difference in the size or calibre of the urethra in male children of the same age as we find to be the case amongst adult males. Age cannot always be depended on as the measure of the capacity of the urethra in boys, as I know from experience; indeed, some children of only four years of age have more capacious urethræ than other children of ten. Cases 35 and 36 in the annexed table are examples of this fact. The No. 8 lithotrite did not pass with the same facility into the bladder of Case 35, whose age was ten, as it did into the bladder of Case 36, whose age was only four. In some children of four or five years of age it is unsafe to pass a No. 7 lithotrite, although an instrument of this size will sometimes pass readily into the bladder of a boy of only two years of age. Perhaps I shall best illustrate the size or calibre of the urethra in male children by briefly relating the history of some of the cases in the annexed table.

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CASE 17.—S——, a male child two years old, was brought by his mother to the Indore Hospital on March 10th, 1884, suffering from symptoms of stone. On being placed under chloroform, I passed a small steel sound and struck a stone in the prostatic portion of the urethra. Withdrawing the sound, I passed a long urethral forceps and seized the stone. I found, however, that the forceps with the stone between its blades could not be withdrawn through the membranous portion of the urethra. I therefore pushed the forceps with the stone between its blades into the bladder and then let go my hold on the stone. Withdrawing the urethral forceps, I then introduced a No. 7 lithotrite into the bladder, seized the stone, and crushed it readily three or four times. To my surprise, a No. 9 evacuating catheter passed readily into the bladder. I then attached a Berkeley Hill's débris extractor to the evacuating catheter and removed the débris, which weighed seven grains and consisted of uric acid. The operation lasted four minutes, and the child left the hospital perfectly well on March 12th.

CASE 18.—F——, a male child one year and nine months old, was carried in his mother's arms to the Indore Hospital on March 24th, 1884, suffering from stone symptoms which had existed for four months. Being placed under chloroform, the stone was struck in the bladder, and I then tried to introduce a No. 9 evacuating catheter, intending to perform litholapaxy. The evacuating catheter would, however, not pass, so the operation was postponed to the 27th. In the interim a clever and very intelligent native workman, who makes many surgical instruments for me from European patterns, made me a No. 7 evacuating catheter. On March 27th, the child being again placed under chloroform, the No. 7 evacuating catheter passed readily. I crushed the stone with a No. 7 lithotrite, which I introduced into the bladder on three occasions, and removed the débris by means of a Berkeley Hill's extractor attached to the No. 7 evacuating catheter. The operation lasted thirty-two minutes, and the stone, which weighed eighteen grains, was composed of lithic acid. There was not a particle of débris left behind in the bladder. On the 28th the child complained of much pain in passing urine, and the penis was somewhat swollen.—29th: Pain in voiding urine much less. Swelling of penis much diminished.—30th: Pain in micturition very slight; swelling of penis nearly subsided. The mother took the child home.

(To be continued.)

A CASE OF

TROPICAL ABSCESS OF THE LIVER, OPENING INTO THE BOWEL; RECOVERY.

BY SURG. G. HARLEY THOMAS, M.R.C.S.,
ARMY MEDICAL STAFF.

PRIVATE P. L——, 1st Battalion Border Regiment, aged twenty-three years, came under my treatment in the Station Hospital, Kasauli, Punjab, on April 3rd, 1885, with symptoms of hepatitis. He had been in India for more than three years, in a hot station. He had never had dysentery, and was not an intemperate man. He had suffered from hepatitis six months previously at Agra. On admission he complained of pain in the right side, over the hepatic region, which was aggravated on breathing deeply; he had also pain in the right shoulder. He had vomited the day before, and still had a feeling of nausea. His liver was much enlarged, chiefly in an upward direction, dulness extending to about an inch and a half below the nipple; there was only slight enlargement below the ribs, no bulgings of the intercostal spaces, and no jaundice. His temperature was 99·2° in the morning, and 100·6° in the evening. He had no rigors. The pulse was normal, the tongue slightly coated, and the bowels constipated. The disease was diagnosed as hepatitis. A sinapism was applied over the liver, and the following mixture ordered to be taken twice a day: one-sixth of a grain of podophyllin, thirty grains of taraxacum, and one ounce of peppermint; also to take a five-grain mercury pill, and to be placed on milk diet. On April 5th his temperature rose slightly, being in the evening 101·6°; his bowels were well open, the motions being white in colour. On the 6th he complained of great pain over the liver; his breathing was quick, and his countenance anxious; his tongue had a white coating, with raised papillæ; his temperature was 100° in the morning and 103° in the evening, but he had no rigors. A blister was applied to the right side, the mixture and pill were omitted, and eight grains of chloride of ammonia in an ounce of water was ordered to be taken thrice a day. On the 7th he was better; the temperature was almost normal in the morning, and only rose to 101° in the evening; he perspired freely during the night. His temperature now varied between 99° in the morning and 102° in the evening up to the 10th, when on that date, after having been eight days in hospital, he was seized with a rigor about the middle of the day, and his temperature dropped from 101·2° in the morning to 99·2° in the evening, and pus was observed in his motions for the first time (about two drachms in each stool). A hepatic abscess was then known to exist. On the 11th he felt much better; the temperature remained normal both morning and evening; the pain in the hepatic region was considerably less; his tongue was coated, but moist; he had only one motion, which was dark-brown and semi-solid, and about four drachms of cream-coloured pus were passed with it; his urine was high-coloured, and contained lithates, but no albumen. The chloride of ammonia was now stopped, and the following ordered to be taken three times a day: perchloride of iron, ten minims; simple syrup, one drachm; and infusion of calumba, one ounce. Also some extra milk and eggs were given him. From the 11th to the 23rd his temperature remained subnormal; he had one or two solid or semi-solid motions daily, passing three or four drachms of sanguineous pus with each stool; but on the morning of the latter date he complained of pain below the sternum, his temperature rose to 100·2°, his pulse was 100, and for the last two or three days he had passed no pus from the bowel. A sinapism was applied to the tender spot, and a diaphoretic mixture administered. On the 24th the hepatic pain was considerably less; his temperature remained high, being 102°. He passed a small solid motion, with some thick unhealthy pus. Five grains of blue pill were ordered. On the 25th his temperature dropped to normal again; his bowels were well opened after the pill, the first motion containing a good deal of decomposing pus, but only a trace of matter in the remaining stools. On the 26th his bowels were open twice, and no pus was passed. The temperature and pulse were normal. From this date, and throughout the whole of the month of May, the patient passed small quantities of pus every two or three days (about three drachms with each motion); his bowels were nearly always regular, and his temperature kept normal; but he was still troubled with a pain in the right side, especially when drawing a deep breath, and he could not lie on that side. He was placed on chicken diet, with extra milk and eggs, and sometimes stimulants. During the month of June he progressed very favourably, and began to gain flesh. A small amount of pus was still passed occasionally. The liver had much contracted, the dulness had diminished in front, and his temperature kept normal. In July he was convalescent, his general health and strength had much improved, no pus had been observed in his motions for three weeks, the hepatic pain had entirely disappeared, and on Aug. 2nd he was discharged from the hospital cured.

Remarks.—The above case is an example of great structural changes going on in the liver without the patient being aware that there was anything very serious the matter with him. It was only eight days after admission into hospital that the abscess burst into the bowel, while a few days before admission the man had been marching about ten miles daily, and had enjoyed fairly good health from the time of his discharge from the Agra hospital six months previously. But this is frequently the case when the inflammation of the organ is caused by the combined effects of great heat and malaria. It will be observed that the bursting of the abscess was followed by an immediate fall of temperature, which remained slightly subnormal for twelve days; it then suddenly rose, and this indicated decomposition of pus taking place, especially as none had been passed with his motions for a few days previously to this rise of temperature; but as soon as the unhealthy matter was discharged the temperature dropped to normal again. The previous history of hepatitis, which lasted a long time, doubtless caused extensive adhesion between the liver and the abdominal walls, so that, although the abscess burst

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quickly after his admission into hospital, the pus was thus prevented from being discharged into the abdominal cavity, and causing his death.

Umballa, Punjab.

CURATIVE TREATMENT OF VAGINAL HYDROCELE BY CORROSIVE SUBLIMATE.

BY JAMES MILLER,

SURGEON TO THE LONDON GASLIGHT AND COKE COMPANY, NINE ELMS STATION; VISITING SURGEON TO THE SOUTH LAMBETH AND STOCKWELL DISPENSARY.

THE treatment of vaginal hydrocele by tapping is so simple that were it *per se* curative instead of being merely palliative, as is usually the case, there would be no need of any further method. But unfortunately such is not the case, and when an individual is tapped for the first time, it is simply one of a series of operations which will have to be repeated from time to time at longer or shorter periods, varying with different persons, and sometimes with the same one.

Various methods for the radical cure have been suggested and carried out, the latest probably being that recommended by Mr. Bellamy[1]—viz., "a clean sweep through all the scrotal tissues from the cord to the base;.....the cavity is then to be stuffed with carbolised lint or gauze, and the upper part of the wound brought together by stitches." But, though undoubtedly good, this is bold treatment, and such as many men would not submit to, for the reason that their hydroceles give them little or no pain, and they are more content to go on with the tapping process now and then than take the risk of the knife. If, however, at the time of tapping, an injection can be used which will cure the hydrocele without compelling the patient to keep to his bed or give up his work for a time, there is a distinct gain upon the various methods of treatment at present in vogue. And such an injection I believe we have in corrosive sublimate, as illustrated by the following cases.

CASE 1.—B. C——, aged forty-five, a stoker, had been troubled with hydrocele (left) for about two years. It was the usual history of a gradual and painless enlargement. Only the inconvenience of having so large a burden in such an awkward place induced him to seek some relief. I therefore tapped him, and the process was repeated four times in two years, there being only an interval of three months between the third and fourth operation, which tended to dishearten him. As he could not afford to lose time and "lay up," I therefore determined to try what the injection of a small quantity of corrosive sublimate would do. Accordingly I prepared a solution of one grain of the salt in an ounce of distilled water, and injected fifteen minims ($=\frac{1}{32}$ of a grain) of this into the sac. The *modus operandi* was very simple. Having evacuated the contents of the sac, I charged a hypodermic syringe of the above capacity with the liquid, and fitted it into the cannula which had been left *in situ*, discharged the contents into the sac, and removed the cannula in the perpendicular. The man felt no more than if he had only been tapped. This was done on Saturday evening, Jan. 3rd, 1885. I saw no more of him until the following October, when, on inquiry about his hydrocele, he informed me that it had all gone; in fact, he had not been troubled with it since I "injected the stuff." He stated that he experienced some sharp pain during the first night, but it passed off, and he went to work on the Monday as usual. On examining the scrotum there was no deformity or enlargement to be seen. It was perfectly natural.

Having another patient troubled with hydrocele, I was therefore glad to know the result of this first case, which, being so satisfactory, I did not hesitate to repeat.

CASE 2.—A. M——, aged thirty-eight. On Nov. 14th, 1885, I treated this patient in the same way. Here, again, was another ordinary vaginal hydrocele (left). Having drawn off twelve ounces of blood-stained fluid, I injected the solution in the same quantity and the same strength as before. In this case, however, I anticipated any after-pain by ordering some belladonna liniment to be sprinkled on lint and applied to the scrotum. On Nov. 16th, there had been no pain, and the patient had slept well at night, but the sac was rather more distended than it was immediately after the operation. I ordered him to keep on the sling which he had worn previously, and in a few days the fluid had been reabsorbed and the swelling was much less. In a few days more the swelling had all disappeared, and has not troubled him since.

In addition to the above cases I have treated two others on the same lines as the last, but there is no history to them. They were injected after evacuation, and disappeared without trouble. The gains by this simple method are great, for though the means used are the minimum for palliative treatment, the result is the maximum of curative treatment, and this without loss of time to the patient, which to most men is a great consideration.

South Lambeth-road, S.W.

[1] THE LANCET, July 4th, 1885.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum allorum tum proprias collegere habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Procemium.

MIDDLESEX HOSPITAL.

CASE OF BILIARY COLIC WITH JAUNDICE OF TWO YEARS' DURATION; EXPLORATORY OPERATION; DEATH; NECROPSY; REMARKS.

(Under the care of Dr. PRINGLE.)

THE following case is one of considerable interest, and will be attentively perused by all interested in abdominal surgery. The condition of the part as found at the time of operation was unusual, and exceptional difficulties were encountered, making it impossible either to remove the stone through the wound or to crush it *in situ*. The gall-bladder lay so deeply that the ordinary method of attaching it to the wound could not be employed, and its position also prevented suture of the incision which had been made in it for the purpose of exploration of its interior. On this account a ligature was applied round the gall-bladder above the incision, the part below being removed, and it was thus hoped that the extravasation of its contents would be prevented. This procedure appears to have been effective until the general cavity of the peritoneum was shut off by adhesions.

Elizabeth L——, a widow, aged fifty-five, was admitted under the care of Dr. J. J. Pringle on Sept. 8th, 1886. No facts of importance in regard to her family history were elicited, except that her mother had died of heart disease, and that four brothers still alive are subject to rheumatism. Her previous health had been uniformly good, interrupted only by seven pregnancies and several attacks of rheumatism, affecting chiefly the small joints of the hands and feet, the most severe of which kept her confined to bed for six weeks in the spring of 1884. In September of that year a varicose vein in the right leg "burst," and during her consequent confinement to bed she was suddenly seized with severe pain in the abdomen, starting from the right side, radiating towards the spine, and becoming general over the abdomen; uncontrollable vomiting accompanied this attack, which lasted two days, and after it her skin and conjunctivæ were noticed to be yellow. Similar attacks, of varying intensity, recurred once or twice a week until April 4th, 1886, when she first came under observation as an out-patient. She then stated that her appetite was good, but that she was "afraid to eat," as solid food invariably caused pain, relieved only by vomiting; her bowels were very confined. Under palliative treatment directed to these symptoms (bismuth, carminatives, saline purgatives), she improved remarkably for nearly three months; but from the beginning of July onwards she had a great number of attacks; her jaundice became deeper; she rapidly emaciated and suffered from sleeplessness, due to her constant pain and mental worry from inability to attend to her domestic and business affairs. Recognising the gravity of her condition she at length con-

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sented to her admission into the hospital, and to submit to any measure considered advisable for her.

State on admission.—An intelligent, big-framed woman, with drawn features expressive of pain, dilated facial capillaries, jaundiced tint of skin and mucous membranes, and chronic rheumatic deformity of the joints of both hands and feet. The superficial veins of both legs are varicose, and there is a large number of hæmorrhages into the skin of the lower extremities and trunk with evidences of much scratching, although the patient states that she does not itch now as formerly. Since first coming under observation she has lost flesh greatly. The pulmonary physical signs are normal. There is no physical evidence of hypertrophy or dilatation of the heart, but over the position of the apex beat is a distinct, though soft, systolic bruit conducted towards the axilla. Over the area of the aortic valve is a harsher systolic bruit, distinctly heard in the right carotid artery, and loudest in the first right interspace close to the sternum; the second sound everywhere is sharp and clear. The radial pulse is small, rather incompressible, and beats 88 to the minute. The abdominal walls are lax, permitting thorough examination of the viscera. Hepatic dulness extends a distance of four inches and a half vertically in the nipple line from the sixth rib to an inch below the costal arch, where the organ can be indistinctly felt; it is soft, its surface not irregular, and manipulation causes no pain. Nothing corresponding to a distended gall-bladder can be detected. Stomach resonance is obtained as high as the fifth rib in the left anterior axillary line, and the patient complains of flatulence. The tongue is large, coated, and transversely furrowed. The urine is of low specific gravity (1008), and contains bile-pigment, but no albumen. The progress of the case during the following six days was eminently unsatisfactory. She was in almost constant pain, relieved only by morphia administered subcutaneously; she vomited repeatedly, and became more and more pinched and exhausted. The abdomen became tender, and its examination badly tolerated; but on one occasion a mass, judged to be about the size of a pigeon's egg, was felt one inch above and two inches to the right of the umbilicus, and the opinion was hazarded that it might be the gall-bladder containing stones. The bowels were acted upon by purgatives, no gall-stones being present in the motions. An exploratory operation was, after consultation, decided upon, its object and risks having been explained to the patient and her relatives.

The operation was performed by Mr. Pearce Gould on Sept. 15th. Ether was the anæsthetic selected, on account of the supposed cardiac disease, and was administered by Mr. Henry Davis. Full antiseptic precautions were adopted, excepting the spray, solution of bichloride of mercury (1 in 2000) being used for sponges and hands. An incision four inches long was made in the right linea semilunaris and continued down to the peritoneum. Previously to opening the peritoneal cavity all bleeding points in the wound were seized with forci-pressure forceps. On opening the peritoneal cavity the liver was at once seen to be considerably enlarged, with a deep notch in its free border in the position of the gall-bladder, but that organ could neither be seen nor felt; the finger when passed in deeply under the liver felt a stone. The omentum and colon were protected and pressed down by a flat sponge, the edge of the liver gently raised, and a careful dissection was made in the direction of the gall-bladder, which was exposed after dividing firm peritoneal adhesions. The bladder was small, did not reach the free border of the liver, and no stone was felt in it. An aspirator was introduced, and about two drachms of pale bile and mucus withdrawn. The puncture was then enlarged to admit the forefinger, but the stone could not be felt from the interior of the bladder. Repeated attempts to pass a probe into the cystic duct failed, nor could the stone be pushed back into the gall-bladder or into the intestine. It was then found to be quite impracticable to stitch the gall-bladder to the abdominal wound, and it lay so deep that an attempt to suture the wound in it was hardly more successful. Under these circumstances the fundus of the bladder was freed from the liver, and a stout silk ligature was tied tightly around the bladder well beyond the wound, and the part incised cut off. Its wall was found to be considerably thickened. The peritoneum of the stump was then stitched over the mucous membrane with fine catgut. The stone was now felt for again, and it was found to be very movable, at times slipping out of reach, so that it was impossible to grasp it between the fingers or in a forceps, or to force it into the duodenum. All hæmorrhage having been stopped and the peritoneal cavity sponged out, the wound was closed with several deep and superficial chromic catgut sutures, and dressed with iodoform wool. The operation lasted a little over two hours.

The case rapidly progressed to a fatal termination. The patient never rallied from the shock of the operation, and complained of intense pain about the wound, relieved only by frequently repeated injections of morphia. Her breathing became laboured, and she presented the physical signs of severe acute general bronchitis with progressive rise of temperature, finally attaining 105° immediately before death, fifty-four hours after the operation.

The necropsy was made by Dr. Pasteur twenty-two hours after death, and showed the following condition:—Rigidity present, integuments deeply bile-stained. On opening the abdominal cavity there was a considerable amount of recent adhesive peritonitis around the edges of the wound, to which the great omentum was adherent. The small omentum was firmly attached to the under surface of the liver, both lobes of which were covered with recent lymph. A short, deep, abnormal vertical fissure, an inch and a half to the left of the falciform ligament, bounded a supernumerary lobe, which probably corresponded to the prominence felt during life. Immediately below the liver, and shut off from the general cavity of the peritoneum by recent adhesions, was an irregular cavity containing some bile-stained fluid, and lying against the liver was the end of the cystic duct surrounded by a ligature. The orifice was not completely closed by the ligature, and easily admitted a medium-sized probe, which passed along the cystic duct a distance of about three-quarters of an inch. There was no evidence of general peritonitis. The liver, stomach, and duodenum were removed *en masse*. The stomach was dilated, but otherwise healthy in appearance. The duodenum was also normal. On compressing the common bile-duct in a downward direction, bile flowed freely into the duodenum. The hepatic and common bile-ducts were enormously dilated, the two forming one straight, cylindrical tube from the liver to within half an inch of the duodenal papilla. Lying in this, and very freely movable in every portion of it, was a single cylindrical stone, 1 in. in length and 1¼ in. in circumference; its lower end squared off abruptly, but above it tapered off in a conical summit much resembling a rifle-bullet. Its weight when dried was 27 grs. The cystic duct was not dilated, and a small probe was now passed with some difficulty from it into the common duct. The portal vein was normal. There were considerable dilatation and hypertrophy of the biliary system throughout the liver, which was unduly tough. The spleen was large and soft; it weighed 9 oz. The kidneys were moderately granular. The heart weighed 10¾ oz.; its cavities contained mixed clot, and were not dilated; there was some fibrotic thickening along the margins of the mitral valve, but no vegetations; the aortic valves appeared normal. There was marked atheroma of the aorta. Both lungs were studded with subpleural hæmorrhages and extensive areas of collapse and broncho-pneumonia. The bronchi contained much frothy mucus.

Remarks by Dr. PRINGLE.—It is obligatory to record in detail all cases of an operation still under discussion, the acceptance of which as a standard surgical procedure must ultimately depend upon the results of extensive collective experience. [Dr. Pringle also refers to the successful results of the operation when performed for distension of the gall-bladder due to impaction of a stone in the cystic duct, not agreeing with an opinion which has been expressed that the occurrence of jaundice during and after the passage of a gall-stone is of extreme rarity.] The case narrated was fully acknowledged not to accord with the type which presents the most favourable conditions for operation, inasmuch as the seat of arrest of the gallstone could not be definitely determined, and the evidence as to distension of the gall-bladder was equivocal. Recorded operative experience upon cases similar in these respects, although admittedly not encouraging, is based upon too small a number of cases to have much value. The patient's constant suffering and rapid downward progress prompted recourse to any measure calculated to afford her the slightest chance of relief. The object of the operation was, in the first instance, exploratory; and after the easy discovery of the gall-stone by the finger it was hoped that its removal would be satisfactorily accomplished, or, at all events, that it might be crushed by padded forceps from outside the duct, as

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has been twice successfully practised. Unforeseen difficulties were, however, encountered in the numerous adhesions about the gall-bladder, the removal of which organ became a matter of necessity, and in the extreme mobility of the stone, which it was found impossible to fix at the bottom of so deep a wound. The great thickness of the wall of the gall-duct, found at the necropsy, showed the perfect feasibility of the ingenious manœuvre which has been termed "cholelithotrity." Finally, it cannot be doubted that death was in great measure, if not mainly, due to the lung condition resulting from the administration of ether as the anæsthetic selected, on account of an erroneous intepretation of the cardiac physical signs; and it is hoped that the publication of this fatal case may not deter surgeons from operating upon similar cases, whilst it may forewarn them of some of the difficulties which may have to be encountered.

LIVERPOOL NORTHERN HOSPITAL.

SYNOVIAL CYSTS IN CONNEXION WITH THE KNEE; SYNOVIAL CYST OF THE WRIST; OPERATIONS; RECOVERY; REMARKS.

(Under the care of Mr. CHAUNCY PUZEY.)

CASE 1. *Synovial Cyst in the Calf of the Leg, communicating with the Knee-joint; Synovial Cyst of the Wrist; Operations; Satisfactory result.*—T. W——, aged twenty-four, a printer, was admitted on Feb. 17th, 1885. He said that he had rheumatic fever four years before, that the right wrist-joint and knee-joint were most affected, and that the swelling never quite disappeared from the wrist. A month before admission, after a slight contusion or squeeze of this wrist, an increase of swelling appeared as below described. The man's own expression (as noted by Mr. Horrocks, house-surgeon) was that "it seemed to drive it to both ends."

On admission, there was a rounded, elongated swelling over the radial side of the back of the wrist and hand, extending from the base of the first metacarpal bone to about two inches above the wrist-joint. There was no redness or heat about the swelling, which was divided into two portions by the annular ligament. Fluctuation existed between these two portions, and a sort of soft crepitus was felt occasionally on squeezing the contents from one portion to the other, as if caused by the passage of loose bodies. The man's right knee presented an interesting condition. The joint was considerably distended with fluid, and there was a large fluid swelling in the upper part of the calf of the leg, evidently communicating with the joint. This was diagnosed as an enormously distended bursal swelling or synovial cyst, communicating with the knee-joint, and it was decided to test the man's capability of tolerating operative measures by attempting a radical cure of the wrist before in any way interfering with the knee.

On Feb. 18th, under full Listerian precautions, the tumour in the wrist was freely opened by two incisions, one above and the other below the constricting annular ligament. A considerable quantity of thick synovial fluid escaped, and with it two or three "melon-seed bodies," and two more, which were still attached to the wall of the cavity, were removed by scissors. No tendon appeared. The cyst wall was stitched to the skin by three or four sutures, and the track was syringed through with a solution of carbolic acid and iodine. The usual dressings were applied, and the limb fixed on a splint. No complications arose. The wounds healed by granulation, and on March 4th the patient left the hospital with his hand in the most satisfactory condition. He had been kept in bed most of the time, with the knee-joint fixed in a splint, the result being that the swelling in that part had considerably diminished; and he was advised to go to his home near Manchester, and after resting for a while to try if he could resume work.

On May 4th the man returned to the hospital with the determination to submit to the risk of operation, for he said he could never depend upon his knee not giving way under him, causing him to stumble and fall, whereas his wrist, which before operation had been getting weaker and weaker, was now quite strong and useful. The swelling of the knee-joint, he told us, had existed for four years; but it was about a year later that he noticed a swelling behind the knee, which appeared suddenly and coincidently with some diminution of the swelling and discomfort in the knee-joint. The size of the swelling had varied according to the amount of walking undergone, but on the whole there had been a gradual increase of the swelling in the calf.

The condition on admission (as noted by Mr. Horrocks) was as follows:—The affected knee measures 14½ in. round the joint above the patella, and 14 in. below it; the sound knee measures 12⅞ in. round the joint above the patella, and 12½ in. below it. The fulness over the front of the affected thigh extends 3 in. above the upper border of the patella, and laterally is more marked on the inner than the outer aspect of the joint; the depressions on each side of the ligamentum patellæ are distinct, but the patella floats. Fluctuation is distinctly felt between the joint and the swelling in the calf, and *vice versâ*. On examining the back of the leg, a transverse oval swelling 4 in. across and 2½ in. from above downwards is seen in the upper part of the calf; above this there is a transverse depression, and higher again than this a smaller and more deeply situated oval swelling, and fluctuation can be obtained between this and the other swellings. The calf of the affected limb measures 13¾ in. in circumference at the most prominent part of the swelling, the measurement at the corresponding part of the sound limb being 11¾ in.

After a few days' rest in bed, on May 10th, under carbolic spray, the swelling in the calf was laid open freely, and about five or six ounces of thick synovial fluid were evacuated. (Before commencing the operation the knee-joint was firmly bandaged with a Martin's rubber bandage, so as to force the fluid from the joint into the calf, and to prevent the admission of air into the joint.) The sac wall was found to be very thin everywhere, except at its upper part, where it was constricted, and communicated by a narrow channel with the upper and more deeply situated sac; here the cyst wall was thick and wrinkled, looking like the mouth of a bag where it is tied. Through this narrow opening a director was pushed, and the opening was enlarged with a bistoury sufficiently to let out a small quantity of fluid and to permit exploration with the finger. The walls of this smaller cavity were thicker and rigid. The communication with the joint was not found; it was probably too sinuous. As much as possible of the walls of the lower and thinner sac were torn or dissected away; a large drainage-tube was fixed in the upper one. The lower half of the wound was stitched up; the upper half was freely swabbed with tincture of iodine. The limb was fixed on a modified Thomas's knee-splint, and the wound dressed with iodoform wool and Listerian dressings. Then the Martin's bandage was removed from the knee.

May 11th.—Dressings changed (under the spray); found fairly soaked with thin, synovia-like fluid, slightly blood-stained; no effusion in the joint.

15th.—Since the last note the patient has continued to do well; the lower part of the wound has healed. The large drainage-tube was removed to-day, and a smaller one substituted.

30th.—Wound nearly healed. Drainage-tube shortened.

June 13th.—Drainage-tube removed some days ago. Small superficial wound remaining.

By the end of the month the wound was quite healed, and a day or two later the man was allowed to get up. On July 24th he went home. The condition of the limb was most satisfactory; there was no swelling of the joint, and the slight stiffness resulting from the enforced fixing of the limb had almost passed away. At no period of the operation was there the slightest cause for any anxiety. Some months afterwards the man called at the hospital and reported himself to the house-surgeon as being quite well, and engaged at his ordinary work.

CASE 2. *Synovial Cyst in Popliteal Region; Operation; Successful result.*—J. K——, aged fifty-one, a commercial traveller, was admitted on March 3rd, 1885. He complained of weakness of the left knee. On examination a swelling of the size of a small Tangerine orange was found in the lower part of the popliteal space, slightly to the inner side of the median line. It did not pulsate; when the knee was flexed it disappeared, and on extension of the leg it stood out prominently and felt very tense. There was no redness or tenderness about it.

The limb was fixed on a Thomas's splint, and a succession of blisters over the swelling was tried; but as this seemed to have no marked effect, and as the patient became importunate for more active treatment, operation was decided upon. On April 30th the swelling was laid open thoroughly, under carbolic spray, and about an ounce of thin "calves'-foot jelly"-like material escaped.

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The sac, which was very thin, was found to dip down between the heads of the gastrocnemius, and a probe was passed upwards some distance in the direction of the joint, with which, however, no communication could be proved. As much of the cyst wall as possible was stripped away, and a drainage-tube fixed in the deep part of the wound. The superficial part of the wound was stitched up, the iodoform wool and gauze dressings applied, and the limb fixed on a Thomas's splint. All went on well. On May 9th the drainage-tube was shortened, and a week later was removed altogether. By June 3rd the whole wound was soundly healed, and the man was walking about. He said that his knee felt rather stiff (probably from its long-continued position of full extension), but it was seen that he could freely flex it to a right angle. On June 7th the man went out well, and ready for work.

Remarks by Mr. PUZEY.—Of these two cases, in the latter there is some room for doubt as to whether any communication existed between the cyst and the joint; but the former was manifestly one of those to which Mr. Morrant Baker has specially drawn attention in the thirteenth and twenty-first volumes of St. Bartholomew's Hospital Reports, and it appears to me worth recording, because it illustrates many of the conclusions at which he arrived, and it shows how such cases may be treated without running much risk of the calamities which appear to have generally resulted from operative interference. In the case of T. W——, we have the history of two joints—the wrist and the knee—suffering severely from an attack of rheumatism, and never completely recovering from it. Then cystic swellings appear—in the case of the knee obviously, in the case of the wrist most probably, in connexion with the joint. An inspection of the interior of the popliteal swelling showed that it had originated at the back of the joint, and that later on this primary synovial cyst had forced an opening for itself apparently beneath the lower border of the popliteus, and then rapidly the secondary tumour had been formed, as shown by the thinness of the sac wall in every part except at its neck, where the walls of the canal were thick and corrugated, like the neck of a bag. Whether the primary cyst had originally been a bursa which communicated with the joint, or whether it was a true hernia of the synovial membrane, I cannot of course say; and from a surgical point of view it is not of much importance, although of interest pathologically. As may be seen by reference to the articles above referred to (especially pp. 258–261 of vol. xiii. of St. Bartholomew's Hospital Reports), post-mortem examination has not yet thrown much light on this point. But the very important practical question is -How should such cases be treated? The answer given by most authorities amounts to a strong recommendation to avoid any operative interference, and this seems justified by the many cases recorded (and how many more have probably been unrecorded?) in which loss of limb or life has resulted from such interference. But I think it will be found that in the majority of these cases the true nature of the affection has not been recognised in time, and due precautions have therefore not been taken. Several years ago I saw a young woman with a large fluid swelling in the upper part of the calf of one leg. I proposed to admit her into hospital, intending to operate antiseptically. I saw no more of her, but heard, some months after, that another surgeon had opened the swelling at her own home, and that she died in a few weeks. I was unable to ascertain particulars, but have no doubt as to what the nature of the swelling was, and very little as to the sequence of events. But surely antiseptic surgery gives us a freer hand; and although, perhaps, in the case of the well-to-do patient palliative treatment may answer all purposes, in that of the working-man we are justified in risking a little (after duly cautioning him) in view of obtaining a permanent cure. And as Professor Lister has shown us how the knee-joint itself will bear a clean-cut wound, so surely we may venture on a clean-cut wound and on antiseptic drainage of cavities connected with the joint. Paracentesis of such cysts can only be palliative; iodine and such-like injections would be destructive in their effects; and free drainage seems to me to be the only trustworthy means of permanently obliterating the cavity. The extreme tenuity of the cyst wall itself in these two cases leads me to think that it might be possible to bring about this result by forcibly pressing (with the palms of one or both hands) on the tumour, in such a manner as to force the fluid downwards against the weakest part of the sac wall, which might thus be freely torn through and the contents extravasated into the cellular tissue, thus avoiding any skin wound; and then, by well-arranged pressure and bandaging, absorption of the fluid might take place. Or by means of a long tenotomy knife, made to enter the sac at a long distance from the puncture in the skin, the sac wall might be freely opened and the same object gained. But where the Listerian method can be properly carried out I certainly should prefer the precision and thoroughness of open antiseptic drainage. With regard to the permanency of the cure in these two cases the question remains open, but I believe that if either of these men had had a return of his trouble he would have found his way back to me.

Medical Societies.

CLINICAL SOCIETY OF LONDON.

Tumours of the Bladder.—Supra-pubic Cystotomy.—Fracture of the Head of the Radius complicated by Fracture of the Coronoid.

AN ordinary meeting of this Society was held on the 26th ult., Mr. Thomas Bryant, F.R.C.S., President, in the chair. Nearly the whole of the evening was occupied with the surgery of vesical tumours.

Sir H. THOMPSON contributed a paper on Tumours of the Bladder, in which he gave a brief sketch of six cases in which he operated during the last twelve months, showing the parts removed in each case. In three the supra-pubic operation was employed; in two the perineal incision only; and in one, that of a female, urethral dilatation was sufficient for the purpose. It may be added here that in two cases the result is without doubt a complete and permanent cure. In two others the disease, although known to be considerable, was more so than might have been expected from the preliminary examination, and death, in each case imminent, was in one certainly, perhaps in both, postponed for a short time. In each the operation was undertaken only with the view of palliating the patient's condition, not of saving him; removal of the growth, so far as this was possible, being the only mode of arresting severe and continuous hæmorrhage. The remaining two cases are of recent date, and it is only possible to say that the patients have thus far progressed satisfactorily.

Mr. BERNARD PITTS read a case of Supra-pubic Cystotomy two years after the removal of growth by perineal operation. The patient was a man aged forty-five. He began to have hæmorrhage from the bladder about three years before the first operation, or five years ago. When he first came under observation he was losing a large quantity of blood, his urine was very offensive, he was cachectic, and unable to follow his occupation. After operation and removal through the perineum of a pedunculated papilloma he regained his health, his urine became clear, and he saw no trace of blood in it for a year and a half. When examined in July last he was in good general health and actively engaged in his occupation as a watchmaker, but he had a constant deposit of blood and mucus in his urine, and was occasionally passing small clots; micturition was frequent and attended with some pain. In spite of treatment these symptoms continued, and on September 22nd a supra-pubic exploration was made, and it was found that at the site of the old pedicle—viz, just below the right ureter—there was a widely diffused recurrence; the growth was for the most part but slightly elevated, but there were several cone-like elevations of the size of the top of one's finger. These projecting buds were nipped off with forceps, and the broad base of the growth was scraped with a sharp spoon. A number of small sessile tufts were seen on the sides and base of the bladder, and were, as far as possible, removed with the spoon. The patient made a good recovery, and exactly one month after operation the bladder opening had entirely closed. He had lost all trace of blood in his urine, and all pain. The portions of growth removed were firm, and quite different in naked-eye appearance to what was removed on the first occasion. Microscopical examination showed the recurrent growth to be a papilloma, presenting, however, many changes of a suspicious character. The conclusion of the paper dealt with the probable future of the case, since

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it was very likely that further operative interference would in time be necessary, and it was suggested that one should not be in a hurry to interfere in such a case because of slight return of symptoms, but that it would be better to wait until the patient was rendered unfit by hæmorrhage or exhaustion to follow his occupation; then to again open his bladder above the pubes, and to remove the growth as freely as possible, and if on examination the growth presented no further evidence of a malignant change to be content with this; but in case there was distinct evidence of change in the character of the growth, or if the growth was so luxuriant that successive operations failed to keep it in subjection, then it would seem right to give him a chance of prolonged life by diverting the ureters, and subsequently removing such parts of the bladder as necessity compelled. It was suggested that by an incision in the groin, as for ligature of the external iliac, the ureter might be reached, and ligated near the bladder, and the fore-end then brought to the surface; that after the wound had healed, and the kidney was accustomed to the change, the same operation should be done on the opposite side. The bladder would then be rendered a passive organ, and the growth within it could be dealt with through the supra-pubic opening, either by application of caustics or by stripping back the peritoneum as far as the attachment of the ureters, and then removing the greater part of the bladder, taking away the mucous coat from such part as from the connexions it might be inadvisable to otherwise meddle with.—Mr. JOHN CROFT related a case of flat epitheliomatous growth situate behind the trigone; the tumour could not be removed, but great relief followed the establishment of the perineal fistula, which was allowed to remain open for nine months, when the growth grew through the perineal wound; the hæmorrhage and dysuria ceased from the time of the perineal exploration. Another case occurred in a lady; it was a fimbriated growth. The urethra was dilated, and the whole growth was scraped away in fragments by the aid of the finger-nail. The hæmaturia had ceased, and had not returned, now four months since the operation.—Mr. THOMAS BRYANT felt that this operation was a great advance; but the founders of the Society would have regarded it as a rash innovation. Most of the cases were of the "rescued" kind. The average duration of life in tumour of the bladder would be an interesting item of information. He had operated on twelve cases, and all by the perineal section. One case ended fatally, probably because the supra-pubic method had not been employed. But perineal exploration ought first to be used. For the actual operation the supra-pubic method was probably to be preferred in most cases of extensive growth and near the fundus. If the tumour be small and situate at the base, the perineal section might be best for the removal of it. He gave illustrations of the principle that small tumours could produce severe symptoms. The case of a female child suffering from profuse hæmaturia was narrated, in which on withdrawing forcibly a sounding catheter the eyelet contained a papilloma which was torn away from the mucous membrane of the bladder. The child did well, and was healthy sixteen years later. In the case of a lady suffering from vesical spasm and hæmaturia, a small growth not larger than a haricot bean was found near the neck of the bladder; the tumour was easily removed and was a fimbriated papilloma. Eighteen months ago a man with vesical hæmorrhage was reduced to the last degree of anæmia; the bladder was explored through the perineum; the whole bladder appeared to be filled with villous growth. Sir Henry Thompson's forceps were used, and a great deal of the growth was removed; the bladder was scraped throughout, the walls being wiped rather roughly with a sponge on a holder. The man steadily recovered, and remained well for six months, when slight hæmaturia persisted for a week, but this never recurred. Another case of a calamitous kind occurred in a man in whose bladder a fibrous polypoid growth sprang from the fundus; this was seized and withdrawn. A second one was detected, but was not so easily removed; it was drawn into the perineal wound and snipped off. The man died of peritonitis, and a small hole was found in the bladder at the site of the removed polypus.—Mr. HENRY MORRIS had operated in five or six cases. The perineal section was performed in all. Of these only two were thought to justify further operation. In a case that had been one of vesical calculus, a prostatic tumour was discovered, and removed with Sir Henry Thompson's forceps two days later—as the tumour was unexpected at the time of the perineal exploration. In another case, that of a large hard tumour with nodulated surface, the size of a small orange it was found impossible to remove it through the perineal wound, and a supra-pubic opening was made. The two wounds were a great advantage in this operation; but it was impossible to remove the whole of the disease. Though the rectal bag was much inflated, it was surprising to find how little the bladder had been elevated, for a fold of peritonem still presented in making the parietal incision. The tumour extended from the ureter on one side up to the fundus on the same side. Would it be more advantageous to close the perineal or the supra-pubic wound for the purposes of drainage? He did not think that the suggestion made by Mr. Pitts was too adventurous. Draining the kidneys by turning the ureters away, and make urinary fistulæ either in the loin or groin, was scientific treatment on a par with the operation of lumbar colotomy for rectal obstruction. The little inconvenience of urinary fistulæ was illustrated by two cases.—Sir HENRY THOMPSON said that washing out by the catheter was not a certain method of diagnosis. The lithotrite might remove fragments suitable for diagnosis, but this should be done cautiously. He could not certainly diagnose a tumour in the bladder by means of the sound, as the papillomata were very soft and light; even with the finger in the rectum a certain diagnosis was not possible. The perineal opening was no disadvantage whatever, and should form the exploratory opening. He advised in his first paper that the surgeon should lay hold of nothing whilst the assistant is pressing down from the outside, lest the peritoneum be wounded. Had he been aware of what could be done by the supra-pubic method at that time he would not have used the perineal method for that case. Drainage afterwards through the supra-pubic wound was quite sufficient. He referred to the case of a man with very large prostatic growth, necessitating frequent catheterism and causing much exhaustion. A supra-pubic opening was made and a curved silver tube introduced; it was a perfect drain, and the patient still had a permanent opening and enjoyed existence. The urine drains away into a urinal which the patient wears. The suggestion by Mr. Pitts was a novelty well worth consideration. He was thankful for a suggestion thrown out by the President, that a new sponge tightly tied round a forceps was a method of clearing out an extensive villous growth.—Mr. PITTS said that he had perhaps prematurely come to the opinion that the supra-pubic operation was the best. There might be some cases that could be better treated by the perineal method.

Mr. B. WAINEWRIGHT read a paper on Vertical Fracture of the Head of the Right Radius and Fracture of the Coronoid Process of the Ulna, caused by a fall on the hand, in a man, a rivetter by trade, producing great restriction of all the movements of the forearm and inability to follow his occupation. It was treated by excision of the head of the radius and removal of the fractured portion of the coronoid process of the ulna, resulting in greatly improved mobility of the forearm, and enabling him to resume his work.

After Mr. Butlin had exhibited a screen of drawings of Diseases of the Tongue the following living specimens were shown:—Dr. James Anderson: Intracranial Murmur with relapsing Optic Neuritis. Mr. Mansell Moullin: Complete cure of Gunshot Wound of the Foot. Dr. Beevor: Cases showing type of Paralysis resulting from pressure on fifth and sixth cervical roots. Dr. Hale White: Addison's Disease with Leucoplacia Buccalis.

MEDICAL SOCIETY OF LONDON.

Athetosis.—Congenital Dislocation of Patellæ.—Pes Gigas.—Erasion of Diseased Joints.—Dermatitis Herpetiformis.—Cystitis treated by Electricity.

A CLINICAL meeting of this Society was held on Monday last, Mr. R. Brudenell Carter, F.R.C.S., President, in the chair.

Dr. C. E. BEEVOR showed a case of Athetosis in a man aged twenty. There was a history of a convulsive fit at the age of thirteen, and loss of power on both sides. He gradually recovered power in the left side, but remained paralysed in the right leg and arm. Ever since the seizure he had suffered from epileptic fits, occurring about once a year.

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The movements commenced in the right arm and hand only a year ago. Voluntary efforts increased the movements. The right hip-joint was dislocated—it was said as the result of the first fit. The right limbs were much shorter than the left. There was but little difference between the two sides of the face. The movements ceased during sleep. There is no mental defect, though his aspect and speech might suggest this. He has never been aphasic. Dr. Beevor considered that there was a cerebral lesion, but did not attempt to localise the lesion more precisely. Voluntary movements were possible with the right hand, though much interfered with by the involuntary athetosis.

Mr. HERBERT ALLINGHAM showed two cases of Congenital Dislocation of Patellæ; the quadriceps muscle was atrophied. The vastus internus in the boy shown did not respond to electrical reaction.—Mr. J. H. MORGAN was disposed to think that laxity of the internal lateral ligament was the chief cause of the displacement.—Mr. NOBLE SMITH had seen two cases.—Mr. F. B. JESSETT had met with one case.—Mr. W. H. BENNETT considered that infantile paralysis might lead to the dislocation, as he had seen in one case.—Mr. EDMUND OWEN thought that knock-knee might be a cause, in addition to congenital malformation and to infantile palsy.

Mr. H. ALLINGHAM showed a remarkable case of Pes Gigas. The hypertrophy appeared to affect only the anterior part of the foot, and involved the cellular tissue chiefly. The bones did not appear to be enlarged. There was no evidence of nævoid tissue in the hypertrophy, which probably involved the lymphatic and connective tissues.—Mr. DAVIES-COLLEY had recorded a somewhat similar case in the Pathological Transactions three years ago. The foot was amputated through the metatarsal bones. Billroth had pictured such cases in his Clinical Surgery.—Mr. W. H. BENNETT had treated a case of the kind by partial amputation, with very good result. There was some tissue that resembled myxoma.

Mr. EDMUND OWEN showed two cases of Chronic Suppurative Knee-joint Disease, treated by free removal of the diseased tissues. A flap was raised from the front of the joint, in which the patella was contained. The semilunar fibro-cartilages were removed, and the whole cavity rendered aseptic by injections and washings of corrosive sublimate. No local or constitutional disturbance followed the operation. There was ankylosis in each, and no shortening of the limbs.—Mr. F. B. JESSETT fully concurred in the treatment, which was less liable to be followed by severe accidents than resection, and it left no shortening.—Mr. DAVIES-COLLEY'S experience of erasion of the knee-joint was not so favourable. In children he would prefer excision; the epiphysial lines need not always be interfered with.—Mr. BRUCE CLARKE had used the method in a boy in whom the disease was more chronic. A movable joint might be secured if the disease were treated early. A movable was preferable to an ankylosed joint.—Mr. W. H. BENNETT asked whether it should not be the aim of the surgeon to obtain a movable joint.—Mr. BENTON considered that bony ankylosis would not result; there was already some movement.

Dr. STEPHEN MACKENZIE showed a case of Dermatitis Herpetiformis in a man aged thirty-nine. He had a chancre at the age of twenty, but no secondaries. He had had no skin affection till last Boxing Day, when he drank freely and slept in a damp bed. Catarrhal symptoms followed. On Jan. 5th a vesicular eruption appeared on the face and neck. Some bullæ also came out on the arms, as well as erythema on the chest and arms. Where the erythema was there were no vesicles. Ever since January he had had the condition of hyperæmia, vesicles, and bullæ of variable severity. The erythema marginatum was very fugacious, but generally permanent. Duhring had described these cases as dermatitis herpetiformis. He drew attention to the multiplicity of the lesions. Erythema, vesicles, bullæ, and pustules were generally present in the same cases concurrently or consecutively, associated with small vesicles arranged in groups. In all the cases Duhring described (sixteen in number) there was much itching—whence the term pemphigus pruriginosus; but there was no pruritus in Dr. Mackenzie's case. Certainly, as Duhring stated, herpes gestationis was a variety of the same disease. A coloured drawing of a case of this kind in a pregnant woman was shown. Some of the cases described by Bazin and Tilbury Fox as hydroa were of the same nature. Impetigo herpetiformis of Hebra was always fatal, and probably not the same affection as dermatitis herpetiformis. The disease was very rebellious to treatment, but arsenic seemed to have some influence over it. Cold appeared to increase its severity. One case of Duhring's had lasted sixteen years. In reply to questions from Dr. Veale and Dr. C. T. Williams, he said there was no albuminuria and no glycosuria, and the reaction of the urine was natural.

Mr. BRUCE CLARKE showed a case of Cystitis, which was apparently benefited as the result of the application of the constant current for ten to twenty minutes once or more times a week. Benzoate of soda was given in large doses, and every other treatment carried out, including cystotomy.—Mr. E. OWEN considered that cystotomy would cure most cases of cystitis.—Dr. S. MACKENZIE asked whether salicylate of soda in large doses had been given.—Mr. SWINFORD EDWARDS asked whether the negative or the positive pole was introduced into the bladder, and whether the walls of this viscus were touched.—Dr. C. T. WILLIAMS asked how the electricity acted.—Mr. BRUCE CLARKE said he could give no satisfactory explanation.

EPIDEMIOLOGICAL SOCIETY OF LONDON.

A Review of the Past Year, with some Reminiscences of Cholera and Tropical Fevers.

A MEETING of this Society was held on Wednesday, Nov. 10th, Dr. Walter Dickson, R.N., President, in the chair.

Dr. DICKSON, after thanking the Society for the honour of re-election, and congratulating it on its present flourishing condition and the work done last session, paid fitting tribute to the memory and scientific labours of the distinguished members whose loss they had to deplore during the past year—Dr. G. Milroy, Dr. T. S. Cobbold, and Dr. Varentrapp of Frankfort,—all of whom had for many years been connected with the Society. Dr. Dickson then proceeded to consider the epidemic of cholera which, beginning at Brindisi and Venice in the spring of this year, inflicted serious loss in several provinces of Italy, chiefly on the Adriatic Coast, and in the valley of the Po, but also extended to a few places on the west coast near Naples, and to Cagliari in the island of Sardinia. It subsequently spread to Istria and Hungary, but on the whole was much less destructive than former epidemics, the larger cities of Italy having escaped. A minor outbreak in the extreme corner of Brittany in the winter months reminded us that these visitations were not always associated with high temperature, and the report to the French Minister of Commerce showed conclusively how the disease spread from individual to individual, and village to village, in a group of small fishing ports in the department of Finisterre. The highest mortality was always coincident with the most defective sanitation, and in Audierne, with 1700 inhabitants, 400 cases occurred, and 144 deaths. Drunkards, and those who, while nursing the sick, took their meals in the bed-chamber, were especially observed to suffer. Although distinctly traced from one small town to another, its first appearance was variously ascribed to importation from a distance—from Brest or from Toulon, through sailors who had returned from Tonquin, or, as suggested by the Medical Commission of Inquiry, through fishermen returning from the coast of Spain, which was last year devastated by cholera. The troops stationed in the district did not suffer, their better hygienic condition protecting them from the disease. In Italy cholera is always regarded as introduced from without, and quarantine regulations are more confided in than sanitary precautions, involving trouble and expense. The relaxation of the old restrictions was deeply resented by the people, and the Government, though disposed to tread in the paths of this country in the matter of local sanitation, had to yield in some points to popular clamour. Some advance, therefore, has been made by the adoption of the five days' detention of ships and the abolition of land quarantine by the International Conference at Rome last year. In time, no doubt, the English idea of scrupulous universal cleanliness, as the best preventive of cholera and all other epidemic diseases, will obtain extended acceptance among the southern nations of Europe, which have recently so grievously suffered from their neglect of it. Dr. Buchanan's admirable summary of the argument was quoted, and merited praise given to the Local Government Board for their efforts to discover and correct sanitary defects

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wherever they were reasonably suspected to exist. Dr. Koch's researches on cholera microbes and M. Pasteur's prophylactic inoculation for hydrophobia were to be regarded as valuable advances in epidemiological science, though still on their trial and requiring corroboration from further experience. Reference was made to the Peruvian verruga and the recent deplorable self-sacrifice of a young physician of Lima, who inoculated himself with the blood of a patient ill with the disease. After a period of incubation of twenty-three days he induced the disease, and died on the thirty-eighth day, showing that the malady, though strictly endemic, confined to a limited tract of country, and not necessarily contagious, is zymotic and inoculable, and possibly dependent on a bacillus, reported to have been discovered by Professor Izquierdo of Chili, circulating in the blood and provoking the local changes that mark the disease. In the last report of the health of the Royal Navy were found some interesting details of the etiology of the fevers which occurred to the force in the Soudan, Egypt, and Malta in the recent war, and which greatly raised the rate of sickness and mortality. On the west coast of Africa the cases of paroxysmal fevers of the climate appeared to have been of a mild type, although very numerous. In one vessel in the Niger, with seventy whites, all except six were affected by malarious fever, yet no death or invaliding had occurred. Only one case of yellow fever is recorded in the whole naval force (at Callao, in the Pacific), in a man who had slept on shore. Only five cases of cholera seem to have occurred in the whole force (all at Amoy, in China), and were traced to the free use of aerated water manufactured in the town from water polluted with sewage. The naval statistics show a portentous increase of venereal affections, chiefly on the home station. In the whole force absence from duty from this cause has amounted in the year to five days per man—a loss of time equal to that caused by all the zymotic, rheumatic, respiratory, and digestive diseases put together. On some foreign stations there had been a diminution of venereal disease in the navy owing to the salutary regulations enforced by the local authorities; and at the Cape of Good Hope a frightful extension of syphilis, affecting a large portion of the population, including many infants and young children, had led to a great change in public opinion; and the restrictive measures, which had been some years ago repealed by the colonial Legislature, have been again introduced, as absolutely necessary to avert further evil. The President then gave some of his own experiences in the navy in regard to cholera and kindred disorders in two instances, which, in the microcosm of a ship and the thorough knowledge of the persons affected, afforded good opportunity of studying etiology. In the first, a corvette with 200 men serving on the Baltic coast in the first year of the Russian war, the sanitary condition of the ship and crew were very defective, and much deteriorated by the arduous work of incessant cruising in cold, damp, tempestuous weather, blockading the enemy's ports and destroying his commerce. In the end of September, 1854, she captured several prizes, which were sent in care of seventy men into Memel, which had that summer been visited by cholera. A heavy gale drove the ship off the land and prevented communication with the prize crews for four days, during which they underwent much hardship and privation. When they returned on board, nearly all were found to be suffering from bowel-flux in various degrees of intensity, and two died of cholera—one in fifteen hours, the other with consecutive fever on the ninth day. A third case, in a man who had not been on shore, and was less severe, survived to the tenth day, and, in the final stage, had black vomit as well as rice-water evacuations. The men who had not been on shore were affected in far less proportion than those who had been with the prizes at Memel, of whom more than one-third suffered severely, and few of them escaped the minor form of the disease. The other example was of a frigate with 500 men, the flagship on the East India station, which, during eighteen months' service in India, Ceylon, and Arabia, had enjoyed a marvellous immunity from disease, and was in perfect hygienic condition when she arrived at Aden in March, 1859, after lying six months off Jeddah in the Red Sea. Leave to go on shore was given, Aden at that time being reputed healthy, although it was afterwards discovered that a few sporadic cases were occurring among the natives. A few cases of bowel complaints were found when they returned on board, and in three decided cholera was manifested, with two rapid deaths. The ship at once put to sea, and, thanks to her excellent internal economy, although several cases of diarrhœa occurred in the next few days, none attained choleraic intensity. Both instances show that in the cold bleak climate of Prussia, as well as in the intense dry heat of Arabia, much risk is run by communicating with cholera-stricken localities. Malarious fever was then discussed as it appeared on board a steam-sloop with 110 men, employed for three years (1850 to 1853) on the west coast of Africa in the suppression of the slave-trade. Minor forms of fever were not uncommon, but in the River Congo, where the vessel lay seven months, from one to three miles from the shore, it was found that while those who remained on board her scarcely suffered, the crews of the boats, which often ascended the river forty miles to search for slavers and lay near the banks, were much affected by terrestrial miasms, and a considerable portion, one-third of those so employed, contracted malarious fever. Some, who were natives of ague districts or had formerly had that disease, showed only the quotidian or tertian type of intermittent, but the majority were severe cases of remittent, with an average period of twelve days' incubation, exhibiting high pyrexia during the first week with only slight remissions, critical evacuations from the fourth to the seventh day of perspiration, or urine, or blood from the mucous membranes, and, although all recovered, their convalescence was exceedingly slow, with occasional relapses. Only one death occurred in a young officer, who had not been exposed in the boats, but was a man of intemperate habits, and died on the fourth day with black vomit and deeply jaundiced. Thus, from the same malarious poison in the Congo, arose in a few months the morbid processes of ague, remittent and yellow fever, due, it would seem, to the modifying influences of exposure, natural proclivity, and personal habits of the individuals. But two-thirds even of the boats' crews escaped unscathed, and those who remained on board the ship were nearly exempt. Only that one death from disease, and very the little invaliding, occurred during the whole commission of the ship, which was in perfect order, and the greatest care was taken by the commanding officers to mitigate as far as possible depression and discomfort inseparable from three years' sojourn on that dreary station. The last instance adduced by the President was that of a corvette with two hundred men, which lay in the river San Juan de Nicaragua, in Central America, and suffered from the malarious fever of the locality. This ship was in good sanitary condition, and the men had recently come from Europe. It was the hot rainy season, and 16 per cent. of the crew were laid up in nine weeks by various forms of malarious fever—one-half of the number sick showing the intermittent, the other half the remittent type. The disease here differed much from that observed in the river Congo and in Africa generally. Pyrexia, at the outset exceedingly high, was moderated in a few hours, persisted with remissions for one or two weeks, after which the patient rapidly recovered without the extreme debility and prolonged convalescence of African fever. One death only occurred, and that by a coincidence was also in the case of a young officer, intemperate in alcohol, who had been, moreover, on shore, and exposed to chill in heavy rain when overheated. Four days after he was seized with fever of the same character as the others; but on the third day he became delirious, with yellowness of the skin and black vomit, and so died, the fatal symptoms being probably induced or aggravated by chronic alcoholism. Bilious discolouration of the skin, of such grave import in tropical fevers, is of less moment in European epidemics. An outbreak of jaundice two winters ago at Bremen, in North Germany, was described as remarkable from its prevalence exclusively among men, its limitation in locality, its being non-febrile and non-fatal, and from its alleged connexion with revaccination, many of the jaundiced having been revaccinated a few months before. Catarrhal icterus has been lately ascribed to ptomaines absorbed from the alimentary canal acting on the liver. Some remarkable epidemics of jaundice had been quoted by the late Dr. Murchison, two of the last being that at Pavia, in Italy, and Rotherham, in Yorkshire, both of great severity. The light recently shed on several zymotic diseases affecting children by the observations of Drs. Ballard, Power, Cameron, Klein, and others, tracing such diseases to morbidly poisonous milk, is one of the chief medical events of the year. Those researches and the others undertaken in regard to the microbes suspected or proved to form an essential part of various morbid processes will afford interesting material for discussion in the Society.

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ACADEMY OF MEDICINE IN IRELAND.

Liver with two Gall-bladders.—Perforation of Stomach.—Colloid Carcinoma of Stomach.—Fibroma of Cornea.

AT the opening meeting of the Pathological Section on Nov. 5th, the PRESIDENT delivered an introductory address.

Dr. PURSER exhibited a Liver with two Gall-bladders. The specimen was of some little interest from its rarity, though not exemplifying any great morphological law. It was taken from a girl aged eleven years, who was admitted into Sir Patrick Dun's Hospital extremely ill of scarlatina, which she had had for five days, and who died a few hours after her admission.

Dr. QUINLAN submitted a case of Perforation of the Stomach. On the 11th of October, at the request of Dr. Franks, he received into St. Vincent's Hospital a patient who was cook to a gentleman. She had been for many years subject to chronic disease of the stomach, with dyspepsia and constipation; and on the Wednesday before her death she took a very large dose of Epsom salts and senna. This dose had a very active effect, and was followed by great pain, which increased day by day, until, on the Friday night, it became unendurable. In her agony she crawled out of bed and knocked at the door of the head of the family, who with great humanity immediately sent for Dr. Franks. The latter, at half-past two o'clock in the morning, found the woman lying on her face, supported on her elbows and knees, and in very great agony. He found that the pain was localised to the left side of the epigastric region. There was no flatulent distension or pain on pressure. Her pulse was 110, and her temperature normal. Perceiving that it was a case of peritonitis, he applied morphia to keep down the pain. She got worse, and on the following Monday was received into St. Vincent's Hospital. Her abdomen was then greatly distended, but it was remarkable that pressure did not increase the pain. He (Dr. Quinlan) saw her immediately afterwards. She was in great agony; her temperature was 101·6°, her pulse 120, and her face had a pinched, collapsed look. He saw that the case would be fatal, and could only endeavour to relieve the pain by morphia. At 11.30 the house-surgeon found her free from pain and speaking calmly, and then she suddenly collapsed and died in a few minutes. On the following morning a post-mortem was made. Irrespective of the particular lesion, she was a healthy, well-nourished woman, her age being thirty-eight. The intestines were greatly distended with flatus, the contents of the stomach were effused into the peritoneum, and there had been very severe peritonitis. There was a perforation in the stomach at the middle of the lesser curvature. The coats of the stomach were red; and there were a number of patches of very severe congestion, looking like the effect of some irritant poison. He examined the grumous fluid in the stomach, but found no trace of antimony, arsenic, or any other poison. There was great thickening of the stomach throughout its entire contents, and considerable evidence of chronic disease. It was evident that the perforation and subsequent peritonitis had been produced by the action of the violent purgative.

Dr. KENDAL FRANKS exhibited the stomach, omentum, transverse colon, pancreas, and spleen of a man who died in the Adelaide Hospital of Colloid Carcinoma of the Stomach. He was only thirty-eight years of age. The history of the disease dated back eight months, when some pain in the epigastrium was first observed. A tumour was felt for the first time two months previously. Abdominal section was performed on Oct. 12th, but as it was evident that the tumour could not be removed the wound was closed. The patient died twelve days afterwards from exhausting diarrhœa, which set in a few days previously. The wound was firmly healed, and there was no evidence of peritonitis. The specimen showed the stomach walls enormously thickened, white externally, discoloured internally. The different layers of the walls were undistinguishable. The orifices were of normal size. The transverse colon behind was also the seat of colloid degeneration, but not to the same extent. The duodenum was healthy. The orifices of the stomach were scarcely altered in size. The pancreas and spleen were firmly adherent to the stomach, and seemed to be involved in the disease, but the liver was healthy. The great omentum presented a hard, nodulated, cancerous ridge at its junction with the stomach. Dr. Franks alluded to three cases presented to the Pathological Society by the late Dr. Stokes, and to drawings of them which Dr. Foot possessed. Microscopical sections, showing the colloid nature of the disease, were prepared by Dr. Bewley, and exhibited to the meeting.—Dr. FOOT said this was an uncommon form of carcinoma of the stomach, and he believed it to belong to a class which would never be successfully operated on, the reason being that an extensive and widespread infiltration of the pylorus, and sometimes as far as the œsophageal opening, preceded the formation of any tumour. In the cases represented by the three drawings which he laid before the Section, the stomachs were gradually diminished in size by growths projecting on the mucous surface towards the interior of the stomach; and in some of these cases the stomach was reduced to the size of the small intestine. According to Cruveilhier, the information about this form of cancer might be summed up under three heads—viz., first, it was the form of gastric carcinoma the local symptoms of which were the most obscure; secondly, it was the form in which the cachexia was least pronounced; and, thirdly, it was the form in which ulceration was rarest.

Dr. A. H. BENSON showed sections of a Fibrous Tumour which he had removed by dissection from the anterior surface of the apex of the Cornea of a girl aged nineteen, otherwise healthy. It had commenced near the apex of the cornea about three years previously, and had slowly grown in density and extent, without any past or present sign of inflammation in its neighbourhood. It was of a dense white colour, measured about 4 mm. in diameter and 1 mm. in thickness, and was raised above the surface of the surrounding cornea, with sharply-defined margin. Its surface was evenly covered by the corneal epithelium. When dissected off, the cornea under it was perfectly transparent and normal-looking. There was no vascularity in or about the tumour, or anywhere in the cornea; nor was there any history of such having been present at any time. The tumour commenced and grew painlessly. Microscopic examination showed it to consist of apparently normal corneal tissue, with cells and corpuscles. It seemed to be a case of true corneal tumour, though Alt, in his "Histologie des Auges," p. 40, states his disbelief in the occurrence of such. This tumour had nothing whatever to do with the limbus conjunctivæ or the episcleral tissue, the usual origin of so-called corneal tumours.—Mr. STORY asked if there were any bloodvessels in connexion with the tumour. It would be curious to find a tumour of such a character and in such a site without any vascular connexion.—Dr. PURSER remarked that Bowman, in his work on the parts concerned in operations on the eye, had figured a growth on the surface of the cornea consisting of papillæ. Perhaps Dr. Benson's tumour was of that character. From Dr. Benson's description he should imagine that the tumour consisted of papillæ growing on the surface of the cornea—in fact, it was like a wart on the surface of the cornea.—Dr. BENSON, in reply, said there were no bloodvessels in the tumour or cornea, or any opacity that might be the remains of bloodvessels previously existing, or any history of any previous condition of congestion of the eye which might have been the seat of vascular communication between the tumour and the margin of the cornea. The tumour was perfectly smooth and fine. There was no nodulation, or even bossing up of the central part of the cornea.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.

A MEETING of this Society was held on Oct. 28th, Dr. Cleaver, President, in the chair.

Ophthalmic Cases.—Mr. SNELL introduced two patients. 1. Splinter of Steel removed from Lens Capsule by Electro-magnet. The man had been struck at his work five or six months ago, but only very recently sought advice on account of increasing impairment of vision, occasioned by opacity of lens. A coloured spot in the centre of the anterior capsule was presumed to be the splinter. Ten days since, on holding the electro-magnet in contact with the cornea for a little time, the fragment sprang forward to the posterior corneal surface. On his lying on the couch for removal, the splinter was nowhere visible, but on again applying the electro-magnet it once more came forward, and was then guided on to a convenient spot on the iris for removal, which was readily effected with the magnet, through a small corneal wound. The in-

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complete cataract was left for subsequent treatment. The fragment weighed ·0001 gramme, and Mr. Snell stated that he had now removed about sixty pieces of steel or iron from various parts of the eye with his electro-magnet. 2. Paralysis of Internal Rectus from a blow over the eye with fist. The patient was a youth; the eye internally was uninjured, and at first ecchymosis was the only external symptom. Five days after the accident diplopia was noticed, and then the deficient action of the right internal rectus was distinct; three weeks after the injury the condition remained about the same. The direct cause of the condition was obscure; the blow was chiefly felt at the inner side of the eye, where there was tenderness. No evidence of rupture of muscle. Was the tendon crushed or torn, or was the branch of nerve similarly injured or interfered with by hæmorrhage?

Mediastinal Tumour.—Mr. PRIESTLEY exhibited a specimen of mediastinal growth in a patient of Dr. Dyson who had suffered from acute pneumonia. The growth consisted of a mass of caseating glands. The patient had a remarkable distribution of superficial arteries on his back, and the pulsation of the left subclavian could be felt below the left clavicle. Whilst under treatment the pneumonic symptoms were most prominent. The specimen was referred to the Pathological Committee to report upon.

Enlarged Spleen. — Dr. PORTER showed a large spleen from a case of splenic leukæmia. The patient had been under observation for nearly two years, and had presented the usual symptoms of progressive anæmia, emaciation, profuse sweats, epistaxis, great increase of white and diminution of red corpuscles in the blood, with great enlargement of the spleen and latterly of the liver, ascites, and some enlargement of the inguinal glands. The patient died of asthenia, hastened by hæmorrhages into the tissue of the mesentery and omentum, and excessive ascitic effusion, for which he was twice aspirated, with only temporary relief. Post mortem, besides the enlarged spleen, which consisted mostly of pulp and a large fatty liver, enlargement of the mesenteric and lumbar glands was found, and abundant lymphoid deposits in both mesentery and omentum.

Hydrophobia.—Dr. SIDNEY ROBERTS related a case of this disease occurring in a boy of five years under his care at the Public Hospital. The child was bitten on the thumb, which was at the time (half an hour after the bite) cauterised with nitrate of silver. Symptoms began on the forty-second day after the bite with restlessness and pain in the bitten part; on the forty-fifth he refused food and drink. He died on the forty-eighth day after the bite. Salivation was conspicuous by its absence thoughout the disease; there were no lyssi. Various remedies were administered, but chloroform inhalations was the only remedy that afforded temporary relief. An interesting point was that two other children were bitten by the same dog, one an hour and the other only five minutes previously. Both were sent to Pasteur fifty days after the bite and are now, eighty-three days after the bite, in robust health.

Pasteur's Treatment of Hydrophobia.—Dr. WHITE read a paper on this subject, founded on his observations made in a recent visit to Paris. He briefly adverted to Professor Pasteur's work in connexion with splenic fever in cattle, as illustrating the path which the great experimenter followed when he commenced the study of rabies, and related the facts which Pasteur had discovered in his study of the disease in animals—viz.: 1. That the nervous system is *par excellence* the seat of the rabies poison. 2. That the disease can be, with great certainty, transmitted through a long series of animals by trephining the skull, and introducing through the opening thus made a portion of rabid nerve tissue. 3. That passage of the poison through a series of rabbits intensifies it; and that a similar passage through a series of monkeys decreases its virulence. 4. That exposure of a highly virulent nerve tissue to the action of dry air decreases and finally destroys its virulence. 5. That if a dog be treated by inoculation with the attenuated virus of the monkey, or that from the rabbit, after prolonged exposure to air, it remains insusceptible to subsequent inoculations of the most intense virus of rabies. 6. That owing to the long period of incubation in dogs bitten by rabid dogs, it was possible to anticipate, and so avert, the advent of rabies in dogs already bitten by inoculating them with the attenuated virus. Dr. White claimed that Pasteur had demonstrated absolutely by the most rigorous tests his ability to protect dogs against rabies. Among Pasteur's patients who have been bitten by dogs whose rabid condition was ascertained, the mortality has been a little over ½ per cent. Dr. White described in detail the processes whereby the vaccines are prepared; and concluded his paper by reviewing the various theories which seem to shed light on the manner in which the body is protected from the poison of rabies by inoculation.—Mr. Walker, Mr. Favell, and Dr. Potter joined in the discussion.

Tumour of Stomach.—Mr. FAVELL exhibited this specimen from a middle-aged man who during life had suffered very little from stomach symptoms. He appeared only to have vomited once, and the pain experienced was relieved by eating. He suffered chiefly from bladder symptoms. The tumour was a large cauliflower-looking growth, and was found growing from the concave curvature of the stomach. The specimen was referred to the Pathological Committee to report upon.

Aseptic Surgery.—The PRESIDENT (Dr. Cleaver) gave an address on this subject, and laid particular stress upon the fact that many surgeons imagined they were practising aseptic surgery when in reality they were only treating with antiseptics, of which there were many methods, and all of them more or less imperfect; whereas in aseptic surgery there was only one method—viz., that introduced by Sir Joseph Lister, which aimed at and attained a complete absence of putrefaction, and is therefore designated aseptic. Another fatal error was that aseptic or Listerian surgery was spoken of as treatment by the spray; on the other hand, Sir J. Lister, in an address to the Surgical Section of the International Medical Congress in London in 1881, brought forward results of investigations he had made tending to show that the atmospheric dust is not nearly so much to be dreaded as we used to assume, and that the various forms of virus are far more likely to be introduced by contact with infected liquids or solids than from the air. Dr. Cleaver claimed as one of the results of aseptic surgery complete immunity from infectious disease, including pyæmia, septicæmia, erysipelas, and hospital gangrene. In upwards of 300 cases of major operations performed at the Sheffield Hospital for Children during the last few years, not a single case of these diseases had arisen.—Remarks were made by Mr. Pye-Smith, Mr. Jackson, Mr. Favell, Dr. Martin, Dr. Gwynne, Dr. Keeling, Mr. Garrard, and Mr. Knight.

MIDLAND MEDICAL SOCIETY.

AT the meeting of this Society on the 10th ult., Mr. Lloyd Owen, President, in the chair, the following specimens were shown:—

Borborygmi.—Mr. S. C. LAWRENCE showed a girl, aged eighteen, who for the last fifteen months had been subject to constant "borborygmi." These sounds were audible at a distance of some yards, and were synchronous with the respiratory movements; they ceased when she was asleep, lying down, or holding her breath. They had obstinately resisted all treatment, and were regarded as hysterical.

Dermoid Tumour of Ovary.—Dr. MALINS showed a dermoid cyst of the ovary that he had successfully removed from a patient aged fifty-one. It contained a large quantity of light-brown hair, a well-formed tooth, and some bony plates, besides much thick fluid.

Convergent Squint.—Mr. EALES showed a woman, aged twenty-two, suffering from complete paralysis of both external recti muscles. She consulted him on account of convergent strabismus, which the mother stated was noticed at birth, and had been present ever since. V = ⅔. H = ·50 dioptre; accommodation was good in each eye, and there was no other symptom present. She had no binocular vision, even for near objects. Division of the left internal rectus had gratified her by curing the obvious squint, but she had neither binocular vision nor was troubled with diplopia, though there was still some slight strabismus convergens.

Myxœdema.—Dr. SUCKLING showed a man aged forty suffering from myxœdema. He had been ailing for two years, complaining of debility and malaise. He presented the usual symptoms of myxœdema in a typical manner; the urine was free from albumen, of a low specific gravity, and deficient in urea. There was no reduplication of the heart sound, but feebleness of the circulation was a marked feature, the extremities always being cold, and the pulse small and of low tension; the temperature was 97·5 F.

Dr. SAUNDBY read a paper on the Treatment of Diabetes Mellitus.

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Reviews and Notices of Books.

The Surgical Diseases of Children. By EDMUND OWEN, M.B., F.R.C.S. London: Cassell and Co. Pp. 518. 1885.

CASSELL'S "Clinical Manuals" have been so good and have established for themselves such a high standard that we now come to their criticism with rather exalted anticipations. It is perhaps on this account that we must plead to a feeling of disappointment in the volume before us; not that the volume is without merit, but that it is less meritorious than it might have been, seeing how its author had at his disposal the clinical and pathological records, statistics, and illustrations of the Hospital for Sick Children since its foundation—records &c. which in their special detail and excellence are probably not to be equalled at any other institution of the same kind.

Passing, however, from what is not to what is contained in this work, we would, in the first place, venture to regret the absence of all system in the arranagement of the matters discussed, and the very unequal attention bestowed on these matters. Let us glance at the Table of Contents. The Introductory Remarks are followed immediately by chapters on Diphtheria and on Tracheotomy. Would it not have been wiser to make the student acquainted with the diatheses of childhood, syphilis, rickets, scrofula, and the like—to teach him, in fact, something of the conditions which influence and modify disease and its treatment in young subjects—before discussing so vague and difficult a subject as diphtheria or tracheotomy? Further down this table we find a chapter on Nævus, followed by another on Empyema; then one on Burns and Scalds, followed by another on Infantile Paralysis. The chapter on the Genito-urinary Tract is cut short by those on the Rectum and Intestinal Obstruction, the Testis and its Coverings being then dealt with and followed by Hernia. It is impossible to conceive of any arrangement better calculated to render a difficult task more difficult for an author, or one more likely to puzzle a student, than this mixing up of subjects, which are neither clinically, pathologically, nor surgically associated.

Then, as regards individual subjects. The Introductory Remarks, consisting of some nine pages, discuss and dismiss a variety of subjects, such as the following: anæsthetics, temperature, pulse, tongue, proposed operations, scarlet fever, administration of medicines, leeches, poultices, and "how to bring up babies." If a book on the surgical diseases of children were wanted, surely such questions as the foregoing ought to have been dealt with in a more extended form, since they include much that makes children's diseases special. The paragraph on anæsthetics occupies barely eight lines. It is dogmatically stated that "chloroform is best adapted for the purpose": the reader is informed that "no painful operation or wearying examination should be conducted without the aid of an anæsthetic"; in other words, that chloroform must be constantly brought into use; yet there are no instructions as to its mode of administration, beyond that "at the Children's Hospital it is usually given on a piece of lint." A few hints as to the accidents likely to occur, and how to avoid them, might advantageously have been given. Even in empyema, where one lung is *hors de combat*, and the other not infrequently damaged, we find no caution enjoined: simply the statement "chloroform having been administered."

The chapter on Diphtheria includes a paragraph, with special heading, on "laryngismus stridulus." What the connexion may be we quite fail to perceive. Then chronic laryngitis, we are told, "is often the result of congenital syphilis. ..... It may be treated by a couple of leeches over the trachea." Several other alternatives mentioned "are all useful in various phases of the disease." Not only are these phases not described, but we are left in ignorance as to when or how to apply one remedy in preference to another. Why not have included chronic laryngitis under its asserted causation, and described it more fully?

Tracheotomy is dealt with in much the same casual way. It is illustrated with three woodcuts, one of which is Spencer Wells' compression forceps, now so well known as not to require illustration; another is an old-fashioned tapering Fuller's bivalve cannula with a rigid neck-plate. This form of cannula, occasionally useful in an emergency, is here recommended for general use. As regards size, we are told that "for small children the lumen of the outer tube, at the level of the plate, may be about the size of an ordinary steel penholder, and for larger children of the size of a cedar pencil." These instructions are somewhat vague; in a subject of such moment they might even be more severely characterised. This chapter (on tracheotomy) closes with a paragraph on "papillomata of the larynx," consisting of fifteen lines for history, diagnosis, and treatment.

In considering the Diatheses of Childhood, the author introduces a condition we have not yet heard of in this connexion—"children out of condition"; but the half-page devoted to it contains nothing which, in our opinion, justifies its removal from the place usually assigned to the subject—viz., the introductory remarks or chapter.

Among the symptoms of Congenital Syphilis we meet with the following dogma: "An eczema which extends up the abdomen and down the lower part of the thighs—that is, beyond the region enclosed in the napkins—is of syphilitic origin." Visceral syphilis is not even mentioned. A coloured drawing representing condylomata, and referred to in this chapter, will be found (owing, doubtless, to careless editing) many pages further on among rachitic deformities. We cannot commend this drawing; the mucous patches are usually broader, larger, and less elevated than here represented; as shown, they look like warts, and might well serve for contagious molluscum, and be less likely to mislead.

Rickets is discussed chiefly as if it were a disorder of the bones, first under diatheses, and further on under rachitic deformities. But neither this subject nor syphilis is treated in the orderly manner we should have expected in the special work before us; the author does not attempt anything like a chronological sequence of the manifestations of these diseases as they occur at various ages, from infancy onwards.

Concerning Strumous Glands, we read: "A common cause of enlargement is irritation of the pharyngeal mucous membrane by *sewer gas*." After relating how the children of three distinct families, one of which "was markedly strumous," got cervical abscess after exposure to sewer gas, the author says, "The use of the word struma must not be made a scapegoat in an endeavour to explain the occurrence of glandular enlargements when no other source of irritation happens to be discoverable." While agreeing generally with this caution, we venture to claim an equal indulgence for "sewer gas" under like circumstances.

In discussing the treatment of Empyema, the author says, "The site recommended for the opening of the pleural abscess is the fifth intercostal space, at the junction of the anterior third with the posterior two-thirds." This spot may be very well when the abscess cavity happens to be seated here, or even when there is an abscess occupying the whole or a considerable part of the chest; but we do not think the fifth space quite the best, and prefer the sixth. We also differ in regard to the exact part of the space for the opening; the junction of the anterior third with the posterior two-thirds is, we think, too far forwards for satisfactory draining in the recumbent position, and places the opening too high up even in the above-named class of cases. The author's method of operating is stated to be as follows: "An exploratory puncture at the selected

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spot is made with a fine trocar and cannula, and a grooved director is passed along the track into the pleural cavity. Along the groove a probe-pointed bistoury is then thrust, and an incision about an inch in length is made through the space. The incision is subsequently enlarged by thrusting in the end of the finger, and working it along between the ribs." To say nothing of the difficulty of such a proceeding, is it well to recommend a student to thrust in the end of his finger, and work it along between the ribs in order to enlarge an incision? Would he not find a sharp scalpel far more to the purpose? Mr. Parker is said to have invented a useful double drainage-tube, illustrated in a woodcut. We believe it would be more correct to credit Mr. Scott Battams with this invention, which from experience we can speak highly of.

A propos of the diagnosis of Spinal Caries, we are told that if a child prefers a cautious descent downstairs by the aid of the balusters, and refuses "to jump from the bottom step," the diagnosis is clear. Does the author really offer this as a serious statement in a book written largely for students?

With regard to the chapter on Fractures, the book would have lost nothing had it been left out. On the other hand, a systematic account of the anatomy of the epiphyses at various ages, and of the injuries and diseases to which they are liable, would have greatly enhanced its value, and indeed should have been regarded as a *sine quâ non* in a surgical work on children's diseases.

Our perusal of other chapters brings us face to face with the same want of thoroughness—the same want of system in the treatment of the subjects discussed. Why not have abstracted some typical histories from the hospital note-books, instead of giving quotations first from one writer, then from another, often without any indication of what the author himself thinks best? Some of the chapters commence with a paragraph on the development of the organs under consideration, but this is so brief that it quite fails in its object. So, too, with the illustrations—they are not sufficiently obvious. Take for instance Fig. 21, representing the Development of Face. "Quain's Anatomy" is almost essential to make its bearing quite clear to the student.

We will now close this notice—not because we have exhausted the points open to criticism, but because we have said enough to justify the disappointment which we admitted to have felt in first glancing through the book. This feeling has increased rather than otherwise as we have more carefully studied the chapters. If the author will only take our criticisms kindly to heart, he will set about a reconstruction of his book and a re-writing of his chapters such as will ensure a really useful work when the second edition is called for. Should such a course be taken, our criticisms will have fulfilled the object we aim at in respectfully offering them.

The Member, the Fellow, and the Franchise. By JOHN ERIC ERICHSEN, F.R.C.S., F.R.S., Surgeon Extraordinary to Her Majesty the Queen, &c. London: H. K. Lewis. 1886. pp. 16.

THE present pamphlet is a somewhat amplified edition of the speech its author delivered at the College of Surgeons on Nov. 4th at the general meeting. We must pass over the opening paragraphs, without, however, on that account, be it said, endorsing the author's eulogy of the College of Surgeons, many of these statements being as visionary as the "vastness of its acquired wealth," to which allusion is made in proof of the wisdom and excellence of the policy hitherto pursued by the Council.

Considerable stress is laid on the fact that Licentiates of the College of Physicians and of the Apothecaries' Society have no status beyond their licence to practise; it is argued that the Members of the College of Surgeons stand exactly on the same level, and therefore should also have none. We must remind Mr. Erichsen that the College of Surgeons bestows not a mere licence to practise, but Membership of the body corporate; that this Membership is a survival of the ancient privileges formerly enjoyed (and enjoyed by all alike) by those who belonged to the corporation, and that to interpret the full meaning of this term we must go back to the origin and growth of the College. Let those who are interested in the matter refer to our columns of Oct. 30th, where a brief *résumé* of the history of the College will be found.

Mr. Erichsen's contention that the Members are not at present entitled to electoral privileges is indisputable; he is wrong in saying that Members urge a legal claim. On the contrary, they urge a claim similar to that put forth in 1843, when, as a result of this claim, the Fellowship was instituted, and they have now an equal right at least to do so. The Members, who in and after 1843 by the new Charter were elected Fellows, stood exactly on the same footing as regards their legal claim as do the Members of to-day. But whereas in 1843 a very limited number of the Members were made eligible for the electoral privilege, it is now sought to do justice to all alike, and to confer the electoral franchise on all Members of a certain standing.

Mr. Erichsen states that the business of the College is not political, not ethical, and not commercial. In the sense that the College cannot exercise any political influence, that it attempts but little ethical control over its Members, and that it does not conduct its affairs on ordinary commercial lines, this statement is strictly true. Whether, however, this is as it should be, is quite another question.

We are told that the business of the College is educational and scientific, and "that the supervision of surgical education and the conduct of those examinations by which it is controlled can only be efficiently done by men who are thoroughly trained to that sort of work." The author proceeds, "probably at least 1000 (of the 1140) Fellows are general practitioners." It therefore follows that he would practically limit the management of the College to the remaining 140; in other words, Mr. Erichsen would re-establish the monopoly which the institution of the Fellowship, it was hoped, would put an end to. Provincial Fellows will do well to note this argument. With the exception of some 140 favoured Fellows none are fit to participate in College concerns. By "favoured" we mean of course London Fellows, for the Council have, until quite recently, insisted on personal voting, which practically shuts out the majority of provincial Fellows from an expression of their views. Mr. Erichsen knows "of only one teacher of anatomy of any distinction who is not a Fellow." Are there not two at least at University College? He need only turn his eyes to other schools in order to convince himself how unjust this remark is to men of great distinction as anatomists, not in London only, but in Edinburgh, Aberdeen, Glasgow, and other places. Has he forgotten such men as Huxley, W. K. Parker, Ward, and a host of others? On this showing is it not strange that the Fellowship is not a necessary qualification for the "endowed lectureships," of which Mr. Erichsen speaks so enthusiastically in the early part of his pamphlet?

Mr. Erichsen would further support the *status quo* by appealing to the scientific acquirements of many members of Council. "Where are to be found the men of science connected with the College of Surgeons? Are they amongst its Fellows or in the ranks of its Members?" he asks. Gauged by the test of the "coveted distinction of the F.R.S.," Mr. Erichsen implies that Fellows only obtain it, and yet the very first name mentioned in this connexion is that of Sir James Paget. Now Sir James Paget, of all living men, is about the best instance of what can be accomplished without the academic test on which Mr. Erichsen lays so much stress. For Sir James is a Fellow by election and not by examination; like all the *elected* Fellows, therefore, his position is that of a Member as regards examination tests, while his status and privileges are those of the higher grade. A glance at the College Register reveals that Owen, Quain, Busk, Hewett, Birkett, Simon, Bowman, Spencer Wells, Humphry, and many others are Fellows by *election* and *not by examination*.

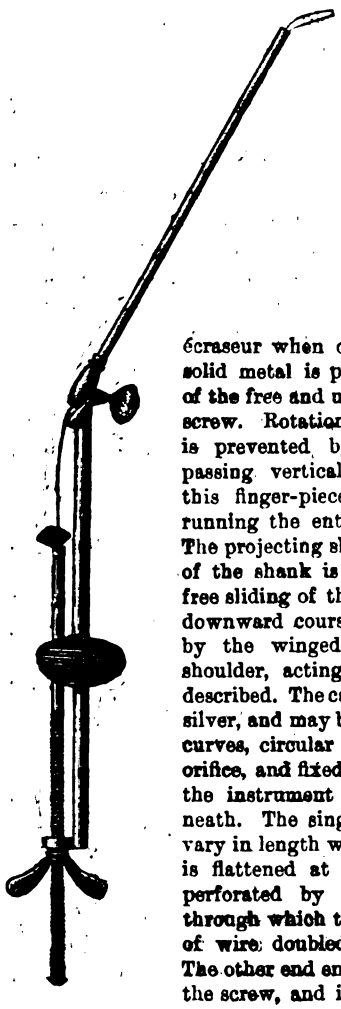
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These are names to be proud of, and are, and will remain, evidences of how much depends on the man, how little on the mere examination test, and will serve to show that the highest scientific attainments and reputation in no way depend on the Fellowship of the College by examination, to which Mr. Erichsen attaches such an undue importance.

New Inventions.

AN IMPROVED NASAL ÉCRASEUR.

SIMPLICITY of construction, lightness combined with strength, and durability, are the essentials of a good nasal polypus snare. The rapidity with which the steel wire loop may be adjusted to the instrument should also be considered in the selection of a snare. The accompanying woodcut is intended to represent an appliance for which all the above advantages are claimed. This snare-écraseur may be described as consisting of four parts. The main body or shank has inserted at its angle a grooved wheel or pulley. A screw runs parallel with the shank, with a winged milled nut at its lower end; a cannula and a single steel wire loop drawer. The body of the instrument is constructed of steel of a superior quality, and is provided with the grooved wheel before referred to at its upper extremity, a finger-piece at or about its middle, and a projecting shoulder at its lower end. Over this revolving wheel the steel wire loop drawer passes, thereby reducing to a minimum the friction and loss of power that would otherwise be considerable. The finger-piece is one with the shank, and is intended for securely holding the écraseur when operating. This piece of solid metal is perforated so as to allow of the free and unimpeded passage of the screw. Rotation of the latter on its axis is prevented by a small steel point passing vertically downwards through this finger-piece, and entering a slot running the entire length of the screw. The projecting shoulder at the lower end of the shank is also perforated for the free sliding of the screw in its upward or downward course. Traction is obtained by the winged nut, external to the shoulder, acting on the screw already described. The cannula is made of German silver, and may be of varying lengths and curves, circular or flattened at its nasal orifice, and fixed to the body or shank of the instrument by a set screw underneath. The single wire loop-drawer will vary in length with that of the cannula, is flattened at its free extremity, and perforated by one or more openings, through which the ends of a small piece of wire, doubled into a loop are fixed. The other end enters the nearest point of the screw, and is secured by a set screw on its side. A pear-shaped extremity is brazed to the screw end of the wire to lessen the liability to slip when undergoing a severe strain. When the winged nut is worked up the screw, the latter is drawn backwards, pulling the single wire loop-drawer and its attached loop further into the cannula, and thus the growth of hypertrophy is shared with expedition and with but little effort. The snare as described possesses all the power of the straight instrument, with the additional advantage that the operator's hand is out of his line of vision. The grooved wheel or pulley was applied by the writer for the first time in the history of nasal snares to a modification of Wilde's original model in common use in Germany. This instrument (Krause's) differs from the snare ordinarily employed in Germany and Austria in having the single wire loop-drawer (*Drahtstange*) substituted for the long wire loop. In justice to Dr. Sajous of Philadelphia it must be stated that he introduced the same principle of attaching a short length of wire loop to a single rod or stile in his straight snare écraseur several years ago. The advantage of this method of attachment is that the rotation of a short loop on its axis is much less likely to occur than in a loop of greater length. The original of the instrument illustrated was made to order by H. Pfau, Dorotheenstrasse 67, Berlin. Messrs. Maw, Son, and Thompson, of Aldersgate-street, are prepared to supply the écraseur as described.



GEORGE W. MAJOR, M.D. Montreal.

TENNIS ELBOW-CAP.

MESSRS. POPE and PLANTE, of Waterloo-place, have brought out a cap for the elbow in cases where the muscular parts about the joint have been overworked at tennis. It is composed of cotton or silk elastic, which completely surrounds the arm, extending for some distance above and below the joint, the part below being strengthened by a band one inch and a half below the joint. They recommend its use when the arm is recovering from a strain, and there is no prolonged return of tenderness or of pain on lifting a weight of about four pounds. It is only to be used during gentle play. Our experience of its use is that whilst it affords relief and support to the part, it also produces discomfort of the arm below from obstruction to the superficial veins, congestion rapidly following the frequent movements of the forearm, accompanied by a feeling of fulness and heat if the cap is too tight. Accurate measurement is required. It is called the Cavendish Elbow-cap.

THE METROPOLITAN INFIRMARIES.

AT a meeting of the medical superintendents of the metropolitan infirmaries, held at the Lambeth Infirmary on Nov. 25th, Dr. Lloyd in the chair, the following resolutions were agreed to:—

1. Moved by Dr. Saville, and seconded by Dr. Webster,—"That, in view of the differentiation into departments which the science of medicine has undergone of recent years, the opinion of the boards of guardians be obtained as to the desirability of appointing specialists of eminence as honorary consultants to Poor-law infirmaries, who shall be available for consultation with the medical superintendents; such consultants not to have any power in the administration of these institutions, as set forth in the regulations now in existence at the various metropolitan infirmaries. And that a copy of this resolution be forwarded to the medical superintendent of each metropolitan infirmary."

2. Moved by Dr. Webster, and seconded by Dr. Lund,—"That it is desirable that an increased medical staff be provided in the metropolitan infirmaries, in the form of a resident qualified clinical assistant (with board and lodging), in addition to the medical superintendent; but that such clinical assistant should not supplant the present assistant medical officer."

It was further agreed that these resolutions stand adjourned for further consideration at a meeting to be held on Saturday, Dec. 4th.

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THE LANCET.

LONDON: SATURDAY, DECEMBER 4, 1886.

WE announced in our second edition, published on Friday last at 5 P.M., that Mr. WHEELHOUSE, Sir WALTER FOSTER, and Dr. GLOVER had been elected the direct representatives for England and Wales to the General Medical Council, with the actual numbers polled by each; thus the anxiously expected result was known throughout England and Wales on Saturday morning. There can be no need of any apology for again referring to this election, the great importance of which we have more than once impressed upon our readers, not only with regard to the choice of candidates, but even more as an indication of the public spirit in the profession, and of its interest in and appreciation of direct representation on the General Medical Council. Many prophecies have been indulged in, some hopeful, others adverse; but we doubt if anyone ever dared to foretell that so large a number as 13,381 in England alone would vote when the total on the Register is 18,074. Yet this is the fact. A poll of one-half of the Register would have been a success, but a poll of over two-thirds is such an unlooked-for response to the trust that Parliament has reposed in the profession that it ought to silence once and for all those who affect to believe that direct representation was a "cry" got up by interested parties, and was in no sense a genuine and strongly felt need of the profession. The result has conclusively shown a remarkably general and widespread interest in the election.

Another matter which fairly calls for praise is the mode in which the election has been carried out. Opinions will no doubt, differ as to the conduct of different candidates and committees, but when we bear in mind the suddenness with which the election came upon the great body of practitioners, the entire lack of experience of similar electoral contests, the widely distributed electorate, and the other obvious difficulties in the management of a canvass, the features of the election, on the whole, must be regarded as satisfactory. It is also satisfactory to learn that those elected have been returned by very substantial majorities over the other candidates. If we look at the poll for England and Wales, we find that Mr. WHEELHOUSE received a vote from very nearly one-half of the entire body of electors; and that Dr. GLOVER, who was supported by a full third of those entitled to vote, has a majority of nearly 2000 over the candidate who stands next to him on the poll. With so many candidates for the three seats the results might have been very different, and it is certainly a great advantage for those who will speak with unique authority at the Council to know that they have been supported by the great body of the profession in general, and that they do not owe their election to small majorities. Like all minorities, those defeated will not look upon the verdict as irrevocable, but will endeavour at a future time to turn their minorities into majorities. If they succeed in this, we hope that their success will be as decided as is that of those who have been returned on this occasion.

We have all along contended that it was most important that those who were returned as the direct representatives should be really such, and not men of the same interests as those already having seats on the Council. We rejoice to see that this principle has been largely successful. In England all three of the members will, we believe, represent the wants and aspirations of the general practitioners of medicine. By their wide acquaintance with the profession in all its branches, by their public action and well-known sympathies, they have shown themselves well able to represent the thousands whose votes have placed them at the head of the poll. In Scotland the same may be heartily said of the return of Dr. BRUCE over the head of a candidate whose connexion with a corporation was too close to enable him to represent the general practitioners of Scotland. In Ireland alone has this principle been completely disregarded by the majority. Not only is Dr. KIDD, the successful candidate, a member of the Council of the College of Surgeons, and an ex-president of that body, but his return keeps the representation of the entire profession in Ireland—corporate and otherwise—in the hands of Dublin men. This is undoubtedly a pity, and ought to be corrected whenever the opportunity for it arises. So far as the return of actual general practitioners is concerned, the election has been in some measure a success. In Scotland Dr. BRUCE, and in England Dr. GLOVER, are typical general practitioners; and although Mr. WHEELHOUSE can scarcely claim that title now, it certainly fitly described him for a large part of his honourable career.

In one word we may be permitted to refer to the position taken by THE LANCET. We have strenuously contended that the electors should be left absolutely free and unhampered in their exercise of the franchise. We have repeatedly drawn attention to principles rather than to men; we have urged our readers to exercise their right in accordance with these principles, but we have not pressed the claims of individuals. One argument that has been used against the gift of "direct representation" has been that the elections would be in the hands of the medical press. We have endeavoured—we believe with success—not to interfere in any improper or questionable way with the vote of any one of our readers; and this in spite of the fact that Dr. GLOVER is, and has long been, a very valued member of our editorial staff. We rejoice in his success, and all the more that it has been won without the aid which might have been afforded him in our columns.

THE importance of life insurance to all those who have others dependent upon them is so obvious that it would seem superfluous to advocate its more general adoption at the present time; and yet it is surprising how many men there are with wives and families, having an income more or less precarious, and no private means, who have not made this almost necessary provision for those whom they might at any time leave wholly unprovided for. To no men do more harrowing scenes occur of widows and fatherless children left utterly destitute, than to members of the medical profession. The breadwinner has been carried off at the end it may be of a long illness, and after the due discharge of all outstanding bills and funeral expenses there is found to be no policy of insurance, and nothing left save

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household furniture. It is well indeed if matters are not worse than this, and the unfortunate widow left with debts to be paid. One would naturally have expected that with these harrowing sights in recollection all such members of our profession as are wholly dependent upon it for the support of themselves, their wives, and families, would have taken the precaution of having a policy in one of the many well-established life offices, which are not only willing, but anxious, to increase the number of their "assured," always provided that the lives are fair average ones. But, as any one who reads this may ascertain by inquiry among his friends, medical or lay, life insurance is still very far from being so general as it should be. If such persons are asked why they have not become policy-holders, various reasons are assigned. For example, one probable, and apparently logical, reason will be that the person questioned does not see the advantage of life insurance, since, if he should live to a good old age, his relatives will only receive what he has probably paid in premiums. This objection is easily answered. Life assurance is a provision against the uncertainty of life, and although medical applicants are, *cæteris paribus*, accepted as good lives, in no profession is the uncertainty of life more plainly illustrated than in that of medicine. Instances might be given and multiplied, but it is sufficient to say that every office could adduce cases where the sum insured has been paid within a very short period after the policy has been issued, and where only one premium has been paid. But should the applicant live to a good old age, has he done wisely in insuring? Undoubtedly he has. If as is now usual, he insure with profits, and in a well-established office the policy will increase in value each succeeding year, and may become double the original amount. In either case therefore the taking out of a policy of insurance on his life is to every medical man a good investment, and every medical practitioner would do well to insure against accident whereby he may receive a weekly sum in case of total or partial disablement, while in the event of a fatal accident his relatives will receive the capital sum. A more general adoption of these wise—might we not say necessary?—provisions for the future would render unnecessary most of those heart-rending appeals for the widows and orphans of medical men which appear so often in our columns, and those of our contemporaries.

An excellent means of promoting life insurance is by parents insuring their sons' lives as soon as they are insurable, say, at the age of fifteen. The premiums are low and remain so, and when the assured is old enough to take up the policy, he may be said to have, owing to the wise provision of his father, a small capital or estate to dispose of. Should he unfortunately never reach "man's estate," but die young, there is the capital sum to leave to parents, brothers, or sisters, instead of being wholly dependent upon them. And, like all other measures taken out in an honest spirit, life insurance brings good in its train. It inculcates habits of thrift and prudence; it compels a man to save up at least a portion of his income for others; and it affords great relief from the otherwise harassing care which must weigh upon everyone who thinks upon what will happen when he is gone, and how loved ones will be comfortably provided for.

FURTHER communications have been made to the Académie des Sciences by M. GUIDO TIZZONI on the pathology of the suprarenal capsules. The last paper deals with the functional and structural alterations that occur in the nervous system after the extirpation of these organs. The functional derangements have been observed in five rabbits operated on after the following manner. In one rabbit both suprarenal capsules had been removed fifteen months; in another the right capsule had been extirpated twenty-four days and the left six; in the remaining three animals the right capsule only had been excised nine, eighteen, and twenty-two months respectively. The lesions of the capsules were proved in seven animals; the five above mentioned and two others were killed at the end of nine and twelve months respectively, without having shown the least sign of functional disturbance. The nervous symptoms appear to be related to the brain and medulla oblongata. The animal moved with less ease and refused nourishment; soon it became comatose, spread its legs to prevent its falling, and dropped its head; it was seized with trembling and a tendency to be propelled forwards; mere touching excited a transient opisthotonos, or jerking and exaggerated movements; convulsive seizures, opisthotonos, and violent spasms preceded death. There was also diminution of mobility and sensibility (to pain and electrical excitation) and reflex action, especially in the anterior extremities; mydriasis, acceleration of respiration during the spasms, slowing of the same during the intervals, redness of the buccal mucous membrane, lowering of temperature, and finally rapid rigor mortis. The lesions observed were great injection of vessels in the central nervous system, and hæmorrhagic foci in the grey matter of the cord about the anterior horns and neighbourhood of the central canal, if death occurred soon after the operation. When death follows the operation at a longer interval the lesions are found in the pia mater and subarachnoid space, in the cavities and ventricular walls. There is an exudation with fibrous reticulum in the subarachnoid space, which contains also an amorphous, granular substance, rich in white cells and droplets of myelin. Branched villous outgrowths fill a large part of the ventricular cavities, which are also the seat of an exudation still richer in formed elements than that in the subarachnoid space. The leucocytal infiltration may be followed into the substance of the brain and cerebellum, where foci of cells and fibres have been destroyed and the epithelium of the cavity shed. These lesions correspond in distribution to the pia mater, and affect a limited layer at the surface of the hemispheres or at the interior of the ventricles; but there are, besides, disseminated plaques of degeneration, with, at the same time, infiltration of the spinal cord, and acute softening, commencing in the axial part of the nerve fibres and extending thence to the sheath. In the ependyma an exudation is found—sometimes of simple sort, sometimes attended with loss of epithelium and infiltration of the grey matter, penetration of leucocytes into the vascular walls, and disorganisation of the same; in fine, extension, either uniform or focal, of the morbid process into the grey matter, which may be replaced by globular masses or an amyloid substance. The same lesions are found in the walls and cavity of the fourth ventricle; the nerve nuclei of the bulb do not escape, and their cells are destroyed by pericellular dropsy, infiltration, and dystrophy, the result of the vascular lesion. The intensity of the

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changes diminishes from above downwards, and attains its maximum (*sic*) at the seat of the second and third dorsal pair. Roots, ganglia, and nerves may be also totally or partially degenerated. In the two cases where no lesions were found the posterior part of the cord was alone preserved, that which generally remains normal. These alterations are probably due primarily to vascular lesions, which in the acute cases lead to hæmorrhages, and in the more chronic ones to alteration of the cerebro-spinal fluid. This opinion is strengthened, TIZZONI believes, by the fact demonstrated by his former experiments (see THE LANCET, vol. ii. 1884, p. 549), that suprarenal regeneration takes its point of departure in the solar plexus; also by the analogy between the nervous lesions and those of the skin which NOTHNAGEL has shown to affect primarily the vessels of the cutis; and, finally, by the great resemblance between the disturbances observed by BROWN-SÉQUARD soon after extirpation of the organs, and those which TIZZONI has observed later. Two cases described by BURRESI and SEMMOLA demonstrate the occurrence of nervous disorders in man, like those which TIZZONI has described in rabbits, as the result of disease of the adrenal organs.

WE understand that a deputation from the Committee for promoting a Teaching University in London has waited on the Senate of the University of London, has laid the views of those interested in the success of such a university before the members of the Senate, and has received a satisfactory reply. We are glad to find that this movement is again being brought into notice, but fail to see how, after Sir J. PAGET'S remarks at Manchester, any common line of action between the proposed and the existing Universities can be arrived at; moreover, we doubt if the Vice-Chancellor went further than to suggest, with his well-known courtesy, that every consideration should be given to the proposals of the deputation. Some internal reforms in the present University, such as the formation of a Board of Studies, as a means of communication between the teachers and the Senate, and perhaps a reconstitution of the Senate so as to give increased representation thereon to the teachers in the two large London Colleges, may be effected by this movement; but this will not satisfy the general body of its supporters, who demand a real Teaching University. A paragraph in *The Times* of Monday last showed how intense this feeling is among certain of the London teachers, and were it not for the evidence it afforded of the eager craving existing for some solution of our present difficulty, would have been sufficiently grotesque. The Victoria University, in order to provide for the affiliation of the Yorkshire College of Science, or any new college that may be successfully started in the North of England, has a clause in its Charter by which "any incorporated College may be admitted as a College in the University, on the University Court being satisfied, (first) that the College applying has established a reasonably complete curriculum, and possesses a reasonably sufficient teaching staff in the departments of Arts and Sciences at least; (secondly) that the means and appliances of the College for its teaching are established on a sound basis; and (thirdly) that the College is under the independent control of its own governing body." Power is further given in case of a refusal, for an appeal to the Privy Council. It is gravely suggested by some of the teachers at University College that this College should, under the above clause, become a constituent College of the Victoria University; and of course, if this application were made and was successful, King's College, the Mason College at Birmingham, and the University College at Bristol would at once follow suit. The students of the teaching Colleges of England would thus all be able to obtain degrees in arts, science, and medicine from the northern University, and no further Teaching University would be required; whilst the secession of Owens College and the University College of Liverpool from the University of London would be followed by every other fully-equipped college in the kingdom. The idea is so strikingly original, and is such an easy mode of cutting the Gordian knot, that it seems really a pity that it should have been officially announced as premature by the Secretary of University College on the very next day. It will probably have served its purpose if it brings the necessity of a real Teaching University more forcibly before those interested in the movement and the authorities of the existing University, and proves to them that no stone will be left unturned to obtain for London students degrees not only in medicine, but also in arts and science, on similar terms to those which are readily afforded by every University in the world except by the imperial examining board in this metropolis which bears the name of the University of London.

Annotations.

"Ne quid nimis."

THE AMALGAMATION OF THE EXAMINING BOARDS.

A LEGAL correspondent takes exception to our statement in a recent article that the action of the Royal Colleges of Physicians and Surgeons in refusing to amalgamate with the Apothecaries' Society for the purposes of examination has placed the public under a serious disadvantage. As one of the public, he asks how this can be the case, and points out that (1) if the Medical Council appoint assistant examiners for the purpose of creating the Apothecaries' Society an examining board, it is a positive requirement of the Act that they "shall maintain such standard of proficiency as is required from candidates for the qualifying examinations—i.e., possession of knowledge and skill for the efficient practice of medicine, surgery, and midwifery"; (2) the public, he urges, are not affected by the question whether the Apothecaries' Society will charge a lower fee; and (3) if the Privy Council were to refuse to appoint assistant examiners, and were to leave the present Conjoint Board as the sole examining board, the fees would not prevent men from entering the profession, and the public would therefore be able to get good doctors to treat them. Concerning the last of these objections we have only to reply that it is a possibility which need not be entertained. The Apothecaries' Society will doubtless be able to substantiate their claim to be an independent examining board, through the appointment of assistant examiners either by the Medical Council or by the Privy Council. With regard to the first two objections, we admit at once that the Act has endeavoured to guard against any undue lowering of their standard of proficiency; but this standard is not one that can be recorded as a mathematical expression from which there can be no deviation. If any circumstance should lead

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the Colleges to believe that a lower standard was not undesirable, it is not difficult to see that the General Council, in view of the intimate relation of its members with those who control the affairs of the licensing bodies, might easily be led to fall in with the views of the Corporation in this respect. Such professional opinion must also have its influence upon the Privy Council; the standard might not be suddenly altered, but a gradual change might be brought about if the Colleges thought this change desirable. We do not need to show that this would be prejudicial to the public, and we have only to consider what circumstance could give rise to it. The existence of rivalry between different examining bodies alone could do this, and it is this rivalry that we have been desirous of seeing rendered an impossibility by the creation of one examining body. The principle of unity is obviously of so much advantage to the public that it was but right that the medical corporations should have made some sacrifice to preserve it. They have, however, considered too much what they believe to be their own interest, and have thought less of the chief object which it was intended by the Act to attain. This is a question which we believe concerns the public not less than it does the medical profession.

LORD SALISBURY ON HOSPITAL SUPPORT.

THERE is something very refreshing in seeing the Prime Minister of England, at a time of considerable social and public anxiety, devoting his mind to an argument in favour of hospital support. All honour to Lord Salisbury for doing so. His paper is contained in the *Hospital* for Nov. 27th, as also two other deliverances on the same subject by Sir Andrew Clark and Sir Sydney Waterlow respectively, two other undoubted friends of Hospitals. The case for supporting these institutions could not be stronger than it is, nor could the time be more opportune. Never were the hospitals more straitened. It is said gravely that one or two of the best will have to be closed if unforeseen help does not come. And Christmas is at hand, with its mystic sympathies and benevolent impulses. Is it imaginable that a hospital in London should be closed for want of funds? There have been black days when banks have been closed; but such days would appear bright compared with that in which a great London hospital shall close its doors because men have closed their pockets in a community whose income is to be counted by millions. Lord Salisbury admits the great depression of the present moment, but he points out that this very circumstance strengthens his argument. He shows that depression of trade increases the amount of misery and disease to be relieved. The Premier thinks that one disadvantage of the case of hospitals is that it is so plain—no one disputes their excellence. No one who has seriously gone into hospital wards and work will do so. But is his Lordship quite right in thinking the case so undisputed? There are many people nowadays who think it their duty to prate about the abuses of hospitals on the strength of a few exceptional cases, and who give no thought to the mass of pain and disease and disablement with which they grapple. Lord Salisbury is right in placing the claim of hospitals at the very top of all claims. When sickness and accident overtake the working man all other misfortunes follow—wages stop, nourishment is stinted, so is clothing. The case is one for ready help. No one that is in actual work can be excused from the duty of some contribution to these institutions. "No doubt," says Lord Salisbury, "the heavier call is upon the rich, but it is equally upon all, and this deficiency will never be filled up unless the masses of those whose incomes are not large will each feel the responsibility of contributing what he can to so glorious an object." Let hospitals be as severe as they please in excluding cases of ascertained unfitness; nothing can justify the admission of cases that can be treated as well at home, and that ought to be under the care of the ordinary practitioner, who as he has advanced in skill has only grown more considerate in his charges. But let a bed be made, and let all medical and nursing help be ready, for the sick poor in the great calamities of their life. Similar lessons are urged by Sir Andrew Clark and Sir Sydney Waterlow. Sir Andrew insists on the advantages of inter-communication between hospitals, and Sir Sydney on the enormous development of skilled nursing and its importance in sickness. Let us hope that Christmas benefactions will follow these great arguments, and lighten the heart of many an anxious hospital treasurer.

LEPROSY.

THE Hawaiian Legislature, in its determined efforts to try to control the spread of leprosy in the islands, was fortunate in securing the valuable services of Dr. Edward Arning for purposes of special research. He found the bacillus lepræ plentifully in all nodules and diffuse swellings of the tuberculated cases and in similar lesions of the mucous membrane of the mouth, throat, nose, rectum, and large intestine, and in the discharges from the ulcerated lesions. He recognises a diarrhœa arising from the leprous ulceration of the bowels closely simulating a true dysentery, and thinks that the deaths usually ascribed to intercurrent pneumonia, tubercular phthisis, and dysentery should be more correctly ascribed to breaking down of leprous infiltrations of the lungs and bowels. He failed to find the bacilli in the early bright-red patches of vaso-motor congestion due to nerve lesions, in the anæsthetic patches of the so-called "anæsthetic cases," and in the chronic sores of necrotic parts of skin tissue and bone, but they were present in the nerves supplying the mutilated parts. There were none in the urine and none in the blood, nor could he discover by culture or otherwise the existence of any spores in the latter fluid. All attempts to obtain an independent and pure growth of the bacillus lepræ failed, nor were inoculations of animals of various ages in different parts of the body succeeded by a general infection. Arning inoculated a condemned criminal, but fourteen months later no definite results had followed, though a few bacilli could still be detected in the scar. Lastly, he demonstrated a vitality persisting over several months of the bacillus lepræ in putrefying tissues. On the clinical side, researches in electro-diagnosis convinced him that the anæsthesia and paralysis are due to leprous disease of peripheral nerves, but he does not regard the muscular crippling as so characteristic of the disease as the bone affections. Coming to therapeutics, we notice that Arning administered iodide of potassium without any good effect, also hyposulphite of soda, salicylate of soda, creasote, carbolic acid, and arsenious acid; and with some good effect salicylic acid and hypodermic injections of corrosive sublimate. He observed the efficiency of electrical treatment in anæsthetic cases, and insists on the value of salicylic acid in a 10 per cent. paste or ointment or solution in oleic acid, and also of pyrogallic acid in a 10 per cent. ointment or strong solution in traumaticine. Arning declares that, for one reason or another, he found it impossible to obtain from questioning the natives reliable statistics on which to base proofs for the hereditary or congenital transmission of leprosy; but we note from other reports that amongst the cases of advanced leprosy at Molokai sterility is almost universal, and the majority of the offspring, where either one or both parents are diseased, have been stillborn or have died within a short period after birth, and of those who have survived many have not yet developed leprosy. No congenital cases have been observed, but Arning saw two well-marked lepers aged respectively three and a half and four years. Dr. Mouritz points out that, whilst it is perfectly

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true that healthy people may live with tuberculated lepers for years without contracting the disease, many on the other hand do not escape, and he especially refers to the remarkable percentage of the non-leprous assistants, or kokuas, on the settlement who contract the disease. Of 178 kokuas, 17 developed leprosy between Feb. 1885 and 1886.

GENERAL MAXWELL ON THE "BEAUFORT" LIMB.

IT was not in the nature of things that the artificial arms and legs of the Comte de Beaufort, served out annually by hundreds at home and abroad to the crippled poor, should in every case give satisfaction or escape the fault-finding which sometimes does duty for criticism. It is one thing to command success and another to deserve it; but that the good Count's invention comes fairly within the latter predicament must be evident to all who have considered it theoretically or who have had a just experience of it practically. General H. H. Maxwell has for upwards of six years been an energetic and well-judging administrant of these artificial limbs, and in a pamphlet, privately printed, he comes forward as a fully-qualified, impartial witness to their efficacy when duly applied to the proper cases. Having thoroughly schooled himself in the classic treatise on human locomotion by the brothers Weber ("Mechanik des Menschlichen Gehwerkzeuge": Göttingen, 1836), which is quite a sealed book to all but accomplished mathematicians, the General proceeds to show how by minute attention to the requirements of each cripple, above all by careful measurement, and, after trial, by such modifications as may be necessary, the limb can be so fitted, whether to the superior or the inferior stump, as to form a highly serviceable and by no means unsightly substitute for the natural arm or leg. The invention itself was gradual, and, like most things, has reached perfection by successive improvements. Baron Larrey's report on it to the Academy of Medicine in 1851 describes the apparatus as consisting of a piece of ash wood attached like the peg to the ordinary wooden leg. Replacing the metal disc of the peg, it is shaped somewhat like a foot, but shorter in length. The plantar surface is covered with a leathern sole garnished with cork at the heel. It is curved in form, the curve being such as to give the limb continuous lines of bearing on the ground while the body moves forward, save that the curve is not so perfectly uniform as to incur any danger of slipping. Dr. Tillaux, in his report on the Paris Exhibition of 1867, congratulates the inventor on having given the sole of the foot a convex form, which admits of the cripple's raising himself on the stump, while at the same instant he bends the leg to make a step forward, resting on the fore-part of the foot, thus imitating the natural step. In the words of the Count himself as to the action of the curved sole, "a bearing-point in front, acting like the fore-part of the natural foot, is the only means of equalising the pace (of the artificial and natural legs), and of enabling the cripple to get under weigh, as it were, at the beginning of a step with the artificial leg." A further improvement occurred to him in thinking of the poor, who have no money to spend on costly artificial limbs. It was this—to substitute wood for the usual steel uprights of the rich man's leg, and to adapt to it the foot with convex base. Successfully tried under Dr. Broca's superintendence, it was adopted in the civil and military hospitals and by the great charitable societies of Paris, and "at last there was put within the means of fortune's disinherited ones an apparatus which previously only the rich could afford to buy or keep in repair." All this fine philanthropic story is vividly told in the General's pamphlet, and the objections that have been taken to the invention—mainly in America, and sometimes on the score of unsightliness—are convincingly rebutted. And what has been said of the Beaufort leg may, *mutatis mutandis*, be equally said of the Beaufort arm—a not less brilliant triumph of rehabilitating invention. Here, again, General Maxwell's pamphlet successfully removes objections and vindicates theoretically and practically the efficacy of the limb. With the approach of Christmas, his able and kindly treatise might well have public as well as private distribution, if only to give to a wider circle the benefit of its opportune suggestions for the restoration of the crippled breadwinner to his sphere of usefulness.

POLLING THE FELLOWS OF THE ROYAL COLLEGE OF SURGEONS.

IT will be remembered that at the last meeting of the Council of the College of Surgeons it was decided to poll the Fellows, and that the President and Vice-Presidents were requested to draw up a circular, to be addressed to the Fellows to ascertain their opinion as regards (*a*) Members being allowed to vote for Fellows as members of the Council of the College, and (*b*) the admission of Members of the College to seats on the Council. This circular will come before the Council at their next meeting. We congratulate the Council on the concession to the now popular feeling, which this appeal to the Fellows implies. We assume that the terms of the questions submitted will agree substantially with those of the resolutions passed at the general meeting on Nov. 4th. It would perhaps be better if these resolutions were submitted *verbatim*. They were passed by overwhelming majorities at a public meeting called by the Council, and nothing short of what is set forth in these resolutions will satisfy the Members, or be fair to their aims, aspirations, and intentions. The limitations contained in the resolutions materially affect the decision and the ultimate result. The Council should therefore make their circular include all the points at issue. We shall then learn authoritatively how far the Council are in accord with those by whom they are elected to office. If backed by any large majority, their position will be strengthened by the vote; while if the contrary obtains, the Council will be able, with better grace, to give way, and so bring the present deadlock to a satisfactory close.

BARON HUDDLESTON'S STRICTURES ON THE PROFESSION.

"MEDICAL men who gloat over their scientific knowledge and air the same in the witness-box, where they would usurp the functions of the jury without taking a juryman's oath, and excuse themselves by saying they came to get the prisoner off." Such was the scathing denunciation which one of Her Majesty's judges thought fit to level against what it has been our privilege and pride to consider an honourable profession. We are not going to join issue with Baron Huddleston upon the merits or demerits of any particular case or instance of alleged professional shortcomings, but we take exception to the spirit and the substance of his remarks in their more extended application. If from fear, favour, or affection a medical man entered the witness-box with the avowed intention of delivering a prisoner other than with the conviction that he was going to apply his special knowledge to the furtherance of justice, we do not hesitate to say his conduct would merit all that was said by the judge at the late western assize. It is impossible to consider a medical man in the light of an ordinary witness, for he has to explain facts and terms not "understanded of the people," and much of the evidence he gives is inference from observations that he alone is fitted to make. Again, medicine being an inexact science, it is so easy to put several interpretations upon a number of facts which fit the several theories equally well. In the struggle to arrive at the truth and demonstrate it to a non-scientific audience a medical man is bound in great measure to assume

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the position of advocate; but as the late M. Berryer, the inimitable French jurist, remarked, "there is the *fas* and the *nefas* of advocacy." Strictly speaking, it would be well if the medical man could confine his testimony to facts and leave the jury to draw the conclusions; but if this were the custom and practice, the verdicts of juries, founded upon physiological and pathological data, would soon be brought into contempt and placed under the ban of public censure. Faced by these difficulties, medical men can justly claim a wide indulgence if they seem to err or pass the bounds of legal procedure; and we make bold to say that, with rare exceptions, they quickly find a chord of sympathy struck between them and the occupants of the bench and jury-box. If the reports of the recent trials in the west of England can be trusted, it would not be difficult to take up the gauntlet so ruthlessly thrown down by his lordship, and challenge him upon the particular objects of his charge; but we prefer to leave that to the parties more immediately interested, and to take exception to what appears to be a grevious wrong done to the profession at large, unwittingly no doubt, but none the less reprehensible as coming from one clothed in the purity of the judicial ermine. We trust that Baron Huddleston will see his way to disavow the desire to cast obloquy upon a profession which he probably has had reason to consult and trust.

UREA AND ITS RELATION TO CERTAIN MORBID CONDITIONS.

THE question whether urea is furnished equally by all the albuminous constituents of the body, or whether it only represents the decomposition of one particular tissue or organ, has long been a puzzle to physiologists. The exclusive view, however, which regarded urea as derived only from one source, such as from the excess of nitrogenous food taken into the system but not employed, or from disintegration of muscular tissue, or from nitrogenous metabolism taking place in the liver, have given place to wider ones, and most physiologists are now disposed to admit that the sum total of urea eliminated in the twenty-four hours is derived from many sources. Such a belief would enable us to account for many anomalous circumstances attending on urea excretion in disease. Among the many possible sources of urea formation, Dr. Noel Paton (*Journal of Anatomy and Physiology*) has recently drawn attention to the destruction of blood-corpuscles in the liver, under the agency of certain hæmolytic agents, as leading to the increased discharge of urea and urinary pigment. Indeed, these researches have led Dr. Locke, in the *Practitioner* of Sept. 1886, to explain the diuretic action of mercury as exhibited by the action of the preparation known as "Guy's" pill. Dr. Oliver, of Newcastle-on-Tyne, has recently considered the subject from its clinical side, and has arrived at the same conclusion that Dr. Noel Paton has from the experimental—viz., that the destruction of blood-corpuscles forms an important source of urea; and he has shown that in diseased conditions in which chronic anæmia was present the daily discharge of urea was small, but that where the anæmia was quickly progressive the disappearance of blood-cells was always followed by a marked rise in the daily discharge of urea. Also in a paper on Functional Albuminuria communicated to THE LANCET, Oct. 23rd, 1886, Dr. Ralfe observes that the albuminous element of the blood-corpuscles brought to the liver under ordinary circumstances no doubt undergoes transformation into urea; but that when the destruction is considerable, and the process takes place suddenly, probably, whilst there is a decided increase in the formation of urea, a large proportion of this effete albumen is at once got rid of by the kidneys, giving rise to what is known as functional albuminuria. In a more severe form, however, the number of blood-corpuscles destroyed is so great that the conversion of all the effete hæmoglobin into bilirubin cannot be effected, so that a portion of the undestroyed hæmoglobin appears in the urine. In this manner Dr. Ralfe explains the relationship that exists between certain forms of albuminuria and hæmoglobinuria, and the increase of urea elimination that occurs in them. As we have already stated, the belief in the multiple sources of urea enables us to explain many anomalous circumstances attending urea excretion in disease. Thus, for instance, in phthisis with rapid wasting of tissue we should naturally expect a considerable increase of urea elimination if urea were solely derived from tissue metabolism, but no such increase can be definitely established even when high temperature exists; and Dr. Oliver has shown, from the observation of numerous cases, that when the ureal excretion in phthisis is augmented it is always accompanied by distinct evidence of the increase of the anæmia.

THE PERILS OF FOOTBALL.

THE Football Association have issued the following notice:—

"The attention of the Committee of the Football Association having been drawn to the recent numerous accidents at football, arising in some instances from rough and violent play, wish to impress upon all clubs belonging to the Association the necessity for a strict observance of the rules and laws of the game bearing upon the point under the provisions of Rule No. 15. Referees have the power in all cases of 'violent conduct to order the offenders at once to leave the field without any appeal having been made for foul play, and without the previous caution which is necessary in the case of 'ungentlemanly behaviour,' and as it is absolutely essential, both for the safety of players and in the interests of the game, that 'violent play,' easily to be distinguished from fair and legitimate charging, should be put down with a strong hand, the Committee trust that referees will not hesitate to use the power conferred upon them by the rule quoted above whenever occasion may arise."

We are glad to see that the authorities, of the Association game at any rate, recognise that the interests of football are being jeopardised by "violent play," and that accidents occur which are more numerous and severe than need be. We trust that referees will take the strong hint given them by the Committee, and, by using freely their powers, save football from the reproach under which it now labours. If, however, the rules in force are not sufficiently stringent to prevent these frequent and formidable accidents, the Committee of the Football Association must see that they are made so. We should also be glad to hear that the Rugby Football Union is taking steps to minimise the risk of accidents.

FIFTY YEARS' IMPROVEMENTS.

A REVIEW of the sanitary improvements which have been effected in this country during the reign of Queen Victoria was a fitting text for Captain Douglas Galton's address to the Society of Arts at the first meeting of the present session, and the subject was admirably treated by the lecturer. England has indeed undergone a complete transformation during this period, and English people may well remember how much is due to their Sovereign and her beloved Consort for the changes which have been brought about. The England of to-day is widely different from the England of fifty years ago; she has added largely to her possessions, and her influence has been felt in all parts of the world, but the improvements that have taken place have been greatest in the social condition of the people. Captain Galton's address enables all to understand how different were the conditions of life fifty years ago. The abolition of the window-tax, the institution of civil regis-

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tration of births, marriages, and deaths, and the constitution of the General Board of Health and its successors, have contributed in an untold degree to the happiness and prosperity of the nation. In 1837 it was calculated that one-tenth of the population of Manchester and one-seventh of the population of Liverpool lived in cellars. The window-tax was a cause of excluding the air and shutting out the sun; but in 1851 there was a material advance. Gradually the courts inhabited by the poorer classes in towns were flagged and drained; means were provided for carrying off the waste water which people formerly threw down at their doors; the cleansing of streets and roads was undertaken, and improved water-supplies were provided. Later, health officers were appointed to each district, and its sanitary improvement seriously taken in hand. Captain Galton referred in some detail to the improved condition of the soldier, and reminded his audience that the greatest of the triumphs which had attended the Queen's reign was the saving of millions of lives and the avoidance of a vast amount of physical suffering.

THE LIGHTING OF RAILWAY CARRIAGES.

THIS is a matter of considerable importance, and we are glad to find that it is once again attracting public notice. Railway companies are necessarily monopolists; so far as appearances go, they are doubtless justified in assuming that those who are dependent upon them for the means of rapid travelling must need accept what they please to give. This is, however, but a shortsighted view of the position. As a matter of fact, the regular custom of passengers who "live out of town" and travel daily, or nearly every day, by railway, to and from their places of business, cannot fail to play an important part in the production of profits. And this is the class of passengers which most of all does the useful grumbling against a policy of parsimony and bad management, greatly to the advantage of the general community. Railway directors and administrators who turn a deaf ear to the complainings of these habitual passengers are guilty of singular folly. Looked at from the strictly commercial standpoint, such grievances as this class of customers ventilate are without exception drawbacks to perfect success in earning the largest practicable dividends for shareholders. If it were only possible to make an exact return of the number of families who do *not* live out of town, and whose daily custom is lost to the railway companies by reason of their failure to provide adequate and comfortable accommodation, this view of the case would come quickly home to the financial sense and acumen. We contend that, taking the lowest ground and appealing to the most mercenary and illiberal instinct of railway companies, it would be easy to show that they stand in their own way by not being more amenable to reason in the matter of redressing the wrongs of policy and management which are brought under their notice. Meanwhile there is higher ground that must be occupied. A very considerable amount of actual mischief is done by the long persistent refusal of railway companies to provide suitable means of lighting their carriages. This is a subject on which much has been written, but to very little purpose. The only possible explanation of the great neglect which has been shown in this particular respect is that chairmen and directors have not the courage to incur the needful expenditure. There is, of course, no sort of difficulty in the matter. If only the will existed, plenty of ways and means of attaining the object in view could be found. The Metropolitan and District Companies, not because they are more liberal than others, but because the line lying underground the carriages must needs be lighted, have shown how gas may be employed; and other companies have, by experiment at least, demonstrated how electric apparatus may be adapted to locomotive lighting purposes. It has also been made plain that either gas or the electric light can be economised by being placed under the control of one of the companies' officials, to be turned up when passing through tunnels by day or when it grows dark at night, and turned down again at pleasure. In short, there is no sort of excuse for the failure to provide a proper amount of light for both ordinary and extraordinary purposes. A great mistake was originally made by omitting to provide in the Acts of Parliament which license railway companies that their management should be supervised in every particular and reconsidered throughout, with a view to the public advantage, at short intervals. The supervision which exists is little more than a farce; it is powerless to compel the remedy of evils not directly dangerous to life. This is why so much annoyance and injury is done to passengers in a side way by systematic neglect to meet obvious needs and redress manifest grievances. This is why no inconsiderable part of the public must submit to have its average eyesight impaired, solely because, almost without exception, the railway companies refuse to provide a suitable amount of light in their carriages. It is idle to compare the policy of the several companies in this matter. They are all as parsimonious as the conditions of their enterprise admit. There is nothing whatsoever to be grateful for in relation to any one of the number. Nor have we the least hope that anything we can urge will move them to be reasonable. Our appeal must be to the public, and we would point out that the practice of reading in railway carriages, as for the most part at present lighted, is one that ought to be discontinued. The instances in which injury is inflicted upon persons with weak or irritable eyes are very numerous; and cases of cerebral irritation set up by habitual efforts to read in dimly-lighted carriages are of frequent occurrence. Until the cry for more light elicits a response, it will be simply prudent to abandon the attempt to beguile the time spent in railway journeys by reading. Better do this than sacrifice sight or induce brain disease.

CAUSE OF SPONTANEOUS RUPTURE OF THE HEART.

THE cause of rupture of the heart, which has recently been brought home to the thoughts of the profession in all countries by the case of Professor Panum, has been touched upon by Ziegler, Leyden, Huber, Kraus, and other authors, and has recently been illustrated at the Society of German Practitioners in Prague by Dr. R. v. Limbeck, assistant in Professor Chiari's Institute of Pathological Anatomy, who demonstrated a case which had occurred in the Jewish Hospital, under the care of Dr. Saar. A man, aged seventy-three, who was in the hospital with the signs and symptoms of severe bronchitis, accompanied with fever, but with no indications of cardiac disease, while sitting on the nightstool became suddenly collapsed, and died in ten minutes. The necropsy revealed a rupture of the left ventricle, three centimetres in length, and a remarkable thinning of the wall of the ventricle towards the apex, so that the cavity, instead of being in the form of a cone, was nearly spherical. The muscular substance also was of a dark-brown colour and softened. Evidences of atheroma and calcareous degeneration were found in many of the more important arteries of the body, and when a probe was passed into the left coronary artery from the aorta it was arrested at the depth of a centimetre, the obstruction being, as was found on opening the vessel, complete for half a centimetre. All the coronary vessels were also affected with a considerable amount of endo-arteritis, which in one branch of the left coronary artery had led to a complete blocking up by a thrombus. Dr. v. Limbeck pointed out that Henle and Hyrtl have shown that the coronary arteries do not anastomose with one another, except by means of

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capillaries, and so the great softening (fatty degeneration or acute myomalacia), which was found especially in the part of the heart muscle supplied by the obstructed branch of the left coronary artery, is easily explained. The thinning of the heart wall was of course of the nature of a partial heart aneurysm, which, when the extra pressure caused by straining at stool was put upon it, gave way. Ziegler, too, has shown that the anterior wall of the left ventricle is the usual seat of rupture of the heart, which may very probably be due to myomalacia consequent on sclerosis of the coronary artery, which has been itself caused by thrombosis or embolism.

THE OFFICE OF CORONER FOR EAST MIDDLESEX.

THE proposal that the district apportioned to the coroner for East Middlesex shall be divided recalls the time when the founder of this journal, the late Mr. Thomas Wakley, M.P. for Finsbury, as well as coroner for Middlesex, did the duty of the whole western division of the county, and did it well. Of course, the population has greatly increased since his day, but it is difficult to believe that this fact can wholly explain the multiplication of inquests. We cannot, of course, presume to account for the altered condition of affairs, but it may be permissible to offer one obvious suggestion—namely, whether the need for a largely increased and increasing number of inquests is not, in part at least, due to the fact that, as a rule, the issue of an inquiry is not productive of any decisive result. It must be manifest that if nothing comes of the misconduct or neglect of those who provide the subject matters of inquests, the number of these inquiries is likely to increase. Practically, we fear, the knowledge that an inquest now commonly amounts to nothing more than a formal proceeding, by which the county obtains a satisfactory knowledge of the cause of death at the public expense, induces those formerly in the habit of sending for medical advice, "for the sake of a certificate," to let matters take their course. The proportion of cases in which neglect to call in a medical practitioner is the sole or principal cause of the need for a coroner's inquest is very large. Genuine cases of doubt or mystery of course increase with the population; but cases of neglect to seek medical advice increase in greater ratio. Another source of increase in the number of inquests is to be recognised in the multiplication of institutions which give medical advice with very little discrimination, so that, practically, the victims of heart, and lung, and brain, and organic diseases generally, are not expected to place themselves under responsible medical treatment, and when dying suddenly, as they are likely to do, inquests are required to determine the cause of death.

MICRO-ORGANISMS IN ACUTE RHEUMATISM.

DR. PAUL GUTTMANN records a case (*Deutsch. Med. Woch.*, No. 46) which he thinks has some bearing upon the etiology of acute rheumatism. The case was that of a lad fourteen years of age, who was admitted into hospital with well-marked symptoms of the disease. Pericarditis supervened, and owing to the rapidly extending effusion paracentesis of the pericardium was practised; only a small quantity of purulent fluid was obtained, but after death, which shortly ensued, the sac was found to be distended with pus and fibrin. There were also numerous abscesses in the kidneys; but the effusion in a knee-joint which was examined contained the usual sero-fibrinous exudation, and no pus. Microscopical examination of the pus and exudate showed micrococci in abundance (staphylococcus pyogenes aureus), and gelatine cultures were readily obtained. Dr. Guttmann had little doubt that this microbe, which was found in the joint effusion as well as in the pericardial and renal pus, bore an etiological relation to the disease in this instance, but suggests that other forms may be found in other cases. Micrococci have been found in pericarditis by other observers, and the experimental production of endocarditis by Orth, Ribbert, and others, by means of the intravenous injection of cocci, is one of the most interesting of recent contributions to pathology. Acute rheumatism, again, has many analogies with specific infective diseases, as was shown at the Brighton meeting of the British Medical Association by Dr. Mantle, who also described the discovery he had made of micrococci in the blood in this disease.

METROPOLITAN ASYLUMS BOARD: CLINICAL INSTRUCTION.

THE Committee of the Eastern Fever Hospital of the Metropolitan Asylums Board have appointed Mr. Reginald Dudfield, B.A., L.R.C.P., M.R.C.S., of Upper Phillimore-place, Kensington, to be junior assistant medical officer at the hospital for a limited period. This is the first appointment made in carrying into effect the resolution of the managers to make their small-pox and fever hospitals available for clinical instruction in infectious disease for the benefit of registered medical men whose opportunities for observing this class of diseases have been curtailed almost to the point of extinction by the closure of general hospitals against patients suffering from small-pox, typhus fever, scarlet fever, and, in a less degree, enteric fever. The Local Government Board recently gave their sanction to the principle involved in Mr. Dudfield's appointment. The gentlemen thus appointed will be entitled "assistant medical officers." They will have specified duties, and be in all respects subject to the regulations in force with regard to the hospitals. The remuneration of the office is limited to the allowance of residence, rations, &c.

CHOLERA IN EUROPE.

THE recurrence of cholera in fresh localities in Eastern and Central Europe is the most striking feature of the present phase of this year's epidemic. Large outbreaks are hardly to be expected in Europe at this season of the year, but it is most disquieting to learn that in certain parts of Austrian and Turkish Croatia, and in some districts of Hungary, fresh places are being attacked. The disease has also taken a fresh stride in a south-eastern direction, Belgrade having been attacked. According to the latest intelligence, cholera broke out in one of the infantry barracks, and between the 21st and 27th of November there had been fifty cases and ten deaths. The King of Servia, on receiving the intelligence, returned to his capital and personally visited the sick; he at the same time stimulated the authorities to take ample precautions to prevent the spread of the disease. Typhus is also prevalent in Belgrade, so that there is doubtless ample room for sanitary progress.

AIDED EMIGRATION OF PAUPER CHILDREN.

AMONG various questions relating to the poorer population, not the least important is that which affects the future of pauper children. What is to be done with them? Shall they grow up under the guardianship of the parochial system to find what occupation they can in an overcrowded market, and perhaps to be ultimately absorbed in the ranks of the idle and criminal classes, or is there any course which offers them a surer hope of future usefulness? This question cannot yet perhaps be answered in the affirmative, but there is reason to believe that it may be so answered under a system of aided emigration. A recent writer assures us that many of the children who now burden the parish rates either from poverty alone or as the inmates of reformatories, might be transferred to the colonies to

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the advantage of the latter, at a cost under that of their annual maintenance at home. There are distinct advantages in such a scheme if it could be satisfactorily carried out. On the one hand, children at an age when they are still impressionable for good or evil are removed from the damaging influence of early associations; on the other, they take a fresh start in life in a new country, where, if inclined to work, they will be welcome, and will have every opportunity and encouragement to use their energies. Many will equally gain in physique by leaving behind them at a critical age the unhealthy slums in which they were reared, and taking up out-door occupations in their adopted country. The experiment has already been tried, and so far, we learn, with success.

THE HOSPITAL SUNDAY FUND.

THE Council of the Hospital Sunday Fund, on Monday last, agreed on their report to the meeting of the constituents, which is to be held in the Mansion House in December. The special exertions of this year have resulted in a collection of £40,399 7*s.* 1*d.*, as compared with £34,320 8*s.* 5*d.* in 1885, and an average of £30,121 6*s.* 8*d.* in the preceding thirteen years. The legacy of £1000 by the late Dr. Wakley was gratefully acknowledged by the Council. A proposal to invest that sum was with much unanimity discouraged by the meeting. Sir Sydney Waterlow led the objection to it by strongly expressing the view that we must not burden ourselves with the anxieties of those who have to come after us, but with pressing urgencies of the present. It was resolved to recommend for election on the Council, the Earl of Strafford, Sir Andrew Clark, Mr. Alderman De Keyser, Mr. R. Foster, Mr. Wakley, Mr. Lionel Cohen, M.P., the Rev. Prebendary Eyton, the Rev. C. J. Ridgway, the Rev. Dr. Clifford, and the Rev. J. R. Wood, to fill the vacancies which have recently occurred in its numbers. Benevolent persons who wish to benefit hospitals either during life or after their death cannot do better than make the Hospital Sunday Fund the almoner of their charity. Money distributed through them would go straight, and with only the slightest abatement in the way of expenses, to the most needy and meritorious charities. There is no fund administered so economically as that of the Hospital Sunday Fund. During the past year the extraordinary steps taken to increase the fund have made the working expenses a little more, but even so, they only amount to 3·942 per cent. of the gross receipts.

VEGETABLE OR MIXED DIET.

THE question of preference between animal, vegetable, and mixed foods is constantly recurring, and will probably continue to present itself for a long time to come. This is the more likely, since it is one of those questions the answer to which will greatly vary in the case of different individuals. The purely animal diet need hardly now be considered, since it is probably unknown in this country. The same cannot be said of the vegetarian system. A restaurant recently opened in the Strand by Messrs. Spiers and Pond, and another called the "Orange Tree" near Charing-cross, on the tables of which meat is not found, are sufficient to testify that London, at all events, is inclined to give a trial to light fare. There is, undoubtedly, much to be said in favour of this kind of nourishment. The results of the penny or halfpenny dinner supplied to school-children afford proof of its power to sustain and increase in the young both physical and mental strength. Similarly, there are adults whose constitutions are on the whole better suited for assimilating herbs or farinaceous food than meat Such, for example, are the gouty, who might in many cases restrict themselves to a vegetable diet with much benefit to health. Again, there are many persons who have no such constitutional difficulty to consider who might with advantage at least reduce their daily consumption of animal food. Three or four meals a day at which meat is taken cannot constitute the rule of wholesome living for any but a small and active part of civilised mankind, though this does not imply that a total absence of meat is rather to be advised. For the great majority of healthy people we should certainly recommend a mixed diet in preference to any other, though a vegetable meal now and then will afford a change of fare at once nutritious and palatable.

THE PUBLIC HEALTH ACT, 1875.

THE Birmingham Corporation has always deserved to be considered one of the more advanced of English sanitary authorities. It has now, under the advice of its health officer, the president of the Society of Medical Officers of Health, proceeded against a landlord who refused to abate a nuisance on the ground that there was a tenant in possession, and that he could not properly enter the premises except for certain reasons specified. This case was heard on appeal before Mr. Justice Cave and Baron Pollock, who decided that the landlord was liable to do the work, being the owner within the meaning of the 94th section of the Public Health Act. If he had shown under Section 93 that he had used all due diligence to carry out the order, he would not have been liable for any penalties, but this he had omitted to do. The decision of the Court was therefore against him, Mr. Justice Cave observing that it would be hard on an occupier if he had to make good structural defects which arose from the neglect of the owner; while Baron Pollock wisely pointed out that "it is not probable that the tenant in the majority of instances would object to his landlord coming on the premises to abate a nuisance which was injurious to the health of the persons living there." This decision will doubtless reduce the difficulties sanitary authorities have to meet at the hands of obstructive landlords, and tenants will be encouraged to seek the aid of their local board when they have reasonable ground for complaint. It deserves, therefore, to be widely circulated.

THE FIRST EXCISION OF THE SPLEEN IN SPAIN.

SENOR DON DR. RIBERA recently performed excision of the spleen on a boy of ten in the Hospital del Niño Jesus in Madrid. This is the first time the operation has been performed in Spain, and unfortunately was followed by a fatal result the next day from shock. Immediately after the operation syncope came on, and it was with considerable difficulty that the child was revived. It was remarked that the operating theatre, although in one of the most important hospitals in the Spanish metropolis, was badly lighted, and unprovided with a subcutaneous syringe for injecting ether or with a faradisation instrument.

PROSTITUTION IN LIVERPOOL.

MR. FREDERICK W. LOWNDES of Liverpool has published a pamphlet, to be had of Messrs. Churchill, on the subject of Prostitution and Venereal Diseases in Liverpool. Mr. Lowndes' position as surgeon to the police force of Liverpool and the Lock Hospital gives importance to his views on this painful subject. He estimates that there are at least 4000 prostitutes plying their trade within the city, without let or hindrance, however diseased they may be, so long as they are not guilty of flagrantly disorderly conduct in the streets. One of the most interesting parts of his paper is that in which he discusses the causes of prostitution:—1. Those relating to men—(*a*) juvenile precocity; (*b*) the large number of young men in Liverpool marriage-

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able but unmarried, thousands living a life of enforced celibacy; (*c*) men able to marry, but unwilling; (*d*) intemperance. 2. Those relating to women—(*a*) want of parental control; (*b*) seduction; (*c*) love of dress and finery; (*d*) bad arrangements in domestic service; (*e*) immoral female characters in large factories where girls are employed. The latter part of Mr. Lowndes' paper is devoted to an account of the laws for controlling prostitution, which are very ineffective. He ends by quoting Sir William Jenner, which should be studied by all young men and by public authorities. But there is a terrible continuity and persistence in this vice.

SIR JAMES PAGET ON SENTIMENT.

AT a luncheon held in St. Bartholomew's Hospital a few days ago, to celebrate the reopening of St. Bartholomew's Church, Sir James Paget gave utterance to a manly and practical view of the question of sentiment as a source or spring of action. We are too much inclined to despise or undervalue sentiment in this day of pretentious realism and affected precision. It is well that great and trusted scientists, whose words must needs have weight with the whole profession, should be both able and willing to speak out on this topic. We wish the speech of Sir James Paget had been reported in full. Meanwhile one sentence is worth preserving, and might well form the text of a sermon addressed to those who seem to think that because science claims to rest on facts, such fancies as supply the material of sentiment must needs be disregarded. This is a fallacy that cannot be too frequently or forcibly exposed.

THE HARVARD CELEBRATION.

THE 250th anniversary of Harvard College was celebrated on Nov. 5th and three following days. On the 5th there was a reunion of the *alumni* of the Law School, at which Mr. Justice Oliver Wendell Holmes, jun., delivered an oration. The second day was celebrated by the undergraduates; and on Sunday, the 7th (the actual anniversary of the foundation), memorial services were held in the College chapel. The final day, or "Graduates Day," was occupied by a meeting in the morning in the College theatre, when an oration was delivered by the Hon. Jas. Russell Lowell, and a poem by Dr. Oliver Wendell Holmes. The honorary degree of LL.D. was conferred upon the following three distinguished members of the medical profession—viz., Dr. Leidy of the University of Pennsylvania, Dr. S. Weir Mitchell of Philadelphia, and Dr. J. S. Billings of Washington. The President of the United States was present on this occasion, and also at the banquet which was held in the afternoon. A torchlight procession of the students closed the day's proceedings. The *Boston Medical and Surgical Journal*, from which we quote, urges the propriety of starting an association of medical *alumni* of the University, the Medical School being almost the oldest and largest department.

THE VACANT CORONERSHIP.

THE Middlesex magistrates have decided to present a petition to Her Majesty, praying that the eastern district of the county, as constituted by Order in Council made in 1862 for the purpose of an Act to amend the law respecting the office of county coroner, be altered or divided. The chairman stated that the new coroner would have to confer with the Court as to the salary, and that he certainly would not be elected at the salary which the late coroner received. In addition to the candidates for the vacant office mentioned in our last issue, the following have announced their intention of competing for the coronership: Mr. Cresswell Hewett, M.R.C.S., Mr. W. E. Baxter, and Mr. Thomas Beard.

THE HOUSE OF INDUSTRY HOSPITAL, BOSTON.

THE current number of the New York *Sanitary Engineer* gives plans and descriptions of the new hospital, on the pavilion type, which has been erected for the House of Industry at Deer Island, near Boston. It consists of four one-storeyed pavilions united by a corridor, with a kitchen and administrative block near to the centre of the buildings. The pavilions are on tressels, and their floorings are 4 ft. from the ground; each pavilion is 128 ft. long and 28 ft. wide, with an average height of 18 ft. Each pavilion has the public ward near the middle of its length. The public ward is approached through a group of ward offices and at the far end of each pavilion are isolation wards. The waterclosets are in projecting turrets. There is nothing very novel in all this. We are told that the air-space per bed is about 1500 cubic feet. This means that, with an average height of 18 ft. and a width of 28 ft., each bed has only 84 square feet of floor space, and that there is barely 3 ft. between the beds. This is far too little, and the architect would have done well to have reduced the height of the pavilions and have given more area per patient. The buildings are entirely of timber, and are heated by hot-water coils. In the winter there is provided a complete arrangement for artificial ventilation; a series of air-ducts in the floor terminate in an exhaust flue at one end, which is heated by a steam coil. We are told that the buildings cost $60,000, or £12,000. One pavilion of the four is still wanting, so that there is now accommodation for about 100 out of the full complement of 134 patients. This makes the cost per bed about £120, a very moderate sum; but it must be remembered that the building is entirely of wood, and not to be compared with solid structures of brick or stone.

THE STATE EXAMINATION AND THE DIFFERENT PRUSSIAN UNIVERSITIES.

IN looking over the summary of the results of the Prussian State examinations for diplomas during the last year (which we briefly noticed in our impression of the 20th ult.), one is struck by the good performances of the candidates from some of the smaller universities. While Berlin sent up 203 candidates, 53 of whom had previously been rejected, passing 1 in the first class (very good), 76 in the second (good), and 50 in the third (sufficient), Bonn sent up 47 men, only 2 of whom had been previously rejected, passing 4 in the first class, 29 in the second, and 8 in the third; and Konigsberg, with 2 rejected and 33 new candidates, achieved 6 first classes, 15 second, and 3 third. The plucking seems to have been most severe in Halle, Konigsberg, and Berlin, where about a third of the men failed. In Kiel the proportion of failures was about 1 in 7, and in Bonn only 1 in 8.

VALUE OF MEDICAL EVIDENCE IN LIFE INSURANCE.

THE *Scottish Banking and Insurance Magazine* of Nov. 5th contains an able article on the "Apportionment of Premium to Risk in Cases of Life Insurance." The object of the author is to refute the views of Mr. Chisholm, a Fellow of the Institute of Actuaries, and manager and actuary of a life insurance company, who in a paper before the Institute had expressed himself as being rather doubtful of the advantage of medical estimates of the value of life for insurance purposes. Mr. Chisholm says that in the olden days irregularity of the heart and albuminuria were never discovered. But he does not think the offices were much worse off in consequence, because in his estimation these maladies were probably only transient. It is curious to see a man of importance and intelligence writing so in these days. He is well answered in the paper before us The author points out that the competition in life insurance

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business and the consequent low rates on which it is done make care and every kind of precaution against bad lives essential. The question is not whether too much importance may not be occasionally attached to a medical symptom or a physical sign, but whether intelligent medical evidence is better dispensed with. Be it that such symptoms as Mr. Chisholm mentions are occasionally temporary and unimportant, who is to decide in any given case in which they exist whether they are so or not? The discussion at Brighton on this very subject showed how judicial good medical opinion is even in regard to grave physical signs, and how much disposition there is to give due credit to all qualifications of them. Mr. Chisholm's views are only tenable on the supposition that medical men are deficient in common sense and that directors have more than their share, which may be an excusable theory in the actuary of an insurance office, but will not commend itself to ordinary people. It would be strange indeed if all the improvements in the diagnostic and therapeutic departments of medicine had no value for insurance purposes. We commend the article in our contemporary to our readers and all concerned.

THE FORTHCOMING LECTURES AT THE COLLEGE OF PHYSICIANS.

THE following arrangements have been made in respect of the above lectures for 1887. The Gulstonian will be delivered on March 3rd, 8th, and 10th, by Dr. Macalister of Cambridge, his subject being "The Nature of Fever"; the Croonian will follow on the 15th, 17th, and 22nd of the same month, and will be given by Dr. Broadbent, who will discourse on "The Pulse"; on March 24th, 29th, and 31st the Lumleian lectures will be delivered by Dr. Priestley, who will take for his subject the "Pathology of Intra-uterine Death."

LEGACIES TO HOSPITALS.

THE will of a man like Mr. Morley, at once wealthy and benevolent in a high degree, is a matter of much public interest, and might without disrespect be made the subject of a little criticism. From our point of view it has one great defect—it does not leave anything to hospitals. We believe that hospitals have a peculiar claim on such accumulations of money as that so creditably associated with Mr. Morley. If they are not to be built and endowed out of such accumulations, it is difficult to see much prospect of relief for them in their present impecunious position. Of course it will be said that Mr. Morley did what he thought fit for hospitals while he lived, and few men were more entitled to claim the right to do what he pleased with his own; but, even so, we may express disappointment that about half a million of money can be bequeathed by one so intimately and honourably associated with hospital funds without mention of such institutions.

MILK POLLUTION.

AN interesting case has been heard at the Guildhall showing the possibilities of pollution of milk from noxious chemical effluvia. The defendant was summoned at the instance of the Commissioners of Sewers in the City for carrying on a chemical process which was dangerous to the public health. Complaints had been made to the medical officer of health by a milk-seller who carried on business on the ground-floor of the premises of which the defendant occupied the basement, the complainant stating that the milk was injured by some effluvia arising from the lower part of the House. Dr. Sedgwick Saunders gave evidence that he visited the premises and found a distinct metallic effluvium emanating from the basement; as the result of chemical testing, he was under the impression that it consisted of nitrous acid gas, which was suffocating and poisonous; the milk would absorb the effluvium and thus become dangerous to the drinkers. Alderman Knill, before whom the case was heard, inflicted the full penalty of £5 and 2s. cost. No notice of appeal appears to have been given.

THE FRENCH MILITARY MEDICAL SERVICE.

THE number of admissions into the French Military Medical School of Val-de-Grace has this year been much fewer than usual. As a rule sixty-one students who have completed two years' medical study are admitted. This time, however, only twelve have been accepted. This is not, it appears, due to any existing surplus of military surgeons, for, in fact, the medical department of the army is by no means complete as regards its *personnel*. The reason is to be looked for in the necessity for economy. Indeed, it has been suggested that the school of Val-de-Grace itself may have to be abolished. Sudden changes are of course highly inconvenient to intending candidates, and a petition to the Minister of War is being prepared requesting that the number of vacancies to be filled should always be announced some time in advance.

DR. WATERS AND THE CHEMISTS OF CHESTER.

THE chemists of Chester have presented an address of congratulation to Dr. Waters on the presentation of the gold medal by the British Medical Association, and the presentation of his portrait by the public of Chester. We congratulate Dr. Waters. He knows our sentiments. He deserves great credit for years of trouble to obtain medical reform, though at the last he suffered himself to take too limited a view of the whole subject, and to accept an Act which, on the admission of the President of the Medical Council, withholds the chief reform, and may yet give much trouble to the profession.

THE EXAMINATION OF THE MEDICO-PSYCHOLOGICAL ASSOCIATION.

THE first examination for the certificate in Psychological Medicine, conducted by Drs. Hack Tuke and Savage, was held on Nov. 29th and 30th. The written examination included questions on Classifications and Symptoms, on the forms of Mental Disease associated with Epilepsy, on Testamentary Capacity, the Treatment of Acute Mania, and on Statutary Forms relating to Admission. The practical part included examination of patients, filling up and correction of certificates, &c.

RECENT HONOURS.

THE Queen has given orders for the appointment of Deputy Surgeon-General John M'Neale Donnelly, M.D., of the Indian Medical Department, to be an Ordinary Member of the Military Division of the Third Class, or Companion of the Order of the Bath. Her Majesty has also been pleased to confer upon Deputy Surgeon-General Stewart Aaron Lithgow, C.B., M.D., of the Army Medical Staff, for action at Giniss, the distinction of Companion of the Distinguished Service Order.

TYPHOID FEVER IN PORTH.

THERE is an outbreak of typhoid fever in Porth within the local board district of Ystradyfodwg, the prevalence being associated with conditions of excrement disposal and drainage, which are locally described as a disgrace to any civilised nation. It is alleged that the attention of the sanitary officers has been called to the matter, but that nothing has yet been done by way of remedy. We trust the matter will receive prompt attention.

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THE GENERAL HOSPITAL IN JERSEY.

WE regret to say that the opportunity occasioned by the lamented death of Dr. Charles Godfray, of Jersey, has not been used for improving the medical service of the General Hospital at Jersey. The arguments for enlarging the staff were unanswerable, but they have not prevailed. Another one-man appointment has been made. The fortunate gentleman is Mr. Walter Falla. We do not doubt the fitness of Mr. Falla to stand in the succession to Jones and Godfray, though his oldest qualification only goes back to 1879. We may admit, too, the force of much of the good-natured banter in which the *Chronique de Jersey* indulges with regard to the abounding and superlative testimonials of his fellow-candidates for the post. But for all that, we think that the principal, and till lately the only, hospital in Jersey ought to be served by a larger and more varied staff. A little competition in hospital is good for a community isolated as that of Jersey is, and remote from great hospital centres.

MR. FURNEAUX JORDAN.

OUR readers will learn with regret that Mr. Furneaux Jordan, Senior Surgeon to Queen's Hospital, co-Professor of Surgery at Queen's College, Birmingham, &c., has recently resigned his many surgical appointments, and that the state of his health compels him to retire altogether from professional life. His friends and old pupils intend giving him a substantial testimonial in recognition of his many contributions to the science of surgery, and of his services to the profession. Mr. Bennett May and Mr. Jordan Lloyd are acting as honorary secretaries, *pro tem.*, to the testimonial fund, which we hope will prove worthy of Mr. Jordan's acceptance.

ANOTHER SENSIBLE JUDGMENT.

DR. EDIS, as "the other certifying doctor," has been sued for his share of the responsibility in placing a lunatic in an asylum. The case was complementary to one on which we quite recently commented. In this instance Baron Pollock ruled that the defendant was within the protection of the Act, and directed a verdict for him, and gave judgment accordingly. These sensible procedures will do much to relieve the tension which exists in relation to the working of the Lunacy Laws, which afford very little security to the doctors, particularly as they have been of late years set in motion by suitors and judicially administered.

EPIDEMIOLOGICAL SOCIETY.

AT the next meeting of this Society, which will be held at 11, Chandos-street, W., on Wednesday next at 8 P.M., Dr. J. Edward Squire will read a paper on "Typho-malarial Fever." It is expected that the paper, and the discussion it will elicit, will be of much interest. Dr. Squire has recently studied this subject at Suakim, and it is hoped that others with special experience of the disease will take part in the debate.

FOREIGN UNIVERSITY INTELLIGENCE.

Berlin.—Professor Gerhardt celebrated his twenty-five years' jubilee on the 9th ult.

Cracow.—Dr. Lazarski, Extraordinary Professor, has been appointed Professor of Pharmacology.

Dorpat.—Dr. Carl Dehio has been appointed Extraordinary Professor of Special Pathology and Therapeutics.

Greifswald.—Dr. Grohé, Professor of Pathological Anatomy, who had been made a Privy Councillor, did not live to enjoy his new honours, his death having occurred on Nov. 21st, in the fifty-seventh year of his age. In 1858 he was first appointed to Greifswald, and in 1862 received the full professorship. He is best known for his researches in pathological chemistry, especially upon the occurrence of glycogen in the lungs and heart, and more recently he studied the subject of the effects of intravenous injection of pathogenic fungi, in which he was followed by Dr. Grawitz, who is likely (*Berl. Klin. Woch.* No. 48) to succeed him in the professoriate.

Marburg.—Professor Mannkopff, Director of the Medical Clinic, has been made a Privy Councillor.

Munich.—Dr. Gietl, though improved in health, being still unable to give clinical instruction, Professor Bauer will for the present session take charge of the first medical section of the City Hospital.

Paris.—M. Béclard, Professor of Physiology, has been nominated Dean of the Faculty of Medicine for a fresh period of five years.

Prague (German University).—An invitation having been given to Professor Heubner of Leipsig, to a chair of Diseases of Children in Prague, and the Saxon Government being unwilling to make the arrangements required by Professor Heubner as the condition of his remaining at Leipsig, he has decided to accept the call and go to Prague. It is stated that in case of his refusal Dr. Escherich of Munich, would have been invited.—Dr. Wilhelm Fischl has been appointed to act for Professor Bandl, who is ill.

Würzburg.—The two names proposed by the Medical Faculty for the vacancy caused by the removal of Professor Grashey to Munich are those of Dr. Jolly of Strasburg and Dr. Krieger. (Dr. Jolly is the son of the late physicist of that name, of Munich.)

FROM the report of the examination made by Colonel Sir Francis Bolton of the water supplied by the several metropolitan water companies during the month of October it appears that the Thames water sent out by the Chelsea and West Middlesex companies again contained the very small proportion of organic matter which characterised the samples during the previous three months; whilst the supplies of the Southwark, Grand Junction, and Lambeth companies exhibited a noticeable increase in this respect, although the proportion was by no means excessive for the time of the year. The water drawn from the Lea and distributed by the New River and East London companies manifested no change since the September samples were taken, the proportion of organic matter present being exceptionally small. All the waters were clear and bright on delivery.

DR. WILLIAM TINDAL ROBERTSON, who on the 29th ult. was elected member of Parliament for Brighton, received his professional education at University College Hospital. He became a licentiate of the Apothecaries' Society in 1848, a member of the Royal College of Surgeons of England in 1850, and in 1853 obtained the degree of M.D. at the University of Edinburgh. In 1854 he commenced practice at Nottingham, remaining there until failing sight, which has since culminated in total blindness, compelled him to retire in 1875. Since that date Dr. Robertson has resided at Brighton, and taken an active part in the political life of the town.

IT is authoritatively stated that the Senate of University College, London, has not taken any definite action towards enrolling the College as a constituent part of Victoria University, and that the question of such enrolment has not even been broached at the meetings of the Council.

A BARQUE arrived off Dover on the 27th ult. from the West Indies, and was placed in quarantine, having yellow fever of a very bad type on board. The vessel was not allowed to approach the harbour.

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AT the meeting of the Branch Medical Council for England held on Friday last, resolutions were passed by the Council recording their sense of the judicious care and management with which the details of the late election of direct representatives on the General Medical Council had been conducted by their Registrar, Mr. Millar, and an Honorarium of £50 was presented to him.

THE Grand Cross of Isabel the Catholic has been conferred on Señor Don Dr. Matías Nieto Serrano, editor of *El Siglo Médico*, the leading Spanish medical weekly.

THE new pathological institute at Bonn was opened on Oct. 30th, with appropriate ceremony. It is said to be the finest of its kind in existence.

THE ELECTION OF DIRECT REPRESENTATIVES.

THE following are the numbers of votes polled by the respective candidates last week at the election to the General Council.

Number of voting papers sent out in England ...	18,074
Number of voting papers returned from England	13,381
Wheelhouse, Claudius Galen, F.R.C.S. Eng., Leeds ...	8548
Foster, Sir Balthazar Walter, F.R.C.P.L., Birmingham	7718
Glover, James Grey, M.D. Edin., London	6614
Richardson, Benjamin Ward, M.D. St. And., London ...	4704
Dolan, Thomas Michael, M.D. Durh., Halifax, Yorkshire	3063
James, Moses Prosser, M.D. St. And., London	1223
Morris, Edwin, M.D. St. And., Spalding	986
Balding, Daniel Barley, F.R.C.S. Eng., Royston	896
Taaffe, Rickard Patrick Burke, M.D. Lond., Brighton	878
Brown, George, M.R.C.S., L.S.A., London	865
Carpenter, Robert Henry Spencer, L.R.C.P.L., London	731
Bullock, Henry, F.R.C.S. Eng., Isleworth	463
O'Connor, Bernard, M.D. Q.U.I., London	320
Watts, Algernon Newbegin, M.R.C.S., Sharnbrook ...	214

In consequence of many of the voting papers having been carelessly filled in, a considerable number were invalid.

Result of Poll for Scotland.		*Result of Poll for Ireland.*	
Dr. Bruce	642	Dr. Kidd	911
Dr. Morton	596	Dr. Jacob	614
Dr. Sinclair	414	Mr. Laffan	195
		Dr. McMordie	161

DR. GLOVER'S ELECTION.

A MEETING of Dr. Glover's Executive Committee was held at the residence of Sir Andrew Clark, Bart., on Tuesday evening last. There were present, Dr. Stokes (chairman), Sir A. Clark, Dr. James Anderson, Dr. Glover, Mr. Shirley Murphy, Mr. Pearce Gould, Mr. Anderson Critchett, Mr. Lough, and Mr. Keele and Mr. Fraser Stokes (hon. secs.)

Dr. STOKES, in intimating formally the result of the election, congratulated both Dr. Glover and the committee on the event, as it gave Dr. Glover the important and honourable position for which he had been a candidate, and it brought to the committee the satisfaction of having secured the return of a representative who knew his duties as a member of Council, and who, he felt sure, would perform those duties ably and well.

Dr. GLOVER thanked his committee, each and everyone, for their kind exertions on his behalf. To them and to his many supporters throughout England and Wales he owed his success—a success which had been gained in a way and by means that would bear scrutiny. Some of his supporters did not agree with him upon all points, but he trusted that by honest thought, consideration, and independence, they would be able to reach conclusions both just and equal. The points in his election on which he thought they might be congratulated were, that the freedom of the profession had been rigidly respected, that he had frankly indicated his own opinions on difficult subjects, and that the election had been conducted on quiet and inexpensive lines.

It was unanimously resolved that no part of the expense of the election should fall on Dr. Glover, but that it should be borne by his committee, and it was arranged that subscriptions for this purpose should be sent to Mr. G. T. Keele, 81, St. Paul's-road, Highbury, by whom they will be acknowledged.

Dr. GLOVER moved a vote of thanks to the chairman of his committee, Dr. Stokes, and to the hon. secs., Mr. G. T. Keele, Dr. Reid, and Mr. Fraser Stokes. He said that it had been a peculiar gratification to him that these important offices had been filled by his near neighbours, and had it not been for the support he had received from practitioners in his own immediate neighbourhood he should not have consented to come forward for such a post.

The resolution was cordially seconded by Sir Andrew Clark, who referred to Dr. Stokes as an exemplary chairman, than whom he had never seen a better. The resolution was unanimously carried, and a similar one, thanking Sir Andrew Clark for the energetic assistance he had given throughout the election, brought the proceedings to a close.

WILLS OF MEDICAL MEN.

THE will of Charles Chadwick, M.D., late of Broadwater Down, Tunbridge Wells, Sussex, who died on Aug. 30th last at Buxton, was proved on Nov. 1st by Mr. John Stone Wigg, the Rev. John Watkins, and Charles Montagu Chadwick, physician, the son, the value of the personal estate amounting to upwards of £92,000. The testator bequeaths £500, besides some furniture and effects, to each of his unmarried daughters; and his plate is to be divided between his children. The residue of his real and personal estate he leaves in equal shares to, or upon trust for, his nine children; but the amounts settled upon his unmarried daughters, and the amount advanced to one of his sons, are to be taken into account in the division.

The will of Henry Jewell, M.D., formerly of Sidmouth, but late of Salcombe Regis, Devon, who died on Aug. 27th last, was proved at the Exeter district registry on Oct. 18th, by Captain Edward Hennale, R.N., and Mr. Henry Whitworth Andrew, the executors, the value of the personal estate amounting to upwards of £8000. The testator bequeaths £100, and his plate, books, pictures, household furniture, and effects, to his wife, Mrs. Kate Jewell; an annuity to his sister, and legacies to his executors. The residue of his real and personal estate he leaves upon trust for his wife for life or widowhood, and then for his grandson, Edward Jewell Whitting.

The will of Mr. Francis Falwasser, Surgeon-Major, Medical Staff Corps, late of the North Camp, Aldershot, Hants, who died on Feb. 4th last in India, was proved on Oct. 27th, by Colonel Francis Duncan, R.A., C.B., and Mr. Ernest Bateman Falwasser, the brother, the executors, the value of the personal estate amounting to upwards of £4000. The testator, after making some specific bequests to his brothers and sister, gives his furniture and effects to Mrs. Julia Alicia Madeline Murphy for life, and then for her three daughters. The residue of his property he leaves upon trust for Mrs. Murphy for life, then for the maintenance of her daughters under twenty-one, and ultimately for the daughters of his brother, the Rev. John Frederick Falwasser.

The will and two codicils of Robert Fowler, M.D., late of 145, Bishopsgate-street Without, and 12, Old Burlington-street, who died on Aug. 7th last at Hampstead-heath, were proved on Nov. 6th by Walter Fowler, B.M., F.R.C.S., the son, and Charles Jeken Elwin, the executors, the value of the personal estate exceeding £4000. The testator gives £100 and the lease of his residence in Old Burlington-street, with the furniture and effects, to his wife, Mrs. Judith Fowler, certain property in Shropshire to his said son, and other legacies. There are also some specific gifts of presentation plate to children. The residue of his real and personal estate he leaves to his three children, Walter, Harriet, and Margaret, in equal shares.

The will and codicil of Harvey Buchanan Holl, M.D., late

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of 1, Derby Villas, Cheltenham, who died in September last, were proved on Oct. 11th by Mr. William Haworth Holl, the brother, and John Lawrance Longstaffe, the executors, the value of the personal estate exceeding £3700. The testator bequeaths the silver inkstand presented to him by the governors of York Hospital to his said brother. The remainder of the provisions of the will are in favour of his brother, and of Bennit Mason, Harvey Mason, and Annie Mason.

The will, with two codicils, of Walter Somerville, M.D., formerly of Greenfield, county Lanark, N.B., but late of Harrogate, who died on May 28th last, was proved on Oct. 26th by Mrs. Isabella Young Somerville, the widow, John McCasland McCulloch, and George Dalziel, three of the executors, the value of the personal estate in the United Kingdom amounting to over £2000. The testator gives an annuity of £60, to be subsequently increased to £1000, charged on his estate at Greenfield, to his wife; and the residue of his property equally among his children.

The will of Cosmo Gordon Logie, M.D., F.R.S.E., late of 47, Queensborough-terrace, Bayswater, who died on April 6th last, was proved on Oct. 11th by Mrs. Maria Logie, the widow and sole executrix, to whom he gives all his estate and effects.

The will and two codicils of George Miller, M.D, late of 6, Beaumont Villas, Spring-grove, Isleworth, who died on Aug. 31st last, were proved on Nov. 5th by William Hine Haycock, the sole executor. The testator, after making some bequests, leaves one-fourth of the ultimate residue of his property to his daughter Harriette Louisa, and three-fourths to his daughter Augusta Edwyna.

The following legacies have recently been left to hospitals and other medical charities:—Mr. Thomas Phillips Danson, of 54, Merton-road, Bootle, near Liverpool, £1000 to the Endowment Fund of the Bootle Borough Hospital, and £500 to the Liverpool Dispensaries.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Lambeth.—In the parish of Lambeth the birth and death rates for 1885 were 33·9 and 18·6 per 1000 respectively, the infant mortality under one year of age being at the rate of 131 per 1000 registered births. Amongst the zymotic diseases small-pox caused 85 deaths. As regards cases of this disease, it is stated that 509 came under notice, the districts in which it was most prevalent being Vauxhall and Stockwell. At Stockwell sixty-eight houses were invaded within half a mile of the Small-pox Hospital, the majority of the cases being, as in 1884, within the quarter-mile area. In 1884 Mr. Verdon brought forward some points which, in his opinion, militated against the theory of the aerial dissemination of the small-pox infection, and one of these was the fact that no cases had occurred in the forty houses situated upon the west side of Hargwyne-street, near to the hospital buildings. In 1885, however, the houses no longer enjoyed a similar immunity, and Mr. Verdon states distinctly that the districts in which the Asylums Board Hospitals are situated throughout the metropolis have in every epidemic suffered severely; there has, indeed, been an exceptional prevalence of small-pox in their vicinity. He, however, still believes that aerial dissemination is not the principal factor, and one of the points on which he relies as to this is the alleged comparative escape of children before vaccination. Thus he points out that 427 children were born within the half-mile area in the first six months of 1885, and he takes it for granted that as a rule such children would remain unvaccinated for about three months. From January 1st to July 28th, 293 cases of small-pox were admitted into the hospital, and no cases occurred amongst the children referred to except in two instances, where, it is alleged, the origin of the infection could be traced. Assuming that Dr. Verdon is correct, and that these two which he heard of were really all that did take place in a district where there is no compulsory notification, all he proves is that, whatever the means by which small-pox spreads, it did not, for some reason or other, operate to a large extent on these infants. But the argument is no stronger against aerial communication than against any other method of infection—as for example, sewer infection, which he seems, on insufficient grounds we think, to regard as a principal cause of small-pox spread. The percentage of deaths amongst the vaccinated was 6·7; amongst the unvaccinated it was 78·5.

St. Luke's.—Dr. Yarrow devotes a large portion of his report to the consideration of statistics, the interest of which is mainly local. The corrected death-rate for 1885 was 22·7 per 1000. Measles and scarlet fever were more than usually prevalent. The number of cases of "fever" appearing on the Poor-law officer's books are stated to have been 7 only, and this is compared with 766 in 1865. The precise meaning of this is not clear. It can hardly mean that only 7 persons in receipt of relief had fever in 1885, and if other cases are now removed to the Asylums Board Hospitals, and are hence eliminated from the Poor-law medical officer's books, the comparison does not hold good. A large amount of sanitary work is steadily in progress, regulations have been decided on as to houses let in lodgings, and a considerable portion of land is occupied with artisans' and labourers' dwellings.

Bethnal-green.—In an extensive account of the conditions of this district, in so far as they point to the need of nuisance inspection, Dr. Bate states that in the whole of the metropolis there are 103 nuisance inspectors, this giving a rough average of one inspector to 40,000 inhabitants. The variations are, however, great. Thus, Greenwich and St. Olave's each have only one inspector, the population of the first being 148,545, and that of the latter 10,000 only. In Bethnal-green there is one inspector to every 65,000 inhabitants, and difficulties have arisen as to their relationship to the medical officer of health. The death-rate for Bethnal-green during 1885 was 22·08 per 1000, and the birth-rate 39·96. In the matter of making arrangements with the Metropolitan Asylums Board for the isolation of non-paupers, the vestry decided that no action was necessary, because the persons removed from their district to hospital either were, or by reason of their illness became, paupers. We imagine that many sanitary authorities in London take the view that, as the metropolis has an isolation authority, there is no need for other bodies to take up the work. The new Washington Lyons disinfecting apparatus is giving every satisfaction; before it did so it required to be properly covered with some non-conducting material, in order to prevent the spoiling of certain articles by means of the condensed water from the steam.

Bath Rural District.—Dr. Harper's annual reports on this district generally show a steady amount of sanitary work, and that for 1885 forms no exception. The death-rate was higher than usual—namely, 17·0 per 1000, but the increase was due to deaths amongst elderly people in the suburbs of Bath. Tiverton is evidently a portion of the district which needs substantial sanitary improvements. This last report refers to it again as having been the scene of nine fatal and thirteen non-fatal attacks of diphtheria, and it is stated that the people lived in damp stuffy dwellings, amongst a variety of insanitary conditions. We learn that sewer ventilation and refuse removal have been improved; the improvement has come none too soon, and we hope it may continue. During the summer months the authorities themselves undertook the removal of refuse in the populous parts of Tiverton and Weston, but it appears to have been of a restricted character. The removal ought to have been general, and where it is professedly undertaken by the authority, occupiers should test the matter by resort to measures indicated under Sect. 43 of the Public Health Act. But it would be still better if, in all the more populous parishes, scavenging were always carried out by the authority, and not imposed on occupiers, who have no means of properly carrying it out. When diphtheria was prevalent, considerable precautions were resorted to, and we are glad to find that the isolation hospital was useful both for this disease and other infectious fevers.

Birmingham.—During the third quarter of the present year diarrhœa was accountable for 543 deaths, or 86 per cent. of the gross number in the group of zymotic diseases, this rate being somewhat lower than that for 1884, but nearly double that for the summer of last year. During 1885, August and September were exceptionally cool, and the contrast which the two years exhibit leads Dr. Alfred Hill to remind his

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readers that he has frequently dealt upon the obvious connexion between summer diarrhœa and a high temperature. He also records the mean temperatures of the third quarters of 1884, 1885, and 1886 as 61·4°, 58·0°, and 60·1° respectively, and shows that the corresponding death-rates from diarrhœa per 1000 persons—namely, 5·3, 2·2, and 5·0—again bear out this view. With regard to the deaths from this cause during the past quarter, they were nearly all in children under two years of age, no less than 76 per cent. being under one year of age, and those under five years amounting to 96 per cent. of the total, leaving only a percentage of 4 to be distributed among the remainder of the population.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 5551 births and 3529 deaths were registered during the week ending Nov. 27th. The annual death-rate in these towns, which had been 18·2, 19·5, and 19·1 per 1000 in the preceding three weeks, rose last week to 20·2. During the first eight weeks of the current quarter the death-rate in these towns averaged 19·1 per 1000, and was 2·3 below the mean rate in the corresponding periods of the ten years 1876–85. The lowest rates in these towns last week were 13·4 in Brighton, 13·7 in Birkenhead, 15·3 in Derby, and 15·6 in Sunderland. The rates in the other towns ranged upwards to 26·2 in Bristol, 26·7 in Wolverhampton, 26·7 in Halifax, and 29·5 in Norwich. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had been 411 and 402 in the preceding two weeks, further declined last week to 400; they included 144 from measles, 75 from scarlet fever, 55 from "fever" (principally enteric), 54 from whooping-cough, 37 from diphtheria, 35 from diarrhœa, and not one from small-pox. No death from any of these zymotic diseases was registered last week in Brighton or in Birkenhead; whereas they caused the highest death-rates in Preston, Huddersfield, Wolverhampton, and Leeds. The greatest mortality from measles occurred in Halifax, Leeds, Huddersfield, and Wolverhampton; from scarlet fever, in Liverpool, Bradford, Sheffield, and Blackburn; from whooping-cough, in Leeds and Norwich; and from "fever," in Manchester, Norwich, Plymouth, and Bolton. The 37 deaths from diphtheria in the twenty-eight towns included 24 in London, 2 in Birmingham, 2 in Liverpool, 2 in Halifax, and 2 in Newcastle-upon-Tyne. Small-pox caused no death in London and its outer ring, or in any of the twenty-seven large provincial towns. Only 2 cases of small-pox were under treatment on Saturday last in the metropolitan hospitals receiving cases of this disease. The deaths referred to diseases of the respiratory organs in London, which had been 293, 321, and 346 in the preceding three weeks, further rose last week to 413, but were 61 below the corrected average. The causes of 83, or 2·3 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Bradford, Sunderland, and in five other smaller towns. The largest proportions of uncertified deaths were registered in Blackburn, Oldham, and Sheffield.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 20·1 and 21·4 per 1000 in the preceding two weeks, was again 21·4 in the week ending Nov. 27th; this rate was 1·2 above the mean rate during the same week in the twenty-eight large English towns. The rates in the Scotch towns last week ranged from 16·3 and 16·4 in Leith and Perth, to 23·9 in Aberdeen and 25·3 in Glasgow. The 528 deaths in the eight towns last week were within one of the number in the previous week, and included 17 which were referred to whooping-cough, 17 to diarrhœa, 14 to scarlet fever, 8 to "fever" (typhus, enteric, or simple), 4 to diphtheria, 4 to measles, and not one to small-pox; in all, 64 deaths resulted from these principal zymotic diseases, showing a further decline from 81 and 77 returned in the preceding two weeks. These 64 deaths were equal to an annual rate of 2·6 per 1000, which was 0·3 above the mean rate from the same diseases in the twenty-eight English towns. The fatal cases of whooping-cough, which had been 17 and 19 in the previous two weeks, declined again last week to 17, of which 13 occurred in Glasgow and 2 in Aberdeen. The deaths attributed to diarrhœa, which had declined in the previous five weeks from 46 to 21, further fell last week to 19, and included 6 in Glasgow, 5 in Dundee, and 3 in Edinburgh. The deaths from scarlet fever, which had been 16, 23, and 24 in the preceding three weeks, fell last week to 14, of which 9 occurred in Glasgow, 2 in Dundee, and 2 in Aberdeen. The 8 deaths referred to "fever," of which 4 were returned in Glasgow, exceeded the number returned in the previous week by 2. The 4 fatal cases of diphtheria and measles scarcely differed from the numbers in the previous week; 3 deaths from each of these two diseases occurred in Glasgow. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had increased in the preceding five weeks from 79 to 137, declined again last week to 125, and were no fewer than 46 below the number in the corresponding week of last year. The causes of 71, or nearly 14 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been 26·2, 23·6, and 24·5 per 1000 in the preceding three weeks, rose again to 25·3 in the week ending Nov. 27th. During the first eight weeks of the current quarter the death-rate in the city averaged 23·5; the mean rate during the same period was 17·5 in London and 18·9 in Edinburgh. The 171 deaths in Dublin last week showed an increase of 5 upon the numbers in the previous two weeks, and included 7 which were referred to scarlet fever, 7 to "fever," (typhus, enteric, or simple), 4 to diarrhœa, 3 to whooping-cough, 1 to diphtheria, and not one either to small-pox or measles. Thus 22 deaths resulted from these principal zymotic diseases, against 32, 23, and 20 in the previous three weeks; they were equal to an annual rate of 3·3 per 1000, the rates from the same diseases last week being but 1·8 in London and 0·8 in Edinburgh. The fatal cases of scarlet fever, which had been 15 and 10 in the previous two weeks, further declined last week to 7. The 7 deaths referred to "fever," on the other hand, exceeded the numbers returned in recent weeks; while those from diarrhœa and whooping-cough scarcely differed from those in recent weeks. Two inquest cases and one death from violence were registered; and 57, or a third, of the deaths occurred in public institutions. The deaths both of infants and of elderly persons showed a considerable increase upon the numbers in the previous week. The causes of 18, or more than 10 per cent., of the deaths registered during the week were not certified.

SANITARY CONDITION OF JAMAICA.

The report of the Registrar-General of Jamaica upon the vital statistics and health of that island in the year 1884-85, signifying the year ending 30th September, 1885, has recently come to hand. We must once more enter a protest against the obvious depreciation in the value of the report from the fact that it does not deal with the complete year ending December, and thus afford comparison with similar statistical reports relating to others of the West Indian Islands, and to other British colonies. The estimated mean population of Jamaica in the year 1884-5 is 596,383; it is pointed out, however, that emigration to the Isthmus of Panama during the last two or three years, for the purpose of the Canal, has resulted in a net loss to the population of more than 20,000 persons, almost exclusively male adults, and equal to one-fifth of the male population at the reproductive ages. The effect of this depletion of the population upon its marriage, birth, and death rates must be considerable. The recorded marriage-rate in Jamaica is always low, and was in 1884-5 equal to 10·0 persons married per 1000 of the population, corresponding with the rate in the preceding year. The birth-rate was 37·8 per 1000, and it is worthy of note, as an exceptional fact, that the births of females exceeded those of males. Bearing in mind the large proportion of male adults temporarily absent, the birth-rate is very high. In connexion with the low marriage-rate, the high rate of illegitimacy is very noticeable. In the year under notice the proportion of illegitimate births was equal to 5·9 per cent. of the total births, and differed but slightly from the mean proportion in the preceding six years. The death-rate in the island was equal to 22·6 per 1000, and was almost identical with the rate in the preceding year. The proportion of infant mortality, bearing in

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mind both the climate and the excessively large proportion of illegitimacy, must be considered low. The deaths under one year of age were equal to 159 per 1000 of the recorded births, a rate which compares favourably with that recorded in most European countries. In dealing with the statistics of the causes of death we are faced with the fact that in but 2449 of the 13,500, or only 18·1 per cent., of the deaths recorded in the year had there been any medical attendance during the last illness, and therefore only in this proportion of cases was there any professional evidence of the cause of death. Under these circumstances, the statistics of causes of death are of doubtful value, and doubt is suggested whether the recorded deaths can even approximately represent the actual number of deaths that occur in the island. It will suffice to note that 4098 of the 13,500 deaths in the year were classed to zymotic diseases, including 2139 from undistinguished forms of fever, and 295 from "fever" distinguished as enteric, simple continued, typhus, cerebro-spinal, intermittent, remittent, yellow, or malarial. The deaths referred to measles, scarlet fever, diphtheria, and whooping-cough were comparatively few, but it is quite possible that fatal cases of these diseases may, under the circumstances, have been returned under the heading "fever undistinguished." It is sufficiently noteworthy that while the death-rate from all causes in Jamaica is said not to exceed 22·6 per 1000, the rate from zymotic diseases appears to have been equal to 6·9 per 1000, or nearly a third of the entire mortality. The more than doubt that exists of the value of these statistics of causes of death in Jamaica does not encourage further reference to the rates of mortality from different diseases in the island.

Correspondence.

"Audi alteram partem."

THE MEDICAL COUNCIL AND MR. W. H. H. DAY.

To the Editor of THE LANCET.

SIR,—As an article on, and a report of, the proceedings of the General Medical Council as regards the case of myself and Mr. Davenport appeared in your issue of the 20th inst., which is calculated to leave an injurious impression on the minds of your readers as to my conduct, and to misrepresent me to the profession, I must request your insertion of the following statement, which I have tabulated for the sake of brevity:—

1. Although the practice in Westminster is mine in law, and consequently I am entitled to the profits thereof, I have never touched a farthing of them, as my connexion with that practice has been one of principle and not of profit.

2. I deprecate most strongly the singling out from the large army of "sine diploma" men throughout the country for the purpose of prosecution—without previous warning—of a man who has passed the Final Examination of the Royal College of Surgeons of England in *Surgery*.

3. I hold that this act, as well as being contrary to the spirit of fair-play supposed to animate most Englishmen, was calculated to lower the prestige of the College as an examining body before the public.

4. I hold that it is little short of a public scandal that a post-mortem examination should be made and an inquest held on the body of a person who had been seen by two qualified men and a student who had passed the College Final in Medicine and Surgery two days before his death.

5. The late Drs. Moxon and Mahomed held the same opinion as myself as to the impropriety of this prosecution: the former having spent some time at the police-court for the purpose of testifying in the defendant's favour; and the latter having written a letter, which is now in my possession, in which he deplores the fact of Mr. Davenport having been made the subject of a prosecution, says he is not the sort of person against whom the law against unqualified practice was intended to be set in motion, and finally speaks of him as being *in fact*, if not *in law*, "*a well-trained surgeon or medical man, in the ordinary sense of the word.*"

6. I have forwarded to the Branch Council for England, to whom my case was referred, a full explanation of my conduct, in which I have pointed out to them that as the "unqualified person" in question has passed the same examination on the strength of which in 1878 I received my diploma, and they admitted me on to the Register, he can hardly be considered as "unqualified" within the meaning of their resolution of April, 1883.

7. Under that resolution the Council have no power against me, as I have not practised in Westminster "for gain."

8. I am not attempting to argue that Mr. Davenport is a legally qualified man, but I do claim that he has not been treated with the courtesy due to a full-curriculum student who has passed four-fifths of his Final, but as though he were some dispenser or herbalist who, presuming on his knowledge of drugs, had attempted to act as attendant on the sick.

9. Such being the opinion I formed on the justice of this prosecution, I have loyally endeavoured, at great trouble and expense to myself, so to identify myself with the Westminster practice that the conduct of it should not be open to the censure of anyone. This I did in defence of a friend against whom I considered a great injustice had been done in, i.e., expecting him to qualify immediately.

10. It was the account of the prosecution in the daily papers which brought me forward in defence of my friend, and under no other circumstances should I have dreamt of allowing him to act as my assistant under circumstances which might perhaps be open to misconstruction.

11. While not arguing that I have acted wisely in this affair, or attempting to defend my action in the abstract, I at the same time deny that I have done anything to justify the use of such words as "criminal," "misconduct," and "Public Prosecutor," in connexion with my name, and I am quite willing to leave the profession to form their own opinion on my conduct.

12. As regards my being represented as the proprietor of a dispensary, no one can deplore more than I do the system under which a medical man is expected to supply "advice and medicine" for about half the sum that a druggist would charge for the medicine alone.

13. I hope the publication of this will lead to the expression of some opinions on this most unique case.

I remain, Sir, your obedient servant,

WALTER H. H. DAY, M.B. Trin. Coll. Toronto, M.R.C.S., L.R.C.P. Edin.

East Dulwich, S.E., Nov. 29th.

*** The terms to which Mr. Day takes exception were not used by us, nor did we quote or allude to them in our editorial remarks. We readily accept Mr. Day's explanations of the motives which weighed with him in permitting his name to be used in connexion with the dispensary at Westminster. They are of a kindly nature, and dissociated from motives of "gain." We cannot accept all his argument about the legal or moral position of Mr. Davenport, which, again, is not at present under consideration. It is obvious that a man must either be qualified or unqualified; the door of the profession must either be "open or shut." However near being qualified, if not legally so, he must be treated as unqualified.—ED. L.

THE APOTHECARIES' SOCIETY AND THE CONJOINT SCHEME.

To the Editor of THE LANCET.

SIR,—I am delighted with the letter of "Ye Humble Apothecarie" in your last number, and am very pleased to believe that in the far past the apothecary was of higher status than the surgeon. My question, however, is not answered by him, and I venture to repeat it: "Is not an L.S.A., who has taken no other diploma, *at the present time* in every practical sense a practitioner of an inferior grade?" I have no doubt whatever that the reply must be Yes, and that at the present time every L.S.A. who can obtain an additional qualification does so.

I would further point out that the Apothecaries' Society, by passing gentlemen on a minimum curriculum and a minimum examination, performs a very useful duty, and that should it depart from its present function, quasi-physicians and surgeons from over the Border, with innumerable letters appended to their names, will flock in greater numbers into our large towns, and take the places now well filled by "apothecaries." The typical practitioner of the

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past generation was an M.R.C.S. Eng. and L.S.A; that of the near future will be the M.R.C.S. Eng. and L.R.C.P. Lond.; but we must have an inferior grade if unqualified assistants and prescribing chemists are not to take away a large slice of our bread-and-butter. Why should not this inferior grade be able to obtain an English diploma? If the Conjoint Examining Board in England admit the Apothecaries' Society, the latter can only ask for an unequal authority and the nomination of two or three examiners in materia medica. Do the promoters of the present agitation really desire for it such an impotent position—one which for all practical purposes means its extinction?

I am, Sir, yours obediently,

Dec. 1st, 1886. L.S.A. (with other qualifications).

MEDICAL ATTENDANCE ON THE POOR.

To the Editor of THE LANCET.

SIR,—Another attempt is about to be made by the Metropolitan Medical Provident Association to attract public attention to the subject of the medical treatment of the working classes in London—a subject whose vast importance to the profession it is difficult to exaggerate. Sir Spencer Wells and I have signed a circular of invitation to a meeting for this purpose on Tuesday, Dec. 7th, at 4 P.M., at the rooms of the Society of Arts, in John-street, Adelphi, at which the attendance of all medical men interested in this question will be welcomed. Perhaps you will allow me to explain that this meeting is intended to be one for genuine consultation. Our object is not to recommend the scheme of provident dispensaries, which is now being worked by the above-mentioned Association, but to ascertain if possible if that or any other scheme will command sufficient support from the public and the profession to place the medical attendance on the poor upon a footing more satisfactory to reason and justice. The provident dispensaries have been greatly discredited by the prevalence of "bogus" dispensaries which have assumed the title of "provident," while they are really cheap doctor's shops, and are used as a means of evading the regulations of the Colleges as to advertising, and they no doubt, like other human institutions, have their own intrinsic drawbacks. We have only supported them hitherto as on the whole the best practical step known to us towards the solution of the problem. But we invite the attendance of the opponents as much as that of the friends of that scheme, provided they come prepared to co-operate with us in our real object—which is, I repeat, not to establish provident dispensaries, but to devise some means of relieving the medical profession and the poor from the evils of the present system. May I add that such a reform can only be carried out by the exertions of the medical profession themselves. We have found plenty of persons ready to criticise our proposals, but few hitherto who have given any practical suggestions, and fewer who would spend their own time and labour on the attempt. All medical men practising among the poor complain of the increasing difficulty of making a living, due chiefly to the competition of gratuitous institutions, and of the private "dispensaries" and "sick clubs." We invite them now to join us in our earnest endeavour to introduce a better state of things.

I am, Sir, your obedient servant,

Great Cumberland-place, Nov. 29th, 1886. T. HOLMES.

WORKHOUSE INFIRMARIES AND CLINICAL STUDY.

To the Editor of THE LANCET.

SIR,—With reference to your comment on the very able memorandum of Mr. Vallance, for the improvement of the medical administration of the Whitechapel Infirmary, and the advantages that would accrue from a modification of existing arrangements, I can thoroughly endorse a great deal that has fallen from the pen of that gentleman; but the question is a very vexed one, and one that requires mature consideration, on account of the peculiar and dual control in the administration of these institutions. As regards the visiting staff and the resident medical officer, you state that he (the resident medical officer) would be placed to the said visiting staff as he is to the Board of Guardians. Such would be very anomalous, as how would the visiting staff be placed as regards the guardians—would they be under the control of the Board? If not, how about expenditure for drugs, stimulants, instruments, &c.? Such would be beset with difficulties when the resident medical officer presented his estimate for the consideration of the Board. Touching the visiting staff, you say, Appoint a visiting physician and surgeon. How about the special diseases—viz., eye, women, &c.: would you have specialists for them also? I cannot but think there is not sufficient material for a visiting physician, much less a visiting surgeon. A great part of the patients who seek admission to the infirmaries are people suffering from the dire effects of an ill-spent life—viz, the three D's (dirt, destitution, and drink). It is perfectly wonderful the effect of ablution, H.D., and a regulated diet; in fact, dietetics play a most important part in the treatment. Such cases, I maintain, are not cases for a visiting physician. The other medical cases, as well as surgical, are not such that the medical superintendent, along with his assistant medical officer, could not manage under existing circumstances, with credit to themselves and the profession, as well as to the patient. The cases that do require any special treatment, whether medical or surgical, can always be relieved after due consultation of the medical superintendent and his assistant that such a case requires the attention of a hospital physician or surgeon. It must be borne in mind that the medical superintendents and the assistant medical officers at the present time are men who take a great interest in their work, and keep up the work of the day. Concerning the nervous diseases, the majority of the cases are usually sent from hospitals as incurable (here again diet plays a most important part); in fact, if the institutions went under the designation of "hospitals for the incurable and infirm poor," it would be more appropriate than their present appellation of "union infirmaries." If any cases are obscure, the special physicians and surgeons are only too willing to give their aid. As to students, there is really not sufficient to induce a diligent student to come, as he can always find sufficient work in his hospital—that is, if he be a student of medicine and not a medical student; if they do not attend our special hospitals, much more would they shun our infirmaries. Touching the instruction of nurses, could not the medical superintendent, in conjunction with his assistant, give them all they require? Besides, the nursing staff are not solely confined to attendance on the sick; they have other duties to perform which do not fall to the lot of a hospital nurse—viz., serve dinners, look after clothing, &c., which absorb a great portion of their time. The whole thing is replete with difficulties. The course, I think, most feasible to pursue would be to have a consulting physician and surgeon, and after the medical superintendent and the assistant medical officer have consulted concerning the case, and have come to the conclusion that it is a fit case for a consultant, let them send for him. I may add, in conclusion, that great credit is due to Mr. Vallance for the lucid and able manner in which he has brought forward his scheme; the Whitechapel Board are to be congratulated on such a clever and efficient officer. I am, Sir, yours &c.,

City of London Infirmary, E., Nov. 1886. W. GEM.

THE FELLOWS AND MEMBERS OF THE ROYAL COLLEGE OF SURGEONS.

To the Editor of THE LANCET.

SIR,—Will you allow me to suggest a scheme by which most of the differences between the Fellows and Members of the College of Surgeons might be set at rest. I do not recollect to have seen such a proposal before, but it may possibly have escaped me. It is that the Fellows should be entitled to two votes each on all College matters, and the Members to one. I would make all offices and honours tenable by either, and all should be subject to election. A certain number of the members of Council should be elected periodically, and there is little doubt but that Fellows would generally be chosen; or, if not, that old and respected Members, who should be equally welcome to the Board, would be selected instead. Of course the inequality of voting power would cease if a Member were elected.

With regard to the College of Physicians, it seems to me that a great error has been committed by the Council. There are Fellows and Members here also who appear to me (*pace*

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Mr. Erichsen) to correspond in degree to the same classes in the other College; and as in the latter all are surgeons, so in the former all are physicians. But those who possess merely the licence to practise are surely not physicians, though they call themselves so; and if such title is assumed by the consent of the two higher classes, it is quite time the matter is authoritatively looked to. There is not a corresponding body amongst surgeons at all to this class.

With regard to the title of "Doctor" I cannot see any just or sufficient reason why its value should be depreciated by allowing its assumption by any who have not passed some examination other than that for surgeon or general practitioner, though I would be quite willing to grant it to any who subjected themselves to some examination of this sort, having first qualified by a surgical and medical examination as at present.

The claim of the Apothecaries' Society to a share in the power of examining for an entrance into the profession is as good, or better, than that of either of the Colleges. For many years it was far more dreaded than the examination of the College of Surgeons, and that of the College of Physicians is much younger. Long may it still exist and flourish.

I am, Sir, yours truly,

Nov. 1886. L.S.A., M.D., F.R.C.S.

THE CHARTER OF CHARLES I.

To the Editor of THE LANCET.

SIR,—There are several legal points connected with the present position of affairs and with the existing Charters on which it is desirable that the Council, if they have not already done so, should take legal opinion, and Mr. Erichsen would render a real service to the College by urging upon the Council that the opinion of the solicitor to the College should be published on the following points:—

1. Whether the right to hold lands and houses to the value of £2000 a year is given by the Charters to the Members of the College or to the Council?

2. Whether the Council have not largely exceeded the limit of £2000 a year?

3. Whether the Council have thereby incurred any penalties under any Statute of Mortmain, and if so what; and whether such penalty falls on the Council or on the College?

4. Whether there is any authority in the Charters for the Council holding lands or houses conjointly with the College of Physicians?

I trust Mr. Erichsen will not dissent from the view that this is a reasonable request.

I am, Sir, yours faithfully,

November, 1886. H. NELSON HARDY.

THE M.CH. DEGREE.

To the Editor of THE LANCET.

SIR,—When the attention of the medical profession is being directed towards reform and removing anomalies, it seems a fitting occasion to direct attention to a distinct grievance which a large number of the profession suffer from, and to agitate for its removal. It is a palpable injustice to the holders of the degree of Master in Surgery that, in the case of a large number of hospitals and infirmaries, that degree does not qualify them to apply for the post of hon. surgeon.

A representation from the Medical Council to the governing boards of the hospitals in question would no doubt have the effect of inducing them to alter a superannuated rule not consonant with the times, and which is a plain injustice to a large number of well-educated and competent surgeons. In the majority of cases these rules were framed at a time when the degree in question was either non-existent or but little known. Such is not now the case, and it is time that the rules were changed to meet the altered circumstances. A representation such as I have suggested would doubtless be successful where the personal efforts of the comparatively small number of the holders of the degree would be inadequate.

I am, Sir, your obedient servant,

Nov. 1886. M.CH.

LONDON SEWAGE.

To the Editor of THE LANCET.

SIR,—Advertisements are now being circulated seeking tenders for the construction of *additional* tank room at Barking, in order that Mr. Dibden may have greater space for his chemical experiments, which practical men regard as worthless in relation to the ultimate solution of the great sewage question.

The cost of the additional works required at the present outfalls, according to the joint report of the engineer and chemist of the Metropolitan Board, was £1,140,000, involving a charge on the ratepayers of £34,000 a year. Yet such is the rapid growth of population in the metropolis, particularly in the east, that it is stated on good authority that 65,000 persons are now being added yearly to a population already numbering five millions, so that it is quite certain that both Barking and Crossness will in a few years be densely surrounded with population and dwellings. Let me point out that this expenditure of £1,140,000, great as it is, cannot prevent the condemnation of the present outfalls in a very few years. It appears, therefore, to be a monstrous waste of good money sanctioned by certain members of the Board, who resolutely refuse to consider anything else, although Messrs. Jones and Denton's Canvey Island scheme has much to recommend it, and although they offer to place all their plans and details before a competent independent engineer, when they say they can prove that their proposal, if adopted, would save the metropolis one-half the outlay resulting from chemical treatment.—Yours faithfully,

Nov. 1886. OBSERVER.

"THE LIABILITY OF FRIENDLY SOCIETIES FOR EXTRA MEDICAL ASSISTANCE."

To the Editor of THE LANCET.

SIR,—I find on page 1044 of THE LANCET for Nov. 27th, 1886, a paragraph under the above heading, and as the information contained in the paragraph is *untrue* and calculated to damage the reputation of the Nottingham Friendly Societies' Medical Institution, I hope you will contradict the report in your next issue. 1. The action in the County Court was *not* taken by Dr. Collins against the Friendly Societies' Medical Institution, but against the patient himself. 2. Dr. Collins was *not* an officer of the Nottingham Friendly Societies' Medical Institution. 3. The Nottingham Friendly Societies' Medical Institution had two *doubly qualified* medical officers engaged on the staff at that time, the second gentleman (Dr. Rodgers) being fully competent to perform the operation. 4. Whenever the Nottingham Friendly Societies' Medical Institution has engaged the services of medical men the Committee has paid them punctually and liberally.—I am Sir, yours respectfully,

Nottingham, Nov. 28th, 1886. J. LEE, Secretary.

LIVERPOOL.

(*From our own Correspondent.*)

THE MAYOR AND THE ROYAL SOUTHERN HOSPITAL.

FOLLOWING the annual custom of more than forty years, the newly elected mayor, Mr. James Poole, attended the morning service at St. Barnabas' Church on the 21st inst. (the second Sunday after his election), when a sermon was preached by Archdeacon Gore, and a collection was made on behalf of the funds of the hospital. The collection realised £101. After the service the Mayor visited the hospital, which is within a short distance of St. Barnabas, accompanied by some of the medical staff, and the aldermen and city councillors, who had attended service.

HOSPITAL FOR INFECTIOUS DISEASES.

A correspondence has taken place between the Town Clerk and the Local Government Board in regard to the erection of a hospital for infectious diseases in Grafton-street. Subject to some slight alteration in the plans as to the position of the ambulance shed at the proposed hospital,

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the Local Government Board has given its sanction to the borrowing of £15,000 by the Corporation for the erection of the hospital on the Grafton-street site.

CORONERS' INQUESTS IN LIVERPOOL DURING THE YEAR 1885-86.

The annual report of the Head Constable of Liverpool gives, amongst other interesting details, a table of the inquests held before the city coroner from Sept. 30th, 1885, to Sept. 29th, 1886. The total number was 615, in addition to which there were 695 other cases of death reported to the coroner by the police and others, thus making a total of 1310 deaths investigated by the coroner during the year. As might have been expected, the greater proportion of inquests were held on the bodies of males, the number of these being 376, and that of females 239. Among the causes of death indicated in the verdicts there were 60 deaths due to "natural causes," 5 from "want, cold, and exposure," 5 from "disease aggravated by neglect," 49 from "excessive drinking," 57 "found dead," 46 from "injuries, cause unknown," 41 from "other causes," 33 from "suicide," 4 from "manslaughter," and 5 from "murder."

A YEAR'S ACCIDENTS IN LIVERPOOL.

Another table gives the number of accidents in Liverpool during the same period, which reached a total of 2137. Of these, 411 persons were run over by carts, cars, &c., the accidents being fatal in 17 cases. There were 383 cases of falling into docks, canals, &c., of which 22 only were fatal, showing the promptitude with which lives are saved by the police and bystanders. There were 29 cases of burning, of which 3 were fatal. Firearms caused 5 accidents, of which 1 was fatal. There were, as might have been expected, many accidents resulting in injuries in dock works, on dock quays, and on board vessels in docks, the numbers being respectively 5, 122, and 224; of these only 7 ended fatally.

PROPOSED NEW MORTUARY.

Allusion has been made in previous letters to the dead-house situated at the Prince's Dock, near to the principal landing-places of the River Mersey, and in a position, central and otherwise, convenient for its purpose. But the structure is in every respect unfit even for the bare purpose of affording shelter for the dead bodies deposited in it, and still more so for the necropsies, which frequently have to be held in it under conditions involving the greatest discomfort to the medical examiners. It is satisfactory therefore to say that there is now some prospect of a new mortuary being erected, with every reasonable modern improvement.

Liverpool, Nov. 30th.

MANCHESTER.

(From our own Correspondent.)

THE HOSPITALS.

IT was recently stated in these columns that the Royal Infirmary had not lately received any very large benefaction. Since then it has, however, received under the will of a late alderman no less a sum than £10,000. In acknowledging the munificence of this bequest, the chairman of the Board, on Monday last expressed a hope that the public would not imagine that the infirmary was thus in any way less needful of support, and stated that the banking account was overdrawn to the extent of more than £25,000. Amongst the other hospitals that have benefited under Mr. Rose's will are the Salford Royal and St. Mary's. To the latter is bequeathed £2000, which will be very acceptable in view of the present efforts to raise money for the reconstruction or rebuilding of the hospital. The bazaar lately organised on behalf of this fund by the ladies employed on the staff of the Manchester Post-office realised nearly £400. This bazaar is believed to be the first in the kingdom got up and managed entirely by the *employées* of the postal service. The Salford Hospital received £5000 under the same will, and, seeing that £11,000 has already been paid on account of the extensions now going on, will prove very acceptable. At the annual meeting held on Nov. 17th it was stated that the annual expenditure had been £4120, against an income of £4429, leaving a balance of £300, a rather unusual thing in these days of hospital financial difficulties. It is hoped that the new buildings will be ready for use early in the coming year.

SCARLET FEVER.

The epidemic of scarlet fever shows at present but little sign of abatement, and it is fortunate that no other infectious disease is prevalent at the same time, as the hospital accommodation available for these diseases is now almost fully utilised. At a late meeting of the Manchester Board of Guardians, the Local Government Board inspector alluded to the occurrence of some cases of that disease amongst the children in the Swinton Schools belonging to the guardians, and criticised adversely the present arrangement for isolation, &c., of patients suffering from any infectious disease there.

LECTURES.

The Manchester and Salford Sanitary Association commenced their annual series of lectures last week, when the first of the series was delivered by Dr. Ransome, on some "Preventable Causes of Disease." The meeting was presided over by Mr. Councillor Pingstone, and it is an encouraging sign of the times to note how much more interest has of late been taken by many of our city councillors in the spread of sanitary knowledge amongst the masses of the people. The Combe lectures on Digestion, delivered by Professor Stirling at Owens College during the present session, have been very successful, and attended by large audiences. A hope has been expressed that in the future some arrangements may be made by which these shall be open to others beside students of the College.

THE MEDICAL SOCIETY.

A meeting of considerable interest has just been held at the College, several uncommon surgical cases being brought forward. A case of cholecystotomy was shown by Mr. Jones, and a patient on whom supra-pubic lithotomy had been performed was introduced by Dr. Cullingworth. Other cases were an ununited fracture of the clavicle in which the fragments had been wired, and a patient (shown by Mr. Southam) in whom the upper end of the humerus had been removed for a malignant growth. A paper on Summer Diarrhœa, with special reference to its possible bacterial origin, was read by Dr. H. Tomkins, who during the past summer had been studying this disease in Leicester, than which no town in England affords more ample opportunity for the work. This paper showed that in those parts of the town specially affected the air was far more abundantly loaded with germs than in other districts. Cultivations of microbes had also been made from various organs of the bodies of patients dead from diarrhœa.

The authorities have lately been successful in the Queen's Bench in reducing the rateable value of the Owen's College buildings from £3285 to £1083.

Manchester, Dec. 1st.

NORTHERN COUNTIES NOTES.

(From our own Correspondent.)

BONE-SETTING.

AN inquest was held last week on the body of a sailor from North Shields, aged fifty-eight years. It appeared from the evidence that the deceased, on Oct. 23rd, had, in throwing a rope, fell and dislocated his arm at the shoulder-joint. In the words of a witness, he had been since then "bothering on with a bone-setter," who at last told him he could do no more for him, leaving the arm still unreduced. On the 17th of this month he was taken to the Newcastle Infirmary, where efforts were made at reduction under chloroform. Dr. Arnison, the senior surgeon, deposed that on the conclusion of one of these attempts the armpit was seen to swell up and fill with blood, showing that some vessel had given way. He failed to find the bleeding vessel, but believed it to be deep behind the misplaced bone. The hæmorrhage was stopped by other measures. At night it broke out again, and he was sent for by the house-surgeon, when the wound was opened and a vessel secured. Dr. Arnison remained with the man until 1.30 A.M., when all bleeding had ceased. The next evening, however, it recommenced, but he was then too weak to have anything further done, and died from exhaustion consequent upon repeated bleeding. Dr. Arnison, in his evidence, further said that probably the bloodvessel had formed adhesions to the bone and was torn in using the necessary force to get the bone reduced. He had never

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in his experience met with a similar case, but he knew such had happened in the practice of several eminent surgeons.

SHERBURN HOSPITAL.

In a previous letter I gave you some particulars as to the working of this ancient and useful charity. Since then an inspector from the Charity Commissioners has held an inquiry at the hospital with a view to the permanent increase in the amount for its maintenance. It was stated that the expenditure had increased of late, and the governors of the institution asked that the income might be permanently augmented by £650, thus bringing the amount of the income to £5500. It is hoped that the inspector may report favourably to the Commissioners.

ALCOHOLIC POISONING OF INFANTS.

It is well known, and has been frequently pointed out, that the working-classes of Sunderland feed their children most improperly. In "bad times" they get nothing, or next to nothing, and suffer from hunger; when "good times" come round they get everything, including alcoholic drinks. An inquest was held last week on a child, aged three months, which had slept with its mother, but was found dead beside her in the bed. It was shown by the evidence that the infant was "fed" on condensed milk and breast milk, but that on the advice of "a neighbour" it was also given a teaspoonful of gin "occasionally." The dangerous nature of giving alcohol to tender infants was forcibly pointed out by the coroner in this case, as it has been often done before in similar cases in Sunderland.

WHOOPING-COUGH.

At a late meeting of the Hexham Local Board the medical officer, Dr. Jackson, pointed out the influence of whooping-cough in swelling the mortality-rate in Hexham, where it had been prevalent for some months, although the public thought little of it; and the sufferers did not receive that attention which the seriousness of the disease merited, and as a consequence the deaths from it were more numerous than from other infectious diseases which were in themselves more serious. No doubt many infants perish from whooping-cough and its complications whose lives might be saved by timely medical treatment.

INFECTIOUS DISEASES IN NEWCASTLE.

The returns from practitioners to the medical officer of health prove that the scarlet fever epidemic in Newcastle shows no sign of abating. During the last fortnight a total of 109 cases of infectious disease were reported, of which 92 were from scarlet fever, and 15 from typhoid or enteric fever.

Newcastle-on-Tyne, Nov. 30th.

EDINBURGH.

(From our own Correspondent.)

UNIVERSITY UNION FANCY FAIR.

ON Tuesday the Marquis of Lorne inaugurated the monster bazaar and fancy fair, which is now being held in Edinburgh to raise funds for a University Union, which it is proposed to found on a basis similar to that of the Unions of Oxford and Cambridge. The efforts that have been made during several months with a view to securing success in this enterprise have been unremitting, and have engaged the energies of a very wide circle of the community interested in the University and its undergraduates. As far as the appearance of the bazaar is concerned, they have been crowned with great success; for the largest covered space in Edinburgh, the Waverley market, capable of holding nearly 20,000 people, has been converted into a gorgeous palace for the occasion, stocked with valuable wares from all parts of the world, including large consignments of native products from the Cape, Australia, India, and America. A series of large stalls, each with a distinctive name, and a special fancy uniform for the attendants, are ringed around the transfigured market-place; their arrangement and the sale of the goods being undertaken by a number of Edinburgh ladies, who represent the chief influences of our academic and city life. At the stalls and in the spaces between them are stationed a representative array of the youth and beauty of Edinburgh; the young ladies in fancy costumes varying according to the special stall at which they preside, and the students in the gallant costume of Queen Mary's reign. The spectacle presented by the varied array of stalls, arbours, kiosks, shows of all kinds, shooting galleries, all the paraphernalia of a country fair, which occupies one part of the market, of a theatre, a lecture room, and the bright decorations and gay costumes, is quite unique, and will certainly not be forgotten for many a day; and the good results of all the efforts which have been made, should the Union prove as successful as it bids fair to do, will be of lasting benefit to the University in providing it with what has as yet been missing in Edinburgh—a common bond in our undergraduate social system.

THE ROYAL INFIRMARY.

The managers of the Royal Infirmary have elected Mr. James W. B. Hodsdon, F.R.C.S.Ed., to the vacant post of assistant-surgeon. In securing his services upon the staff of the institution, they have made an acceptable and a useful appointment. His training in surgery has been very varied and unusually comprehensive; he is known as a good teacher, and is popular alike amongst students and patients; and as he has also the reputation of being an able experimentalist and an original thinker, his appointment will add considerably to the teaching power of the Edinburgh School, and tend in due time to enhance its reputation.

Edinburgh, Nov. 30th.

IRELAND.

(From our own Correspondent.)

ROYAL UNIVERSITY OF IRELAND.

IN reference to the recent regulations for the medical curriculum of this University, published in last week's LANCET, I may add that the date at which this rearrangement of the medical course shall be brought into operation has been ordered by the Senate as follows:—(*a*) All medical students who shall not have passed the first examination in medicine prior to Nov. 1st, 1887, shall come under the operation of the whole of this new regulation. (*b*) Medical students who shall have passed the first examination in medicine prior to Nov. 1st, 1887, shall be required to pass subsequently the second examination in medicine as at present, in the four subjects of anatomy, physiology, chemistry, and pharmacology. (*c*) Should any candidates qualified to present themselves for the M.B. examination desire to be allowed the privilege of availing themselves of the division of subjects of examination mentioned in No. 7, they will be allowed to do so even during the coming year. (*d*) All medical students who on Sept. 29th, 1887, shall not be of more than two years' standing as medical students shall come under the operation of the new regulations as to the third and fourth years of medical studies. (*e*) Where prior to the promulgation of this scheme courses of lectures or hospitals have been attended in an order consistent with the existing regulations, but not in the order prescribed in this scheme, certificates of such attendance will be accepted. But after the promulgation of this scheme all attendances at courses of lectures and hospitals must take place conformably with the regulations herein set out.

THE ENTRIES AT THE DUBLIN MEDICAL SCHOOLS.

The following is the return of anatomical students for t present session:—

School.	Session 1886-7.	Session 1885-6.
Trinity College	225	220
Ledwich	217	212
Carmichael	181	179
Royal College of Surgeons ...	129	130
Catholic University	80	101

From these figures it will be seen that compared with last session there is an increase of five at Trinity College and at the Ledwich respectively, and of two at the Carmichael. On the other hand, there is a decrease of twenty-one at the Catholic University, and of one at the College of Surgeons.

ACADEMY OF MEDICINE IN IRELAND.

The inaugural address at the opening meeting of the Obstetrical Section of the Academy last week was given by the President of the Section, Dr. A. V. Macan, who selected for his subject, "Bimanual Examination in the Diagnosis of Female Affections." A vote of condolence with the family of the late Dr. Henry, a member of the Academy, was proposed by Dr. Kidd, seconded by Dr. Kirkpatrick, and adopted by the members of the Section.

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MERCER'S HOSPITAL, DUBLIN.

A meeting of the governors of this institution was held last week to investigate certain charges made against the working of the hospital by Mr. Newcomen, late deputy resident pupil, and who had been refused admission to the hospital. While Mr. Newcomen was on duty one night a patient named Farrell was admitted, and a dispute arose between the acting resident pupil and the matron and house-surgeon, in reference to the alleged ill-treatment the patient received, and who died shortly afterwards. Charges were brought by Mr. Newcomen against those officials, and the committee met on Oct. 18th last, and came to the conclusion that the charges brought by Mr. Newcomen and the widow of the deceased were not proved, and that the former should be prevented from entering the hospital again. Mr. Newcomen applied to have the matter reinvestigated by the board, and in consequence of a summons to appear, he attended at the hospital on a day last week with counsel to assist him. The governors, however, refused to admit his counsel, and the proceedings were conducted in private, when the board passed a resolution that Mr. Newcomen's letters be marked read, and that no further notice be taken of them.

DEATH OF STAFF SURGEON O'SULLIVAN, OF H.M.S. "BELLEISLE."

This gentleman, who was attached to the *Belleisle* at Kingstown Harbour, died very suddenly on Sunday night while leaving a house in Dublin, where he had been dining. He complained when about to take his departure of feeling unwell, and immediately fell on the floor. The nearest surgeon was sent for, and on his arrival pronounced Surgeon O'Sullivan to be dead. Deceased, who was a graduate in medicine of the Queen's University in Ireland, was about forty years of age, and is supposed to have succumbed from thoracic aneurysm.

ZYMOTIC DISEASES IN DUBLIN.

The two zymotic diseases which for some time past have prevailed in Dublin are scarlatina and typhoid fever. Of the latter about forty deaths have been recorded during the last three months, and almost the same number have succumbed from scarlatina during the past four weeks.

HEALTH OF CORK.

During October the death-rate was much lower than for the corresponding month of last year, or any previous year on record. Typhoid fever is still increasing, but the type of the disease seems to be of a mild character. The medical officer of health in his recent report refers to the necessity of having the principal main sewers in the city ventilated.

Dublin, Nov. 30th.

PARIS.

(From our own Correspondent.)

THE ADULTERATION OF WINE.

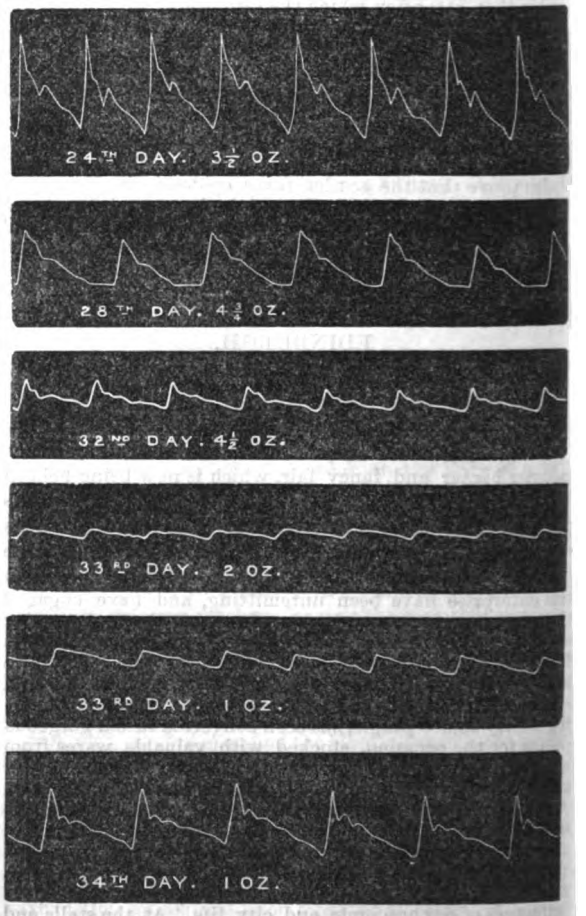
AFTER a long and laborious discussion extending over several sittings, the Academy of Medicine has delivered itself of an opinion on the question of the adulteration of wine by the addition of alcohol. The original conclusions of the committee have undergone some modifications, and now stand as follows:—The Academy, advising from a hygienic point of view, declares:—1. That the *vinage* or alcoholisation of wine by pure alcohol to the extent of two degrees may be permitted, but beyond this it should be absolutely forbidden. 2. The addition of alcohol is not only dangerous by its quantity and by the bad quality which is often used, but also because it leads to the practice of "watering," which is at the same time a fraud and an adulteration. 3. The so-called "higher" alcohols considerably increase the dangers of brandies and liqueurs, and it is reasonable to require that the spirits used for the fabrication of these products should be absolutely pure. 4. The Academy calls the attention of the authorities to the necessity of restricting the number of retail drink-shops, and of putting into force the laws for the repression of drunkenness. It would appear that the addition of two degrees of alcohol is necessary for the preservation of certain wines of low strength, and as it is very doubtful whether such admixture can be detected, the Academy may be congratulated on the wisdom of this authorisation. Some of the speakers would have prohibited the addition of alcohol to all wines over ten degrees, and a motion of M. Gauthier to this effect was voted, but a few minutes later, at the suggestion of M. Brouardel, the vote was negatived.

THE DISEMBARKATION OF TROOPS FROM THE EAST.

Another question of State hygiene is now occupying public attention, but in this case the Government has acted without consulting its sanitary adviser, and hence a storm of timely expostulation. Hitherto the troops returning from the East have been disembarked at Port Gros, which is at a safe distance both from Marseilles and Toulon. This station having been suppressed from financial considerations, recent arrivals have been permitted to land without any quarantine observation; but in consequence of the remonstrances of the representatives of the interested ports, who feared a fresh invasion of cholera, the Government has decided that passengers from suspected countries shall be subjected to observation at the lazaret of Frioul, a couple of miles from Marseilles. After the disembarkation of the passengers the ships are to proceed with their crews to Toulon. The town of Marseilles has suffered much of late years in its commercial prosperity, and it is feared that the near neighbourhood of an inefficient quarantine station may cause it to be considered as an infected port abroad, and so injure its maritime trade. The vicinity of the lazaret is also thought to be a real permanent danger to the town, and the Chamber of Commerce is making strong representations on the subject to the Government, and it is hoped that the measure will be reconsidered.

MERLATTI'S FAST.

Whatever may be the pathological signification of the first four tracings of Merlatti's pulse (on the twenty-fourth, twenty-eighth, thirty-second, and thirty-third days), there can be no doubt that they indicate a progressive



decrease in the volume of the blood. The fifth tracing, taken on the afternoon of the thirty-third day, caused me some surprise, as it shows a temporary restoration of the blood as regards volume; but its explanation is simple. In

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reply to my observation that such a tracing was not possible unless a large quantity of fluid had been quite recently absorbed, Dr. Maréchal informed me that Merlatti had been visited during the day by some of the leading members of the profession, and that, with a view to ascertain the condition of the stomach, he had been made to swallow three litres of water, and a further quantity had been taken during the afternoon. The conclusion of the medical visitors and of the committee was that the heart was normal, that the muscular system was still satisfactory, and that there was no urgency about putting an end to the fast. It may be stated that the enumeration of the blood-corpuscles showed four and a half million cells to the cubic millimetre, an increase of half a million over the first enumeration; but it must be remembered that the quality of blood has immensely decreased, and although the cells still bear the same proportion to the fluid, the total number has greatly decreased, and it is probable that if an enumeration had been again made, it would have given a very different result. My own opinion differs from that of the committee. Merlatti's pulse has varied in rapidity a good deal; certainly between 56 and 76; there is a reduplication of the second sound, and the pulse tracing indicates a similar dynamic condition of the circulation to that found in aortic insufficiency. But what appears still more significant is the odour of the breath (which is stated to be like that of a carnivorous animal), and which reminds me strongly of the odour in some cases of mental disturbance. Merlatti's determination is to achieve his fifty days' fast *quand même*. Indeed, he states that any opposition of the committee will only strengthen his resolution, and he has even hinted that it will lead him to prolong his abstinence until the 1st of January.

Paris, Dec. 1st.

THE SERVICES.

WAR OFFICE.—The Queen has been graciously pleased to approve of the following promotions being conferred upon the undermentioned officers in recognition of their services during the operations in the Soudan, 1885-86:—Surgeon-Major Henry William Alexander Mackinnon, of the Army Medical Staff, and Surgeon-Major Charles Sibthorpe, of the Indian Medical Department, to be Brigade Surgeons.

INDIA OFFICE.—The Queen has approved of the following promotion made by the Government in India:—Brigade Surgeon George Farrell, C.B., of the Bengal Medical Establishment, to be Deputy Surgeon-General.

ADMIRALTY.—The following appointment has been made: Surgeon Henry F. Jackson, to the Royal Marine Depôt at Walmer (temporarily).

ARTILLERY VOLUNTEERS.—1st Kent: Acting Surgeon J. I. Boswell resigns his appointment.—3rd Lancashire: Surgeon A. A. Corte is granted the honorary rank of Surgeon-Major.—2nd Middlesex: Surgeon and Honorary Surgeon-Major R. T. Daniell resigns his commission; also is permitted to retain his rank, and to continue to wear the uniform of the corps on his retirement.

RIFLE VOLUNTEERS.—6th Lanarkshire: Acting Surgeon J. E. Fairlie resigns his appointment.—2nd Oxfordshire: Acting Surgeon E. Cotterell resigns his appointment.

THE VOLUNTEER MEDICAL STAFF CORPS (The London Division).—Valentine Matthews, Gent., to be Surgeon.

HOSPITAL SATURDAY FUND.—At a meeting of the Board of Delegates of this fund held on the 27th ult., it was reported that the amount now in hand, after payment of all expenses, reached £9500, and that a considerable sum was yet outstanding. The aggregate to hand from the workshops is at least £500 in excess of last year, and the expenses show a decrease of £250. It was resolved that a sum of £9750 be distributed, and that the fund be closed for the present year. Lord Brassey was elected president of the fund in the place of the late Mr. Samuel Morley. A proposal for registering the fund under the Friendly Societies Act was deferred for consideration.

THE twelfth annual general meeting of subscribers to the Glasgow Western Infirmary was held on the 25th ult., when a satisfactory report was submitted by the secretary and adopted by those present.

Obituary.

MORTIMER BALDING, B.A., M.D. CANTAB, M.R.C.S.,

OF ST. ALBANS, HERTS.

MORTIMER BALDING was the youngest son of the late Mr. James Balding, of Barkway, Herts, who, himself a medical practitioner, lived to see three of his children engaged in the active pursuit of the same profession. One only of these, the eldest, now survives—Mr. D. B. Balding of Royston, who was recently nominated as a fitting representative of the general body of the profession upon the Medical Council. Mortimer was born in 1850, and received his early education at the hands of the Rev. A. E. Fowler, of Saffron Walden. In October, 1867, he entered Gonville and Caius College, Cambridge, and graduated B.A. in honours (Nat. Sci. Tripos) in 1870. He attended Addenbrooke's Hospital, and after taking his first degree in medicine proceeded to London to complete the medical curriculum at the Middlesex Hospital, where two brothers had been educated many years before. He passed through his studentship with much credit, gaining the esteem of his teachers, and always evincing the energy and honesty that characterised him throughout life. In 1873 he held the office of house-physician, throwing himself with ardour into clinical pursuits. Throughout the ten years that elapsed between his leaving London and finally settling down in country practice, he was engaged in professional work with but little intermission, either in holding travelling appointments or in taking charge of the practices of medical friends who were fortunate in securing the services of one whom they could so implicitly trust. His last travelling appointment was as medical attendant to the late Earl Grosvenor, when that nobleman visited the Marquis of Lorne, then Governor-General of Canada. Dr. Balding's services were called into requisition during this visit on the occasion of the sleigh accident to H.R.H. Princess Louise. On returning home he devoted several months to the preparation of his M.D. thesis, which was read in November, 1880. The subject he selected was "Hydatid Disease of the Liver: its Diagnosis and Treatment." It was based upon his own experience, as well as upon a careful study of recorded cases.

In January, 1883, he succeeded to the practice of the late Dr. Prior of St. Albans, and in a very short time fulfilled the most sanguine expectations of his friends as to his success. Doubtless his long training and experience in general practice stood him in good stead, and no prospect could be brighter than his at the beginning of the present year. He had married in September, 1885, and might well have anticipated a life of continued and increasing usefulness and prosperity. His career, which had opened so brightly, was, however, destined to be abruptly closed. In the spring he began to suffer from symptoms which must be undoubtedly ascribed to the malady that terminated his life; although it was not until the middle of August, after he had vainly sought to recruit his failing health by a holiday, that the existence of malignant disease of the rectum was ascertained. The fortitude with which he bore the information whereby his worst fears were realised was the wonder and admiration of his friends; and, indeed, throughout the remainder of his days he acted as few men have either the character or the courage to act in presence of a death-warrant. So long as he was able, he continued to visit his patients, and for several weeks had the advantage of the assistance of his old friend, Mr. Hughes, formerly of Bromley, Kent, whose presence and kind help were great comforts to him. Immediately on learning the nature of his illness he took steps to dispose of his practice, which eventually resulted in a partnership with Mr. A. H. Boys, who succeeds him. In October colotomy had to be performed, but the local disease continued to make rapid progress, and he sank from exhaustion on November 23rd.

Thus, at the early age of thirty-six, died a member of our profession of whom the world at large knew little, but whose sterling qualities of heart and character endeared him to

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many, who saw in these qualities- hidden somewhat by an unconventional manner and plainness of speech — the making of a thoroughly upright and trustworthy man. For Mortimer Balding possessed original characteristics which mark out the individual from the ordinary conventional type; and his own rectitude of conduct led him to be earnest and outspoken in condemnation of all shams and quackery. His position and success were the outcome of his character, coupled with valuable gifts of method and foresight in the conduct of affairs. The large gathering at the graveside on the 26th ult. bore silent yet eloquent testimony to the hold he had gained on the hearts of the people by his steady devotion to duty and generous dealing in the few years he had practised his profession among them.

S. C.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted Members of the College at a meeting of the Court of Examiners on Nov. 27th:

Abbott, William Louis, L.R.C.P. Lond., Philadelphia.
Darlow, Alfred, L.S.A., Redcliffe House, Plasket, Essex.
Gibbard, Thomas Wykes, L.S.A., Wellingborough.
Lewis, David Thomas, L.S.A., Stoke Newington-road.
O'Reilly, George Hartley, L.S.A., Wyndham House, Reading.
Pedley, George Aston, L.S.A., The Terrace, Camberwell.
Quarty-Papafio, Benj. W., M.B. Edin., Gold Coast, W. Africa.
Redman, William Edward, L.S.A., Steep-hill, Lincoln.
Thorpe, Frank, L.K.Q.C.P.I., Queen's-road, Oldham.
Young, Richard Weekes, L.S.A., Sydney, New South Wales.

CAMBRIDGE UNIVERSITY.—At a congregation held on the 25th ult., the degree of M.B. was conferred on the following gentlemen:—

Evan Evans, King's. | Chas. Silvested Evans, Clare.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—At a meeting of the Court of Examiners, held last week, the under-named was admitted a Fellow of the College:—

Thomas Falkiner Falkiner.

SOCIETY OF APOTHECARIES.—The following gentlemen passed their examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received certificates to practise, on Nov. 25th:—

Browne Henry, M.R.C.S., Cromwell-road, Westbourne-park.
Davey, Thomas George, Helston, Cornwall.
Goodall, Henry, M.R.C.S., Abingdon Villas, Kensington.
Jeaffreson, John Leslie, Park-crescent, Stoke Newington.
Johnson, John George, Lansdown-road, Clapham.
Lansdale, William, M.R.C.S., Chelsham-road, Clapham.
Marshall, Arthur Lumsden, Bournemouth.
Moxon, Alfred, Easenhall, Rugby.
Phillips, G. Gordon Owen, Castletown-road, West Kensington.
Routh, William, Irvine House, Balham-park-road, Balham.
Ward, John Alfred, Ilwarardine Castle, Montford, Shropshire.
Yeoman, Wm. Metcalfe, M.R.C.S., Osmotherley, Northallerton.

THE annual Hospital Sunday collection at Hereford was held on the 28th ult.

THE Goole Cottage Hospital Saturday collection was made on the 27th ult.

THE annual dinner of the Birmingham medical students was held on the 25th ult.

A BAZAAR in aid of the fund for the building of the Mater Misericordiæ Hospital is announced to be held in Dublin on the 15th inst.

THE new infirmary at Workington, which has been built at a cost of about £3000, was formally opened on the 29th ult.

THIRTY-TWO designs have been sent in for the new workhouse hospital which the Belper Board of Guardians contemplate erecting.

A SPECIAL general meeting of the members of the Liverpool Medical Institution will be held to-night (Friday) to receive the report of the Hospital Inquiry Committee.

ON the 27th ult. Mr. B. Thompson Lowne, F.R.C.S., delivered a lecture on "Volcanoes and Earthquakes" at the Working Men's College in Great Ormond-street.

THE death on the 23rd ult. of Mr. J. W. Inger is announced. The deceased, who was in the twenty-ninth year of his age, had practised in Nottingham for six years.

AT a special meeting of the Barnsley Union Rural Sanitary Authority on the 30th ult., the medical officer reports the prevalence to a considerable amount of typhoid fever in Royston.

SUICIDE OF A RUSSIAN SURGEON.—M. Kolomnin, Professor at the St. Petersburg Surgical Academy, is reported to have committed suicide after having failed in the performance of a dangerous operation.

ON the 26th ult. a farmer was fined £10 for sending from Linton, in Cambridgeshire, to the London Central Meat Market the carcases of two sheep which were diseased and unfit for food.

ST. BARTHOLOMEW'S HOSPITAL COLLEGE.—The Preliminary Scientific Exhibition of £50 for one year, open to students of less than six months' standing, has been awarded to Messrs. Sargant and Langford (bracketed equal).

AT a special meeting of the Ripon Millenary Executive Committee on the 29th ult. it was recommended that the question of establishing a cottage hospital in that city be taken into consideration, in connexion with the Queen's jubilee, at a general meeting of the inhabitants to be called by the mayor as early as possible next year.

QUEEN'S COLLEGE, BIRMINGHAM. — An Ingleby Scholarship, after examination in obstetric medicine and surgery, and the diseases of women and children, open to students who have completed two years, has been awarded to Mr. A. H. Nott. There were no competitors for the Sydenham or Queen's Scholarships.

MEDICAL WOMEN FOR INDIA.—Miss E. Littlewood, L.R.C.P. & S. Edin., has started for Bombay. She has received the appointment of resident medical officer to the Cama Hospital for Women, opened by Lord and Lady Reay on July 31st, of which Dr. Edith Pechey and Dr. Charlotte Ellaby are the physicians.

THE TRAINED NURSES' ANNUITY FUND.—By the kind permission of the Countess of Carnwath a meeting of the committee of the Trained Nurses' Annuity Fund was held at her house in Cromwell-place on the 23rd ult., when Mrs. Bell was elected from fourteen candidates to the Albany Annuity, specially founded in memory of the late Duke of Albany, who was president of the Society.

AT a public meeting held at Bournemouth on the 29th ult., it was decided to commemorate the Queen's jubilee by the erection of a general public hospital, to be called the Victoria Hospital. An influential committee was appointed to collect subscriptions and arrange the details.

ST. MARY'S HOSPITAL.—On the 27th ult. a special dramatic performance was given at the Novelty Theatre in aid of the Maternity Fund of this institution. The piece selected was "New Men and Old Acres." As the theatre was well filled, it is satisfactory to know that the hospital in whose favour the undertaking was so successfully carried out will be a considerable gainer.

IN the calendar issued by the Council of the Yorkshire College for the current academical year, it is hinted that there is every probability of the formation in Leeds of a bearer company of the Volunteer Medical Staff Corps. The idea has now assumed a definite form, and there is no doubt that in a short time such a company will have been fairly established.

SALE OF MICROSCOPICAL PREPARATIONS.—The sale of Dr. Matthews' fine microscopical preparations, first-rate microscopes and objectives, &c., is announced for Friday, Dec. 10th, at 12.30, at 31, King-street, Covent-garden, W.C. Dr. Matthews was an ex-president of the Quekett Club.

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PRESENTATION.—An illuminated address, a clock, and ornaments were on the 23rd ult. presented to Mr. Ilott, the late medical superintendent of the Whitechapel Infirmary by the officials engaged at that institution.

FIRST AID.—The women's class in connexion with the St. John Ambulance Association, conducted by D'Arcy B. Carter, Esq., M.R.C.S. Eng., was examined in the "First Aid" course on the 8th ult. by Edward Atkinson, Esq., M.R.C.S. Eng., F.L.S., of Leeds, when twenty-five candidates presented themselves for examination, the whole of whom were successful.

LECTURES ON AIR POLLUTION.—The Manchester and Salford Noxious Vapours Abatement Association has arranged for a series of free lectures, with a view to directing public attention to the evils resulting from the present excessive pollution of the air of Manchester and Salford by coal smoke and vapours from chemical works and other places where offensive trades are carried on. The lectures are to be given by Mr. Carter Bell, Dr. Ransome, Mr. Estcourt, and others.

MEDICO-PSYCHOLOGICAL ASSOCIATION.—The following gentlemen, having passed the examination held at Bethlem Hospital on Nov. 29th and 30th, will receive the certificate in Psychological Medicine—viz., T. B. Hyslop, Bethlem Hospital; James Neil, Warneford House, Oxford; Walter Pearce, Maidenhead; Alan Rigden, County Asylum, Bicton Heath, Shrewsbury; G. M. Robertson, Montagu-street, Russell-square; J. Walter Scott, Fareham, Hants; Percy Smith, Bethlem Hospital; G. D. Symes, County Asylum, Dorchester.

GREAT NORTHERN CENTRAL HOSPITAL.—On the 30th ult., Mr. G. C. T. Bartley, M.P., presided over a meeting, at Holloway Hall, which had been called to consider ways and means with regard to the Great Northern Central Hospital, which it is proposed to erect in the Holloway-road. The site has been purchased at a cost of £7000, and £5000 towards the building is in hand; but £43,000 are still required. A committee of thirty, with power to add to their number, was appointed for the special purpose of collecting funds; Mr. Bartley, M.P., being chairman.

BRITISH MEDICAL TEMPERANCE ASSOCIATION.—At a meeting of this Association held on the 30th ult., an address was delivered by the president, Dr. B. W. Richardson, on "The Public-house and the Public Health," medical officers of health having received special invitations. At the close of the address a discussion ensued, in which Dr. Norman Kerr, Dr. Pearce, and others took part, and it was agreed to memorialise the Government to institute an inquiry into the extent of disease and mortality produced, directly or indirectly, by the public sale of intoxicating drinks.

ROYAL HOSPITAL FOR INCURABLES.—On the 26th ult. the thirty-second annual meeting of the friends of this institution was held, when the report, which was read by the secretary, Mr. F. Andrew, showed that at the present time 673 persons are dependent on the funds of the charity, about 190 of whom are inmates of the hospital. The year's receipts, including dividends, £2202; deposit at bank, £6180; subscriptions, donations, and bequests, £22,793, amounted to £35,736. Of this sum £11,866 were spent on the hospital, £9920 on pensions, £3391 on general expenses, and £5000 invested, leaving a balance of £5201. During the year a seaside home in connexion with the asylum has been opened at St. Leonards, and to this house 90 of the most suitable cases have been sent in parties of five or six.

ROYAL SOCIETY.—At a meeting on the 30th ult. the following medals were presented:—The Copley Medal to Franz Ernst Neumann of Königsberg, for his researches in theoretical optics and electro-dynamics; the Davy Medal to Jean Charles Galissard de Marignac of Geneva, for his researches on atomic weights; the Rumford Medal to Professor Samuel P. Langley, for his researches on the spectrum by means of the bolometer; a Royal Medal to Mr. Francis Galton, for his statistical inquiries into biological phenomena; and a Royal Medal to Professor Peter Guthrie Tait, for his various mathematical and physical researches. Professor Michael Foster was afterwards elected one of the treasurers, and Professor David Ferrier and Arthur Gamgee, M.D., members of the council, for the ensuing year.

QUEEN'S COLLEGE, BELFAST. — The following scholarships have been awarded:—Fourth year (Anatomy and Physiology): Wm. Weatherup. Third year (Medicine): J. M. Hall, R. W. Haslett. Second year: Hamilton Morton, James Taylor. First year: S. M'C. Killen.

SEASONABLE DONATIONS.—Mr. Edward Kelley, late of York-street, now of 5, Broadway, Westminster, has given through Dr. Fenton, in memory of his late wife, £400 to each of the following institutions: Westminster Hospital, the Western Dispensary, Rochester-row, and Miss Sharman's Orphans' Home, West-square, S.E.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

ANNINGSON, BUSHELL, M.D.Cantab., has been reappointed Medical Officer of Health for the Cambridge Urban Sanitary District.

ARUNDELL, SHIRLEY W., M.R.C.S., L.S.A., has been appointed Medical Officer for the Eleventh District of the Wisbeach Union.

ATKINSON, FRANCIS EDWARD, L.R.C.P.Lond., M.R.C.S., has been reappointed Medical Officer of Health for the Haworth, Oakworth, Oxenhope, Silsden, and Skipton Urban Sanitary Districts; and the Keighley, Settle, and Skipton Rural Sanitary Districts.

FRASER, THOMAS, M.A., M.B., has been appointed Assistant-Physician to the Crichton Royal Institution, Dumfries.

HUGHES, E. A., M.R.C.S., L.R.C.P., has been appointed Clinical Assistant in the Skin Department of the North-West London Hospital.

HUNT, EDGAR A., M.R.C.S., L.R.C.P.Ed., has been appointed Surgeon to the Essex and Colchester Hospital.

KARKEEK, P. Q., M.R.C.S., L.S.A., has been appointed Medical Inspector for Torquay, under the Workshops and Factories Act, vice Chilcote, deceased.

LANGLEY, AARON, L.R.C.P.Ed., L.R.C.S., has been appointed Medical Officer for the Eighth District of the St. Saviour's Union.

LING, C. A. S., M.R.C.S., L.S.A., has been appointed Medical Officer for the Twelfth District of the Tendring Union.

LISTON, HENRY, L.R.C.P., L.R.C.S.Ed., has been appointed Honorary Medical Officer to the Sunderland Hospital for Sick Children, vice Mordey Douglas, M.R.C.S., L.R.C.P.Ed., appointed Consultant.

MELVILLE, H. B., M.B., C.M., has been appointed Assistant Physician to the Crichton Royal Institution, Dumfries.

MITCHELL, ROBERT, M.A., M.B., C.M.Edin., late House-Surgeon, Dewsbury, and District General Infirmary, has been appointed House-Surgeon to the Memorial Hospital, Jarrow-on-Tyne.

RAWSON, EDWIN ELSWORTH, L.R.C.P.Ed., M.R.C.S., L.S.A., has been reappointed Medical Officer of Health for the Thornton Urban Sanitary District, Yorkshire.

STARK, ARTHUR C., M.B., C.M.Ed., has been appointed Medical Officer for the First District of the Alderbury Union.

WATSON, WILLIAM CHARLES, L.R.C.P.Ed., M.R.C.S., has been reappointed Medical Officer of Health for the Hoole Urban Sanitary District, Cheshire.

WILLS, W. A., M.B.Lond., M.R.C.S., has been appointed House-Surgeon to the Victoria Hospital for Children, Chelsea, vice P. D. Turner, M.B.Lond., resigned.

Births, Marriages, and Deaths.

BIRTHS.

FLEURY.—On Oct. 11th, at Montevideo, the wife of Luis A. Fleury, M.D., of a son.

PIRRIE.—On the 26th ult., at Redcliffe-gardens, South Kensington London, the wife of J. M. Gordon Pirrie, M.D., of a son.

MARRIAGE.

WITHERS—BRYSON.—On the 27th ult., at St. Simon's, Southsea, Robert Withers, M.R.C.S., of Lawrence, Otago, New Zealand, to Isabella Jane, eldest daughter of Colonel T. Bryson, Chief Paymaster (retired), Army Pay Department.

DEATH.

SMYTH.—Recently, at Bergamo, Alto, North Italy, Robert Beresford Smyth, M.D., M.S., Surgeon-Major, A.M.D. (retired), aged 61.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

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Medical Diary for the ensuing Week.

Monday, December 6.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations 10.30 A.M., and each day at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesdays, same hour.
CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2.30.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.
ROYAL INSTITUTION OF GREAT BRITAIN.—5 P.M. General Monthly Meeting.
SOCIETY OF ARTS.—8 P.M. Mr. Lewis Foreman Day: The Principle and Practice of Ornamental Design (Cantor Lecture).
ODONTOLOGICAL SOCIETY OF GREAT BRITAIN.—8 P.M. Casual communications by Messrs. J. H. Mummery, W. Hern, J. H. Redman, G. Cunningham, A. P. Reboul, W. St. G. Elliott, and Dr. J. Walker. Mr. Cunnington: Pre-historic Skulls from Tumuli in Wiltshire.
MEDICAL SOCIETY OF LONDON.—8.30 P.M. Mr. William Adams: The Advantages of Gymnastic Exercise in the Horizontal Position in the Treatment of Lateral Curvature of the Spine.—Mr. H. Allingham: On a New Method of Excision of the Knee.—Dr. Keser: A case of Intra-peritoneal Hæmorrhage in a newly-born Child.

Tuesday, December 7.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.
CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
PATHOLOGICAL SOCIETY OF LONDON.—8.30 P.M. Dr. Hime (Bradford): Researches concerning Pasteur's Prophylactic.—Mr. Crookshank: Flagellated Organisms in the Blood.—Dr. S. West: Epithelioma of Larynx.—Dr. Hadden: Disseminated Fibrosis of Lungs.—Dr. Silcock: Addison's Disease associated with Cystic condition of Pineal Body.—Dr. Seymour Taylor: Included Ovum.—Mr. Sydney Jones: Malformation of Hand (living subject).—Dr. Pye Smith: Ulcerative Endocarditis of the Right Side of Heart. Card Specimens by Mr. Sydney Jones, Mr. E. H. Fenwick, Dr. H. Sainsbury, Dr. Herringham and Mr. D'Arcy Power, Mr. Shattock, Dr. Hadden, Dr. Hebb, and Dr. Pasteur.

Wednesday, December 8.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesdays and Thursdays, 1.30 P.M.
ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department, Mondays and Thursdays, 9.30 A.M.
ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.
LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.
GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.
KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; and on Friday, 2 P.M.; and Saturday, 1 P.M.
CHILDREN'S HOSPITAL, GREAT ORMOND-STREET.—Operations, 9 A.M.; Saturday, same hour.
SOCIETY OF ARTS.—8 P.M. Major-General C. E. Webber, R.B., C.B.: Glow Lamps, their Use and Manufacture.
ROYAL MICROSCOPICAL SOCIETY.—8 P.M. Ordinary Meeting.
EPIDEMIOLOGICAL SOCIETY OF LONDON.—8 P.M. Dr. J. Edward Squire: Typho-malarial Fever.
HUNTERIAN SOCIETY.—8 P.M. Dr. Pye-Smith: Observations in Prognosis.
BRITISH GYNÆCOLOGICAL SOCIETY.—8.30 P.M. Specimens will be shown by Dr. George Elder and others. Dr. Routh: On the Etiology and Diagnosis from a Medico-legal point of view of some cases of Nymphomania.

Thursday, December 9.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.—8.30 P.M. Living and Card Specimens at 8 P.M. Mr. W. Adams Frost: Case of Symmetrical Swellings in position of Lacrymal Glands.—Dr. Beevor: Case of Ophthalmoplegia Externa without any other Symptoms.—Mr. A. St. Clair Buxton (introduced): A Pocket Refraction Case.—Mr. W. H. Jessop: (1) Atrophy of Iris; (2) Lamellar Cataract exhibiting marked triradiate arrangement.—Mr. A. Quarry Silcock: Choroidal Hæmorrhage in region of Macula. Papers:—Mr. W. T. Jackman (introduced): Results of an Examination of the Eyes of School Children.—Dr. W. A. Brailey: Hydatid Cyst of Orbit.—Dr. J. A. Ormerod: Ecchymosis and Œdema of Eyelids without obvious cause.—Mr. Edgar A. Browne: Case of supposed Quinine Amaurosis.—Mr. W. H. Jessop: Case of sudden and lasting Lateral Nystagmus.

Friday, December 10.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
CLINICAL SOCIETY OF LONDON.—8.30 P.M. Dr. Herringham: Two cases of Diphtheritic Paralysis. Affections of Heart, and Choreic Movements.—Mr. Treves: On Acute Myositis.—Dr. Montague Murray: On a case of Gastric Ulcer with unusual complications.—Dr. Samuel West: Right Hemiplegia, with slight Rigidity and Aphasia, occurring during a Paroxysm of Whooping-cough, subsequently passing into a condition of Athetosis.

Saturday, December 11.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Stewart's Instruments.)

THE LANCET Office, December 2nd, 1886.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Nov. 26	30·33	E.	48	46	...	50	43	...	Overcast
,, 27	30·48	E.	45	44	...	49	44	...	Overcast
,, 28	30·20	W.	46	44	...	50	44	...	Cloudy
,, 29	29·82	W.	50	49	...	52	45	...	Raining
,, 30	29·66	W.	39	38	...	46	37	...	Overcast
Dec. 1	29·95	W.	35	33	...	45	32	...	Hazy
,, 2	29·90	N.W.	32	30	...	30	30	...	Overcast

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

We cannot undertake to return MSS. not used.

SCURVY IN SERPENTS.

M. MAGITOT has recently described to the French Académie des Sciences a disease he has observed amongst snakes which is analogous to scurvy, there being inflammation of the mouth, abscesses, hæmorrhages, ulceration, shedding of teeth, cutaneous ecchymoses, and inflammation of the cervical glands. The causes seem to be overcrowding, dampness, cold, and bad hygienic conditions. A bacillus, too, has been found which M. Pasteur looks upon as the morbid agent. Most of the snakes affected with the disease succumb to it; but by timely care and astringent applications to the mucous membrane of the mouth some may be saved.

A Poor Student.—The decision is not a new one. The vaccination instructors are appointed by the Privy Council, and their certificates only are allowed to be accepted by the examining boards.

Enquirens.—Our Students' Number of September last will afford the information desired.

M. O. H.—The report can be obtained of Knight & Co., Fleet-street, E.C.

Enquirens.—Mr. Jukes de Styrap h s written a book on the subject.

FISSURED TONGUE.

To the Editor of THE LANCET.

SIR,—In answer to "A Young Practitioner," I beg to state that I have been successful in treating four or five cases as follows:—The application twice a week of the solid nitrate of silver to the base of each fissure, after the application of a four-per-cent. solution of cocaine, to prevent pain. Internally the bisiodide of mercury and potassic iodide. Thus: ℞. Sol. hydrarg. bichlor., ℥i.; potass. iodid., ʒss.; ferri ammon. citrat., ʒi.; sp. ether. chloric., ʒii.; aquam ad ℥viii. One tablespoonful every four hours.

I am, Sir, your obedient servant,

Nov. 29th, 1886. C. R. ILLINGWORTH, M.D.

To the Editor of THE LANCET.

SIR,—If "A Young Practitioner" in the case of his patient will try the effect of the local application of a solution of nitrate of silver (thirty grains to the ounce), combined with the internal administration of iodide of potassium, in gradually increasing doses, I venture to think he will soon see an improvement. He has not stated whether there is a history of syphilis or not.

I am, Sir, yours truly,

November 30th, 1886. B. H.

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"WINES" IN NEW YORK.

DR. CYRUS EDSON, of the New York Health Board, has recently analysed some of the "wines" sold in America; and with regard to the process of manufacture adopted by one prominent firm of extensive growers, he says that dried fruits, such as raisins, currants, and peaches, are macerated with water, to which a certain amount of sugar is added. The mixture is then fermented, and when fermentation is considered sufficiently advanced, it is checked by the addition of salicylic acid, sufficient being added to act as a preservative and prevent further fermentation. This liquor is clarified, coloured, and flavoured to cause it to resemble port, claret, or any desired kind of "vintage" the purchaser may desire. It is satisfactory to learn that Dr. Edson obtained an order for the destruction of 5280 gallons of this compound—wine it cannot be called.

Enquirer (Exmouth) will find what he desires in THE LANCET, vol. ii. 1885, p. 881, and vol. i. 1886, p. 609.

CASE OF POISONING BY STRYCHNIA.

To the Editor of THE LANCET.

SIR,—The following notes may be deemed of sufficient interest for publication.

At 8.15 A.M. on Sept. 23rd last, I was summoned to see a woman, who had been moaning and screaming for some time, but was said to have become speechless, unconscious, and seemed very bad. She was a lodger named Margaret B——, aged thirty-five, married but had been deserted by her husband a few days previously. She was lying on her back in bed, dressed, her eyes closed, and could not be roused; her arms were pressed against her sides, and her hands clasped firmly over the chest; the skin was a reddish-purple, and hot; tongue dry, pulse weak (96); respiration short. Every few minutes she would groan, her arms become pressed more firmly against her sides, her legs being rigid and straight, and the soles of the feet arched and back stiff. She could not bend her back, her pulse increased in rapidity, and respiration seemed to stop. There was a peculiar hoarse rattling in the throat, and her face became of a bluish-purple colour. On the mantel-piece I found a teacup empty and dry, lined with a bluish material which tasted bitter, and in the chamber utensil an empty packet of vermin-killer; an attempt to produce emesis failed, and the passage of a tube down her œsophagus brought on a spasm which threatened to end the case; regurgitation in her jugulars was noticed up to the angle of the jaw, and asphyxia almost took place. Chloroform was of certain benefit in two of the spasms, and I procured a one-in-two solution of chloral hydrate and gave her three hypodermic injections of twenty minims each, which reduced the rapidity of the paroxysms and improved her breathing. At 9 o'clock I gave her a final hypodermic injection, making about forty grains in all; she was drowsy, but was made to swallow half an ounce of tannate of glycerine and allowed to sleep. The first needle puncture gave rise to a drop of thick dark venous blood, but the colour rapidly improved. At noon she was still sleeping, but made a slow recovery, and is now in an asylum. I am, Sir, yours truly,

Liverpool, Nov. 9th, 1886. JAS. GRIERSON BROWN, M.B. Lond.

"MORPHIOMANIA."

WITHIN the last few years the disease which goes by the above name has made great strides in France. In the capital its victims almost rival those of alcoholism. At Bellevue a hospital has been opened for the care, and, if possible, the cure of these patients. The cure of it is, however, very rare. It is found that both the use and the deprivation of the drug create a tendency to suicide in the victims; and at Bellevue there are cushioned rooms for some of the patients, and a constant watch kept on all.

B, in the circumstances mentioned, is guilty of no breach of professional etiquette in attending the case.

SANITARY CONDITION OF OXFORD.

To the Editor of THE LANCET.

SIR,—Within the last few days I have been told that the sanitary condition of Oxford in and around the colleges is in a very bad condition, and that more than one case of diphtheria, among the undergraduates, occurred last term. I shall be glad if any brother practitioner can tell me if such is the case, in order that I may give a definite answer to anxious parents. I am, Sir, yours faithfully,

November 25th, 1886. A. T. G. W.

"BARBED WIRE FENCES."

WE have frequently protested against the use of "barbed wire" for fences as being cruel to animals and dangerous to man. It is satisfactory to notice that the Court of Session in Scotland have recently ordered a landowner, who had put up along a public road a wire fence with the top strand barbed, to remove it, as being a danger to the public in the ordinary use of the road.

Dr. R. Rentoul.—The announcement appeared in the 1055th page of our last week's impression.

Francis.—Yes. At the earliest opportunity.

EMIGRATION FOR BELGIAN DOCTORS.

OUR Belgian *confrères* continue to bewail most bitterly the overcrowded state of the profession and the increasing numbers of young men who are yearly entering its portals, only in too many cases to find that it is impossible to secure a sufficient income to live upon. At a recent meeting of the Academy of Medicine a member who had been deputed to report upon a proposed petition to the Government asking for certain concessions for the benefit of rural practitioners—e.g., the formation of provincial medical libraries, the gratuitous distribution of the proceedings of the Academy, the formation of central depôts of surgical instruments, and the assistance of the State in the remuneration of consultants called to patients assisted by the Bureau de Bienfaisance,—after recommending the adoption of this petition, which would somewhat astonish a British Home Secretary, passed on to remark on the overcrowded state of the profession. For this he suggested a remedy, which was no other than emigration to Algeria, a land described by him as a perfect paradise for doctors—at all events, for those who could obtain the post of colonial surgeon, with a salary of 3000 francs, in addition to a house, a garden, and a horse. The only step necessary was to get the Belgian Government to arrange a Franco-medical union with the French Government. If, however, the Algerian medical appointments are as desirable as they appear to M. Barella, it is hardly probable that the members of the profession in France will desire to arrange a union with those in Belgium for the sole purpose of rendering the latter eligible for filling these posts, the number of which is, of course, not unlimited. So our Belgian friends will, it is to be feared, have to look further for a solution of their difficulty.

Mr. F. E. Cane.—According to Wooton's "Guide to the Medical Profession," the following reply was given by the Italian Government to a question similar to that put by our correspondent:—By the law Casati all examinations made and degrees obtained outside the kingdom of Italy are valueless, except in special cases. Holders of the M.D. degree of a foreign university of high standing, who can prove having passed the necessary examinations, may, however, be admitted to the general examinations for the grade to which they aspire. Exemption from these examinations in the case of those who have gained special honours abroad can only be obtained through the Superior Council of Public Instruction, in which case the favour will be sanctioned by Royal decree.

M. G. E. (Cardiff).—The case should be brought under the notice of the College from which the advertiser's diploma was derived.

Duped has not enclosed his card.

THE BRITISH EYE HOSPITAL AT JERUSALEM.

To the Editor of THE LANCET.

SIR,—In your issue of Nov. 13th you were good enough to very favourably notice the work carried out under the supervision of the resident medical surgeon, Mr. John Hovell Ogilvie, at the British Ophthalmic Hospital and Hospice of the Order of St. John at Jerusalem. Will you allow me to add that I have to-day received a letter from Sir Edmund and Lady Lechmere, stating that they had just paid a visit to our small hospital, which is situated some little distance outside the city walls, and that they found it in a perfect state of order and discipline, and largely attended by poor suffering patients from all parts of the Holy Land and adjacent countries. You will, I trust, allow me specially to emphasize the fact that no interference whatever is permitted with the religious views of the patients attending, the work being entirely unsectarian, and, except in a very few cases, when grateful patients in a position to pay insist upon making some small offering, the treatment is entirely gratuitous. It may interest your readers to know that the site of the Hospital, at the special request of H.R.H. the Prince of Wales, who is the patron, was generously given by His Imperial Majesty the Sultan.

I am, Sir, your obedient servant,

JOHN H. EASTERBROOK, Hon. Secretary.

Wilkinson-street, S.W., Nov. 16th, 1886.

M. PASTEUR'S METHOD.

Dr. Henry Downes.—We have carefully perused our correspondent's pamphlet, and cannot concur with him in denouncing M. Pasteur's method. We advocate the expectant treatment of this great question. The results of the investigation by the English Commission are being looked forward to with considerable expectation. We may say generally that the results so far obtained by the Commission are not opposed to M. Pasteur's doctrines.

Beaumont Subscriber.—1. Yes.—2. For an answer to this question we must refer our correspondent to our advertising columns.

Dr. J. N. Constable.—The Apothecaries' Society has power to prosecute in such a case.

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THE QUEEN'S JUBILEE.

Mr. J. T. Macnamara adds the following suggestion to those made by a correspondent in our last week's issue—viz., that Her Majesty should, in honour of the event, create some few leading members of the profession peers of the realm. By the adoption of this suggestion the profession would at last, even if somewhat tardily, secure from the head of the State that recognition which is eminently its due.

Mr. W. T. Mynors.—The New Act does not alter the law in reference to unqualified assistants.

L.K.Q.C.P.I.—The question is a purely legal one.

CONSULTANTS AND GENERAL PRACTITIONERS.

To the Editor of THE LANCET.

SIR,—As a general practitioner I can quite understand "Fairplay's" feelings by the treatment he received at the hands of the consultant to whom he introduced his patient. Something very similar occurred to me a short time ago. I sent a patient, who was suffering from deafness of long-standing, to consult an aural surgeon, to whom I had previously written detailing the case and asking his opinion, at the same time telling him the treatment I had adopted. In due course I received a letter from him, which was in every way apparently satisfactory. He said, "Your prognosis is, I am afraid, about right. I have ordered the chloride of ammonia inhaler to be used again, and also Politzer's bag." Now, I had used this bag regularly for some time, and went as usual to use it again, when, to my utter astonishment, I was informed that the surgeon had written for an inflater for the patient to use herself (a Politzer's bag). Of course, there was nothing left for me to do; it was no use my arguing the point, for the "doctor had ordered it," and I should have been looked upon as only being pecuniarily interested. I maintain that even an apparently simple operation of this kind cannot be satisfactorily carried out by the patient or another unskilled person, and therefore the patient does not derive the benefit intended. I have received very many kindnesses from consultants, and without my seeking them, so that we must not place them all in the same category. I have had on several occasions patients consult physicians, &c., without my knowledge, and without the intention of being in any way discourteous, and the first intimation of such a consultation has been a letter from the consultant. If all consultants would act in the same way towards the general practitioner, it would be much better for the former, and much ill-feeling would be spared the latter.

I am, Sir, your obedient servant,

Dec. 1st, 1886. M.R.C.S.E.

TO YOUNG MOTHERS.

L. P.—The practice of young mothers studying books on first pregnancies is of very doubtful advantage. It will be much more profitable to them to ask their ordinary medical adviser for a little general advice on the subject, to observe the ordinary rules of good health, and otherwise to ignore the subject.

A.M.D.—Our attention has been called to the promotion in question; but we must defer any remarks upon it till next week.

Dr. J. M. Hope (West Australia).—We have had the seeds examined at Kew Gardens. They are certainly those of Abrus precatorius.

A. B. C.—We do not prescribe.

ERRATA.—In the ninth line of the second paragraph of the letter in our last issue, signed "Ye Humble Apothecarie," for "is" read *are*; and in the fifteenth line of the same paragraph for "physician" read *physicians*.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Quinlan, Dublin; Mr. Holmes, London; Dr. Schiltz, Cologne; Dr. Mackenzie Booth; Lord Stanley of Alderley; Mr. Mayo Robson, Leeds; Mr. T. F. Chavasse, Birmingham; Mr. Cresswell Hewett, London; Mr. Grant; Dr. Archie Stockwell, Port Huron; Mr. J. Phillips; Dr. McMunn, Seafield; Dr. Downes, Tiverton; Mr. M. G. Evans, Cardiff; Mr. T. Shepheard, Chester; Mr. G. A. Carpenter, London; Mr. H. F. Bailey, Lee; Mr. Phillips, Birmingham; Mr. Lomas, Vaud; Mr. Bates, New York; Dr. McCambridge, Illinois, U.S.A.; Messrs. Armbrecht and Co., London; Mr. J. T. Macnamara, London; Messrs. Isaacs and Co., London; Mr. Kingsbury, Vermont, U.S.A.; Dr. Stockwell, New York; Mr. Godfrey, Northampton; Dr. J. Mickle, London; Mr. K. Davies, Llandudno; Mr. R. W. Parker, London; Dr. Illingworth, Clayton; Mr. J. Lee, Nottingham; Dr. Lloyd, London; Dr. Fenton, London; Dr. Kirk, Partick; Mr. Saunders, Manchester; Mr. Nelson Hardy; Mr. J. Miller, London; Mr. S. Snell, Sheffield; Dr. Cripps, London; Dr. Hall, Tuebrook; Dr. Wylie, Madras; Messrs. Robinson and Scott, Edinburgh; Mr. Evans, Oswestry; Messrs. Macmillan and Co., London; Mr. Moore, Stourbridge; Mr. Martindale, London; Mr. Borwater, London; Mr. Williams, Shrewsbury; Messrs. Hall and English, Birmingham; Dr. Leeson, Brighton; Messrs. Hopkinson and Co., Nottingham; Mrs. Hitch, St. Leonards; Messrs. Street and Co., London; Mr. Gardner, Ashton-under-Lyne; Messrs Cane and Co., Southsea; Dr. Stuart, Glasgow; Mr. Cook, London; Messrs. Lee and Martin, Birmingham; Dr. J. Lucas, London; Dr. Barr, Glasgow; Dr. Gunn, Invergordon; Dr. Love, Mitcham; Messrs. Burroughs and Wellcome, London; Mr. Hardman, Birmingham; Messrs. Griffin and Co., London; Mr. Wilcox, Woolwich; Messrs. Douglas Fraser and Sons, Arbroath; Dr. Macgregor, Aberdeen; Dr. Wall; Dr. Hunter Mackenzie, Edinburgh; Dr. Banning, London; Messrs. Bennett Bros., Salisbury; Mr. Gurner, London; 420; M.R.C.S.E.; W., London; A. T. G. W.; Alpha; M. O. H.; An Old-standing L.K.Q.C.P.I.; An Anxious Father; L.R.C.P.; Vincit qui Patitur; B. H.; Beaumont Subscriber; J. H., Scarboro'; Medicus; M.D.; M.Ch.; Matron, Canterbury; M.R.C.S.; W. H. J.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Harley, London; Mrs. Wilkins, Salisbury; Mr. Brown, Bristol; Mr. Mackay, Edinburgh; Mr. Kerr, Glasgow; Mr. Waddy, Wexford; Mr. Hunt, Manchester; Messrs. Cornish, Manchester; Miss Pudney, Earl's Colne; Mr. Jones, Loughor; Mr. Hawkins, London; Messrs. Hunter and Co., Aberdeen; Mr. Cornish, Birmingham; Mr. Blenkarne, Leicester; Mr. Sergeant, London; Mr. Lambart; Messrs. Swan and Co., London; Mr. Dowding, Bournemouth; Dr. Griffith, Milford Haven; Mr. Beach, London; Mr. Ward, London; Messrs. Hall and Palmer, Manchester; Mr. Leggat, Woodgreen; Messrs. Zimmermann and Co.; Mr. Hackett, Manchester; Dr. Doyle, Dublin; Mr. Maw, Sheffield; Mrs. Townson, Chester; Mr. Cole, Exeter; Mr. Blatchley, London; Messrs. Essinger, London; Dr. Sinclair, Dundee; Mr. Baron, Manchester; Dr. Meadows, Leicester; Mr. Arnold; Messrs. Read and Co., Bristol; Mr. Whiteside, Shap; Mr. Heard, Dublin; Mr. Twyford, Hanley; Mr. Cox, Walworth; Dr., Bayswater; R. J. P., Hayes; M.D.; A. C., Tredegar; Hugo; Confidant; Zoophyte; Surgeon, Balham; Agricola; Tunbridgens; Energy; Iodine; M.B., Nottingham; S. A. A., Rochester; T. L.; St. Vincent; C. C. T.; Vigilans, Shap; M.D.; M. R. D.; Scalpel, Shepherd's Bush.

Essex Telegraph, Birmingham and Aston Chronicle, Sunderland Herald, New Zealand Times, South Wales Daily News, Hastings and St. Leonards Observer, &c., have been received.

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The Bradshawe Lecture
ON
BACTERIOLOGY IN ITS RELATIONS TO SURGERY.

Delivered at the Royal College of Surgeons on Thursday, December 2nd, 1886,

By HENRY POWER, M.B. Lond., F.R.C.S.

Gentlemen,—I propose in the lecture which you have this year done me the high honour of electing me to deliver, in commemoration of Mr. Bradshawe, to place before you the knowledge which has been recently gained by the new science of bacteriology in its relations to surgery. In beginning to work at the subject I immediately found myself confronted with a difficulty which arose from the great confusion that at present exists in regard to nomenclature; and though I probably do great wrong to some of those who are now my auditors, I am convinced that many surgeons have only hazy and indistinct ideas in regard to the classification of these minute beings, and will not be ungrateful to me if I place before them a succinct account of the arrangement that is accepted provisionally by the best authorities in Germany and France as well as in this country, and add a brief outline of the chief facts that are known in regard to their life history.

Truth, says Lord Bacon, is more easily educed from error than from confusion, and no better illustration could be adduced of the maxim than the advantages that are to be gained from even a provisional and incomplete arrangement of these minute organisms into genera and species. Botanists have divided plants into two great groups: phanerogamous plants, with more or less showy flowers and conspicuous organs of generation and fructification; and cryptogams, which propagate in a secret, inconspicuous, and mysterious method by spores. The cryptogams are again divided into those which have a stem and leaves like ferns and those which produce flat expansions on or in which the spores grow, and which are termed thallophytes. The thallophytes were formerly divided into fungi, algæ, and lichens, the broad distinctions between which were that the fungi were destitute of chlorophyll, contained much nitrogen in their composition, and lived on organic substances, whether dead or living, and in air; that algæ contained chlorophyll and lived in water, building up their bodies from inorganic material; and, finally, that the lichens consisted of a mixture of cells, some containing, some destitute of, chlorophyll, nourishing themselves on inorganic substances, and usually living in air. Late researches by Schwendener and others have rather tended to show that the lichens are really algæ which have been invaded by fungi; and, at all events, it has been found that neither lichens nor algæ bear any very important relation to disease, and that those minute organisms which are really influential in the production of a very considerable number of the maladies incident to man and animals, and especially those which are of an infectious or contagious nature, belong to the fungi. Now the fungi have been subdivided by Flügge—looking at them essentially from a hygienic, and not from a botanical, standpoint—into four groups: (1) the fungi proper; (2) the mycetozoa; (3) the blastomycetes; and (4) the Schizomycetes.

Many of the true *fungi* play an important part in the economy of nature, and are of great importance to man in their industrial relations. To mention only two of them. The ustilago carbo forms the black smut of wheat and other cereals, and tilletia caries or bran forms a similar substance in the interior of the grain, and gives a fetid odour to it. Peronospora infestans is the fungus of the potato disease. Botrytis bassiana is the muscardine disease of the silkworm. Uredo or Æcidium (of which puccinia graminis is an example) forms the red rust of wheat, which is perhaps one of the most important and interesting fungi, and the singular history of which in connexion with the barberry is now well known from De Bary's observations. Then come the aspergilli, interesting because some of them can grow in the bodies of warm-blooded animals, and are capable of producing attacks of pneumonia in man and animals. The spores of these fungi are everywhere so abundant that it is only requisite to expose a piece of black bread to the air for a short time, and then place it in a moist warm chamber, for one or other form of aspergillus, according to the temperature, to appear with certainty. The erysiphe-oïdium, or mildews, are found in the grape disease, caused by oïdium tuckeri and oïdium lactis, which forms a white covering to milk, bread, and dung; and closely allied to these are the fungi causing the parasitic skin diseases known as favus, herpes tonsurans, and pityriasis versicolor. The mucors and the penicillium complete the list, these being the most common of all. None of them are of particular importance to the surgeon, except perhaps to the army surgeon, to whom the quality of the food, and especially of the bread, supplied by the commissariat, is a subject of unfailing interest.

The *Mycetozoa* may be passed over, as so little is known in regard to their relation to disease.

The *Blastomycetes* are represented by the yeasts and organised ferments which convert sugar into alcohol and carbonic acid, and the examination of which, in the hands of M. Pasteur, may be said to have led the way to all recent research on the subject of microbes.

From them we pass to the *Schizomycetes*, which have been differently grouped by different observers, and I here exhibit to you the classifications of Zopf and of Flügge, and also of Klein, whose excellent little work on Micro-organisms, just published, should be in everyone's hands. Klein divides the schizomycetes into micrococci, bacteria, bacilli, and spirilla, and each of these he subdivides into those that are septic, those that are zymogenic, those that are chromogenic, and those that are pathogenic. Septic microbes are those which excite, or at least accompany, the putrefaction of organic matters; their action on proteids, as Hoppe-Seyler has pointed out, resembles digestion: the first products being peptones, then leucin, tyrosin, and the fatty acids; and, finally, indol, phenol, scatol, hydrogen sulphide, ammonia, carbonic acid, and water. From putrefying animal substances there may be obtained a material which is certainly not living, for it can dialyse through a membrane, but which is capable of exciting septicæmia when introduced into the healthy body of animals, a condition that must be carefully distinguished from pyæmia. Septic poisons produce an effect commensurate with the quantity of the poison introduced; if the quantity be small, only slight and transient effects are produced; if it be large, the effects are more severe, and vomiting, rigors, spasms, and collapse, ending in death, may occur. Post-mortem examination shows congestion and hæmorrhage of the lungs and intestinal mucous membrane. In pyæmia, on the other hand, a poisonous agent is also introduced into the system, but it so far differs from the poison of septicæmia that it appears to be living and capable of multiplication, so that a very small quantity may prove fatal by the formation of numerous and widespread abscesses. It is possible, however, that, as Klein argues, large open wounds may become the seat of the multiplication of various organisms, which, by producing a septic poison, may produce septicæmia when absorbed in sufficient quantities.

Zymogenic Microbes.—The term zymogenic action is only another term for the induction of fermentation, and upon the whole of this subject a flood of light has been thrown by the labours of Pasteur. The chief forms are (1) the alcoholic, (2) the lactic, (3) the viscous, (4) the acetic, (5) the ammoniacal, (6) the butyric, and (7) the putrid fermentation. The agents are always microbes destitute of chlorophyll, and are generally anaerobic, obtaining the oxygen they require for growth and activity from the oxidised compounds in the liquid in which they grow. The micrococcus of urea and that of the phosphorescence of putrid meat and fish are, however, aerobic. The ammoniacal and the putrid fermentations are of the greatest interest to the surgeon. The former is exemplified in the action of the micrococcus ureæ and the bacillus ureæ in converting urea in ammonium carbonate. The micrococcus ureæ appears, when cultivated, in the form of minute spherical cells, either separate or united to diplococci, or in tetrads or in chains. They do not fluidify gelatine. The development of the microbe is not interfered with by the alkalinity of the fluid, and it can continue when the proportion of ammonium carbonate is as much as 13 per cent. The most favourable temperature for its development is from 30° to 38° C. The bacillus ureæ is a short

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plump bacillus with rounded poles, and is about twice as long as wide. Growth only takes place on the surface exposed to air, and, like the micrococcus, its action, as is now well known, is to decompose urea into ammonium carbonate with absorption of water: $CONH_2\ NH_2 + 2H_2O = CO_3\ 2(NH_4)$.

Chromogenic Microbes.—The term "chromogenic" is applied to those which develop colouring matter. This is sometimes soluble, sometimes insoluble, in water. The microbes are always aerobic. The most remarkable forms of chromogenic micrococcus is the M. prodigiosus, or red snow. The most remarkable of chromogenic bacteria are the bacterium rubescens of Ray Lankester,[1] which appears in vessels containing decomposing astaci and which is noticeable for its pleomorphism, and the bacterium cyanogenum, which is the cause of blue milk.

Pathogenic Microbes.—The pathogenic organisms are those which, as their name implies, are capable of generating disease; and the evidence on which their disease-producing powers rest is, it must be admitted, sufficiently satisfactory, for no microbe is regarded as the cause of a disease unless it is, in the first place, found to be constantly present in that disease, either in the blood or in the tissues; secondly, that when carefully isolated and cultivated, it can, when introduced into the body of a healthy animal, give rise to the original disease, and be again found in quantity in the body.

That the air contains a large number of particles floating in it has been shown by many observers, amongst whom Cunningham in India, Salisbury in America, Sanderson in England, Robin in France, and especially Miquel, of the Montsouris Observatory, may be mentioned. The apparatus of Miquel consisted of a S-shaped tube with a vane, so that the open mouth was always directed to the windward quarter. In the interior was an inverted funnel, the small extremity of which almost impinged on a horizontal plate of glass, the surface of which was rendered glutinous or adhesive by covering it with a solution of glucose in glycerine, and which was replaced from time to time. Examination of this plate showed some inorganic substances—such as fine crystals and iron; and many organic particles—such as vegetable cells and fibres, pollen grains, grains of starch, the spores of penicillium, aspergillus, coremium, and some botrytidæ, septonema, the septate ends of leptotrichum, trichostemium, septosporium, helicotrichum, vibrios, and many other spores; and, lastly, various animal substances—such as the scales of butterflies and moths, particles of wool and feathers, and also microbes. He has given an excellent graphic representation of the number of microbes contained in the air blowing from different quarters over the Observatory of Montsouris, which is situated to the south of Paris. From this it appears that the air picks up in its passage across Paris in the course of half an hour three times the number of microbes it contains when blowing over the country. In the water, as might be expected, they are still more numerous, and nothing shows more clearly the effects of the drainage of a large city into a river than the fact that at Bercy on the Seine, above Paris, the number of microbes was about 5,000,000, whilst at Asnières, below Paris, it was nearly 13,000,000 per cubic litre, whilst a litre of rain-water contained 248,000. That these particles not only enter our bodies, but are arrested, and retained in them, is shown by the conclusive yet simple experiment of Tyndall, who, by transmitting a beam of electric light through air before and after it has been respired, showed that, however thickly populated before, it is entirely free from organic and inorganic particles after it has once passed through our lungs. It may be incidentally mentioned that many microbes exist under ordinary circumstances on or in our bodies. Such are those which Bizzozero has shown fasten on our dead and desquamating epithelial scales, the leptothrix found between the fingers and toes, the bacillus of the smegma preputii, the numerous micro-organisms found between the teeth in all but those who are exceptionally cleanly in their habits, and which have been described by Miller and Lewis, and the various microbes of the intestines.

In regard to the life history of the schizomycetes, it may be said that they are all microscopic, and some of them only just visible under the highest powers. They are composed of a special form, named by Nencki mycoprotein, which is destitute of sulphur and phosphorus, and is not precipitated by alcohol. Some move; others are motionless. Some form a kind of gelatinous capsule, which, fusing with those of adjacent microbes, produce a zoogloea. Many require a special soil. V. Jacksch has shown that the micrococcus ureæ can grow on ammonium succinate and lactate and malate, but not on ammonium formiate, acetate, or butyrate. Some require oxygen—the aerobic microbes of Pasteur; others can grow without access of free oxygen, obtaining that element from the soil on or in which they grow. Most grow best at some definite temperature. The multiplication of the schizomycetes takes place by fission only, or by fission and by the formation of spores. The separation and isolation of these micro-organisms is a matter of much difficulty, but it can be effected by Pasteur's fluid method, or, still better, by Koch's method of plate culture and growth in sterilised peptone gelatine and agar agar.

True Breeding.—A considerable divergence of opinion still exists as to whether the various forms of microbes are really specifically distinct from one another, and whether successive generations so far retain their characters that they may be held, supposing the conditions to be similar, to breed true. This is obviously of importance from a sanitary and hygienic point of view, for, as Mittenzweig has well expressed it, if a form of microbe which has been ascertained to possess injurious qualities can be developed out of a harmless form, it is impossible that we should ever be able to establish sanitary measures that are of the least value, since we are always surrounded by millions of germs which may at any moment develop into a dangerous enemy. On the other hand, if these prove to be specific varieties, it is perfectly possible that, by gaining an accurate knowledge of its life history, its mode of origin, its favourite haunts, its mode of attack, the conditions of temperature and soil which are most favourable to its growth, its fruiting, the germination of its spores, and the like, we may learn to know our enemy, and may adopt precautionary measures which shall have for their object the extermination of the species in question.

Micrococci.—The pathogenic micrococci which are of interest to the surgeon are (1) those of the pus of open wounds, (2) the micrococcus of erysipelas, (3) the micrococcus of gonorrhœa, (4) the micrococcus of acute infectious myelitis, and (5) the micrococcus of progressive necrosis. The bacilli are (1) those of syphilis, (2) those of tubercle and lepra, (3) those of tetanus, (4) those of anthrax, (5) those of ulcerative stomatitis, and (6) those of foot-and-mouth disease.

Micrococcus.—Several forms of micrococcus are associated with disease in man. First, the staphylococcus pyogenes aureus. This was first recognised by Ogston in 1881. It appears in the form of spheroidal cells 0·87μ in diameter, which may either be isolated or twin, or arranged in groups of four, or in the form of a short chain of three or four elements, but sometimes also in large irregular groups, from which its name is derived. The colonies fluidify gelatine, but not agar-agar. When they are in contact with air they assume a bright yellow tint, but if covered with a layer of oil they remain white. This is the most common microbe found in collections of pus in man, and much evidence has been accumulated to show that either they or their excreta are the active agents in the production of abscesses; for, in the first place, Rosenbach and Passet have demonstrated that abscesses do not, as has hitherto been generally believed, necessarily result from the subcutaneous injection of even highly irritating substances—such, for example, as the oil of turpentine—unless some microbe be present; whilst certain forms of microbes are almost constantly found in abscesses, and some kinds of suppuration appear to be especially induced by the staphylococcus aureus. Thus it may be regarded as peculiarly apt to occasion boils, acute abscesses, and empyema. It is found also in acute osteo-myelitis, though whether it is the exclusive cause of this disease is not certainly known. Other affections in which it has been noticed are metastatic affections, pyæmia, and ulcerative endocarditis. Mr. Hartridge and myself found it in the pus of a hypopyon. The poisonous qualities this kind of pus microbe possesses is well shown by an experiment made by Garré and quoted by Flügge, in which a little of the cultivated micrococcus rubbed into the completely intact and healthy skin of the arm irritated the excretory ducts of the glands of the skin and occasioned a widespread group of furuncles. Other forms of staphylococcus have been described by late observers under the names of staphylococcus pyogenes

[1] Mic. Journal, 1873.

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albus, citreus, and tenuis, which differ in the two former cases in the colour assumed by culture colonies, and in the latter by the slightly larger size of the cocci and their disposition to exhibit two dark poles and clear equator. The citreus and tenuis forms are stated each to occur in about 10 per cent. of the pus removed from abscesses. Micrococci of pyæmia and of septicæmia have been described as occurring in the rabbit. Those of pyæmia were obtained from animals into which maceration fluid had been injected; those of septicæmia from those in which fresh meat infusion has been injected. Pyæmic micrococci are round; septicæmic are oval: the former mere points, only $\frac{1}{100000}$th of an inch in diameter; the latter large, $\frac{1}{25000}$th. Pyæmic micrococci cause strong infiltration at the point of inoculation. Peritonitis, metastatic abscesses in lungs and liver, and the capillaries contain heaps of micrococcus masses with blood-corpuscles enclosed, and there are many thrombi. Septicæmic micrococci cause no coagulation of the blood, never surround the blood-corpuscles, but push them to one side. There is no peritonitis; the bloodvessels are often filled with them.

Although the purulent discharges of gonorrhœa and the purulent ophthalmia of new-born children were examined by many competent observers with a view of discovering the active agents producing these diseases, it was not till the technical methods of Koch had been introduced that any success attended the efforts made for the discovery of these agents. In 1879, however, Neisser first demonstrated the existence of a microbe, which has been recognised by nearly all microscopists, and is evidently intimately connected with the whole group of purulent and contagious diseases of mucous membranes. In the following year Bokai and Finkelstein obtained pure cultures of this micrococcus in the course of two or three weeks, and on introducing a small portion of such cultures into the male urethra an acute attack of gonorrhœa rapidly followed, though when a little eucalyptus oil had been added to the culture, which killed the micrococci, no effects were observed. A similar experiment was performed by Bockhart on a general paralytic. Haab found that the cocci of purulent ophthalmia were absolutely identical with those of gonorrhœa. According to Cornil and Babes, the microbes of gonorrhœa, when fresh, are small spheroidal bodies about four micromillimetres in diameter, which appear to possess some power of motion. They are often arranged in pairs, or even in tetrads, the opposed surfaces being then somewhat flattened. Cornil and Babes believe they have recognised two forms, one a little larger than the other: the latter are disposed in heaps outside the cells; the former are within the cells. They colour easily with strongly staining agents, as methyl violet and fuchsin, but do not stain when treated on Gram's plan. They are found in the epithelial cells, both attached and free, and in the pus cells. The gonorrhœal pus of the male usually contains nothing but micrococci; but that of the female, obtained or collected from the vulva, at the orifice of the urethra, and in the vagina, contains long filaments like those of leptothrix buccalis, and masses of large spores which fill the pavement cells of the membrane. The best, the fullest, and the most recent account of this form of micrococcus has been given by Bumm, whose description I shall follow. Bumm's experiments were made exclusively upon the conjunctiva, which, as he points out, presents special advantages for experiments of this kind; for, in the first place, it is very easily infected; the infection attacks the whole surface simultaneously, and does not slowly spread from point to point; the moment of the commencement of the inflammatory reaction can be precisely noticed, and a portion can without difficulty or harm be excised for examination. There can be no doubt that a very small quantity of the gonorrhœal pus containing micrococci is capable of spreading the disease, and the natural and healthy moist surfaces of the conjunctiva and of the urethra seem to be well adapted for their growth and multiplication, so that they appear in great numbers in the course of twenty-four hours. Whilst other forms of micrococci, if they enter the eye, are unable to effect a lodgment, but are washed away by the tears or urine, the gonococcus cleaves, as Bumm remarks, with an eminently invasive force, to the superficial epithelial cells and the soft protoplasmic substance they contain; they then grow down for the most part between the epithelial cells till they reach the papillary surface of the mucous membrane, and at the end of the second day of infection the whole epithelial investment is completely beset with diplococci. The membrane now begins to present signs of reaction, swarms of white corpuscles escape from the bloodvessels and make their way between the tissue elements till they arrive at the surface of the epithelial investment. The cells of this layer, already disturbed in their arrangement by the growth of the fungus, become further separated by the intrusion of the white corpuscles and pus cells, and may even be raised in flakes and detached by the movements of the lids, leading to capillary hæmorrhages between the epithelium and connective tissue. In the event of a croupous exudation forming, the gonococci form rows and heaps between the fibrinous network and the lymphoid cells. In the case of the eye the disease stops suddenly at the limbus corneæ and at the margin of the lids, and when the epithelial investment is broken down the microbes seem to have little power of penetrating the papillary tissue. They do, however, extend along the fibres of the fibrous tissue, and where these separate from each other form little colonies not exceeding the size of the area of a divided capillary. Coincidently the phenomena of inflammation increase in intensity, the round cell infiltration extends to a depth of 2 mm. beneath the surface of the mucous membrane, and the cells become tightly packed, and at this time the suppuration stage of the disease is fully developed. In the course of about four days, when the conditions are favourable, a renovation of the epithelial coat takes place, commencing from the scattered remains of the old epithelium; a single layer is first formed, and by proliferation of the cells of this, a second and a third are formed beneath the first, the cells being flattened with fusiform processes. The development of the microbes now seems to terminate, though it may recommence, and solid rods of cells dip into the subjacent tissue, reminding the observer of the growing zone of cancroid. The gonococci quickly die when introduced into the tissue of the cutis, which explains the negative results formerly obtained by the syphilographers, and Bumm considers on this ground that the statements of those who have found gonococcus in the knee-joint and lymphatic glands require corroboration. No doubt they had a micrococcus before them, but no evidence has been afforded that it was *gonococcus*. He has himself found in the pus of acute bubo diplococci, which, however, both by their staining with Gram's methods and their mode of growth when cultivated, proved to be streptococcus aureus. In this case the staphylococcus which is frequent in gonorrhœal pus had entered through erosions of the prepuce or of the urethra, and had occasioned the suppuration of the gland.

I need hardly say how valuable a knowledge of these organisms has proved in the prevention of a terrible disease—the purulent ophthalmia of new-born infants. Formerly of common occurrence in all lying-in institutions, it is now, or perhaps I ought to say it might be now, by the use of well-known precautionary measures, entirely abolished. Sexual connexion should not take place during the last week or two preceding delivery. The hands and (if such are required) the instruments of the accoucheur should be absolutely clean. If there is the least doubt as to the existence of any discharge in father or mother, the vagina may be washed out with a dilute solution of corrosive sublimate (1 in 10,000); and if any discharge show itself in the infant, it should be promptly met and arrested by the instillation of a drop or two of a solution of silver nitrate containing from 1 to 3 per cent. of the salt; and all head-coverings and napkins, shawls, and the like, to which discharge is likely to adhere and then dry up, should be frequently washed. By proceedings like these, Credé and the speakers at a recent meeting of the German Gynæcological Society were able to point to the satisfactory result that, from an average of 150 cases per 1000, the number of purulent ophthalmic cases in the German Lying-in Institution had fallen to 2, and even these were due to the fact that the appropriate measures were not properly carried out.

The streptococcus erysipelatos was first noticed by Lukomsky, who found it at the margin of an erysipelatous area where the disease was making active progress. The lymphatics of the skin presented the zooglœa of micrococci. The microbes in the centre of the area were dead. Orth and Fehleisen have experimented largely with the cultivated forms. It appears to present subordinate forms in different instances. Inoculation of the erysipelatous microbe into the ear of rabbits in *most* instances caused redness and increased heat of the ear, though both were less than when streptococcus pyogenes was introduced. The

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inflammation began in from thirty-six to forty-eight hours after inoculation in the form of a well-defined area of redness, which extended in the course of the veins to the root of the ear. The animals soon recovered completely. The difference between this microbe and that of ordinary pus, which it closely resembles in appearance, rests on experimental and clinical evidence. Streptococcus pyogenes occurs, according to Flügge, in about one half of all kinds of pus, while that of erysipelas occurs only in this affection, and it is, moreover, capable of being transmitted from one person to another. Fehleisen has continued the culture through seventeen or more generations on sterilised gelatine, and has still found that when inoculated into patients with a view of curing lupus, cancer, and sarcoma, a typical attack of erysipelas was induced.

The subject of acute infectious osteomyelitis was first worked at by Rosenbach, who thought the infection might be analogous to one of the ordinary ferments, and from experiment he arrived at the conclusion that it was the lactic acid ferment; but Kraske has quite recently demonstrated that several microbes are present in this disease, and that in all probability the active agent is the well-known form of micrococcus named M. pyogenes aureus, the co-operating agents being the M. pyogenes albus, the streptococcus pyogenes, and some forms of bacillus. The paths by which the poison may enter the system are various, and Kraske reports a fatal case in which the disease started from a furuncle on the lip. Similar results have been obtained by Becker.

Bacilli.—From the micrococci exemplified in these forms of suppuration let us turn to the other grand division of microbes, the bacilli. A typical example of the bacillus is presented by charbon, which has been so fully worked out by Koch and Klein; no spores are formed by it in the animal body; it increases only by fission in that situation. This bacillus is one of the most interesting on three grounds: first, that it was the first instance in which a microbe could be shown to induce disease; secondly, because it can attack man as well as animals, though certain breeds show themselves to be exempt from its attacks; and lastly, because by inoculation its virulent effects can be greatly modified. The charbon bacillus belongs to the aerobia, since its growth is almost arrested when the access of oxygen is cut off. The colonies when nourished on gelatine form small punctiform masses with wavy contour, which quickly spread over the surface of the gelatine, effecting partial fluidification. A mere trace inserted into the veins of mice, rabbits, guinea-pigs, hedgehogs, sparrows, sheep, or horses, causes sickness, which in the mouse may kill in twenty hours, and in rabbits in forty-two hours, the bacilli being found after death in the spleen and in the capillaries of the lungs, liver, kidneys, and intestines. Pasteur and Toussaint made the extremely important discovery that the exposure to moderately high temperature materially diminished the virulence of charbon bacillus, and that its action was also softened by certain poisonous substances, though their morphological features remained unchanged.

Bacillus of Syphilis.—The presence of peculiar forms of cells in syphilis had been announced by Hallier, Lostorfer, and others some years ago, before precise methods of investigation had been devised; but it was only in the course of last year that Lustgarten obtained by special modes of staining evidence of the presence of a microbe peculiar to syphilis. His plan was to make sections and place them in aniline water and a concentrated alcoholic solution of gentian; to remove the dye in a solution of potassium permanganate; the brown flocculi of reduced manganese dioxide were dissolved in sulphuric acid, and the sections then appeared completely colourless, with the exception of the bacilli of syphilis. Lepra and tubercle bacilli were stained in the same way. The bacilli found in syphilitic neoplastic formations resemble those of tubercle, and are usually curved, sometimes in opposite directions, and are on the average 4·5μ long, extremes being met with varying from 3 to 7μ. They often present a feebly marked enlargement at one extremity. The contours are not always parallel, but have kinks and indentations in their course. With high powers the bacilli appear of a deep-blue tint, and have bright oval spots arranged at equal distances from one another in their interior, which he thinks may possibly be regarded as spores. The bacilli are contained in large oval or polygonal cells, where they occur in groups of from two to eight, intercrossing with one another. On the whole the bacilli are rare, so that several sections may be made before a single bacillus, containing cell can be found. In examinations of sixteen cases Lustgarten found these cells to be invariably present, and in particular he found them in a periosteal gumma in a case of congenital syphilis. On the other hand, he was unable to find them in two excised soft chancres and in numerous pathological as well as healthy tissues which were examined after similar treatment; and the same difficulty has been experienced by other observers, and especially by Alvarez, who believes he has found the syphilitic bacilli of Lustgarten, or organisms indistinguishable from them, in the smegma of the prepuce or of the vulva.

Strümpell has quite recently called attention to the etiological relations that exist between tabes and progressive paralysis and syphilis. He found that in 61 per cent. of the cases of tabes that had fallen under his own observation syphilis had previously certainly existed, and that in no less than 90 per cent. it had probably been present. He endeavours to show by citing the analogous nerve degenerations that occur in diphtheria that we have not here to deal with the deposit of the primary disease-producing microbe in the nervous system and its multiplication there, but rather that the secondary disease proceeds from some chemical poison produced no doubt by the original microbes. Similar nerve conditions occur after typhus and after dysentery. The most severe forms of nervous affection may follow the simplest and slightest attacks of these diseases. The attack of tabes so long after that of the original syphilis is not surprising when we reflect how chronic a disease syphilis is. It must be acknowledged, however, that the view that the secondary affections of syphilis are due to the secretion of syphilis bacilli—that is to say, to ptomaines produced by them—is far less probable than that the bacilli wander from the original seat of inoculation and induce local disease. Take, for example, syphilitic iritis. Surely the blood poisoning which would excite a sharp attack of iritis would produce serious disturbance of many other organs; but we can easily explain the occurrence of the iritis if we admit that the bacilli are carried by the current of the blood till they are arrested in some spot which, like the highly vascular iris, is well fitted for their multiplication; and it is not, then, surprising that there may be no other signs of constitutional disturbance than such as are occasioned by the local conditions of pain.

Another subject of the highest possible interest to the surgeon—the etiology of tetanus—has recently received some elucidation from the labours of Roser and Heiberg, of Rosenbach, of Göttingen, and of others. The causes of this affection have hitherto been in the last degree obscure, and I need hardly do more than refer to the reflex irritation theory. Roser and Heiberg first suggested that, owing to the formation of some miasm, a poison was generated which, being absorbed, caused the disease. Though supported by many observers, as Arloing and Tripier, Billroth and others endeavoured to transmit tetanus by inoculation, and failed. In fact, these negative results appear to be attributable to the circumstance that dogs were chiefly used for experiment, animals that appear to be singularly indisposed to suffer from tetanus. The first positive results were obtained by Carle and Rattone, who obtained from a pustule of acne matter which, being injected into twelve rabbits, caused eleven to be infected with tetanus; and further, the disease was transmitted from one of these animals to another. More recent observations have been made by Rosenbach, who took the material for his experiments from the body of a workman aged twenty-three, who in February of the present year had frost-bitten feet, and who died the day after his admission into hospital from tetanus. It was taken an hour after death from just below the line of demarcation. Two guinea-pigs into whose thighs small fragments were introduced in the evening exhibited well-marked tetanus the following morning, and died in the course of the day. The inoculation of other animals from these only succeeded when the material used for inoculation was taken from the immediate vicinity of the point inoculated. But when this was done, four guinea-pigs and eleven mice were rendered tetanic. The tetanus thus produced was in all respects identical with Nicolaier's earth-tetanus. It differs in the order of the appearance of the symptoms according to the position of the place where the inoculation is made. For example, if in a mouse the inoculation is made in the groin, the tail is found, after incubation of from nine to twelve hours, to be erect and

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directed stiffly to the side inoculated. The corresponding leg is stiff in all its movements, and is soon stiffly extended, the sole turned upwards, the toes clenched. The same phenomena are then seen in the opposite posterior extremity. The stiffness extends to the lower muscles of the back. The animal can only move by means of its fore feet. After the lapse of eighteen hours the anterior extremities become stiff, and immediately after trismus and opisthotonos, and with every touch, even mere contact of the glass jar, tetanic spasms set in. The animal then lies in a state of exhaustion, with intense dyspnœa, and soon only slight shallow respiratory movements and feeble convulsions afford evidence that life still persists. Death usually takes place in twenty-four hours. If a mouse were inoculated at some other point—as, for example, over the humerus—the extremity soon became motionless, and quickly became prone and stiff; a few hours later the ear fell back, the prominent eyeball of the field mouse became retracted, the lids half closed, the jaws tightly closed; eighteen hours after the inoculation the whole body was bent towards the inoculated side, the left fore foot stiff, the hind foot movable; on contact tetanic cramps were excited, and again in twenty-four hours the animal was dead. The process was the same in guinea-pigs and in rabbits, though in the latter animals the general tetanic convulsions were less marked. The period of incubation is at least twenty-four, and in the majority of cases thirty-six, hours. Professor Flügge and his coadjutors informed Rosenbach that they had been able to obtain pure cultures of earth-tetanus-bacillus, but that they experienced great difficulty in transferring such pure cultures from one medium to another. Experiments made with a view of explaining this peculiarity suggested that the presence of some other fungus was requisite; in other words that, as occurs in some of the higher animals, commensalism existed, perhaps due to the fact that the companion fungus promoted its growth by absorption of oxygen; and this observation, if supported by others, is interesting in connexion with the fact that tetanus is peculiarly liable to follow wounds in injuries in which foreign bodies or necrosis and gangrene are present. The question whether the tetanus bacillus spread itself throughout the body, and by what channels this occurred, has been the subject of many researches by Nicolaier, who found the bacilli in question once in the sciatic and twice in the spinal cord. Inoculation with fragments of organs succeeded fourteen times in fifty-two experiments. As the bacillus does not appear to be very abundant, it is difficult to understand how the simple growth of a fungus could produce such violent effects upon the nervous system, and it seems more probable that, as the old supporters of the zymotic nature of tetanus thought, some kind of poison resembling strychnia is generated by the bacilli. We may suppose, then, that the bacilli streaming forth from the point of inoculation as from a centre distribute themselves through the body, and, further, that each bacillus lying in tissues represents a small but constantly acting source of poison, which first affects its own immediate vicinity, but as a consequence of absorption and in co-operation with others, affects ultimately the whole body, and we may thus explain the local tone and tension, its gradual extension, and finally the affection of the whole system.

It is interesting to consider how these organisms exert their baneful influence on the living bodies of the higher animals. How, for example, does the bacilli of splenic fever act upon cattle? There are clearly four ways in which we may explain the action of microbes upon the infected animal. In the first place, they may act like an invading army on a peaceful population; they may simply consume their stores of pabulum. Possessing greater strength and vitality than the normal tissues, which are highly specialised and perhaps require more complex food—that is, food which has been more or less highly assimilated,—these young and vigorous warriors seize upon and appropriate the raw material, and practically starve out the more delicately framed cells. And this action cannot be overlooked, in whatever mode we may seek to explain their influence. Their enormous rate of reproduction has been already referred to, and we have only to look at the drawings of Klein and others of the thorough infiltration of many organs to understand what a powerful influence they must exert in this direction, and how the normal cells weakened by inanition may fall, like Gulliver before the Liliputians, victims to the attacks of their minute but numerous and persevering enemies; and if any further proof were needed, it would be found in the serious effects that are produced upon the economy by any constant drain, whether it be from an imperfectly healed abscess, from leucorrhœa or even from purulent ophthalmia. Secondly, they may act by interfering with the due performance of the functions of the various depurating organs. Klein, in his numerous and excellent drawings, has frequently represented the kidney, and we see the capillaries of the glomeruli blocked up with myriads of microbes. It is clear that the urea and other final products of the regressive metamorphosis of the tissues must be imperfectly eliminated, and if retained in the body must contribute their share in the development of disease.

But another view may be held. It may be said, so far as we know, all living beings produce excreta, the simplest of which, carbonic acid and water, contain the carbon hydrogen and oxygen of the food; whilst the nitrogen is eliminated in the form of urea or uric acid or guanin, or some other soluble and generally poisonous compound. Microbes can constitute no exception to this rule, but whereas in most instances the products of excretion are thrown forth into the vast receptacles of the atmosphere or of the waters, or of the soil of the earth, and by the play of other forces become harmless, they are here discharged into the body of the animal on which they are living, and so bring about its destruction more or less quickly, but as surely as if that animal's own excreta were retained in its body.

There is still another explanation which on many grounds has recommended itself, as accounting more satisfactorily for the phenomena observed, both to chemists and biologists. It is that the injurious effects produced by microbes is due, not to what they take or to what they excrete, but to what they leave, and this is closely associated with the imperious demand they make for oxygen. Being in many instances anærobic—that is, living and multiplying without direct exposure to air,—they must obtain the oxygen they require for the process of life from the tissues by which they are surrounded; but when oxygen is withdrawn from such complex chemical compounds as those of which our bodies are constructed, the elements enter into new combinations, and then, under the name of ptomanies (from πτῶμα, a dead body), are believed to be the really poisonous agents. Attempts have been made to isolate these compounds; and it has been shown that they are of the nature of alkaloids, and resemble, both in their constitution and in their effects, those deadly poisons that may be extracted from digitalis, conium, tobacco, delphinum, and other noxious plants. In reference to this it may just be noted that Miquel has cultivated a bacterium which has the singular power of converting a gramme of sulphur in the course of forty-eight hours into hydro-sulphuric acid on the addition of four litres of boiling water and some tartrate of ammonium. This bacterium often fixes itself in vulcanised indiarubber tubes, and in the course of a few hours can charge the water they contain with from 60 cc. to 70 cc. per litre of sulphuretted hydrogen.

The difficulty which must strike everyone in regard to the action of these microbes on the body is the comparative rarity of disease. How is it, if the air is swarming with these ferocious microbes, that we do not all succumb to their attacks? How can anyone escape? Pasteur meets the difficulty by stating that the healthy body is capable of resisting the attacks of these foreign agents, and that so long as the surface is intact no harm comes from their ingestion. A healthy man is probably capable of resisting the attacks of the majority of pathogenic organisms, at least for a time. The cells which cover the surface of our bodies and line our alimentary respirators and genito-urinary tracts possess their own vital energy, and when perfectly normal cannot be invaded by any microbe; they present an impenetrable front to such organisms along their whole line. When, however, by mechanical, chemical, or other injury the vitality of these cells is lowered, a door is opened for the admission of such organisms, which, having once penetrated the tissues or the blood, find a fit soil for multiplication; and these may prove, by their mere numbers or by their effects, injurious or fatal to the whole body. Nothing can demonstrate this better than the experiment recently made by Orth and Wyssokowitsch, who found that staphylococcus could be injected into the blood of a rabbit without apparent injury to it; but if before the injection a slight mechanical injury was inflicted on the valves of the heart, typical endocarditis was at once produced.

In conclusion, I would desire to point out that this branch

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of inquiry is of quite a special character, and that it requires very considerable practice and entire devotion of time. Take my own case. I was most desirous to obtain cultures from various diseases of the eye attended with suppuration to illustrate this lecture, but it is requisite in the first instance to have sterilised tubes and plates to grow the microbe. Though pretty well accustomed to delicate operations, very special precaution is required to introduce the matter gained without entrance of foreign bodies. Then an incubator is wanted; and finally there is the long and difficult examination with the microscope, with all its details of cutting, staining, mounting, and, not least, preserving in an accessible form. On these grounds I hope that the Council of the College will see fit to institute with part of Sir Erasmus Wilson's bequest a laboratory devoted to this object, where one or two able demonstrators may continue the study of bacteriology, and prosecute, with all modern appliances, those researches, which are certain to prove of service in the diagnosis and treatment of disease.

A Clinical Lecture

ON THE

PATHOLOGY AND TREATMENT OF CHRONIC CONSTIPATION IN CHILDHOOD, AND ITS SEQUEL, ATONY AND DILATATION OF THE COLON.

Delivered at the Hospital for Sick Children, Great Ormond-street,

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(*Concluded from page 1064.*)

IN the case last mentioned the nausea and headache were frequent, coming on at irregular intervals without any great coating of the tongue or sign of special bilious disorder. In other instances, however, the attacks are periodic, coming on once in every three, four, or six weeks with considerable regularity, and accompanied by great coating of the tongue with vomiting and considerable fever. The constipation is habitual and persistent, but it would seem as if the fæcal poisoning were cumulative. In the intervals between the attacks the patient remains fairly well; then the child grows feverish, the tongue becomes greatly coated, headache and vomiting supervene—in fact, culminate in an attack of migraine, not cured or alleviated by bromide of potassium or other sedatives or neurotic remedies unless accompanied by a purge, but removed at once by a dose of calomel or other purge, to recur again after three or four weeks' respite. Such cases are, however, curable by the steady administration of laxatives with strychnia or nux vomica, with bromide of potassium in addition in some cases, and regulation of diet. Of this form the case I now relate affords a good example.

CASE 5.—W. W——, aged three years and a half, a fairly healthy-looking, fairly nourished boy, was brought to me in March, 1882, for attacks of headache and vomiting. The attacks came on every three or four weeks; the first sign being some feverishness, coating of the tongue, and loss of appetite. In the course of a day the tongue became more coated still, the breath offensive, the headache severe, and vomiting usually followed; with rest and a good deal of opening medicine the attacks subsided. The bowels were extremely constipated. The boy always complained of a little headache, even in the intervals between the attacks. A dose of calomel (two grains and a half) was prescribed at once, and sulphates of magnesia and soda, with strychnia and iron, were given twice a day after food to keep the bowels open daily. The next attack was slight, although the bowels were still somewhat confined, and the laxative was increased.

This case was one of migraine induced by the constipation, and relieved at once by its removal. In some cases no doubt this is not alone sufficient for cure, and patients are benefited by the addition of bromides and croton chloral. But when migraine is accompanied by constipation, as it is almost invariably in children, the cure of this is the most essential part of treatment, and rarely fails to stop the periodic headache and sickness. In other instances, again, the symptoms of headache and nausea are comparatively unimportant, but there is general loss of health, with more intractable constipation, considerable abdominal distension and flatus, and signs of considerable dilatation of the bowels, especially of the large intestine, the heart being in some cases considerably displaced upwards, and its action seriously interfered with. These cases are highly interesting and important, for the distension and dilatation of the gut are largely due to mistaken treatment. The progressive atonic distension of the bowel is probably due in part to the pressure of fæcal accumulation and gaseous distension arising from fermentative decomposition, but in greater measure still to the loss of tone and peristaltic power consequent upon the constant stimulation by irritant purgative drugs; and more still by the undue expansion of the loaded intestinal tube by frequent injections. The following case illustrates this point.

CASE 6.—F. F——, aged six years, was brought to me in June, 1885, on account of distension of the abdomen and intermittent feverish attacks, with headache, nausea, and sometimes vomiting. The temperature was often as high as 101°; the tongue always coated, especially at the time of these febrile bilious attacks. The last three attacks had appeared with great regularly at intervals of six weeks. The bowels had always been constipated, and were now more so than ever, in spite of frequent doses of all kinds of aperient medicines, and latterly of the use of enemata. The abdomen had become more and more distended, so much so that the doctor in attendance advised the use of an elastic abdominal belt to support it, and this the boy had worn for some months. The enlargement of the abdomen was due to gaseous distension; there was no effusion. No scybalous masses could be detected, but some rounded bodies (either enlarged glands or small scybala) were indistinctly felt deep down towards the middle of the abdomen. A mixture of strychnine and iron, with three-quarter drachm doses of sulphates of soda and magnesia, were ordered twice a day after meals. In a week the boy was already much better. There was no return of the bilious attacks. The bowels acted daily. The abdomen began to go steadily down. The medicine after a time was gradually reduced. The bowels were kept open. Six months later the bandage was left off, the abdomen being normal in size and character. Not a single relapse occurred from the first. No more strong purgatives or enemata were used.

Here, again, is a case in which such simple measures as I have detailed were sufficient after the strong and vigorous means tried before had failed, and worse than failed—made matters steadily worse. The original cause of the constipation was not clear. It dated from early infancy, and probably had its origin in milk food insufficiently stimulating the intestine, aggravated by the dislike of the child to aid evacuation, and his desire to resist it since it had become painful. Later, stimulating purges and enemata had increased the evil.

Here is a similar but still more striking case:

CASE 7.—C. M——, a fairly healthy boy, aged three, was brought to me in February last on account of a large tumid abdomen and obstinate constipation, which had existed since he was three months old. The motions were dry, whitish, and hard. The child's general health was impaired; he had little appetite, was languid, but had no headache or nausea. Every purgative known appeared to have been given. Here is a list the mother gave me: castor oil, grey powder, calomel, senna, scammony, jalap, podophyllin, Steedman's powders innumerable, Gregory's powder, belladonna, rhubarb, and cascara sagrada.[1] But all these had failed in turn, and latterly—for the last two years, indeed—enemata had been given constantly, not infrequently two in a day. If the first was retained a second was given. Once or twice three had been given in the day, the first two being retained; so that oftentimes the gut was distended with two or three together. The bowels never acted without injections, except for a short time at Brighton in the spring. Sometimes three enemata were retained, and did not act until the following day. On

[1] The list is not exhaustive; but these are just what the mother could call to mind at the moment.

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examining the abdomen, it was seen to be greatly distended, especially immediately under and below the false ribs, from the epigastrium to the umbilicus. This characteristic feature indicated the colon to be greatly expanded. Here it was more tense than below the umbilicus, where the abdomen was softer. The heart's apex beat was exactly at the nipple, and on percussion the tympanitic bowel note was found to extend upwards to a finger's breadth below the nipple. The girth at the largest point above the umbilicus was 23¾ in.

Here the distension was clearly due to dilatation of the colon, evidenced by the position of greatest distension at the epigastric line, the pushing up of the heart, and the tympanitic resonance extending upwards to the nipple line. This persistent dilatation had been brought about, as in the last case, partly by the accumulating fæces and gases of constipation, but especially by the constant forcible distension of the gut, already loaded with fæces, by the enemata. The fact that two or three ordinary enemata were retained sometimes for twenty-four hours spoke volumes for the capacity of the large bowel. Under similar treatment by sulphates, strychnia, and belladonna, with appropriate diet—i.e., diet of a simple kind, with fruits (but no coarse food, like oatmeal),—the wearied, enfeebled intestinal walls began to regain tone and power, and the increased fluidity of the stools enabled slight peristalsis to act effectively. In the course of two months' steady treatment of this kind the distension subsided, and the child is now nearly well, the bowels acting daily and the abdomen being almost normal in size, so much so that the bandage has been left off.

Lastly, let me give a case of like character, but more extreme and protracted, and still under treatment from time to time. It is now nearly two years since its first commencement.

CASE 8.—Arthur H——, a delicate boy of the age of five years and a half, was sent to me by a medical man in June, 1884, on account of obstinate constipation, which had existed for nine months, and had resisted all treatment. The usual vicious plan of giving stronger and stronger aperients frequently had been adopted, and latterly, when these had ceased to be effectual, enemata. This had now become the regular practice; the bowels could not be opened without injections. Sometimes these were retained, and had to be repeated two or three times. The boy dreaded the action of the bowels, and resisted it with all his might. The abdomen was much distended, especially the portion answering to the position of the transverse colon; and there was great tympanites. The first cause of the constipation was obscure; probably some slight derangement and neglect. This had been developed by mistaken treatment into confirmed constipation from atony of the intestine and dilatation. Half-drachm doses of sulphate of magnesia, and the same quantity of sulphate of soda, with iron, strychnine, and belladonna, soon gave daily action, and this at last increased to diarrhœa, when the medicine was reduced and then omitted. The child was well at the end of three months. He remained well for nearly four months, the bowels acting regularly without medicine; then the bowels again became constipated, owing, it was supposed, to a severe cold. The laxative medicine was resumed, but it produced no effect and caused griping pain. A doctor was called in, who at once unfortunately ordered regular injections, and the constipation went on increasing, the abdomen becoming again distended. The boy was then brought to me in the same straits as before, and he was admitted into this hospital. A pill of calomel and colocynth, followed by a small castor-oil enema, unlocked the block. The boy caught scarlatina, but he did well, and the saline laxatives, with strychnine, were then resumed, and the child again recovered as before. He went out in March of last year. After that the bowels acted regularly for four months; then diarrhœa set in after an attack of some eruptive fever—probably measles. Then constipation recurred, with much griping pain, which, occurring very frequently, prevented sleep, due clearly to ineffectual peristalsis. The doctor was called in at home, and gave again repeated injections, with little or no effect. Ultimately the boy was once more brought to the hospital, and readmitted last December. The abdomen at this time was found to be greatly distended, especially above the umbilicus, by an enormously dilated colon; excessive drum-like resonance reached as high as the nipple-line. The abdomen measured 21½ in. at the largest circumference over the false ribs. The heart's beat was seen in the first, second, and third spaces; the apex at the nipple. He was suffering from constant colic, with loud rumbling noises. The bowels did not act except by repeated enemata given several days together. A bandage was applied firmly to the upper abdomen, which was rubbed and kneaded daily with cod-liver oil. To relieve pain a mixture containing two minims each of tincture of opium and of tincture of belladonna, with cardamoms and ginger, were given, and the bowels emptied by small castor-oil and olive-oil enemata. The plan did not answer; the pains continued, and the abdomen became enormously distended, measuring 22¾ in. The boy grew pale, and lost flesh; appetite entirely failed: vomiting occurred; the circulation became extremely feeble from the pressure on the heart; the face and lips and fingers assumed a blue tint. There was extreme debility and tendency to faintness. The patient became worse daily; râles began to appear in the lungs. In view of the collapsed state of the child under the upward pressure of the colon, it was decided to puncture it with a fine trocar, which was accordingly done with a thoroughly carbolised large hypodermic needle in two places between the ensiform cartilage and the umbilicus. Gas issued freely through the needle; a large quantity was allowed to escape. The distension subsided, and immense relief followed. The old mixture of belladonna and strychnia, with the sulphates of soda and magnesia, were resumed. The abdomen steadily decreased in size. The bowels began to act freely. Arsenic and iron were given in addition, and in six weeks' time the boy again went out well. The heart's position, however, was unchanged. He was bandaged, and the medicine continued in smaller doses. I had enjoined this patient to come in again last week, in order that you might have the opportunity of examining him, and also for the purpose of being galvanised with the view of causing contraction of the still greatly dilated colon. Unfortunately he developed scarlatina, and is now in the isolation ward with a second attack.

This specimen of dilated colon from the museum which I show you is from a case of atresia ani, the enormous distension being the result of pressure by cumulation and gases, with ineffectual peristalsis, similar to that produced by analogous mechanical causes in some of the preceding cases. The colon appeared to fill almost the whole abdominal cavity when it was first opened at the post-mortem examination. This distension of the colon in children appears to have been unnoticed, although Henoch speaks of cases in which constipation leads to extreme distension of the abdomen, with pain and tenderness, so as to simulate peritonitis. The swelling of the abdomen is put down to chronic peritonitis or to tabes mesenterica. These cases are seen chiefly amongst the children of the better class of people. They are not so common amongst hospital patients. The reason is, I imagine, that the poorer children are less treated.

Gentlemen, my object in these lectures is not so much to describe the cause and symptoms of constipation as to point out the disastrous results of mistaken treatment, and to enforce the necessity of a more rational procedure. Look at the evil effect of strong purgations how they enervate and wear out the tone of the bowel. No occasional purge of rhubarb or scammony is efficient to cure. Look, again, at the evil effect of frequent enemata. Enemata are only to be used on an emergency. They, equally with strong purges, impair tone and do direct harm by actual dilatation. In confirmed cases of constipated habit, treatment must be not intermittent, but continuous; the daily administration of appropriate remedies steadily, for a considerable period, is absolutely essential. Intermittent treatment is abortive, ineffectual, and aggravates the evil. What, then, is the proper treatment for these cases? First, be sure that there is no malformation, no intussusception, no sore about the anus, rendering defecation painful. Then use saline laxatives. Their mode of action is by increasing the flow of secretion rather than by stimulating peristalsis. Thus tone returns when distension is relieved by the easy evacuation of fluid stools. Further aids to this are strychnia, nux vomica, iron, and belladonna. They act by increasing muscular tone and nutrition, not by stimulating peristalsis directly. In the case of little children up to two years old simple carbonate of magnesia in milk is sufficient (5 to 10 or 20 gr.); this is better than the piece of soap in the rectum, or the repeated castor oil or manna so constantly advised. In older children, the sulphates of magnesia and soda, with the tonics named above, and daily massage with castor oil or cod-liver-oil, are most useful. In older children still, a pill of aloes or euonymin, with sulphate of iron and nux vomica, may be given as an alternative to the salts and strychnia, but no frequent rhubarb, or scammony, or podophyllin, or

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jalap (these are for the relief of temporary difficulty only); in mild cases, perhaps, or if the liver is not acting, a dose of calomel, grey powder, and soda, or senna. Regimen is an important element in the treatment if the child should have chronic constipation: abundant water, pure, not hard; "salutaris water" is excellent. In little children add a good infants' food to milk; fruits; fruit jellies; treacle; cooked green vegetables of the softer and more delicate kinds. Some variety in food is useful; a good mixture is better than a monotonous diet. It is, I think, extremely doubtful if coarse food is useful in the long run. It causes atony and weariness of muscle eventually by over-stimulation. And you must insist on regular evacuations. Take care that the stools are not dry and hard, or the child will resist action and increase constipation. Other useful adjuncts are—abundance of fresh air, which aids in improving nutrition; and exercise, which mechanically aids the passage of the contents of the intestine down the tube, and improves general health and muscular tone.

SOME OBSERVATIONS ON RUPTURE OF THE URINARY BLADDER,

WITH AN ACCOUNT OF TWO CASES OF INTRA-PERITONEAL RUPTURE SUCCESSFULLY TREATED BY ABDOMINAL SECTION AND SUBSEQUENT SUTURE OF THE VESICAL RENT.

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TWO cases of intra-peritoneal rupture of the bladder have been recently under my care in St. Thomas's Hospital. In each case abdominal section was performed very shortly after admission, the rent in the bladder exposed, and carefully closed by numerous interrupted silk sutures. The cavity of the peritoneum was then thoroughly washed out with warm boric solution and the external wound closed. An uninterrupted recovery followed in both instances, the first, so far as I can learn, upon record.

The injury is comparatively very rare. During ten years only five cases of rupture of the bladder, not including the two now recorded, were admitted to St. Thomas's Hospital. In France, Germany, and Austria I learn that this form of injury is extremely rare. Intra-peritoneal rupture of the bladder has hitherto proved almost uniformly fatal. Sir Henry Thompson, in Holmes' System of Surgery, last edition, says "recovery can hardly be regarded as possible." Some few cases of alleged recovery have been recorded, but in all but perhaps one of these, where the abdominal cavity was opened, the diagnosis must be considered as more or less doubtful. In the case above adverted to, Walter of Pittsburg, U.S.A., performed abdominal section ten hours after the patient had received a blow on the lower abdomen. A pint of blood was sponged out of the peritoneal cavity, and a rent two inches long seen in the bladder. This was not further interfered with. The abdominal wound being immediately closed, opium was given and a catheter introduced into the bladder. Recovery ensued.

The most recently published article on the subject is by Mr. Rivington, in "Heath's Surgical Dictionary" (1886). He there states that "no indubitable case of recovery after intra-peritoneal rupture of the bladder is on record." Unfortunately, the experience of operative interference has been equally unsatisfactory. In a very few cases abdominal section has been performed with subsequent suture of the intra-peritoneal rent, but hitherto without success, unless Hofmokl's case be so regarded. Mr. Heath,[1] Mr. Willett,[2] and Mr. McGill of Leeds[3] have published cases of intra-peritoneal cystoraphy—these being, so far as I know, the only ones in this country. Professor Hofmokl,[4] relates a case of rupture of the bladder complicated with separation of the symphysis pubis. The subject fell from a height to the ground and fractured the pelvis. The symptoms were chiefly those of extra-peritoneal rupture. On an abdominal incision being made much blood and urine were found in the cellular tissue behind the pubes, and the bladder was torn opposite this, the serous layer being detached for a little distance over the fundus. Although some bloody fluid was found in the peritoneal cavity, the description does not make it clear that the rent in the bladder extended through its peritoneal investment. The rent was partially sutured and the patient eventually recovered. In the cases of Messrs. Heath and Willett the sutures gave way near the lower angle of the wound, and fresh extravasation took place. They were passed through the whole thickness of the bladder, which Maximow,[5] in his experiments on dogs proves, was always attended by fatal consequences. Mr. J. Duncan of the Royal Infirmary, Edinburgh,[6] has also performed abdominal section in one case, after failing to find the rent by digital exploration after perineal cystotomy; and, just as in the instance of Walter of Pittsburg, he did not suture the rent in the bladder. A fatal result followed, apparently due to suppression of urine. Mr. Brown, of the Leeds Infirmary,[7] performed perineal cystotomy with subsequent drainage. The rupture, although sufficiently large to admit the end of the middle finger, was not discovered by the finger passed into the bladder. The patient did not rally from the operation, and shortly after died. Extensive recent peritonitis was found post mortem. There was no history of injury in this case. Mr. McGill, of the same hospital,[8] records a case of intra-peritoneal rupture by direct violence. He sutured a median vertical rent in the bladder, four inches long, with nine chromic gut sutures. The operation was performed about sixty-eight hours after the accident. The introduction of the sutures was found to be facilitated by the previous distension of the rectum with an air tampon, which materially raised the recto-vesical culde-sac, a method suggested by Gueterbock.[9] The patient, who was fifty-four years old, sank the following day from shock. At the necropsy, performed three days and a half after the accident, there was no fluid in the peritoneum. No signs of peritonitis were found, and nothing very abnormal in any organ. Mr. Teale some years ago stitched up a ruptured bladder and inserted a drainage-tube through the perineum. The patient died the same night, his death being apparently accelerated by considerable hæmorrhage from the perineal incision.

There is thus considerable diversity in the practice recommended for adoption in cases of intra-peritoneal rupture of the bladder. Catheterism simply has been practised, or washing out the peritoneal cavity from the side of the perineum or urethra; median or lateral cystotomy has been performed to provide direct drainage through the perineum; aspirating the abdominal cavity, abdominal section, sponging out urine and blood from the interior, leaving the rent undisturbed, have been adopted in at least two instances; and lastly, abdominal section, with suturing of the rent in the bladder, in some cases completely, in others leaving the anterior part unclosed, or making a drainage opening in the part of the bladder uncovered by peritoneum, has been tried.

CASE 1. (Mr. Cooper and Mr. Brockway, dressers; Mr. F. Nichol, house-surgeon).—William S——, aged thirty-three, labourer, an old soldier, was admitted into hospital on Sept. 22nd, 1885. About 8.30 P.M. on the 21st, the patient, whilst pursuing his son, ran "full tilt" against an iron upright post at the entrance to a court. The head of the post struck him in the region of the umbilicus; he fell to the ground, and for a minute or two felt stunned, but soon was able to rise and walk slowly home in great pain, a distance of 250 yards. He vomited twice shortly after the accident, and about half an hour later felt an inclination to micturate. He tried and failed, but a strong desire continued. Throughout the night the abdominal pain was severe; he walked up and down his room, unable to remain at rest or lie in bed, and striving continually to pass urine without success. He had micturated, he felt sure, an hour and a half before the accident. He had drunk about a quart of beer during the evening, but denies that he was intoxicated. In the morning, the pain increasing and finding himself unable to pass urine, the man walked, unaided, to the hospital about noon on the following day, a distance of one mile. There does not seem at any period to have been anything like collapse.

On admission, fifteen hours and a half after the accident, the patient, a powerfully built, healthy-looking man, of florid complexion, complained of intense abdominal pain

[1] Med. Chir. Trans., vol. lxii.
[2] St. Bartholomew's Hospital Reports, vol. xii.
[3] THE LANCET, Nov. 20th, 1886.
[4] Wiener Medizinische Presse, Sept. 1886.
[5] Rev. de Chirurg. 1881.
[6] THE LANCET, Aug. 28th, 1885.
[7] Ibid., Nov. 20th, 1886.
[8] Ibid.
[9] Langenbeck's Archiv, vol. xxxi., 1885.

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and betrayed the anguish he suffered in his face. The inability to pass urine was complete; his expression was very anxious, and his manner uneasy. There were then no symptoms of shock. The abdomen was distended and exceedingly tender all over, more especially in the epigastric and hypogastric regions. There was resonance anteriorly, with dulness in both flanks, varying in extent with the position of the patient. A No. 6 soft black catheter was passed, and one ounce and a half of urine, slightly tinged with blood, drawn off. Temperature 99·8°; respiration 24. About 2.30 P.M. I saw the patient, and on again introducing a catheter drew off ninety-five ounces of slightly red coloured fluid. The point of the instrument seemed grasped, and did not move freely, proving the bladder to be contracted, but the existence of any damage to its wall could not be made out. The level of dulness in the flanks was sensibly diminished, and the patient experienced some relief. Taking into account the history, symptoms, and especially the large amount of blood-stained fluid removed, an intra-peritoneal rupture of the bladder seemed probable, and I decided that abdominal section should be performed at once, it being then some nineteen hours after the receipt of the injury.

Operation.—At 3.15 P.M., the patient having been placed under the influence of ether, a full-sized catheter was introduced and four or five ounces of bloody fluid drawn off. An incision about six inches in length was made in the median line terminating just over the pubes. The abdominal wall was very fat. The linea alba having been divided and the recti muscles retracted, all bleeding points were secured before the peritoneal cavity was opened. On fully dividing the peritoneum and retracting the margins of the wound, an extensive rent could be felt in the bladder, and the point of a catheter could be perceived free in the peritoneal cavity. The bladder was empty and firmly contracted behind the pubes. No urinary smell was perceptible. The rent was in the posterior aspect of the bladder, and extended from the superior fundus to the recto-vesical cul-de-sac; it was median and vertical, and as nearly as may be four inches in length. The edges were rather irregular and thickened. So deeply did the rupture extend into the pelvis that great difficulty was afterwards experienced in the introduction of the deeper sutures. To facilitate this the parietal peritoneum was divided transversely on each side, and it was then found possible to draw the bladder much further out. The intestines were pushed back with sponges held by one assistant, while a second pulled the bladder forward. Sixteen sutures of fine silk were then introduced after Lembert's method, including the serous and muscular coats only, at intervals of about a quarter of an inch apart, beginning at the lower part, and the first and last sutures were introduced quite beyond the limits of the injury. The edges of the mucous membrane were thus thoroughly inverted and the serous surfaces brought into contact (Fig. 1). Wherever the closure did not seem absolutely complete and perfect, catgut sutures were introduced to the number of six or eight between the silk ones, including the peritoneum only. The bladder was now twice moderately distended with a weak solution of boric acid injected through the catheter by a Higginson's syringe, and proved perfectly watertight. The peritoneal cavity was finally irrigated with two gallons of a 1 per cent. solution of boric acid dissolved in water previously boiled and cooled down to a temperature of 98° F. The fluid was introduced by means of a tube attached to an irrigating can raised 8 ft. from the floor. It overflowed into a macintosh and thence to a tub placed at the foot of the table, in the manner customary during ovariotomy. The irrigation was continued until the escaping fluid became absolutely clear. There was no sponging of the peritoneum. A glass drainage-tube was introduced from the centre of the wound to the recto-vesical cul-de-sac. The edges of the peritoneum and external wound were then closed by deep silk sutures, and iodoform, iodoform gauze, and salicylic wool applied, with bandages of carbolic gauze. A soft black catheter was fastened in the urethra, the tip only projecting into the bladder. The operation lasted two hours, and was conducted under the carbolic spray throughout, save for a few minutes when the steam failed. The peritoneum and intestines looked quite healthy, presenting a polished appearance, apparently not injected. No blood-clots were observed.

The subsequent progress of the patient may be briefly summed up. Almost directly after the operation all pain and abdominal tenderness completely disappeared. There was no sickness. The man slept quietly through the night, an injection of a quarter of a grain of morphia being given. During the subsequent five days the temperature never reached 100°; on the eighth and ninth days it was a little over 100° in the evening. The pulse and respiration were normal. He passed from thirty to forty ounces of urine daily, at no time containing any blood. This was at first drawn off by the catheter at intervals of four hours; but on the third day the catheter was removed, and subsequently he passed urine naturally, the instrument not being again needed. As regards the abdominal wound, it healed quickly and well. A very small amount of serous discharge was sucked out of the drainage-tube at each dressing, and on the fourth day the drain was removed altogether. The opening it left somewhat delayed the final closure of the wound, but on the eighth day the sutures were removed, and within the fortnight the abdominal incision had cicatrised and the patient pronounced convalescent. In three weeks the man was able to rise, and he shortly after went home and resumed his ordinary work, as well apparently in all respects as he was before the accident. Beyond what was incident to confinement in bed there was no discomfort complained of, and he had not a particle of pain or distress of any kind throughout. None of the sutures were seen in the urine while the man remained in hospital, though carefully looked for.

CASE 2. (Mr. F. Nichol, house-surgeon; Mr. C. H. James, dresser, to whom I am indebted for these notes.)—C. F——, aged thirty-seven, a slater, living at Camberwell, was admitted on Nov. 17th, 1886. The subject of the accident is a stout, heavy-built man, 5 ft. 6 in. high, weighing 15st. On the day previously, at 11.45 A.M., while he was at work on some scaffolding, he stepped backwards and fell a distance of eighteen or twenty feet, in a sitting posture, upon some soft clay. He did not become faint, or indeed have any symptoms of collapse, nor did he consider himself seriously hurt. He was able to walk a few yards to a cab. While waiting for this to come up he had a desire to pass urine, but failed to do so, and the desire soon left him. On arriving at the hospital at 1 o'clock, he walked in, getting the porters to assist him on account of his back feeling so "queer." It was then found that the skin in the region of the sacrum was bruised and slightly ecchymosed. No injury to the pelvis or spinal column was detectable. In the casualty room he was able to stand and move about without apparent inconvenience, and complained of no abdominal pain or tenderness. He had no particular pain or distress of any kind. He stated distinctly that he had no desire to micturate, and therefore a catheter was not passed. He had drunk one pint of beer about half an hour before the accident, and had micturated about the same time. He had also had a pint of beer between 6 and 7 A.M. A flannel bandage was applied to the abdomen and hips, and he was told to return home and rest quietly. About 4 o'clock the same afternoon he commenced to feel a little pain at the lower part of the abdomen, but it was so slight that it was not mentioned when his club doctor visited him at about 5 P.M. in order to give a sick certificate. In fact, he felt fairly well till about 6 P.M., when he experienced some pain and a desire to micturate, and again failed to pass anything. This desire became more and more urgent, and the fruitless efforts to gratify it kept him awake all night. There was no vomiting. At 9 A.M. on Wednesday his club doctor again visited him. Then he complained of great abdominal pain and tenderness, and a strong desire to micturate. The doctor tried to pass a catheter, but, failing to get it into the bladder, recommended the patient to go to the hospital without delay.

At 11.30 A.M. the patient was brought to the hospital in a cab, and admitted. He was seen by the house-surgeon, who tried to pass a full-sized catheter, but on account of a moderate stricture about four inches from the meatus was unable to do so. A No. 6 silver catheter was easily passed, and six ounces of turbid coffee-coloured urine were drawn off. The abdomen was extremely tender all over, especially in the epigastric and hypogastric regions. It was not much distended or very tense. It was resonant all over anteriorly, but dull on percussion in the extreme flanks, the dulness shifting with the position of the patient. A slight ecchymosis was to be seen at the lower part of the abdomen on the left side. After being put to bed the patient lay on his back with his legs drawn up, and any movement of the trunk was attended with severe pain. The man had a most anxious expression. The temperature was 97°; pulse 143. There were no symptoms of collapse. When he had

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been taken into the Leopold ward, I was sent for. After admission the patient's symptoms rapidly increased in severity. The anxiety of countenance became more marked, the pain and desire to micturate more intense, and the abdomen more tender and distended. At 2 P.M. I found the symptoms as above detailed. On introducing a catheter, it seemed at first to hitch in the neighbourhood of the bulb, conveying the sensation of a false passage. The bladder was found to be contracted. Three ounces of dark brown-coloured bloody urine and clots were drawn off. The fluid was without smell. In consultation with Mr. Croft I decided that the evidence of intra-peritoneal rupture of the bladder was sufficiently strong to justify immediate abdominal section and exploration, and for this preparation was at once directed to be made.

Operation.—At 2.30 P.M. the patient was placed under the influence of ether by Mr. Lynch, the abdomen having been shaved and washed with 1 in 30 solution of carbolic acid. A red gum-elastic catheter, No. 9, was passed, and three or four more ounces of fluid were drawn off. The spray was used throughout. An incision about six inches in length, extending from an inch below the umbilicus to the symphysis pubis, was made through the abdominal walls, which were loaded with fat. The linea alba was sought for and divided. A great thickness of subperitoneal fat was also cut through before the peritoneum was exposed. At the lower part of the incision the fat appeared of a darker colour, as if recently bruised, but there was no extravasation into the *cavum Retzii* or sign of extra-peritoneal rupture. It was therefore decided to lay open the peritoneal cavity. As soon as this was done, a large quantity of clear fluid, serum and urine, quite free from odour, gushed from the abdominal cavity. Fifty ounces of this were collected, but a much larger quantity flowed down the sides of the abdomen and between the patient's legs, saturating the bedding. On introducing the finger the rent was at once detected. The bladder was now drawn forwards, a transverse incision of the peritoneum of half an inch being made on each side. An irregular obliquely placed rent in the bladder was then clearly exposed, situated at the upper and posterior part, and slightly to the left of the middle line; it was much more extensive in the outer than the inner wall, measuring two inches in length where the peritoneal covering and muscular coat were ruptured, and a quarter of an inch where the internal coat was torn. A blunt director passed into the wound came into contact with the catheter previously introduced. The rent in the bladder was closed by twelve fine silk sutures, rather less than a quarter of an inch apart; the ends were cut short. Each suture was passed by means of an ordinary fine curved needle introduced about a quarter of an inch distant from the margin. (Figs. 1 and 2.) The first and last pairs of sutures were passed through the bladder wall completely beyond the limits of the rent, so as to prevent the possibility of leakage from its extremities. On drawing the sutures tight, the closure of the rent seemed so complete and secure that no additional ones through the peritoneal coat appeared necessary. The bladder was then fully distended by injecting nine ounces of a warm boracic acid solution through the catheter, and found to be perfectly watertight. The abdominal cavity was thoroughly washed out with about two gallons of a 1 per cent. solution of boracic acid warmed to a temperature of 98°. The irrigator consisted of a large glass vessel raised four feet above the patient's abdomen, with a long indiarubber tube and glass nozzle attached. At first the fluid flowed out slightly tinged with blood; subsequently it became quite clear. There were no clots. Before the external wound was closed as much of the residual fluid as possible was expressed. No signs of inflammation could be detected in the peritoneum where it was exposed during the operation. The intestinal coats were free from injection; there was no adhesion or lymph visible. No vessels of importance were divided in the external wound, and all bleeding points were secured as they appeared, catgut ligatures being used. A suture was passed on each side, uniting the transversely divided edges of the peritoneum, and the abdominal wound and peritoneum were then united by eight stout silk sutures passed through the whole thickness of the abdominal wall. No drainage-tube was inserted in the peritoneal cavity, nor was a permanent catheter passed into the bladder, confidence being felt in the effective and complete manner in which the rent in the bladder was closed. A small, short drain was, however, inserted in the lower part of the external wound. Just before the dressings were applied, a fit of vomiting came on. There was severe abdominal strain and a certain quantity of boracic fluid was forced up between the sutures. The operative proceedings lasted exactly two hours. The patient's pulse kept good, and the respiration was quiet and easy, except for a minute or two while the abdominal cavity was being washed out. Iodoform was powdered over the abdomen and groins. Iodoform gauze and salicylic wool were applied to the wound and kept in position by carbolic gauze and flannel bandages. The patient was lifted into bed and a pillow placed beneath his knees. A half-grain morphia suppository was introduced into the rectum. Before removal from the table the bladder was ascertained to be empty and the catheter was withdrawn.

The subsequent recovery of this man proved even more rapid than the last. He rallied very quickly after the operation, and expressed himself as feeling comfortable and free from pain. One hour after the temperature was 99·8°; pulse 104. Shortly after being put to bed he involuntarily passed three ounces of urine, and he continued to void a small quantity in this way at short intervals until the following day, when he regained partial control and passed some urine every two hours. The following day (the third) the control was complete, and he emptied the bladder every three or four hours without trouble. There was never any blood in the urine, and the quantity varied from thirty to forty ounces in the twenty-four hours. The temperature rose on the second and third days to 101°, and afterwards steadily declined to normal. The abdominal distension rapidly diminished, and he never felt any pain or tenderness on pressure. His only complaint at first was thirst and some pain from lying on his bruised buttocks. A week after the operation the external incision was found united throughout. The sutures were removed, and some strips of strapping applied to support the fat abdominal wall. At some of the suture openings the tension had caused some irritation, and a drop or two of pus was seen. On Nov. 28th (the twelfth day after the operation) the man was allowed to sit up, being apparently in all respects convalescent. He may now (Dec. 2nd) be regarded as quite well, only a fortnight having elapsed since the operation.

Remarks.—In the detailed account of these two cases there are several features of great interest. Both patients were adults, heavy, fat men. In neither was any other injury of importance present, and neither appears to have suffered any symptoms of collapse—a condition so commonly ascribed to a state of severe visceral lesion. In both, too, at the time of operation, the peritoneum was free from any trace of inflammatory change. The first patient walked home after the injury, and a distance of a mile from his house to the hospital on the following day. The second patient immediately drove to the hospital; but on examination by a most careful house-surgeon no symptoms directing attention to the bladder injury were observed. Whilst being examined the man stood up quite tranquilly, and apparently free from suffering. The only thing left undone, perhaps, was to pass a catheter, which would doubtless have drawn off bloody fluid. But for this there was no indication, as no desire to urinate was felt and the urine had been passed an hour before.

The success of the method by abdominal section must largely depend on matters of detail, and none can be more important than the method of suturing. The operation is not a new one. It had been suggested long ago by Benjamin Bell, who proposed in 1789 to suture the bladder after performing abdominal section. Grandchamps in 1826 sutured the bladder in animals, and proposed that it should be done in man. Blundell, an American surgeon, in 1840 proposed to suture the rent to the external wound. Larrey, Legouest, Gross, Cusack, Holmes, and probably others, have also advocated suture of the bladder after rupture. Nevertheless, in the discussion on Heath's and Willett's cases, the method by suture was considered by many of doubtful advantage, and in his recently published paper Gueterbock states that the practice of complete closure of the bladder wound adopted by Heath and Willett has in his opinion no future before it, that a supra-pubic opening left in the bladder for drainage is the important matter, and also that the toilette and drainage of the peritoneum before closing the external wound are of comparatively little moment. The accurate and complete suture of the bladder wound by sutures inserted through the whole thickness of the serous and muscular coats, carefully avoiding the mucous coats, is of the greatest importance. The serous surfaces should be inverted, brought into close contact, and the first and last stitches

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inserted quite beyond the extremities of the wound, so that leakage at either angle, the most common place (Figs. 1 and 2) for it to occur, may be rendered impossible. Znamensky of Moscow, in an article on partial resection of the bladder in dogs,[10] lays the utmost stress on the accurate closure of the wound by sero-muscular sutures. Maksimow also attaches the greatest importance to this part of the operation from his experiments on dogs and rabbits, and so does Vincent of Lyons in a paper communicated to the Transactions of the International Medical Congress of London. In fact, in all the experiments it was clearly shown that success almost entirely depends

FIG. 1.

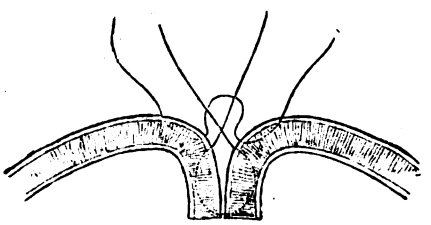


Diagram showing the edges inverted by the sero-muscular suture. The upper suture represents the serous suture, which is as a rule unnecessary.

upon the accuracy with which the sutures are placed. Vincent recommends a double row of sutures—one sero-muscular, one serous (Fig. 1),—but this is unnecessary. Znamensky abandoned the double row of sutures recommended by Vincent, because he found that sutures passed through the peritoneum only uniformly gave way, and on examination afterwards an ulcerated surface was found, while the deeper sero-muscular row of sutures could be seen between holding fast. Znamensky, Vincent, and Petersen recommend interrupted silk sutures as the best method and material to employ. I myself regard the double row of sutures as being unnecessary. The continuous

FIG. 2.

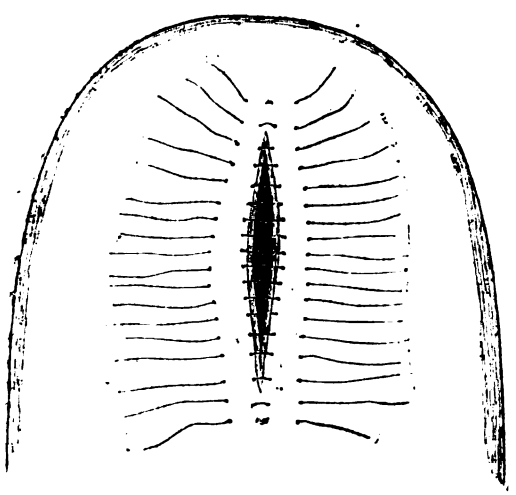


Diagram representing the manner of placing the interrupted sero-muscular sutures so as to approximate two surfaces of serous membrane when the sutures are drawn tight. It will be seen that two points of suture have been inserted at each end beyond the limits of the wound.

suture is the least desirable form. Opinions differ as to the comparative value of catgut, silk, and silver sutures. Catgut, I think, is not sufficiently reliable; silver is not very manageable. Experience shows us that carbolised silk is, on the whole, most efficient and trustworthy, and that buried silk sutures employed in aseptic operations may be safely left without risk of giving further trouble. Vincent employed silk in twenty-nine experiments, and never with any unfavourable consequence. It is not, however, the quality of the material so much as the manner in which it is employed that is of chief moment. The serous surfaces should be brought into contact by a sero-muscular suture and the mucous membrane always excluded. When the mucous coat has been traversed in animals the result has nearly always proved fatal. The mucous membrane falls between the edges of the wound on drawing the sutures tight, and hinders union. The loop of suture within the bladder is a foreign body, and salts are deposited on it. The urine may find a channel to the interior of the wound or the cavity of the peritoneum, through the points of passage of the sutures through the mucous membrane. The transverse division of the peritoneum on each side permits the bladder to be very fully drawn out of the wound, and is not the least likely to interfere with the future success of the operation. Whether the introduction of a rectal tampon be of greater advantage, I am not prepared to say. On trying it on the dead subject, I found that it somewhat raised, and certainly steadied, the recto-vesical cul-de-sac, and would thus probably render the deeper stitches more easy of introduction. I believe a free parietal incision important. Greater facility is thus afforded for inspection of the parts and for the introduction of sutures, the needful manipulations are rendered easier, while the intestines can be controlled and pushed upwards by flat sponges. Probably also the all-essential cleansing of the abdominal cavity can be more perfectly realised. The earlier the operation is performed the greater the prospect of success, hence prompt diagnosis becomes all important, and this should be followed by immediate action; but in doubtful cases I regard an exploratory operation as often justifiable. In itself it need not materially aggravate the danger to life, while it may prove the means of discovering the presence of a rupture previously only suspected to exist. If the deeper structures be first divided near the pubes, the anterior surface of the bladder can be exposed and examined before opening the peritoneal cavity. If a rent be found there, it may be unnecessary to proceed further; otherwise the serous cavity can be laid open and the upper and posterior surfaces of the bladder laid bare. No other manner of treatment seems likely to prove of real avail in rupture of the bladder. Lastly, great importance must be attached to the thorough washing out of the peritoneal cavity. The urine and bloody serum permeate everywhere. Wegner's experiments prove that extravasated urine does not merely gravitate, but that peristaltic movements of the bowel speedily distribute the fluid over the entire peritoneal surface. A 1 per cent. boric solution dissolved in previously boiled water and cooled to a temperature of 98° F. seems to me well adapted for the purpose, or water simply boiled can be employed.

As regards the interval after the injury at which the operation may be successfully undertaken, this may possibly prove greater than has hitherto been held. Mr. Rivington speaks of some period within the first twenty-four hours. In one of my cases twenty-six hours had elapsed, and, just as in the other case, without any sign of peritonitis having shown itself. In Mr. Brown's case no peritonitis was apparent after three days and a half; in Hamilton's, after five days and four hours. The mere presence of urine therefore, or urine and blood, in the peritoneal cavity, does not immediately set up inflammatory changes, as was once generally believed. In Professor Vincent's experiments, he states that in fifteen rabbits where the peritoneal cavity was flooded with urine for a longer or shorter period only three died. In a case of ovariotomy in my own practice, in which there were extensive and very firm adhesions, the bladder was torn through to the extent of three inches during an attempt to separate them. Although the catheter had been introduced immediately before the operation, the bladder contained several ounces of urine, which escaped into the peritoneal cavity. I sutured the bladder wound carefully, and the untoward occurrence was not followed by any bad consequence. The patient, although sixty-eight years old, made a good recovery in the usual time. Vincent, Julliard, Atlee, Pozzi, and Sonnenburg mention cases of a similar nature, which go far to prove that extensive intra-peritoneal injury to the bladder may be readily recovered from when it is promptly dealt with, as will be of necessity the case where it occurs during the performance of an ovariotomy. In ordinary traumatic cases of intra-peritoneal rupture of the bladder the margins of the rent are generally lacerated in appearance and soon become swollen. Rivington recommends paring these edges off, but when they are fully inverted by the method of suture paring becomes unnecessary, and needlessly adds to the difficulty and duration of the operation. When the rent

[10] Langenbeck's Archiv, 1885.

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is in the upper and back part—the ordinary situation, in fact—it is, in my opinion, hurtful to perform perineal cystotomy, unless, indeed, in cases where the urethra is obstructed by stricture or rupture.

A drainage-tube introduced from the perineum into the bladder inflicts a further severe complication in cases of intra-peritoneal rupture. Vesical drainage can be effected through the urethra. In some cases the catheter *à demeure* may be indicated, but it is better practice surely to introduce a catheter each time the bladder has to be emptied if the patient be unable to void his urine. I think the prolonged detention of a catheter introduces a distinct element of risk; it favours the occurrence of septic decomposition within the bladder, and hinders the healing process in the rupture. If the rent be sutured effectively, the patient runs less risk from moderate distension of the bladder, which is all that can possibly occur in a case properly watched, than he does from the consequences of retaining a catheter for some days within the viscus. The experience of my two cases goes far to prove that the catheter may in many instances be safely dispensed with altogether. I am sure, too, an abdominal drainage-tube is not in most cases needful, and that its presence proves a source of danger to the patient. If the peritoneal cavity be thoroughly washed out the presence of a drainage-tube can scarcely be necessary. What watery fluid is left behind will be soon absorbed, and there is no surface from which bleeding can recur as from adhesions after a case of ovariotomy. Where peritonitis has already taken place, drainage, however, will be of advantage. The practice of making an opening in the superior fundus for drainage purposes, advised theoretically by Gueterbock, suggested also by Bryant in his "Practice of Surgery," and adopted by Pozzi and McGill, I should condemn in cases of intra-peritoneal rupture. It inflicts a further injury on the bladder, and can be dispensed with without incurring additional risk. Occlusive dressings can scarcely be effectively applied to the abdominal wound. The drainage opening must be left free, and as it is practically in contact with the remainder of the abdominal wound the advantages of antiseptic dressing cannot be realised.

Most authorities consider it unlikely that a rupture of the bladder should be overlooked, But in the earlier period, before the manifestation of the severer symptoms, this error, judging by past experience, seems not unlikely to occur. Many cases are upon record where the lesion was not diagnosed for several days, nor until the occurrence of severer symptoms not only made the nature of the injury clear, but completely contra-indicated operative interference. In fact, most of the symptoms usually ascribed to the presence of an intra-peritoneal rupture of the bladder may at first, and for some time, be entirely absent in some instances, and none of severity appear for several days.

I have not included the question of diagnosis in the scope of this communication. But I should say that, although there may be many cases where certainty of diagnosis is difficult to arrive at, yet the group of symptoms usually associated together, taken with the history of the injury, is in the majority of instances sufficient to render a correct diagnosis reasonably certain. Moreover, the only manner in which an uncertain diagnosis can be made certain is by practising an exploratory laparotomy with greater frequency. If this be done early enough, it will prove successful in uncomplicated cases, while the operation in itself scarcely aggravates the patient's condition, and is surely better than a hesitating, halting practice in expectation of improvement, which usually never takes place. I would strongly urge, therefore, the necessity for an earlier interference and bolder practice. The whole history of abdominal surgery points in this direction, and here we have to deal with a lesion in which recovery is otherwise admittedly hopeless.

Harley-street.

SURGICAL AID SOCIETY.—The twenty-fourth annual meeting of this charitable organisation was held on the 6th inst., the Lord Mayor presiding. During the past year the Society has relieved 6412 persons, including 2311 men, 3156 women, and 945 children, or an average of 123 a week; while the total number of patients assisted by the Society since it was called into existence is 58,587. The total income for the year was £5485, of which £3469 were derived from annual subscriptions, being an increase of £310. The expenditure amounted to £5414. Donations amounting to £380 were received at the meeting.

LITHOLAPAXY IN MALE CHILDREN AND MALE ADULTS.

BY SURGEON-MAJOR D. F. KEEGAN, M.D. DUB.,
RESIDENCY SURGEON, INDORE, CENTRAL INDIA.

(*Continued from page 1071.*)

CASE 38.—K——, a boy aged two years and a half, was admitted into hospital on June 9th, 1885, suffering from stone symptoms, which had existed for three months. A No. 7 lithotrite and a No. 7 evacuating catheter passed readily into the bladder. It was not considered necessary to incise the meatus. The lithotrite was introduced into the bladder on four different occasions. On its last withdrawal from the bladder, the meatus of the urethra was torn slightly, as some of the débris had got clogged between the blades of the lithotrite, thus increasing the size of the lithotrite from a No. 7 to perhaps a No. 7·5. Weight of stone removed 11 grs., and consisting of uric acid. Time occupied in operation seventeen minutes. — 10th: Urine clear; boy cries much when passing urine.—12th: Patient doing well; urine clear; much less pain in passing urine.—13th: Patient feels much better. The boy's father, living not far from Indore, took the child home. On July 26th the father brought the boy to the hospital to show him to me. The boy had grown plump, and had continued to pass urine without pain and with perfect freedom.

CASE 39.—M. A. K——, a boy aged two years and nine months, was admitted into hospital on July 8th, 1885, with stone symptoms, which had existed for three months. Urine clear and acid in reaction. There is great straining in passing urine, which comes away drop by drop. Evening temperature 100·6°. Next day a No. 8 lithotrite passed readily into the bladder. Lithotrite introduced five times. A No. 7 evacuating catheter employed to remove the débris. Stone weighed 32 grs., brick-dust colour, consisting principally of uric acid. Operation lasted thirty-one minutes. — 10th: Urine quite clear; slight pain in micturating — 12th: No pain in passing urine, and the father took the boy home. On the 19th the father brought him to the hospital for inspection. The boy complained of no symptoms of stone, and passed urine quite freely and without pain.

CASE 53.—G——, a boy aged three years and three months, was admitted into hospital on February 6th, 1886. When sounded, a stone was detected. Chloroform having been administered, I tried to pass a No. 9 and then a No. 8 evacuating catheter, but found the meatus of the urethra too small to permit their passing. I then introduced without any difficulty a No. 7 evacuating catheter into the bladder, into which I injected some tepid water. A partially fenestrated No. 8 lithotrite was then passed with ease. When in the bladder, and before attempting to seize the stone, I opened the blades of the lithotrite very slightly by working the screw action. I did so to allow for clogging, and then withdrew the lithotrite, thus slightly opened, with the greatest ease through the membranous portion of the urethra. When coming through the meatus of the urethra the lithotrite ruptured it (the meatus) and caused a little bleeding. I then screwed home the lithotrite and passed it again into the bladder, and immediately struck the calculus, but found great difficulty in seizing it. The stone seemed to me to be quite spherical, for it slipped from out the blades of the lithotrite on several occasions. I seldom recollect having experienced so much difficulty in seizing a stone as I did on this occasion. However, after some thirteen minutes' duration, I at last succeeded, and then crushed it readily. After the crushing, a No. 8 and then a No. 9 evacuating catheter passed with ease into this boy's bladder. Indeed, I feel quite certain that I could have passed a No. 10, or perhaps even a No. 12, evacuating catheter, if I had found it necessary or advisable to do so, *once the meatus of the urethra had been ruptured.* Owing to the great difficulty experienced in seizing the stone the operation lasted thirty-seven minutes, although the stone weighed only 70 grs.—Feb. 7th: No pain on pressure being made over the bladder or course of the urethra; pain in passing urine less than it was prior to the operation. — 8th: Urine clear and pale; no pain over bladder or urethra; no fever; pain in passing urine less. — 12th: Child placed under chloroform, and

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bladder explored with Sir H. Thompson's sound. No particle of stone could be detected. No click heard on working the aspirator. — 13th: Patient quite well; allowed to go home, distant about forty miles from Indore.

Remarks.—The history of this case well exemplifies the fact that, although the meatus of the urethra is sometimes very small in young boys, the size or calibre of the urethra itself may nevertheless be very large. Had I incised the meatus of the urethra before introducing the No. 8 partially fenestrated lithotrite, I might have dispensed with the precaution of opening its blades in the bladder, because I should have at the outset learnt that the lithotrite was, so to speak, an easy fit for the urethra. I opened the blades of the lithotrite when in the bladder because, from the sensation conveyed to my hand on first passing the lithotrite, I thought that if the instrument were to become clogged by débris I should experience some trouble and difficulty in withdrawing it through the membranous portion of the urethra. A lithotrite, when being passed through the urethra, if it happens to be gripped merely by the meatus, still conveys to the hand of the operator the impression that the lithotrite is a tight fit for the whole length of the urethra, when, as a matter of fact, the urethra itself would accommodate a lithotrite a size or two larger if the constriction existing at the meatus were removed in the first instance by means of an incision. And here I would like to make some observations on the kind of lithotrite which experience has taught me is best adapted to the performance of litholapaxy in male children. Unquestionably the best, and indeed the only perfectly safe, form of lithotrite to use in performing litholapaxy in young boys is the *completely fenestrated* pattern of lithotrite. A partially fenestrated lithotrite is liable to get clogged with débris, and may sometimes retain within its blades a thin sharp projecting fragment of stone, which would lacerate the urethra on the withdrawal of the lithotrite from the bladder. Clogging of the blades of a lithotrite with débris is a very dangerous complication in performing litholapaxy in male children, because it has the effect of increasing the size or number of the lithotrite, say, from a No. 7 to a No. 8 (English scale). And as in performing litholapaxy in male children we are dealing with urethræ in which there is, so to speak, not much spare room left to work in, the effect of increasing the size or number of the lithotrite might be such that in its withdrawal from the bladder the urethra might get unduly stretched or ruptured. Now, it is impossible that clogging can occur, or that thin, sharp fragments of stone can project, between the blades of a completely fenestrated lithotrite. Objecting to the employment of a partially fenestrated lithotrite in performing litholapaxy in male children for the reasons already stated, I can only characterise the use of a flat-bladed unfenestrated instrument in operating on this class of patients as unwarrantable and absolutely dangerous. Since the operation in the case just detailed I have received from Messrs. Weiss and Son, of London, a completely fenestrated lithotrite, which is No. 6 in the stem and No. 8 in the angle (English scale), and with this instrument I performed litholapaxy on three young male children shortly before leaving India. Since my arrival in England the same firm have constructed for me a still smaller instrument, which is No. 6 in the stem and No. 6 in the angle (English scale). This instrument will pass readily through the urethræ of the great majority of boys of between two and three years of age, and is perfectly capable of disposing of stones weighing up to two drachms. I exhibited these two patterns of lithotrite at the recent meeting of the British Medical Association held at Brighton, and they are miniatures of of the lithotrite shown as Fig. 2 on page 10 of Freyer's work on Litholapaxy, recently published.

Having now related perhaps sufficient examples of cases in which I performed litholapaxy for the removal of small stones in very young boys, I shall proceed to detail a few cases in which I removed by this operation stones of considerable size from older boys.

CASE 37.—V——, a boy aged ten, was admitted into the Indore Hospital on May 26th, 1885, suffering from stone symptoms, which had existed for six years. His spleen was greatly enlarged. Urine neutral and clear. Next day, being placed under chloroform, a No. 8 lithotrite was passed into his bladder, when a large stone was easily seized and crushed. A No. 9 evacuating catheter was then introduced with ease. The lithotrite was passed six different times, and the operation lasted as long as ninety-four minutes. The stone was composed of uric acid and phosphates, weighed 360 grains, and was completely removed at one sitting.—May 28th: Pain along course of urethra and over bladder region; pain also on micturition. At the root of the penis there is a slight swelling.—May 29th: Swelling less, also pain on micturition; urine quite clear.—31st: Swelling at root of penis diminishing; some pain along the course of the urethra when pressure is made; eats well.—June 4th: All swelling disappeared; micturates freely and without pain; complains of pain over region of spleen. Discharged as cured of stone, and readmitted for the treatment of splenic enlargement. Left hospital for his home on June 9th.

CASE 44.—R——, a boy aged nine years and a half, was admitted into hospital on Aug. 18th, 1885, with stone in the bladder. Urine alkaline and turbid; specific gravity 1014; a trace of albumen. Next day, being placed under chloroform, the meatus of the urethra was incised, when evacuating catheters Nos. 9, 11, 13, and 14 were passed with ease. Lithotrites Nos. 8, 10, 11, 14, and 15 were then passed, but the stone proved too large for all these, with the exception of the last. The stone was eventually seized and crushed. The operation lasted as long as three hours and two minutes, and the urine in the aspirator was clear to the end.—20th: There is great pain over the urethra and over the bladder region when deep pressure is made; considerable pain in passing urine; colour of urine reddish-brown.—21st: General condition unchanged; urine light brown.—22nd: Pain over bladder region and urethra much less; has fever.—23rd: Fever less.—24th: Penis is swollen.—26th: Much better; pain over bladder and in passing urine much less; swelling of penis much diminished.—28th: Feels quite well now; walks about the hospital verandah.—Sept. 1st: Gone home quite well.

Remarks.—The stone in this case weighed 700 grains, and consisted chiefly of uric acid, with a nucleus of oxalate of lime and a thin covering of phosphates. My friend, Surgeon-Major Caldecott, removed this stone during my absence from Indore on leave. It is the largest that we have as yet removed from a boy's bladder at the Indore Charitable Hospital. Had this boy been cut, he would, in all probability, have remained in hospital for five or six weeks before being discharged; and had his urethra proved less capacious than it was, litholapaxy would have been impracticable. Had his lines been cast in London in the present day, he would most probably have been subjected to Petersen's modification of supra-pubic lithotomy.

CASE 46.—S——, a boy aged twelve, was admitted into hospital on Sept. 30th, 1885, with symptoms of stone, which had existed for one year. Specific gravity of urine 1026; alkaline in reaction; no albumen; deposits phosphates on standing. Being placed under chloroform, Nos. 11 and 14 lithotrites were passed with ease. An oxalate of lime calculus weighing 344 grains was removed in sixty-two minutes. Respiration of patient stopped suddenly during operation, but he revived under artificial respiration; colour of urine quite clear in aspirator throughout the operation.—Oct. 1st: No pain over urethra or bladder. Urine quite clear and of amber colour; has no pain in passing urine.—2nd: Feels perfectly well; colour of urine normal; wishes to go home.—3rd: Quite well; allowed to go home.

Remarks.—Compare the history of this case after the operation of litholapaxy with what it would have been had the stone been extracted by lateral lithotomy. This boy was practically well the day after the operation.

In the table giving the details of fifty-eight litholapaxies performed at the Indore Hospital there is one fatal case, the history of which I have given at some length at pages 135 and 136 in the May number of the *Indian Medical Gazette* for 1884. Suffice it to say on the present occasion that had the previous history of this case been carefully noted on the boy's admission into hospital, lateral lithotomy, and not litholapaxy, would have been performed. The nucleus of the stone in this case was a long piece of "tilli"[1] stalk, which had penetrated the bladder through the rectum and had broken off inside the former. It was a case eminently suited to lateral or supra-pubic lithotomy. I have included this case in the table of litholapaxies, although it really does not fairly come under this category, for my assistant in the first instance attempted to treat this case by lithotrity, and on two subsequent occasions I endeavoured

[1] Didynamia angiospermid sesamum. Schreb-gen, N. 1043. Is annual, and in good soil grows generally to about three or four feet high. Oil from the seed is used extensively in all ... dian bazaars.

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to remove the foreign body and its encrustation by the lithotrite and an evacuating catheter. The case altogether was a very unfortunate one, and exemplifies the great importance of carefully going into the previous history of every case before an operation is undertaken. I think, however, that any of my readers who will refer to the history of this case in the pages of the above-quoted medical journal will agree with me when I state that the fatal termination in this one solitary case should not be considered as militating against the performance of litholapaxy in male children.

There is one other case in the table which, being of special interest, I shall detail at some length. Although in this case the operation of litholapaxy in itself was completely successful, I was subsequently afforded an opportunity of examining the bladder and urethra post mortem, the immediate cause of death being due to anæmia and epistaxis.

CASE 54.—L. —, a Hindu lad aged fourteen years, was admitted into hospital on Feb. 11th, 1886, with symptoms of stone which had existed for two years. He was greatly emaciated: sunken jaws and prominent teeth; spleen much enlarged; most anæmic. He had travelled a long distance to reach Indore; his sufferings were very great, and he begged to be operated on at once. Urine contained about one-third albumen. Next day, being placed under chloroform, a fawn-coloured uric acid calculus, weighing 248 grains, was evacuated from the bladder in sixty minutes. A No. 11 lithotrite was passed with the greatest ease into the bladder, and the operation presented no special features of interest or difficulty.—Feb. 13th: Morning temperature 104·5°. No pain on pressure over bladder; some pain along the course of the urethra; pain in passing urine great; colour of urine reddish-brown. Evening temperature 104·4°. Linseed-tea, milk, and diaphoretic mixture every third hour.—14th: Morning temperature 101·6°; pulse 120. Had five thin motions during the night; colour of urine clear brown; some pain in passing urine. Port wine and lead and opium pills ordered. Evening temperature 99·8°.—15th: Slept well; feels very languid; no desire for food. Morning temperature 98·4°; evening, 102°; pulse 120.—16th: Has great pain over the splenic region and in the left loin, for which morphia was injected hypodermically.—17th: Morning temperature 100·8°; pulse 120; no pain in abdomen; passes urine in a good stream.—18th: Had two thin motions during the night; slight epistaxis; quinine and sulphuric acid prescribed.—19th: No fever; pulse 108; feels slight pain in passing urine.—20th: Had four motions during the night; morning temperature 97°; pulse 96; tongue clean; feels better; biniodide of mercury ointment rubbed over spleen.—23rd: Has no urinary symptoms whatever; discharged as cured of stone in the bladder, and readmitted for hypertrophy of spleen and debility. From this date up to March 2nd, the lad used to walk about the hospital grounds.—March 3rd: Has some pain in left loin.—4th: Has great pain in left loin over kidney. From this date up to March 13th he had much pain in both loins; latterly the pain was greater in the right loin, and presence of stone in the right kidney was suspected. Very weak and anæmic.—14th: Had bleeding from the nose during the night; tampon applied.—15th: Epistaxis stopped by tampon; pain in the right loin less.—16th: The tampon being removed, epistaxis recurred; tampon reapplied; blood which came from nose thin, pale, and watery; very weak.—17th: Patient died early this morning. The post-mortem appearances six hours after death were as follows. The bladder and urethra were found free from organic disease, though very anæmic; lining membrane of bladder and urethra perfectly smooth; urine drawn off after death perfectly clear. No particle of calculus found in bladder; spleen much enlarged, presenting the usual features of malarious hypertrophy. Left kidney flabby and pale; a small abscess found in its cortical substance; some grains of uric acid found in the pelvis. Right kidney: On making a section, a large uric acid calculus was found filling up the pelvis and infundibula; indeed, the stone formed a perfect cast of the pelvis and infundibula, and several processes of the stone were embedded in the papillæ of the kidney. Weight of kidney calculus, 80 grains. Heart pale and somewhat flabby.

Remarks.—I think I am justified in returning this case amongst the number of successful litholapaxies performed at the Indore Hospital. I feel quite certain that if I had performed lateral lithotomy for the removal of the stone from this boy's bladder he would never have left his bed, and would most probably have died of exhaustion and diarrhœa a few weeks after the operation. The most ardent advocates of lateral or supra-pubic lithotomy would not, I think, assert that the final result in this case would have been different from what it was, had the stone been extracted by one or other of these methods. Although the presence of a stone in the right kidney was suspected during life, the boy's general condition contra-indicated all further operative interference. Extirpation of the right kidney could have done no good, as the left kidney was also much diseased. The history of this very interesting case strengthens the opinion I had already formed respecting the superiority of litholapaxy over lateral lithotomy in the treatment of stone in boys in suitable cases.

(To be continued.)

EXPERIMENTAL RESEARCHES CONCERNING PASTEUR'S PROPHYLACTIC.[1]

BY T. WHITESIDE HIME, A.B., M.B. DUB.

DR. HIME referred at the commencement of his paper to the difficulties which were placed in the way of scientific research in this country in all that concerned the life and well-being of man and the higher animals. Physiological and pathological research were practically dead in England, killed through the unreasoning proceedings of those who were not in a position to estimate correctly the results of their action in the matter. Fortunately there was no difficulty in pursuing such researches abroad. For some months he had been, in Paris, unremittingly engaged in studying Pasteur's method, and availing himself of the extreme kindness and generosity of the Professor in following the practice of his laboratory. The affability with which Pasteur received all comers, and the candour and want of reserve with which he explained and demonstrated his methods to all earnest inquirers, were in his experience unequalled, and worthy of imitation everywhere. It was unavoidable that the subject of rabies should be unfamilar to the vast majority. It was not given to every man to have a supply of the virus at his disposal. The number of cases and deaths from rabies in this country was comparatively so small that few medical men had ever seen such, and Pasteur's method of treatment was still more unfamiliar, except through such inaccurate and unscientific *canards* as were published in the daily papers. Hence to some extent the attitude of the profession in this country, which had preserved a cold silence on the subject. Hence also the boldness of the few critics who had ventured to oppose Pasteur. Spitzka of New York was one of these critics. His familiarity with Pasteur's method was strangely illustrated by his request, published in the *British Medical Journal*, to be informed what are the symptoms of rabies in the rabbit; while his experimental skill in the practice of the method was shown by his statement that it is "a very difficult matter to keep any rabbit inoculated with fresh brain material by trephining alive" (see *Brit. Med. Journ.*, Oct. 30th, 1886). Dr. Hime could assert from personal knowledge that there is no more difficulty in keeping a rabbit alive in such circumstances than in keeping an infant alive after vaccination. The interference with physiological function in the former case, if the operation be done by an operator skilled in the method, is nothing like so marked as in the latter, there being no fever, no loss of appetite, no restlessness, and no local symptoms. Another critic in this country had shown himself possessed of more dialectic skill, but he, too, was entirely ignorant of the practice of Pasteur's method; he had never seen the practice in Pasteur's laboratory; he had never seen any other person perform the inoculation; he had never done it himself, and had never seen either a living or dead rabbit which had been so inoculated, yet he could criticise the method, and take Pasteur to task (without a shadow of reason) for not performing control experiments! Having devoted himself to the study of the question for months in Paris and performed numerous experiments, Dr. Hime wished to bring some of them before the Society, which he desired them to regard as types of many others having the same result, and not as isolated. He had selected them especially

[1] Abstract of a paper read at the Pathological Society on Dec. 7th, 1886.

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to bring before the Society, because they were, he thought, important in themselves, and, further, they met the objections raised against Pasteur's method in this country. To save the time of the Society, he gave the results in narrative form, without entering into minute details of each. But the facts which he would detail were all within his own knowledge. He intentionally avoided entering on the statistical question of results, because he believed such were foreign to the business of the Society; but he believed the success of Pasteur's treatment had been brilliantly demonstrated by statistics as well as by experiment. That the disease in the rabbit from which Pasteur obtained his material for human inoculations was true rabies was indubitable. Nerve matter taken from such a rabbit and inoculated on a dog intracranially, the only certain method, invariably produces true rabies. If nerve matter be taken from a human being dead from an attack of canine rabies, and be inoculated on a rabbit, a guinea-pig, and a dog, all three will take rabies and die. The dog will have rabies according to his kind, with symptoms either of the dumb or furious character. The guinea-pig will exhibit very characteristic symptoms, and the rabbit will develop the symptoms peculiar to its kind—such as, for convenience, may be called the "Pasteurian disease."[2] But an interesting and important fact must be borne in mind. The virus used for the experiment, being canine virus which has passed once through the human subject, will retain certain canine peculiarities as to period of incubation, date of death, &c. If instead of human nerve tissue from persons who have died of canine rabies we employ nerve matter direct from a dog which has died of rabies for inoculation, the animal will be similarly affected, and the disease produced in the rabbit cannot be distinguished from that caused by inoculation with nerve matter taken from a human being who has died of rabies after inoculation with canine virus. If again, nerve matter be used taken from one of the rabbits employed by Pasteur for protective inoculation, the same result will be obtained, with this difference—the course of the disease in the various animals will be shorter. Pasteur uses for his protective inoculation virus which, originating in ordinary canine rabies, has been passed directly from rabbit to rabbit for some hundreds of series. The result is that the virus has become intensified, and kills more rapidly than the original canine virus. It was actually alleged at one time that the deaths following Pasteur's inoculations were due to them. This was triumphantly disproved by the experimental demonstration that the virus in the deceased was canine virus (originating in the original bite), and not rabbit virus inoculated by Pasteur for protection. The opposite result is obtained if the virus be passed from monkey to monkey through a long series: the virus becomes weaker and weaker. But no doubt, just as the virus of anthrax or fowl cholera, which has been modified by cultivation, could be brought back to its primitive virulence, so the weakened rabic virus of the ape and the intensified rabic virus of the rabbit could be brought back to their original degree of virulence. If Pasteurian virus be passed through the dog once, and then be inoculated on a rabbit, it will be found not to have resumed canine characteristics by passing once through the dog. But more frequent passages through the dog would probably restore its primitive characteristics. The symptoms are very special in the rabbit inoculated with Pasteurian virus; the length of the incubative period (five to six days) and the date of death (nine to ten days) are more invariable than in any other disease of man or animal known to Dr. Hime. Further, the symptoms are very characteristic and invariable, notably the slightness of the general symptoms, even after paralysis has become marked. The temperature[3] also is very interesting, and markedly different from that found after intra-cranial inoculation with other materials than the Pasteurian virus or rabic virus from some other source. The following is a characteristic chart of the temperature of a rabbit which died of the Pasteurian rabies:—

First day	102·6°[4] / 102·2°[5]	Sixth day	105·6°
Second day	103·0°	Seventh day	105·3°
Third day	102·8°	Eighth day	106·1°
Fourth day	103·0°	Ninth day	104·1°
Fifth day	104·2°	Tenth day	97·0°
		Eleventh day ...	86·0°[6]

The febrile stage may be shorter, and the fall more gradual, but the latter is always great. The elevation is not always so great as in this example, but the rhythm is characteristic, and the temperature usually gives indications before the actual symptoms appear. The course of the temperature in the rabid dog is similar. At first there is no change, then the temperature rises rapidly, and may reach 105° or 106°; the period of acme lasts one or two days, and is succeeded by a very rapid fall to about 84·6°, when death ensues. The fact that the disease is always and invariably transmissible by inoculation is of great importance as regards its pathology, and as distinguishing it from other diseases.

With regard to post-mortem appearances in the Pasteurian rabbit, there is nothing pathognomonic, any more than in the dog or the human subject dead from rabies; all the organs appear free from disease, some more or less hyperæmic; and sometimes hæmorrhages are found; the brain is slightly hyperæmic as a rule, the heart contracted, and the bladder generally full. The stomach almost invariably contains food; the cæcum is commonly full, and the remainder of the intestine generally contains but little, and the small intestine nothing. This absence of morbid conditions is remarkable, and is certainly not found after death from injury to the brain in the operation, nor after death from intra-cranial injection of other materials—e.g., putrid material. In this case pus will be found within the cranium, and other evidences of purulent absorption will be detected. It is alleged by Dr. Dolan (*Brit. Med. Journ.*, Sept. 4th, 1886, p. 475, line 15 from the bottom) that the inoculations are made "into the rabbit's medulla," and that "the same kind of affection in rabbits can be produced by injecting almost any kind of diseased material into the same region." The injection is not made into the medulla, nor into any part of the nervous system. It is made into the space beneath the dura mater and pia mater, and the brain is not injured or touched by the instrument in a successful operation. The medulla, indeed, could not be reached at all (as suggested by Dr. Dolan) from the site of the inoculation, without traversing almost the entire mass of brain. But even if the brain were injured (and it certainly is not, as specimens exhibited prove[7]), mechanical lesions of the brain or medulla do not produce a specific contagious disease indefinitely transmisible by inoculation, and presenting the symptoms of the Pasteurian disease. These are certainly not the symptoms of injury to the brain or of any part of the nervous system. The allegation that injection of "almost any other kind of diseased material" will produce the symptoms can only be disproved by experiment. Intra-cranial injection of sterilised bouillon will not produce the symptoms of the Pasteurian disease nor any other morbid symptoms, and rabbits so injected will not die if skilfully operated on. Rabbits inoculated according to Pasteur's method with sterilised bouillon rubbed up with putrid meat will die, but with symptoms entirely different from those of the Pasteurian disease, and without the characteristic paralysis and temperature. But still more noteworthy is the fact that the disease produced by injecting putrid material is not transmissible. If fresh nerve matter be taken from a rabbit which has died in consequence of disease produced by intra-cranial injection of putrid matter, and be injected intra-cranially (according to Pasteur's method) on another rabbit, the latter will not die, and will have no specific disease whatever, nor marked symptoms of any kind, if skilfully operated

[2] Dr Hime stated that he merely used this term for brevity's sake, without special reference to the fact that the period of incubation and the period elapsing before death have been shortened in the rabbits used by Pasteur for preventive inoculations. This shortening of these periods does not alter the nature of the disease, any more than the nature of the virus in a case of typhoid or scarlet fever is altered because in particular conditions it may kill in ten or three days respectively, instead of in twenty or in six days.

[3] The normal temperature of the rabbit and of the dog is about 102° F. Variation will be found in accordance to age, and probably race, but not to a very large extent. Taking the temperature of rabid dogs is a very dangerous performance, but with experience it can be readily done. Dr. Hime has seen many furious rabid dogs apparently so astonished at his audacity in putting a thermometer up their rectum that they have stood as if mesmerised or cataleptic for ten minutes without a movement.

[4] Immediately before inoculation. [5] Immediately after inoculation. [6] Death.

[7] One was a rabbit's skull and brain injected, after trephining, according to Pasteur's method, with a coloured solution of gelatine. The gelatine was seen solidified on the surface of the pia mater, the brain being intact, and the whole being a distinct demonstration of the method of performing Pasteur's operation. Another interesting specimen exhibited by Dr. Hime was a fresh preparation of a rabbit's brain inoculated in Pasteur's laboratory on Dec. 4th ult. The skull-cap was removed, showing the brain *in situ*, free from the slightest injury.

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on. But the Pasteurian disease is always transmissible by intra-cranial injection. If the same bouillon as used in these operations be rubbed up with fresh brain matter from a healthy dog, and injected into a rabbit according to Pasteur's method, the rabbit will not die, notwithstanding Spitzka's statement to the contrary, and will not exhibit one symptom of the Pasteurian rabbit, which always dies. It is hardly necessary to add that intentional lesion of the rabbit's brain in the performance of a dummy Pasteurian operation, when nothing at all is injected, does not necessarily cause death, and if it does the symptoms are utterly different from those of the rabbit which has died of the Pasteurian disease or from putrid infection, and inoculations made from such a rabbit will not cause death. Nerve matter from dogs which have been suspected of rabies, and have died, or been killed in consequence, has frequently been injected intra-cranially on rabbits as a diagnostic. If the dogs were rabid, the Pasteurian disease will be developed in the rabbits; if not, the rabbits will survive, without showing any symptoms of this disease, or of any other disease. That this crucial method of diagnosis exists is due to Pasteur; that it cannot be applied so as to settle every doubtful case is the result of British legislation. In fine, the following results are established: The virus used by Pasteur for protective inoculations originated in the rabid dog, and is the virus of rabies. Pasteur had published results showing that the material used for his later protective inoculations of man caused rabies in animals which were unprotected. If virus be taken from a rabid dog and be passed through a series of rabbits it will produce the same disease as is developed in the rabbits from which Pasteur takes his matter for preventive inoculations. If the virus from such rabbits be inoculated back into the dog or other susceptible animal, it will produce true rabies in them, and if then passed back to the rabbit it will reproduce the same symptoms *ad infinitum*. Human rabies, if inoculated on the rabbit, will produce the same symptoms, with such variations only as are due to its origination in the dog, cat, &c. These variations are exhibited chiefly in the length of the period of incubation, and the period elapsing before death, the disease invariably terminating fatally. No other known disease produces the same results, nor can the symptoms be caused either by surgical brain lesion or the intra-cranial injection of inert material such as sterilised bouillon, or with putrid material. The Pasteurian disease is specific, and very distinctly characterised by its course and symptoms, which are different from those of any other disease; it invariably ends fatally, and is indefinitely transmissible by inoculation from animal to animal. Dr. Hime did not enter into the question of the success of Pasteur's treatment, but stated that the protection afforded to dogs by Pasteur was proved beyond doubt or question, and analogy would suggest that the same method was applicable to man. Dogs could be protected either by inoculation before infection or afterwards. Further, they had been protected against the action of the rabbit virus, which is much more active than ordinary canine virus. The reality of this protection established the truth of Pasteur's principle. That his practice was capable of improvement was not improbable; but he had already effected a great deal in a short time. It has been objected that the inoculated prophylactic virus is inert because the patients show no specific reaction. A foolish objection. As well say arsenic is inert because a patient taking it shows no toxic symptoms. Indeed, Dr. Hime was inclined to think that there was a decided though slight reaction. He himself had experienced local symptoms and distinct axillary tenderness, and in others these were more marked still. He had made numerous thermometric observations on patients under treatment, but so far could not assert that there was any characteristic thermal change. Some, while admitting that protection had been afforded by Pasteur after slight wounds, denied that this was true in severe ones. These persons at least admitted the scientific basis of Pasteur's method. But of Pasteur's patients persons most seriously wounded by rabid animals had escaped, and, Dr. Hime believed, entirely owing to the treatment. The accuracy of the method being admitted, he thought this objection was not only in fact unfounded, but was at most one of detail. Finally, from the fact of the extraordinary low mortality—little over 1 per cent.—corroborative evidence was obtained. The rabid condition of the animals in a large number of these cases was proved either by experimental inoculation or by certificates from veterinary surgeons, and the number includes no doubtful cases, these being purposely omitted. Dr. Hime expressed his opinion that Pasteur had established a true prophylactic treatment against rabies, one of the most formidable and hitherto intractable diseases. He had thus crowned a glorious career of research directed to the benefit of man by a most notable discovery, primarily salutary to man himself. The establishment of a Pasteur Institute in this country, he thought, was called for, and such institutions were already established in Paris, Moscow, St. Petersburg, Odessa, Samara, Varsovia, Naples, and Milan. Turin and New York will soon be provided with such institutions. The English public were still vainly waiting for the report of the Royal Commission of inquiry into this subject. While this report was being prepared other countries were acting, and we were satisfied to send our patients to Paris for treatment instead of making provision for them in England.

UNUSUAL CASE OF ORBITAL TUMOUR.

BY T. H. BICKERTON,
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MRS. G——, aged forty-seven, came under my notice, through the kindness of Dr. Oxley, on July 31st, 1886, on account of slight dimness of vision of the right eye; but what greatly attracted attention, as may be judged from the accompanying illustrations, was the condition of the left orbital region, which was concealed by a large shade, and



which she was only with difficulty induced to uncover. She gave the following history: When she was ten years of age a small boy struck her in the left eye with his fist, the blow causing great pain. The pain continuing, and the eye at the end of six weeks being noticed to be "swelled out," she



was taken to the Glasgow Eye Infirmary. Here she was seen by Mr. Mackenzie, and the notes then taken indicate the condition of affairs at that time and for a lengthened period afterwards. For these notes I have to thank Dr.

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William Wallace, the present house-surgeon of that institution, who kindly sent me a *verbatim* copy of the report, which runs as follows:—

"March 4th, 1850: Mary B——, aged eleven. Exophthalmos of left eye consequent on a blow. Complains of pain in forehead. Vision of this eye enables her to see characters an inch long. Pot. iodid., gr. i., t. d. s.—9th: Pot. iodid., gr. ii., t. d. s.—13th: Three leeches to left temple.—17th: Eye seems rather less prominent.—27th: Repeat leeches.—April 4th: Blister behind ear.—11th: Repeat blister.—Sept. 8th: Is reported to be worse. Repeat blister and leeches.—Aug. 23rd, 1851: Much the same. Pot. iodid., gr. 3ij, t. d.—Sept. 12th, 1851: Exophthalmos seems rather less.—March 28th, 1854: Exophthalmos much increased. Hydrarg. bichlor., gr. $\frac{1}{4}$; ammon. muriat., gr. $\frac{1}{4}$, t. d.—April 29th, 1854: No improvement. Stop the bichloride.—April 18th, 1855: Exophthalmos increased. On lifting the upper lid the glandulæ congregatæ are found increased, and the lacrymal gland enlarged. Sept. 3rd, 1856: Tumour seems stationary. Lower sinus of conjunctiva, being infiltrated and swollen, was snipped off."

The patient states she has a distinct recollection that on one occasion she was given chloroform for the purpose of having the swelling punctured, but no account of this operation can be found by Dr. Wallace. From this time (Sept. 3rd, 1856) until July 31st, 1886, an interval of thirty years, she has not allowed a medical man to see the eye. Her account of the progress of the swelling since that time is that it has gone on increasing very slowly in prominence and in size in all directions; that she has been a martyr to pain during the whole of this period, and is never without it, except when asleep. At times the pain is of a dull aching character, at times sharp and stabbing. It frequently, by its severity, confines her to bed for days and weeks, and on occasions it is so severe that it brings on vomiting, the vomiting being unaccompanied by any feeling of nausea. Her experience is that the pain is always relieved to a greater or less extent by the recumbent position, and this, with the constant applications of cold wet cloths and cold bread poultices to the swelling in order to "cool it down," have been the only palliative measures adopted.

Present condition.—On removing the large shade there is to be seen an enormous tumour, which, occupying the socket, and extending in all directions, has pushed the eyeball far beyond the limits of the orbit, the eyeball forming the apex of the tumour. The upper and lower lids are tightly stretched, reddish purple in colour, the superficial veins standing out like pieces of whipcord. These appearances are more marked in the upper than in the lower lid. Projecting between the eyelids is the eyeball, which is unaltered in size and shape. The upper two-thirds of the cornea are clear, the lower third is semi-opaque. The pupil is 2 mm. wide and immobile, but it acts faintly to stimulation of the right retina. The right pupil has a width of 3 mm. The conjunctiva, ocular and palpebral, is red and swollen, and the lower tarsal fold is turned inside out. Lacrymation goes on at the regular rate of about one drop per minute, the drop falling from the centre of the lid. Movement of the eye is *nil*. Sight is lost except for light and shade. The length of the left palpebral aperture is two inches; that of the right is one inch. Tension of the globe + 3. The measurements of the tumour are: Circumference at base, measured by string, $8\frac{1}{8}$ in.; greatest vertical length of the anterior surface, $4\frac{5}{16}$ in. The apex (formed by the cornea) of the tumour projects from the temporal angle about 3in., and from the cornea of the right eye about $2\frac{1}{2}$ in. The tumour is about as hard as cartilage, slightly nodulated, but has nowhere the feel of bone. Right eye: vision normal for distant (C + 1·50 D $\frac{20}{20}$) and (presbyopia corrected) for near objects also. The optic disc is of a normal pink tinge, and the retinal arteries and veins are of normal calibre.

After some hesitation the patient consented to be photographed, but she would not listen to operative treatment. In the literature bearing upon tumours of the orbit to which I have had the opportunity of referring I have not been able to find a record of a case similar to this one.

Liverpool.

ON the 3rd inst. Dr. Riddell of Dunsford, near Exeter, committed suicide. The deceased, who died from poisoning by strychnine, had been called upon by the Local Government Board to resign a parish appointment which he held.

CASE OF

TUMOUR OF THE PONS VAROLII AND MEDULLA OBLONGATA.

BY A. MACGREGOR, M.D.,
ASSISTANT-PHYSICIAN TO THE ABERDEEN HOSPITAL FOR SICK CHILDREN.

G. M. —, aged seven years, was admitted into the Aberdeen Hospital for Sick Children on April 21st. His symptoms then were paralysis of the right seventh and sixth cranial nerves, marked deafness on the right side, the eyeballs prominent and strongly drawn to the left, the head drawn towards the right shoulder, with the face turned towards the left, the sterno-mastoid in a state of tonic spasm, headache, and frequent attacks of sickness and vomiting. Temperature from 96° to 97°; the abdominal and thoracic viscera seemed healthy. Specific gravity of urine 1022; otherwise normal.

The patient was one of a family of five. The father died of phthisis; the mother is alive and healthy. Three weeks before admission into the hospital he awoke during the night screaming, and complained of pain in the head. Next morning the facial paralysis was noticed, and frequent attacks of sickness and vomiting followed. For some time previously to this he was considered to be "not well," but no definite symptoms presented themselves.

On April 26th the sickness was distressing, and it was then noted that the right pupil was contracted while the left was dilated, and this continued throughout the course of the illness; occasionally the right dilated slightly, but never to the same extent as the left. The ophthalmoscope showed a haziness and paleness of the right disc and fundus generally, and the vessels were not so full as those of the left fundus, which appeared to be normal. The cornea of the affected eye was insensitive over its entire surface, and its lower half after a time became opaque, and there soon followed a large ulcer, which a few days before death penetrated into the anterior chamber.

About May 1st it was found that the grasping power of the left hand was very much less than that of the right, and that on attempting to walk the patient staggered, with a marked tendency to fall to the right; and it was also noted at this date that the spasm of the right sterno-mastoid had passed off, and that the head had regained its natural position, while the left eye was no longer divergent, but the convergence of the right was even more marked. There was now paresis of the right side of the palate, and the hemiplegia gradually became almost complete. Tactile sensibility was nowhere lost, but pinching up the skin on the point of a needle gave rise to no pain; deeper penetration did. He was unable to distinguish between heat and cold over the surface of the lower limb below the knee; over the other paralysed parts the sensibility to changes of temperature was decidedly diminished. Taste and smell were not affected.

On June 4th the sickness was severe, and the patient could not articulate distinctly. This paralysis of the muscles of articulation passed away next day, but became quite complete on the 6th and remained so till death. On the following day he became unconscious, and the left upper limb passed into a state of spastic rigidity. He remained unconscious until his death, which took place on the morning of the 12th. Previously to this there had been no vomiting for five days, but a few hours before he died he vomited twice, and the temperature rose from 100·5° to 102·6°. During the first week in hospital the temperature was almost constantly 96° and the pulse 116; during the next fortnight the temperature oscillated between 96° and 99°; after this the morning temperature was almost constantly 97°, and the evening temperature ranged between 98° and 100°.

Necropsy.—The brain alone was the seat of any lesion, and the following were the appearances found at the examination made about twelve hours after death:—The dura mater was tightly stretched over what appeared to be a distended brain. The vessels were congested, especially those of the pia mater. The subarachnoid space over the entire vertex was filled with a milky-looking fluid. The olfactory nerves were soft and pulpy, the right more especially. The optic nerves appeared perfectly healthy, as

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also did the third and fourth nerves of both sides. The only thing noticeable in the case of the fifth pair was that the sensory part of the right fifth was not so white as that of the left. The sixth nerve of the left side had its natural white appearance, but it seemed smaller than usual; the right sixth was reduced to a couple of small grey gelatinous filaments. The portio mollis of the seventh seemed to be alike on both sides, and to be natural; but while the portio dura on the left side was healthy, on the opposite side this portion of the nerve had the same wasted grey gelatinous appearance as the sixth of the same side. The right glosso-pharyngeal had also more or less of this grey gelatinous appearance. The other nerves did not appear to be altered. There was a marked deformity of the pons and medulla: the right side of both was about a third larger than the left; the enlargement was irregular and nodulated. The chief projection in the pons was towards its lower border, in a direction downwards and backwards. The left side of the pons did not seem to be very much altered. The left olivary body seemed to be a little more prominent than usual. Examined microscopically, the altered nerves were found to be in a state of extensive fatty degeneration. Attached to each olfactory bulb was a quantity of gelatinous material, which was found to be composed of small round cells, very much like those of a sarcoma. The tumour itself was caseous, and composed of a number of small round cells, the greater number of which were shrivelled and broken up.

Aberdeen.

NOTES ON A TYPHOID FEVER OUTBREAK AT FOLKESTONE.

BY CLEMENT E. PRIESTLEY, M.R.C.S., &c.

PERHAPS the particulars of a typhoid outbreak occurring in my practice here may not be without interest to many of the readers of THE LANCET.

On July 1st I was called to visit a girl who had fallen ill in a caravan at the fair then being held in the outskirts of the east end of Folkestone, and found her suffering with premonitory symptoms of typhoid. At the same time I was asked to see several others of the fair people suffering from very similar symptoms. After three days typhoid spots appeared on three of the patients, but as the fair was at an end I could not find out if the others I had seen had typhoid, as they had left the ground. I was, however, given to understand that they recovered without being attacked. Of the three typhoid patients, one was removed to Ashford by her friends before the medical officer had arrived. One was treated at the Sanatorium, and one in a caravan in the middle of the field where the fair had been held. On one side of this field are two small cottages, in one of which a girl of seventeen was attacked with typhoid on July 23rd, and died a few days afterwards. A boy in the same cottage showed symptoms of failing health, but, being removed, recovered without having the disease. A month later I was called to see a lad in the town in whom the malady proved fatal. In August and September I had six other cases of typhoid, all at the eastern part of the town. In each case I have tried to trace the origin of the disease, with the following result. The people of the fair on their way to Folkestone passed through the village of Dymchurch, and, having a difficulty in obtaining sufficient well-water, several drank from a roadside pond, which was brackish to the taste and of a greenish colour. The three persons that had typhoid drank some of this water, as also did the others that suffered from diarrhœa and pyrexia; whilst amongst those of the company who did not have recourse to the pond-water there was no illness. In the case of the girl who died the water supplying the cottage in which she resided is an open spring and close to the tents of the fair people, and could therefore have easily become polluted. Again, the boy had been at the fair constantly and may have contracted the disease there; on the other hand, he was occupied daily packing fish in ice, and was constantly sucking ice. Of the other six cases I could obtain no clue as to the origin of the fever. The inspector or sub-inspector of nuisances inspected their residences, and could not find anything wrong with drains, and only in one instance water-supply; they had not been at or near the fair, and four had not been in contiguity with one another. The milk-supply was investigated, but nothing was discovered. Three patients drank water other than that supplied to the town by the water company; this had been analysed some few months before, and reported as good.

I think these cases go far to prove, first, that typhoid may rise *de novo*, for I cannot hear of any case of typhoid having occurred at Dymchurch; and, secondly, that it is contagious, which is quite contrary to my previous experience. I have seen much typhoid, but have always been able to find and remove the cause, and thus prevent the spread of the disease, even under most unfavourable circumstances.

It is not my province to write with regard to the sanitary condition of Folkestone, but from a year's experience of the state of things existing at the eastern part of it I should say it is unsatisfactory. A mild form of diphtheria is mostly endemic in that quarter, and has been so, I understand, for some time. It may not be out of place to sound a slight note of warning—viz., that a house-to-house inspection of the poorer parts of the town would show a condition of things that, to say the least, must be a cause of surprise when one contemplates how very near we may be to a cholera epidemic. On the other hand, the western portion cannot be spoken too highly of.

Folkestone.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Procemium.

GUY'S HOSPITAL.

A CASE OF LOCOMOTOR ATAXY WITH SEVERAL UNUSUAL SYMPTOMS; REMARKS.

(Under the care of Dr. HALE WHITE.)

THERE are few diseases which present such a multiplicity of symptoms as are found in locomotor ataxy, of which the following case is an example. The prognosis is very unfavourable, but the course of the disease may be spread over a long period (even thirty years according to Bristowe), the patient, however, making frequent calls on the physician for relief of symptoms. Although, as Dr. Hale White observes in his remarks, death is generally due to intercurrent disease, it may also be caused by implication of the muscles of deglutition, paralysis of the laryngeal muscles, renal disease secondary to vesical mischief, or even to bed-sores. We refer our readers to the remarks appended to the case.

Alfred P——, aged fifty, was admitted on June 10th, 1886. He was in Philip ward, under Dr. Fagge, in 1883. An old report states:—"He has been the subject of chronic rheumatic pains for many years. Three or four years ago he suffered from indigestion; three months ago he had a sharp attack of pain in the stomach, lasting all day, and accompanied by vomiting. These attacks have become more sharp and frequent lately. The pupils are unequal, the right being larger than the left. They do not react to light or accommodation. He can stand with his eyes shut; he has paralysis of the right external rectus and diplopia; both discs show a white margin and venous pulsation. The patellar reflex is absent. The superficial reflexes are normal. Sensation: Occasional numbness of legs and arms. He has shooting pains starting in the toes and running up the legs. He has girdle pains at the lower part of the thorax, the ring being about four inches across. He has numbness over this area and upwards to the shoulders behind, and down the extensor surfaces on both sides as far as the hands; he has also numbness of the face and head. Twenty-one days after admission he suddenly had transitory pains of the right upper limb. The stomach had sometimes to be washed out. He can turn and walk easily along a chalked line." The old report, to which all the above refers, is headed "Early Tabes Dorsalis, with Gastric Crises." He has been getting worse since; has had much difficulty in breathing; he went to St. Bartholomew's Hospital last January, stayed there three months, and was tracheotomised for this trouble.

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State on admission.—The abductors of the vocal cords are quite paralysed, and they are so close together that they leave a median chink no wider than the thickness of a sheet of note paper. They appear healthy, but are quite immovable when he speaks or breathes. He wears an indiarubber tracheotomy tube with an opening on its upper surface. He speaks, very hoarsely and indistinctly, by putting his finger over the tube. His hearing is preternaturally acute. His sight is bad; he wears convex glasses; has conjunctivitis in both eyes; the right pupil is the larger; pupils do not react to light or accommodation; there is no strabismus, but there is complete ptosis of the right eye, and there is hemiatrophy of both discs. He cannot stand with his eyes shut, and walks with a slightly ataxic gait. His muscles are very little wasted; there is no rigidity. Tendon reflexes all absent, superficial ones diminished. He very rarely gets gastric crises now. The anæsthesia, numbness, and girdle and lightning pains remain as before. All his joints are healthy. His tongue is normal. Only two teeth are left in the upper and one in the lower jaw; some of the teeth have been extracted, others have fallen out, and one or two have broken off near the root; those in the mouth now are not decayed, but are quite loose. The alveolar processes of the jaws are quite atrophied. He has a sensation as if he always had food in his mouth. Bowels irregular. Occasional catheterisation is required. No sexual disturbance. The patient seems to be deficient in power of smell.

Remarks by Dr. HALE WHITE.—It will be noticed that the diagnosis of tabes dorsalis was made, when the patient was last in the hospital, from three symptoms—namely, (1) the pains, (2) the abolition of reflexes, and (3) the gastric crises. There was at that time no locomotor ataxy, yet the diagnosis was pretty certain from these three symptoms, which are all of them usually present early, generally before the ataxy. Locomotor ataxy is a bad name, for it is only the name of a symptom. We may have ataxy due to (1) cerebral disease, (2) cerebellar disease, (3) spinal cord disease, and (4) peripheral nerve disease; and for each of these it may be due to disturbance of (1) sensory function, (2) motor function, and (3) both combined. So we must insist that ataxy is only a symptom, and therefore not a diagnosis, any more than is albuminuria or jaundice. From the position of the lesion we can explain some of the above symptoms. The initial sclerosis is either in the posterior grey horn, or in that part of the column of Burdach traversed by the inner division of the posterior roots as they reach the level of entry into the grey substance. It is distinct from the secondary degenerations which accompany it. The affections of the columns of Goll and Clarke and the cerebellar tract are truly systemic; that of the middle area of the column of Burdach probably is not; whilst that of the root zones certainly is not. The reasons for looking upon the degeneration of the column of Goll in tabes as a true secondary degeneration are that when the lesion in the primary field is in the lower lumbar or sacral region, the degeneration of Goll's column is limited to its postero-internal border; when the primary lesion is in the upper lumbar or lower dorsal region, the rest of Goll's column is affected; and when the primary lesion is in the upper dorsal or lower cervical region, the comma-shaped area of Burdach's column is affected. The position and amount of sclerosis in the above-mentioned areas vary proportionately to the position and amount of the motor ataxy. Hence it is seen that we are able to determine the position of the lesion when the case shows motor ataxy. By an analogous process of reasoning we are able to say that when the case presents static ataxy the cerebellar tract will be involved. Degeneration of these tracts just mentioned is never connected with any other symptoms than motor and static ataxy. The degeneration of Clarke's column is probably in some way connected with static ataxy. By a similar method of careful comparison of symptoms during life with pathological appearances after death, it has been found that an area with its base at the border of the cord for a short distance, one side along the inner border of the posterior root, and a third side joining the other two, is always diseased in cases in which there are severe pains, hyperæsthesia, or analgesia; hence we say that this lesion is the cause of these symptoms. The affection of the external root zones causes abolition of the tendon reflexes. Thus we are able to localise the cause of four of this patient's symptoms—viz., (1) the motor ataxy, (2) the static ataxy, (3) the sensory disturbances, and (4) the abolition of reflexes. The other symptoms are so various and so difficult of pathological localisation that some hold that the disease is a diffuse inflammation affecting the nervous system in different parts. Three views are held as to the pathology of the changes in the cord — 1. The sclerosis begins in the nerve bundles (primary neuritis). 2. It begins in the connective tissue (interstitial neuritis). 3. It begins in the vessels (vascular neuritis). Which of these is true we cannot yet say; the last has fewest adherents. With regard to the other symptoms: 1. Gastric crises. In this patient, as usual, they are an early symptom, disappearing later on. 2. Laryngeal crises. These may or may not be followed by laryngeal paralysis; whether or not this patient ever had any laryngeal crises is not quite certain. The laryngeal paralysis is a very rare symptom; it is generally a paralysis of the abductors, as here, and is dangerous as necessitating tracheotomy. 3. Paralysis of ocular muscles. This symptom was also present. 4. Eye symptoms are often present; they are mydriasis, myosis, the Argyll-Robertson symptom, optic atrophy, colour blindness, restricted field of vision, hemiopia, loss of accommodation, and diplopia. This patient presented several of these; he was tested for all. 5. Perversion of hearing. Deafness is common; in this case great acuteness of hearing, a rare symptom, was present. 6. Perversion of tastes—a rare group; perhaps the sensation of food in the mouth experienced by this patient should be referred to it. Hemiatrophy of the tongue is described. 7. Perversion of smell—a rare symptom—was present in this case. 8. Transitory paralysis of various muscles is also rare. This patient had transitory paralysis of his right arm. 9. Bladder disturbance. This is rare; this patient appeared to have some vesical paralysis. 10. Trophic symptoms. These are usually in the joints; but it is noteworthy that this patient has lost many of his teeth, for that has been described by several French authors as a trophic symptom. It has been suggested that the edentulous cases are generally present with laryngeal crises. It was so here. Perforating ulcers and changes in the nails have been described in tabes. 11. Sexual disturbances: firstly, an excess of virile power; later, paresis of it. This patient does not present either of these. 12. Mental symptoms are common, but this patient did not show any; when they appear the motor ataxy may disappear. Many of the above symptoms are so rare that it is very doubtful whether their occurrence in locomotor ataxy is more than a coincidence. Dr. White also refers to the etiology of the disease, and its connexion with syphilis, pointing out that 90 per cent. of the cases of locomotor paralysis have had syphilis. He recommends iodide of potassium in large doses, and gives as a prognosis death sooner or later from intercurrent disease, possibly of the lungs.

HOSPITAL FOR SICK CHILDREN, GREAT ORMOND STREET.

TWO CASES OF CLEFT PALATE, AND ONE OF ACUTE PERIOSTITIS OF THE FEMUR; REMARKS.

(Under the care of Mr. EDMUND OWEN.)

THE notes of the following cases have been furnished by Dr. Penrose.

CASE 1. *Cleft Palate.*—Rosa W——, aged five years and four months, was admitted on July 26th for a cleft of the soft and the posterior part of the hard palate. Her mother gave a graphic account of how, between the second and third months of pregnancy, she was shocked by the sight of "a man who had a hare lip, and who spoke funnily." She mentioned the occurrence to her husband. (This is recorded rather as a matter of history than as of scientific import.) After a few days' stay in the ward, so that she might become accustomed to her strange surroundings, and learn obedience to sister and nurses, the child was brought into the theatre for operation. Chloroform was administered on a piece of lint, and a Smith's gag was introduced. The edges of the cleft were pared, the mucoperiosteum was detached from the under surface of the hard palate by the use of curved raspatories, and the flaps were approximated and secured by fine sutures introduced by a Marion Sims' tubular needle, furnished with a reel of silver wire at the end of the handle. All tension of the united flaps of the velum was then eased by a free incision made through it on either side of and parallel with the line of sutures. Complete union occurred, and the child was dis-

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charged on the fourteenth day. When seen two months after the operation, the palate was quite sound, several of the sutures were remaining, and the voice and speech were steadily improving.

CASE 2. *Cleft Palate.*—Betsy G——, aged seven years and three months, was admitted from Chesterfield on July 14th with a complete and wide cleft of the hard and soft palate. She had been operated on fifteen months previously, but with no success. The muco-periosteum having been detached from the palatine processes, and the soft palate having been freely disconnected from beneath the horizontal plate of the palate bone by the use of curved scissors, the pared edges of the cleft were sutured as described in the preceding case, the tension being relieved by exceedingly free lateral incisions. She was discharged on Aug. 19th. On October 14th Dr. Macdougall wrote that the only spot where union was not perfect was just in front of the soft palate. This aperture will probably grow steadily smaller; if not, it can be easily closed at any time. The child's father writes that her speech is "altogether improved."

Remarks by Mr. OWEN.—The operation for cleft palate has been much simplified of late years by the use of chloroform and of the tubular needle with the endless wire, and by the introduction of Smith's gag. The relief of the dragging of the tensor and levator palati, too, is much more easily accomplished by the simple transfixion of the halves of the soft palate, and by making an incision through it, forwards and backwards, by a tenotomy knife. My experience is that the success of the operation depends very much on the boldness with which these lateral incisions are made; and freely as I make them now, I have had no experience of sloughing of the parts; fortunately their vascular supply is extremely free. The children are kept very little in bed, but they are carefully watched lest they introduce their fingers or solid food into the mouth.

CASE 3. *Acute Periostitis of Femur.*—Agnes S——, aged six years and four months, was admitted on July 28th. On June 15th she had to be taken out of school because she was sick; she walked lame, and complained of pain at the right knee. At night she was very feverish, but there was no delirium. She was thought to be suffering from rheumatic fever, and the occurrence of swelling about the knee a few days later seemed to offer confirmation of that diagnosis. She continued very ill for three weeks, the urine being thick. Immediately on her admission into the hospital she was put under chloroform, so that the tender limb might be thoroughly examined. A fluctuating swelling was found over the lower two-thirds of the thigh, and the house-surgeon (Dr. Hinds) opened it by Hilton's method, attacking it through the interval between the ilio-tibial band of the fascia lata and the tendon of the biceps. A large quantity of brownish fluid escaped, and on introducing the finger a surface of the femur near the linea aspera was found denuded of periosteum; a counter opening was made through the brawny integuments on the inner side of the limb, and the wound was thoroughly drained. The cavity was irrigated with an antiseptic solution, surrounded with mercuric dressing, and firmly bandaged, the limb being fixed on a splint. After the operation the temperature never reached 100° F., and the child was discharged cured on the twenty-eighth day.

Remarks by Mr. OWEN.—This is one of those many cases in which periostitis has been mistaken for articular rheumatism. The suddenness of the onset of the symptoms, the redness, swelling, and tenderness of the limb, the high temperature, and the great constitutional distress, all seemed to point to rheumatism. The diagnosis could have been made by the fact of the swelling being not *in* the joint, by the existence of central enlargement and tenderness in the *shaft* of the bone, and subsequently, if that were necessary, by the temperature remaining uninfluenced by the administration of salicylic acid. To the comparative mildness of the periostitis must be attributed the child's happy escape from necrosis, consecutive purulent arthritis and pyæmia—those frequent consequences of acute periostitis in childhood.

PROPOSED ITALIAN HOSPITAL.—The fourth annual ball in aid of a fund started for the purpose of founding a hospital for the benefit of Italians in London, was held on the 1st inst., and proved very successful. There is at present a small Italian hospital in Queen-square, Bloomsbury, but this has long since outgrown the demands upon it, and it is in contemplation to erect a larger and more suitable building.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

Tumours of Palate.—Researches concerning Pasteur's Prophylactic.—Flagellated Organisms in the Blood.—Epithelioma of Larynx.—Disseminated Fibrosis of Lungs.—Addison's Disease associated with Cystic Condition of Pineal Body.—Included Ovum.

AN ordinary meeting of this Society was held on Tuesday last, Dr. J. S. Bristowe, F.R.S., President, in the chair. Mr. F. Treves and Dr. Angel Money were nominated as auditors of the Society's accounts.

Mr. STEPHEN PAGET read a supplementary note on a specimen of Tumour of the Palate, exhibited to the Society on Nov. 2nd, 1886. The chief masses of the tumour were epithelial. In a second similar tumour removed by Mr. Walsham there were identical masses of epithelium. In both there were cell-nests, glandular structures, and intervening tracts of embryonic tissue. The existence of cell-nests in tumours which were evidently innocent was a point of great interest. In their history and course these tumours of the palate resembled those occurring in the parotid region, and were probably examples of included embryonic vestiges.

Dr. HIME read a paper on Experimental Researches concerning Pasteur's Prophylactic, which will be found on another page.—Mr. VICTOR HORSLEY said that the pathognomonic appearances of rabies as described by the French school were in the stomach, which was congested in 70 per cent. of the cases, and hæmorrhages of varying size were found in the submucous tissues. The contents of the stomach were very important; foreign bodies of all kinds in large quantity and variety indicated a perverted appetite. Then about the root of the tongue and larynx, with but few exceptions (5 per cent.), there were signs of active congestion, whether due to the mode of death or not he could not say. In the central nervous system there was nothing definite. The lungs showed signs of catarrhal pneumonia, which might be due to secondary consequences. These signs were seen in the rabbit and dog. The small intestines of the rabbit and dog were empty except for straw-coloured serum, and the large bowel contained fæces, and often there was melæna.—Dr. HIME said that the stomach need contain no miscellaneous articles in rabies, and dogs may die with a variety of articles in the stomach without having had rabies. In true rabies the stomach may be absolutely empty; especially is this the case in the exceedingly violent form of rabies with marked paralytic symptoms.—With these statements Mr. HORSLEY also agreed.

Mr. CROOKSHANK showed specimens of Flagellated Organisms in the Blood of Healthy and Diseased Animals. There was an epidemic disease that prevailed at long intervals in horses, camels, and mules in India; it was a blood disease called "surra," and supposed at one time to be dependent on the presence of a kind of spirillum—"equine spirillum fever." The organism had very distinctive features, was of fusiform shape, with a longitudinal delicate membrane and flagellum at either end. Such an organism has been discovered in the blood of the calf. The hæmatomonas of fish was similar. But Leuckart's description of trichomonas would probably include the organism found in Indian rats by Timothy Lewis. Such organisms had been discovered by Mr. Crookshank in apparently healthy London sewer rats, whose blood teemed with them. It was difficult to be sure that the organisms were pathogenic, even in the disease called "surra."

Dr. S. WEST showed an extensive Epithelioma of the Larynx, taken from a man aged forty-three, in whom aphonia and dyspnœa of purely laryngeal origin, that necessitated tracheotomy, were the first symptoms. The left vocal cord was found to be fixed, and there was a slough on it. Anti-syphilitic remedies were tried without effect. Mr. Butlin saw the case and advised that extirpation of the larynx should not be practised. The ulceration extended from the base of the epiglottis to the first cartilage of the trachea. The thyroid and arytenoid cartilages were extensively destroyed. There was no very obvious glandular enlargement.

Dr. HADDEN showed the lungs of a man aged sixty, a mason. The man died soon after admission into the hospital from the effects of an injury. No history could be obtained. Numerous small white dots, surrounded by a ring of pig-

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ment, were scattered all over the surface of the lung. These dots were simply thickenings of the pleura, and the pigmented areas corresponded to small hard fibrous nodules just beneath the pleura. There was a large hard pigmented mass at the apex of the right lung, and some thickened pleura over it. A small calcareous nodule was found in the centre of the mass. The nodules and the large mass were made up of dense fibrous tissue with pigment. There was no excavation or caseation. Bacilli were not discovered. The bronchial glands were pigmented and calcareous. The lung tissue generally was crepitant, not emphysematous. The author thought it probable that the case was one of masons' phthisis, although the change was not diffuse as in those cases generally. Syphilis might have been the cause, but there were several facts against this.—Dr. BRISTOWE considered that his specimen, to which Dr. Hadden had alluded, was one of obsolescent miliary tubercles.—Dr. PYE-SMITH referred to certain pleural nodules surrounded by rings of pigment, and which were miliary tubercles.—Dr. EWART said that Dr. Hadden's specimen looked familiar to him. The pleural nodules probably originated in connexion with irritation of the lymphatics; he did not think tuberculosis of that violence would affect merely the surface of the lung.—Dr. PERCY KIDD thought that the fibromatous nodules might originate in the lymphatic stomata.—Dr. S. COUPLAND supported the view of the two previous speakers. In one case that he had examined for Dr. Greenhow, the nodular growths in the pleura appeared to be formed in connexion with lymphatics.—Dr. HADDEN did not object to the view that the pleural nodules originated at the site of lymphatic stomata, but there were lesions also scattered throughout the lungs.

Mr. A. Q. SILCOCK showed two specimens of Addison's Suprarenal Capsules associated with Cystic Pineal Glands. The first case was a man, aged thirty-six, in whom emaciation and vomiting were symptoms. The adrenal bodies showed changes typical of Addison's disease. There was no tubercle anywhere else in the body, and no bacilli were found in the caseous matter of the suprarenal. There was no obvious pigmentation of the skin. The second case was that of a woman who was "suckling" just before death. The pineal body was cystic, and of the size of a small cherry. There was deep pigmentation of the inner parts of the thighs and mammary areolæ. There were constant vomiting and great emaciation; but as Bright's disease also coexisted, little stress could be laid on the former symptom. Numerous caseous foci were scattered through the suprarenal bodies, and there was general fibrosis; the arteries were greatly thickened and obliterated in places. Sir W. Gull had noticed the similarity of structure between the pituitary body and the structure of the adrenals, and had observed such a cystic change. Some recent observations of Mr. Baldwin Spencer seemed to show that the pineal gland was homological with the vertex eye of lacertilians.

Dr. SEYMOUR TAYLOR showed a specimen of Included Ovum taken from a male infant aged eleven months. The tumour was situate behind the stomach, in the median line, and lying on the first and second lumbar vertebræ. It was of the size of a duck's egg. It showed a rudimentary vertebral column and coccyx, with spinal cord and meninges; also a primitive intestinal canal. There was also a mass of dense fat. The external surface of the ovum was coated with skin. There were rudimentary limbs and pelvis. A layer of vernix caseosa was detected. The features found would indicate the developmental condition of the fœtus at the tenth or eleventh week.—Dr. WALTER GRIFFITHS thought the specimen was acardiacous rather than anencephalous. The further degree of development depended on the fact that it was contained in a host that lived for nearly a year.—Mr. STEPHEN PAGET referred to a case of fœtal tumour growing from the hard palate, published in THE LANCET, 1881, as showing that the condition described was not necessarily due to invagination.—Dr. PYE-SMITH considered that Mr. Paget's objection was not a conclusive argument against invagination.

The following card specimens were shown:—Mr. Sydney Jones: (1) Malformation of Hand; (2) Large Calculus with hairpin as nucleus. Mr. E. H. Fenwick: Finger-shaped Calculus. Dr. Herringham and Mr. D'Arcy Power: Sarcoma of Brain and Cord. Mr. Shattock: Microphthalmos. Dr. H. Sainsbury: Occlusion of Coronary Arteries in Angina Pectoris. Dr. Hebb: Tuberculosis of Uterus. Dr. Hadden: (1) Cirrhosis of Pancreas in Diabetes; (2) Tubercular Ulceration of Trachea; (3) Carcinoma of Cæcum with extreme narrowing. Dr. Pasteur: (1) Lung in Chronic Pleurisy; (2) Organs from a case of Addison's Disease. Dr. G. N. Pitt: (1) Multiple Erosions of Stomach following a Burn; (2) Ascending Nephritis leading to a local scarring of Kidneys. Mr. Reginald Harrison: Urinary Organs from a case of Bilharzia Hæmatobia. Mr. T. Smith: Hypertrophy of Mammary Gland, with adenomata.

OBSTETRICAL SOCIETY OF LONDON.

A MEETING of this Society was held on December 1st, Dr. J. B. Potter, President, in the chair.

The following specimens were shown:—Mr. Alban Doran: A Dissection of the Muscles of the Female Pelvis. Dr. Phillips: Conjoined Twins; Dicephalous Monster delivered with one pain without assistance. Mr. Malcolm showed for Mr. J. Knowsley Thornton a pair of Diseased Ovaries.

On Mercurialism in Lying-in Women undergoing Sublimate Irrigation, by Dr. W. R. DAKIN, B.S.—The author gave a list of recorded deaths from mercurialism in lying-in patients, with an epitome in each case of the post-mortem appearances. He mentioned Keller's recognition of mercury in the urine of patients douched with sublimate solution, confirmed by his own experiments. Having noticed the contra-indications to its use, he detailed the method employed at the General Lying-in Hospital, and examined the conditions affecting susceptibility to the poison, including von Herff's experiments. The symptoms of poisoning were given in detail in the cases observed. He narrated two cases, one of the milder form of poisoning and one fatal, in which the post-mortem appearances and histology of the kidneys were given, and made a comparison of results obtained as regards temperature, rate of involution, and duration of lochia under different modes of using the solution. The precautions to be observed and the most successful method of use were then indicated, the opinions of continental physicians quoted, and the treatment which proved most useful pointed out. He gave a table of affected cases under his observation, showing the symptoms and their respective dates of appearance, with a list of authors referred to in the course of the paper.—Dr. BOXALL thought that the first fatal case related by Dr. Dakin was due to shock from the sudden passage of foreign material into the blood stream through the uterine sinuses. He had seen such a fatality after an intra-uterine injection of carbolic acid. As one of Dr. Dakin's more immediate predecessors at the General Lying-in Hospital, he had an excellent opportunity of observing the results obtained by carbolic acid and permanganate of potash compared with corrosive sublimate as an antiseptic agent. Dr. Boxall showed a table representing the morbility among all the patients admitted to the hospital during sixteen months. Nothing but sublimate irrigation (1 in 2000) was used during the latter half of the time, and the morbility was reduced in a marked degree. Among 240 patients delivered during the sublimate era, three cases of slight mercurialism occurred; while pyæmia, septicæmia, and local pelvic mischief were almost entirely eliminated.—Dr. DAKIN had reported ten cases of mercurialism after 165 deliveries, but the symptoms were very slight, and a solution of 1 in 1000 is at present employed immediately after labour.—Dr. BOXALL thought that sublimate solution deteriorated, owing to the alkalinity of London water, and he advised a concentrated preparation from which to make the solution for immediate use, with the addition of dilute hydrochloric acid in the proportion of four drachms to each ounce of solid sublimate.—Dr. JOHN PHILLIPS thought that the question of intra-uterine injections was still *sub judice*. As regards vaginal injections, if there were no lacerations the use of the sublimate might be safe, not otherwise. He used a 1 in 2000 solution to dip the hands in before examinations, and was accustomed to add enough litmus to colour it pale purple.—Dr. MATTHEWS DUNCAN recognised the supreme importance of the subject now brought before the Society in a valuable contribution. He remembered the wonderful diminution of morbility in the Edinburgh Maternity Hospital when antiseptic treatment by carbolic acid was introduced there. Now he had no maternity hospital unfortunately, but only the experience acquired in home and consulting practice. Nothing in the history of midwifery could show such beneficent results in practice as antiseptics, and the import-

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ance of details was shown by Dr. Boxall's table of the results in the York-road Hospital—a gradual and very large diminution of morbility, as the antiseptic was changed from Condy's fluid to carbolic acid and from that to corrosive sublimate, from first to last a diminution of more than 30 per cent. The paper showed the dangers of mercurial antiseptics, and he should not be satisfied with care after the mercurial poisoning began. Such care might be too late In consequence he confined the use of the sublimate to one or an occasional application, using carbolic acid for the continuous antiseptic washings. He had not seen hydrargyrismus when the antiseptic was used in this way. Great care must be taken to leave no part of the solution in the patient. This is especially necessary when what has been called ballooning of the vagina occurred, a state due rather to intra-abdominal pressure than any condition of the perineum.—Dr. PARAMORE advocated the use of alcohol as an antiseptic injection during and after labour.—Dr. GRAILY HEWITT thought that the practice of midwifery in private and in a lying-in hospital could not be looked upon as identical so far as the frequent use of antiseptic injections was concerned. He was anxious to insist on this, because if it went about that the internal injection of a dangerous antiseptic such as corrosive sublimate was in the opinion of this Society essential to the safety of the lying-in patient, it would be the cause of infinite mischief. No doubt in a lying-in hospital extreme precaution was justifiable, but in private practice less dangerous materials could be employed, and frequent use of injections could not be held to be necessary.—Dr. ROGERS had seen sudden death follow an intra-uterine injection of iodine in a case of fibroid of the uterus with metrorrhagia. He now always uses dilute iodine irrigations, and has never seen or known any bad result.—Dr. CHAMPNEYS feared the present discussion might hamper those who rightly might wish to use sublimate irrigations in suitable cases. Private practice and hospital practice differed in one respect. In both the patient required protection from infection by the accoucheur and nurse, but the latter also required protection from other patients. We had to balance the risk of sepsis against the risk of mercurialism, and he unhesitatingly embraced the latter. During the five years in which Dr. John Williams and he had charge of the General Lying-in Hospital their mortality was but 7 per 1000, and in the face of such results he cheerfully accepted the responsibility of the risk of mercurialism by routine post-partum irrigation with sublimate. In private practice he reserved this for cases specially liable to infection—cases of operation—in which he did not hesitate to wash out the uterus (if entered by the hand) or vagina with corrosive sublimate (1 in 1000 or 2000). He did not usually repeat the sublimate, preferring to leave one of Ehrendorfer's iodoform bougies in the uterus. In simple cases in private he used Condy.—Dr. W. Duncan, Dr. Fowler, and the President took part in the discussion, and Dr. Dakin replied.

MEDICAL OFFICERS OF HEALTH SOCIETY.

School Lighting.—Sanitary Registration of Dwellings.

A MEETING of this Society was held at the Scottish Corporation Hall, Crane-court, Fleet-street, the President, Dr. Alfred Hill, in the chair.

Dr. WILLOUGHBY read a paper on School Lighting, of which the following is an abstract:—In introducing the subject of school lighting, Dr. Willoughby referred to the fact that, unlike hyperopia, which was always congenital, myopia was the direct result of reading or otherwise exerting the eyes under unfavourable conditions, though when once acquired it showed a tendency to hereditary transmission; that, unknown among uncivilised races, it prevailed among the civilised in direct ratio to the amount of "schooling," and in schools and universities progressively from the younger to the senior students. Faulty postures and other circumstances aided in its production or aggravation, but these again were greatly dependent on insufficient lighting. From the ease with which one reads in the open air when the sky is overcast, he argued that the perfection of illumination was to be found in a full uniform *shadowless* light; that while under all circumstances one had to avoid the projection of the shadow of the head on the work, and of that of the hand on the written word, one should in natural illumination guard also against the admission of the direct rays of the sun, and in artificial lighting against the irritation and drying of the conjunctiva by the heat given off from gas or oil lamps, which, moreover, deteriorate the air of schools, in which the cubic space was almost always grossly insufficient, 250 cubic feet per head being absolutely necessary, though even the London School Board allowed only 130 for each child, and the code sanctioned 80! In all these respects the electric "glowlight" presented great advantages. In natural illumination the chief points to be considered were the aspect of the windows, their position as regards the scholars, and the proportion between their area and that of the room; the relation of neighbouring buildings, the "angular aperture," and the angle of incidence of the light as affecting its intensity. Dr. Willoughby maintained that so long as the light from the left was the stronger, so that the shadow of the hand did not fall on the writing, the objections urged against "cross-lighting" were imaginary, and that while the main source of the light should always be on the left, it might with great advantage be supplemented by lights of lesser intensity from other sides, the total illumination being thus increased. Blinds being open to several objections, he condemned south windows except when ground or dimmed and used as subsidiary sources, preferring north, east, and west windows, which did not admit direct sunshine. In wide rooms the rows of desks on either side should face in opposite directions, so that the nearer and therefore the stronger light, whether from the east or west, should always come from the left. These principles were also applicable to artificial lighting, for which he advocated the use wherever possible of the electric light, on the ground of its greater intensity and the absence of heat and of the products of combustion. Shades acting also as reflectors he considered very preferable to semi-opaque globes, which involved great loss of light. The two points to be observed in the arrangement of the lights were the avoidance of shadows and of the direct incidence of the light on the eyes. Where gas must be employed he recommended the use of naphthaline, the so-called albo-carbon, by which the illumination could be increased tenfold. But whatever the illuminant, he would suggest as the best arrangement one or more large lights on the ceiling, and smaller lights with shades, as used in billiard-rooms, over the desks. The number of these which would be required could only be determined by experience, but he strongly urged a trial of this arrangement, which he believed had never been attempted.

Mr. MARK H. JUDGE followed with a paper on the Sanitary Registration of Buildings Bill. Sanitation is, he said, in the air, though the public mind may be slow to realise the truth of the adage that "cleanliness is next to godliness," and that in reality sanitation is the science of cleanliness, and a science which becomes of importance in proportion to the density of the population. With the growth of population there has grown a sense of the need of giving more attention to the science of cleanliness, and at present we have a mass of sanitary legislation which, while failing to secure satisfactory conditions with regard to the removal of refuse from our towns, at the same time gives greater powers to local authorities than they have hitherto exercised. As an instance of the great powers conferred by Parliament on the local authorities with regard to sanitary matters, he had only to refer to the Metropolis Local Management Act of 1855, under which Act the London vestries have absolute authority to regulate the sanitary arrangements of every house or building, whether erected before or subsequent to the passing of the Act, provided there be a public sewer within 100 ft. of such house or building. These powers were, and are to this day, greater than public opinion would tolerate the exercise of, and therefore to a large extent the Acts under which they have been granted have been dead letters. According to the 73rd Section of the Metropolis Local Management Act, the vestries of London are made practically responsible for the public sewers and house drains, as well as for the sanitary arrangements generally. Similar powers are conferred upon local Boards of Health under the Act of 1875, but modified by the supervision of the Local Government Board. In spite of the existence of these great powers, the fact remains that our towns are in a lamentable state so far as the sanitation of our dwellings is concerned. That the present law has failed to secure reasonably healthy dwellings in our large towns was never more forcibly stated than last year, when the Government introduced the Housing of the Working Classes Bill, which provided that "in any contract for letting for human habitation an unfurnished house, or part of an unfurnished house, there shall be implied a condition that the house is in all respects

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reasonably fit for such habitation; and in the event of a breach of such condition as above mentioned, in the case either of a furnished or unfurnished house, or any part thereof, any inmate of such house who suffers any loss or injury to health or otherwise in consequence of such breach shall be entitled to recover damages from the person responsible for such breach." The opposition this proposal met with was, however, so great that when the Act became law this bold attempt to prevent the adulteration of houses had dwindled down to the following:—"In any contract made after the passing of this Act for letting for habitation by persons of the working classes a house or part of a house, there shall be implied a condition that the house is at the commencement of the holding in all respects reasonably fit for human habitation. In this section the expression 'letting for habitation by persons of the working classes' means the letting for habitation of a house or part of a house at a rent not exceeding in England the sum named as the limit for the composition of rates by Section 3 of the Poor-rate Assessment and Collection Act, 1869, and in Scotland or Ireland £4." This would seem to suggest that except when let to persons of the "working classes," houses may or may not be reasonably fit for human habitation, and thus it is more than ever necessary that something should be done to remedy the existing state of things. The Sanitary Registration of Buildings Bill is a legislative attempt to protect the community against unsanitary dwellings. It is to be brought before the House of Commons early next session by Dr. R. Farquharson, M.P., and may be briefly described as an effort to secure the maximum advantage with the minimum of officialism. The principle on which the Bill is based is the same as that on which the Vaccination Acts are administered—viz., the enforcement of a State regulation for the public benefit, while at the same time leaving individual citizens freedom in the matter of carrying out the same. It is not proposed that owners and occupiers of property should be relieved of their proper responsibility, though such inspection and supervision might for the moment greatly improve the sanitary condition of large towns. The provisions of the Sanitary Registration of Buildings Bill are:—1. That the Act shall come into operation in January, 1888, in all towns in England of 50,000 inhabitants and upwards, and in such other districts in the United Kingdom as may choose to adopt it. 2. The authorities entrusted with carrying out the Act are the same as those charged with the administration of the Public Health Acts. 3. Each authority shall appoint a sanitary registrar, whose duty it shall be to issue certificate forms for buildings, such forms to be returned in the same way as the vaccination papers issued on registration of births. 4. These certificates will declare that the buildings to which they refer are in a satisfactory sanitary condition, and shall be signed or sealed by specified competent persons or by corporations. 5. Where the owner or occupier wishes it, he may call in the services of the surveyor or engineer to the local authority to certify his house, but in that case he is to pay a fee to the local authority for the services rendered. 6. After January, 1889, it is to be unlawful for any dwelling-house, school, hotel, hospital, or other building to be occupied unless and until a certificate as described is deposited with the local authority. 7. A penalty is provided in case of the issue of a false certificate, and the wilful issue of a false certificate is made a misdemeanor; penalties are also provided for letting or occupying a house without a certificate. All whose opinions are worth consideration recognise the fact that serious imperfections exist in the sanitary arrangements of dwelling-houses, and are alike earnest in their desire to amend them. All are not, however, agreed as to the best means to be adopted to bring about the sanitary reform desired. Some would make it the business of the State to design and regulate the sanitary arrangements of every dwelling-house; others think that the State should have no right to inquire into the sanitary condition of any private property, and that it should in no way interfere with those who choose to reside in dwellings of the flimsiest description. Mr. Judge thought that in this, as in all other matters, the rule of liberty would be found the best preserver of the public well-being, which, correctly understood, includes the well-being of the individual. Where drains and sewers are public property, the responsibility for their proper maintenance admittedly rests in the State, or its representative, the local authority of the district. Any citizen who may be injured in consequence of the unsanitary condition of such public drains or sewers should, he thought, have right of action against any authority through whose neglect the unsanitary condition is proved to have been caused. On the same ground he would urge that in all cases of private drains and sanitary arrangements the responsibility for their proper maintenance should rest in the owner (or occupier when he stands in the place of the owner), and that the public authority should only have right of action in so far as the condition of the property may be directly injurious to the public health. That the sanitary arrangements of dwelling-houses should be of one uniform pattern, or that the internal economy of our houses ought to be submitted to the censorship of a public official, cannot be desirable. He did not desire to see the law with regard to compulsory sanitation increased—i.e., that the local authorities should have greater powers given them—but he would gladly welcome reform which would amend and strengthen existing law. At present the powers which the local authorities might exercise are considerably greater than any local board does exercise with any consistency, and it is this want of consistency in the enforcement of the Public Health Acts which has made them so inoperative. Too much has been attempted and too little done. Regulations have been made and builders have been told that a variety of things must be attended to, but in too many cases local boards and their officials have been content with framing regulations and giving orders. They have failed in the essential thing—viz., in seeing that builders and others obey. Mr. Judge would strengthen the law by minimising its demands to essentials, and by insisting on its absolute enforcement; he would increase the responsibility of the individual; but in so far as the public authorities pretend to interfere, he would make it a real interference, and in every case where the law was not complied with there should be some punishment meted out to those responsible for the breach. The Sanitary Registration of Buildings Bill does not, however, make any attempt in the direction of the very important work of amending and modifying existing sanitary laws. The Bill only deals with the one question of sanitary registration, and asks that it should not be lawful for any building to be occupied until it is certified as reasonably fit for habitation.

The Council presented a report on a communication recently addressed by the Commissioner of Police to metropolitan sanitary authorities on the subject of Disinfection of Cabs, stating that he was advised that the sanitary inspector is the proper authority for disinfecting cabs which may have conveyed a person suffering from contagious or infectious disease, and asking for information on the subject, and also if a certificate could be given to the driver that his cab was disinfected, so that he may be able to satisfy the police when inquiry is made of him. The Council reported that although the risk of cab infection is very slight, owing to the general use of ambulances, yet that it is very desirable that the sanitary authorities should, when occasion requires it, disinfect cabs free of charge, and that a certificate, the form of which was suggested in the report, should be given to the cab-driver.

The Council also presented a statement on a recent report of the General Purposes Committee of the Metropolitan Asylums Board on the subject of contract with metropolitan sanitary authorities for the reception into the Board's hospitals of persons suffering from infectious disease, and who are not paupers. After reviewing the various Acts and regulations on the subject, the Council reported that in the interest of public health every possible facility should be afforded for admission to the hospitals of the infectious sick; and that as no attempt has been made to define "non-pauper" from other cases, presumably owing to the difficulty attending any such definition, and as dangerous delays would inevitably result from conflict of opinion between Poor-law and sanitary authorities as to the status of candidates for admission to the hospitals, the wiser and better course would be some arrangement whereby these rate-supported hospitals should be freely open without payment to all classes of the community without distinction; that orders for admission should be given by medical officers of health as well as by relieving officers; that the certificate of any registered medical practitioner should be accepted as evidence of the nature of the infective character of the illness, and of the patient's fitness for removal, and that all charges incurred in the maintenance of the hospitals should be defrayed out of the metropolitan common poor fund, until such time as the hospitals themselves shall have been transferred to a properly constituted central sanitary authority.

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THE LANCET.

LONDON: SATURDAY, DECEMBER 11, 1886.

A GOOD deal has been said recently about the academic status of the Fellowship, chiefly in relation to the extra privileges over the Membership which it carries, and which its holders, by reason of their superior knowledge, are supposed to be better qualified to exercise and to enjoy. But by their latest action the Council have largely discounted this aspect of the diploma. As the result of outside pressure, and in the hope of depriving this pressure of much of its influence, the Council have been considering how to widen the basis on which the Fellowship is obtained, and the methods by which this object may be accomplished. They have decided that it is desirable to widen the basis, provided this be so done that the value of the distinction, as now held by the Fellows of the College, be not diminished. Yet in the face of this proviso the Council deliberately propose—(1) to elect annually a certain number of Members of the College, without any test as to their fitness for such an academic distinction other than a recommendation of five Fellows and five Members; and (2) to admit any Members of fifteen years' standing to the Pass without having passed the Primary Examination.

We have already discussed these proposals, and spoken not unfavourably concerning them; but we cannot admit that either the one or the other, and especially the former method, can be adopted without detracting in some measure from the present value of this now somewhat exclusive diploma. The adoption of the second proposal will not, in our opinion, be prejudicial to the purpose for which the Fellowship was originally issued—"in order more effectually to promote and encourage the study and practice of the art and science of surgery," as the Charter has it. But even this proposal must lower the present academic status of the diploma, seeing that the examination in anatomy and physiology—the *pons asinorum* of aspirants—is to be entirely abrogated. Nor is anything said about the preliminary art tests which the new order of Fellows shall have undergone. The purpose, however, of the Council being to increase the number of Fellows, it may reasonably be supposed that no stress will be laid on this point; this is the more certain as there has been a decided tendency on the part of the Council, during recent years, to lower rather than to raise this preliminary educational standard.

It would appear, then, that while resisting the desire of the Members of the College to more directly participate in its management, on the ground that acquiescence would be prejudicial to the vested interests of the Fellows and tend to lower the academic status of their diploma, the Council propose to elect annually a certain number of Fellows from among the Members, some without any of the tests on which the Fellowship at present rests and which give it the pre-eminence it enjoys, and some after a very modified test indeed. The professions of the Council and their practice are thus diametrically opposed. It will rest, therefore, with the Fellows at large, by whom alone the Council "have been elected to office as the governing body of the College," to come forward and say how long such an unwise and contradictory policy shall continue.

We have already, more than once, given our reasons for thinking that the extension of the franchise to Members of the College of, say, ten years' standing, and the concession of eligibility to sit on the Council to Members of twenty years' standing, need in no way either lessen the academic status or diminish the privileges of the Fellowship. The privilege of voting is not lessened in value because it is shared by others, while an increase in the present number of the Council by as many seats as it may be decided to offer the Members will deprive this concession to Members of any show of injustice to the Fellows.

Circulars will shortly be sent out to the Fellows to ascertain their views as to the desirability of extending the franchise to Members of a certain standing. The issue of large and important questions affecting the welfare of the College will be greatly facilitated should the Fellows of the College proclaim in favour of these concessions to the Members. An adverse vote, on the other hand, will at most stave off the final decision for a few months. We trust that the Fellows will see that their interests are really one with those of the Members in this respect. A retrospect of the action of the Council ought to convince even the most sceptical of the Fellows that they have little to hope for from the Council as at present constituted. A seat at the Council table is within reach of a very small minority of provincial Fellows, and can hardly, therefore, be reckoned as a tangible privilege of Fellowship. Voting for members of Council, which at present necessitates a journey to London, is at best an empty privilege, the entire abrogation of which would not make much difference to the majority of Fellows; how much less, then, will its being shared with the Members at large affect them, since they lose nothing by the concession.

Let the Fellows, on the other hand, make a stand on the question of facilitating the acquisition of their diploma on any other than on a strictly academic basis. In fact, ought not something to be done in the way of making this diploma still more select? Should it not be, in very truth, a test of *special* surgical attainments, and attainable by those only who are prepared to devote several years to its acquisition? An aspirant should not be allowed to pass the Primary Examination until he has been a Member of the College at least one year; and this examination should be of such a practical nature that only those can pass it who have been demonstrating anatomy and are intimately acquainted with dissected as opposed to text-book anatomy. The Final Examination should be equally searching, and require evidence of practical knowledge, of original work, of mature age, and of settled character before it can be obtained. Provision should also be made for withdrawing the diploma in case of misconduct or improper use. We feel sure that these are the points to insist upon, and that the time has come to abolish the merely political privileges of a diploma, which at present runs serious risk of being deprived of its academical status for the sake simply of perpetuating these privileges.

In connexion with the question of the relationship of the Fellows, Members, and Council of the College, we may

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direct the attention of our readers to an article on another page, complementary of one which appeared in our issue of Oct. 30th of the present year. These two articles, taken together, are well calculated to rectify many erroneous views which appear to be still entertained on the history and constitution of the Royal College of Surgeons.

IT is disheartening to receive report after report revealing the unsatisfactory and even dangerous sanitary state of the towns and places to which the English people resort on their own coasts in order to find change of air and to recruit their health. It is not long since attention was drawn to the continued failure of the sanitary authority of Shoreham to deal with sanitary defects which had been pointed out to them, and which, in the end, were associated with a serious outbreak of fever emanating from one of the dairies of the town. The report of the medical officer of the Local Government Board soon followed with a description of similar places which should be avoided as health-resorts, and special attention was called in the volume to the circumstances affecting the rural area of the Isle of Wight. Indeed, Dr. BALLARD, in his general report on the sanitary survey which was made in anticipation of the advent of cholera into this country, puts forward the case of the rural sanitary district of that island as one typical of bad administration, and he instances conditions illustrative of the existence over a long series of years of some of the worst sanitary circumstances that could well obtain in such a district. A glance at our columns dealing with reports of medical officers of health will show how this official condemnation receives support from the local official. Dr. BALLARD'S report was soon followed by another relating to the maintained prevalence of diphtheria in East Cowes, this being issued in October last; and now we find that during holiday time at Swanage, in Dorsetshire, typhoid fever was widely prevalent there, and this under circumstances which should not exist in any town, far less in a place making profession of being fitted to serve as a health-resort.

The report in question[1] has been prepared by Mr. W. HARVEY, F.R.C.S., an officer of health of local distinction who was temporarily engaged in the service of the Medical Department of the Local Government Board, and from it we learn the following history. Swanage lies on the northern slope of the Purbeck Beds which in the valley opening out at Swanage Bay, consist of hard limestone exhibiting vertical faults or fissures every few feet. The rock is, in fact, one indicating easy permeability vertically and horizontally, the dip of the strata being from above down to the town, and a brook flowing through it. These conditions are so obviously of the first importance as regards many sanitary matters, that it might naturally be assumed they would have been held in view. But Swanage has 342 privies, with pits averaging about five feet in each of the three diameters, and these are "mostly situated in the Purbeck Beds." For other 150 houses, excreta and refuse are practically stored "on the ground" surface, the receptacles only being cleansed at long intervals, and even then the work is not undertaken by the authority. Some of the pits are in direct relation with the rocky substratum. Then, again, Swanage was without anything that can be called a system of sewers until some commencement in this direction was made last year, there being separate outfalls for liquid filth into cesspits, the brook, and the sea. Fortunately, as it might at first appear, the town has an inexhaustible supply of water from a deep well, and power was some time since taken by the authority, under an Act of Parliament, to purchase the water-works for the public benefit. But this has never been done, and the supply has only been laid on to 91 of the 562 houses in the town. Such a condition of things could, of course, only be justified by the existence of other easily available supplies of a really wholesome character. The report reveals the real state of affairs as to this. A pond and a spring are, in the first instance, reverted to without special comment as favourite supplies. Then comes a reference to two public and thirty private wells. These are sunk in the same permeable rock to which we have just alluded in connexion with privy-pits, cesspits, &c, and this rock is further spoken of as lying "below an ancient town, abounding with defective sewers, privies, cesspits, graveyards, and so on," the physical condition of the wells being such that "the pollution of all or many of them is inevitable." Here, then, we have precisely the conditions which are so well known, even by the least experienced of health authorities, to be identified with the spread of typhoid fever. But as regards the onset of epidemics of this disease, milk has of late years been a principal and prominent cause, and hence special attention has very generally come to be devoted to dairies. In Swanage, however, only one dairy has the public water-supply laid on to it; the others, with one exception, resort to wells, already described by Mr. HARVEY; and in the exceptional case the dairy premises are not only without any water-supply of any sort, but the dairy is "situated on the bank of the brook," which we have already learned is made to receive sewage.

Under these insanitary circumstances a case of typhoid fever makes its appearance in Swanage. It spreads to two other persons, and it is stated that there can be no question that the bowel discharges from the patients passed by means of a rubble drain into the brook. Then came a sudden outburst of disease, and up to the date of the report fifty-five persons had been attacked and three had already died. Now, reverting to the dairy without water-supply, it is stated that, like others, it has been under no sort of regulation or supervision. And not only so, but it actually had a "dipping-place" in the brook only a few yards below the outlet of the rubble drain with its now specifically poisoned contents. It would need no sanitary expert to prophesy what some day or another would be the result of such conditions. The milkman need not be asked whether he ever used the only available but polluted water-supply near to his premises. The milk soon told its own tale, for out of twenty-six cases during the first onset of the disease, twenty-two obtained their supply from the dairy in question. It was the smallest dairy in the place, and yet out of sixty customers about one in six families were invaded, whereas only one in 150 not using this milk had fever. In such a town as Swanage it

[1] Sold by Knight and Co., Fleet-street; Shaw and Sons, Fetter-lane; Hadden, Best, and Co., West Harding-street; and P. S. King and Co., King-street, S.W.

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could hardly be expected that, even when the source was suspected and dealt with, the disease could be stopped; and so it turned out. For, in the words of the report, typhoid fever having been started by the agency of milk, there were thenceforth other means ready at hand to continue the work—namely, "water-supplies, drains, soil and refuse heaps befouled by excrements," obtaining in manifold instances a specific character for their pollution. These led to a later renewed prevalence; and, as Mr. HARVEY says at the close of a very interesting report, "the experience is a familiar one." The public can easily judge who is most to blame—the small dairyman who only had two cows out of which he had to make a living, or the sanitary authority to whom the Legislature and the local community have delegated the care of the public health in this watering-place.

MR. BAILEY DENTON and Lieutenant-Colonel JONES, V.C., have submitted to the Metropolitan Board of Works a scheme for the disposal of London sewage, which deserves, but will probably not receive, careful and impartial attention. In its broad features it is no novelty, and is indeed practically the solution of the great difficulty which found most favour with the last, and perhaps the best, of the Royal Commissions on sewage disposal. It is, in fact, the Canvey Island scheme, which we have so often urged as the only one presenting a real remedy for the frightful evil which has so long disgraced the metropolis. Its feasibility is now admitted by all, for even Sir JOSEPH BAZALGETTE, who at one time believed it to be practically impossible, has submitted a plan for its accomplishment. In the hands of the skilful engineers who now bring it forward its success would not be doubtful. Properly executed, it would purify the river effectually, and would entail no injury on anyone.

The very existence of Canvey Island is probably unknown to the majority of Londoners, and even to many who have frequently travelled on the Lower Thames. In Sea Reach, on the left bank of the river, about ten miles below Gravesend and about nine above Southend, there is a small creek or haven called Holehaven, which is well known to barge captains and yacht sailors. Here begins the flat stretch of land known as Canvey Island. It is below high-water mark, and is enclosed by a massive river wall. Strictly speaking, it is only an island at high water, and it is far away from houses, and has very few of its own. To this island it is proposed to carry the sewage of the metropolis, including that of the Lower Thames and Lea valleys. The area is believed to be amply sufficient for the disposal of the whole for an indefinite period of time. Following the strongly expressed advice of the Royal Commissioners, the sewage is to be defecated, and we presume filtered through the soil, before it is allowed to pass into the river as a fairly clear effluent. We believe that no nuisance would be occasioned by the works; and to suppose that Southend would be injured by them or by the introduction of effluent sewage into the heart of the tide-way appears to us ridiculous. The suggestion comes with very bad grace from those who, for so many years and at so great an expense, have contended that the addition of the raw sewage at Barking and Crossness has not occasioned nuisance to Woolwich or Erith.

There is, as we have already said, general agreement as to the practicability of this great and most desirable undertaking. The only serious question is as to its cost. Up to June next London has, it seems, the option of buying the whole of Canvey Island for a sum of £230,000. It is estimated that to carry down the sewage would cost £3,250,000, and the necessary works on the island £1,040,000. Taking the permanent expenses of pumping and treatment as £61,141, the annual cost to London would be £197,851, equal to a rate of rather less than 1½*d.* in the pound on the rateable value of the metropolis and lower Lea Valley. The cost of treating the sewage on the island is estimated at £20,000 a year only. Doubtless this means that the sludge is to be separated by simple subsidence without chemical treatment, the fluid portion being applied to crops and the sludge employed, without machine pressing, in raising the level of the land. We express no opinion on this suggestion, which appears to be the only debateable point in the scheme, but wait with the greatest interest for further particulars.

The important matter now is to force upon the attention of Government and the public this well-considered and promising scheme. We know well that the Metropolitan Board of Works, with remarkable obstinacy, has to the present time persisted in opposing the removal of the present outfalls. They are now preparing to spend an enormous sum in the treatment by chemical precipitation and deodorisation of the London sewage at Barking and Crossness. This expenditure will ultimately be wasted, for London will not long be satisfied with any system of costly tinkering. The chemical advisers of the Board, and particularly their chemist, Mr. W. J. DIBDEN, deserve all credit for the skill with which they have made the best of the conditions imposed upon them. But the conditions are wrong; and we can only hope that Mr. DIBDEN and his colleagues will shortly be able to apply their experience and skill in a district where real and final success may be obtained. If the members of the Metropolitan Board only realised how much of their increasing unpopularity is due to their contempt of the just complaints of Londoners about the condition of the Thames, they would perhaps change their tactics before it was too late, and would push forward the reform which they have so long opposed.

THE science of physiology has been Dr. GASKELL's field of investigation for many years back. His conclusions, too, have received a very large measure of acceptance. The work which he has recently accomplished on the relations of the sympathetic nervous system to the central nervous system is also characterised by scientific methods, and the conclusions bear the impress of truth. We must remember, however, that the advancing zone of physiological knowledge, whilst it is supported by a nucleus of ascertained truth, is nevertheless subject to fluctuations which are not always actual contradictions. The object Dr. GASKELL had in view in his lecture at the Royal Institution of Great Britain was to give the deathblow to BICHAT's teaching that the cerebro-spinal and the sympathetic systems were co-ordinate. Dr. GASKELL appeared to prove conclusively that the whole sympathetic system was nothing more than an outflow of visceral nerves from certain nerve centres in the cerebro-spinal system. It was shown that the sympathetic nerves do not send non-medullated fibres into the cerebro-

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spinal system, because all these fibres pass out of the nerve-roots before they reach the spinal cord. White or medullated nerve fibres constitute the only link between the sympathetic and cerebro-spinal systems, and this link is always by way of the white rami communicantes. Consequently the connexion between these two nervous systems is limited to the region of the white rami communicantes; that is, to the region between the second thoracic and the second lumbar nerves. Further, these conclusions are borne out when an attempt is made to follow the white rami communicantes into the central spinal axis by means of their structural peculiarities. Sections of osmic acid preparations show that each white ramus is composed of very small medullated nerve fibres, often seven times smaller than the large medullated nerve fibres which compose the bulk of the anterior nerve roots. It would therefore be easy to demonstrate the fibres of the white rami communicantes in the anterior nerve roots wherever they are present. Observations proved that in the dog these small white rami were present only in the thoracic part of the spinal cord. Further observations showed that the communication of the sympathetic and cerebro-spinal systems is not symmetrical throughout, but consists of three distinct outflows of characteristic visceral nerves—(1) cervico-cranial, (2) thoracic, and (3) sacral; the break in the continuity corresponding to the exit from the cord of the nerve bundles that supply the upper and lower extremities. Dr. GASKELL then went on to show that the accelerator nerves of the heart left the spinal cord in the anterior nerve-roots as fine medullated nerve fibres, and that after they had passed through the ganglia stellata they had become non-medullated nerve fibres. And this transition obtains throughout, for not only do the accelerator, but all the vaso-motor nerves change their coats in the same way in passing through the sympathetic ganglia. Besides losing their medulla, they have increased in number by a process of division, so that the efferent fibres of the ganglia are more numerous than the afferent. Seeing, then, that the sympathetic (non-medullated) nerve fibres are throughout modified medullated nerve fibres (cerebro-spinal), and do not arise independently in the sympathetic ganglia, we may fairly regard the sympathetic ganglia as bearing the same kind of relation to the visceral nerves that the ganglia on the posterior nerve roots do to the ordinary sensory nerves. ONODI has shown that the sympathetic are developed in close connexion with the posterior root ganglia, and travel further away from the central axis as the animal grows. Finally, argues Dr. GASKELL, the meaning of the sympathetic as a simple outflow of the ganglionated visceral nerves from certain portions of the cord and bulb is to his mind conclusively settled by the intimate relationship that exists between the structure of the spinal cord and the presence or absence of the rami viscerales. CLARKE'S column of cells is limited to certain parts of the cord and bulb. It is conspicuous in that part of the cord that lies between the second thoracic nerve and the second lumbar nerve. It is seen, again, in the top of the cervical cord, and extending into the cranial region. And, lastly, it occurs as an isolated patch in the sacral region of the cord. In other words, its cells correspond in distribution to those parts of the cord that give origin to the white rami communicantes. Hence the conclusion is drawn that the white rami communicantes arise in the cells that compose CLARKE'S column. On this showing the whole of the visceral nerves of the body are of spino-bulbar source.

A BILL which is backed by more than one distinguished member of the medical profession deserves for this reason careful consideration. Its object—that of promoting the sanitary improvement of dwelling-houses—is one that will command the respect of all who desire to see the removal of causes of disease and mortality. We felt, therefore, no hesitation in recently expressing sympathy with these intentions of the Bill which has been prepared by Mr. MARK JUDGE, but at the same time we doubted whether his proposal could be seriously entertained. Mr. JUDGE has now placed his views upon this subject before the Association of Medical Officers of Health, in a paper which he read to the Society; and the discussion which it elicited is fully in accord with the opinions we ourselves entertained concerning this measure. Mr. JUDGE was able without difficulty to show that dwelling-houses are now constructed in such a manner as to endanger the health of their inhabitants, and he does not limit his condemnation to those which have been erected within the last few years; it may, indeed, be admitted that a very large proportion of habitations in existence at the present time fail to fulfil satisfactorily the requirements which we have learnt to regard as necessary for the full enjoyment of health. He is desirous, therefore, that every house should be examined, that if found wanting in the sense we have indicated the defect should be remedied, and that by this process it should be ensured that every dwelling in the kingdom is fit in the best sense of the word for human habitation.

There is no section of our profession which would more willingly accord support to this principle than that which is engaged in the important duty of preventing disease. Nevertheless, there is no question that the Society of Medical Officers of Health have practically condemned as unworkable the means by which Mr. JUDGE proposes to accomplish the much-desired end. His suggestion that the vast process of reconstruction should be completed in the course of a few months shows either a want of appreciation of the character of the work that has to be performed or of the condition of a large number of houses in the metropolis and elsewhere; his intention to entrust the work to members of various professions who have but an elementary knowledge of the conditions which have to be fulfilled is another reason for doubting the practicability of his scheme. It was not difficult for Professor CORFIELD to plead, on behalf of those whose practice embraces specially the removal of unhealthy conditions, that the chief effect of such proposed legislation would be to employ a large number of persons altogether incompetent to properly perform this duty; and, again, it was easy for others to argue that the possession by a house-owner of a certificate under these circumstances would strongly militate against the improvements which are slowly being carried out in many of the larger centres of population.

The Bill as it stands must therefore be condemned; but although the machinery which it was proposed to bring into action for the improvement of dwelling-houses has been found unsuitable, the fact remains that

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there is a great necessity for some further powers for the attainment of the object it had in view. It is in no way obvious to us that the Legislature has failed to recognise the importance of this subject and to provide the means which are necessary for the purpose. The want that really exists is that which concerns the constitution of local authorities; and it is this difficulty which is now engaging the attention of statesmen. Nowhere is this obstacle to the enforcement of sanitary law more keenly felt than in the metropolis, and nowhere is there more opposition to any rearrangement of constituted authorities. The only influence which can overcome this opposition is that of public opinion, and this, so far as the metropolis is concerned, it is almost impossible to create. The demand for municipal reform is, indeed, left to those who have personal knowledge of the disadvantages attendant upon the present system, and, perhaps, to those who for other reasons desire to ally themselves with this movement. The Home Secretary's reply to a recent deputation on this subject, that their views deserved attention, inasmuch as they represented authorities which had failed in their duty, was doubtless not made without reason. To those who are watching the course of events with regard to municipal reform, and who are desirous of seeing an authority called into existence which is worthy of confidence, there was something almost farcical in the constitution of the deputation which waited on the Home Secretary and the President of the Local Government Board. It is probable that all who shared in the appeal to those gentlemen were not cognisant of the position in which they were placed, but there is the greater necessity for those who wish London well to bestir themselves in this matter, and not to leave to mere chance the future constitution of the authority, which will eventually have to deal with even larger problems than that Mr. JUDGE submitted for the opinion of the Society of Medical Officers of Health.

THE conference held at the Society of Arts, John-street, Adelphi, on Tuesday last, under the presidency of Sir ANDREW CLARK, was rather a lively one. The presence of the Chairman, of Sir SPENCER WELLS, of Mr. TIMOTHY HOLMES, and other consultants, shows how deep is the interest in the problems discussed, even among those who have no personal interest in the subject. The question, as it affects London, is altogether a special one. More limited communities are infinitely more favourable for experiments in the way of provident dispensaries. Even in these such experimens are not easy, and have not been altogether satisfactory. But in a community, or a congeries of communities, like London, the organisation of provident dispensaries on a sound basis is a matter of extreme difficulty. The Metropolitan Provident Medical Association has now been in existence for several years, backed by many prominent members of society, who formed themselves into a Joint Stock Company. But it does not appear to have had any great success. It has never been popular in the profession, and it seems to have been scarcely more so among the people for whom it was intended. The secretary stated, in answer to a question, that there were about 25,000 members, 40 medical officers, and that the amount paid to medical men varied from £100 to 160*s.* per annum. This is 5000 members less than there are in the Leicester Provident Dispensary, which includes a quarter of the inhabitants. The explanation usually given of the non-success of the Metropolitan Provident Medical Association is the competition of the great hospitals and the free dispensaries of London, and especially the abuse of the out-patient department. This was the explanation on which Mr. TIMOTHY HOLMES laid most stress on Tuesday, and the speeches of many of the medical men present showed that it was their view of the matter. But there are other reasons for the comparative failure of the Metropolitan Provident Dispensaries; at any rate, there are other reasons why they have been unpopular in the profession. The first is that they introduced a low rate of charge, and this at a time when in most parts of the country an effort was being made, with more or less success, to raise the rate of pay in club practice. Secondly, they threw their net for all comers, without reference to their wages or their means. Thirdly, they entered into negotiations with the friendly societies and other such bodies, which were already provided with medical officers. It may readily be understood that such tactics were most objectionable to medical men. They did not raise the estimate of medical service. They took or tempted the patients of other medical men, and, instead of working in new seams and among the improvident, they catered for those who had already entered into provident arrangements of their own. We pointed out these errors from the beginning, and have noticed with regret that our remonstrances were unheeded. The meeting of Tuesday was largely occupied with a statement of these grievances by various speakers, in more or less methodical form. But undoubtedly the out-patient department of hospitals was much spoken against. It was said to be grossly abused. Mr. GEORGE BROWN proposed an amendment strongly denouncing it. Sir ANDREW CLARK was disquieted by the free way in which charges were brought against it, and proposals made for its abolition. As we have said, he had to use his best influence to prevent a very strong resolution against the out-patient system, which, in his opinion, would have greatly reduced the value of hospitals as places for learning the art of medicine; and he had also to protest against a statement that out-patients are often treated by students. It is enormously important in all such discussions to observe care and accuracy of language. No member of the profession would like to say a word that could really injure the hospitals in which he has largely learned his profession, and in which the poor find a refuge in their dark days of sickness and accident. At the same time, it is evident that hospitals must restrict themselves more and more to their proper sphere, and not compete with practitioners. The treasurer of Guy's seemed surprised at the meeting not being delighted with the system now practised at that hospital of charging the poor a few pence for their medicine. This is a mockery of a provident system, and an equal mockery of charity. We do not believe that there exists any abuse of hospitals to justify the withholding of a sixpence from them. It is important at this benevolent season to be explicit on this point. But they might do enormous good to the poor to the public, and to themselves, by working with and into the hands of provident dispensaries. The committee which has been appointed may earn for itself great gratitude by a study of these questions, and such suggestions as will

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lead to mutual respect and coöperation between the staffs of hospitals and those of provident dispensaries. The affirmation that attendance on the sick poor should be on the principle of sick assurance, the directing of the attention of the governing bodies of hospitals to the necessity for some check on the indiscriminate provision of medical treatment and dispensaries, and the appointment of a committee to report on the subject of assurance as applied to the sick, was not bad work for a somewhat divided and excited meeting. The interests of the profession and those of the poor alike call for wise and prompt action by this committee.

Annotations.

"Ne quid nimis."

DEGREES FOR LONDON MEDICAL STUDENTS.

THE position in which the question of degrees for London medical students is now placed must quickly bring some one of the various solutions of the difficulty to the forefront. The grievance to the London student, and to the various provincial schools, which have not as yet been able to combine into a university, or do not constitute an integral portion of a university, is admitted on all sides. Sir James Paget, as Vice-Chancellor of the University of London, publicly said in Manchester last month that "although some schemes were afloat which rather implied that the University of London should be the great body in England for granting the degree of Doctor of Medicine, that was not likely to take place," so that it is obvious that, except for some minor internal reforms, the authorities of the University will defend the *status quo*, and that average London students must look elsewhere for a medical degree on terms equivalent to those granted by the other Universities in the United Kingdom. The only suggestions entitled to consideration for removing this disadvantage to the London student are—(1) the establishment of a Teaching University in London; and (2) the constitution of a University, primarily medical, of which the medical schools should form the Medical Faculty, under the auspices of the Royal Colleges of Physicians and Surgeons in London, and around which the other Faculties should gradually congregate, and become component parts. If the students are to be allowed to obtain degrees on as fair terms as those which exist in other medical centres, one or other alternative must take the lead in affording the solution to the difficulty. The Association for promoting a Teaching University in London, which will hold a general meeting on the 15th inst., will present a report and urge the advisability of approaching Her Majesty's Government on the question. It is further understood that the Committee of Delegates of the two Colleges will lay before special meetings of the Council of the Royal College of Surgeons and of the Comitia of the Royal College of Physicians respectively, on the 16th inst., a report passed by the Committee, to the effect that candidates who have qualified at the Conjoint Examining Board, after having passed an examination in arts and science to be subsequently defined, should obtain a degree in Medicine and Surgery, but which will also assert that the Colleges and the associated schools form practically a Medical University. There are two questions in this proposition of great interest—viz., what constitutes a Medical University; and is residence to be an absolute necessity for a new Medical degree? We venture to look for some approximation between the academical and the purely professional aspects under which the question is at present being debated, and we hope that on such lines some speedy solution will be found which will remedy the admitted hardship which the London medical student experiences when he honestly and fairly asks for a degree on similar terms to those which obtain with his Scotch and provincial brethren.

GALEN AND HIS WORK.

MODERN science has been accused of an ignorant and irrational contempt for its early precursors. No doubt the excessive admiration in which these masters were held incurred the inevitable reaction; but now that both extremes have had their day, a far more enlightened and far higher estimate of their lives and work is steadily being formed. Galen is an example in point. After sharing with Aristotle something like despotic sway over the schools, and suffering with him the neglect and even odium meted out to dethroned monarchs, he is now restored to his proper place in the order of history and rehabilitated with the honours he is justly entitled to. In the words of a living master of inductive research, "it is impossible too greatly to admire the really astonishing fidelity with which this early biologist adhered to the true methods of science. Many a worker of the present day would do well to take a lesson from the patient and laborious diligence with which Galen applied himself to the accurate study of facts, and no less profitably might many of them imitate Galen in the caution which he displayed in the province of speculation. Regarded as a scientific genius, Galen is second to no man in history. It is certain that he was charged with the true conception of scientific methods more fully than any of his predecessors, or than any of his successors, till within the last few centuries." It is one of the many causes of regret for the arrested labours of the Old Sydenham Society that the same office, so well discharged by the late Dr. Francis Adams for Hippocrates and Aretæus among the Greek physicians, was not extended to Galen, and that a faithful English version of at least his medical writings was not placed within reach of the higher order of students. German criticism has recently done signal service in reconstituting the text of these writings; and when this necessary work has been completed, let us hope that English scholarship will have preserved enough of the sound traditions of Adams and Greenhill to provide a new interpretation of the text so purified and established. Archæology has also made her contribution to the better understanding of the great physician of the Antonines, and has almost placed her finger on that spot in the Forum Romanum where the philosophic practitioner was burnt out of house and home in the disastrous conflagration under Commodus. Art, too, is thus enabled to give pictorial rendering to one of the most dramatic situations of science, and Alma Tadema might well be trusted to do for medical what he has so happily achieved for industrial and social antiquity.

THE METROPOLITAN ASYLUMS BOARD.

THIS Board met again on Saturday, and once more determined to adhere to their previous resolution to erect a permanent small-pox hospital at Darenth. They expressed their willingness to elaborate and submit a scheme and plan for the approval of the Local Government Board at the lowest cost consistent with efficiency for the purposes intended; but this hospital is to be built of brick, and therefore a permanent structure. This serious division of opinion threatens to be fraught with danger to the metropolis. It is more than probable that further accommodation for small-pox will be required; it is equally certain that the proper time for its preparation is when the disease is absent from London, and it would be a grave misfortune if the demand for hospital provision should come before the managers are ready to meet the requirements of an epidemic.

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The correspondence which has appeared in the daily press on this subject seems to have shown that the difficulty of the Local Government Board is not as to the spending of a few thousand pounds more or less, but in determining the best method in which they shall be laid out. Whether the hospital to be erected be a temporary or permanent structure, we fear there is little doubt that the money will serve but for the purposes of the moment. London would probably not object to this inevitable sacrifice if it were clear that these Boards were determined without loss of time to institute a continuous and searching examination into all the circumstances of hospital influence. The opportunities for this investigation have in the past been very partially utilised. The past cannot be undone, but there is the strongest necessity that the continuance of this want of systematic observation should cease. At the present moment the question before the public is that of the expenditure of money. It must not be forgotten that bound up with this question is the more serious expenditure of human life. To wait for changes in London government which would call the necessary organisation into existence is to trust to an unknown future, and to hopes that may not be realised in this generation.

ALCOHOLIC OR PNEUMONIC DELIRIUM.

ON Nov. 29th Dr. Danford Thomas held an inquest at the Paddington Workhouse touching the death of John Barnes, aged fifty-one. Deceased had given way to drink of late; and a week prior to his death he was seized with acute illness, ushered in by tremors, pain in the side, and cough. Getting rapidly worse, he was seen by Dr. Hibberd, the out-door Poor-law medical officer, who ordered his removal to the Paddington *Infirmary*—the infirmary is a distinct institution from the workhouse, and is under a separate board of management. The certificate given by Dr. Hibberd was to the effect that the man was suffering from a severe cold, and was very ill. Unfortunately, it does not appear that mention was made of the existence of pneumonia. Deceased was taken in a cab to the infirmary, where he was seen by the medical superintendent. This gentleman, finding the patient delirious and labouring under delusions, came to the conclusion that the case was rather one for the padded room of the workhouse than for a ward in the infirmary, and consequently he endorsed Dr. Hibberd's certificate: "This appears to be a case for the strong room." Although the infirmary and workhouse are adjacent, we hear that an hour and a half elapsed before deceased was put to bed in the latter institution. At this season of the year such delay might well turn the balance between the chances of a fatal and favourable issue; but in the case under consideration it was stated in evidence that deceased had succumbed to double pleuro-pneumonia, from which he could not recover. A day or two before his death deceased became delirious, wandered into the street in his shirt, and had marked illusions of the senses, mistaking a pair of braces on a chair for somebody's legs. Moreover, he was subject to hallucinations; and, in short, if he did not actually have delirium tremens, he had something very like it. An important point raised at the inquest was with regard to the nature of this mental aberration. Was it alcoholic, or was it due to pneumonia, or both? Mr. Pepper stated that, in his opinion, a person who had previously been recently drinking hard, whether he had had delirium tremens or not, would be very likely to develop delirium tremens on the incidence of acute pneumonia, the sudden onset of a severe inflammatory disease acting as a shock to the nervous system much in the same way as would a physical injury. We are not informed if the patient's chest was examined; we imagine not, for had the medical superintendent been aware of the condition of the lungs he would assuredly have taken measures for the instant admission of the man, and we fully endorse the views of the coroner that resident medical officers of public institutions would do well in any case of doubt to admit the patient. A few hours would soon clear up the problem, as they did by death in Barnes's case. It is unfortunate that the Paddington Workhouse and Infirmary should be almost within touch one of the other, and that they should have separate medical departmental officers. Is there a special room in the infirmary for casualty cases?

HOSPITAL APPOINTMENTS AND DEGREES IN SURGERY.

THE holders of University degrees in Surgery complain that they have a great grievance in the fact that these degrees do not qualify them for surgical appointments in many hospitals. This is a matter of some significance and of much consequence. English hospitals are not State institutions, and it is competent to their voluntary subscribers to require any particular qualification they please. But it is certainly anomalous that the holders of University degrees in surgery, though qualified to practise on all Her Majesty's subjects, are not qualified to hold surgical office in many hospitals. Similarly the membership of the English College of Surgeons does not qualify for many hospital appointments, and some of our most distinguished surgeons have had to go to the Edinburgh College and ask for a Fellowship on terms very different from those upon which the similar qualification is granted in England. The matter is not one for the General Medical Council so much as for those bodies whose licentiates and graduates are injured by, not the law of the kingdom, but the bye-laws of hospitals. We should advise our correspondents, in the first instance, to address themselves to these bodies, and ask them to make representations to the hospitals which make distinctions unknown to public law.

"LEARNING HOW TO LEARN."

IN the course of his very apposite and suggestive remarks on the occasion of distributing prizes and certificates to the successful candidates at the London centre of the Oxford Local Examination on the 1st inst., Sir James Paget laid especial stress on the importance of "learning how to learn," and did full justice to the proposition that knowledge not immediately useful in itself may be the means of developing *this power of learning* in the mind acquiring it. This is a great practical truth, full of force and value. We are not at the moment concerned to determine whether classical or scientific knowledge is of the greater worth, looked at from the strictly utilitarian standpoint. There may be wide differences of opinion on that topic, and it is no secret to our readers that we entertain a strong opinion that the growing neglect of classical studies is an evil to be deplored. The question of the instant, however, is the need of "learning how to learn." To every student, and especially the student of the science of health and healing, who has to obtain something more than "a smattering" of many branches of knowledge, it is of the very highest practical importance to recognise this fact. The cultivation of the faculty of knowing is of incomparably greater moment than the mere acquisition of knowledge. He is not the best of explorers or campaigners who is the most burdened with baggage, but he who knows how to forage well and how to make the best possible use of what he has or can obtain. So it is with the student: to know how to learn, so that when need arises knowledge may be quickly obtained, is a better provision for the business of life than is afforded by the largest or richest store of information packed away in the memory—perhaps

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so packed as to be inaccessible when wanted. If students for themselves, and teachers for their pupils, would insist on the importance of "learning how to learn," instead of cramming, there would be fewer disappointments in life and greater and more enduring successes. The vanity of carrying a huge quantity of information for the sake of display is contemptible. The folly of attaching any real value to vast stores of knowledge is pitiful. The only brain property worth carrying about is the power of finding at pleasure and learning at will precisely what is wanted; and this power cannot be acquired without considerable practice in the art of learning—an art which the student should make it a first object of his best endeavour to master.

STEEPLECHASE ACCIDENTS.

IN a contemporary of the 3rd inst., it was reported that at the recent Croydon meeting a jockey had to wait a considerable time before a substitute for a bandage could be obtained wherewith to bind up his injured body. Considering the popularity of steeplechasing and hurdle-racing, the number of meetings, and the peculiar dangers risked by riders, we agree with the suggestion made that the Grand National Hunt Committee should take steps to see that ordinary surgical appliances are always ready to hand. Excluding fatal and exceptionally severe injuries such as fracture of the skull, the most likely mishaps are cuts and bruises and simple fractures, especially of the clavicle. The degree of suffering in such cases is minimised by prompt and careful attention, even that which an ordinary "unskilled" person can render. But we would go a step further and urge that a pastime which counts thousands for its votaries, and implies the outlay of large sums, is surely able to sustain the expense of paying for the attendance of a qualified medical man at all meetings held under the Hunt rules. We doubt not that if the services of a doctor could be requisitioned immediately, many cases of accident which might otherwise prove serious would be kept within the limits of a favourable prognosis. Compare, for example, the danger in cases of simple and compound fractures, in which too often one of the first rules of surgery is contravened for want of adequate and reasonable surgical aid; we refer to the converting of a simple into a compound fracture.

PUBLIC HEALTH IN CALIFORNIA.

THE ninth biennial report of the State Board of Health of California is a document full of promise for the future sanitary history of that State. It indicates throughout that an increasing amount of attention is being bestowed upon considerations affecting the sanitary welfare of the people, and it points out the lines for future action and for such legislation as is needed, in order to secure the end in view. From the Secretary's report it would appear that diphtheria has been epidemic in San Francisco, that it has prevailed as an endemic in various parts of the State, and that its precise origin is no more understood there than it is in this country. Enteric fever is also a source of considerable alarm, and, with a view of preparing the State to cope with it, an excellent summary of the various scientific opinions as to its origin and means of diffusion in Europe and in America is set out. The need for quarantine restrictions, in order to keep out such diseases as cholera, yellow-fever, and small-pox, especially in connexion with the sea traffic from Japan and China, is strongly enforced; and in the absence of compulsory vaccination in the case of small-pox, and in view of the peculiar climatic conditions of the State as to the other diseases, greater precautions may be necessary than can effect real good in Europe. But what is wanted in America is the establishment of some general principles of action rather than the intermittent and varying action of a number of separate States; and we entirely sympathise with the request which has gone forth from more than one State, that the general health defences of the country should be subject to some central organisation, whether this be by the re-habilitation of the National Board or by the construction of some new body. The appendix to the report contains a number of interesting papers on the physical, social, climatic and other aspects of California, and other matters having a sanitary bearing on the State.

SANITARY PROGRESS AT THORNHILL.

As a part of the cholera survey which has for some time past been in progress under the surveillance of the medical officer of the Local Government Board, Dr. Barry recently visited Thornhill, a local board district in the vicinity of Dewsbury. He informed the authority that he had made his inspection on the lines adopted in the same district in 1878 by Dr. Thorne Thorne, and he was able to compliment the authority on many satisfactory evidences of progress since that date. The public water-service was now carried throughout the district, scavenging was fairly well in operation, and with regard to the abolition of the great midden-privies, to which Yorkshire and Lancashire still cling so tenaciously, Dr. Barry was able to say that greater progress had been made in Thornhill than in any other portion of the Dewsbury district. In three vital respects, in so far as danger from cholera is concerned, Thornhill has done well; but all risks attaching to filth will not be removed until the question of an efficient system of sewerage is dealt with. This is an admitted difficulty, but it will be well that it should be faced without delay. Old and antiquated bye-laws are also a hindrance to proper and wholesome house construction, and this the authority should find no difficulty in altering. Thornhill has always been a progressive district, and we trust it will not be content until all its sanitary arrangements have been placed on a satisfactory footing.

RAILWAY COUPLINGS.

ON the 2nd inst. a number of tests were made at Derby with the prize waggon couplings shown at Nine Elms in March of this year through the offer of a prize, the object of which is to prevent the present loss of life among waggon couplers. The contrivance which at the last demonstration elicited the most unanimous approval is a light pole, about 5 ft. 6 in. in length, with a skilfully devised hook at the end, by which the chains can be attached or set free in wonderfully short time. One man ran along twenty waggons and uncoupled them in seventy seconds; another coupled them again in seventy-six seconds. This plan has been in use on the Midland Company's system for some time, and has led to a decided diminution of accidents. It is to be hoped that other railway companies will speedily take steps to terminate or materially diminish the slaughter which annually results from the goods guards and shunters having to pass between the waggons to couple and uncouple them.

DAIRIES, COWSHEDS, AND MILK-SHOPS.

THE subject of the powers and duties of sanitary authorities and their officers under the Dairies, Cowsheds, and Milkshops Order of the Contagious Diseases (Animals) Act of the present year will be discussed by the Society of Medical Officers of Health on Friday next, at 8 P.M., when Mr. Alfred Ashby, M.B., F.R.C.S., Medical Officer of Health of Grantham, will read a paper thereon. It is convenient that so early an opportunity has been afforded for enabling health officers to take counsel together upon this matter.

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THE METROPOLITAN BRANCH AND THE SOCIETY OF APOTHECARIES.

AT the meeting held on Friday Dec. 3rd, at the School of Mines, both of the principal resolutions brought forward were adopted. That relating to the question between the Colleges and the Apothecaries' Society was in accordance with the views we have expressed on the subject. The probable effect of the extinction of that Society as a legal and frequently effective check on spurious practice was insisted on. This has much practical significance, but it by no means constitutes the chief difficulty with which the profession has now to deal. Of far greater importance would be the creation of the Society's diploma into a rival qualification in medicine. It is hardly necessary now to recapitulate the reasons given in a former article which led us to deprecate such a step. Another question discussed at Friday's meeting was the representation of Members of the College of Surgeons and Licentiates of the College of Physicians on the Councils of their respective corporations. The resolution relating to this was also carried.

MORBID SENSE OF RESPONSIBILITY.

PEOPLE sometimes think that medical men are apt to look upon their patients as machines or as corpora vilia for their experiments. How very far this is the reverse of the truth is probably only known to medical men themselves. Indeed, the sense of responsibility is sometimes exaggerated to an abnormal or morbid extent, as is shown by a very sad occurrence which, as we mentioned last week, has just taken place at St. Petersburg, resulting in the self-destruction of one of the most gifted and esteemed surgeons there, Dr. S. P. Kolomnin, Professor of Clinical Surgery in the Military Medical Academy. He had to perform an operation on the rectum of a woman, and for the purpose employed cocaine anæsthesia; the patient died in a very few hours after the operation from cocaine poisoning; at least, that is what is considered to have been the cause of death, but no details have as yet been published. The sad result took such a hold on the mind of the unfortunate operator, that, though his colleagues did their best to reassure him, and to show him that the result should be ascribed to an accident such as most surgeons have occasionally met with, it was impossible to prevent him from considering himself the culpable agent in the woman's death. This so preyed upon his mind that he shot himself with a revolver on November 23rd.

THE LLANDUDNO COTTAGE HOSPITAL.

THIS Cottage Hospital, which can now make up beds to the number of thirty-five, has issued its fifth annual report, statement of accounts, list of donations, &c. The building is now completed, and the trustees make an earnest appeal for increased subscriptions, in order to pay off the outstanding debt. The number of patients admitted has increased gradually during the last three years, and in the last year eighty patients were treated in the institution. There are five gentlemen whose names appear as honorary medical officers, which are more than sufficient to do the work of the institution, and as the list does not include the names of all those practising in the town, we do not see why the names of these are not included. As this is a cottage hospital, all the medical practitioners of the district ought to have the privilege of attending their patients, and of obtaining equal advantages from it. The number of practitioners not included in the staff is not large, but it would add to the efficiency and advancement of the hospital if they were granted what is only just to them; whereas, No. 4 of the rules, which have been altered since the last report, decidedly tends to produce unpleasantness. Surely the other medical men in the town are quite as capable of certifying the non-infectiousness of cases which they recommend for admission as are those of the honorary staff. A more careful revision of the names of the diseases from which the patients were suffering would improve that portion of the report.

CHARCOT'S JOINT DISEASE.

AT the meeting of the Berlin Medical Society on the 17th ult. a discussion took place upon Tabetic Arthropathy, which, it may be remembered, excited so much attention at our Clinical Society two years ago. Dr. Rotter, who opened the debate, described succinctly the clinical and anatomical features of the disease, with a view of proving its distinct identity, and the dependence of the articular changes upon nerve disorder. Professor Virchow followed in a long and careful speech, in which he acknowledged the similarity of the affection to rheumatoid arthritis, and traced the development of the pathological changes in the joints from hyperplasia of the cartilaginous investment, followed by regressive change and atrophy, ossification of the medulla leading to eburnation, hyperplasia, and ossification of synovial fringes, and ultimately of ligamentous tissues. These changes, he declared, were hardly to be regarded as inflammatory; but, although he admitted their dependence upon disordered nerve influence, he maintained that in each case there must be a local determining cause also at work. Other members also spoke, but we must postpone a full analysis of the debate to a subsequent occasion. Neurologists will note that Professor Virchow objects to the phrase "tabetic," and prefers that of "arthropathia tabidorum."

"SHELTERS" FOR 'BUSMEN.

THE 'busmen need "shelters" fully as much as, even if not more than, cabmen. The work of the former is more continuous and exacting than that of the latter. The drivers are seated, reins and whip in hand, and the conductors are standing throughout long journeys, whether the vehicles be full or empty. These journeys succeed each other with such rapidity that practically the men have little or no time for their meals, and most of the refreshment they can procure during the twelve or sixteen hours they are on duty consists of "two's" or "three's" of gin, hot or cold as the case may be, with scarcely any food, and what little there may be nearly always cold. It is therefore quite necessary, in the interests of health and morals, that this class of public servants should be provided with places wherein to rest, to cook their food, and be allowed time to eat it. We trust this reasonable demand will not be either rejected or neglected.

BORATED FISH.

THE question to decide in connexion with the employment of boracic acid as a preservative of fish is not the economic or the commercial one. The point is whether the use of boracic acid is calculated to deteriorate the fish as an article of food, or to cause derangement, not to say disease, in the human economy. Nothing short of the experimental method will afford a decisive and accurate conclusion. But we tread on safe ground when we assert that fish perfectly fresh, and kept no longer after its removal from the watery element than is absolutely unavoidable, must be considered to be a better article for consumption and less liable to effect harmful changes in the organism than any kind of borated substitute. However, if fish must be preserved, are there any known facts that should recommend the employment of boracic acid? It is a good antiseptic, and will undoubtedly prevent putrefaction if used in sufficient quantity. Does it cause disease when

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introduced into the healthy human body in minute doses and for long periods? It certainly is of value internally administered in some morbid conditions of the stomach and intestines. For the last question we have no certain data on which to give a satisfactory answer. But we should think that, if used occasionally and in very small quantities, the acid would probably not prove injurious to the health of the animal organism. It may be urged that washing, boiling, or cooking would free the fish from any boracic acid that might have penetrated into its substance, but probably some of the salt would remain in the fish. The salicylage of beer is a more wholesale saturation, both of beer and consumer of beer, but, so far as can be judged *a priori*, the use of boracic acid to preserve fish, though not desirable, would with proper precautions not prove harmful.

THE PURITY OF MID-ATLANTIC AIR.

IN the course of an address on the Action of Micro-Organisms on Surgical Wounds, Professor F. S. Dennis of New York states that during his last trip across the Atlantic he made some experiments to test the purity of the air about 1000 miles from land. He employed capsules of sterilised gelatine, and exposed them for fifteen minutes. One capsule was exposed in the state room upon the main deck of the steamer. Within eighteen hours over 500 points of infection had developed. Two capsules exposed in a similar manner in a cabin on the promenade deck, where the circulation of air was free, showed five or six points of infection each ten days afterwards. A capsule exposed over the bow of the ship was found to be entirely uncontaminated. These experiments are on the same lines as those of Pasteur and Tyndall upon the mountain air of Switzerland, and, so far as they go, they show the germless condition of mid-oceanic air, and also the need for much more efficient ventilation in the state rooms of even the first-class American liners.

SCHOOL HYGIENE IN SILESIA.

A PETITION has been sent to the municipal authorities in Breslau emanating from the hygienic section of the local scientific and educational association, and signed by twenty-six medical men, pointing out the great importance of medical supervision for schools, and suggesting that on school managing committees one in every four members should be a doctor. The signatories also offer to undertake the duties of school medical officers gratis, so that there may be no objection raised on the ground of expense. It is mentioned that for some months past the Grand Duchy of Baden has appointed medical men on all the school management committees. The petition concludes by asking that one doctor shall at once be appointed on every school management committee, he on his part promising to give his services as medical officer to the school.

THE ROYAL UNIVERSITY.

OUR Belfast correspondent writes:—"The Senate of the Royal University have again been making most extensive alterations in the medical curriculum, to which direction has been drawn by your Dublin correspondent. These frequent changes do not tend to give students much confidence in the stability of the University. It was thought that the chief function of this University was to be that of an Examining Board, but the Senate now go much further and specify the exact course that the medical students are to take each year. The popularity of the University is not increasing, and in Ulster the feeling is growing that in the present unsettled condition of political affairs in Ireland the life of the Royal University will not be a long one."

NEW SPANISH MARITIME SANITARY SERVICE.

THE Spanish Government has at last awakened to some sense of the importance of guarding against the importation of epidemic diseases by sea, which was the route by which the last serious visitation entered, the attention of the officials being almost entirely concentrated on guarding the land frontiers. The *Gaceta*, however, published on Nov. 17th, contained a series of regulations creating a "maritime sanitary service." Four classes of ports and *lazaretos* are named. The first comprises thirteen of the most important, such as Barcelona and Cadiz; the second includes Huelva and Seville; and the third and fourth, smaller or less important ports. The officials will consist of a director, who must in all cases be a medical man; inspecting medical officers; and a secretary, who must also be a medical man, except in ports of the fourth class, where he may be a pharmacist. A knowledge of French is indispensable. The vacancies are to be filled up by competition, a tribunal or committee of selection being specially provided for. Preference is to be accorded to naval medical officers and those of the mercantile marine who have had opportunities of seeing cholera, yellow fever, or plague (*peste Levantina*); also to others who have been engaged during epidemics, or who have published works on the subject of hygiene; and lastly, to such as are acquainted with other languages besides French. The establishment of such a service is a step in the right direction, but at present there appear to be no instructions issued as to the precautionary methods to be employed by the different sanitary officers, and it is to be feared that there will be but little result beyond a somewhat more vexatious system of quarantine.

DEATH OF DR. NORMAN CHEVERS.

DR. NORMAN CHEVERS, C.I.E., whose death occurred on the 2nd inst., was secretary to the Medical Board at Calcutta, and subsequently became principal and first physician and professor of medicine of the Medical College of that place, where he lived for about a quarter of a century. He was a member of the Medical Committee appointed by the Secretary of State for India to inquire into Professor Koch's discovery in connexion with the prevalence of cholera. Dr. Chevers entered the Bengal Medical Service in 1848, and retired in 1876 as Deputy Surgeon-General.

SHORTENING OF THE ROUND LIGAMENTS OF THE UTERUS.

DR. P. SABIL publishes in the *Journal de Médecine de Bordeaux* some very precise directions for finding the round ligaments of the uterus for the purpose of shortening them in cases of prolapsus. He and M. Ricord have made a large number of trials on the dead body, and they have arrived at the conclusion that the Alexander-Adams operation as modified by them will probably prove a valuable means of treating cases of this kind, so as in confirmed cases to supersede the constant wearing of pessaries.

BURMAH.

THERE are at the present time a very large number of medical officers serving in Upper Burmah with the field force. The principal medical officer at Mandalay is Mr. G. Farrel, C.B., Deputy Surgeon-General; and there are two large field hospitals in Mandalay, one for British and the other for native troops and followers (respectively under the charge of Dr. Corbett, Surgeon-Major, Army Medical Department, and Mr. Peters, M.B., Surgeon-Major, Indian Medical Service), besides other smaller field and other hospitals. We believe that Dr. Corbett and Mr. Peters, who

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have been in Burmah since the earliest phase of the guerilla campaign, have rendered excellent service, as also Dr. MacGregor, and Messrs. Elcum, Corkery, and several others. The sickness and mortality that have prevailed have been something terrible, and we hope that the country will by the beginning of next year have so far quieted down as to permit of the return to India of the troops, and their adequate reward by the issue of the necessary *batta*, &c.

TYPHUS IN LARGE TOWNS.

THE appearance of typhus in our large centres of population at the commencement of winter is a matter which always demands the special concern of sanitary authorities, the disease being one which of all others calls for the earliest possible isolation of first attacks. We learn that typhus exists in Liverpool, but not as yet to an exceptional extent. It is also somewhat prevalent in Leeds, where the neighbourhood of Marsh-lane is affected.

FOREIGN UNIVERSITY INTELLIGENCE.

Innsbruck.—Dr. Eduard Lange, Extraordinary Professor of Skin Diseases and Syphilis, has been made Ordinary Professor.

Santiago, Chili.—It is probable that Professor E. von Fleischl, assistant in the Physiological Institute in Vienna, will accept the vacant Professorship of Physiology.

Basle.—The death is announced, at the age of forty-four, of Dr. Albert Burckhardt-Merian, Extraordinary Professor of Otology and editor of the *Correspondenzblatt für Schweizer Aerzte*. The deceased was attached to the German army during the Franco-German war, and made some valuable reports on the subject of military hygiene, which have been of great use in the organisation of the Swiss army.

THE *Townsville Herald*, Queensland, announces the death of Dr. Macartney, which took place there on Oct. 1st, after a short illness, and only ten months after his marriage. Dr. Macartney was an old Belfast student, and before he left for Queensland he did temporary duty for Dr. Dunlop, Holywood. He was considered by the members of his profession as a man of more than average ability, and the older practitioners anticipated that he would have had a distinguished future. Dr. Macartney was taken ill about five o'clock, and before ten he had breathed his last. Medical assistance having been sent for, Dr. Van Someren arrived shortly before his death, but his skill was unavailing.

WE learn, from its publication in the *Bombay Gazette*, that the students of the Grant Medical College have presented a petition to the University of Bombay, praying that the designation conferred by this body be altered from Licentiate in Medicine and Surgery to Bachelor of Medicine, the reasons assigned being that it is likely to be "confounded with a mere licence conferred by colleges and licensing bodies."

A MEETING of delegates from the various medical schools in London was held at the Middlesex Hospital on Wednesday, the 8th inst., to consider the desirability of granting degrees to London medical students. After a discussion, Mr. F. Treves, acting secretary, was desired to summon another meeting at an early date in next year.

DR. HAROLD B. DIXON, M.A., F.R.S., Fellow of Balliol College, Oxford, has been appointed Professor of Chemistry and Director of the Chemical Laboratories in Owens College, Manchester, in succession to Sir Henry E. Roscoe, M.P.

DR. J. S. MACKAY, senior surgeon to the Rio Tinto Mining Company, Spain, has received from the Spanish Government the Grand Cross of Isabel for his bravery and his services during the terrible cholera epidemic. The cross is a Maltese one, with a groundwork of white enamel on both sides. On one side is the inscription, "Por Isabel la Catolica"; on the other, "Por lealtad acrisolada"—for pure bravery.

WE regret to record the death, on the 4th inst., of Dr. Alfred Wiltshire, at the early age of forty-seven. We hope to publish in an early issue an obituary notice of the deceased, who held several professional appointments and was a voluminous contributor to various medical and scientific publications.

DR. THOMAS BUZZARD, F.R.C.P.L., has been elected a member of the Royal Institution of Great Britain.

PROFESSOR PASTEUR is staying at Bordighera for his health, which has somewhat suffered of late.

THE FELLOWS, MEMBERS, AND COUNCIL OF THE ROYAL COLLEGE OF SURGEONS.

HISTORY AND INFERENCE.

IN an article which appeared in our issue of Oct. 30th we gave a brief historical account of the various Companies or Gilds which preceded the institution of the present College of Surgeons, and traced some of the changes which had in the course of two or three centuries been introduced into their constitution and modes of government. Up to the beginning of the seventeenth century the government of the Barbers' Company and of the Company of Barbers and Surgeons, successively was, like that of other craft-gilds, practically in the hands of the whole commonalty. There were regular assemblies of the gild-men to elect the President and Wardens, to enact bye-laws, and transact the business of the Gild. The Charters embodying the constitution of all the Companies were confirmed at the beginning of every new reign up to the time of Elizabeth. But on the accession of James I. important changes were introduced. Instead of confirming the old Charters by *Inspeximuses*, this Sovereign granted a series of new Charters to the more important of the Companies. By these Charters the ancient mode of election by the commonalty was superseded; the Court of Assistants became self-elective and held office for life, and the government of the Gild and the exercise of the franchise were transferred from the community to the Master, Wardens, and Court of Assistants. By an Act of Parliament passed in 1604 (2nd James I.) the members of the Court of Assistants of the United Company of Barbers and Surgeons were, in accordance with the new practice, for the first time elected for life, and the Master was chosen from and by the Assistants. The Act of Parliament of 1745, which separated the Barbers and the Surgeons, not only confirmed these monopolies, but vested solely in the Master, Wardens, and Assistants the power to make or abrogate such bye-laws and ordinances as might seem requisite. In the face of this it is absurd to represent that some Members of the present College of Surgeons pretend to base their claim to elect the Council on the Charter of Charles I. Even if this Charter had conferred on ordinary members of the Company the right to elect the governing body, the Charter was itself superseded by the Act of Parliament of 1745. This Act did not, however, deprive the Members of the old Company of Surgeons from the right of meeting in general court on important occasions. It is important to bear this in mind, for though this right was, for some reason, not exercised after the year 1784, the fact of its existence had an important influence on subsequent events. It is probable, for example, that if the Master and Court of Assistants of the late Company of Surgeons had had the honesty and candour to confer with the Members, the Company need not have come to such an ignoble end, and in any case the present

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College of Surgeons would have been honourably established by Act of Parliament, instead of having to resort to questionable expedients in order to obtain a Charter. Had an Act been fairly and honestly obtained, it is certain that those constitutional anomalies and abuses which the present agitation for reform is seeking to remove would have been unknown.

The circumstances which led to the dissolution of the old Company and the establishment of the present College, were briefly as follows: By the Act of 1745 it was enacted that the Master and at least one of the Governors should be present at every Court, with one or two ordinary Assistants, in order to constitute a quorum. It happened at the meeting to be held on July 7th, 1796, that in consequence of the death of one Governor and the serious illness of the other no legal Court was possible. Notwithstanding this, the Master and some Assistants determined on proceeding to business. This rash action proved fatal to the Corporation. The opinion of counsel was taken, and there was no doubt that the Corporation was destroyed by the illegal construction of the last court. In the following year a Bill was brought before Parliament, at the instigation of the Court of Assistants, to indemnify the Court and to legalise its acts, as well as to procure the re-establishment of the Corporation under the name of a College. This Bill had passed through the House of Commons, and had been twice read in the House of Lords, before the Members of the Corporation were aware of its purport. A petition in opposition to the Bill was at once prepared, and presented to the House of Lords. This petition set forth that the Bill had been drawn up without the knowledge or sanction of the members of the late Company, who had not been convened to consider it. It further declared that the Master, Wardens, and Assistants, without the knowledge or consent of the Company, had alienated the property of the Company; made purchases greatly beyond the extent allowed by law; and been guilty of gross maladministration: that they had not taken one material step for the public good or the advancement of the science of surgery; that a certain number of the Court of Assistants had, as examiners, received for their private use a large share of the revenue of the Company; that if the Bill were to become law those persons who had been guilty of this maladministration would acquire absolute supervisal and control over the members and their affairs; that the ancient privileges of members would be annihilated, and their right of meeting in a General Court would be taken away; and that the Court of Assistants would be able to oblige members to swear to the observance of such laws as the Court might make, although the members themselves would have no voice in the making of these laws, and no choice in the appointment of those who should make them. The result was that the Bill was thrown out in the last stage. General indignation ensued on the disclosure of the gross and culpable mismanagement. Lord Thurlow, who took up the cause of those members who petitioned against the Bill, said: "The petitioners against this Bill have great reason to complain. Their privileges have been violated; and even their property has been invaded. They have been too long trampled under foot; and, however grating it may be to the ears of some people, they have the strongest title in the world to have their complaints heard with patience and attention." A member of the Corporation, writing in 1797, immediately after the rejection of the Bill, said: "A Bill has been brought into Parliament, and was nearly carried through both Houses, calculated to give a despotic power over the Surgeon's Company to a junto, self-nominated, consisting of an insignificant number, who fill up all vacancies in their own body; so that you are to obey laws, made by persons who have an interest distinct from your own; laws, made by a legislative body, in which you have no representation. This is a degradation of your profession, and even of your species; it is a daring attack on the free principles of the British Constitution."

As bearing upon the present demand of Members of the College for the franchise, it should be stated that one of the reasons which led to the rejection of the Bill by the House of Lords was the determination of its promoters to exclude ordinary Members from any share in the management of the affairs of the College. A noble and learned lord asked one of the principal supporters of the Bill what objection he had to allow Members of the Corporation at large a share in the management of their own affairs. The answer was, "Some of them are ignorant, my Lord." To which his Lordship replied, "The more shame to you to let loose a set of ignorant fellows." This was, be it remembered, in the year 1797, and it is worthy of remark that after a lapse of nearly ninety years Mr. Erichsen, in his recent pamphlet against admission of Members to the franchise, reproduces the spirit and intention of this objection, though not the identical words.

But in spite of the rejection of the Bill by the House of Lords the discredited Court of Assistants of the defunct and dissolved Corporation did not despair; they continued to admit persons under letters testimonial, and though low in reputation and in funds, agreed on Dec. 13th, 1799, by a *unanimous* vote, to accept the charge of Hunter's Museum, for which Parliament had six months before voted a sum of £15,000. The next step followed as a matter of course: the Court of Assistants had now no difficulty, by the aid of courtly intrigue, in satisfying George III. that it was impossible to discharge its trust without some method of replenishing its finances. What Parliament had refused the King was easily prevailed upon to grant, and thus in the month of March, 1800, the College of Surgeons was established by a Royal Charter, which sanctioned most of the obnoxious provisions contained in the Bill rejected by the House of Lords. The course of events since that time is more or less correctly known. But there is one fact that stands out conspicuously in the negotiations which preceded and led up to the establishment of the College, and that is, that Parliament refused to pass a Bill which excluded Members of the College from a share in its government. Consequently, though it is true that Members have no legal "right" to the franchise by the Charter of 1800, they have at least a tacit moral claim, which the present Council should frankly recognise, and thus do what it can to purge it of the taint which has hitherto vitiated the constitution of the College.

THE PROFESSION AND THE COLLEGES.

MEETING OF THE METROPOLITAN COUNTIES BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

A SPECIAL meeting of the Metropolitan Counties Branch of the British Medical Association was held at the Royal School of Mines on Friday evening, December 3rd, Dr. Bristowe, F.R.S., President of the Branch, in the chair. The meeting had been specially convened by the Council in compliance with the requisition signed by twenty members, to consider the exclusion of the Apothecaries' Society from the Conjoint Examining Board, and the representation of Members and Licentiates upon the Councils of the Colleges of Surgeons and Physicians. There were not more than seventy members present.

At the commencement of the proceedings a protest was handed in against the introduction on the agenda of other business than that for which the meeting was specially summoned; and it was decided to postpone that business until the close of the meeting.

Dr. MORTON, in the absence of Dr. Danford Thomas, moved the first resolution: "That this meeting is of opinion that the exclusion of the Apothecaries' Society from participation in the Conjoint Examining Board of England and Wales will, under the provisions of the recent Medical Act, 1886, lead to one or other of the following consequences, either of which are equally to be deplored in the interests of the public and of the profession, and especially of the general practitioners of England and Wales: (*a*) Extinction of the Apothecaries' Society in the highly improbable, if not impossible, case of their not receiving the legal powers which the Act contemplates, to appoint surgical examiners recognised by law—a result which would be disastrous to the whole profession and to the public, seeing that the powers of the Apothecaries Act alone avail to protect the profession against the practice of a large body of unqualified practitioners, and especially of visiting and prescribing chemists; or (*b*) in case the Apothecaries' Society receive such powers of giving a surgical examination and surgical licence, legally registrable, the creation of a new class of surgical and medical practitioners throughout England and Wales, contrary to the intention of the Legislature and the wishes of the profession, legally entitled to medical and surgical titles,

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who would compete on a lower grade with the existing Members of the College of Surgeons and the Licentiates of the College of Physicians." Dr. Morton said that the present was a critical period in the history of the profession, the new generation of medical men aspiring to take a share in the government of their Colleges, of which they formed a part, and striving to obtain reasonable facilities for obtaining medical degrees in London. The Colleges had treated the Apothecaries' Society with scant courtesy in delaying to reply to the application of the Society, and in returning a negative answer in the face of a resolution passed at the meeting of the Members of the College of Surgeons on Nov. 4th. The Apothecaries' Society may not be a very dignified body, but it has a respectable and useful history, and at one time the "apothecary" took precedence of the "barber-surgeon." During the whole of the present century the work done by the Society would compare favourably with that done by the College of Surgeons. If the Society were extinguished, there would go with it valuable powers which it alone possessed for repressing illegal practice in this country. It is, however, very unlikely that the Society will submit to extinction, for the Act especially provides for its seeking assistance to grant a full diploma, with power to appeal to the Privy Council if such a privilege is denied it by the General Medical Council. The result would be the creation of another lower order (No, no!) of practitioners; at any rate the admission of candidates at lower fees, with a consequent loss of dignity to the profession. Such a result is said to be deliberately contemplated by the Colleges, which desire to see the establishment of a grade of *officiers de santé*; and the poor would suffer unless some such provision were made to ensure them medical aid; but the true way of meeting this question was the extension of the provident dispensary system.

Mr. VERDON seconded the motion, the subject being one, he said, that affects the welfare of a large body of practitioners, and to be considered from a practical and commonsense point of view. If the Colleges adhere to their decision, then the Apothecaries' Society will either undergo extinction or rejuvenescence. In the first case the Act of 1815, with its important penal clause, would perish with it; but it is very unlikely that the Apothecaries' Society will die. It is showing no signs of decrepitude, and the effect will be the creation of a new order of practitioners who will compete successfully with the L.R.C.P. and M.R.C.S., and lead to a divided profession.

Dr. PARAMORE supported the resolution, characterising the treatment of the Society by the Colleges as an act of base ingratitude.

Mr. G. BROWN said that the result of the action of the Colleges would not be the extinction of the Society; and he strongly deprecated the introduction of the words "lower grade" into the resolution, for in his personal experience the examination at the Hall was better than that at the College of Surgeons.

The words "lower grade" were, by consent, struck out of the resolution.

Mr. WALLIS MASON asked that the resolution should be passed with great force. The Councils of the Colleges must be influenced, but they will require force applied from all sides to compel them to yield. He urged that members of Parliament should be approached, so that pressure might be brought to bear through the Government.

The resolution was then put and carried, 39 voting for and 5 against it.

Mr. T. HOLMES moved the second resolution: "That, seeing that the Royal College of Physicians and the Royal College of Surgeons of England are entrusted with the regulation of the examinations and status, and with the protection of the interests, of the general practitioners throughout England and Wales, and that under the Medical Act of 1886 their powers and monopoly in this respect are greatly strengthened, it is just and important that the Members of the College of Surgeons and the Licentiates of the College of Physicians respectively should be duly represented in the Councils of these Colleges, and should be admitted to a rightful share in the administration of their own affairs in relation to the government of these Colleges." Mr. Holmes said that it no longer admitted of argument that Members of the College of Surgeons are entitled by every consideration of justice and public policy to a voice in the management of their own College. If the Members are satisfied that the affairs of that wealthy corporation should be managed without their voice being heard, as if they had no interest at all in it, there was no more to be said; but if they were dissatisfied with such a state of things, the remedy was in their own hands, and they were sure to succeed. He did not know what might be the case at the College of Physicians, but he supposed the same line of argument would apply to it. The management of that body does not appear to have gained the admiration of the profession, and it seemed only reasonable that its Licentiates should share in the work.

Mr. GUBB seconded the motion, and said that the Licentiates of the College of Physicians had the right to speak—at any rate in affairs in which they are interested. The College had only taken up the work of licensing general practitioners for the past twenty years, and had done so with the narrowest restrictions.

Mr. STOKER pointed out that the franchise in question at the Colleges was an educational one, and that any attempt to endow Members with it as well as Fellows would be to lower the educational standard.

Dr. COUPLAND appealed to the mover and seconder to divide the resolution respecting the two Colleges, but this being declined, he moved that the part of the resolution affecting the College of Surgeons be taken separately from that affecting the College of Physicians.

The motion was seconded by Dr. DOWSE, and negatived by 29 votes to 11.

The original resolution was then put, and carried by 39 to 1.

Respecting the remaining resolutions on the agenda, a letter was read from the solicitors to the Association pointing out that the meeting had no power to take action upon resolutions passed, but that such action must be taken by the Council. The final resolutions were therefore recast by Mr. HART, who moved their adoption, requesting the Council to prepare a petition, and to ask the Colleges to receive a deputation, upon the subject of the two resolutions. Also that the resolutions be communicated to the Branches of the Association, and that the Council appoint a committee consisting of its own members, together with a number nominated at the meeting.

METROPOLITAN PROVIDENT MEDICAL ASSOCIATION.

A CONFERENCE of medical and lay gentlemen, with a few ladies, was held on Tuesday last at the Society of Arts, John-street, Adelphi, Sir Andrew Clark, Bart., in the chair.

The CHAIRMAN, in opening the meeting, said the object of the conference was to ascertain the views of the medical and lay public on the principles stated in the resolutions to be submitted to the meeting. For his own part, he confessed that he had not yet come to any definite conclusions; therefore he felt qualified, in his character of chairman, to listen patiently to the suggestions that might arise for and against the objects of the Metropolitan Provident Medical Association.

Mr. TIMOTHY HOLMES made a lengthy speech, and endeavoured to place before the meeting the *pros* and *cons* in connexion with the movement, which had originated as long as thirty years ago. It was admitted that the movement, though successful in some districts, was, on the whole, not gaining the ground which it was hoped it would have done. The principle on which the Association worked was that of insurance as in life and fire offices. The out-patient departments of the hospitals were abused by people who could well afford to pay something for medical advice. The provident movement, if successful, would diminish the expenditure at hospitals by relieving the out-patient department. He thought that from the point of view of the poor, of the general public, of the hospitals, of the medical practitioners, and of the medical teaching and science, the Metropolitan Provident Medical Association, so far as its principle was concerned, would prove of great advantage. Some such method of dealing with this great question was absolutely necessary. He considered that the Association should be managed by the public, and not by private enterprise. The dispensaries should be affiliated to the hospitals, which should be used as the consulting places for the poor. It was difficult, indeed, to say who the members of the Association were to be. An income limit or wages limit was probably the best method of settling the question of member-

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ship. He proposed:—"That in the opinion of this meeting the future medical attendance on the poorer classes ought to be conducted on the principle of sick assurance."

Mr. LUSHINGTON, treasurer of Guy's Hospital, seconded the resolution. He thought that with proper safeguards and precautions the Association, or some movement of the kind, would prove of great utility in solving the difficult problem. When people paid for anything, were it medical advice or otherwise, it created and established within them a feeling of independence and manliness. In cases of extreme poverty the small payments were not exacted at Guy's Hospital.

Dr. PARAMORE did not approve of the methods of the Metropolitan Association. He would support the principle of sick assurance, but rather in the manner proposed by Dr. Sheen at Cardiff.

Mr. F. B. JESSETT gave an account of a successful venture on the principle of sick assurance that occurred in one of the London suburbs.

Dr. WALTER SMITH thought that there should be a wages limit.

Mr. G. BROWN and Dr. R. J. LEE joined in the discussion.

The resolution was put to the meeting and carried unanimously.

Mr. W. BOUSFIELD, chairman of the Association, next moved the second resolution, and explained the grounds of the necessity for drawing the attention of the governing bodies of hospitals to the abuse of the out-patient department.

The resolution was seconded by Mr. NELSON HARDY, and carried unanimously. It ran as follows:—"That the attention of the governing bodies of hospitals and other public authorities be called to the necessity for some check on the indiscriminate provision of medical treatment at hospitals and dispensaries."

Sir T. SPENCER WELLS, Bart., proposed the appointment of a committee "for the purpose of reporting on the subject of assurance as applied to the treatment of the sick."

Mr. WILSON seconded the motion, which was adopted, and a small committee was elected with power to add to their number.

REPORT ON SANITARY MEASURES IN INDIA IN 1884-5,

TOGETHER WITH MISCELLANEOUS INFORMATION UP TO JUNE, 1886. (VOL. XVIII.)

WE have already brought under the notice of our readers much of the information contained in this volume, in our special articles on the Reports of the Sanitary Commissioner with the Government of India, and of the Army Medical Department.[1] We shall therefore now confine our remarks to a few points which from various causes did not previously come under observation. One of the most important of these is the subject of the measures taken during the year to improve the sanitary condition of Calcutta, as shown in the reports of the Calcutta municipality by Mr. Harrison, and of Dr. O'Brien, the health officer. The death-rate of the year 1884 was for the town of Calcutta 30·5, and for the suburbs 45·2 per 1000 of the population, the former being higher than in any of the preceding five, and the latter than in any of the preceding four, years. The increase was chiefly due to cholera, which prevailed in the form of a severe epidemic in the months of March, April, and May, and was the cause in the course of the year of 5·2 deaths per 1000 in the town and 9·6 in the suburbs. The deaths by small-pox were also much in excess of the average. The most fatal class of diseases was fevers, by which the mortality in the town was 8·3 and in the suburbs 15·4 per 1000 of their respective populations. "The higher rate of mortality was confined to the first two quarters of the year. The total number of deaths registered during this period was 7301. In the two later quarters the number fell to 5955. The figures of the first period exceed the decennial mortality by 915, while those of the second fall short by 848." Whether it was in consequence of the high death-rate in the first half of the year, or of the course taken by the Lieutenant-Governor in the appointment of a special committee to report upon the cleansing and conservancy of the town, there seems to have been increased energy in carrying out sanitary improvements. These consisted chiefly in an augmented supply of water filtered and unfiltered, the former for drinking and the latter for the purposes of road-watering and of flushing; completion of the sewerage of the town; improvement of privies and latrines; filling up foul tanks and wells, and construction of bathing platforms; improvement and subsoil drainage of bustees, and surface conservancy; for the latter purpose an increase of 50 per cent. was made to the establishment, and the bustee grant of 80,000 rupees which had been sanctioned was doubled. There still remains much to be done in the way of sanitary improvements, but a very satisfactory impetus seems to have been given to the subject. With regard to Hastings ward, which "maintains its unenviable reputation as the worst ward in the town," the health officer states: "It is satisfactory to be able to report that the necessary funds have been allotted in the Budget of the current year for the thorough drainage of this ward. With an efficient system of well-flushed underground sewers, and an increase in the supply of pure drinking-water, it ought to become a very healthy ward."

The mortality in Madras is shown by the report of the municipality to have been 39·8 per 1000 of the population, or about 20 per cent. higher than in 1883. This great increase was due chiefly to small-pox and cholera: the former prevailed as an epidemic from the beginning of the year till the end of June, and the latter with great virulence in August and September. Sanitary work appears to have been carried on satisfactorily during the year, but there is no report by the health officer as to its results, nor is any information given on the subject of further requirements in this important branch.

We have already noticed the sanitary condition of the municipality of Bombay (*vide* THE LANCET Jan. 16th, 1886) as detailed in the annual report by Surgeon Davidson, the acting health officer. From the report of the municipal commissioner, it appears that important works for the improvement of the water-supply and for the more efficient drainage of the town have been so far successfully carried out, and their completion is in progress. But there seems to be some difficulty with regard to connecting the house drains with the sewers, as it had not been determined "whether the necessary house pipes and fittings should be paid by the municipality, as at first determined, or by the house-owners." In connexion with the question of the disposal of the sewage, it is mentioned "that the construction of a chamber within which the offensive matters raised by the shred-lifter [at the Love Grove pumping-station] may be incinerated is being pushed on and will soon be complete."

[1] See THE LANCET, May 1st and 8th, Aug. 21st and 28th, and Sept. 4th, 1886.

THE LIVERPOOL HOSPITAL FOR WOMEN.

REPORT OF THE INQUIRY COMMITTEE APPOINTED BY THE LIVERPOOL MEDICAL INSTITUTION.

HISTORY OF THE APPOINTMENT OF THE COMMITTEE.

THE operative procedures included under the term "abdominal section" having risen at the Hospital for Women, Shaw-street, Liverpool, from 86 in the year 1884 to 166 in the year 1885, this remarkable increase was brought before the notice of the Liverpool Medical Institution at a largely attended meeting, held on February 4th, 1886. At this meeting a Committee was appointed to inquire into the matter, and the medical staff of the Hospital for Women then present took an active part in the discussion and voted for the proposed Committee.

The resolution under which the Committee was appointed stated that "In view of the large and increasing number of cases of abdominal section in the Hospital for Women in this city, as shown by the annual Medical Report for the year 1884-85, this meeting is of opinion that a Special Committee be appointed for the purpose of investigating the grave question of practice and ethics involved in the performance of these operations, and to report to a future meeting."

The Committee consisted of the President of the Medical Institution (Dr. Nevins, Consulting Physician, Stanley Hospital, Kirkdale, and Consulting Surgeon, Liverpool Eye and Ear Infirmary); three former Presidents (Mr. Bickersteth, Senior Surgeon, Royal Infirmary; Dr. Cameron, Senior Physician, Royal Southern Hospital; Dr. Waters, Senior Physician, Royal Infirmary); one present and three former Vice-Presidents (Dr. Alexander, Surgeon, Liverpool Workhouse Hospital; Mr. Mitchell Banks, Surgeon, Royal Infirmary; Dr. Macfie Campbell, Consulting Surgeon, Northern Hospital; Dr. J. H. Wilson, Consulting Physician, Lying-in-Hospital). At a subsequent period it was deemed right that the medical officers of the Hospital for Women should each, if they wished, send a representative to the Committee to watch their interests. Mr. Damer Harrison, Surgeon to the Northern Hospital, and Dr. Barron, Medical Tutor to the Royal Infirmary, were nominated on the part of Drs. Burton and Lupton, and were placed on the Committee. Dr. Imlach did not nominate any representative. After a short period of service Dr. Cameron resigned his seat.

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Before proceeding to their report, the Committee regret very much that it has been so long delayed. They wish it to be known, however, that this has not been due to any remissness on their part. During the early part of the year they felt that it would have been ungenerous to have pursued their inquiries during the serious illness of Dr. Imlach, one of the medical staff of the Hospital for Women; while during the summer their hands were tied by the fact that a civil trial, Casey *v.* Imlach, was pending, before the conclusion of which any investigation into the questions affecting that trial by any private body would clearly have been improper. Even after the conclusion of that trial, great delay (in spite of frequent applications to the Hospital Committee) was experienced in getting the reports of cases from the Hospital, so that the more important labours of the Committee may be said to have practically commenced only about two months ago.

MODE OF CONDUCTING THE INQUIRY.

The Committee have devoted a great deal of time and labour to the inquiry with which they were charged. They have met on twenty occasions, the sittings lasting from two to four hours. Their plan of operations has been as follows:—

1. The Lay Committee of the Hospital for Women requested each of the medical officers of the institution to produce reports of all the cases of abdominal section done by him during the year 1885. These reports were laid before the Medical Board of the hospital, who made comments upon them, and who visited many of the patients at their own homes, with the view of ascertaining their condition some time after operation. The reports, with the annotations of the Medical Board appended to them in writing, then came before the Inquiry Committee. Each report was read aloud by one of the members, and notes were taken by the others. After the reading of the report, the Committee discussed the case, and adjudicated upon it, as far as could be done by the written statements concerning it.

2. The Committee invited the medical practitioners in Liverpool and the neighbourhood to give them any information about the subsequent progress of the cases which had been operated upon in the Shaw-street Hospital, but which had been under their care before or after operation. The letters and communications received from these gentlemen were read and considered in connexion with the hospital reports of the cases mentioned.

3. The Committee personally visited at their own houses between forty and fifty of the patients who had been operated upon, selecting, as a general rule, cases where there was a discrepancy between the statements of the original report and the annotations of the Medical Board or the letters from practitioners, or cases in which the information seemed incomplete.

4. The Committee finally examined certain specimens of ovaries and Fallopian tubes removed by Dr. Imlach, and voluntarily laid by him before the Committee for pathological investigation.

5. The first step taken by the Committee was to appoint a deputation, composed of Dr. Cameron and Dr. Alexander, to visit the Hospital for Women, to look into the operation registers and to examine the lady superintendent and nurses upon such points as might seem to them to bear upon the inquiry. The Committee of the Hospital at once agreed to receive the deputation, appointing Mr. Bushby, the President, and Mr. Job to meet them. At the same time, they courteously expressed their desire to promote in every way the object of the Inquiry Committee.

The principal subject of inquiry was whether the patients were duly and fully informed of the nature and probable consequences of the operations proposed. The lady superintendent and the nurses stated that they were always most completely informed upon every point. The deputation, however, reported to the Inquiry Committee that the impression which they had received from their interview was that, whatever might have been the intention of the nursing staff, they had not in reality conveyed to the patients such information as to the character and results of the operations as could alone be considered sufficient.

CLASSIFICATION OF OPERATIONS.

With regard to the various operations involving abdominal sections, the Committee have deemed it best to consider each operation by itself. In their judgment these operations have been performed skilfully and with due attention to all proper surgical precautions, while the patients universally stated that they had received every attention and kindness while in the hospital.

Of the whole number of abdominal sections for removal of the uterine appendages, eighty-five were performed by Dr. Imlach, sixteen by Dr. Burton, and five by Dr. Lupton.

Ovariotomy, meaning thereby the removal of large cysts or tumours of the ovaries.—This operation is one the expediency of which is universally recognised, and the Committee are of opinion that the cases submitted to this procedure were fit and proper cases for it, and that the operations were done satisfactorily and successfully.

Exploratory Incisions into the Abdomen.—Considering the great difficulty of diagnosing many morbid conditions in the pelvis and abdomen, it is admitted that in certain instances an incision may be made into the abdomen for exploratory purposes with so little risk as to warrant this proceeding, enabling the operator, as it does to take further action if practicable, or to leave matters as they are if such action is impossible. The Committee therefore think that the few operations of this character done at the Hospital for Women were justifiable.

Oophorraphy, or the Replacement and Fixation of Prolapsed Ovaries.—Concerning this operation, the number of cases reported was not sufficient to enable the Committee to express any strong opinion either for or against it. But while they do not wish to regard it in the light of an unwarrantable operation, they find that the relief afforded by it to the patients was by no means clear and decided. This, combined with the danger attached to all abdominal sections and the uncertainty as to whether the ovaries will retain the position in which they are fixed after replacement, constitute serious objections to anything like a frequent use of this proceeding.

Removal of the Ovaries and Fallopian Tubes ("Uterine Appendages").—As it is with regard to this operation that the greatest controversy has occurred, the Committee have given to it their most serious consideration. They are quite aware that it is an operation which is admitted into the category of legitimate and justifiable surgical proceedings, applicable to certain cases, and they wish it to be thoroughly understood that they are not reviewing the operation as such, but simply the way in which it has been employed at the Hospital for Women and the subsequent results to the patients after the lapse of a period of time sufficient to enable a correct appreciation of the value of the operation to be made.

RESULTS OF THIS LAST OPERATION.

Danger to Life.—Out of 106 patients subjected to removal of ovaries and tubes, 9 died, being a mortality of between 8 and 9 per cent. If the morbid conditions for which this operation is done are such as to make life miserable, and if the results of the operation are found to be completely and thoroughly satisfactory from a curative point of view, then this mortality cannot be considered excessive, in view of the fact that such operations become less and less fatal in course of time from the discovery of new appliances and from increased skill on the part of individual operators. If, on the other hand, the operation is done for comparatively trivial affections, or for conditions which might be remedied in a reasonable time without resorting to operation, and if the results are afterwards found to be far from certain curatively, then a mortality of 8 or 9 per cent. is a serious objection to the operation done under these circumstances.

Sterility.—The operation, it must be borne in mind, when both ovaries are removed, inevitably produces sterility. Out of 92 patients on whom this operation was done in the Hospital for Women, 59 were between twenty and thirty years of age, while 7 were only from seventeen to twenty years old. It may be said that the ovaries removed were already useless for child-bearing purposes, but the Committee consider that very great difficulty exists in making certain of this fact, either before or even at the time of operation. Under these circumstances the operator should take especial precaution invariably to inform the relatives of an unmarried woman, or the husband of a married woman, as well as the patient herself, that she will in future be sterile.

Loss of Sexual Feelings and of Physical Energy.—With regard to the alteration in voice, abnormal growth of hair, and assumption of masculine appearance which have been stated to follow loss of the ovaries, the Committee have no evidence that such ensue. Concerning the *loss of sexual desire*, however, it was found that a certain number of patients stated that they had not perceived any difference after the operation; from a large majority no information could be obtained; while out of those upon whose statements reliance could be placed, a considerable proportion averred that they had suffered a distinct loss of sexual feeling, to such an extent as to cause serious domestic unhappiness in not a few instances. Furthermore, certain of these patients also complained of such a loss of physical energy and spirit as prevented them discharging their ordinary household or other duties as before operation.

Danger of Hernia following the Operation.—Out of 166 cases of abdominal section it was found, as a matter of fact, that in 15 instances a hernia resulted at the line of incision, and of these 13 occurred amongst the 106 removals of the ovaries and Fallopian tubes. This, however, does not represent the full percentage, because a large number of the 166 cases could not be traced, and the 15 cases of hernia were confined to those which could.

Actual Benefit to the Patients.—The Committee have found that many of the patients operated on have received distinct and probably permanent benefit, and to such the operation has naturally been a great boon. On the other hand, in very nearly an equally large number, the relief to suffering afforded by the operation did not seem to the Committee to have been of a decided or lasting character, while to some the operation has been positively injurious.

In view of the above facts, the Committee wish to point out that the removal of the ovaries and Fallopian tubes is an operation which cannot be considered purely from a surgical aspect, but that it has, also, a certain ethical or moral element in it which cannot be put aside. For whether it be regarded as a mere sentimental objection or not, the removal of the organs which are characteristic of sex is, and always will be, viewed by the public and the medical profession with great misgiving. In consequence, such an operation should only be performed after the most careful consideration. As a result of their investigation, the Committee are of opinion, considering the various risks attending the operation of removal of the ovaries and Fallopian tubes and the uncertain nature of the results, that at the Hospital for Women sufficient care and discrimination have not been exercised in the selection of cases for operation, and that in many instances the gravity of the symptoms was not such as to have justified an abdominal section of any kind. It appeared to the Committee that frequently a sufficient trial of rest in hospital had not been given before operation, seeing that this most important feature in treatment cannot be obtained by poor women, who are merely attending as dispensary patients, and who at their homes are endeavouring to pursue their usual fatiguing duties.

The Committee regret that from a scientific point of view they are unable to give any very definite assistance to the medical profession in judging of the class of cases appropriate for the operation under consideration, in advance of what is already known and admitted.

Pelvic Hæmatocele.—On one point they feel decided—viz., that in ordinary cases of pelvic hæmatocele it is not to be recommended.

Bleeding Myoma.—They also note the fact that a large number of the operations were done in the Shaw-street Hospital under the diagnosis of "bleeding myoma." But the reports usually fail in giving any description of the size and character of the myomata, or of the state of the uterus when the abdomen was opened at the time of operation. Moreover, there are no definite records of a character likely to be useful to the profession, as to the subsequent shrinkage of the said tumours; while certain patients reported as "cured" have stated that they still suffered from hæmorrhage. Indeed, the Committee have found serious discrepancies between the statements made by one of the operators and the condition of matters found by the Medical Board and by themselves. But they are willing to believe that such discrepancies were often due to the fact that the patients had been reported upon rather early by the operator, while they were seen at later periods by the members of the Medical Board and Inquiry Committee appointed to visit them.

RECOMMENDATIONS.

Consultations.—With a view to the more prudent consideration of the cases demanding operation, the Inquiry Committee desire to urge upon the authorities of the Women's Hospital that a more frequent use of consultations by the medical staff be made for the future. They are distinctly of opinion that consultations in the proper sense of the word have been too much neglected by one of the operators, and they suggest

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that Rule 39, which now runs: "No operation of a dangerous character shall be performed in the hospital without a consultation between one of the medical officers for in-patients or one of the consulting medical officers and the operator." should run: "No operation of a dangerous character, or that involves abdominal section, shall be performed (except in cases of extreme emergency) without previously summoning a consultation of the consulting and acting surgeons for in-patients."

Previous Information to the Patients.—The Committee are also of opinion that the medical staff should use more care fully to apprise the patients of the nature of the operations about to be performed, and their possible results. The patients examined by the Committee very generally denied that sufficient information—or, indeed, any information at all—was given to them as to what was proposed to be done to them.

Longer Retention in Hospital after Operation.—In view of the large proportion of cases of hernia occurring after abdominal section, especially after removal of the ovaries and Fallopian tubes, and of the fact ascertained by the Committee that many operation-patients, after being discharged from the hospital as "cured," had to remain in bed for considerable periods in their own homes, the Committee recommend that patients should in future be retained for a longer period in hospital after operation than has hitherto been the case.

In conclusion, the Committee are very strongly of opinion that the diseases which alone should be treated in the Hospital for Women should be those occurring in the female genito-urinary organs. Such operations as those for the cure of rupture, for the removal of the spleen, for cancer of the breast, or for opening the bowels, in disease of the rectum (which, with others of a similar character to the number of twenty-one, were performed in 1885 in the Shaw-street Hospital) are entirely unsuited for such a hospital, and should be relegated to a general surgical hospital. If such operations as those mentioned are done in a hospital for special gynæcological work, then the public are called upon to support it under pretexts which are not strictly true, while the presence of cases of general surgery in a hospital where the abdominal cavity is frequently being opened cannot be otherwise than dangerous.

This report was carried unanimously by the Committee on Nov. 27th, 1886, all the members, with one exception, being present.

(Signed) J. BIRKBECK NEVINS, Chairman.
WM. ALEXANDER, Secretary.

WE have received the following letter from Dr. Imlach, with a request for its publication. This letter, he states, he has sent to all subscribers to the Hospital.

To the President of the Hospital for Women.

DEAR SIR,—The conclusion of the whole matter is that I ought to consult with Dr. Grimsdale. That is the keynote and cue of the whole report of the Inquiry Committee, and Dr. Grimsdale's own desire. I accept the position. There is really no reason, beyond a little mutual animosity, why we should not consult. Dr. Grimsdale has admitted that "removal of uterine appendages is a valuable addition to the resources of scientific surgery." Mine is the same contention. He considers the necessity to be rare. But for a long time Dr. Grimsdale has done no hospital work; he will become convinced to the contrary when he sees my cases. The responsibility shall be a joint one.

As to the details of this report, having regard to the peculiar method circumstances, and object of its production [correspondence enclosed], it is fairly satisfactory. The constitution of the Committee has, however, been inexactly described. Its members were nominated by Dr. Grimsdale, who brought their names in his pocket to the meeting. On March 8th Dr. Cameron visited the Hospital for Women as one of the two delegates from the Inquiry Committee. In the presence of yourself and the Vice-President, the case-books, hospital registers, and various memoranda were examined, and the lady superintendent and nursing staff subjected to a severe cross examination. At the next meeting of the Medical Institution he resigned from the Inquiry Committee, declining to serve any longer upon it. Though Mr. Bickersteth did not then formally resign, he has not, I believe, attended a single meeting of the Committee since that date.

It would be a mistake to suppose the acting medical staff was represented on the Committee. On Feb. 17th I wrote from Edinburgh as follows to Dr. Davidson, Professor of Pathology at the Liverpool University:—

"I regret an important engagement prevents my being present at the Medical Institution. My feeling is that the Committee has been irregularly appointed; but, should they see fit, I think your appointment would be very suitable, inasmuch as you were fully acquainted with many of the facts regarding one disputed case."

My object was to get a pathologist upon the Committee; but he declined, stating that he disapproved of the method of appointment of the Committee. It was impossible to be adequately "represented," and I asked no other. To secure fair play, I ought to have been allowed to be present at all the meetings. But when, at a later date, I made a request through you and our secretary to be allowed to appear once before the Committee in order to make a statement and hear any complaint which my competitors might have preferred, it was not granted.

My late colleague, Dr. Lupton, was represented by a gentleman whom he had never seen in his life, and from whom he received not a single communication.

The Committee say that "during the summer their hands were tied by the fact that a civil trial, Casey *v.* Imlach, was pending, before the conclusion of which any investigation into the questions affecting that trial by any private body would clearly have been improper." But with tied hands they issued a circular to the whole medical profession concerning cases treated at our hospital, and asking that replies should be sent in by July 10th. The trial was to come off at the beginning of August, and, in the opinion of my solicitors, this circular was obviously calculated to stir up prejudice against me. And within a week of the appeal for a new trial they publish their opinion that "on *one* point they feel decided—viz., that in ordinary cases of pelvic hæmatocele it (i.e., operation) is not to be recommended."

It is my duty to be respectful to the finding of the Committee, but it is not my whole business to agree with them. They have once more ignored the distinction between extra-peritoneal hæmatocele, or thrombus, as I prefer (with Bernutz) to call it, and intra-peritoneal hæmatocele. If, as I believe, they refer by the term "ordinary" to the former variety, I am certain they are right; there is no object to be gained by an operation, and I have never attempted one.

As to operative treatment, however, to stop indefinite bleeding in the latter form, two short quotations from eminent authorities will convince most people of its propriety, and even urgent necessity.

Sir Spencer Wells says ("Surgical Treatment of Abdominal Tumours," 1885, p. 35):—"An ovarian cyst is seldom dangerous to the life of the patient before it has attained considerable size; whereas a hæmatocele of very moderate extent, and of sudden formation, may be either rapidly fatal or lead to very dangerous symptoms."

Dr. Thorburn, late Physician to the Manchester Infirmary, says ("Diseases of Women," 1885):—"The course of this disease is very varied; death in a very short time often occurs in the intra-peritoneal cases. If post-mortem examinations were more common in private practice than they are, this would be speedily apparent. Inflammation of some indefinite character gets the credit of many of these rapid deaths."

And Bernutz, the most eminent authority upon this subject, quotes a large series of fatal cases in the "Archives de Tocologie," 1884 and 1885.

Of the series of intra-peritoneal hæmatoceles upon which I have operated, in all cases with successful results, Dr. Grimsdale saw only one with me in consultation. It was my second case, and, if he had disapproved, I should certainly have left the patient to her fate. But on November 3rd, 1884, he advised operative treatment; on the next day I performed the operation in his presence, that of his son, Miss Cradock, and the hospital staff, and her perfect recovery speaks for itself. (Vide *British Medical Journal*, May 16th, 1885.)

My late colleague, Mr. Lupton, saw many of my cases in consultation, and assisted at most of the operations. On September 25th he wrote as follows in THE LANCET:—"I desire, from my personal experience, to express my approval of Dr. Imlach's method of treatment of pelvic hæmatocele." Dr. E. T. Davies has assisted at them all, and has expressed his deliberate approval.

Dr. Angus Macdonald, late Obstetric Physician to the Edinburgh Royal Infirmary, wrote as follows:—"Recent experience, especially that of Mr. Lawson Tait and Dr. Imlach, tends to show that this accident (i.e. internal hæmorrhage) is more frequently associated with hæmato-salpinx, or other disease of the uterine appendages, and, therefore, the legitimate object of operation, than we have hitherto supposed." (*Edinburgh Medical Journal*, November, 1885, p. 416.)

And, finally, the question was thoroughly threshed out at the trial, and I won my case.

Of all the operations performed by us the term "justifiable" is only applied to the "exploratory incisions." After many nights they "are unable to give any very definite assistance to the Medical Profession in judging of the class of cases appropriate for the operation under consideration." It is, therefore, with a grave sense of responsibility that I venture, from my experience, to lay down the following propositions:—

1. In simple chronic ovaritis, without adhesions, removal of the organs, or indeed any other operation, is very rarely to be recommended.

2. When this condition is complicated only with peritoneal adhesions, oöphorraphy (in which no parts are removed) is justifiable when pain is persistent, urgent and disabling. Judged by facts this operation is absolutely devoid of danger.

3. In ovarian abscess operation is imperative.

4. A like rule is applicable when there is an inflammatory or suppurative condition of the Fallopian tubes.

5. The question of sterility is readily and certainly determined at the commencement of an operation; it depends upon the condition of the tubes rather than that of the ovaries. It can also be determined with considerable accuracy in the majority of cases previously to operation.

6. By the time intra-peritoneal hæmatocele is completely diagnosed it is almost too late to operate; but there is also a more chronic and recurrent form.

7. In myoma the question of operation is determined entirely by the persistence of symptoms. The Committee appear to doubt the existence of these tumours, yet dwell upon the persistence of their characteristic symptom. That is taking a double advantage of me. If they had allowed me to appear before them, or asked for further information, this paragraph would not have been written.

8. When peritonitis intervenes in any of these cases, immediate surgical treatment is the only chance of saving life.

I earnestly trust that these eight rules will receive the approbation of the medical profession, with whom I have no wish to be in controversy.

In answer to the ready-made charge of want of discrimination, I have to reply that, through lack of space, the Inquiry Committee have neglected to inform you that I have treated sixty-seven cases of inflammatory disease, sent in with a view to operation, solely by rest, and medical means.

With reference to age it would have been kinder to have mentioned, for example, that two patients, aged nineteen, were treated for large ovarian tumours, and two for double pyosalpinx, a condition of danger not amenable to remedial agents. The discrepancies to which allusion is made may be ascribed to the fact that the inquiry was conducted after the patients, "forty or fifty" in number (at a guess) had been excited by the tale that their nature had been taken away from them.

As to longer retention in hospital, it must be recognised that the advice of the Committee is excellent. We had found out the advantage by ourselves, but it is a difficult matter to carry into practice. During the past twelve months I have kept my patients in hospital on an average for five weeks after operative treatment, with excellent results.

In conclusion, I can only say that I have never performed an operation that I would not, under like conditions, have advised my wife or any relative to undergo, and that I have been as conscientious in my work as any member of the critical Committee, from its president down to its secretary. A vast deal has been made out of the fact that since the illness of my late colleague, Dr. Lupton, I have not carried out Law 39 to the letter. Consultations we must hold; but far more important is our want of a competent and independent pathologist, who should report upon the conditions which had required surgical treatment. The first task I should ask of him would be a report upon the series of specimens I placed before the Inquiry Committee, which they have returned uncriticised. Should these opinions, and this concession, fail to gain acceptance, I must, in honour, tender my resignation. In any case, I trust that your Committee will defend our nursing staff.

Yours obediently,

Dec. 6th. FRANCIS IMLACH.

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Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Isle of Wight Rural District.—The general death-rate for this rural district during 1885 was 15·4 per 1000, or 13·6 if deaths of non-residents be excluded. The death-rate from zymotic diseases was 1·09 per 1000, 10 diphtheria and 4 fever deaths being included. Dr. Groves evidently writes with a feeling that his advice is not heeded as it should be. Thus, referring to the fact that diphtheria raged in Northwood and in Whitwell as an epidemic, he says that one of the most painful features in the sanitary history of the year is that people died of diphtheria who apparently need not have died if the sanitary arrangements of the district had been what they might be. Diphtheria at a certain farm revealed insanitary surroundings which are described as appalling, and yet the dairy produce from this place was sold regularly in Cowes. At Whitwell we read, in connexion with diphtheria, of people drinking water from a well polluted by soakage from a brick drain, of a foul closet, and of overcrowding. At Freshwater the same disease of a fatal character was associated with a closet without water, and stench from an unventilated cesspool. At Porchfield diphtheria was imported from Cowes, and under the same roof as the four sick persons was a dairy, the produce of which was sold in Cowes. Here water was derived from a foul rain-water butt, or from a pond used by cattle in a neighbouring field. At Northwood, where the mortality was great, diphtheria is stated not to have been spread by communication, but the sanitary conditions were bad, and the air was polluted by refuse. In the case of enteric fever, we read of filthy unventilated closets of drinking water subject to fouling by a leaky cesspit, and of an untrapped drain in an affected dairy. So far as the rural district is concerned, the cases were imported, but one came from West Cowes, and another occurred just outside East Cowes. Under these circumstances Dr. Groves may well endeavour to impress upon the sanitary authorities of the island how close is the interdependence between the rural district and the neighbouring towns, and his records supply ample grounds for telling his authority that their mode of procedure in abating nuisances is exceedingly and dangerously slow, and for reminding them that the interests confided to their trust demand more than mere routine administration.

Oldham.—Dr. James Niven, the newly appointed medical officer of health for Oldham, found himself much limited in reporting on the year 1885, except in so far as statistical and other records were at hand. But his preliminary investigations have enabled him to lay down some rules for future work. He finds it necessary to urge increased action to secure modifications of house drainage, and so to prevent the escape of drain air into dwellings. The various results affecting health from defects now existing are fully described; and Dr. Niven is so impressed with the responsibility of landlords in this and similar matters, that he suggests whether the law could not be made to throw upon that class the resonsibility of loss arising to occupiers from such causes during at least the first six months of their occupancy. He refers to the fact that the water-supply of the borough is insufficient for all the purposes of the place, and hence arises a custom of using sewage water for condensing purposes, a practice which leads to some of the mill lodges becoming a source of discomfort and danger. The Westhulme infectious hospital did excellent work during the year, 132 patients being received into it; of these ninety were scarlet fever and thirty typhoid fever. The internal management of the institution is highly spoken of. A long list of excellent sanitary work is appended, and amongst other matters we find that 5843 articles were disinfected; the same process, together with cleansing, being applied to 797 rooms and 275 houses. Oldham possesses an excellent organisation for these purposes. The birth-rate for 1885 was 35·5 and the death-rate 22·0 per 1000.

SIR ANDREW WALKER, BART., has announced his intention of presenting a sum of £15,000 to the Liverpool University College, in commemoration of the Jubilee year.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns 5317 births and 3652 deaths were registered during the week ending Dec. 4th. The annual death-rate in these towns, which had been 19·1 and 20.1 per 1000 in the preceding two weeks, further rose last week to 21·0. During the first nine weeks of the current quarter the death-rate in these towns averaged 19·3 per 1000, and was 2·3 below the mean rate in the corresponding periods of the ten years 1876–85. The lowest rates in these towns last week were 14·2 in Birkenhead, 14·3 in Brighton, 16·5 in Nottingham, and 17·0 in Derby. The rates in the other towns ranged upwards to 26·0 in Leeds, 26·6 in Manchester, 27·9 in Plymouth, and 32·1 in Oldham. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had been 411, 402, and 400 in the preceding three weeks, further declined last week to 379; they included 134 from measles, 70 from scarlet fever, 61 from whooping-cough, 46 from diarrhœa, 36 from "fever" (principally enteric), 32 from diphtheria, and not one from small-pox. The lowest death-rates last week from these zymotic diseases were registered in Nottingham, Bolton, and Derby; and the highest in Leeds, Wolverhampton, and Halifax. The greatest mortality from measles occurred in Bristol, Halifax, Leeds, and Wolverhampton; from scarlet fever, in Salford, Bradford, Manchester, and Plymouth; and from whooping-cough, in Oldham, Huddersfield, Halifax, and Sunderland. The 32 deaths from diphtheria in the twenty-eight towns included 12 in London, 8 in Liverpool, 5 in Birmingham, 2 in Manchester, and 2 in Oldham. Small-pox caused no death in London and its outer ring, or in any of the twenty-seven large provincial towns. Only 2 cases of small-pox were under treatment on Saturday last in the metropolitan hospitals receiving cases of this disease. The deaths referred to diseases of the respiratory organs in London, which had increased in the preceding four weeks from 293 to 413, further rose last week to 444, but were 35 below the corrected average. The causes of 99, or 2·7 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Newcastle-upon-Tyne, Bolton, and in four other smaller towns. The largest proportions of uncertified deaths were registered in Halifax, Hull, Preston, and Oldham.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 21·4 per 1000 in each of the preceding two weeks, rose to 23·1 in the week ending Dec. 4th; this rate was 2·1 above the mean rate during the same week in the twenty-eight large English towns. The rates in the Scotch towns last week ranged from 12·5 and 18·5 in Greenock and Leith, to 27·3 in Glasgow and 27·9 in Perth. The 570 deaths in the eight towns last week showed an increase of 42 upon the number in the previous week, and included 25 which were referred to scarlet fever, 19 to whooping-cough, 17 to diarrhœa, 9 to measles, 8 to diphtheria, 3 to "fever" (typhus, enteric, or simple), and not one to small-pox; in all, 81 deaths resulted from these principal zymotic diseases, against 81, 77 and 64 in the preceding three weeks. These 81 deaths were equal to an annual rate of 3·3 per 1000, which exceeded by 1·1 the mean rate from the same diseases in the twenty-eight English towns. The fatal cases of scarlet fever, which had been 24 and 14 in the previous two weeks, rose last week to 25, of which 19 occurred in Glasgow, 3 in Dundee, and 2 in Edinburgh. The 19 deaths from whooping-cough showed an increase of 2 upon the number in the previous week, and included 16 in Glasgow and 3 in Edinburgh. The 17 deaths attributed to diarrhœa corresponded with the number in the previous week. The 9 fatal cases of measles exceeded the numbers in recent weeks, and included 7 in Glasgow. The 8 deaths from diphtheria also showed an increase; 3 were returned in Glasgow and 3 in Edinburgh. The 3 deaths referred to "fever," however, showed a marked decline, and included 2 in Glasgow. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 137 and 125 in the preceding two weeks, rose last week to 142, but were 33 below the number in the

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corresponding week of last year. The causes of 78, or nearly 14 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been 23·6, 24·5, and 25·3 per 1000 in the preceding three weeks, further rose to 28·1 in the week ending Dec. 4th. During the first nine weeks of the current quarter the death-rate in the city averaged 24·0; the mean rate during the same period was but 17·8 in London and 19·2 in Edinburgh. The 190 deaths in Dublin last week showed a further increase of 19 upon the numbers returned in recent weeks, and included 8 which were referred to scarlet fever, 7 to "fever," (typhus, enteric, or simple), 3 to diarrhœa, 2 to whooping-cough, 1 to measles, and not one either to small-pox or diphtheria. Thus 21 deaths resulted from these principal zymotic diseases, against 23, 20, and 22 in the previous three weeks; they were equal to an annual rate of 3·1 per 1000, the rates from the same diseases last week being but 1·7 in London and 2·5 in Edinburgh. The fatal cases of scarlet fever, which had been 15, 10, and 7 in the preceding three weeks, were 8 last week. The 7 deaths from "fever," corresponded with the number in the previous week, while the fatal cases both of diarrhœa and whooping-cough showed a decline. Five inquest cases and three deaths from violence were registered; and 69, or more than a third, of the deaths occurred in public institutions. The deaths both of infants and of elderly persons showed an increase upon the respective numbers in the previous week. The causes of 32, or nearly 17 per cent., of the deaths registered during the week were not certified.

Correspondence.

"Audi alteram partem."

THE MEMBER, THE FELLOW, AND THE FRANCHISE.

To the Editor of THE LANCET.

SIR,—In an editorial notice of Mr. Erichsen's pamphlet, "The Member, the Fellow, and the Franchise," in THE LANCET of Dec. 4th, many of the author's statements are characterised as "visionary." Were it not that Mr. Erichsen's reputation for propriety and honesty of purpose is above suspicion, a stronger epithet might have been employed without undue severity. Whatever may have been the motive of Mr. Erichsen's speech at the College of Surgeons on Nov. 4th, or whatever be his personal justification and apology, the part which he is now playing does seem different from that which had popularly been assigned to him. Be this as it may, the publication of the pamphlet cannot fail, in spite of itself, to influence beneficially the progress of the present agitation for effectual reform. It shows at once the hollowness of the arguments and the untenability of the position of those who oppose a readjustment of the relations between the Council and the rest of the body politic and corporate of the College. Whether designedly or not, the publication of Mr. Erichsen's pamphlet will almost coincide with the issue to the Fellows of the interrogations of the Council, as to whether Members of the College shall, under certain restrictions, be empowered to vote in the election of the Council and be eligible to sit in the Council itself or not. This conjunction gives the pamphlet a degree of importance which it would not otherwise have had, and warrants a scrutiny which could not under ordinary circumstances be justified. If, however, the matter be closely examined, it will be found that Mr. Erichsen scarcely makes a statement or draws an inference which cannot be directly controverted, or which does not at least require considerable modification.

In his exposition of the respective rights, rank, and status of Members and Fellows, and of the conduct, character, and constitution of the Council, Mr. Erichsen traverses a wide range of thought, interspersing his remarks with disquisitions on jurisprudence, politics, ethics, metaphysics, economics, pædagogics, biology, surgery, and antiquarian lore. Entertaining though all these things might otherwise have been, the only observations pertinent to the present issue are those which refer to the claims of Members to the franchise, to the prestige and the monopoly of the Fellows, and to the influence and action of the Council.

With a little trouble Mr. Erichsen's remarks may be arranged generally under three heads—namely, those relating (1) to Members, (2) to Fellows, and (3) to the Council. It is, however, predictive of the confusion of thought which is the prevailing characteristic of the pamphlet to find, at the outset, that what is entitled an "Appendix" appears as the *Preface*. This extraordinary disposition is doubtless intended to give the "Appendix" greater prominence; it would have been well if equal care had been taken to ensure greater accuracy.

In opposition to the claim of Members to take part in the election of the Council, Mr. Erichsen contends, first, that Members have never possessed the "right" to elect members of the Council (p. 7 *seq.*); second, that inasmuch as they have passed only a "minimum qualifying examination," they ought not, in accordance with the custom of kindred institutions to be entrusted with this privilege (pp. 4 and 6); and, third, that they are by training and pursuits unfit to take part in the direction of a great educational and scientific institution (*passim*). The Member of the College of Surgeons is, he says, a registered student who has passed a minimum qualifying examination in Anatomy, Physiology, and Surgery, and stands, therefore, on exactly the same level as a Licentiate of the College of Physicians (p. 4). And "the L.R.C.P. can never in his wildest dreams of professional ambition have looked forward to the possibility of his becoming one of the governing body of the College of Physicians", &c. Yet this "wildest dream" has possessed men whose name, fame, and memory are not altogether so contemptible as Mr. Erichsen's assumption would seem to imply. The Licentiates of the College of Physicians were regularly summoned to the *comitia majora*, up to the year 1765, when the practice was abruptly discontinued. In 1767 a number of Licentiates, amongst whom were William Hunter, John Fothergill, Alexander Russell, and other eminent men, associated with a view of taking legal proceedings against the College for the recovery of their right of incorporation. Eventually, in January, 1770, Dr. Archer and Dr. Fothergill did move the Court of King's Bench for writs of mandamus to compel the College to admit them. The case was argued in April, 1771, when Lord Mansfield and the other judges expressed the opinion that *Licentiates* could not set up their licence, accepted under a bye-law, as a foundation of a right to be admitted under the Charter. This ruling therefore disposed of the claim of Licentiates to be admitted to the College, and determined the radical and essential difference between a Licentiate and a Member. In this light Mr. Erichsen's forced and fanciful comparisons of the corporate status of a Member of the College of Surgeons and any Licentiate whatever turns out to be an unsubstantial figment. The only really apposite comparison which he draws is that between a Member of the College and a Graduate of the University of London who possesses only a lowest degree. Each occupies a precisely identical position in so far as he has passed only a "minimum examination." But here, according to Mr. Erichsen, the comparison ends. "There is not a single M.B. in the Senate," he says (p. 7), thereby implying, as indeed he did actually state in his speech at the College, that Bachelors of Medicine and others who had taken only a minimum degree are ineligible, for a seat in the Senate, and on that account. Now it is true there is no M.B. in the Senate of the London University, and for an obvious reason; but the only legitimate interpretation which Mr. Erichsen's allusion will bear is not true. There are at the present moment no less than *four* members of the Senate who possess degrees of the lowest grade only.

In discussing the fitness of Members to take part in the direction of the educational and scientific departments of the College, Mr. Erichsen applies a test to which no reasonable person can object. "Who," he asks, "but men of science can control and direct efficiently a scientific department, and where are to be found the men of science connected with the College of Surgeons? Are they amongst its Fellows or in the ranks of its Members? The Fellowship of the Royal Society may be taken as indicative. ..... Now where, I would ask, are the Fellows of the Royal Society to be found—amongst the Fellows or amongst the Members of this College?" Mr. Erichsen puts the question fairly enough, but he leaves it unanswered,—except by insinuation. Once more he is in error. The latest published list of Fellows of

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the Royal Society contains the names of at least thirty-one Members of the College—probably more,—and only of eight Fellows by examination. There are in addition fourteen Fellows of the College by election, and as they have, according to Mr. Erichsen's criterion, only passed the "minimum qualifying examination," they should be classed with Members; so that there are in the Royal Society forty-five Members of the College and only eight Fellows! Where, indeed, are the Fellows of the Society to be found? Where?

With a view of impressing the existing Members of the College with a due sense of the unreasonableness of their demand for electoral powers, Mr. Erichsen gravely remarks that originally the Council was self-elected, and its elections were controlled by the Court of Examiners, and that it was "in order to correct this obviously corrupt state of things" that the order of Fellows was instituted (p. 8). From that time forth all was well; finality was then attained. Those who wish to obtain the franchise may, he observes, do so by becoming Fellows (p. 8); indeed, it would appear that the franchise is the sole use and purpose of the Fellowship. "The Fellowship was instituted in order to create an electoral body" (p. 15). It may be so, but, on the other hand, Sir Benjamin Brodie, the acknowledged author of the order of the Fellows, has given a different explanation of the origin and intention of this institution. "The object of this institution," he says, "is to ensure the introduction into the profession of a certain number of young men who may be qualified to maintain its scientific character, and will be fully equal to its higher duties as hospital surgeons, teachers, and improvers of physiological, pathological, and surgical science afterwards. With this view, if they have not University degrees, they are required to undergo a preliminary examination in classics and mathematics; while their professional education having been continued for a longer period of time, they are expected to show that they have a more perfect acquaintance with those sciences which are the foundation of medical and surgical knowledge than can be expected of the great majority of those who are candidates for practice. If this system be properly and honestly carried out, I apprehend that the result will be that the Fellowship of the College of Surgeons will be the most honourable distinction that is offered to the junior members of the medical profession." Is this system being properly and honestly carried out by restricting the franchise to the Fellows in opposition to the wishes and aspirations of more than 16,000 of the members of the corporation, while the academic status is being persistently debased in the silly hope of allaying the disaffection of a few Members by the offer of a cheap but degraded Fellowship? The truth is, that the intellectual and professional prestige of the Fellowship is being seriously prejudiced by its forced association with an exclusive and obnoxious electoral privilege—a privilege, be it remembered, which is also an usurpation; for though it is true that the Members never did possess electoral rights, it is nevertheless a fact that by the Charter of 1843 they were deprived of their inherent rights of eligibility for election to the Council and to the office of president.

There is, however, one possible contingency which in Mr. Erichsen's opinion might justify a change in the constitution of the College; but this, he thinks, is happily absent. "The advocates of change do not," he says, "rest their case on the only ground that would be unassailable—namely, that the Council of the College has been negligent or indifferent to the conduct of its affairs, and that its interests—material, educational, and scientific—have consequently suffered in their hands" (p. 4). What these interests and duties are he elsewhere describes—namely "the controlling of medical education" (p. 3), "the conduct of examinations" (p. 9), and "the supervision of surgical education" (p. 11). Most persons who have not enjoyed an "official connexion with the College" are under the impression that the Legislature has committed the care and keeping of these interests to the General Medical Council, to whose opinions and decisions the influence of the Council of the College of Surgeons must always be subordinated. Indeed, it is no secret that the General Medical Council has, in the past, more than once had to take the Council of the College and its Court of Examiners seriously to task for scandalous defects and misconduct in examinations. But let it be for the moment allowed that the Council of the College does possess all the influence and importance which Mr. Erichsen claims for it. How has it discharged its duties and obligations to the profession and the State?

The College was established in the year 1800. In 1818 Sir C. Monk said in the House of Commons, "The usual examination before the College of Surgeons is conducted in a very loose and slovenly manner"; and on the same occasion Mr. Peel suggested that the fees required for the diplomas were alone looked to, and that the examinations were a mere formality. In the year 1826, at a large meeting presided over by Mr. (afterwards Sir William) Lawrence, a resolution was passed condemning the examination "as perfectly ridiculous as a test of qualification." This state of things continued almost unchanged for a further period of forty years. Mr. John Simon, writing in the year 1865, says of the late Joseph Henry Green, whose long connexion with the Council of the College of Surgeons began in the year 1835:—"I know it to have been against his judgment that the Council of the College of Surgeons, charged with the high trust of providing for the due qualification of persons who by that portal shall enter the medical profession, persisted in regarding its own ranks as the only source from which to appoint examiners for this important purpose—a view in which, alas, it still persists, though involving the absurdity and scandal that persons (superannuated hospital surgeons and the like) are thus the College's sole examiners in those daily growing sciences of physiology and pathology which the College affects to promote in the interests of the profession and the public."

In 1866-7 the Visitors appointed by the General Medical Council to inspect and report on the examinations of the College called attention to the imperfect character of the examination, and to the fact that the Council of the College granted its diploma to practise without requiring any examination in medicine. In consequence of this exposure examiners in medicine were appointed in 1868. In 1874 the Visitors again called attention to defects in the examination, and though some of the recommendations of the Visitors were adopted the most important of them were evaded. In 1881 a Royal Commission inquired into the Medical Acts. The Commissioners in their report called attention to the fact that "even the diploma of the Royal College of Surgeons of England does not imply a knowledge of midwifery." Alarmed at the possible influence which the publication of this "prominent defect" might have upon the course of threatening legislation, the Council had recourse to its old strategy of hurriedly adopting an innovation which could no longer with prudence or with safety be resisted. Examiners in midwifery for the diploma of Member were consequently not appointed till the eighty-first year of the College's existence, and then, as in the previous case of the examiners in medicine, only as the result of external pressure.

The foregoing accusations can be supported by unimpeachable evidence. I wish in conclusion to guard against a possible misinterpretation. I have not the least desire to incriminate individual members of the Council. They are gentlemen of high professional reputation, and fully deserve Mr. Erichsen's eulogium on the goodness of their intentions and the sincerity of their devotion. But this only emphasises the necessity for a complete and radical reform in the constitution of the College. How vicious must that constitution be that can deprave so excellent a Council!

I am, Sir, yours &c.,

December, 1886. HISTORICUS.

THE LATE DR. NORMAN CHEVERS.

To the Editor of THE LANCET.

SIR,—I shall feel obliged if you will afford me space to meet, however imperfectly, the claims of a long friendship, and of my profession, by expressing in a few words my deep sense of the loss we have had in the sudden death of Dr Norman Chevers. His death was not strictly premature, for he was sixty-eight years of age, but his useful pen was still active. Dr. Chevers was a student of the then united hospitals of Guy's and St. Thomas's. He passed the main part of his professional life in India, and wherever known, all who intimately knew him recognised that he possessed rare mental endowments, and these were combined with the highest and most delicate sense of honour. His writings are extensive, including "Medical Jurisprudence for India," for which our College of Physicians awarded him the Swiney prize; a volume on "The Diseases of India," just published; and numerous contributions to the Guy's Hospital Reports, to the "Indian Annals," and to the *British Medical Journal*.

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What he wrote was not only of great value to the literature of medicine, but its value was enhanced by the fair and truthful spirit which everywhere breathed in his writings. I believe that Sir Joseph Fayrer, who was one of Dr. Chevers valued colleagues in India for many years, will give the profession an ampler memoir.

I am, Sir, your obedient servant,

Brook-street, W., Dec. 8th, 1886. WILLIAM W. GULL.

THE APOTHECARIES AND THE CONJOINT SCHEME.

To the Editor of THE LANCET.

SIR,—Much has been said as to the necessity of admitting the Apothecaries' Society to the Conjoint Scheme, and very much can be said against it. Let us, if possible, examine the position critically and impartially, and, putting sentiment aside, endeavour to ascertain what is the best course for the profession to pursue in this matter. It is argued that, if the apothecaries be not allowed to amalgamate with the Colleges, a new and competing class of practitioners will be created. Now, this argument is quite incorrect, and will not bear a moment's consideration. The Society, by taking powers to itself to qualify in surgery as well as in medicine and midwifery, will not induce more students to take its licence than already take that estimable qualification; such gentlemen, though legally qualified to practise surgery, will, as licentiates of a Society of Apothecaries, remain, as heretofore, apothecaries; they will be no more entitled to dub themselves surgeons than they are at present entitled to style themselves physicians.

Hitherto, the Society's licentiates, if desirous of qualifying in surgery, have been compelled either to go to the London College, and pay another and larger fee, or to Edinburgh; and if the authorities at Lincoln's-inn-fields do not object to the loss of these fees, why should the profession object? Again, the class of students who now go up for the much more stringent examinations at the College of Physicians will not, in the future any more than at present, go to the Apothecaries' Society because its licence happens to be also a qualification in surgery. Let us grant for a moment that the apothecaries are admitted to the Conjoint Scheme, what is the result? The examination fee, which is now, supposing there be no rejection at any stage, thirty-five guineas, will be raised to forty-one guineas, and every student who wishes to become an apothecary will have to pay this large sum as well as pass the conjoint examinations—that is to say, every apothecary must also be a physician, and every physician an apothecary. How the Edinburgh Colleges would rejoice at such an arrangement, and what shoals of Scotch licentiates we should soon have practising in England! As to the supposed power of the Apothecaries' Society to suppress illegal practice, the less said about it the better. It is an ancient and rusty weapon, and, judging from recent events, more likely to be used against ourselves than in the suppression of the salve-mongers and practising druggists. Having now, I think, shown that the arguments in favour of amalgamation are worthless, I would point out that the profession has solid work before it in the proposed reform at the College of Surgeons, and should not allow its energies to be diverted from that great object in order to attack the Colleges conjointly, and probably without even a chance of success.—I am, Sir, your obedient servant,

Dec. 6th, 1886. A LATE HOUSE-PHYSICIAN.

THE MEETING OF THE METROPOLITAN COUNTIES BRANCH.

To the Editor of THE LANCET.

SIR,—The meeting at Jermyn-street on the 3rd inst. cannot be regarded as a very great success from any point of view. There is no doubt that it was disappointing, both to the promoters and to those who went there prepared to hear the subject freely debated. For, in spite of unprecedented effort on the part of those who are best in a position to give effect to their views, only about seventy members out of a roll approaching 1000 attended a meeting upon objects which have been proclaimed to be of vital importance to every member of the profession. Even when it came to actual voting, so languid was the interest that only thirty-nine could be found to support the resolutions which it was hoped would strike terror into the hearts of the College authorities. It may well be that the evils of the exclusion of the Apothecaries' Society from participation in the Conjoint Board have been overdrawn, and that the vast majority of practitioners regard without dismay a possible renewal of existence for a Society which, it must be admitted, has done good work in the past, and will doubtless continue to do good and useful work in the future. But the speaking was all on one side, and therefore it is impossible to judge what are the opinions of those who maintain this proposition. The temper of the voting majority was, moreover, not wholly conducive to quiet and reasonable debate, as was evinced by the reception of a very simple suggestion that the rights of the Members of the College of Surgeons to the franchise should be distinguished from the wholly novel claim put forward on behalf of the Licentiates of the sister College. It would have been more consonant with dignity had the latter plea been urged on its own merits, and not allowed to depend for its support upon a movement which has far greater claims to be entertained. Another interesting episode of this abortive meeting was the dilemma in which its promoters found themselves, either of passing resolutions which could not be legally enforced or of empowering the Council of the Branch to take action upon them. The latter course was forced upon them, and had to be yielded to unless it was wished to show that the Council did not enjoy the confidence of the Branch. So far as can be gathered from the whole business, it would be wise for those who are urging these questions to take measures for ascertaining the *real* feeling of all members of the profession upon them; for if they pursue their present policy and abide by the result of meetings such as this they will do more to divide the profession than the British Medical Association has ever done to unite it. It was not for this that the Association was founded.

I am, Sir, yours faithfully,

Dec. 6th, 1886. A MEMBER OF THE ASSOCIATION.

THE PUPILS IN CHEYNE-STOKES' RESPIRATION.

To the Editor of THE LANCET.

SIR,—The phenomena so well described by Dr. Robertson in THE LANCET of the 27th inst. are of much interest, but his observations are not altogether novel. I saw and took notes of a case about six years ago in which the same phenomena were presented in a typical form, but found on consulting the literature of the subject that similar cases had already been described by Ziemssen, Bernheim, and Biot. The latter ("Étude Clinique et Expérimentale sur la Respiration de Cheyne-Stokes," Paris, 1878) relates several cases in which the rhythmic contraction and dilatation of the pupils were observed, the latter always coinciding with the period of respiration, the commencement of which was also frequently attended by convulsive movements of the limbs. The rapidity with which dilatation took place seemed to vary in different cases; in my own case it was neither instantaneous nor continuous, but passed through a series of gradations, and the effect of light at any stage was inappreciable. As in other cases, the pupillary phenomena disappeared some hours before death.

Biot refers the phenomena, apparently with justice, to changes in the arterial tension, the pupils contracting as the pressure falls, and *vice versâ*. He instances the fact that when a patient is attacked with dyspnœa, especially if the subject of cardiac disease, and makes violent efforts to force air into the chest, the pupils enormously dilate. He further refers to the experiments of Claude Bernard, which showed that section of the sympathetic in the neck leading to vaso-motor paralysis and diminution of arterial tension was always accompanied with contraction of the pupils. Indeed, the contraction of the pupils and flaccidity of the muscles during the period of apnœa are nearly on a par with all the other vital phenomena at the same time. The patient is for the moment, so to speak, comparatively dead, every function and sense being in abeyance.—I am, Sir, yours &c.

Partick, Glasgow, Nov. 29th, 1886. R. KIRK, M.D.

To the Editor of THE LANCET.

SIR,—In your issue of this day's date Dr. Alex. Robertson directs the attention of other observers to the rhythmic contraction and dilatation of the pupils noticed by him in some

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cases of Cheyne-Stokes' respiration, the pupils being dilated when the breathing was full and laboured, but progressively contracting during the descent and cessation of the respiration. This point has already engaged the attention of some observers; and in an article on Cheyne-Stokes' respiration, published in the *British Medical Journal* so long ago as August 31st, 1878, I mentioned that "Ziemssen and Biot noticed contraction of the pupils during the period of apnœa, relaxing during the period of respiration" (*loc. cit.* p. 310). That the rhythmical contractions also affected the muscles of the limbs gives additional interest to the first of the two cases now reported in THE LANCET.

I am, Sir, yours truly,

W. JULIUS MICKLE, M.D.

Grove Hall, London, Nov. 27th, 1886.

THE HYDROBROMATE OF HYOSCINE IN A CASE OF ATROPINE IRRITATION.

To the Editor of THE LANCET.

SIR,—In the last number of THE LANCET, Mr. Tweedy, in an article entitled "On the Mydriatic Properties of Hydrobromate of Hyoscine," mentioned some observations I had made on the action of this alkaloid. Since that was written I have used it in a case of atropine irritation, in which, after three applications of a two grains to the ounce solution of atropine considerable swelling and redness of the eyelids and of the side of the face had followed. The hyoscine was used three times a day for six days without the least irritation; the case was one of old iritis, in which iridectomy had been performed, and inflammatory symptoms were again commencing. It was very desirable that a mydriatic should be used. Under the influence of hyoscine the threatened attack entirely passed away. Should this happy result be confirmed by other cases, and should it also be found by extended experience not to produce delirium, as is often the case with duboisin, it will prove a very valuable drug.

I am, Sir, yours truly,

E. TREACHER COLLINS.

Royal London Ophthalmic Hospital, Moorfields, E.C., Dec., 1886.

To the Editor of THE LANCET.

SIR,—In the *Ophthalmic Review* for 1882 (p. 343) are some remarks of mine on this drug. My own experience was then confirmatory of that of Emmest of Berne,[1] and will be found to agree in the main with the interesting observations of Mr. Tweedy, in THE LANCET of Dec. 4th. Emmest stated that a drop of one-tenth per cent. of hyoscine solution was more rapid and more manifest on the pupillary sphincter and the accommodation than a drop of atropine solution of one-half per cent. I was able to bear out this statement, and was convinced that for rapid pupil dilatation and for paralysing the accommodation it was a valuable drug, and that its effects were as lasting as atropine, or more so. I used it both before and after writing the article in many cases of iritis, and found it more powerful than atropine for breaking down adhesions. Mr. Tweedy states that he has not yet met with any instance of its producing toxic effects. My experience was the reverse, and to mention the following facts is my chief object in writing this letter. Subsequently to publishing the article before referred to, at my request Messrs. Savory and Moore made with their well-known care gelatine discs for me of the hydrobromide, which they considered the most suitable salt for the purpose. The strength was, I believe, the same as the watery solution I then employed—viz., 1 in 1000. In two cases only were the discs used. One was a young lady with astigmatism, and it was employed for paralysing the accommodation prior to testing the refraction; the other was a middle-aged lady with iritic adhesions. I believe only one disc was used in each case, but in both unpleasant symptoms, giddiness, confusion of ideas, &c., and in the young lady especially, faintness supervened, very similar to what I had observed with duboisin, but perhaps less severe. The symptoms continued a good long time. Before this I had employed the watery solution in many cases, some for refraction, but mostly in place of atropine for iritis, and I do not now recall any ill effects. The salt used was the iodide. The conclusion I arrived at was that in certain cases of iritis it was undoubtedly useful, but that it was more dangerous than atropine, and therefore it came to be less used by me. I have used and do use largely ophthalmic discs, and believe in their convenience, and I wish to guard against any impression prejudicial to their employment generally.

I am, Sir, yours truly,

SIMEON SNELL,
Ophthalmic Surgeon to the Sheffield General Infirmary.

December, 1886.

[1] Abstracted from the Archiv für Augenheilkunde, in Ann. d'Oculist., 1882, vol. II., p. 51.

THE PREVALENCE OF SHINGLES.

To the Editor of THE LANCET.

SIR,—There appears to be more than the usual amount of this troublesome, and frequently painful, malady just now. Dr. Aitken remarked, in an early edition of his Practice of Medicine, that "a special mystery envelops its origin"; and in the twenty years which have elapsed since this was written little has been done to clear up this mystery. No satisfactory explanation has been given why in one case the neuralgic pain, which sometimes is very intense, should precede the eruption, in another accompany it, and in a third succeed it. Fifty years ago Dr. Anthony Todd Thomson wrote that it might occur several times in the same individual, whilst more modern views favour the belief that one attack is prophylactic of another. That the malady is often intimately associated with some nerve trouble, there appears now no reason to doubt. But Sir Erasmus Wilson, in his last contribution on the subject, believed the *predisposing* cause to be the gouty or rheumatic diathesis, and that a chill acted only as a secondary or *exciting* cause. The present prevalence of the malady affords opportunities for further clinical observations. The relation of shingles and other forms of herpes to pneumonia is full of interest. Why should pneumonia be so frequently accompanied by herpes labialis, and so rarely by herpes zoster or shingles? And yet when shingles prevails largely pneumonia is apt to be prevalent also, but not in the same persons. It may be a consolation to some who are suffering intense pain from shingles to think that they have possibly just escaped an attack of the graver malady, pneumonia. Not that by this it is intended to imply that an attack of shingles is a trifle, for it frequently is accompanied by great prostration of the nervous system, causing irregularity of the heart's action, needing prolonged care to ensure entire restoration to health. Three typical cases have recently come under my care: in one the rash occupied one side of the neck—the right side; in another it followed the line of the external cutaneous nerve of the right thigh; and in the third it spread over the left half of the chest. In each of these cases the pain was very severe, and in two of them the heart's action was embarrassed, so as to produce an intermittent pulse and much præcordial distress. In the case affecting the neck this symptom was absent. In THE LANCET, vol. i. 1882, some interesting cases of trophic herpes are recorded. In calling to memory some fifty cases of fracture of the ribs, in no instance did any herpetic eruption follow the injury which the nerves must receive from this accident, though it is believed that there is some connexion between herpes zoster and nerve injury.

I am, Sir, yours obediently,

A GENERAL PRACTITIONER.

December, 1886.

MERLATTI'S PULSE.

To the Editor of THE LANCET.

SIR,—There is a mistake in my letter of Dec. 1st, which appears in THE LANCET of Dec. 4th. The last paragraph on page 1104 should read, "The *sixth* tracing taken on the afternoon of the thirty-*fourth* day caused me some surprise, as it shows a temporary restoration of the blood." The *fifth* tracing shows the progressive diminution of volume, and was taken at the same hour as all the others (6 P.M.), except the fourth, which is that of the thirty-third *morning*, when the pulse was said by the medical men to be filiform, a condition well seen on the tracing. Since then the pulse has varied between 60 and 120 to the minute, being sometimes filiform, at others bounding. I must also ask your readers to insert the words "on the evening of the thirty-fourth day" after "if an enumeration had again been made," on page 1105.—I am, Sir, yours faithfully,

THE PARIS CORRESPONDENT OF THE LANCET.

Paris, Dec. 7th, 1886.

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"THE M.Ch. DEGREE."

To the Editor of THE LANCET.

SIR,—I was very pleased to see that "M.Ch." had started the question of the injustice under which holders of the Master of Surgery degree have been suffering for a long time past in regard to hospital honorary appointments. I sincerely hope that hospital authorities will see their way to altering a rule which has now become effete, inasmuch as there are many more eligible men than formerly holding the C.M. degree, who are shut out from ever holding appointments as hospital honorary surgeons. Could not you, Sir, do something to help these outcasts by bringing the subject prominently before the Medical Council.

I am, Sir, yours truly,

December, 1886. C.M.

THE UNIVERSITIES OF GREAT BRITAIN AND IRELAND AND MEDICAL DEGREES.

(*From a Correspondent.*)

IN THE LANCET of the 27th ult., it is pointed out as a serious objection to the granting of a Medical degree by the Royal College of Physicians of London and the Royal College of Surgeons of England, acting conjointly, "that a degree can only be properly given by a university." Admitting the force of the objection, it is of the utmost importance to the just appreciation of the question to point out the present relations of the universities to medical students and the conferring of medical degrees. They may be easily divided into classes. Thus:—

1. The University of London and the Royal University of Ireland merely require attendance on certain lectures and hospital practice at named institutions, but do not insist on residence at any particular school or place, and rely on an examination test principally. 2. The Universities of Oxford and Dublin (Trinity College) insist on a candidate being previously a B.A. of one of these universities, as well as on residence for a certain number of terms; but at Cambridge the B.A. is not imperative, and non-collegiate students are permitted, and are on the increase. At Oxford and Cambridge a B.A. degree can now be taken in Natural Science, and such scientific education exempts a medical student from some portions of his medical curriculum. The clinical study for Oxford and Cambridge degrees is usually obtained in London. 3. The Scotch universities require only the passing of a matriculation examination, and then the student passes on to a strictly medical course (two years of his time being spent at the special university at which he presents himself for his degree), and he may attend many lectures at an extra-mural school. There is no supervision over the lodgings in which students live, and residence in the sense of Cambridge, Oxford, and Dublin is unknown. There are no colleges, and he only learns who are the professors in the other faculties when his degree-testamur is signed. The Victoria University is framed on similar lines to the Scotch universities, but consists of two colleges—Owens College at Manchester and University College at Liverpool. These are not residential. 4. The University of Durham: A knowledge of Greek, which may be passed at any university, is the only additional requisite to any qualifying preliminary examination of the medical student. A year's attendance is imperative, and this is passed in clinical study at the infirmary at Newcastle-on-Tyne. The student may reside anywhere, so long as he attends some lectures during the year.

In discussing the question of the necessity of residence at a university, and the culture that is obtained therefrom, it is important that it should be fully known to the profession how dissimilar this condittion and its derived advantages may be at the various universities.

LIFE-GOVERNORSHIPS TO HOSPITALS.—On the 7th inst. the anniversary dinner of the East London Association for promoting life-governorships to hospitals was held at the Three Nuns Hotel, Aldgate, under the chairmanship of Lieut.-Colonel and Sheriff Kirby. The Society was formed in 1873, and has been the means of increasing the funds of the various London hospitals to the extent of £4000.

NORTHERN COUNTIES NOTES.

(*From our own Correspondent.*)

A WEEK OF DISASTERS IN THE NORTH.

LAST week was one of disasters. The explosion at the Elemore Colliery, by which twenty-five miners lost their lives on Thursday last, was succeeded on Friday by an explosion and fire on the Gateshead side of the Tyne, and just above Newcastle, causing the deaths of four persons from burns and contusions of a dreadful nature. In addition to these disasters, we have been kept in an almost constant state of alarm by other fires, no less than seven or eight taking place in Newcastle and Gateshead within the week, or as many as occur in an ordinary way in twelve months. I happened to be near the Teams fire which took place on the Gateshead side of the river, nearly opposite Sir William Armstrong's works. We, on the Newcastle side, heard a loud report as if from a very heavy piece of ordnance, then a tongue of flame shot into the air to a great height. This was followed by a dense column of black smoke, which soon spread over the west-end of the city, and, it being noonday, it presented a very peculiar appearance. The scene of the fire was a factory where tar products were manufactured by various processes, including distillation; the works were burnt to the ground. The dangerous nature of the manufacture will be seen from the statement that this is the third fire which has occurred at the place within the last three or four years. The manager was blown fully sixty yards from the works, and died from his injuries, as well as three of the workmen, in the infirmary. The dreadful nature of the fire will be seen from the evidence of one of the witnesses at the inquest, who said "he was at his own house, about 600 yards from the tar works, when he heard a report, and thought it was a cannon at Sir William Armstrong's works. He ran as fast as he could to the works. He saw the deceased running out all on fire. Witness took off his shirt and covered him; he was burnt all over, and was removed to the infirmary, where he died."

DURHAM UNIVERSITY.

The *Durham University Journal* is apparently taking up the cudgels on behalf of the ladies, and says:—"We regret to announce that at a hastily-summoned meeting on Monday the Senate decided by a single vote to reject the offer to convert Hatfield Lodge into a College for Women. The history of the opposition to this scheme we forbear to characterise out of respect for the Senate and regard for the University. The theory of the Senate is that its proceedings are private, and it is obviously desirable that the practice should be made as far as possible to correspond with the theory. Doubtless there are occasions on which the proceedings of the Senate might be published, if it thought fit, with advantage to the University. But this is not one of them."

SOUTH SHIELDS.

In South Shields an epidemic of scarlet fever continues to prevail. Fifteen deaths occurred during the four weeks ending Nov. 27th from this cause. Whooping-cough was also prevalent in a very fatal form during the same period. The medical officer, Dr. Monro, in reporting on these matters, pointed out that the town would be liable to periodical epidemics of scarlet fever, unless the authorities had more control over cases where isolation cannot be, or from carelessness is not, resorted to. A local paper says:—"The Council passed over the question without notice however. A corporate body desirous of making their borough a summer resort for visitors should certainly give the closest attention to everything affecting the public health."

THE DURHAM COUNTY HOSPITAL.

The opening of the new Eden wing of this hospital took place under very favourable auspices. Its erection is due to the munificent bequest of the late Mr. W. Eden of Beamish, co. Durham, and Eaton-place, London, a wealthy coalowner and landed proprietor. He was styled in the north "The Master of Beamish." One of the local papers points out that the generous bequest of the benefactor, owing to the action of the committee, has increased the size and responsibilities of the hospital without adding to its income, "for if they had spent £2000 on the ward, they might have

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£10,000 to invest for its support." But at the same time its efficiency has been increased, and this should not be overlooked in the matter.

Newcastle-on-Tyne, Dec. 8th.

EDINBURGH.

(From our own Correspondent.)

THE CITY FEVER HOSPITAL.

THE "Public Health" Committee of the Edinburgh Town Council have justified their claims to such an appellation by a recommendation in favour of clinical instruction in fevers made to the municipal authorities. It is probable that the recommendation will be adopted, and the wards of the hospital thrown open to such students as wish to attend. Suitable arrangements for their instruction will be made under the direction of Dr. Jamieson, the visiting physician, and thus this very important branch of medical training will be placed within the reach of our medical students. It has been decided to recommend that no fee be charged in the first place, as the session is already advanced, but that the proposed course of instruction should be held tentatively, and according to its results as regards the numbers attending, and, as regards its effects on patients and students, will be either abandoned or established on a permanent basis for the future. A very important problem, fraught with good or evil to the Edinburgh School, is thus to be worked out. That clinical teaching, the thorough discussion of their condition and treatment, can only be beneficial to the patients, goes without saying; and a no less distinct benefit must accrue from the students' increased practical experience. But the effects produced upon the physique of those attending the course will be awaited with some anxiety. It is to be hoped that some age qualification will be demanded of these, in addition to the understanding that they are not attending other hospitals or lectures at the same time. Unless some stringent restrictions of this nature are imposed, the effects upon the medical section of the population, if not upon the community at large, may be very serious. These dangers are likely to be minimised, however, by the fact that in no curriculum is attendance upon fever cases a compulsory part of undergraduate training, and our students have now such a considerable load of compulsory instruction to stagger under, that it is not likely that many will find time to take part in the Fever Cliniques, specially if restrictions of the sort hinted at be enforced. If a special period of his career, when he is not otherwise overworked and susceptible to infection, be set aside by the student for the study of this subject, he will be able to minimise the attendant risk, and will commence his professional career as master of this important subject, not as a tyro in the study of its practical details.

ROYAL SOCIETY OF EDINBURGH.

The opening meeting of the 104th session of this Society took place on Monday, when Dr. John Murray, director of the work of the "Challenger" Commission, delivered the inaugural address. The state of the Society was favourably reviewed, and the large amount of research contained in its transactions and proceedings commented on as matter for congratulation. Dr. Murray then proceeded to detail some of the special work in physical science carried out under the auspices of the Society; the accounts of the marine stations on the east and west coasts, and of the Meteorological Observatory on Ben Nevis were replete with interesting facts, and show that, notwithstanding the neglect of Government in the matter of granting subsidies, scientific work of an advanced and most valuable type is actively carried on in Scotland.

THE UNION FANCY FAIR.

The five-days' bazaar last week realised a sum of over £10,000 for building a students' union for the University. A sum of £4000 was already subscribed, so that after deducting expenses about £13,000 will be available for building purposes.

ROYAL HOSPITAL FOR SICK CHILDREN.

Owing to Dr. Hodsdon's appointment upon the staff of the Royal Infirmary, a vacancy has occurred on that of the Sick Children's Hospital, and the managers will appoint an assistant physician two weeks hence. Several candidates for the appointment are in the field, amongst whom are Drs. Philip, Noël-Paton, W. Hunter, Dunlop, and John Thomson.

Edinburgh, Dec. 7th.

IRELAND.

(From our own Correspondent.)

THE EPIDEMIC OF ENTERIC FEVER IN CORK.

AT a meeting of the Public Health Committee of the Corporation of Cork held last week, an important communication was received from Dr. Donovan, medical officer of health, in reference to the present outbreak of enteric fever which prevails there. From his report it appears that the number of cases of enteric fever which occurred during the past three months amounted to about 150. The average number of cases in Cork for the past twenty years would be about eighty annually. Dr. Donovan is of opinion that although the water-supply may not be all that could be desired, yet it is perfectly innocent of the present outbreak. He comes to this conclusion for the following reasons:—1. The analysis of the water, taken at the most unfavourable times—namely, when floods set in and when the water was most charged with impurities,—always showed it to be safe to drink. 2. If it was owing to the water-supply, instead of having 180 cases of enteric fever, there probably would be some thousands of cases. 3. The absence of enteric fever, nay, even of cases of diarrhœa, from the workhouses, gaols, industrial schools, &c., institutions wholly dependent on the public water-supply, clearly indicates that the disease must be traced to some other source. 4. The character of the disease and its mode of attack, its slow incubation, and the absence of certain symptoms, point more to the entrance of poison into the system by means of impure air than to its absorption from contaminated water, which would give rise to speedier and better developed symptoms of the disease. Dr. Donovan, who possesses special facilities for forming an opinion, believes that the present epidemic is owing to the unclean condition of the city generally, streets, backyards, and premises; also to the badly-constructed sewers, which are simply stagnant cesspits, and to the want of ventilation and proper flushing of the sewers. The recent opening up and clearing out of old choked drains he regards as an additional factor. The following are his recommendations:—The regular and systematic removal of night soil and other refuse at the public cost—that is, the domestic scavenging of the entire city, with the reconstruction of depôts, and the ventilation and systematic flushing of the sewers in dry weather. The entire question of the drainage of the city will have to be considered in the near future; but in the meantime, the carrying out of the above suggestions will materially improve the health of the city.

ACADEMY OF MEDICINE IN IRELAND.

At a meeting of the Academy last week, Mr. E. H. Bennett exhibited a cast and specimens of a rather rare accident—viz., simultaneous fractures of both clavicles. There are only about eighteen examples known, and in eight cases only did union take place. He also showed specimens of fractures of the costal cartilages in a girl aged six, a most unusual age; the second, third, and fourth being broken on the left side; and the cartilage of the first rib being separated from the bone on the other side.

MEMORIAL TO THE LATE DR. SCOTT, OF LURGAN.

In Shankill Cemetery, Lurgan, there has recently been placed a monument over the remains of the late Dr. J. M. Scott, who died about a year since, aged thirty-five years. It consists of a pedestal of polished grey granite, 12ft. high, which bears the following inscription:—"This monument is erected by the friends of J. M. Johnston Scott, M.D., F.R.M., and C.S.L., in Lurgan and neighbourhood, who from an intimate knowledge of his worth place it here as a sincere tribute to his memory, his professional talents, and his exemplary benevolence as a physician. Died Nov. 30th, 1885, aged thirty-five years."

The opening meeting of the Carmichael College Medical Science Association took place last week, when the president, Dr. A. H. Corley, gave an address on Clinical Teaching and Clinical Study.

Surgeon Falvey, Army Medical Staff, has been admitted a Fellow of the Royal College of Surgeons in Ireland.

Dublin, Dec. 7th.

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PARIS.

(From our own Correspondent.)

DENTAL ANÆSTHESIA; COCAINE.

M. GEORGES VIAN claims to have solved the problem of local anæsthesia in dentistry. After numerous trials of solutions of different strengths he has found that the soft parts about the maxillæ may be rendered completely insensible by the use of cocaine, associated with a 2 per cent. solution of carbolic acid. Five minutes before operating M. Vian dissolves five centigrammes (one grain) of hydrochlorate of cocaine in fifty centigrammes (ten drops) of the solution, and injects it into the gums, half way between the neck and the extremity of the root of the tooth. Half of the solution is injected on the palatine and the remainder on the labial side, pressure being made by the finger, when the needle is withdrawn, to prevent the exit of the fluid. Anæsthesia is perfect in three minutes. The quantity of cocaine advised by M. Vian seems somewhat large, but it is said to have been so used in eighty-seven cases without causing any unpleasant symptoms. *A propos* of cocaine, the *Semaine Médicale* gives some particulars of the fatal accident which led to the suicide of Professor Kolomnine. The Professor had decided to perform an operation for the removal of tubercle from the rectum of a female patient, and inquired of his colleague, M. Louschinsky, what dose of cocaine he might administer. The answer was that the maximum was two grains. Upon consulting special treatises, however, M. Kolomnine found that thirty cases of anæsthesia were recorded in which the quantity given had varied between six and ninety-six grains. In a similar operation to that he proposed to perform, a French surgeon had given forty-eight grains. In consequence of these references it was decided to employ twenty-four grains, which were introduced into the rectum by instalments. About half an hour after the operation the first symptoms of poisoning appeared, and notwithstanding the administration of nitrite of amyl, hypodermic injections of ether, oxygen and artificial respiration, &c., the patient succumbed. Hypodermic injections of morphia do not seem to have been tried, and I do not know whether they have been recommended in cases absolutely similar to this. I may mention, however, that I have seen symptoms of cocaine poisoning in subjects of morphia habit removed instantly by a hypodermic injection of morphia, and in one case five grains of cocaine had been taken hypodermically within ten minutes, and I have frequently seen the same antagonistic effect produced by a small quantity of cocaine in an overdose of morphia. It is also regrettable that strychnia was not tried in this case, for the experiments of Dr. Bignon having shown that cocaine is its physiological antidote, it is quite possible that the antagonism may be reciprocal. Dogs poisoned by strychnia to the extent of one milligramme (a fiftieth of a grain) per pound can always be saved by keeping up cocaine intoxication until the elimination of the strychnia.

SUGGESTION.

The *Comptes Rendus* of the Société de Biologie contain a preliminary note by MM. Fontan and Legard, on the results obtained by them by Suggestion. The cases related form part of a series of nearly a hundred, seen in hospital and private practice. The induction of hypnotism was always obtained as simply as possible, most often by occlusion of the eyes; and only failed to occur in three per cent. of the subjects. In the induced sleep therapeutic suggestions were made, and were certain in their effects. It must be observed that the cases described by MM. Fontan and Legard were not those of functional disturbances of the nervous system, such as are cured by any remedy in fashion, and in which the patient has faith; but to quote the words of the author, they were "circulatory and secretory disorders depending upon anatomical lesions." The articular stiffness which remains for weeks after traumatic arthritis, the impotence of the lower limbs, and the tendency to syncope following upon cerebral concussion disappear after one *séance* of suggestion. The painful reflexes set up by gonorrhœal prostatitis and pelvimetritis are as easily dissipated. Dyspepsia, with vomiting and obstinate constipation, can, they state, be cured instantly. One of the patients suffering from acute urethritis and prostatitis, with tenesmus and painful irradiations, was relieved of all pain, including that of micturition, in three sittings, and the cure of the urethritis was greatly accelerated by suggestion. The first suggestion was that there was to be no burning pain during micturition, nor in the thighs, perineum, or loins, and the patient was forbidden to urinate every ten minutes. It was no doubt too much to expect all at once, for after an improvement which lasted two hours the symptoms resumed their previous severity. The second suggestion, however, removed all pain definitively, and brought down the swelling of the prostate. A week later nothing remained but a urethral discharge, and the prescription by suggestion was as follows. "*There is to be no further discharge. The cure is to be absolute.*" And the next day it was so. There is a simplicity about this treatment by suggestion that ought to bring it into favour, although it may not meet with the approbation of manufacturers of sovereign injections and capsules. But perhaps we may not all be what Paracelsus termed "predestined to effect cures" of this kind—"Suggestio curat, sed quod ab omni factus medico vanum est." It would be interesting if those who are gifted with this power would re-examine the old alchemists' cures by transplantation, and those effected by Digby's weapon-salve.

Paris, Dec. 8th.

ROYAL COLLEGE OF SURGEONS.

AT the ordinary meeting of the Council held on Thursday, Dec. 9th, the Minutes of the last meeting were confirmed.

The following recommendations from the Committee of Management were approved, adopted, and entered in the Minutes:—

1. That Mr. T. Cooke's School of Instruction in Anatomy and Physiology in Brunswick-square be recognised as a "place of study" for candidates rejected at the Second Examination of the Examining Board in England, subject to an annual renewal of such recognition on application from Mr. Cooke. 2. That the Committee be empowered to determine questions relating to exceptions to the conditions of admission to the several examinations of the Examining Board in England. 3. That in the final part of Paragraph 18, Section II., of the Regulations of the Examining Board in England, relating to the interval of two years required to be spent in professional study between the date of passing the second examination and admission to the third or final examination, the words "two winter and two summer sessions" be substituted for "two years."

A report of the Committee, in which the practicability and advisability of adding a wing to the Museum of the College was affirmed, and in which it was recommended that the Council should confer greater powers on the Committee to enable them to consider and report on the question of extending generally the College premises, including the museum and library, the addition of workrooms, &c., was approved, adopted, and entered on the Minutes.

It was agreed to issue a circular to the Fellows in accordance with a resolution proposed at the last meeting of the Council, with respect to (1) Members being allowed to vote for Fellows as members of Council; (2) the admission of Members of the College to seats on the Council.

Mrs. Frank Buckland presented a chair, made by her husband, out of the bedstead of John Hunter.

It was decided that the regulations relating to the rejected candidates being required to produce certificates of additional attendance after rejection are to apply to the Primary Examination of the College when taken alone, as well as to the second Conjoint Examination.

A vote of thanks was given to Mr. Power, the Bradshawe lecturer, and he was requested to publish the lecture.

The consideration of a motion brought forward by Sir Spencer Wells, to the following effect, was deferred: "That although the Council is not inclined to agree with the first motion passed at the meeting of Fellows and Members, still it is willing to appoint a committee to confer on the subject."

THE BURIAL-PLACE OF WILLIAM HARVEY.—The tower of Hempstead Church, Essex, which fell down in 1882, demolishing the western portion of the nave and aisles, is about to be rebuilt, and the church generally restored, under the superintendence of the architect, Mr. Samuel Knight.

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THE SERVICES.

Surgeon-General Sir A. Home, V.C., Principal Medical Officer of the Southern District, on the 6th inst. retired from the service, and was succeeded by Surgeon-General H. V. Reade, V.C. Sir A. Home, who has been in hospital for the last six weeks suffering from bronchitis, retires on reaching the age of sixty.

WAR OFFICE.—Army Medical Staff: Surgeon-Major Duke Parke is granted retired pay, with the honorary rank of Brigade Surgeon.

INDIA OFFICE.—The Queen has approved of the retirement from the service of the undermentioned officers:—Deputy-Surgeon General Henry Walter Bellew, C.S.I., of the Bengal Medical Establishment; Deputy Surgeon-General Henry Cook, M.D., of the Bombay Medical Establishment; Brigade Surgeon Robert Sander Bateson, of the Bengal Medical Establishment; and Brigade Surgeon Charles Thick Eves, of the Madras Medical Establishment. The undermentioned officer has been granted a step of honorary rank on retirement:—Brigade Surgeon Charles Thick Eves, of the Madras Establishment, to be Deputy Surgeon-General.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following were elected Examiners for the ensuing year:—

Examining Board in England: First Examination.—Elementary Anatomy: Messrs. James Black, W. B. Clarke, A. P. Gould, C. W. M. Moullin, and R. W. Reid. Elementary Physiology: Messrs. E. H. Fenwick and W. D. Halliburton.

Second Examination.—Anatomy: Messrs. W. H. Bennett, R. J. Godlee, H. G. Howse, and Edmund Owen. Physiology: Messrs. W. M. Baker, C. H. Golding-Bird, and J. McCarthy.

Third Examination.—Midwifery: Drs. W. Duncan, G. E. Herman, J. B. Potter, and John Williams.

Board of Examiners: Fellowship.—Anatomy: Messrs. W. Anderson, R. J. Godlee, H. G. Howse, H. Morris, and E. Owen. Physiology: Messrs. W. M. Baker, C. H. Golding-Bird, B. T. Lowne, and J. McCarthy.

The following Members, having passed the Final Examination for the Fellowship on Nov. 24th, 25th, 26th, and 27th, were, at a meeting of the Council, held on the 9th inst., admitted Fellows of the College:—

Campbell, E. Kenneth, M.B. Edin., Guilford-street; date of Membership, July 21st, 1881.
Dodd, J. Richard, M.D. Durh., Army Medical Staff; July 21st, 1879.
Elliott, J., M.B. Lond., St. Bartholomew's Hospital; July 29th, 1884.
French, George W. Henry, Rose-bank, Highgate; April 23rd, 1884.
Harrison, E., M.B. Cantab., Royal Infirmary, Hull; May 17th, 1883.
Hudson, E., L.S.A., Indian Medical Service (Bengal); July 31st, 1882.
Little, E. Muirhead, L.R.C.P. Lond., Park-street; Jan. 21st, 1880.
Openshaw, T. Horrocks, M.B. Durh., London Hospital; Jan. 17th, 1882.
Page, Harry Marmaduke, L.R.C.P. Lond., Westbourne-park; Jan. 26th, 1885.
Sylvester, George Holden, L.R.C.P. Lond., Dry-hill-park, Tonbridge, Kent; April 16th, 1878.
Tanner, Charles Edward, M.D. Durham, Marlborough, Wilts; Oct. 22nd, 1884.
Vinrace, Felix Coulson, M.D.Q.U.I., 17A, Temple-row, Birmingham; Nov. 11th, 1879.

One other candidate passed the examination, but not having attained the legal age (twenty-five), will receive his diploma at a future meeting of the Council. Fourteen candidates failed to reach the required standard; 4 were referred for six months, and 10 for one year.

The following Members, having passed the Final Examination in May last, and having since attained the legal age, were also admitted Fellows:—

Targett, James Henry, M.B. Lond., Guy's Hospital; Jan. 24th, 1882.
Roughton, Edmund Wilkinson, Brook-green; Jan. 24th, 1883.

SOCIETY OF APOTHECARIES.—The following gentlemen passed their examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received certificates to practise, on Dec. 2nd:—

Brook, William Frederick, St. George's-road, Southwark.
Moxham, Marcus Campbell, Swansea.

AT an inquest held at Weymouth on the 6th inst. on the body of G. W. J. Sutherland, R.N., Deputy Inspector-General, who was found dead under somewhat mysterious circumstances, the jury, in accordance with the medical evidence, returned a verdict of death from natural causes.

THE annual dinner of the past and present students of the National Dental Hospital was held on the 3rd inst.

THE new Children's Hospital in Bordeaux has just been opened.

ON the 7th inst. a bazaar was opened at Hastings in aid of the Building Fund of the East Sussex Hospital.

ANOTHER outbreak of anthrax in cattle has been reported by the Kent county authorities.

FALL IN THE PRICE OF ANTIPYRIN.—The price of antipyrin has recently fallen from 30*s.* to 5*s.* 6*d.* per kilogramme.

THE death is announced of Mr. R. J. Lupton of Liverpool, after a prolonged illness. The deceased was one of the surgeons to the Hospital for Women of that city.

GRAZ UNIVERSITY.—The University of Graz is celebrating its 300th anniversary. The Medical Faculty, however, was only founded in 1863.

ON the 1st inst. a bazaar, promoted for the purpose of providing funds for removing to larger and more convenient premises the Bradford Hospital for the Sick Children of the Poor, was opened by the Mayor of that town.

ON the 2nd inst. a meeting was held at Gateshead for the purpose of appointing a ladies' committee to assist a general committee in carrying out the proposed scheme for a children's hospital at Gateshead.

ON the 2nd inst. the Earl of Durham opened the new wards at Durham County Hospital, which have been built at an outlay of £6000, part of a bequest of £10,000 made by the late Mr. Eden of Beamish to the institution.

ON the 2nd inst. the Chelmsford Workhouse was burnt down. The buildings were insured for £6500. No lives were lost, but several of the inmates are reported to have had narrow escapes.

SUICIDE OF A MEDICAL MAN IN AN ASYLUM.—Dr. Daschkewitsch, who has written a good deal on nervous and mental diseases in both Russian and foreign journals, has recently hanged himself in a lunatic asylum in Warsaw, in which he had been placed owing to his having developed suicidal tendencies.

ROYAL ALBERT HOSPITAL, DEVONPORT.—From the report which was read at the twenty-third annual meeting of the supporters of this institution, it appears that the average daily number of patients under treatment during the past twelve months has been 71·73, as compared with 76 for the preceding year. The average cost of the maintenance of each occupied bed was £47. 10*s.* 7*d.* The financial condition of the hospital is unsatisfactory, and a reduction of the resident staff of officials is contemplated.

BOOKS ETC. RECEIVED.

BAILLIÈRE ET FILS, Paris.
Nouveau Dictionnaire de Médecine et de Chirurgie Pratiques. Tome quarantième. pp. 781.

BAILLIÈRE, TINDALL, & COX, King William-street, Strand, London.
The Veterinary Pharmacopœia, Materia Medica and Therapeutics. By G. and C. Greaswell. With Descriptions of the Physiological Actions of Medicines by A. Greaswell, B.M.Oxon. pp. 398.
The Practice of Veterinary Medicine and Surgery. By Edw. Courtenay. pp. 398.

BLAKISTON, SON, & CO., Philadelphia.
Transactions of the American Surgical Association. Vol. IV. Edited by J. Ewing Mears, M.D. pp. 339.

CHURCHILL, J. & A., New Burlington-street, London.
A Manual of the Diseases of India. By W. J. Moore, C.I.E. Second Edition. pp. 638.
Alpine Winter in its Medical Aspects. By A. T. Wise, M.D. Third Edition. pp. 138, with Illustrations.
A Systematic Handbook of Volumetric Analysis. By Francis Sutton, F.C.S. Fifth Edition. pp. 491, with Illustrations.
Commercial Organic Analysis. By A. H. Allen, F.C.S., &c. Second Edition, Revised and Enlarged. Vol. II. pp. 583.
Ambulance Lectures; to which is added a Nursing Lecture. By J. M. H. Martin, M.D. pp. 120, with Illustrations.
Sanitary Examinations of Water, Air and Food; a Vade-Mecum for the Medical Officer of Health. By Cornelius B. Fox, M.D., F.R.C.P. Lond. Second Edition. pp. 563, with Illustrations.
Mental Disorders and Nervous Affections of recent Origin or Long Standing, successfully Treated by a new especial Method. By George Moseley, F.R.C.S.E. pp. 63. 2*s.* 6*d.*
The Treatment of some of the Forms of Valvular Disease of the Heart. The Lettsomian Lectures delivered in 1883 by A. E. Sansom, M.D., F.R.C.P. Second Edition. pp. 160.

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CASSELL & Co., London, Paris, New York, & Melbourne.
Diseases of the Joints. By Howard Marsh, F.R.C.S. pp. 461, with 64 Illustrations and a Coloured Plate.

FANNIN & Co., Grafton-street, Dublin; BAILLIÈRE, TINDALL, & COX, London.
Rupture of the Perineum, its Causes, Prevention, and Treatment. By M. J. Moloney, L.R.C.P., L.R.C.S. pp. 63.

GOVERNMENT PRINTING OFFICE, Washington, U.S.A.
Index Catalogue of the Library of the Surgeon-General's Office, United States Army. Vol. VII.: Insignarès—Leghorn. pp. 959.

GRIFFIN, C., & Co., Exeter-street, Strand, London.
Outlines of Quantitative Analysis. By Prof. A. Humboldt Sexton. pp. 132, with Illustrations.

HIRSCHWALD, A., Berlin.
Die Zimmer-Gymnastik. Von Dr. B. Fromm. S. 102, mit 71 Figuren.
Grundriss der Bakterienkunde. Von Dr. Med. Carl Fraenkel. S. 368.

LEA BROTHERS & Co., Philadelphia.
A Treatise on the Principles and Practice of Medicine. By Austin Flint, M.D., LL.D. Sixth Edition, Revised and largely Re-written by the Author, assisted by W. H. Welch, M.D., and Austin Flint, M.D., LL.D. pp. 1160.

LEWIS, H. K., Gower-street, London.
The Diagnosis and Treatment of Diseases of the Kidney amenable to Direct Surgical Interference. By Bruce Clarke, M.A., M.B.Oxon., F.R.C.S. pp. 176, with Illustrations.

MACMILLAN & Co., London and New York.
A new Departure in Science. By C. Bland Radcliffe, M.D. Being a Second Edition of a new Chapter in the Story of Nature. pp. 121.

NEW SYDENHAM SOCIETY, London.
Handbook of Geographical and Historical Pathology. By Dr. August Hirsch. Vol. III.: Diseases of Organs and Parts. Translated from the Second German Edition by Chas. Creighton, M.D. pp. 780.

OLIVER & BOYD, Edinburgh.
The Transactions of the Medico-Chirurgical Society of Edinburgh. Vol. V., New Series. pp. 219.
Subjective Symptoms in Eye Diseases. By G. A. Berry, M.B., F.R.C.S.Ed. pp. 118.

REDWAY, GEORGE, London.
Wellerisms from "Pickwick," and "Master Humphrey's Clock." pp. 174.

RELFE BROTHERS, London. COLIN ET CIE, Paris.
First Year of Scientific Knowledge. By Paul Bert. Translated by Josephina Clayton (Madame Paul Bert). Third Edition. pp. 344, with Illustrations.

ROKKER, H. W., Springfield, Ill.
Eighth Annual Report of the State Board of Health of Illinois; with an Appendix. pp. 556.

ROTHSCHILD, J., Paris.
Causeries Scientifiques. Par Henri de Parville. Vingt-cinquième Année, 1885. pp. 370.
La Goutte, sa Nature et son Traitement. Par Dr. W. Ebstein. Traduction du Dr. E. Chambard. Introduction du Prof. Charcot. pp. 194, avec 12 Chromo-lithographies.

SAMPSON LOW, MARSTON, SEARLE, & RIVINGTON, Fleet-street, London.
Persia as it is; being Sketches of Persian Modern Life and Character. By C. J. Wills, M.D. pp. 315.

SHAW & SONS, Fetter-lane, London.
Transactions of the Society of Medical Officers of Health. Session 1885–86. pp. 135.

STENHOUSE, A., College-gate, Glasgow.
Poems, Songs, and Sonnets. By William M. Stenhouse, M.D. pp. 247.

WARD & DOWNEY, York-street, Covent-garden, London.
The Healing Art, or Chapters upon Medicine, Diseases, Remedies, and Physicians. In Two Vols. pp. 316–377.

Transactions of the Medical and Chirurgical Faculty of the State of Maryland; 88th annual Session.—Alcohol Impartially Considered: by Philip Foster, M.D.—A few Words on Vaccination; by Major Greenwood, M.R.C.S., &c.—Ninth Biennial Report of the State Board of Health, California.—Child Culture, Third Edition; by T. More Maddan, M.D.—Guy's Hospital; Instructions for Case-taking in the Medical Wards.—Prostitution and Venereal Disease in Liverpool; by F. W. Lowndes, M.R.C.S. (Churchills).—The Scientific Prevention of Consumption; by G. W. Hambleton, L.K.Q.C.P.I. (Churchills).—The Index Medicus; Vol. VIII., No. 10.—Cassell's Illustrated History of England; Part I.—John Leech's Pictures of Life and Character; Part VII.—L'Acido Fenico ed il Iodo nella Cura della Pustola Maligna; pel Dott. Pasquale Morelli.—Parkins and Gotto's Monthly Pocket Diary for 1887.—Electricity and Metallo-Therapeutics in their application to Medicine; by Cresswell Hewett, M.D.—Proceedings of the Queensland Branch of the Geographical Society of Australasia; Vol. I.—The Insurance Year-book, 1887.—The Abuse of our Medical Charities; by Jas. Erskine, M.B. (Holmes, Glasgow).—Women and Medicine, Prize Essay; by Edith A. Huntley (Farncombe, Lewes).—Vital Statistics of the City of Glasgow; by J. B. Russell, M.D.—Good Words, Sunday Magazine, Leisure Hour, Sunday at Home, Boys' Own Paper, Girls' Own Paper (with Feathery Flakes Christmas Number), for December.—On Ptomaines and Leucomaines; by A. M. Brown, M.D. (Ball and Sons).

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

BARENDT, FRANK HUGH, L.R.C.P.Lond., M.R.C.S., has been appointed House-Surgeon to the Bootle Borough Hospital, vice Martin, resigned.

BAUMGARTNER, HENRY S., M.B., M.S.Dur., M.R.C.S., L.S.A., has been appointed Visiting-Surgeon to the Prudhoe Memorial Convalescent Home, Whitley, Newcastle-on-Tyne.

BONAR, THOMSON, M.D.Edin., has been appointed Assistant Resident Medical Officer to the Royal National Hospital for Consumption, Ventnor, Undercliff, Isle of Wight.

BRENCHLEY, ALGERNON, M.D., C.M.Aber., M.R.C.S., L.S.A., has been elected a Medical Officer of the Camberwell Provident Dispensary, vice H. C. Brenchley, M.R.C.S., L.S.A., deceased.

CALLAGHAN, JAMES LESLIE, L.R.C.S.I., L.R.C.P.Ed., has been appointed Honorary Medical Officer to the Sir G. Bowles Hospital, Butleigh, Somerset.

DOUGLAS, CLAUDE, M.R.C.S., L.R.C.P. Lond., has been appointed Honorary Assistant Surgeon to the Leicester Infirmary.

FIRTH, CHARLES, M.D.Lond., F.R.C.S.E., has been appointed Medical Officer for the Milton District of the Gravesend and Milton Union.

GARROD, ARCHIBALD E., M.A., M.B. Oxon., M.R.C.P., has been appointed Honorary Physician to the St. Marylebone General Dispensary.

GRANT, JOHN, M.B., C.M.Edin., late Assistant Medical Officer to the Inverness District Asylum, Inverness, has been appointed Assistant Medical Officer to the East Riding Asylum, Beverley, Yorkshire.

MACDONALD, JOHN A., M.B., C.M.Glas., has been appointed Medical Officer and Public Vaccinator for the Denton District of the Grantham Union, vice Kingston, resigned.

OLIPHANT, E. H. LAWRENCE, M.D.Edin., has been appointed Assistant Obstetric Physician to the Glasgow Maternity Hospital.

RAYNER, HERBERT E., L.R.C.P.Lond., M.R.C.S., late Clinical Assistant at the London Hospital, has been appointed House-Physician to the above Hospital, vice D. Thomas, M.R.C.S., L.R.C.P., resigned.

TABOR, CHARLES J., M.B., M.R.C.S., L.R.C.P., has been appointed Medical Officer of Health for Illogan District of the Redruth Union, Cornwall.

TURNER, PHILIP D., M.B.Lond., has been appointed House-Physician to University College Hospital.

Births, Marriages, and Deaths.

BIRTHS.

BOVILL.—On the 30th ult., at Redcliffe-gardens, the wife of Edward Bovill, F.R.C.S., Civil Surgeon, Motahari, Bengal, of a daughter.

BROGDEN.—On the 7th inst., at St. Mary-le-Tower Vicarage, Ipswich, the wife of R. W. Brogden, M.B., B.S.Lond., of a daughter.

GORDON.—On the 2nd inst., at Amersham-road, New Cross, S.E., the wife of J. Gordon, M.D., of a son.

GREENFIELD.—On the 2nd inst., at Heriot-row, Edinburgh, the wife of W. S. Greenfield, M.D., F.R.C.P., of a daughter.

HANKINS.—On Oct. 23rd, at Lyons-terrace, Sydney, N.S.W., the wife of G. T. Hankins, M.R.C.S., of Sydney, late of Clapham, London, of a daughter.

LEFTWICH.—On the 28th ult., at Radnor, Park-road, Folkestone, the wife of Charles Harcourt Leftwich, M.R.C.S., &c., of a son.

MARRIAGES.

GEORGE—WANHILL.—On the 25th ult., at St. Peter's, Parkstone, Dorset, George Aldridge George, L.R.C.P. Lond., M.R.C.S., J.P., of Dorchester, to Amy, youngest daughter of the late Thomas Wanhill, Esq., of Poole, Dorset.

LAMB—HEATHERLEY.—On the 18th inst., at St. Andrews, Well-street, London, W., Hugh Lamb, M.R.C.S., L.R.C.P.Lond., of Ashton-on-Ribble, Lancashire, to Lois, only daughter of T. Heatherley, Esq., of Newman-street, W.

DEATHS.

DREW.—On the 1st inst., at Cheltenham, Samuel Drew, M.D.Aber., aged 66.

HUMBY.—On the 6th inst., at Brunswick-road, Hove, Brighton, William Warren Humby, M.R.C.P.Lond.

JONES.—On Sept. 28th, at Rugby, Morgan County, State of Tennessee, U.S.A. (of dysentery), Alfred Jones, M.D., aged 45.

MACKENZIE.—On Oct. 14th, at Lyons-terrace, Hyde-park, Sydney, N.S.W., Walter Fawkes Mackenzie, L.R.C.P.Ed., M.R.C.S., L.S.A., aged 51.

PHILLIPS.—On the 2nd ult., at Jamaica (of fever), John Mortlock Phillips, M.D., Surgeon of H.M.S. *Goshawk*, aged 26.

UMPLEBY.—On the 2nd inst., at South-parade, York, Henry Umpleby, M.D., late of Bedale, aged 71.

WILTSHIRE.—On the 4th inst., Alfred Wiltshire, M.D., F.R.C.P., of Wimpole-street, aged 47.

N.B.—*A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.*

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Medical Diary for the ensuing Week.

Monday, December 13.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.

ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesdays, same hour.

CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2.30.

HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.

SOCIETY OF ARTS.—8 P.M. Mr. Lewis Foreman Day: The Principle and Practice of Ornamental Design (Cantor Lecture).

MEDICAL SOCIETY OF LONDON.—8.30 P.M. Dr. Keser: A case of Intra-peritoneal Hæmorrhage in a new-born Child.—Mr. Marmaduke Sheild: On the Administration of Ether, and on the Selection of Anæsthetic Agents in Surgical Operations.

Tuesday, December 14.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.

CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

SOCIETY OF MEDICAL MEN QUALIFIED IN SANITARY SCIENCE.—4 P.M. First Ordinary Meeting at the Parkes Museum. Dr. Alfred Carpenter: The Duty of the State to foster the Cultivation of Sanitary Science.—Mr. John F. J. Sykes: The Sanitary Medical Service as a Career.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8.30 P.M. Mr. Savory: On the Effect upon the Femoral Artery of its Ligature for the cure of Popliteal Aneurysm.—Mr. Treves: Richter's Hernia, or Partial Enterocele.

ANTHROPOLOGICAL INSTITUTE OF GREAT BRITAIN AND IRELAND.—8.30 P.M. Rev. George Brown: Papuans and Polynesians.—Mr. A. W. Howitt: Notes on Songs and Song Makers of some Australian Tribes.—Mr. G. W. Torrance: Music of the Australian Aborigines.—Mr. R. H. Bland: On the Aborigines of Western Australia.

Wednesday, December 15.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesdays and Thursdays, 1.30 P.M.

ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department, Mondays and Thursdays, 9.30 A.M.

ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.

LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.

GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.

KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; and on Friday, 2 P.M.; and Saturday, 1 P.M.

CHILDREN'S HOSPITAL, GREAT ORMOND-STREET.—Operations, 9 A.M.; Saturday, same hour.

SOCIETY OF ARTS.—8 P.M. Adjourned Discussion on Mr. C. Meymott Tidy's paper on Sewage Disposal.

Thursday, December 16.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

Friday, December 17.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.—7.30 P.M. The President will communicate to the Society a recent decision under the Public Health Act.—Mr. Alfred Ashby: The Powers and Duties of Sanitary Authorities and their Officers in respect of Dairies, Cowsheds, and Milk-shops in Extra Metropolitan Districts.

Saturday, December 18.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, December 9th, 1886.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radiation Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Dec. 3	30·09	W.	27	...	...	40	25	...	Foggy
,, 4	29·82	S.W.	40	39	...	44	26	·06	Raining
,, 5	29·98	W.	38	34	...	52	33	·34	Overcast
,, 6	29·81	W.	51	50	...	55	35	...	Overcast
,, 7	29·37	W.	45	43	...	46	43	·05	Cloudy
,, 8	28·60	S.W.	46	45	...	49	40	·17	Raining
,, 9	28·40	W.	43	43	...	45	41	·35	Raining

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

We cannot undertake to return MSS. not used.

THE LATE DR. ROBERT RIDDELL.

Dr. Joseph Rogers, president of the Poor-law Medical Officers' Association, writes to ask for the practical sympathy of the profession on behalf of the widow and family of the late Dr. Robert Riddell. Dr. Rogers' state of health will not permit him to take an active part in the matter, but he states that Mr. Wickham Barnes, F.R.C.S., of 3, Bolt-court, Fleet-street, has kindly offered to receive subscriptions in aid of the bereaved family.

Mr. F. Shaw.—Dr. G. V. Poore's work on Medical Electricity, or Amidon's Electro-Therapeutics.

A. M. G.—The lines are not suitable for our columns.

"CRACKED OR FISSURED TONGUE."

To the Editor of THE LANCET.

SIR,—Your correspondent, "Young Practitioner," does not mention whether his patient is suffering from constitutional syphilis or not. If not, I think he will find the following treatment of use:—℞. Acidum broacicum, ʒl.; aq. ad ʒiii. This lotion for the tongue to be used frequently. The above, together with a tonic containing iron in some form, I have found sufficient to cure this very troublesome disease. The diet should consist principally of milk and potash water, with very little solid food, if any. I am, Sir, yours faithfully,

December 2nd, 1886. JAS. EWING HUNTER.

THE DEATH-RATE OF ALDERSHOT.

WE are asked, probably in view of our previous comments on diphtheria in Aldershot, to note the fact that during the month ending Nov. 30th the mortality for this urban district was only at the rate of 8 per 1000. We make it a general practice not to call attention to death-rates for short periods on comparatively small populations, and we can only comply with the request made on this occasion subject to the caution that unless a small death-rate in Aldershot is maintained the one quoted has no real significance. And not only so; but if any part of the camp, with its picked body of able-bodied troops, is in any way included in the population on which the rate is calculated, it is even more misleading for any purposes of comparison.

M. O. H.—By application, in the first instance, to the Secretary of the Board.

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THE IRISH CONJOINT EXAMINATION SCHEME.

Mr. Thomas Laffan (Cashel) writes to complain of a regulation under this scheme which renders it compulsory for students who have been able heretofore to work out their first year's study outside a medical school to now enter a place of study immediately after matriculation. This rule our correspondent regards as an act of injustice to the whole provincial profession, who are affected by it; and he asks what steps the newly elected representative for Ireland will take to remedy it.

Local Board.—There is no legal objection to one partner acting as an officer while the other is a member of the local board, provided they both be properly qualified—the one as a member of the board, the other as an officer. Of course, no private agreement between themselves, such as we understand to be meant, is a matter which concerns the electors.

E. H. H. (Nottingham).—A pledget of wool saturated with sweet oil, kept constantly applied, is often very effective.

Dr. J. Fraser.—In an early number.

PROFESSIONAL TITLES.

To the Editor of THE LANCET.

SIR,—The question of titles, which sounds the best and is worth the most, still agitates the profession, and crops up in your correspondence columns occasionally. Cannot the new Council give us some distinct legislation on the subject? At present there is no guide as to the title of "Dr." but that of taste, and in matters of taste it is not to be disputed. The Edinburgh College of Physicians takes the position that the title of "Physician" is allowable to its licentiates, but discourages, while not forbidding, the use of the title of "Dr." This position will lead ultimately to that title being used by all the licentiates. It will become simply a matter of self-defence, unless the title be restricted to a degree equivalent to that of the London University "M.D." The practitioner who wishes to preserve the rules of good taste finds himself thrown into the midst of a large number who think quite differently as to what good taste is, and in self-defence he adopts the general view. The physician and surgeon (or as one of your correspondents playfully and kindly calls him the quasi-physician and surgeon) finds himself competing not only with licentiates who think it right to assume the title of "Dr.," but also with M.B.'s and C.M.'s who are really only doubly qualified general practitioners, after all; but who, if they do not assume the title prematurely, can become M.D.'s by writing a thesis, often of but little merit as an original production. The subject is really important, and is at the bottom of much of our jealousy of each other. It will never be finally settled until the profession has one portal and one title, or titles which define particular grades and lines of practice. It appears to me that too much is thought of titles and of examinations. The first ought to be certificates of proficiency, not ornamental distinctions; the second ought to be tests of proficiency, not of the power of cramming. To be true tests of proficiency, the examinations must be longer, and include more practical work, especially in the clinical department. I do not say that honours in examination or prizes are undesirable. These ought to be the reward for more than average merit, not a distinction of title, which causes innumerable jealousies, and which the British public, for the protection of which the whole system exists, will never really understand.

I am, Sir, your obedient servant,

Loughborough, Dec. 4th, 1886. J. B. PIKE.

PATENT MEDICINES IN RUSSIA.

A LIST of patent medicines, the importation of which the Russian Government has decided to prohibit, has recently been published. It consists of about 800 preparations of English, American, French, and German origin, the English or American numbering nearly 100. Pills, plasters, hair restorers, cough drops, medicated foods, ointments, and many miscellaneous preparations for a great variety of purposes are all classed together in one long medical *index expurgatorius*. The list appears to have been drawn up by a committee of Russian physicians, and even such remedies as taraxacum and podophyllin have been struck out.

Dr. Schiltz.—The treatment of whooping-cough by carbolic acid has been long adopted in this country.

"DEAD FINGERS."

To the Editor of THE LANCET.

SIR,—In your issue of Dec. 4th Dr. J. Edward Squire says that local syncope, or "dead fingers," is probably due to spasm of the arterioles. This explanation is, I think, correct as far as it goes. It would be interesting to know whether "dead fingers" occur in extreme old age. This inquiry is suggested by the following case. On May 28th, 1884, I saw an old gentleman aged ninety-one. His intellect was quite clear, sight good, and hearing fair. He told me he used to suffer very often during his lifetime from dead fingers, and that the affection used often to come on without any known cause. It always occurred when he bathed in the sea, save on one occasion. During the last fifteen years he has never had dead fingers. This may possibly be due to the nerves supplying the arterioles becoming dulled by age.

I am, Sir, your obedient servant,

Burt, Londonderry, Dec. 4th, 1886. E. DONALDSON.

ALGERIAN COLONIAL SURGEONCIES.

A BELGIAN practitioner, who complains that he lives in a poor district where eight or ten years ago there was only one medical man, there being now eight, and where they, as he says, "se disputent littéralement un morceau de pain," decided to take M. Barella's advice about emigration to Algeria, and wrote to a prominent Algerian deputy for information. The answer he received is exactly what we anticipated in a notice in our last issue (p. 1109)—viz., that foreigners cannot be appointed to medical posts in Algeria, and that there are at least twenty French candidates, many of them, indeed, natives of Algeria, who are most anxious for the post of colonial surgeon, but the vacancies are very rare, and the service is being gradually reduced; for as the population increases in the different localities, so as to be sufficient to need the services of a medical man, the Government withdraws the grant for the pay of a colonial surgeon.

Mr. Henry Love, M.B.—Our correspondent should have declined the subpœna unless a fair retaining fee were offered him. In any case, five shillings could not be considered in any way an adequate recompense for the inconvenience of attending a court. Failing a proper fee, our correspondent might have intimated that inasmuch as he would be called to give an opinion, and not merely state matters of fact, his evidence might not be of any great service to the parties demanding his attendance. Did our correspondent before he was sworn appeal to the judge for further remuneration? Even when the costs are taxed a medical man is allowed a larger sum than that received by our correspondent. If the case is settled, there is, we fear, no legal redress.

Enquirer.—C is quite justified in refusing to make social calls for professional ends.

Dr. Augagneur (Lyon).—We cannot exchange.

MEDICAL ATTENDANCE ON THE POOR.

To the Editor of THE LANCET.

SIR,—On this subject, as on most others, an ounce of fact is worth a pound of theory; and I wish to show by means of the former that this question can be, and is being, solved in a manner satisfactory both to the profession and the poor. Some five years ago the Wandsworth Medical Aid Society was started by several gentlemen, most of whom were connected with the oldest established practices in the place. The basis of the society is purely provident; the payments consist mainly of the much-despised penny a week; the members select their medical attendant, come to his surgery, and are considered in all respects as his private patients. The number of members at the present time approaches 5000; the annual income is nearly £1000, divided among six medical attendants; the expenses of collection, printing, &c. are about 15 per cent., and the average rate of sickness is 5 per cent.

I am, Sir, your obedient servant,

Dec. 7th, 1886. W. G. DICKINSON.

To the Editor of THE LANCET.

SIR,—In reference to the letter of Mr. T. Holmes in your issue of the 4th inst., I beg to be allowed to make a few remarks about the "bogus" dispensaries to which he alludes. The cause of the great number of these private dispensaries in London is due to the fact that there is apparently no restriction placed on, or proper inquiries made as to, the social status or the means of the patients who present themselves for treatment at most of the hospitals and charitable institutions. So the private practitioner is obliged to give advice and medicine for a sum less than what it would cost in time and fares to attend a hospital. In a thickly populated metropolitan district with which I am well acquainted it is almost an impossibility for any medical man to support himself, as he has to compete with several hospitals and charitable dispensaries; together with his professional brethren who accept the modest sum of *one penny* per week for attendance and medicine whenever their services may be required.

It may be of interest to some of your readers, especially those who talk about the nobility, status, etiquette, &c., of the profession, to know that one penny per week is quite a large fee when compared with those that obtain in most of the mining districts of England and Scotland, where the medical gentleman attends whole families within a three- or four-mile radius for in some places 2*d.*, and in others 3*d.*, per week, paying 10 per cent. for the collection.—I am, Sir, yours faithfully,

Dec. 7th, 1886. TWIDDLER.

THE INFLUENCE OF CLIMATE AND SOIL UPON MEDICINAL PLANTS.

ACCORDING to Professor Vogel, plants do not always contain their characteristic alkaloids when grown under other than natural conditions. Hemlock does not yield coniine in Scotland, and cinchona plants are nearly free from quinine when grown in hothouses. Tannin is found in the greatest quantity in trees which have had a full supply of direct sunlight.

Dr. Leibreicht (Liège).—We do not, at this distance of time, recollect the name of the writer of the letter referred to.

R. B. K.—There can be no objection to a card so worded.

Dr. Greig-Smith.—Yes.

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THE ABUSE OF MILK DIET.

M. DEBOVE showed a case the other day at a Paris medical society which demonstrated the possibility of pushing a milk diet too far. The man was of very intemperate habits, and had gastric ulceration, for which he was put on a milk diet in a country hospital. At first he took only about two quarts a day, but this quantity was gradually raised to eight quarts. He became greatly emaciated, and was found to have a stomach enormously dilated. The milk was reduced to three pints, and powdered meat added, the stomach being washed out every day. Under this he rapidly improved, scarcely any splashing sound being audible over the epigastrium after meals.

Mr. R. D. Stapylton.—We do not know that a duplicate diploma is ever issued; but probably some evidence would be afforded, after due investigation, of qualification. Our correspondent should apply to the officials of the board who granted the diploma.

M.D. (Paris).—Is our correspondent's patient living in an arsenically impregnated atmosphere?

Algida.—The nurse of the ward, who is supposed to be equal to her duties.

Dr. Schmulewitsch.—We are unable to comply with the request.

THE DEAF AND DUMB.

To the Editor of THE LANCET.

SIR,—In the absence of inquiry into the cause of deaf-mutism in 80 per cent. from disease of the so afflicted, and of my receiving reply from the Royal Commissioners now sitting thereon, would you be pleased to insert the enclosed copy of a letter in your columns. The enclosed appeal in behalf of the deaf and dumb, although it was written thirty years ago, is good now, and requires scrutiny, and is much strengthened by much correspondence and reflection on the necessary and essential point of inquiry by the said Royal Commissioners, as the deaf and dumb are entitled to our sympathy as much as any other sufferers of mankind from disease. I am, Sir, faithfully yours,

Bath, Dec. 4th, 1886. WILLIAM PARKER, M.R.C.S., L.A.C.

The Lord Egerton, Chairman Royal Commission on the Blind, the Deaf and Dumb, &c., Westminster, London.

MY LORD,—May it please your lordship to lay before the above Commission the three accompanying pamphlets, containing my researches and practice on the deaf and dumb for fifty-six years, during which time I have mixed with some of the most celebrated aurists in Europe—viz., M. Itard in Paris, in 1830; Dr. Purdon, of the Belfast Deaf and Dumb Institution, &c., who concur in my proposition that a hospital should be founded for their benefit. "Precept upon precept," &c., have been observed in my labours among authors, the most distinguished in chemical and medical sciences. My object has not been to interfere with any system of teaching, but in their cure, which is too palpably neglected. As M. Pinel, about the year 1825, liberated the lunatic from his chains, after repeated appeals to the French Government, so the deaf and dumb should be freed of disease, 80 per cent. being the frightful number of the so afflicted. No attempt to cure them in a hospital has been made. Should such be refused to them in this professedly religious country? This appeal is submitted to you for your deliberation and recommendation to the English Legislature to establish an especial hospital in Bath, where they would receive the benefit of those very valuable hot mineral waters (see pamphlet, "Lecture in behalf of the Deaf and Dumb," in 1856.—I have the honour to be, my lord, your obedient servant, WILLIAM PARKER, M.R.C.S., L.A.C.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Sir W. W. Gull, London; Dr. W. H. Dickinson, London; Dr. Russell Reynolds, London; Dr. Macalister, Cambridge; Dr. Allchin, London; Sir Henry Thompson, London; Dr. W. O. Priestley, London; Dr. De Havilland Hall, London; Dr. Latham, Cambridge; Sir Andrew Clark, London; Dr. Tomes, Midnapore; Dr. Hughlings Jackson, London; Dr. Percy Boulton, London; Dr. Charlton Bastian, London; Dr. Broadbent, London; Dr. Hime, Bradford; Mr. Bellamy, London; Lord Stanley of Alderley; Dr. John Lucas; Dr. Bristowe, London; Mr. Brown, London; Mr. S. Snell, Sheffield; Dr. Grabham, Pontefract; Mr. E. T. Collins, London; Mr. T. Laffan, Cashel; Mr. W. Fraser, Ashburton; Mrs. Weldon, London; Dr. J. F. Porter, London; Dr. C. R. Drysdale, London; Dr. Schmulewitsch, St. Petersburg; Mr. R. d'Heureuse, New York; Dr. J. B. Sim, Nottingham; Mr. Foster, Aldershot; Dr. Greig Smith, Clifton; Dr. Mercado, Aden; Dr. Muskett, Sydney; Mr. H. Rundle, Southsea; Dr. Augagneur, Lyon; Mr. J. E. Hunter; Mr. W. Parker, Bath; Mr. Cassell, Algiers; Mr. Bygott, Lincoln; Mr. Pugin Thornton, Canterbury; Mr. J. Gordon, Aberdeen; Messrs. Christy and Co., London; Mr. H. Morris, London; Mr. T. J. Kelly, Buncorthy; Mr. Bunn, London; Dr. Kirk, Partick; Messrs. Parkins and Gotto, London; Dr. Whitla, Belfast; Mr. Bowes, London; Dr. P. Leibreicht, Liège; Mr. L. Humphrey, Cambridge; Messrs. Magrath and Co., Yeovil; Mr. Varley, Harrogate; Dr. J. Fraser; Messrs. Freeth and Pocock, London; Mr. Bernard, Liverpool; Mr. W. G. Dickinson, London; Mr. T. H. Wyatt, London; Dr. E. H. Jacob; Mr. Donaldson, Burt; Mr. J. B. Pike, Loughboro'; Mr. C. J. Smith; Mr. J. P. Henry, Dublin; Mr. Waddy, London; Dr. Stansby, Derby; Mr. A. Havilland, London; Mr. Latimer, Swansea; Mr. G. Hastes, London; Dr. Joseph Rogers, London; Dr. Illingworth, Clayton-le-Moors; Dr. Horace Swete, Worcester; Mr. J. W. Wilkinson, Lincoln; Mr. Ramanadgar, Malabar; Mr. Brown, Westgate-on-Sea; Mr. Saville, Paddington; Mr. Page, Bridgewater; Dr. Neale, St. John's Wood; Mr. Godfrey, Northampton; Dr. Juler, London; Mr. Freeman, London; Mr. Wells, Crewkerne; Mr. Cane, Waterford; Dr. Tolim, Ilkeston; Mr. Gravatt, London; Dr. Urquhart, Perth; Mr. Brennan, Ireland; Mr. Wheeler, Manchester; Mr. Flynn, Stockton-on-Tees; Mr. Hosegood, Swindon; Dr. Adam, West Malling; Mr. Milne, Ladywell; Messrs. Hodge and Co., London; Mr. Evans, Stockport; Mr. Tumner, Harrogate; Mr. F. Evans, Cardiff; Verax; R. J. R.; F. P.; Practitioner; Atropia; A. M. G.; Harkaway; Enquirer (Hingham); O. M.; Local Board; M.D. (Paris); J. P.; Twiddler; Surgeon; Continent; Mater, Brighton.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Eberle, Thirsk; Messrs. Johnstone, Edinburgh; Dr. Guy, Hilston; Mr. Nutt, Devonport; Dr. Richardson, London; Mr. Hall, Peel; Mr. Whitham, Adlington; Mrs. Shaw, St. Leonards-on-Sea; Messrs. Hopkinson and Co., Notts; Dr. Browne, Galwally; Mr. Richards; Messrs. Battle and Co., London; Mr. Barlow, Birmingham; Miss Hunter, Valley Range; Mr. Scott, Glasgow; Mr. Webb, Bury; Messrs. Whitfield and Co.; Dr. Barry, Westport; Dr. Mackay, Crook; Messrs. Sug and Barker, Edinburgh; Prof. Mapother, Dublin; Messrs. Hewlett and Co., London; Colonel Maurice, Barnstaple; Mr. Tomlinson, Little Ouseburn; Mr. Leftwich, Folkestone; Mr. Daniel, Brighton; Dr. Birch, Hednesford; Mr. Davis, Worcester; Dr. Cunningham, Eastbourne; Mr. Bricknell, Sawbridgenorth; Mr. Brebden, Ipswich; Mr. Henry, Birmingham; Mr. Morgan, West Hartlepool; Mr. Abbot, Birmingham; Mr. Nadin, Sheffield; Mr. Evans, Oswestry; J. P. Y., Leicester; Ozone; Superintendent, Brighton; B. G., Dulwich; Rus; P. B. L., Sheffield; Fides; George; Australian; Medicus, Nantwich; House Physician, Brighton; Æsculapius; Medicus, Sheffield; A., Orange Free State; G. H. L., Hereford; Fidelis; Omega, Brighton; Surgeon, Plumstead; Ambo; M. A. C.

Nottingham Daily Guardian, Belfast News Letter, Isle of Wight County Press, Kendal Mercury and Times, Derbyshire Times, South Wales Land Agents' Record, West Briton and Cornwall Advertiser, &c., have been received.

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ABSTRACT OF THE

Brown Lectures.

Delivered at the University of London,

By VICTOR HORSLEY, F.R.C.S., F.R.S.

THE PATHOLOGY OF THE THYROID GLAND.

LECTURE I.

IN the lectures delivered last year on the pathological relations of the thyroid gland, evidence was adduced tending to show that this body was an excretory or rather metabolic organ, without being provided with the usual duct of such organs. It was also shown that the gland possessed some sort of hæmapoietic function, since the number of red blood-discs in the efferent vein was greater than their number in the afferent artery. Whether the gland exercised any power of forming the fluid portions of blood must remain at present a doubtful matter. Hitherto it had been held that the gland was a maker of corpuscles only. But blood is not a definitely complete or finished tissue like muscle or nerve; at the same time it is not a mere carrier of oxygen, food, and excreta. The ease with which blood when lost can be replaced in the organism was an important and suggestive circumstance. Blood may be regarded as an intermediate tissue, and it is interesting to remember its embryonic origin from the connective tissue cells as shown by Schäfer and others. It is an intermediate tissue also in serving to unite in itself all the requirements of every other tissue. Probably the thyroid gland is hæmapoietic as the result of some metamorphosing influence it may have on the fluid constituents of the blood. Last year it was apparently demonstrated also that it was a direct corpuscle-maker. The subject that treated of the manufacture of blood-corpuscles was, however, always a difficult problem, and especially so when the rapid way in which they were regenerated after acute losses of blood is considered. But some remarkable researches made by Wooldridge might throw a flood of light on this dark question. Indeed, the notion of Wooldridge that the blood-plasma was but a mass of fluid protoplasm from which corpuscles might be precipitated in the fashion of a spontaneous generation should be regarded as a revolutionary idea, but nevertheless as one deserving of careful consideration. There could be no doubt, however, that Wooldridge's observation, to the effect that the mere action of cold upon corpuscle-free blood-plasma could produce a precipitate of biconcave discs, was a perfectly true and faithful observation, which had been attested even by the great Virchow himself. So that whether we go with Wooldridge or not in believing that blood-plasma was fluid protoplasm, we must recognise the value of his important discovery. Taking the observation of Wooldridge as a lever, we might argue that the thyroid gland may possess a cytopoietic function in an indirect fashion, the blood-discs being precipitated from the fluid blood-plasma by some method as yet unknown. But this was only thrown out by way of suggestion, and Mr. Horsley did not mean to imply anything further than that such a process might be part of the hæmapoietic function of the thyroid gland.

The next subject discussed was the histology of the thyroid glands. The acini were well-known microscopic objects, but not so the embryonic tissue, which had been described by Cresswell Baber, and which Mr. Horsley had specially investigated. This tissue was composed of columns of cells round which blood capillaries coursed; hence it had a mesh-like aspect. In some animals a large quantity of this tissue could be formed in a single lump beneath the capsule. This lump of embryonic tissue was also separately and distinctly encapsuled. Virchow considered that such a lump might be the homologue of a single acinus; but the Brown Professor could not accede to this position. Although the tissue was regarded as embryonic, still it had not been demonstrated that this tissue ever developed into acini; on the contrary, the result of researches into this matter had hitherto rather tended to oppose the likelihood of such a supposition being true. Of the nature of the large parenchymatous cells described by Weber we were equally also in the dark. These views were also borne out by the observations of Stieda on the development of the thyroid gland. That these nodules of "embryonic" tissue were not only imperfect developments of thyroid tissue was also rendered probable by the fact that the nodules, instead of becoming further metamorphosed, increased in size, number, and staining power when the thyroid gland underwent development as the result of removal of one lobe. This operation of removal of the lobe may be carried out in dogs by the exercise of antiseptic precautions, and the animal may be then kept alive for a great number of days. In one case in which Mr. Horsley had operated the animal was killed after the lapse of 160 days from the operation. The animal was a young adult bitch, and had exercised the functions of a parent, increasing in weight and size during that period. The lobe of the gland that was left became hypertrophied so as to be four or five times its normal size. One of the most remarkable features of the thyroid hypertrophy was the great vascular engorgement, which was probably in relation to the increased amount of hæmapoietic function which would be thrown upon it so long as there was no emaciation of the animal. If the animal wasted after the removal of the lobe of the thyroid gland, then there need be, and probably would be, no hypertrophy of the remaining lobe.

Mr. Horsley discussed minutely the histology of compensatory hypertrophy of the kidney, and showed that hypertrophy in this case was also at the command of the body weight. If this did not increase, and if there was actual loss of weight, the compensatory hypertrophy of the remaining kidney did not occur. This matter of increase or diminution of body weight gave a clue to much of the want of harmony that existed on the subject of compensatory hypertrophy; and Lorenz, in a recent number of the *Deutsches Archiv*, had pointed out the great importance, and indeed deserved to receive much credit for insisting on the importance, of the matter. Remembering, then, that compensatory hypertrophy might not occur if the animal did not keep up its weight, Mr. Horsley proceeded to demonstrate the histological facts of renal and thyroidal compensatory hypertrophy. The renal enlargement was both macroscopic and microscopic. The cortex was more hypertrophied, far more than the pyramids, and the hypertrophy was chiefly seen in a greater size and a greater number of the vascular glomeruli, in the greater size of the lamina of the convoluted and straight tubules, and in a hyperplasia and hypertrophy of the epithelial cells lining the convoluted tubules. The connective tissue did not appear to be increased in amount. In hypertrophy of the thyroid the acini were found to undergo very remarkable changes; the epithelial cells lining them multiplied in number and increased in size, so that there was a plication of the acinal wall; but the full reason for this folding-in of the wall of the acinus, Mr. Horsley said, was not yet forthcoming. There was no increase in the number of the parenchymatous cells of Weber, and no metamorphosis of the "embryonic" tissue into acini. The change that occurred in the contents of the acini was not the least striking feature of the alterations. The colloid material did not increase in amount, but changed its consistence, became softer, more viscous, and less solid; so that at one time it appeared like a network of viscosity, and later on had a watery aspect in which floated a few granules. Increased activity of the organ appeared, therefore, to cause a diminution in the consistence, and this was contrasted with the greater solidification of the acinal contents that occurred when the function of the gland was less active.

LECTURE II.

Relation of the Thyroid to the Encephalon.—The question of the relation of the thyroid gland to the cerebral hemispheres has been discussed by Luschka, Liebermeister, Guyon, and others. Most of these observers believed that the thyroid gland acted as a kind of bolster to support the circulation to the brain, and they attributed the nervous disturbances that followed the extirpation of the organ to the removal of its mechanical support or function. John Simon, however, somewhat modified this view, and believed that the thyroid gland might serve as a drain to relieve the cerebral hemispheres from much pressure, and he

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also thought that it was a special source of nutrition to the brain in such a way as that each lobe had some relation to each hemisphere of the same side. Mr. Horsley believed, however, that the relation of the thyroid gland to the brain was an apparent and not a real one, and experimental evidence was adduced to prove this position. An adult fox terrier, from whom one lobe of the thyroid gland was removed, was submitted to experimental excitation of the cerebral hemispheres after the expiration of a period of 271 days. An adult black-and-tan dog was similarly the subject of an experiment 109 days after removal of one lobe of the thyroid; also a bonnet monkey eighty-four days after a similar operation. The motor centres of each of these animals were exposed under precisely similar conditions. Excitations with the faradaic current were made to each motor part of the hemisphere in each animal, and with the result that no difference could be detected on the two sides. The period of latency, tonic spasm, and clonic spasm—epileptic motor phenomena—were precisely the same whether the right or left hemisphere was stimulated. It was clear then that removal of the one lobe of the thyroid had exerted no detectible influence over the nutrition of the motor cerebral centres on the same side. German workers in this department had come to the conclusion that the thyroid gland had a special metabolic function over those waste products which were specially inimical to the nervous system, and especially the brain. This view was put forward in order to explain the rapid onset of nervous symptoms, which were the most noteworthy and earliest symptoms in many of the animals from whom the thyroid gland had been wholly extirpated. Mr. Horsley said that he would adopt this view, but only in a tentative way.

Innervation of the Thyroid Gland.—Mr. Horsley stated that there was no experimental or clinical evidence that the thyroid gland is represented in the cerebral hemispheres. The gland receives from the medulla oblongata sympathetic fibres, which pass down the cervical part of the spinal cord as far as the eighth cervical nerve, and then leave the cord and proceed upwards in a direction almost parallel to their former direction in the cord, and are distributed to the glands along the arterial vessels. The gland appears also to receive nerve fibres from the recurrent laryngeal nerve, which are probably derived from the motor nucleus of the spinal accessory. Dr. Hale White had advanced the theory that the recurrent laryngeal nerve was the trophic nerve of the gland. This view was based on the observation of two cases of disease in which the recurrent laryngeal nerve had been compressed by the pressure of an aneurysm in one case, and by the slow growth of a tumour in another, and in both of which there was atrophy of the gland on the side on which the recurrent nerve was damaged. Dr. Hale White, however, also published a third case of tumour of the base of the brain, in which the vagus nerve was involved, but in which there was no atrophy. It was suggested by him that the trophic fibres of the thyroid gland joined the recurrent nerve lower down than the seat of the tumour in this third case. Mr. Horsley pointed out that in the first case the sympathetic fibres going to the thyroid gland must have been affected, and that they may have been involved in the second of Dr. White's cases. He himself believed that the gland was chiefly supplied by the sympathetic nerves; that the sympathetic was the "secretory" or "glandular" nerve. The facts relating to the submaxillary gland were adduced in support of this view, and it was thought that the "secretory" nerves of the thyroid were contained in the sympathetic in the same manner as the "secretory" fibres of the chorda tympani were arranged in the nerve-supply to the submaxillary gland. In order to place on an experimental basis the subject of innervation of the gland Mr. Horsley had performed two experiments on dogs. In each dog an inch of the recurrent laryngeal nerve was excised on one side. One dog was kept alive nine and the other eleven months. But there was no histological difference to be detected between the lobes of the thyroid in either case. Schiff had made some incomplete experimental observations on the influence of the sympathetic nerve on the thyroid gland. He had torn through all the sympathetic nerve fibres going to the gland on the coats of the arteries. This, though a tedious, was a possible operation. As the result of it, Schiff detected no change in the nutrition of the gland, except the unavoidable hyperæmia. But as Schiff did not keep the animals alive for longer than a few days and as alterations might require a much longer time to become manifest, Mr. Horsley considered that we must await the result of further investigation before coming to any conclusion concerning the influence of the sympathetic nerve-supply.

Comparative Pathology of the Thyroid Gland.—The Brown Professor next took up the subject of the relation of the thyroid gland to the metabolic processes in different kinds of animals. The first problem was to estimate the importance of the gland to the body processes in the various classes of animals. This was altogether a very wide field, and one which he had but just begun to explore. Indeed his observations had been largely interrupted in this direction by the more pressing investigations in relation to rabies. But he had, nevertheless, obtained results of a sufficiently clear nature to show that the gland possessed a very different activity in different animals. This difference was expressed not only anatomically, but also pathologically. Moreover, there was an exact proportion between the activity of the gland and the symptoms that followed its removal. The exact proportion obtained in this way: The greater the activity of the gland in any particular animal or class of animals the more urgent and rapid were the symptoms that followed its removal; and, conversely, the less the activity of the gland the longer the animal lived without symptoms. The relation, however, on which Mr. Horsley specially insisted at the present time was the anatomical one. In the donkey the thyroid consists of two small lobes unconnected by an isthmus. Not only were the glands very small to the naked eye, but the acini of which they were composed were also very minute and numerous, and contained but little colloid material in their interiors. The suggestion was made that where the glands and acini are small functional activity is slight. One experiment was made on a donkey. The thyroid gland was excised in August, 1885, and the animal died in 205 days, or about seven months. The chief symptoms for two months were emaciation and weakness; the mental hebetude, if any, was difficult to gauge; the temperature of its body was but slightly lowered. In March, 1886, when the weather became severely cold, nervous symptoms suddenly supervened, and tremors were observed for three days, chiefly in the muscles of the head and neck. On the fourth day these were complicated by constant twitching; the animal became so weak as to be unable to stand, and the body temperature became markedly lowered. Later still muscular rigidity was observed, and also the paralysis increased, especially in the jaw. On the fifth day of the cold weather the donkey became much worse, and died in the morning. This experiment seemed to show that the gland in the donkey was of but relatively little importance, and the case also brought out very clearly the malignant influence of cold when the thyroid gland was inactive or had been altogether removed. Two experiments had been made in sheep, which have a comparatively good-sized thyroid gland, but though the operation was performed in October, 1885, the animals were still well. It was impossible, however, to say yet whether the whole of the glands had been removed. In two pigs the removal of the thyroid was followed by characteristic symptoms of tremors, leucocytosis, and anæmia, with subnormal temperature. The duration of the incubation period in these animals was probably rather a long one, but uncertainty may be caused by accidental circumstances. In monkeys the symptoms supervened fairly rapidly after removal of the gland, especially in cold weather, and in young animals. In cats also the symptoms soon became evident, and this was even more marked in the cases of young adult dogs. In the last three sorts of animals the glands were fairly large, and so were their acini. The whole subject, however, required further investigation.

SURGICAL APPLIANCES AND THE HOSPITAL SATURDAY FUND.—The committee which was appointed last January by the Board of Delegates of the Hospital Saturday Fund to carry out an extension of this fund's usefulness—viz., the provision of surgical appliances and instruments at one-half the contract price to cases recommended by such fund collectors—have just made a report of their work to the end of their financial year, Nov. 30th. Assistance has been afforded to 632 cases, the average cost being 6s. 8d. for each appliance. The expenditure has amounted to nearly £300, of which patients have paid £100. A balance remains of £180.

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DISLOCATION OF THE HIP.

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MY attention has been directed to a lecture by Professor Humphry in THE LANCET of Nov. 27th, 1886, on three cases of hip dislocations. In his remarks the lecturer says: "It has lately been maintained, upon insufficient grounds I think, that the dislocations of the hip backwards are always, or almost always, indirect; that the head of the bone escapes from the acetabulum close to the transverse ligament, and is then, if the limb be in an inverted position, carried backwards, and perhaps upwards. Furthermore, it is held that the accident occurs during the *ab*ducted position of the limb." Professor Humphry's authority on anatomical and surgical matters is so well recognised that any views published by him are likely to be accepted by the majority without hesitation or question. It is for this reason that I venture to point out, with due respect for the weight of his opinions, wherein there is ground for differing from his conclusions.

I will, as briefly as possible, first state how very nearly the views which I have published correspond with those which Professor Humphry seeks to disprove, and upon what kind of foundation my views are based.

Ten years ago, when demonstrator of practical surgery, I found myself expected to teach that the "backward," or (as Hamilton calls them) "backward and upward," varieties of the four regular dislocations—namely, the dorsal and the ischiatic—were always produced by violence applied to the limb when in a flexed and *ad*ducted position; that in these dislocations the head of the femur reached its new position by being driven there *directly* through the back of the capsule; that the head of the bone often escaped through a mere buttonhole in the capsule; and that in the dorsal dislocation it always passed out above the tendon of the obturator internus. This teaching, venerable and authoritative as it is, seemed to me so inconsistent with the anatomical construction of the joint, and with the magical ease with which dorsal and ischiatic dislocations are reduced by manipulations—i.e., by movements which simply bring the head of the femur down to the lower and shallow edge of the acetabulum, and then turn it upwards into its socket through the rent here situated,—so inconsistent, too, with the facility with which pubic and obturator dislocations can be converted into dorsal, or dorsal and ischiatic into pubic, that I was induced to investigate for myself.

My inquiries were directed first to the anatomy of the joint, and to the results of experiments on the dead subject, but they by no means ended there. I carefully studied the descriptions of published cases, and the contents of many museums, both British and foreign: and in course of time I published no less than five cases of traumatic dislocations of the hip, which had been under my own care,[1] besides the description of another, the dissection of which was made under my own observation. This I believe to be a somewhat larger experience than usually falls to the lot of one surgeon within a period of five or six years. Moreover, I have since had the advantage of witnessing the dissection of a seventh case, an account of which was published by Mr. Hulke, in a lecture in THE LANCET. I hope, therefore, I have not allowed myself to infer too much from experiments on the dead body. Certainly, I have taken pains to check and, where necessary, correct the inferences I drew from such experiments, and to obtain from all these sources put together sufficient grounds for the opinions I maintain. Some of these views I may shortly sum up as follows:—1. In the regular backward dislocations (i.e., dorsal and sciatic) the head of the femur leaves the acetabulum in a downward, or downward and backward, direction through a rupture in the thin parts of the capsule, and is carried upwards outside the acetabulum to its position on the dorsum ilii or ischium. In other words, that these dislocations (when not complicated with fracture of one or both bones of the joint) are indirect in the sense that the head of the bone ascends to its position after having burst through the capsule at a lower point. 2. That the thin part of the capsule is all that portion of it, except the narrow pubo-femoral band, which is below and between two imaginary lines—namely, one drawn from the inferior iliac spine to the small trochanter, and the other from the upper part of the tuber ischii to the digital fossa of the femur. 3. That during *ab*duction the head of the bone bulges against the thin portion of the capsule, and that in this position dislocation most easily occurs. 4. That the mode of occurrence of backward dislocations described in No. 1 affords the only rational explanation of the ease with which dorsal and sciatic dislocations are reduced, or converted into the pubic variety, by manipulation.

After refuting the statement that dislocations backwards occur in the living body during *ab*duction, Professor Humphry states the following to be some of the points to which he specially wishes to direct attention: "1. The position of the rent in the capsule through which the head of the bone escapes from the acetabulum—namely, at the lower and back part, behind the pubo-femoral ligament, therefore not at the lowest part, although the weakness of the capsule here may seem to predispose it to give way in this latter situation. 2. That the dislocation occurs commonly, not, as recently suggested, when the limb is abducted, but when the thigh is adducted, flexed, and inverted. 3. That the dislocation is not indirect, but direct, the head of the bone being driven through the rent in the capsule at the lower and back part of the joint, and then carried up to a variable extent by the force which caused the dislocation." If I might change the positions of the two words, indirect and direct, in No. 3, I could agree substantially with Professor Humphry's first and third conclusions. From the second I entirely dissent. On a fourth point I entirely agree with him, for he gives precisely the same *rationale* of the reduction of manipulation which I insisted upon—namely, that the head of the bone is *carried down* opposite to the rent in the capsule before any effort is made to turn it back into the acetabulum. Respecting the first conclusion, I submit that the lowest part of the capsule is behind the pubo-femoral ligament, and that in backward dislocations by *ab*duction it is not necessary, though it is not unfrequent, for this band to be either detached or ruptured. As a proof of the latter part of this statement, take the following description of the rent in the capsule in a case of dorsal dislocation during abduction, figured in my paper in the Royal Medical and Chirurgical Transactions for 1877. Place side by side with this the description of any one—it matters not which—of the three cases given in Professor Humphry's lecture. I will take the first, because it is the first, and is described as a case of dislocation on the dorsum of the ilium.

Case published in 1877.

"The rent commenced below the pectineo-femoral band, midway between the acetabulum and the femur, and ran (1) outwards and backwards to the neck of the latter, which it reached just above and behind the small trochanter, and (2) inwards and backwards across the thin portion of the capsule towards the acetabulum, which it nearly reached, a little behind the ischial border of the cotyloid notch. It thus formed two sides of a large opening, which was made quadrilateral in form by the detachment of the flap from the back of the femoral neck."

Prof. Humphry's Case.

"There was a valvular rent in the under and back part of the capsule, commencing just behind the pubo-femoral ligament, midway between the acetabular and the femoral attachments, as a single tear, which divided and extended upwards and backwards to the tuber ischii, and upwards and forwards to the trochanter near the attachment of the obturator externus; or it might be described as a tri-radiate rent, the rays diverging from the apex of the valve which was situated opposite the lower part of the tuber ischii."

Allowing for difference in phraseology, it will be seen that the rents in these two capsules were essentially the same. In both cases, by rising on to the dorsum ilii the head of the bone reached a much higher position than that at which it was forced through the capsule; therefore in both cases the position attained was *secondary* and by an *indirect* course. In his second case the head of the bone did not mount up so high, and the dislocation was therefore less *indirect*; it was, however, neither a dorsal nor an ischiatic dislocation, but, as Hamilton calls it, an "irregular" dislocation, *downwards and backwards*, upon the tuber ischii. This form of dislocation simply corroborates my arguments as to the general direction of dislocations; and how it can ever be used, as it has been, to refute

[1] Royal Medical and Chirurgical Transactions, vols. lx. and lxv.

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them, I do not understand. The third case was a "regular" ischiatic dislocation or "dorsal below the tendon," and the rent in the capsule was such as I have produced any number of times by abduction; it was entirely confined to the thin part of the capsule.

Indeed, all three of Prof. Humphry's cases afford strong confirmation of my view as to the position of the rent in the capsule in hip dislocations. It would be almost impossible for any cases to correspond more completely than they do with my published description of the usual lesions of the capsule—namely, that the rent is confined to its thin portion, and takes a general course along the femoral attachment of this portion.

I am unable, within the limits of this paper, to discuss all Professor Humphry's arguments in favour of his second conclusion; but I cannot see that his cases afford any evidence whatever in support of it; on the contrary, two of them—the first and third—point to *ab*duction as having been the position of the limb at the time of injury, for a boy aged thirteen, riding on the back of a horse in a cart, and falling astride the shaft, and a man in the act of excavating a bank part of which falls upon him, are pretty certain to have their legs well separated. As to the position of the limb in the second case nothing can be inferred, because all that is said about it is that a lad aged thirteen was run over by a heavy cart. It is often impossible to learn what was the exact position of the patient when dislocation occurred, but in not a few published cases in which it is stated that the thigh was adducted, a careful consideration of the account given shows reasons for thinking that it was *ab*ducted. Referring to the position of the limb, Professor Humphry says "The probabilities, of course, are that a limb will be in a habitual or natural position when an accident occurs, and the position of flexion, *ad*duction, and *in*version, is both a habitual position, and is the one in which the head of the femur is pressed against the part of the capsule (the under and back part), and this is the part which gave way in the specimens before you." But Professor Humphry does not, and could not, mean to imply that *ab*duction is an unusual or an unnatural position; or that during *ab*duction the head of the bone is *not* pressed against the same thin part of the capsule, or that this is *not* the part of the capsule which gives way in dislocation by *ab*duction. I have proved both by experiments and by the lesions in accident cases that such are the results of *ab*duction, and these, at any rate, are points capable of being tested on the *dead* body. The degree of *ab*duction requisite to make the head of the femur press against the part of the capsule which gave way in Professor Humphry's cases is not great; *in every position* of abduction the head of the bone projects beyond the lower edge of the socket, and in some it is more than half out of the acetabulum. But the degree of flexion, *ad*duction, and inversion necessary to make the head of the femur press against the same part of the capsule is extreme, and the attitude resulting therefrom is neither a habitual nor a natural one, with most persons.

I could refer to several instances of traumatic dorsal and ischiatic dislocations which occurred during *ab*duction; two[2] will suffice here. Guersant well describes a case of ordinary dorsal dislocation, and states that the thigh was dislocated by a forcible movement of ab*duction and inward rotation*. Crawford reported a case of double dislocation in a miner aged thirty-six, who was standing on an incline "*with his feet widely separated*, the right one being much lower (and therefore much less flexed) than the left, and the body bent forwards. *While in this position* a large mass of rock fell upon his dorsal region, bending his body upon the thighs and pressing him forcibly down upon the rock on which he was standing." The man was certain that both joints were dislocated at the same instant; the right was a dorsal, the left an ischiatic dislocation. Such cases as these cannot be put aside as inconclusive or insufficient. Such a position as this miner was in is one of the most natural and frequent; the forms of dislocation were theoretically and practically perfect.

As to Professor Humphry's third conclusion, I confess my inability to understand it; for I do not know how a dislocation can be other than *indirect* if the head of the bone is "*carried up to a variable extent*," no matter by what force, *after it has left the acetabulum*.

It is, however, a great gain to find a teacher so eminent as Professor Humphry pointing out that in the backward dislocations of the hip the rent is in the *lower* and back part of the capsule; and granting that dislocation is easily caused, in the dead body, by forcible *ab*duction of the limb. But I regret to see he is of opinion "that the view formerly entertained is correct—namely, that the backward dislocations of the hip, whether accompanied by fracture of the edge of the acetabulum or not, are commonly direct, and produced by force applied to the limb in its flexed, adducted, and inverted position." It was this view which led to attempts at reduction by pulleys. It was this view which kept alive the idea that the head of the bone, having passed *directly* back to its abnormal position, must be pulled right again by traction in the axis of the displaced limb. It was this view which sanctioned the barbarous practice of bleeding, tartar emetic, and enormous traction force of hundreds of pounds' weight, continued over several hours. And it was this view which caused large extravasations of blood, and abscesses, around the joint, and even death itself—results such as Professor Humphry, and not a few surgeons besides, witnessed in the comparatively recent past; results which were the outcome of the ignorance of, or an indifference to, the position of the rent in the capsule in hip dislocations. It is this view which, to my thinking, Professor Humphry himself, in his lecture, takes care to explain ought not to be acted upon; for he describes the *rationale* of reduction by manipulation upon the opposite view—the view, namely, for which I contend.

I have good reasons for knowing that during the last ten years a great deal of the instruction given, in London at least, on dislocations of the hip, has been clearer and simpler than it was before. This better understanding is probably much more due to an accurate knowledge of the position of the rent in the capsule than to the fact that dislocations of the hip occur during *ab*duction.

There is, however, this value in knowing that *ab*duction is the simplest and commonest position which favours dislocation; it explains why the rent in the capsule is always in the thin part and below, and why three of the regular forms of dislocations of the hip are (with the rarest, if any, exceptions) indirect or secondary, and that *some* of the other forms are direct only because the head of the femur *remains below*, opposite the rent through which it was forced. It is always desirable to have a reasonable explanation of the success of our treatment, and, as regards reduction by manipulation, this is only to be found in a knowledge of the position of the rent in the capsule, and of the direction taken by the head of the bone after it leaves the acetabulum. In other words, by knowing that in pubic and in dorsal and sciatic dislocations (when not complicated by fracture at the hip-joint), the head of the bone, having been driven down through the thin lower part of the capsule, ploughs its way up outside the acetabulum, and over the deep muscles, to its new position on the pubes, the dorsum ilii, or the ischium; and that the surgeon has to make it retrace its steps—first, down to the rent in the capsule, and then through this rent into the acetabulum. This is the lesson of practical and surgical importance which is taught us by a complete study of hip dislocations, and this fact we all now act upon, whatever may be our individual views of the position of the limb at the moment of luxation.

[2] The references to these and other cases are given in the article on Injuries to the Lower Extremities" (ed. 3, vol. i., p. 1062, &c.), in Holmes' and Hulke's System of Surgery.

AN EXPERIMENT IN HOSPITAL PAY SYSTEM.

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So much has been recently written and spoken concerning the theory of the pay system in hospitals that an appeal to actual experience may be both refreshing and instructive. It would be difficult to find a better example of the changes which ensue upon the adoption of the paying system at a hospital, in the number of new cases, in the attendances of the old, and in the receipts and expenditure, than that which we are about to present.

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The Western Ophthalmic Hospital was founded in 1856 and is situated in the Marylebone-road. Until the year 1874 it was free to all comers; since then the pay system has been in vogue. From the reports for the last sixteen years we have abstracted the statistics of in-patients, out-patients, attendances of the latter, together with the donations and subscriptions, the patients' payments, and the expenses, from 1870 to the present time, and have arranged them in the appended table in parallel columns. The years which appear in this table are naturally divisible into two periods, owing to "important changes in the management of the hospital,"[1] which took place on Nov. 16th, 1874. Prior to that period "the hospital was free to all comers. Hundreds of poor persons, many of whom came from distant parishes, availed themselves month after month of the benefits thus offered. The institution soon became known as a place where sufferers could obtain both gratuitous relief and successful treatment, each year showing a large increase in the number of patients—1573 new out-patients in 1870 to 2316 in 1874."[2] The committee justly regarded this result as "a proof of the success of their labours," but owing apparently to a pressing financial difficulty, accentuated for the time by the need of extensive repairs, involving the outlay of £300, the committee gave notice that from the "16th of November, 1874, a payment of sixpence per week would be required from each out-patient, and a proportionate sum from each in-patient."[3] No one, however, was to be turned away for want of money. It was not likely that the hundreds of poor from distant parts, who in past years had become acquainted with the gratuitous advantages of the hospital, would immediately become aware of this fundamental innovation. The committee, failing to make allowance for this, and instituting a comparison between the patients' attendances during three months following the new rule, and the same period in the previous year, "rejoiced to report the thorough success of the experiment. The patients have not only subscribed their weekly sixpences with cheerfulness, but have, contrary to the fears of the committee, attended in increased numbers,"[4] and gave the following figures:—

	1873-4.	1874-5.
Patients' attendances, Nov. 16 to Feb. 13...	2662 ...	3073
Cash receipts from patients.....	Nil ...	£53 11*s.* 4*d.*

The committee, moreover, found herein "reason to look for a yearly addition to their funds of a sum more than equal to the present total of their annual subscription list." Such sanguine expectations were, however, speedily dispelled by actual experience, and in the next report (1875) the committee regretted that "the hope that the attendances of patients would not be reduced by the adoption of the paying system had not been realised."[5] The regret was only too well founded, and the figures show a steady decline in the number of new out-patients from 2316 in 1874 (the year of introduction of pay system) to 1467 in 1881, and of attendances of patients from 13,677 in 1874 to 5746 in 1881, the new patients being reduced by one-third and the attendances by more than a half. Whether the result of the paying system was desirable or not, it was at any rate the very reverse of the expectation of the committee, and the pay system commenced upon the plea of economy was justified, and continued "to preserve the self-respect of the patients,"[6] and in the hope that kindred institutions would follow the example of this "bold experiment."[7]

Unfortunately such reciprocity has not commended itself to other charities to any great extent, and the only result of the compulsory paying system has been to turn away from our doors a large number of patients, who fail to see the force of paying here for that which they can receive gratuitously elsewhere. While fully agreeing with the principle that patients able and willing to pay should be permitted or even requested to do so, we believe that unless the Western Ophthalmic Hospital is to be content with its position as the smallest of the five eye hospitals in London, and to allow its hold on the public to further decline, or at best remain stationary, this fettering regulation of compulsory payments must be reconsidered.

We would point out that, as a mere question of economy, a larger attendance does not imply increased outlay, the cost of the treatment of out-patients being ridiculously small. Thus, in the year 1874 the attendances were 13,677, and the expenses £635 11*s.* 6*d.*; in the year 1884 the attendances were 5186, and the expenses £624 5*s.* 6*d.* Evidently the expenses do not vary with the attendances. Moreover, the paying system reacts upon the receipts after the manner of a self-denying ordinance, for, as pointed out by the committee in their last report, "the very circumstance of a self-supporting element in the administration of this hospital deprives it of a portion of the grants that might be apportioned to it were its doors freely open to all in-comers."[8]

A survey of the appended table will suggest the following general conclusions: 1. The patient's attendances, which had steadily increased under the free system, have greatly declined under the pay system. 2. The in-patients are too small in number to permit much weight to be attached to their fluctuation; but the average for five years of the free system was 64; for eleven years of the pay system, 50. 3. The third column is perhaps the most instructive and valuable as a gauge of hospital success. It shows that the steady increase of new out-patients which the free system fostered received a shock by the introduction of payments, which continued for twelve years, while during the last three the increase of cases of eye disease in an increasing population has made itself felt in our hospital in spite of the depressing influence of the pay system. 4. The conclusion to be drawn from the financial receipts is not favourable to the view that the paying system is supported by the alms-giving public. It would seem that the more a hospital seeks to help itself out of patients' pockets the less is it helped by others; and the desire to assist a partially self-supporting charity does not appeal to the charitable sentiment so much as the benefaction of the indigent. 5. The expenses do not appear to vary with the number either of in- or out-patients, or the attendances of the latter, and were not far different in 1873, when the number of in-patients was 86, out-patients 2004, and attendances 14,417, from what they were

Statistics of the Western Ophthalmic Hospital under the Free and Pay Systems.

	Year.	Attendances.	In-patients.	New out-patients.	Donations and subscriptions. £	*s.*	*d.*	Hospital expenses. £	*s.*	*d.*	Patients' payments. £	*s.*	*d.*
Free System.	1870	11,762	71	1573	847	8	11	800	2	5	—		
	1871	12,085	69	1651	534	8	9	745	13	7	—		
	1872	12,534	59	1941	523	6	3	552	9	10	—		
	1873	14,417	86	2004	524	2	10	662	14	6	—		
	1874	13,677	37	2316	623	11	7*	635	11	6	—		
Pay System.	1875	11,406	76	1782	434	13	4	889	4	3	235	3	2
	1876	7063	15	1633	501	16	6	620	10	0	136	6	0
	1877	8980	44	1677	499	16	0	777	12	8	157	0	5
	1878	7910	46	1608	364	8	7	488	17	4	129	10	11
	1879	8083	64	1616	302	18	2	574	18	7	175	2	3
	1880	7117	53	1467	307	12	4	559	12	11	153	4	1
	1881	5746	30	1473	354	15	10	545	3	7	114	2	6
	1882	5161	55	1478	358	1	2	646	0	4	208	13	3
	1883	5094	60	1666	375	5	4	634	10	7	183	6	6
	1884	5186	53	1734	331	6	8	624	5	6	164	19	6
	1885	5186	54	1813	345	0	6	586	19	5	156	2	6

* Including special donation of £150.

[1] Report for 1874, p. 5. [2] Ibid., p. 6.
[3] Ibid., p. 7. [4] Ibid., pp. 7, 8.
[5] Report for 1875, p. 7. [6] Report for 1876 p. 9. [7] Ibid
[8] Report for 1885, p. 11.

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in 1882, with 55 in-patients, 1478 out-patients, and 5161 attendances. 6. The patients' payments fluctuate unaccountably and in ratio with no other varying quantity. Thus, in 1881, with 1473 out-patients, the receipts were £114 2*s.* 6*d.*, and in 1882, with 1478, they were £208 13*s.* 3*d.*—a difference which an excess of 25 in-patients in the latter year might possibly partially explain, but for which it is totally inadequate to account.

An effect of the pay system which figures cannot show, but of which the medical staff are painfully aware, is that cases of unusual interest, and operation cases generally, are repelled from our doors to be received with open arms elsewhere. One advantage may indeed be claimed for the paying system by way of reducing the attendances of chronic cases where treatment is of no avail, and perhaps in choking off a class of ailments pretty universally recorded as *nihilitis*. From the point of view of medical and surgical practice, then, the adoption of the compulsory paying system, so long as it is not universal, is undesirable and to be condemned; it is questionable whether voluntary payments might not yield almost as large a sum, and would be at least as well calculated to preserve the self-respect of the poor and increase their respect for the charity.

LITHOLAPAXY IN MALE CHILDREN AND MALE ADULTS.

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(*Continued from page 1124.*)

IF space permitted, I might relate the history of several other interesting cases from the series of litholapaxies detailed in the table (*ante*, p. 1069). I have now, however, I consider, produced sufficient evidence to prove that the calibre of the urethra in male children is as a rule much larger than surgeons have hitherto believed to be the case. Amongst the many objections raised against the advisability of performing litholapaxy in boys, there is really only one which is worth much consideration in practice, and that is the hitherto assumed smallness or narrowness of the urethra. The fact is that the whole question of the feasibility of performing litholapaxy with success in male children hinges on the size or calibre of the urethra in these young patients. Mr. W. J. Walsham was the first, as far as I know, to perform litholapaxy pure and simple, in England, on boys. In bringing forward for discussion at the meeting of the Clinical Society of London held on April 9th last the history of a case in which he had successfully performed litholapaxy on a boy aged ten, he stated that experiments instituted by him confirmed the truth of my experience of the size of the urethra in male children. This experience has been gained in the performance of forty-seven litholapaxies with my own hands in this class of patients, and I do not know how I could have gained it in a more practical way. In the table of litholapaxies (*ante*, p. 1069) there are several cases detailed in which I was able to pass a No. 7 lithotrite into the bladder of boys of only two years old, and there is one case of a boy aged one year and nine months into whose bladder a No. 7 lithotrite was passed. I have met with a case in which I have been able to pass a No. 7 catheter into the bladder of a boy of only eleven months old. This case was as follows. In August, 1885, a mother brought her male child, aged eleven months, to the Indore Hospital, labouring under symptoms of stone. The child was the subject of phimosis, which I considered the cause of these symptoms. Being placed under chloroform preparatory to performing the operation for the cure of phimosis, I considered it advisable to clear up any doubts existing in my mind as regards the cause of the stone symptoms, and passed a No. 7 catheter with ease into the child's bladder. I then attached an aspirator, but could detect no click. The phimosis was cured, and the symptoms of stone soon passed away. But had I found a small stone in this case, I should certainly have crushed it with a No. 6 lithotrite and evacuated the débris through the No. 7 evacuating catheter. I should say that in many cases a No. 6 catheter will readily pass into the bladder of a child of one year old, and with a lithotrite and evacuating catheter of this size it is quite feasible to dispose of a fair-sized stone in half-an-hour. On the other hand, I have often met with cases of boys of two years of age suffering from stone into whose bladders it was impossible to pass a No. 6 catheter, and in such cases I have of course performed lateral lithotomy. In dealing with cases of stone in young boys, I do not as a rule decide the kind of operation I shall perform until the little patient is placed under chloroform. If I find that the urethra will admit a lithotrite sufficiently powerful to crush the stone to be attacked, I almost invariably perform litholapaxy; and if not I perform lateral lithotomy. I have, however, on one occasion begun the operation of litholapaxy, and after proceeding some way in this operation considered it wiser and safer to extract the stone by lateral lithotomy. But this was in the days when I was not well supplied with small fully fenestrated lithotrites. The case is an interesting one, and, briefly stated, is as follows. K——, a boy aged eight years and a half was admitted into the Indore Hospital on April 28th, 1884, suffering from symptoms of stone for three years and a half. The same day I passed with comparative ease a No. 7 lithotrite into the bladder, and at once seized a stone. After a few crushings I withdrew the lithotrite (which was not fenestrated) from the bladder, and in doing so I experienced considerable difficulty in getting it to pass through the membranous portion of the urethra, as the blades had become clogged with the débris of a soft, clayey stone. This clogging had the effect of increasing the size of the lithotrite from a No. 7 to a No. 8. Fearing that this clogging might occur on a second withdrawal of the lithotrite from the bladder, I determined to cut the boy, and, passing in a No. 5 staff, performed lateral lithotomy, making a very small cut in the prostate, and extracted the broken fragments of stone from the bladder by means of an ordinary dressing forceps. The stone weighed 127 grains, and was composed of mixed phosphates and urates. The boy made an excellent recovery, and left the hospital well on May 11th. Here was a boy, aged eight years and a half, with a far less capacious urethra than I have often found to exist in a child of three or four years old.

At starting, I stated that I advocate litholapaxy in male children principally for two reasons—rapidity of cure and absence of a cutting operation. An analysis of the table appended shows that the average number of days spent in the Indore Hospital by boys after litholapaxy was a little over seven. The surgical records of this hospital in past years show that the average number of days passed by boys in hospital after lateral lithotomy was 17·61, and from what I have been able to learn of the statistics of other hospitals in India, it would appear that boys generally remain nearly twenty days in hospital after lateral lithotomy. Now, an average stay in hospital of but seven days after litholapaxy does not fully represent the advantages gained by the patient in having his stone removed by this method. The table does not show the fact that many of these young patients were practically well the day succeeding the operation, and that they were very often only detained in hospital for the purpose of observation. Indeed, some of them were walking about the wards of the hospital the day succeeding the operation. Any lithotomist who has cut many boys for stone will readily recognise the advantages inherent in a method of surgical procedure wherein so much suffering, annoyance, and personal inconvenience can be safely avoided. Rapidity of cure in itself would not of course be a sufficient reason for performing litholapaxy in boys, unless rapidity of cure were accompanied by successful results. And such results I have obtained. Some surgeons would include Case 53, where death was caused by epistaxis and general anæmia some three weeks after all troublesome urinary symptoms had disappeared, amongst the number of unsuccessful litholapaxies. I do not myself think that this case should appear in this category. But, granting that it should so appear, I have still only lost two cases out of fifty-eight, or something under 3½ per cent., which is a rate of mortality considerably less than that usually following the operation of lateral lithotomy in boys in England. I have not selected my cases, but took them as they came. Some of the boys operated on were in a very weakly state of health, and not a few suffered from chronic malaria with enlargement of the spleen. The operation of litholapaxy in boys cannot of course be free from all risks to life, no matter how skilfully performed; and should extensive organic disease of the kidneys coexist with stone in the bladder, there must of necessity be always a certain percentage of mortality after such an operation. But I maintain that if suitable instru-

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ments are skilfully and judiciously employed in performing litholapaxy, this operation will be found to be a much more rapid and a somewhat more successful method of dealing with stones in male children than lateral lithotomy. I advocate litholapaxy in preference to lateral lithotomy in dealing with stone in boys for another and very important reason—viz., the absence of a cutting operation.

The operation of litholapaxy, in the performance of which no important structures are cut or wounded, has much to recommend it, more especially in a country like India. A native of India will not, as a rule, undergo any grave surgical operation for the cure of disease until he has tried all other methods of treatment; and he will be even still more loth to submit his child to the terrors of the surgical knife unless he be fully persuaded that an operation is an unavoidable and absolute necessity. He will procrastinate and put off what he considers the evil day to the last hour. And hence it is that surgeons in India are continually meeting with cases of very large stones in young boys. But when the native of India comes to learn, as he is already slowly beginning to do, that in certain hospitals a stone can be disposed of without a cutting operation, he will then seek surgical aid for his child as soon as stone symptoms manifest themselves. I am strengthened in this belief by the fact that at the Indore Hospital the number of admissions into hospital on account of stone amongst boys has steadily increased since litholapaxy has become an established and a recognised operation at this institution. I am sanguine enough to hope that when the prejudices and opposition which have hitherto existed amongst surgeons in India against the operation of litholapaxy in boys shall have disappeared, and when this method of treating stone in boys shall be more generally adopted than it is at present, we shall then more rarely meet with cases of large stones in young male children. And should this operation become an established and widely recognised method of treating stone in boys, its adoption in this class of patients will mean an avoidance of an amount of pain and misery which can be only fully realised by those who are intimately acquainted with the daily lives of the Indian peasantry, cut off as they often are from frequent communication with large towns or cities where hospitals and dispensaries flourish. A glance at the table shows that many of the boys operated on at the Indore Hospital had suffered for four or five years from stone before they sought surgical relief; and I feel certain that many unfortunate Indian boys, living in villages far removed from skilled surgical aid, drag out a miserable existence for some years, and eventually perish with the stones in their bladders. The method of treating stone in boys by supra-pubic cystotomy is not very likely to find much favour amongst the natives of India, and I think that surgeons in India will be slow to adopt it amongst this class of patients. I do not think that surgeons practising in India very generally share Langenbeck's opinion, that the operation of lateral lithotomy in boys is frequently followed by emasculation. The natives of India have certainly not generally noted this after-consequence of lateral lithotomy; and should they ever come to do so, they will at once abandon this time-honoured operation for litholapaxy, or for even supra-pubic cystotomy, although the latter is a cutting operation. They will do so chiefly on religious grounds, for in no other country in the world is the hope of male offspring so intimately interwoven with religious aspirations and practices as it is amongst the natives of our great dependency. I am not in a position to deny or confirm the truth of Langenbeck's statement, for this question I confess has not as yet engaged my attention. It is extremely difficult in a country like India to follow up the life-histories of boys cut for stone at public hospitals, for in India, as in Europe, we meet with stone in boys nearly always amongst the poorer classes of society, and the "short and simple annals of the poor" are not easily traced. Still, the difficulties of collecting the necessary information to settle this very interesting and important question, so far as it refers to Central India, are not insuperable, and on my return to India I shall endeavour to trace the life-histories of all boys cut for stone in past years at the Indore Hospital. The impossibility of wounding the ejaculatory ducts in performing supra-pubic cystotomy would seem, however, to be the principal advantage it possesses over lateral lithotomy in dealing with cases of stone in male children. It may perhaps be an easier method of removing a stone from the bladder of a very young male child than lateral lithotomy would seem to be for those who do not enjoy many opportunities of cutting for stone in boys. I say it may be an easier method advisedly, for I have my doubts on this point. I am inclined to think that the "high" operation in a fat male child of two years of age might possibly be not so easy of performance as the advocates of supra-pubic cystotomy would have us believe. But it will not prove a more expeditious, and it can hardly prove a more successful, method of dealing with stones in boys than lateral lithotomy is well known to be when performed by an experienced and skilled hand. Freyer's brilliant and unequalled success in cutting 143 boys for stone without a death has conclusively shown what splendid results can be achieved by lateral lithotomy when this operation is skilfully performed. On the other hand, the total number of supra-pubic cystotomies performed on boys in England up to the present date is so very small that it is as yet impossible to draw any safe conclusions as to what its rate of mortality is likely to be, and therefore I think I am warranted in expressing my conviction that surgeons practising in India will be slow to abandon lateral lithotomy for supra-pubic cystotomy when dealing with cases of stone in male children. Before leaving the subject of litholapaxy in boys, I should like to make a few remarks of a practical nature.

The operation of litholapaxy in boys differs from the same operation in the adult male only in the size of the instruments employed. Great gentleness and a light hand are essential to success. The evacuating catheters should be as short as possible, and they should be fitted with stilets; for although some authorities state that a fragment of stone impacted in the eye of the catheter is easily removable by briskly working the aspirator, I have on many occasions found that this manœuvre fails to dislodge a tightly wedged fragment. The employment of a stilet then becomes a necessity. The evacuating catheter should never be withdrawn from the bladder with the aspirator attached to the catheter, because in doing so the operator has no means of knowing whether a small fragment of stone is lodged in the eye of the catheter or not; and should a piece of stone project from the eye of the evacuating catheter, the urethra might be lacerated in the withdrawal of the catheter from the bladder. It is, therefore, a wise plan to always pass the stilet into the catheter before withdrawing the latter from the bladder. All lateral and up-and-down movement of the lithotrite should be avoided as much as possible, so as not to strain the neck of the bladder. It is scarcely necessary to say that no undue force should be employed in passing either a lithotrite or evacuating catheter into the bladder. The meatus of the urethra should be incised only when it is considered necessary to do so. The operation very often lasts a considerable time when a stone of considerable size has to be dealt with; for, since the evacuating catheters employed are comparatively small, the stone must be crushed very fine to come through the eye of the catheter. But the surgeon should be in no hurry to finish the operation, and no particle of débris should, if possible, be left behind in the bladder. The aspirator should be freely employed. I think that the performance of this operation in young male children requires a greater amount of skill and dexterity than the same operation in the adult male. But the difficulties are, after all, not very great, and the surgeon who has performed a few litholapaxies in the adult male with success may then safely proceed to operate by this method in young male children. Whoever wishes to give litholapaxy in boys a fair trial must supply himself with a set of completely fenestrated lithotrites, beginning at No. 6 and running up to No. 10 (English scale). To recapitulate. Use completely fenestrated lithotrites suited to the calibre of the urethra; if possible, crush the stone in the bladder into fine powder, and you will not then require to use large evacuating catheters; never use a lithotrite or an evacuating catheter which will not pass readily in and out of the bladder; be extremely gentle and careful in practising all manipulations in the bladder and urethra; do not be in a hurry to finish the operation; use the aspirator freely, and never, if possible, leave a single grain of débris behind in the bladder. If all these conditions be fulfilled, you may count on a large measure of success. Some cases you will meet with where no lithotrite, however small, can be employed with safety, and these are the cases which should be dealt with by lateral lithotomy.

Having now considered the operation of litholapaxy in its application to the treatment of stone in male children, I should like to touch on some points of present interest connected with its performance in the adult male. It would

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appear that whilst surgeons in India are endeavouring to widen the sphere of litholapaxy their brethren in Europe, and even in America, seem inclined to restrict Bigelow's operation to very narrow limits. This divergence in opinion and practice between the East and the West has doubtless been brought about by the increasing favour now being accorded to the operation of supra-pubic cystotomy in its revived form. I have had no practical experience of the "high" operation; but, in common with most surgeons, I recognise the fact that in its latest development it is eminently adapted to the treatment of very large stones, which cannot be disposed of by litholapaxy or by perineal lithotomy. And in dealing with cases of tumours of the bladder and encysted stones, no matter what their size may be, it is doubtless the correct method of surgical procedure. It cannot, however, be said that there exists a universal consensus of opinion amongst practical surgeons at the present day as to where we should draw the boundary-line between litholapaxy and supra-pubic cystotomy. I certainly am not disposed to draw this line at a stone which is hard and much above an ounce, and I feel certain that my brethren in India, with their unrivalled opportunities of treating stone, have no intention of adopting a course of practice which I can only characterise as retrograde.

The size, density, and weight of a stone must be carefully considered when drawing the boundary-line. But the size, density, and weight of a stone are not the only important points of the problem to be solved. The size and the general condition of the bladder and prostate, together with the size or calibre of the urethra, are equally important points for consideration before we can arrive at any safe conclusion as to the method of treatment best adapted to each individual case. Indeed, no operator can tell with anything approaching accuracy the weight of a stone in the bladder when grasped between the blades of a lithotrite. The weight can only be determined after its evacuation from the bladder, and its density can only be learned during the progress of the operation. And, therefore, rules laid down to guide inexperienced surgeons in drawing the boundary-line between litholapaxy and supra-pubic cystotomy based solely on the weight and hardness of a stone must prove valueless and misguiding in actual practice. For it often happens that a stone of moderate size lying in an irritable, contracted, and diseased bladder will give the operator much more trouble than a stone weighing upwards of three ounces will do, in a roomy and healthy viscus. Again, there are some cases, happily rare, wherein the bladder continues to contract during the whole course of the operation, grasping with spasmodic effort the lithotrite, impeding its working and ejecting the water thrown in by the aspirator. These are certainly the most difficult cases we meet with in practice, and should the novice in performing litholapaxy be so unfortunate as to come across a case of this kind, it will give him an exaggerated idea of the difficulties to be met with in performing litholapaxy in the ordinary run of cases. It requires all the patience, care, and skill which an experienced hand can command to combat such conditions as these. Indeed, it is a question for consideration whether even an experienced litholapaxist would not better consult the safety and welfare of his patient by having recourse to perineal or supra-pubic lithotomy when brought face to face with a case of this kind, more especially if the stone happens to be at all large. I am, however, of opinion that any uncomplicated stone on which the surgeon can lock a trusty and efficient lithotrite can in most cases be crushed and evacuated from the bladder at one sitting. By an uncomplicated stone I mean one not complicated by an enlarged and diseased prostate, and which lies free in a healthy and roomy bladder. I can, of course, imagine a case in which the surgeon, having locked his lithotrite on a very hard mulberry calculus, weighing between two and a half and four ounces, would fail to break it; and I can also imagine a case in which the surgeon, having broken across a large stone, would still be unable to evacuate it at one sitting owing to the inability or unfitness of the patient to remain sufficiently long under an anæsthetic to permit of the operation being completed at one sitting. But putting aside exceptional cases such as these, I think that, using efficient modern instruments, the surgeon ought to be able to dispose of any uncomplicated stone on which his lithotrite will lock, at one sitting. I would go even further, and say that some stones on which a lithotrite will not, in the first instance lock can be reduced in size to the working capabilities of the lithotrite by judicious chipping of the outer covering of the stone, and that then the operation can be completed at one sitting. In dealing with cases of large, soft, phosphatic stones this chipping process is quite feasible. I shall now endeavour to substantiate these views by relating the histories of some cases from my own practice at the Indore Hospital.

M. S——, forty-nine years of age, suffering from stone symptoms, was admitted into the Indore Hospital on Dec. 16th, 1884. He suffered from emphysema of the lungs; his heart was weak, and he was very corpulent. His muscular system was very flabby. Urine acid; specific gravity 1014; no albumen. On Dec. 17th he was placed under chloroform, which he took very badly. Equal parts of chloroform and ether were then tried. The largest lithotrite which could be used with safety was a No. 12 fenestrated. The stone was readily seized, but the inspiratory and expiratory efforts were so deep and laboured that the water injected into the bladder was soon expelled, and so the bladder kept continually contracting on the lithotrite, rendering the operation most difficult and tedious. A No. 14 evacuating catheter (English scale) was the largest I was able to employ. The lithotrite was introduced sixteen times, and the operation lasted two hours and thirty-five minutes, although the stone, mixed lithic acid and phosphates, only weighed 272 grains. This will give some idea of the difficulties attending the operation of litholapaxy in this case. Again and again I was obliged to cease working the lithotrite and aspirator in the course of the operation, owing to the frequent spasmodic contractions of the bladder. I have frequently removed stones weighing between two and three ounces with far less difficulty than I experienced in this case.—Dec. 19th: Pulse 120; evening temperature 104°; suffering from an attack of asthma; right testicle swollen; some pain on pressure over bladder.—22nd: Feels burning at time of micturition; condition of testicle unchanged; sounded bladder with Sir H. Thompson's sound, but no fragment of stone could be detected.—26th: Does not sleep well; pain in epigastric region; getting weaker; has difficulty in breathing; had two fits of asthma.—27th: Dyspnœa increasing; pulse rapid and weak; becoming drowsy. Died during the night. No post-mortem examination was obtainable.

I ascribe the fatal issue in the foregoing case to the lengthened administration of chloroform and ether in a patient suffering from emphysema of lungs and weak heart. If I were again to meet with a similar case, I should most certainly perform either perineal lithotomy or supra-pubic cystotomy in preference to litholapaxy, for I consider that litholapaxy is contra-indicated in cases where a contracting bladder keeps on continually grasping the lithotrite and expelling the water injected by the aspirator. We have performed ninty-three litholapaxies in boys, men, and females at the Indore Hospital between May, 1884, and the end of March, 1886, and this case is the only one amongst this large number of litholapaxies which has proved fatal. Indeed, I am disposed to think that, had I used no anæsthetic, and had performed lithotrity instead of litholapaxy in dealing with this stone, the result might have been different from what it was. The history of this case goes to prove how valueless in actual practice are the rules which have been laid down to guide us in drawing the boundary line between litholapaxy and supra-pubic cystotomy, rules which are based solely on the weight and density of a stone.

(To be concluded.)

ON HYSTERICAL AFFECTIONS.

BY F. T. THISTLE, L.R.C.P. LOND. &c.,
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IN THE LANCET of Sept. 18th is an interesting report by Dr. Suckling of a case of what he terms "paralysis depending on idea." Whether the difference between the cases denominated by this somewhat cumbersome phrase and those of so-called hysteria is fanciful or not need not concern us much at present. Dr. Suckling thinks that there is a difference in the character of the patient, and perhaps he is right. That such cases are "hysterical" in the literal sense of the word no one for a moment supposes. That much-slandered organ, the uterus, has quite sufficient responsibility in carrying out its normal functions without

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being saddled with all the ills which we are unable to localise in any of the other organs of the body. The term "hysterical," however, as applied to these cases, is a convenient one, and will probably continue to be used. There is no class of cases which yield such satisfactory results when judiciously treated as these hysterical affections. On the other hand, if not properly managed, there is no class so difficult to benefit in any way. We hear a good deal of the *vis medicatrix naturæ*, and no doubt physicians gain a good deal of credit which really belongs to nature; but in the cases now under consideration nature is a most hopeless failure, and the physician achieves his greatest triumphs. With regard to the difference in disposition alluded to by Dr. Suckling in patients of this class, some being cheerful, intelligent, and anxious to recover, others just the reverse, the same difference is equally noticeable in patients suffering from other diseases. One thing, however, should not be forgotten, which seems to me to have a decided influence on this point, and that is the length of time the affection has existed. If it has been in progress for months or years, the patient has naturally become depressed and given up all hope of recovery; perhaps she has been under the care of many medical men, and owing to unfavourable circumstances has received no decided benefit. With regard to treatment, if possible it is always better to remove the patient away from her friends, whose injudicious sympathy tends to counteract all beneficial remedies. My own experience is that these cases do better in a hospital than anywhere else, where you have a reliable nurse, who will take an interest in the patient and carry out all your directions. They require so much time and attention that it is almost impossible for a busy practitioner to carry out the treatment effectually. The next step is to gain the confidence of the patient, and not only to impress on her that she will get well, but also to prevail on her to use her utmost efforts in this direction, and to encourage her when we really see that she is making such efforts. The following three cases will serve to illustrate some of the curious phases of this very interesting affection. They came under my notice at the Torbay Hospital. I will state them as briefly as possible.

CASE 1.—Harriett B——, aged forty, unmarried, dressmaker, was admitted into the hospital on Feb. 22nd, 1883. She had always been a very emotional subject. Three years before admission the left breast was removed at the Middlesex Hospital for scirrhus. She had been in bed eleven weeks before admission. She complained of pain in the left thigh and leg; there was no swelling; the muscles were slightly wasted; the left lower limb was completely paralysed, and she could not move it in the bed; there was partial anæsthesia of the whole limb, most marked on the inner side of the thigh; she was anæmic in appearance. She was put on strychnine and iron; the leg was faradised daily, and blistered in a few places with the thermal hammer. In three days she was walking on crutches, a few days later with a stick only, and soon was able to walk without any support at all. She had some difficulty at first in getting up and down stairs, but was made to practise it several times in the day. She gradually improved in health and strength, and was discharged on May 21st, when she could walk several miles a day.

CASE 2.—Mary W——, aged twenty-five, formerly a servant, was first seen by me in consultation with Dr. Wills about the middle of February of last year. She had been in bed for five years, and had to be lifted from one bed to another. She was a most pitiable object, emaciated, peevish, unable to stand or walk or feed herself. She could move her legs in bed, but in getting her out of it they gave way under her, and she would have fallen if not supported. I offered to take her into the hospital, telling her that she would get perfectly well. She objected very much, and said she did not want to get well. After much persuasion she consented to come in, and was admitted on Feb. 24th. On admission I ordered her milk and beef-tea at first, as she had taken nothing but slops for some time. She was faradised and rubbed every day. On the third day I ordered her a mutton chop; this she obstinately refused to eat, saying she could not swallow it. On being informed of this by the nurse, I went up into the ward, cut the chop into small pieces, and insisted on her eating it, threatening to apply the battery if she would not do so. After a good deal of trouble she ate the whole of it, with some bread and a cup of milk. After this we had no further trouble about her food and she was put on a liberal diet. On the fifth day she was out of bed, and able to walk a little when supported on each side by a nurse; a few days later she could walk with crutches in the garden. She gradually gained flesh and strength, and was discharged from the hospital seven weeks from the date of admission, able to walk two or three miles in the day. She then went for a few weeks to a convalescent home in the country, and returned much benefited by the change.

CASE 3.—Mary T——, aged twenty-one. I first saw this patient with Dr. Eales on July 11th of the present year. She had been in bed or on a couch for three years, and was considered by her friends to be suffering from heart disease and consumption. She was very emaciated, and could not stand without being supported; her breathing was rapid and noisy, and she jerked out her words in a spasmodic manner when answering questions, which she rather whispered than spoke. She complained of pain over the region of the heart, which was beating quickly and feebly; the sounds were natural; breathing jerky, but nothing abnormal about the lungs. We recommended her friends to send her into the hospital, and promised that she would get quite well. She was admitted under my care on July 13th. Her weight on admission was 67 lb. She was faradised and rubbed every day, given as much good nourishing food as she could be made to eat, and ordered cod-liver oil and iron. As in the previous case, she was got out of bed, and walked at first with support, and very soon by herself. A small blister was placed over the region of the heart, which removed the pain she complained of. The breathing soon became natural. She rapidly gained flesh, strength, and weight. In a fortnight she was able to take good walks. She was discharged on September 16th, and sent to a convalescent home on the Moor. Her weight on leaving was 80 lb., having gained 13 lb. in rather more than two months.

The above cases are examples of many to be met with in practice. Whatever name we may apply to them—real, ideal, hysterical, or neurotic,—they are all of them very amenable to treatment, are extremely interesting to watch, and amply repay in their satisfactory termination the time and trouble devoted to them.

Torquay.

CASE OF

IMPERFORATE HYMEN WITH RETENTION OF MENSTRUAL FLUID.

BY HENRY DAVY, M.D. LOND., M.R.C.P.,
PHYSICIAN TO DEVON AND EXETER HOSPITAL.

MARY F——, aged fourteen, was admitted under my care on April 24th, 1883. In the previous October she began to suffer from pains in the back and thighs, which caused her to stay in bed for one week; after this she got better, but for two or three months past the pains have increased in severity. She never noticed any periodical recurrence of these pains, and her mother attributed them to rheumatism. She had never menstruated. She is a well-developed, healthy-looking girl. I first saw her on the morning of April 24th, but having an appointment in the country, and her case being apparently of no urgency, I did not pay much attention to her symptoms. At 9 P.M. the same evening I was asked to see her. She had been suffering from some amount of pain in the back and thighs all day, but not more than she had previously done. About 8 P.M. she called the nurse's attention to a swelling between her legs, on seeing which the house-surgeon sent for me. On examination I found that the external genitals on the left side were much swollen, blood having extravasated into both the labia majora and minora on that side. So much was this the case that the left side of the labia majora was much thickened, whilst the lower part of the corresponding labia minora was so much altered that it was evidently about to slough. Between these swollen parts on the left and the corresponding parts on the right was a small, bulging, soft, and fluctuating swelling, evidently caused by blood pressing an imperforate hymen forward. The hymen was thick and tough, but in one spot it had partially ruptured, and a small piece of clot protruded through the small aperture where the rupture had occurred. A careful examination proved that the vagina was much distended. The labia majora and minora on the right side appeared perfectly natural, while no

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tumour could be made out above the pubes. The case did not seem to me to warrant any delay in treatment. I had to do with a much-distended vagina, and the hymen was already ruptured. It seemed probable, also, both from palpation of the distended vagina externally, and from the fact that clot had protruded through the ruptured hymen, that the vagina was distended with clot. It seemed, therefore, useless to attempt to empty the vagina with an aspirator, and I therefore determined to adopt a bolder line of treatment. By the help of a probe and my fingers I completely ruptured the hymen and turned out of the vagina just 18 oz. of blood, mostly firm clot. This clot was particularly firm, retaining in great measure a cylindrical form after evacuation; it almost appeared to be undergoing organisation, and was evidently formed from almost pure blood, without admixture of secretion from the uterus and vagina. Behind the clot was a small quantity of thick dark treacly fluid, probably ordinary blood mixed with the vaginal secretions. Passing two fingers as far as possible into the vagina, I found the latter very greatly distended; none of the usual parts could be made out, and no part of the uterus could be reached. I now passed the nozzle of a Higginson syringe along my fingers, and very slowly washed out the vagina with a solution of carbolic acid in water, in the proportion of 1 in 80. I continued the injection carefully until the lotion returned unaltered, taking care that it had a very free escape along my fingers, and that the syringing was very slowly performed. After this an opium pill (a quarter of a grain) was given every six hours.

April 25th.—The patient has passed a quiet night, and there is no pain or tenderness over the abdomen. The vagina contains a considerable amount of yellowish discharge, which has a very offensive smell. I syringed all this away as before.

From this time the patient did well, and made a good recovery, without pain or fever. The yellow offensive discharge continued for some days, but the parts were carefully washed with the carbolic lotion twice a day. The left side of the labia majora recovered its usual appearance; the lower half of the left labia minora sloughed away, but the wound healed without any trouble. The patient was kept in bed for five weeks, but menstruation not appearing, and she being apparently well, she was allowed to get up, and after four more weeks to leave the hospital. Up to the time of her leaving I could never reach the os uteri with my finger, although the parts seemed otherwise normal. Up to July 6th she had not menstruated, but since then I have lost sight of her.

Many cases more or less similar to the above are on record, and there is nothing particularly original in the treatment adopted. In Dr. Galabin's little work on Diseases of Women, p. 41, he says: "When the collection of fluid is comparatively small, a free opening may be made at once. Experience has not yet fully decided whether it is better or not to wash out the cavity immediately. It appears preferable, however, as in the former case, to wait twelve or twenty-four hours for gradual evacuation before injecting, unless any sign of decomposition or febrile symptoms have previously appeared." I have put this case on record as shewing the benefit of immediately washing out the cavity as recommended by Dr. Emmett and others. Even after this was done the vagina, as the report shows, contained a considerable amount of yellowish discharge with a very offensive smell within twelve hours after evacuation; and I attribute much of the success of the case to the care and frequency with which this was washed away. At the same time, I think very much care should be taken, as in this case, to have one's fingers in the vagina as far as the nozzle of the syringe, and to syringe most slowly, taking care that there is a very easy escape from the vagina of the lotion injected.

BRITISH PHARMACEUTICAL CONFERENCE FORMULARY.—A meeting of the committee was held at 17, Bloomsbury-square, on Dec. 8th, at 6 P.M. At 9.30 there was an adjournment until 10 the following morning. Present: Mr. Martindale (in the chair), Messrs. Abraham, Greenish, Groves, Martin, Reynolds, Thresh, and W. Naylor (secretary). Letters regretting inability to attend were received from Messrs. Maben and Symes. Lists of suggested preparations and formulæ were discussed, and agreed to be reported upon.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

OXYGEN IN THERAPEUTICS.

BY CHARLES J. SMITH, M.R.C.S., F.R.G.S., &c.
FORMERLY SURGEON TO THE FARRINGDON DISPENSARY, E.C.

ENGLISH medical literature is singularly deficient in works upon the value of oxygen as an addition to our therapeutic agents—and for this reason, that from one cause or another, but chiefly from the difficulty and cost of production of the gas in any quantity, oxygen has never been brought into general use by the profession in this country, so that no large experience of its advantages has been gained; while, unfortunately, those persons who have written at all upon the subject have done so in such a manner as to have exposed it to the suspicion of quackery. This is greatly to be deplored, because there can be no question that the gas, which Lavoisier characterised as "the vivifying spirit *par excellence*," is an agent of the highest value to the physician.

Those who are desirous of learning what has been done with oxygen must look to the papers read before the various scientific societies on the Continent, and to the records of the practice of many distinguished continental physicians. Demarquay appears to have been a somewhat enthusiastic believer in the efficacy of oxygen inhalation: and he has written strongly upon the subject in his work on "Pneumo-therapeutics." He considers this as one of the safest agents in the treatment of pulmonary phthisis in every stage of the disease, and that its curative action is still more manifest in bronchitis, asthma (spasmodic no doubt is meant), and whooping-cough. Hayem, as well as Demarquay, reports favourably of its use in anæmia and scrofula. Durand-Fardel, Béranger-Feraud, and Thierry-Mieg have utilised its combustible action in the treatment of diabetes, in which disease its use is highly extolled by Dr. E. Morin, who, in his prize essay, read before the Society of Medicine in Antwerp, states: "In inhaling from ten to twenty litres of oxygen every morning the sufferer from diabetes will add to his treatment an incontestably useful agent, especially if his lungs have any tendency to become congested." Dr. Campardon read a paper before the Society of Practical Medicine in Paris. Mayer, Maunoir, Pinard, and Dorean have published among them the details of eight cases, of which the last three were cases of incessant vomiting. Quinquod and Kirnberger have also contributed to the records of success which has attended the administration of oxygen. The most recent, and perhaps the most interesting, use made of this agent was during the late terrible epidemic of cholera at Toulon and Marseilles, when highly favourable results were obtained and are duly recorded in the official reports of the Chief Medical Officer of the Marine. There is every reason to believe that the surgeon too may find a faithful aid in oxygen. Langier appears to have met with considerable success in the treatment of senile gangrene and "local asphyxia congestion" by oxygenated baths. There are many others who have published the results of their experience with oxygen; but those already quoted will be sufficient to show how well worth attention it is as a therapeutic agent.

The two great difficulties which have opposed the use of oxygen on the very threshold have been the cost of its production and its impurity when produced. These difficulties, however, have been successfully overcome by MM. Brin, members of the Société d'Hygiène Français, who have succeeded (after the devotion of fifteen years of their lives to the subject) in perfecting a process by which oxygen is obtained in an absolutely pure state from atmospheric air, and this at a cost which places it as much within reach as the ordinary medicinal agents in daily use. This process of obtaining oxygen is really a most simple one. Although Boussingault stated in a report made to the French Academy of Science thirty years ago that oxide of barium was an unstable agent for the purpose, yet it is this selfsame agent that MM. Brin have succeeded in making their servant. Their anhydrous oxide of barium, placed in retorts heated to a given temperature, and served

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with a supply of purified atmospheric air, will give off every two hours oxygen at the rate of one cubic foot per pound of barium oxide. Perhaps the most interesting point in connexion with this process is that it is absolutely a mechanical one. There is no loss or waste of the agent employed—namely, the anhydrous oxide of barium. There is no visible difference under the microscope between the low and the peroxide, and no chemical change takes place. The oxygen is absorbed from the purified air passed through the retorts under pressure; it is given off again under vacuum; and the proof that in carrying out this method MM. Brin call to their aid no complex chemical decomposition is, that the same pound of barium, increased in weight when it takes up the oxygen, returns to its exact original weight when, under vacuum, the oxygen is yielded up. Moreover this same pound of barium is at once ready to perform, and repeat *ad infinitum*, its task of absorbing and yielding up this perfectly pure oxygen.

Park-street, W.

CASE OF MENSTRUATION AFTER REMOVAL OF PREGNANT UTERUS AND APPENDAGES.

By LAWSON TAIT, F.R.C.S.

E. P——, aged thirty-three, menstruates somewhat profusely at irregular times, and has done so twice in the last three weeks. This has continued since I removed the uterus (at the fourth month of pregnancy) in August, 1884. A large soft sarcoma grew from the fundus, and the whole uterus was infiltrated with nodules of the same growth; therefore the clamp was made to include as much of the organ as could be pulled up, and I believe the whole of the organ was removed. Previous to the operation, she tells me that she never had any sexual enjoyment, but that now she has it occasionally. The vagina is now (Nov. 22nd, 1886) greatly elongated, and a small pimple can be felt at the upper end of it, in the cicatrix.

Birmingham.

LARGE HÆMATOMA OF BUTTOCK; ASPIRATION.

By J. HEADLEY NEALE, M.B.ED., M.R.C.P. LOND.,
ASSISTANT-PHYSICIAN TO THE LEICESTER INFIRMARY.

ON the evening of Sept. 3rd, 1885, I was sent for to see Mrs. M——, the wife of a travelling photographer, who was stated to be suffering from persistent loss of sleep, following an injury. I found the patient, a stout comely-looking woman of fifty years of age, bathed in a profuse perspiration, and exhibiting signs of extreme mental as well as physical prostration. She complained of a dull aching pain in the region of the left buttock, which deprived her of any but the merest snatches of sleep, and gave me the following history:—One evening, about three weeks previously, she was leaning against the gate-post at the entrance of the yard in which her husband's photographic "saloon" stood, talking with a neighbour, when a two-horse waggon turned into the gateway. The horses shied, and, instead of making the curve, the waggon came over the corner of the pavement, and my patient was jammed between the near fore-wheel and the gate-post, from which perilous position she was rescued by the prompt action of her friend, who dragged her clear of the wheel. Since the accident she had been under the care of an unqualified practitioner. The application of some "oils" had raised a huge superficial sore—fortunately, however, *not* over the most prominent seat of injury, but doubtless adding in a great measure to the condition of prostration from pain and insomnia in which I found the patient. Careful inquiry elicited the fact that the bladder and rectal functions were normal, so I prescribed a draught containing bromide of potassium and chloral hydrate, promising to make a more systematic examination of the swelling on the following day.

This I did, and, on the principle of exclusion, made up my mind that I had to deal with one of three things—(*a*) malignant tumour,[1] (*b*) gluteal abscess, or (*c*) hæmatoma (unabsorbed). The size and period of growth negatived the first, in addition to which I thought I could detect obscure fluctuation. A subnormal temperature contra-indicated the second alternative, so I made the diagnosis that there had been fracture of the gluteal muscles with deep-seated hæmorrhage. An exploratory puncture with a fine trocar and cannula, placed the matter beyond a doubt, several drops of serous fluid with flakes of fibrin oozing through the cannula. On Sept. 7th, after cleansing the parts with a 1 in 2000 solution of corrosive sublimate (the discharge from the sore referred to smelling badly), I plunged a hollow needle attached to a Potain's aspirator into the most dependent part of the swelling, and drew off a quantity of blood-stained serum (17¾ oz., carefully measured) with flakes of fibrin in suspension. There was so little apparent diminution in the size of the tumour, that I felt convinced that all the fluid had not been evacuated, and reluctantly withdrew the needle, only to find it, as I had anticipated, plugged with fibrin. The patient expressed herself as much relieved, but in the course of a few days, the dull aching pain having returned, I aspirated a second time, using on this occasion a good-sized trocar and cannula, and removing 14½ oz. of fluid. Rapid resolution followed, and then the condition of the injured parts was plainly shown. Running downwards and inwards from the back of the great trochanter was a nodulated ridge, the contracted tendinous fibres of the gluteus maximus, which had been torn through close to its insertion, while the belly of the muscle hung as a flabby useless mass, giving an asymmetrical appearance to the buttocks. The patient made a rapid and complete recovery, with the exception that on flexing the trunk beyond a certain angle (as on stooping to pick up anything from the floor) she was unable to regain the erect posture without the aid of extraneous objects, such as a chair or table leg; and failing these she adopted much the same tactics seen in children suffering from pseudo-hypertrophic paralysis, by climbing up her own thighs.

I saw Mrs. M—— in July last, ten months after the accident, and found her in good health, but complaining that "the place ached a good deal in wet weather." Her daughter informed me that they sometimes had to help her up when she stooped, and if more fatigued than usual she could not get upstairs to bed without assistance. The patient allowed me to inspect the parts, and I found that the asymmetry persisted in a marked degree, a deep furrow indicating the line of fracture of the muscle.

Leicester.

[1] I have twice seen a sarcoma result from a hæmatoma following an injury, and have long regarded this as one of the "ultimate destinies" of blood-clot.

A CASE ILLUSTRATING THE NEED OF CAUTION IN THE USE OF SALICYLIC ACID.

By W. T. FREEMAN, L.R.C.P. Lond., M.R.C.S.,

IN connexion with the annotation in THE LANCET of Oct. 2nd on salicylic acid ("salicylated beer") the following notes should prove interesting.

A short time ago I was attending an old lady of fifty-nine years of age. My attendance to the time of her death extended over a period of three weeks, but she had been attended for a few weeks previously elsewhere by another medical man. Her symptoms ran as follows: A great feeling of malaise, of depression of spirits, with always more or less of a slight headache; tongue coated with brownish fur, especially at the back; sallow skin; stools clay-coloured; bowels opened freely every day; pulse during the whole of the three weeks full, and beating at the rate of from 105 to 110 per minute; never any rise of temperature; specific gravity of urine about 1020, acid, with distinct trace of phosphates, but no albumen or sugar. She was restless at times at night, even to the extent of getting out of bed aimlessly. I diagnosed the case as an obscure one, but expressed my opinion that she was suffering from congestion of the liver, and probably also from some congestion of the brain. The patient was generally of a feeble habit. On the twentieth day of my attendance, although she showed no alarming symptoms whatever, and as she became but slowly better, I suggested a consultation. She had improved, however, in these respects—the motions had become of an almost natural colour, and the headache was better; the rest of the symptoms were unchanged. The treatment to that day had been attending to the bowels, regulating diet, and keeping the patient quiet, whilst medicinally she had been taking a simple effervescing

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mixture of tartaric acid and bicarbonate of potash, with ten grains of bromide of potash in each dose, three or four times in the twenty-four hours. After most carefully considering the case, the gentleman I had called in came to the conclusion that a rheumatic taint was at the bottom of the remaining mischief, and prescribed for her fifteen grains of salicylic acid, together with small doses of carbonate of soda, carbonate of ammonia, and tincture of nux vomica three times daily. In this treatment I coincided. She was quite in a natural mood in the afternoon that we saw her together, and we were agreed that there was no cause for alarm, and that there was reasonable hope of her being restored to her usual state of health in the course of a few weeks. I saw her no more till next morning; she had then taken three doses of the salicylic acid mixture. I found her comatose and rapidly sinking. The urine contained albumen. We had another consultation as soon as possible, but she died in the course of a few hours. Although probably the brain symptoms were more severe all along than I expected, and most likely the head mischief would have ended her days, yet I cannot help feeling that our last attempts to cure our patient only resulted in the abrupt snapping of the thin cord of life she had left to her.

Pangbourne.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum allorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. THOMAS'S HOSPITAL.

POISONING BY CYANIDE OF POTASSIUM; RECOVERY; REMARKS.

(Under the care of Dr. ORD.)

THE following case is one presenting some points of great interest: the large amount of the poison taken, the severity of the effect produced, and the recovery from this condition, considering the duration of time which had elapsed between the taking of the dose and the commencement of treatment. Cyanide of potassium produces symptoms similar to those which follow the administration of prussic acid, and produces its poisonous effect with nearly the same rapidity. For the notes of the case we are indebted to Mr. A. A. Brockatt, late house-physician.

Sophia P——, aged thirty, was admitted at 4 P.M. on Oct. 4th, having taken cyanide of potassium with an intent to commit suicide about fifteen minutes previously. She appears to have been living a very unhappy domestic life, and took a piece of the salt, "the size of an ordinary lump of sugar," and chewed it, swallowing the greater amount, a stock being kept in the house for business purposes. In a few seconds she became very giddy, and her head swam; but she remembered nothing more until she found herself in bed at the hospital. According to a statement made, she fell suddenly on her face without uttering a sound; the assistance of the police was then procured and she was brought direct to St. Thomas's. One of the policemen removed several pieces of the salt from between her lips while in the house.

When seen at the hospital, about ten minutes later, she was completely insensible, and, except for an occasional gasping inspiration, was in a state of apnœa. Her face was flushed and of a livid hue, the limbs flaccid and cold, the pupils dilated, and the eyelids closed; the pulse was imperceptible at the wrist, and the jaws were tightly clenched. She had passed urine unconsciously, but not fæces. An odour of bitter almonds pervaded the whole room. The patient was supposed to be dead when brought into the hospital.

Artificial respiration was at once resorted to, with cold affusions and flagellation of the chest with a wet towel. The mouth having with great difficulty been opened with a screw gag, the contents of the stomach, which had the same characteristic smell, were pumped out, and about fifteen ounces of a solution of ferrous sulphate [illegible]ty grains to the ounce) injected. The stomach was not full. While this was being done the breathing entirely ceased, and artificial respiration had to be hurriedly resumed. An injection of forty minims of ether was administered, and her condition gradually improved, but artificial respiration had to be kept up more or less continuously for one hour, and for shorter intervals during another, as her breathing stopped whenever it was left off. Even at the end of this time the respiratory acts were extremely shallow and irregular, but they improved markedly after another ether injection. Previously to this a quantity of solution of carbonate of potash had been poured down her throat.

The patient gradually began to recover consciousness in about two hours after admission, but appeared to be in a very dazed condition, was extremely sleepy, and could give no account of herself. She recovered, however, during the evening, and complained of nothing but extreme drowsiness and an uneasy sensation of heat behind the sternum and in the epigastrium. Before recovering consciousness she was very sick, and continued so at intervals for a few hours: the first vomit gave a decided prussian blue tinge with sulphuric acid, and was of a dirty-green colour. Her breath smelt faintly of bitter almonds during the next day, and she slept almost continuously, but she had no further symptoms, and left the hospital in four days quite well. She admitted having been drinking during the day, but was not intoxicated.

Remarks by Mr. BROCKATT.—The above is one of the few recorded cases of recovery from poisoning by cyanide of potassium. The dose in this case was a very large one. Several cases have been recorded which have proved fatal after five grains, but it was here estimated that she must have had at least forty grains. The great symptom was the persisting interference with respiration, and I have no doubt that perseverance with artificial respiration, combined with the subcutaneous injection of ether, was the great factor in saving the patient's life. It seems unlikely that antidotes could have had much influence in the happy result attained, as fifteen minutes had elapsed before they were administered.

LINCOLN COUNTY HOSPITAL.

THREE CASES OF OVARIAN TUMOUR; OVARIOTOMY; RECOVERY; REMARKS.

(Under the care of Mr. T. M. WILKINSON.)

FOR the following notes we are indebted to Mr. M. Johnston, house-surgeon.

CASE 1. *Multilocular Cystic Disease of the Left Ovary: Small Cyst of Right Ovary.*—E. K——, aged fifty-four, was admitted on Feb. 15th, 1886, having been sent by Dr. Lett of Redbourne. Married; has had five children, one (the last aged twenty-one) still living; the others died of consumption. Had always been healthy. She first noticed pain with swelling in the left iliac region about eight months ago, which had increased rapidly in size since that time. Menstruation had ceased for about twelve months, with one exception about midway during that interval, when it lasted seven days, and whilst in the hospital a discharge came on lasting three days. Her appearance is healthy although thin and emaciated. Heart and lungs normal. Abdomen distended by a tumour, which is dull on percussion for three inches above the umbilicus, resonant in left flank, but dull in the right; the tumour appears movable, and composed chiefly of solid matter. There is a great deal of fluid in the peritoneal cavity superficial to the tumour. Abdomen measures 42 in. around the umbilicus. Uterus high up, normal, and free from tumour.

Ovariotomy was performed on March 9th. Chloroform was first administered, but, causing asphyxia, the A.C.E. mixture was given, and answered well. On opening the abdomen there was a rush of peritoneal fluid. The tumour was a multilocular cyst, with a large amount of solid and semi-solid gelatinous material, which weighed 7¼ lb.; the amount of fluid, cystic and peritoneal, was five gallons. There were some slight adhesions to the omentum. The original incision had to be considerably enlarged to admit of the removal of the tumour. The pedicle was tied with silk, cut short, and returned. On examining the right ovary, it was found diseased, a single cyst, about the size of a small orange, being removed with the ovary. The abdominal cavity was sponged out, and the edges brought together with deep carbolised gut and superficial silk sutures, a glass drainage-tube being left at the lower part of the wound. The dressing was dry

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antiseptic gauze. While being lifted into bed the patient became collapsed; the drainage-tube was found to be filled with blood. This was removed from the tube, and as there was no recurrence the cavity was not opened again. Serum tinged with blood continued to pass through the tube for some days. When the tube was removed the wound kept open by it healed in a few days. The bleeding was caused by the tube being caught in the bandage and wounding some intestine.

This patient progressed slowly but steadily, her highest temperature being 101·6°. She was ultimately discharged cured.

CASE 2. *Multilocular Cystic Disease of Left Ovary.*—G. D——, aged twenty-four, a domestic servant, was admitted on April 12th, 1886. The patient is thin and short. Her family history is good; she has always been healthy, and is unmarried. The abdomen has been increasing in size for twelve months, but this was not noticed by the patient until attention was drawn to it by others. For the last three or four months she has had pain in the right iliac fossa. Menstruation regular. A distinct tumour can be felt; dull on percussion. There is resonance in the right and left flanks, and two inches above the umbilicus. Fluctuation all over the tumour. The uterus is depressed, but movable from the tumour.

April 21st.—The A.C.E. mixture having been administered, a small incision was made in the abdominal wall for two inches and a half, and the cyst exposed and tapped. It was then found to be multilocular, and to have a solid-feeling growth, consisting of smaller cysts containing gelatinous matter, situated in the upper part of the tumour, and to the right side, this was about the size of a fœtal head. The pedicle was broad and thin; it was ligatured with China silk and returned. There was fluid in the cavity—not cystic,—which was sponged out; the wound was closed with silk sutures and dressed with iodoform. The fluid from the tumour measured 1 gal. 6 pts. The wound healed by first intention, the stitches being removed on the third day.

The temperature in this case rose to 102° shortly after operation, ever after being below 101°. The patient made a most satisfactory recovery, and was discharged from the hospital cured.

CASE 3. *Cystic Disease of Left Ovary; Dermoid Cyst.*—B. S——, aged thirty-two, was admitted on May 10th, 1886, having been sent by Dr. Lett. Married; no children. Menstruation regular. Has always been healthy until a year ago, when she began to lose flesh. Two months after this she noticed a swelling in the left iliac region, but as there was no pain she took very little notice of it. For the last three months it has been increasing rapidly, and causing pain in her left groin and loin. The abdomen measures 34½ in. at the umbilicus, and is occupied by a swelling partly solid and partly fluid—the solid portions being in the right hypochondriac and left lumbar regions. The percussion-note is dull all over the abdomen, except in the flanks and above a line drawn transversely two inches above the umbilicus. Uterus normal and freely movable.

On May 25th an operation was performed. The A.C.E. mixture having been administered, an incision three inches long was made, and the fluid withdrawn from a large cyst occupying the front of the tumour, which was still too large to be removed through the opening, so the incision was continued another inch. With some difficulty the tumour was removed, when it was found to be a dermoid cyst containing a large quantity of vernix caseosa—hair—bone, and partially developed teeth. The weight of the solid portion was 5 lb. 2 oz., the fluid being small in quantity. The pedicle was ligatured and returned, the cavity being thoroughly sponged out. The wound was closed with silk sutures, and dressed with iodoform and dry lint. A few adhesions to the parietal peritoneum were broken through, and others attached to the intestines were divided between double catgut ligatures.

The highest temperature after operation in this case was 100°. The patient convalesced satisfactorily, and was discharged cured.

Remarks.—Before operation the patients were carefully dieted, and in addition had baths containing carbolic acid. The operations were done in the small general ward in which the patient was to remain, the ward having been previously thoroughly disinfected. The temperature of the room during the operation was 70°, being afterwards kept at 65°. For a quarter of an hour before and during the operation the carbolic spray was at work, but not close to the patient. The hands of the operator and assistants were washed in carbolic solution, and the usual precautions with regard to sponges and instruments were taken. After the operation the patient was put to bed, and carefully nursed, watched, and fed either by mouth or rectum according to circumstances. It is not necessary to enter into the details of their convalescence; suffice it to say that they all responded well to the efficient nursing provided for them.

HULL ROYAL INFIRMARY.

SCALD OF THE LARYNX IN A CHILD; TRACHEOTOMY; RECOVERY.

(Under the care of Dr. LUNN.)

FOR the following account we are indebted to Mr. Edward Harrison, house-surgeon.

Charles C——, aged two years and four months, was admitted on Jan. 2nd, 1886, at 6.30 P.M. At 2.30 P.M. on the day of admission he attempted to drink from the spout of a kettle containing boiling water.

On admission there was some cyanosis and sucking in of the lower ribs during inspiration, He was at once put into a tracheotomy cot, with a steam kettle, in a warm room. At 8 P.M. the symptoms were much relieved. At 9 P.M. he became much worse; there was much cyanosis and sucking in of the chest walls during inspiration, and the breathing was stridulous. Tracheotomy was performed, and at once relieved him.

On the following morning the temperature was 103·4° F. This came down gradually day by day. For the first few days there was much bronchial discharge, so that the tube had to be cleared with a feather about every five minutes. His pulse was 150, and respiration 60 to 80. He was treated with brandy, ipecacuanha wine, and aromatic spirits of ammonia, and had poultices applied to the chest. On the 19th the silver Bryant's tube was changed for an indiarubber one, in which a hole was cut to allow of respiration through the larynx. On the 22nd he wore a cork in the tube all day, and on the 23rd the tube was removed and the wound allowed to heal. The after-progress was uninterruptedly good. He was discharged on Feb. 5th, well.

INTESTINAL OBSTRUCTION CURED BY INVERSION AND INJECTION OF AIR.

(Under the care of Mr. CRAVEN.)

Frederick F——, aged four, was admitted on Jan. 24th. The child was well and the bowels acted regularly daily until Jan. 15th, when they did not act. Vomiting began the same evening and continued until the day of admission, when it had become very offensive. No blood or mucus was passed. The child complained of abdominal pain, and refused to take any food.

On admission the face was flushed and looked pinched, and he was much emaciated. Abdomen distended; pain referred to umbilicus. Tongue red and dry; pulse small and frequent. He vomited once, but the vomit could not be collected; it smelt, however, stercoraceous. Under chloroform the abdomen was found to be distended and tympanitic all over; no sausage-shaped tumour to be felt. Per rectum a few scybala were removed from its lower part, and a mass was then felt which seemed to be scybala covered with mucous membrane. The child was then inverted and air pumped into the bowel; this could be felt entering by the hand placed on the abdomen. After a short time the air seemed to enter more easily, judging by the force required to squeeze the syringe. The inflation was then discontinued and the finger again introduced into the rectum, where the fold of mucous membrane had disappeared, and some free scybala were found and removed. The finger could now be passed above the brim of the pelvis, where more scybala were lodged. An enema of a pint of warm water was then injected, which brought away some hard lumps, but no blood or mucus. The abdomen was rubbed with an oiled hand, which assisted in expelling the water and a small formed motion. Three minims of tincture of belladonna and three of tincture of opium were given in a teaspoonful of water, but were immediately vomited; the vomit was stercoraceous. A twelfth of a grain of morphia and of belladonna was introduced as a suppository, and the child passed a good night.

Jan 25th.—The mixture of opium and belladonna was

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ordered three times a day; a teaspoonful of milk every half hour, Brand's essence, and brandy.

26th.—Vomited after drinking a quantity of milk in the absence of the nurse.

28th.—Bowels acted twice. Is able to take more food, and is gaining flesh.

Feb. 2nd.—Bowels acted freely. Is able to take chicken and egg, &c.

7th.—Bowels have acted daily since the 2nd. Has no pain; abdomen soft and natural. Has gained three pounds in weight since Feb. 1st.

14th.—The child was discharged well.

Medical Societies.

ROYAL MEDICAL & CHIRURGICAL SOCIETY.

The State of the Femoral Artery after Ligature for Popliteal Aneurysm.—Richter's Hernia or Partial Enterocele.

AN ordinary meeting of this Society was held on Tuesday last, Mr. G. D. Pollock, F.R.C.S., President, in the chair.

Mr. W. S. SAVORY contributed a paper on the effect upon the Femoral Artery of its Ligature for the cure of Popliteal Aneurysm. The paper contained an analysis of twenty-six specimens in the museums of the London hospitals in which the femoral artery had been tied in Scarpa's triangle for the cure of popliteal aneurysm. Of these specimens seventeen were complete. Of these seventeen, the artery was pervious throughout in thirteen, and partially closed in four. In none was the artery impervious throughout. Of the seventeen specimens fifteen were cured. In these the artery was pervious in eleven and partially closed in four. In two the operation had failed to cure, and the artery remained pervious in both. Mr. Savory gave details of cases from his own practice. In one case, a man aged thirty-seven, a hawker, with popliteal aneurysm, the pulsation of which could be reduced by controlling the femoral, there was a three months' history. In February the femoral artery was tied in Scarpa's triangle. A slight return of pulsation occurred on the third day. One year afterwards the aneurysm had returned, with slight pulsation, and formed a bigger tumour. It was treated by rest and elastic bandages without much effect, for six months later it was in the same state. Then the patient was anæsthetised, and the leg bandaged with Esmarch's apparatus; the popliteal artery was tied in the upper part of the popliteal space. This operation was perfectly successful. In a second case the artery was ligatured first in Scarpa's space, next in Hunter's canal, and finally a third time in the upper part of the popliteal space. The question of reconsidering the method of ligaturing the popliteal artery for popliteal aneurysm ought to be entertained. Mr. Savory was disposed to think that this method would prove most useful, and said he should generally prefer to adopt it in future.—Mr. G. D. POLLOCK said that in his experience ligature of the external iliac artery was very successful in obliterating the vessel below.—Mr. JOHN CROFT concluded from the evidence in Mr. Savory's paper that ligature of an artery in its continuity should be practised by the application of two ligatures, with division of the vessel between. An additional element of safety was added when the two ligatures were used.—Mr. J. W. HULKE thought that Mr. Croft's remarks were beside the subject of the paper. The author's paper appeared to him to point to the conclusion that the best method of treating popliteal aneurysm was by tying the artery close to the aneurysm. Doubtless in past times such operations were frequently fatal from secondary hæmorrhage and other accidents, but then it was likely that the ligatures were not thoroughly aseptic.—Mr. JOHN WOOD said that the outcome of Mr. Savory's valuable paper was a return to the practice of Anel, who ligatured the artery just above the aneurysm. But since Anel's time a complete revolution had taken place in the treatment of surgical wounds. The employment of the method of double ligature, with division between, prevented tension of the parts around the artery, and strict antiseptics also prevented inflammation; hence the chief dangers of the original Anel's operation were removed. The artery should be tied before the aneurysm attained an enormous size, lest secondary hæmorrhage and gangrene might result from the great tension. The remarks of Mr. Croft were not so irrelevant to the paper as Mr. Hulke seemed to think.—Mr. THOMAS SMITH considered that ligature of the popliteal instead of the femoral artery was preferable for popliteal aneurysm; the operation was not difficult with the modern means at our disposal, and by the use of Esmarch's bloodless method. It was much more likely to produce a radical cure. He had ligatured this vessel in two or three other cases. In one he had previously ligatured the femoral. He was very glad that Mr. Savory had come to practise the method of double ligature with division between. The fact that the artery was pervious beyond the ligature was stated in recent books, and especially in Messrs. Ballance and Edmunds' pamphlet.—Mr. A. A. BOWLBY said that Mr. T. Smith had also tied the popliteal artery as a primary operation in one case of popliteal aneurysm. The artery was tied in the upper part of the popliteal space; the return of pulsation in the tibial arteries occurred rather sooner than when the femoral was tied; the aneurysm was cured perfectly. He alluded to one pathological point as to the condition of the artery just above the aneurysm; it was likely to be fully as healthy as the artery in Scarpa's triangle.—Mr. C. BALLANCE said that in his numerous experiments on the ligature of large arteries in their continuity in animals he had never found the artery obliterated for any distance beyond the ligature.—Mr. W. S. SAVORY, in reply to Mr. Smith, said that his paper dealt with the femoral artery, whereas Mr. Ballance's experiments were concerned with other arteries. The variability of the result would depend largely on the artery tied. He was not aware that any ordinary book stated that the artery was pervious from the ligature to the aneurysm. In reply to Mr. Pollock, he was not prepared to state the proportion of figures in which the femoral was pervious or impervious after ligature of the iliac artery. He agreed with Mr. Hulke that his paper was in no way concerned with the employment of two ligatures instead of one. The evidence on that point was in favour of one ligature, and of silk or twine over any form of animal membrane. It was true that in one case he had recently ventured to depart from his usual practice, but if he had to tie the femoral artery to-morrow he should use but one, and that a silk or twine ligature. He thought that the introduction of antiseptics and of the double ligature into a discussion on his paper was irrelevant.

Mr. FREDERICK TARVES read a paper on Richter's Hernia or Partial Enterocele. In this form of hernia a part only of the circumference of the bowel is engaged in the hernial orifice and there strangulated. The strangulation may be complete, and may proceed to gangrene without the lumen of the bowel being entirely occluded. The nomenclature of this rupture is obscure. By the majority of English writers it receives the title of Littré's hernia. The hernia described by Littré in 1700 was not of the character now under notice, but was an example of the escape into a hernial sac of a Meckel's diverticulum. These two varieties should be kept quite distinct. The author traces the history of these forms of rupture as displayed in surgical literature. The name of Richter's hernia is proposed, since the first scientific recognition of the condition was due to that surgeon. In Richter's hernia the small intestine is involved, and is held by that part of the gut that is most remote from the mesentery. The condition is met with more frequently in women than in men, and in femoral than in inguinal ruptures, is limited to adults, and occurs in recent as well as in old-standing protrusions. The mode of formation of the hernia was discussed, and the question of the formation of diverticula considered. The author described four cases that occurred in his own practice. The account of the clinical and pathological aspects of the condition was based upon the examination of thirty-three recorded cases. The symptoms tend to assume a milder character than is observed in the usual form of strangulation. The vomiting is slighter, less frequent, often of late onset, and is very rarely feculent. Hiccough is uncommon. The bowels may remain open during the whole progress of the strangulation, or may act occasionally, or will respond to aperients. In certain instances persistent diarrhœa may exist. Tympanitic distension of the abdomen is uncommon. The hernial tumour is very small, and often not recognised. The gut is practically irreducible by taxis, and, if prolonged efforts are employed, reduction *en masse* not unfrequently occurs. The mortality is exceedingly high, being represented by 62·2 per cent. This depends upon the difficulties in the way of diagnosis, upon the irreducibility of the gut, and upon the remarkable frequency of gangrene. The mortality after

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herniotomy is proportionately high. The special features in the treatment are considered. The hernia deserves notice on account of the peculiar features involved in its pathology, its special clinical aspect, its grave prognosis, and the light that it throws upon the production of strangulation symptoms in general.—Mr. J. W. HULKE said that Littré described in 1700 hernia of a Meckel's diverticulum, but a second form of partial hernia was described in 1714 by Littré also, in which it was distinctly stated that the enterocele was not a loop of colon, and that not the whole of the circumference of the bowel was included. He rather thought that Richter did not fully comprehend the matter. In his second volume, published in 1779, references were made to small herniæ in which the whole circumference of the bowel was not included as existing between the xiphoid cartilage and umbilicus, which were sometimes omental and sometimes intestinal. Richter spoke of but one case, and of that he gave no description; probably, therefore, he neither operated on it nor dissected it. Reike described congenital and acquired diverticula; the latter were also known as partial enterocele. Ruysch treated of hernia lateralis, which was doubtless the same condition. Dieffenbach had a separate chapter on this affection, and had had two cases in his own practice. This form of hernia could hardly be called very rare. It was exceedingly difficult to distinguish it from an ordinary hernia, and he doubted if we could depend on the symptoms in a differential diagnosis.—Mr. TREVES, in reply, agreed with Mr. Hulke that a great deal of confusion had existed on the subject of the original description of the hernia; but he also thought that if Mr. Hulke had heard certain parts relating to this question, and which had been suppressed in the reading of the paper owing to the great length of the communication, he would have concurred with him (Mr. Treves) in assigning the first accurate description of the hernia to Richter.

CLINICAL SOCIETY OF LONDON.

Diphtheritic Paralysis and Heart Disease.—Acute Myositis.—Gastric Ulcer.

AN ordinary meeting of this Society was held on the 10th inst. Mr. Thomas Bryant, F.R.C.S., President, in the chair. Dr. Montagu Murray and Mr. Frederick Treves were elected auditors for the annual general meeting.

Dr. HERRINGHAM read a paper on two cases of Diphtheritic Paralysis with Heart Affections and Clonic Movements. On admission there was in both great weakness of the legs, with a tottering gait, and the deep reflexes were abolished. The legs were in other respects normal. In one case, a girl aged nine, eight or nine weeks from the beginning of the weakness the knee-jerk was suddenly present in excess, and with it ankle-clonus. The jerk became normal in four weeks; the clonus vanished in six weeks. The heart, which was normal on admission, became affected during her stay in bed with mitral disease, and so remained after an interval of ten months. The other case, a boy aged four, did not ever show ankle-clonus or extensive jerk, but a few days after his discharge he returned with a faint mitral murmur. If, as is now supposed, diptheritic paralysis is due to disease of the central grey matter of the cord, this case is in favour of the theory that the deep reflexes depend upon this part, and are increased in disease not because the brain's veto cannot travel down the cord, but because the grey matter is itself altered.—Dr. S. COUPLAND considered that if the murmur and cardiac enlargement occurred during the diphtheritic attack, myocarditis might have been the cause. Diphtheritic paralysis was more likely to supervene if cases were not treated from the first as Dr. Abercrombie had pointed out. Loss of the knee-jerks was a constant symptom of the paralysis. He had seen cases which were ataxic rather than paralytic.—Dr. ANGEL MONEY had made some observations on the mode of disappearance of the knee-jerk in diphtheritic paralysis. The jerk became excessive—an illustration of the "irritable weakness" of old authors—prior to its being lost. He thought this would throw some light on the occurrence of phenomena of exaggeration preceding the proper re-establishment of the jerk when the paralysis had passed away. In some cases the tap on one ligamentum patellæ was followed by excessive contraction of the triceps on that side and by a well-marked contraction of the triceps of the other side, showing that the nerve discharge in the cord had passed across from one anterior horn to the other.—Dr. MACLAGAN thought diphtheritic paralysis was anæmic in origin in many cases. Ataxic paralysis occurring after diphtheria disappeared under tonic treatment, as in the case of a gentleman, aged eighty-two, that had been under his care. Diphtheria affected the myocardium, and so might generate a murmur, as chorea did by causing irregular spasm. He asked whether there had been albuminuria in the cases.—Dr. PERCY KIDD objected to the view that diphtheritic paralysis was of anæmic origin. In many fatal cases there were changes in the anterior spinal cornua, as Déjérine, Landouzy, and himself had shown. Neuritis of peripheral nerves and changes in the anterior and posterior roots of nerves had been observed in cases of diphtheritic paralysis.—Dr. T. BARLOW could not allow that the paralysis was of anæmic, functional origin. In other ordinary cases of anæmia such symptoms as nasal voice, failure of accommodation, and paralysis of oculo-motor nerve were not observed, and such a combination would suggest diphtheritic paralysis, not anæmia. He could confirm Dr. Money's observation to the effect that there was a period of irritability preceding the loss of the knee-jerk. He considered that dilatation of the myocardium would explain the murmurs observed in diphtheria.—Dr. S. WEST also agreed that affection of the muscular substance of the heart would best explain the murmurs, were it not that they had lasted ten months; on the other hand, the fact that the murmurs vary so much was in favour of their myocardial origin.—Dr. HERRINGHAM, in reply, said that the enlargement of the heart persisting so long, and the existence of an accentuated second sound, seemed to him to point to the valvular origin of the heart disease.

Mr. TREVES read a paper on Acute Myositis. A carman, aged twenty-two, was admitted into the London Hospital with "an inflamed arm." Three weeks previously he was exposed to severe cold when driving, and had been wet through. The chief symptoms were rigor, malaise, fever, loss of power in the arm, and cramp-like pain. Similar pains appeared in the calves of both legs. The affected parts were swollen and tender. The trouble in the legs soon subsided, but the swelling in the left arm increased. The muscles, notably the deltoid and biceps, were enlarged, and were very hard and tender. There was fever. Under treatment, extending over three weeks, the induration in the muscles gradually disappeared without suppuration, and the man made a complete recovery. Mr. Treves considered the case to be one of acute myositis, and entered fully into the points raised by the differential diagnosis. He divided acute myositis into the following varieties: 1. Simple myositis due to injury or the direct extension of inflammation. 2. Myositis from cold. 3. Infective myositis. This interesting affection has been fully described by Connor, Hayem, and Scriba. The usual centre of infection is a common boil, and the similarity of the disease to acute osteo-myelitis may be considered to have been demonstrated. 4. The myositis of trichinosis. The present patient was in the habit of eating a quantity of ill-cooked pork, and Mr. Treves discussed the phenomena of cases of mild trichinosis that undergo spontaneous cure. 5. Secondary myositis—i.e., that attending certain eruptive fevers,—the myositis of syphilis, and the muscle inflammations of pyæmia, puerperal fever, scurvy, glanders, and ulcerative endocarditis. The general phenomena of true muscle inflammation were considered, together with the usual seats of that inflammation and the clinical evidences of the disease.—Dr. DE HAVILLAND HALL said that acute glossitis had been clearly traced to "cold."—Mr. R. J. GODLEE said that in a case of myositis ossificans occurring in a child the disease began as a tender swelling in the muscle, and it was supposed that a tumour was developing.—Dr. EWART asked whether the cases described were true myositis or perimyositis. In rheumatic conditions like lumbago the fibrous sheath was probably affected. He thought that a distinction of a pathological kind into parenchymatous and interstitial inflammations would improve the classification.—Dr. GOODHART spoke of two cases, both of middle-aged men with a suspicion of gout, in whom severe pain in one calf of the leg was the preface to a hard indurated condition of the muscle, which lasted from two to three weeks, and in one of them possibly suppuration occurred.—Dr. COUPLAND mentioned a case of embolism in a middle-aged man suffering from chronic Bright's disease. There was sudden pain in the right elbow, followed by sudden swelling, which

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rapidly increased, and suggested hæmorrhage. The artery was tied, but the necropsy showed that there was no rupture of the artery. There had formed an embolic aneurysm of a branch of the brachial artery. Would Dr. Ewart include in the term myositis the remarkable degeneration in muscle that occurred in typhoid and other fevers?—Dr. S. PHILLIPS referred to a case with contracted elbows and tender muscles, apparently due to a past gonorrhœa. In another case a young man was seized with intense pain and tenderness in both calves, suggesting deep phlebitis; but the signs disappeared; the patient had gonorrhœa.—Dr. S. WEST spoke of the case of a young man with an obscure acute affection of muscles. It did not appear to be simple rheumatic fever, for the muscles of the arms, calves, and thighs were tense, hard, and extremely tender. There was high fever and rapid wasting of the muscles. Albuminuria and œdema were also present. Trichinosis was thought of, but the case must remain undiagnosed.—Mr. FRED. TREVES specially avoided speaking of glossitis. He could not grasp the idea of glossitis from cold. Erb had published an account of the anatomical changes in myositis, and had shown that the true muscular tissue was involved. Did muscular rheumatism set in with a rigor and high continued fever lasting two or three weeks? Did such symptoms occur in gonorrhœal rheumatism?

Dr. MONTAGU MURRAY read a paper on a case of Gastric Ulcer with unusual complications. An anæmic girl, aged twenty-three, was admitted on Feb. 15th with indefinite gastric symptoms. On the 16th the temperature rose suddenly to 103·6°F., a sharp pain was experienced in the left side, and a pleuritic rub could be heard. On the 17th the abdomen was found to be tender and swollen. During the 17th and 18th there was severe vomiting. Hæmatemesis began on the 19th. At first the blood was bright red, and the amount ten ounces, but subsequently the quantities were smaller and the colour much darker. Patient rapidly became weaker, and died on the 22nd. Vomiting ceased four hours before death. At the post-mortem acute left pleurisy and acute peritonitis were found. On opening the stomach a small ulcer was seen at the cardiac end; its outline was roughly circular, its diameter an inch, its wall thickened and precipitous, and its floor composed of peritoneum, perforated in the centre by an aperture one eighth of an inch in diameter. Three questions were discussed: (1) The age of the ulcer; (2) the time of the perforation; (3) the connexion between the ulcer and the inflammation of the serous membranes. 1. It was argued that while the symptoms on admission did not clearly point to ulceration, yet when considered with the subsequent history and the post-mortem appearances, it was clear that the ulcer must have been present at that time. The immediate cause of the hæmatemesis was probably the straining during the severe vomiting which preceded it. 2. That perforation was a cause of the pleurisy and the peritonitis was rejected on the ground that the hæmatemesis did not begin until after the onset of the three complications; that the vomiting did not cease until four hours before death; and that there was no evidence of extravasation from, or of inflammation in the neighbourhood of, the perforation, which was believed to have coincided with the cessation of vomiting. 3. The connexion of the ulcer with the pleurisy, and peritonitis was rendered probable because of the existence of communicating lymphatics; the occurrence of left pleurisy with an ulcer at the cardiac end; the rarity of the two conditions occurring simultaneously; and the absence of any other discoverable cause.—Dr. MITCHELL BRUCE said that cases of perforation and peritonitis were of great interest, not only to the physician, but also the surgeon. In Dr. Murray's case it seemed clear that peritonitis preceded perforation.

The following card specimens were shown:—Dr. A. H. Robinson: Venous Angioma of Leg. Mr. Pearce Gould: Branchial Fistula of Pinna of Left Ear. Dr. Herringham: Mitral Disease after Diphtheria. Mr. Harrison Cripps: Valvular Left Lumbar Colotomy.

MEDICAL SOCIETY OF LONDON.

Treatment of Lateral Curvature of the Spine.—A New Method of Excision of the Knee.

AN ordinary meeting was held on the 6th inst., Mr. R. Brudenell Carter, F.R.C.S., President, in the chair.

Mr. WM. ADAMS read a paper on the Advantages of Gymnastic Exercises in the Horizontal Position in the Treatment of Lateral Curvature of the Spine. The author recommended a combination of the various methods, or so-called systems, of treatment—such as recumbency, muscular exercises or gymnastics, and mechanical support,—rather than relying upon any one system exclusively. The degree in which they should be combined must vary according to the nature of the case, age, and other circumstances. For gymnastic exercises in the horizontal position Mr. Adams had recently employed an improved exercising plane, made by Mr. Ernst at Mr. Adams's suggestion, and exhibited to the Society. The plane is 6 ft. in length, and made on the incline, having a sliding board, half the length fitted with rollers, and movable up and down the inclined plane in metal grooves at the sides. The exercise essentially consists in the patient drawing herself up the inclined plane whilst the body is resting on the sliding board or movable stage. This movement may be repeated several times—say from five to ten at the commencement—after short intervals of rest, and gradually increased, but always avoiding fatigue. Exercises on the plane and the trapeze bar may be repeated two or three times a day, and lasting half an hour each time, constituting a plan of home gymnastics. Mr. John Shaw was the earliest advocate of horizontal gymnastics, and illustrated an exercising plane plate in his work in 1823. This was modified by Mr. Ainsbury, but the plane exhibited embodied the principle of Mr. Shaw's plane with several useful appliances for special exercises. By the combination of recumbency with gymnastic exercises, and the addition of mechanical support in some form best adapted to the requirements of each case, the spinal curvature, when slight, would be removed, and in the later stages its progress would be arrested.—Mr. EDMUND OWEN considered that jackets of poroplastic material and plaster-of-Paris should not be employed, for the muscles were by such supports rather weakened than strengthened.—Mr. BERNARD ROTH expected to hear of a new departure, and was disappointed. He objected to the systematic employment of the recumbent posture, as not calculated to promote muscular tone. The treatment he advocated would be found in detail in Mr. Heath's Dictionary of Surgery.—Mr. JAMES BLACK was convinced that posture and exercise were the correct treatment.—Mr. WALTER PYE thought there were severe cases of scoliosis that necessitated the use of some spinal support.—The PRESIDENT said that Dr. Little had advocated gymnastics for the treatment of spinal deformity twenty-five years ago.—Mr. W. ADAMS said that a combination of different systems for different cases was the correct method of treatment. He did not believe that muscular exercises alone could remove confirmed slowly-produced osseous deformities. The instruments were merely used as passive supports.

Mr. HERBERT ALLINGHAM read a paper and showed cases of a New Method of Excision of the Knee. The operation consists in making a vertical incision over the joint in front, beginning two or three inches above the patella, and prolonged over the patella down to the tubercle of the tibia. The knife splits right through the quadriceps tendon above the patella into the synovial pouch there. The soft tissues over the patella are divided to the bone, the knee-cap sawn through, dividing it into two lateral halves, then the ligamentum patellæ is also split down to the tubercle of the tibia. By this means the joint may be thoroughly exposed by drawing outwards each half of the patella and associated structures to its corresponding side of the joint. The two halves of the patella are wired when the operation is finished. He claimed the following advantages for the operation:—1. The attachments of the fascia lata, the lateral ligaments, and the prolongation of the vasti to the tibia and fibula are not divided, and consequently there is much more support to the joint during the healing process, and when the leg is well. 2. Above the patella the synovial pouches are well opened, and all the synovial membrane can be thoroughly removed. 3. Dislocation of the tibia backwards and tilting of the femur forwards, which commonly occur after the operation, are thus prevented. 4. The joint and the end of the bones can be thoroughly examined, which was not possible by the method of lateral incisions. 5. The undivided quadriceps is a strong antagonist to the hamstring muscles, and should the splint be left off the leg is much less likely to become bent. 6. Progression is greatly improved, the attachment of the quadriceps being neither divided nor the muscles shortened, as must necessarily take place when either the transverse H or U shaped operation is performed. 7. And, above all, as we hope after excision

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to obtain movement in the knee-joint, the chances, Mr. Allingham thought, of such a result being brought about will be greatly facilitated by the operation described. In future operations Mr. Allingham said he would remove thoroughly the whole synovial membrane, and only dig out with a gouge the diseased spots on the cartilage, and should not in any way interfere with any of the cartilage that looks healthy. If the crucial ligaments are not extremely diseased they should be left undivided. The joint should be kept at absolute rest until the wound has healed, when passive motion may be commenced.—Mr. WILLIAM ADAMS thought nothing could be better than the result in the case shown.—Mr. EDMUND OWEN considered that the hæmorrhage would be less from the joint in Mr. Allingham's method, which he should certainly practise, but rather as erasion than excision of the joint.—Mr. J. H. MORGAN always avoided excision as far as possible, and this would certainly be obtained by Mr. Allingham's method, which he hoped in future to try.—Mr. ALLINGHAM, in reply, said that a good view of the whole of the interior of the joint could be obtained.

Intra-peritoneal Hæmorrhage in a Newly-born Infant.—Anæsthetics.

At the ordinary meeting held on Monday last,

Dr. KESER read notes of a case of Intra-peritoneal Hæmorrhage in a newly-born infant of the male sex. The child was born at full term on April 29th, and the labour was normal. The child was in a state of apparent asphyxia, but respiration was easily established. There was slight subconjunctival hæmorrhage on the right side. On May 1st swelling of the scrotum was observed, and the penis was œdematous. On May 4th the scrotum was much more swollen. The temperature in the rectum was 98°. The abdomen became swollen and the lips were pale. The cord separated on that day without hæmorrhage. The child died on the ninth day. There was an ecchymosis in the middle of the back. Melæna or hæmatemesis was not observed. The spleen was enlarged, and measured 9 cm. in length, 5 cm. in breadth, and 2 cm. in thickness; the upper half was swollen and congested, and very dark from hæmorrhage, which seemed to have come from a lesion that looked like an infarct. According to Birch-Hirschfeld the size of the spleen in a child eight days old was 4 cm. by 3 cm. The peritoneal cavity was full of dark fluid blood, the amount escaping being about 8 oz. The splenic artery appeared to be normal, as well as the other branches of the aorta. There were no hæmorrhages or infarcts in any other organs. The mother had had eight pregnancies. The first child died at the age of eighteen days, but the cause of death was unknown. After this child five stillbirths occurred. The seventh child was born at full term, was nursed by the mother, and remained well until the end of the fourth week, when epistaxis set in, followed by hæmatemesis and melæna; large ecchymoses appeared on the trunk and limbs, and death ensued after a week's illness. The mother had no tendency to metrorrhagia or to any other form of hæmorrhage. There was no hæmophilic history so far as could be obtained. Spontaneous rupture, as probably occurred in the case recorded, was very rare. Ritter, who collected 132 cases of hæmorrhage in new-born children, had never observed it. Grandidier had observed intra-peritoneal hæmorrhage, but the source of the blood was not discovered. Steffen found a rent in the convex surface of a soft spleen in one case of intra-peritoneal hæmorrhage. Billard found at the necropsy of a child six days old a large quantity of blood in the stomach and intestine, and an enlargement of the spleen, which was ruptured; there was but a tablespoonful of blood in the peritoneal cavity. Dr. Keser could not detect the source of embolism, but believed that there was an infarct in the spleen as the result of arterial obstruction.—Mr. J. H. MORGAN related a case of icterus neonatorum attended with severe hæmorrhages, and due to congenital obliteration of bile ducts.

Mr. MARMADUKE SHEILD read a most elaborate and comprehensive paper on the Administration of Anæsthetics. He indicated the methods to be employed and the agents to be used; and the various operations, circumstances, or diseases which required special plans of administration were dealt with *seriatim* and in detail. He advised Clover's apparatus and ether in the great majority of cases.—Mr. R. BRUDENELL CARTER referred to the difficulties attending operations on the eye when ether was used, and also gave an account of some painful occurrences due to chloroform. Happily, the use of general anæsthetics in ophthalmic surgery was now almost entirely unnecessary.—Mr. BAILEY agreed that ether in Clover's apparatus was the most useful agent. If chloroform is to be given, ether should precede its administration. In young children chloroform must be administered with caution, and indeed should be preceded by ether.—Dr. HEWITT thought that a sudden transition from nitrous oxide to ether was a method to be avoided. The transition should be gradual. Some anæsthetic mixtures were most useful.—Mr. M. SHEILD, in reply, said that some cases of death under anæsthetics were not due to the anæsthesia, but to something in the operation, or to some morbid condition in the patient. Of the value of the expiratory valve in Clover's apparatus he was not quite sure.

OPHTHALMOLOGICAL SOCIETY.

Symmetrical Swellings about Lacrymal Glands.—Atrophy of Iris.—Lamellar Cataract with Triradiate Structure.—Choroidal Hæmorrhage.—Eyes of School Children.—Ecchymosis and Œdema of Eyelids without obvious cause.—Hydatid Cyst of Orbit.—Quinine Amaurosis.

AN ordinary meeting of this Society was held on the 9th inst., Mr. J. Whitaker Hulke, F.R.S., President, in the chair.

Mr. SAMUELSON, of John-street, Manchester, presented to the Society the cover of the blotting-pad and the ophthalmoscope of von Graefe.—Mr. HULKE presented the various ophthalmoscopes shown to the Society at the first meeting of the session, when he gave his presidential address.

Mr. ADAMS FROST showed a case of Symmetrical Hypertrophy in the neighbourhood of the Lacrymal Glands. The growth had been noticed for two months, but no treatment had yet been of avail. It was possible that the swellings were tumours of the same nature as those found in the carotid gland, but here both sides were affected.—Mr. H. POWER had shown a very similar case at the last meeting but one (THE LANCET, p. 823); there was chiefly hypertrophy of fibrous tissue.

Mr. W. H. JESSOP showed a case of Congenital Atrophy of the Iris, in which the anterior epithelial layer was absent and the well-marked radial structure of the pigment exposed. The vision was perfect.

Mr. W. H. JESSOP also showed a case of Lamellar Cataract with the triradiate structure very marked. He was uncertain as to the correct disposition of the lens sectors. The Y-shape was inverted in front and upright behind according to Schwalbe and Quain's Anatomy, but the opposite obtained in the case shown.

Mr. A. Q. SILCOCK showed a case of Hæmorrhage into the Choroid of semicircular shape, situate nearly at the posterior pole of the eye. The question was whether the extravasation was from choroidal, as the Germans said, or retinal vessels, as the English held.—Mr. NETTLESHIP asked for the reasons for attributing the extravasation to a choroidal vessel. The fact that the retinal vessels disappearing in the hæmorrhage were exceedingly tortuous, whilst vessels away from it were normal, was surely in favour of the retinal origin. In some cases a thin layer of retina existed in front of the extravasation. If choroidal, a layer of nerve fibres should be found in front of the hæmorrhage. In some cases a large retinal vessel, previously invisible, was found to have thickened coats or to be actually blocked when the hæmorrhage was absorbed. The shape—circular—favoured the retinal origin, for there was no reason why this shape should occur in the choroid.—Mr. W. H. JESSOP said that in the last volume of the Transactions he had recorded a case of hæmorrhage in which the vision was Jaeger 20. Now all the hæmorrhage had disappeared, and small white spots along the vessel that was tortuous were all that remains; but vision was now perfect. He believed the retina was the seat of the extravasation.—Mr. H. POWER believed such hæmorrhages were choroidal, for a thin membrane, which was probably the retina, was invariably situate in front of them. In Mr. Jessop's case, with perfect recovery of vision, the choroidal view was also favoured, for if the hæmorrhage had been retinal perfect recovery of vision would hardly be possible.—Dr. J. ANDERSON mentioned a case of chronic Bright's disease in which a large hæmorrhage appeared to be in the retina when the fundus was examined after death, though the specimen had not yet been microscoped.

Mr. W. LANG showed a case, in a woman aged twenty-five, of Post-neuritic Atrophy of Optic Nerve, with preservation

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of good vision. There was a history of fits before the age of seven, and also of "bilious attacks," with vomiting and attacks of giddiness, during the last five years.

Mr. JACKMAN read a paper on the Eyesight of School Children, based on the examination of 456 children. The cases of ametropia were carefully tested in all, with and without a mydriatic, with the exception of the 32 cases of astigmatism in the Coggeshall Boys' School. In any doubtful case the cornea was examined through a + 10 D lens. The colour sense was examined by means of coloured wools. The 456 children ranged from the age of five to fourteen years, and were scholars at the seven following schools:—Coggeshall National Boys'; Coggeshall National Girls'; Coggeshall British Boys' and Girls'; Kelvedon National Boys'; Kelvedon National Girls'; Kelvedon British Boys and Girls'; Feering Boys and Girls'. The children were not in any way selected for examination. The statistics showed the following percentage for each defect: Ametropia = 19·2; hypermetropia = 6·5; myopia = 2·17; astigmatism = 10·5; anisometropia = 5·04; colour-blindness = 1·7; defective internal rectus = 8·7; strabismus = 2·8. Plans of the seven schools were taken, and the ratio between the window-space and the floor-space noted for each school. Upon comparing these results with the percentage of cases of myopia in each school, no connexion could be traced between the two, as was evident from the following table:—

School.	Window-space to Floor-space.	Myopia.
Coggleshall Boys' ...	1 square foot : 12 square feet ...	2·1 per cent.
Kelvedon Boys' ...	1 ,, : 7·7 ,, ...	0·0 ,,
Coggleshall British ...	1 ,, : 6·7 ,, ...	2·5 ,,
Kelvedon British ...	1 ,, : 6·5 ,, ...	2·17 ,,
Kelvedon National Girls'	1 ,, : 5·8 ,, ...	1·88 ,,
Feering	1 ,, : 5·3 ,, ...	0·0 ,,
Coggleshall Girls' ...	1 ,, : 5·0 ,, ...	7·8 ,,

Neither could the positions in which the children sit with regard to the positions of the windows be shown to affect directly the amount of myopia in the several schools. The school books used in all the schools were of good print, with the exception of the copy of Shakespeare used for the higher standards; but this was used in the schools which give a low percentage of myopia, as well as those which showed a high percentage. It was therefore necessary to seek further for a cause as to the difference in the amount of myopia noticed in the seven schools under consideration. Of all the Coggeshall school children examined, the percentage of myopia was =3·4; in Kelvedon, =1·2; in Feering, =0. The Coggeshall children were of very low vital stamina; their parents were, as a rule, poor, and the children were raised upon ill-nourishing food, the absence of milk in their diet being particularly noticeable; moreover, their surroundings more nearly approached those of children resident in larger towns. The Kelvedon children were of better constitutions, and milk was more easily obtained in this village. The Feering children were of still better constitutions, and their surroundings more conducive to good health. It therefore seemed probable that the amount of myopia was directly dependent upon the constitutional stamina of the children. In connexion with this point, it was of interest to refer to the percentage of cases of defective internal recti muscles, as a similar ratio was apparent between the constitutions of the children and this defect. In the Coggeshall children the percentage was 12·5; in the Kelvedon, 11; in the Feering, 0.—Mr. ADAMS FROST said that if the vision were tested without the use of atropine, the percentage of myopia was much higher than when atropine was used. Mr. Jackman deserved commendation for drawing attention to other causes than deficient lighting in the production of myopia.—Mr. H. POWER thought that the effect of close work upon girls should be taken into account in appraising the etiology of myopia. One young lady hemmed handkerchiefs, in which there were seventy-two threads to the inch; two at a time were taken up in each stitch, and so vision would have to be much more acute, and the eyes "tried" more in girls, for the letter M would occupy $\frac{1}{72}$ in., the stitch only occupying $\frac{1}{36}$ in. Therefore defective light was assisted by the quality and character of work required to be done.—Mr. EDGAR BROWNE (Liverpool) alluded to certain fallacies in estimating the influence of light in the production of myopia. Different parts of the house or school were unequally lighted. If every inmate of the school could see a strip of sky, there would probably be sufficient light for all purposes. This was an instruction to be given to the architect. Girls in sewing hold the article within six inches of the eyes for fear of pricking their fingers, and of punishment if a false stitch be made. The act of sewing fine things was far more exhausting and exciting to the organs of vision.—Mr. JACKMAN admitted that sewing and lace-making, especially of black lace, were very trying to the eyes.

Dr. ORMEROD read a paper on Ecchymosis and Œdema of the Eyelids without obvious cause. The prominent feature of the affection was that the patient complained of his eye turning black as if from a blow in the course of a night or in a few hours' time. On examination, ecchymosis of the eyelids, or in some cases œdema only was found. Usually pain in the eye or the head preceded the attack, but no injury and no fit. The attacks might be recurrent. Three cases were given where this was witnessed: a man, aged seventy-two, suffering from vertigo and pains in the head; a woman, aged fifty-four, suffering from paralysis of one arm; a woman, aged fifty-five, epileptic. Other cases were mentioned where similar "black eyes" were complained of by the patients. A definite explanation was not attempted, but the possibility of a connexion with migraine was suggested by an observation of O. Berger's. The ecchymoses of tabes dorsalis were quoted to show that extravasation of blood might be caused by disease of the nervous system.—Dr. COUPLAND referred to a case of hysteria in a woman. There were spontaneous hæmorrhages into the skin on both sides, which could not be explained satisfactorily.—Mr. HULKE thought different cases might be grouped together accidentally; in individuals above middle age diseased vessels were common, and straining or other mechanical acts might play a part in causing ecchymosis. In nervous disease, too, affecting one part of the body, the vessels on that side might presumably be more liable to rapid change, and hence become deteriorated in structure.—Dr. HADDEN referred to the case of a young medical man in whom the eyelids became swollen, and remained so for two weeks; no cause could be ascertained, and there certainly was no albuminuria. In another case, that of a young woman aged twenty-four, who came for diarrhœa, there was only frequent defecation, with some œdema about the face. She also suffered from bronchitis. When last seen at the Marylebone Infirmary, myxœdema was considered: there was œdema of the legs, with bronchitis, and œdema of the eyelids, but this last symptom cleared up in a week; the patient died, but the thyroid was healthy. In neither of the cases mentioned was there ecchymosis. He had seen similar local fugitive œdemas in children. The question of their nervous origin was worth entertaining.—Dr. ORMEROD, in reply, said, though the cases occurred in people beyond the middle age, he did not think that arterial disease had any influence in the causation of the hæmorrhages.

Dr. W. A. BRAILEY exhibited specimens, and gave an account of a case of Hydatid Cyst, causing Proptosis, with Cysts in Liver, Lungs, Brain, and other Viscera, and Unilateral Optic Neuritis. The patient, a female child, aged two, was generally healthy till fourteen weeks before death; then the left eye did not close properly during sleep, and she used to wake up occasionally with a screaming fit. Eight weeks later she was admitted into Guy's Hospital, where, on Sept. 28th, she had a convulsion. Then, being taken with whooping-cough, she was transferred to the Evelina Hospital. It was noticed that the liver had a bossy feel, the nodules varying in size from a pea to a walnut. The left eye was markedly proptosed, and directed downwards and forwards. The lids were pinkish and slightly swollen, but the extensively visible sclerotic was quite white. The lateral movements were much limited, and the upward movement was entirely wanting. The pupil was active to light and accommodation; its indirect reflex action was perfect. The optic disc was diffusely swollen and ill-defined. The veins were very large, dark, and tortuous. The vision on this side appeared good. The other eye seemed to see properly; its fundus was quite normal. The child was very irritable, constantly calling out "Oh! my eye!" if examined, or even moved for any purpose whatever. On October 4th, at 6 A.M., she was convulsed for forty minutes. On the 11th the liver was apparently more distinctly nodular. The breathing was irregular, with a great many râles and rhonchi. On the 13th, at 9.30 A.M., she was convulsed for over two hours. The convulsions began on the left side, though the movements were shortly transferred to the opposite side. Then the right hand was clenched, and there was a continuous jerking movement backwards of the hand and arm. The right leg was slightly convulsed. The right eye was turned to the left, and its pupil was widely dilated. The left eye was much congested, and protruded and jerked slightly. The breathing was jerky and

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noisy, with a good deal of froth about the mouth. The temperature rose from normal at the commencement of the convulsion till 3 P.M., when it was 104·2°. Death occurred about twelve hours later. At the post-mortem examination a cyst the size of a large walnut was found in the upper part of the left orbit, and its pressure had displaced the eye forwards and downwards. It was actually within the superior rectus muscle of the eye, implicating it from near its origin right up to its tendinous insertion; the muscular fibres were seen to expand as a thin sheet on the posterior part of the cyst, except on its lower and outer aspect, where they were scarcely traceable. Further forwards all trace of them was lost, except on the extreme inner side, where they were continued as an extremely attenuated layer right up to the tendinous insertion of the muscle. The much-enlarged liver showed numerous cysts, projecting as bosses, on its surface, most about the size of a pigeon's egg. Thirty-six could be counted without any dissection. The lungs contained about twenty large cysts, mainly in their lower and posterior parts. There were recent pleuritic adhesions at each base, but no fluid exudation. The spleen showed a very large cyst, nearly two inches in diameter, projecting from its upper part. The right kidney showed a somewhat smaller cyst, and one the size of a pea was found embedded in the left ovary. None were found in the peritoneum. On opening the cranial cavity, the dura mater was found closely adherent to its walls. A cyst, the size of a tangerine orange, was embedded in the posterior superior part of the right cerebrum, where it shelled out easily from beneath the unaffected pia mater. It occupied the region of the right angular gyrus and submarginal convolution. The cysts were those of the Tænia echinococcus.—Dr. HUGHLINGS JACKSON said that the case was one of great interest. He supposed that the left-sided optic neuritis was produced by the hydatid, which involved the right cerebral hemisphere and caused the left-sided fits. He had seen but three cases of uniocular neuritis, in which necropsies had been obtained, and in each the optic neuritis was in the side paralysed, both symptoms depending on tumour of the opposite cerebral hemisphere.—Mr. HULKE thought the concurrence of hydatids of the orbit with hydatids elsewhere was remarkable. In two cases—boys, aged fourteen and twelve—of hydatid of the orbit that he had seen, these were the only tumours.—Mr. NETTLESHIP asked whether there was any inflammation about the hydatids.—Dr. BRAILEY, in reply, said there was nothing unusual around the hydatid in the orbit; it actually replaced the superior rectus. He considered that the proptosis caused the neuritis, but deferred to the authority of Dr. Jackson.

Mr. EDGAR BROWNE read a paper on a case of supposed Quinine Amaurosis. The diagnosis in the earlier recorded cases of quinine amaurosis had been facilitated by a knowledge of the amount of the drug taken. In this case the quantity was not clearly ascertained. The patient was a powerful man, aged thirty-four; had syphilis in 1877; was carefully treated; was temperate; formerly a heavy smoker; general health perfect. Fell into the water at Shanghai on Jan. 3rd, 1886; had a rigor next day, followed by pneumonia. On Jan. 6th his temperature was 104°. Was told he was taking quinine to reduce his temperature. On Jan. 7th his temperature rose to 105°, or more. The patient believed the quinine was increased to thirty grains every two hours, but there was no professional note of this amount. Patient thought he had taken about 120 grains in this way. Towards afternoon he had a "confusion" in the ears, and became very deaf. About 4 P.M. there was a flickering before his eyes, and he suddenly went completely blind, "as if they had turned out the gas." He had a double perception of the difference between dark and tropical sunlight, but he could not perceive the flame of a candle a few inches from his eyes. The pupils were widely dilated. At the end of six weeks he began to see objects in bright sunlight, and his central vision rapidly returned. Slight paresis of internal rectus. No sign of syphilis, except a doubtful enlargement of posterior cervical glands. Patellar reflexes normal. Fields for white very contracted; greatest diameter nowhere beyond 20° from fixing-point. Optic discs very pale; vessels extremely small and contracted. Hearing perfect. From that time to Dec. 4th scarcely any change had taken place, except a slight failure in central vision of left eye. He could distinguish a light thrown from a short-focus mirror (as in testing the sensibility of the retina in cataract) up to the periphery. He was placed in great difficulties by his telescopic vision, and constantly ran against things. He was in remarkably good health, with no sign of cerebral or spinal mischief, except perhaps the slight paresis of the rectus. He had collected references to eighteen cases, including his own. The symptoms were blindness and deafness of a very marked character—deafness first in order of time, temporary in duration, and recovery rapid. In two cases twenty-four hours, one ten days, and in one some permanent impairment. The onset of the amaurosis was sudden or very rapid, more complete than was known in any other recoverable condition. It resembled the dense darkness of atrophy, for which one case was mistaken. In one case the deafness and blindness were so complete that communication was only possible by touch. In cases examined by the ophthalmoscope early, a whitish haze with a central cherry-coloured spot was observed at the macula, as in embolism. The retinal vessels were always extremely contracted. In one case the contraction was first noted on the eighth day of the blindness, the first examination being on the fourth. The optic discs were pale, pupils always widely dilated, and insensible to light. In one case accommodation-reflex (convergence) was present. Hence it might be inferred that the state of the pupil was due to the blindness, and not to affection of the third or sympathetic. The mobility of the pupils was restored. Duration of the blindness very remarkable. No perception of light existing for three or four days, six weeks, and even seven months. Recovery of central vision when it commenced was rapid. There was central colour-blindness in early convalescence. Out of eighteen cases, no contraction in four; contracted for colour, one; no notes, two; great contraction, eleven. In one case there was central scotomata, but it was not noted if the patient was a smoker. In some cases the field widened somewhat, but in pronounced cases it is never fully restored. The perceptive portion of the retina corresponded to the non-vascularised space around the macula, exactly the opposite condition as regards parts of the retina affected in axial neuritis, when there was central scotoma with peripheral perception. This pointed to a more decided demarcation of the central from peripheral retina than was usually described. Recovery of central vision was generally perfect; permanent blindness not having been recorded. The quantity of quinine taken ranged from 180 grains in a single dose, 100 grains per diem for four days, to 46 grains per diem for eight days in adults. The resemblance to embolism or hæmorrhage into the optic nerve was obvious, but the bilaterism and complete recovery of central vision negatived these. The retinal ischæmia seemed local; there were no signs of general cerebral anæmia. The influence of the vaso-motor system must be considered. The first effects of toxic doses of quinine were felt in the labyrinthine circulation. It was supposed that the inferior cervical ganglion was especially affected, and the condition was hyperæmic. It seemed unlikely that hyperæmia of the labyrinth should coexist with retinal anæmia from the same mechanism. The deafness was temporary, while the peripheral blindness was permanent. The affection was probably local. The seclusion of the arteries was not retro-ocular nor quite complete, or atrophy of the optic disc would be a probable sequence. There was no sign of periarteritis, nor was there any pressure, veins and arteries being alike attenuated. Quinine applied locally causes contraction of minute bloodvessels. Highly cinchonised blood, passing into a peripheral circulation unprovided with anastomoses, might deposit sufficiently to prevent the ingress of blood till such time as the contraction has become permanent. Information was needed on the appearances in the early stage of the amaurosis, whether the pupil reacted to myotics, what was the condition of the optic disc, and whether there was any fluorescence of media or retina.

SOCIETY OF MEDICAL MEN QUALIFIED IN SANITARY SCIENCE.—At a meeting of the members of this Society on the 14th inst., it was reported that the Council had been in constant communication with the various medical corporations, the universities, and the General Medical Council, with a view of procuring a similarity in the nomenclature of the title of diplomas in sanitary science, and had strongly recommended that "Diploma in Public Health" be the style adopted for registration. Dr. Alfred Carpenter gave an address on "The Duty of the State to foster the Cultivation of Sanitary Science." Sir J. Fayrer afterwards strongly supported the views put forward, and Mr. J. F. Sykes read a paper on "The Sanitary Medical Service as a Career."

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Notices of Books.

A Text-book of Human Physiology, including Histology. By Dr. L. LANDOIS. Translated from the Fifth German Edition, with Additions, by W. STIRLING, M.D. Second Edition. Two Vols. London: Charles Griffin and Co.—This edition of Dr. Landois' work has been thoroughly revised, and many corrections and additions have been made by the translator. It is the only text-book of physiology with which we are acquainted in which the practical bearings of physiology on medicine and surgery have been constantly borne in mind both by the editor and translator. If the contents of this treatise were thoroughly mastered by the student during his first two years of study, he would enter the wards of his hospital fully competent to understand that disease is only a modification and perversion of normal processes, and not a separate entity to be expelled by certain drugs. Dr. Stirling has added a chapter on the action of drugs, and the chapters on the nervous system have been considerably modified. A great improvement has been made in adding a very copious bibliography, which refers the student to the principal sources of the information contained in each chapter. The number of the woodcuts has been augmented by nearly 100 figures.

Commercial Organic Analysis. A Treatise on the Properties, Modes of Assaying, and proximate Analytical Examination of the various Organic Chemicals and Products employed in the Arts, Manufactures, Medicine, &c. By ALFRED H. ALLEN, F.I.C., F.C.S., Public Analyst for the West Riding of Yorkshire, &c. Second Edition, Revised and Enlarged. Vol. II.: Fixed Oils and Fats, Hydrocarbons, Phenols, &c. London: J. and A. Churchill. 1886.—Mr. Allen's book supplies a great want, and has been used with gratitude in every well-appointed laboratory. His new edition, of which this is the second out of three promised volumes, has been prepared with great care and enormous labour. One-half of the present volume is devoted to the fixed oils and fats; the other to hydrocarbons and allied bodies, including the terpines and benzene. The author has wisely refrained from discussing the coal-tar industry as a whole, although he has given much valuable matter in regard to it. He may, perhaps, give us a separate volume upon it, and we hope he will, for he has a great power of lucid writing and arranging; but he could not have done justice to the subject in a small space. What he has attempted he has attained and those portions of his work which are before us are crowded with information often original and always well compiled, with full and fair references to original authorities. We may point to the sections on soap, in which the recent work of Dr. Alder Wright and others is summarised, as a good example of his style.

The Chemistry of Wheat, Flour, and Bread, and Technology of Bread-making. By WILLIAM JAGO, F.C.S., F.I.C., Analytical and Consulting Chemist, Head Master of the Science Schools, Brighton. Brighton: Published by Wm. Jago. 1886.—This is a useful, and, as far as we have tested, a trustworthy, scientific, and practical treatise on the industry of wheat, with a fairly complete account of existing knowledge and practice, and some original matter. The first five chapters are occupied with general principles and elementary facts, partly chemical, partly physical. This part seems good, but we doubt the wisdom of inserting an elementary text-book in a special manual such as this; there are plenty of well-known and very cheap works which give all the necessary information. Then follows a more detailed study, accompanied with directions for experimental work, of the constitution of wheat and flour, the carbohydrates and albuminoids (this last chapter might have been longer), and a good account of fermentation. The chapters on yeast are valuable, and show much original work. The sorting, so to speak, of yeasts by the microscope has of late years been recognised as a matter of the utmost practical importance. Full directions are here given, not only for this examination, but for the valuation of yeast by quantitative methods. The succeeding chapters are mainly devoted to the technology of flour and bread, while the rest of the book is mainly analytical, with a concluding chapter on adulteration, which is much too short. In the sixteenth chapter a good account of the viscometer and its indications is given. This instrument is employed for ascertaining the stiffness and tenacity of dough, and is said to be a valuable help to millers and bakers.

Sketch-book for Ophthalmological Observations of the Fundus of the Eye. By Dr. O. HAAB. London: Trübner and Co.; Zurich: Hofer and Burger. 1886.—This is a very handy and useful little book. It easily slips into the breast-pocket, and consists of a series of plates representing the fundus of the eye in vermilion with the optic disc. Some have, some have not, the retinal vessels. To enable the observer to insert the vessels a pencil is provided, with a bright red for the arteries and a dark red for the veins. The pencil has a cap with a piece of indiarubber attached, with which it is easy to expunge part of the vermilion of the plates, and in this way with the utmost rapidity an even inexperienced draughtsman can make a fair drawing of the eye when affected with choroiditis or hæmorrhages or with retained sheath. Every ophthalmologist should have one of these convenient little books in his possession.

Social Arrows. By Lord BRABAZON. London: Longmans, Green, and Co.—It will not be denied that the prosperity of a nation depends largely on the national care of the physical well-being of women and children. Lord Brabazon draws attention to the fact that unless some speedy change is made in the social condition of some of our women and children, the nation must inevitably deteriorate in the next generation. The utter absence in many large towns of adequate public playgrounds is a serious evil, as it is impossible for children to develop into healthy men and women without sufficient air and exercise. A public playground has been opened in Horsemonger-lane, and some also in Manchester and Salford. It has been found by the Metropolitan Public Garden Association that a playground can be daily provided for 3000 children at a cost of £100 a year. Horsemonger-lane playground contains a gymnasium, swings, running-ground, giant stride, fives court, and many other advantages. After 6.30 P.M., the young men of the neighbourhood are allowed to enter the boys' enclosure, and the young women that of the girls. There can be no question of the inestimable boon thus conferred on thousands of our poorer fellow-creatures, and the advantage to the national welfare will be great in its influence on the health of the people. Many efforts have been made of late years to shorten the hours of labour for various classes, but there still remains a class for whom legislation is necessary. Lord Brabazon states that girls in shops and refreshment-rooms are kept standing for an unpardonable length of time. In places of public refreshment girls work alternate days fifteen and eighteen hours, with but a very short interval for food. Many of the shop girls also work for fourteen hours. The effects of these long hours are most injurious in every way. That it is physically injurious it scarcely seems necessary to remark, and it appears also to be so morally. Many return home broken in health, and there are numberless sad tales of insanity, phthisis, bronchial affections, chronic dyspepsia, and other maladies. It must be said that many of the shopkeepers would willingly abridge the hours could it be made incumbent on all shops to close earlier. It is impossible to touch on more than one or two points in this most interesting book. Lord Brabazon

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does not confine himself to the subject of women and children; he takes up the question of State-directed emigration, cultivation of flowers, young men's clubs, and many other things. The book is written throughout in a clear, sensible, temperate manner, and is well worth reading.

The Techno-Chemical Receipt-book. Containing several thousand Receipts covering the latest, most important, and most useful discoveries in Chemical Technology, and their practical application in the Arts and the Industries. Edited chiefly from the German, with additions, by W. T. BRAUNT and W. H. WAHL. Philadelphia: Henry Carey, Baird, and Co. London: Sampson Low and Co. 1886.—Although there are several good English technological receipt-books, and although they are not of primary importance to members of the medical profession, we notice this little book, first, because it is good of its kind, and likely to be useful in the thousand and one non-medical difficulties about which the "doctor"—often the only scientific authority in a district—is consulted; and, secondly, for the unpatriotic reason that it is "chiefly from the German." Whether the Germans are or are not superior to us in technical skill, all Englishmen will gladly acknowledge that they are skilful and industrious, and will be grateful to any compiler who collects in the English language the results of their labours. Five hundred closely-printed pages, well filled with useful matter, with alphabetical arrangement, a good index, and a table of contents almost as full as the index, make up a book which will be valuable in every house.

Brain. A Journal of Neurology. Part XXXV., October, 1886. London: Macmillan and Co.—The number opens with two papers of a controversial kind. Professor Schiff, aroused by Professor Horsley's strictures upon his experiments on Cerebro-spinal Physiology, gives a reply thereto, and hints that his opponent has not made himself sufficiently acquainted with the details of those experiments. Schiff, as is well known, is opposed to the commonly accepted doctrine of the motor functions of the brain cortex; and, moreover, believes that the posterior spinal columns are directly related to the excitable area in question. Professor Horsley follows with a spirited rejoinder, in which he demonstrates not only his full acquaintance with Schiff's work, but the fallacies that underlie his conclusions. Dr. Parinaud of Paris contributes a paper on Paralysis of the Movement of Convergence of the Eyes, and Dr. Sherrington one upon Two newly-described Tracts in the Spinal Cord—viz., the ascending antero-lateral tract (of Gowers and Hadden) and a tract of small fibres described by Lissauer at the junction of the lateral and posterior columns. Dr. Sherrington proves by developmental studies the independence of these tracts. Mr. Bland Sutton has a readable paper on the Lateral Recesses of the Fourth Ventricle, and their relation to certain Cysts and Tumours of the Cerebellum and to Occipital Meningocele. Mr. Birt raises the important but difficult question of changes in the urine due to nerve-metabolism in a paper on Urinology of the Insane. Dr. James Anderson gives notes of an interesting case of Tumour at the Base of the Brain, with a valuable commentary; and Dr. Hale White supplies a "critical digest" on recent advances in knowledge of Tabes Dorsalis.

Manuel Pratique de Bactériologie. Par EDGAR M. CROOKSHANK. Traduit par M. BERGEAUD. Ouvrage orné de 32 planches et de 44 gravures sur bois. Paris: George Carré. Bruxelles: A. Manceaux. 1886.—This is a literal translation of Mr. Crookshank's well-known treatise, and it speaks much in favour of the original work that the translator has not found it necessary to add any notes or observations. As far as we have compared the translation with the original, it appears to have been executed with care and fidelity. The plates are as good as those in Mr. Crookshank's work, which are, perhaps, a little too highly coloured.

The Physician's and Surgeon's Visiting List, Diary, Almanack, and Book of Engagements for 1887. Forty-first year. London: John Smith and Co., Medical Stationers.—We can cordially recommend this established Visiting List to our readers. The spaces attributed to the daily journal and the visiting list are convenient, and the tables and lists of drugs in the new Pharmacopœia and of American eclectic drugs, with the proper doses, make it very useful. Under the head of Baths, some instructions for cold baths in case of pyrexia should be included. The members of the councils of the principal medical corporations and of the General Medical Council should be given. But there is little to desiderate and much to praise in Smith's Visiting List.

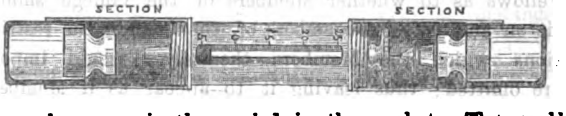
Parkins and Gotto's Monthly Pocket Diaries present a feature which appears of a novel kind. There is a part for each month and a page for each day in the year, so giving plenty of room for entering a number of engagements, and only necessitating the carrying of one or two of the parts at most, which may be easily slipped into a letter-case.

CHRISTMAS LITERATURE.—*The Land of Little People* (Poems by FREDERIC E. WEATHERLY; pictures by JANE M. DEALY—London: Hildesheimer and Faulkner)—is a very pretty little Christmas book for the entertainment of the young folks during the approaching festive season. Both text and illustrations are of undoubted merit, and do credit to poet and artist. The same firm publish *Christmas Cards* of great variety, and some of them of remarkable excellence. —The Christmas Numbers of the *Graphic* and *Life* have been received. The former will no doubt be in great demand, as it is fully equal to, if it does not even surpass, any of its rivals.

New Inventions.

PORTABLE HYPODERMIC SYRINGE.

THIS portable hypodermic syringe is made entirely of metal, resembling an ordinary pencil-case, and may at all



times be conveniently carried in the pocket. The small glass bottles hold one fluid drachm, and are made to be withdrawn from the metal casing so as to facilitate their being filled. The needle is screwed in the piston-rod. The instrument in its entire length is 4½ in., and may be obtained from Messrs Krohne and Sesemann, Duke-street, London, W.

A. HERBERT BUTCHER,
Surgeon, Birkenhead Borough Hospital.

TESTIMONIAL.—The inhabitants of the mining districts of Carrizal Alto, Carrizal Bajo, and Cerro Blanco, Chili, have recently subscribed a sum of £200 to purchase a testimonial to be presented to Dr. William M. Johnson, who has served during the past ten years as medical officer to the Carrizal Hospital, and has attended the different mining establishments in the districts. During his long residence he has gained the love and esteem of all, both Europeans and natives, by his skilful treatment and his exceptional philanthropy. The proceeds of the sum subscribed have been sent to England to be devoted to the purchase of a valuable case of instruments, a gold watch chronograph, and a massive salver of pure gold, bearing suitable inscriptions expressing the regard and remembrance of the subscribers.

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THE LANCET.

LONDON: SATURDAY, DECEMBER 18, 1886.

To say that we are disappointed with the circular just issued by the Council to the Fellows of the College respecting the admission of Members of the College to vote at the election of the Council, and to be themselves eligible to sit on the Council, would be a very inadequate expression of the feelings which possessed us on reading that document. These feelings are evidently similar to those which prompted "Historicus" to lose no time in issuing his note of warning and remonstrance. Were it not for an experience of the Council extending over more than fifty years, we should have thought that there had been inadvertence in framing the questions which have been submitted to the Fellows. But looking back to the times just antecedent to the granting of the Charter in 1843, when the "new class of members" was instituted, to the arguments then used, and to the tactics adopted, we cannot avoid the conclusion that the present Council (like the old one) are deliberately throwing dust in the eyes of the constituency, with a view to the maintenance of their own monopolies, to a continuation of the *status quo*, or to making the very least concessions with which the Council may satisfy the favoured few who have at present some feeble voice in College concerns. As issued, the circular implies that the Council are anxious to enlarge the privileges of the Fellows—to enable them to vote by voting-papers, without personal attendance at the College, while in reality very heavy pressure has had to be brought to bear before even this scanty concession could be wrung from them, although forty years have passed during which London has practically enjoyed this monopoly, as flagrant as it is unjust. Moreover, in seeking the opinion of the Fellows as to whether Members of the College should sit on and vote for members of, the Council, the restrictions which the Members themselves would impose are omitted; thus leaving it to appear as if Members were asking for identical privileges with the Fellows. Now the omission from the questions put to the Fellows of these restrictions is undoubtedly calculated to pervert the answers which will be returned. Such tactics on the part of the administrators of a public institution are altogether unworthy, and deserve the severest condemnation. The Fellows, we hope, will not so far lend themselves to this device as to give simple answers, Yes or No. We trust they will amplify the questions for themselves, or adopt as answers the resolutions passed at the general meeting on Nov. 4th.

Those resolutions were in effect as follows:—It is desirable that Members of the College should be empowered to vote in the election of the Council, and be eligible to sit on the Council, provided that, in order to be eligible to sit on the Council, a Member must have at least twenty years' standing; to vote at the election of councillors a Member must have, say, ten years' standing; and in order to give the Fellows a due and proper preponderance in the Council, not more than one-fourth of the whole Council should consist of Members of the College. Let Fellows, before returning their circulars to the College, compare and contrast the foregoing proposals as they emanate from the Members with the unconditioned questions as propounded by the Council. What a difference! The one guarded by wise restrictions; the other bare, unqualified, and misleading: in fact, a totally new issue. Let those who have not yet read Mr. HOLMES' speech at the meeting on Nov. 4th carefully do so. They will then see what it is the Members wish for, and the arguments that may be legitimately put forward in support of their contention. In issuing so bald a statement, the Council have laid themselves open to a charge of desiring to mislead the Fellows, to get their opinion on an issue not properly before them. Whether Members of the College of Surgeons shall vote is not the whole question. Holding as we do that a return of the original idea of membership—a brotherhood—will raise the professional status of each man individually, and of the whole corporation as such, and that it will conduce to the better management of the College, the question is a much wider one than it at first sight appears, and one which affects the general public as well as the State.

It is pretty clear to us that, whichever way the vote may go, the Members will have to look after themselves. Every inch of ground will have to be fought—and that, too, with a silent, self-satisfied Council. We should think that early in the new year the petition to Her Majesty ought to be presented praying for a new Charter. The Jubilee year will be a most propitious epoch to seek for such a boon—a Jubilee Charter of emancipation, restoring the rights of membership to those who have so long been strangers and outcasts in their own house!

IN February of this year the Liverpool Medical Institution appointed a Committee to inquire into the frequency with which abdominal section was performed, and more especially for spaying, or the "removal of the uterine appendages," at the Hospital for Women. The Committee consisted of the President of the Institution, three past Presidents, a Vice-President, and three past Vice-Presidents. The medical officers of the Hospital for Women were invited to send each a representative to the Committee; two availed themselves of the offer and one did not. The mode of conducting the inquiry was fair and reasonable, was calculated to do full justice to the medical officers, and at the same time to bring out the facts bearing on the subject of inquiry. The lay Committee of the Hospital for Women facilitated the work of the Committee of Inquiry. Each one of the medical officers of the hospital was asked to furnish reports of all the cases of abdominal section performed by him in the hospital. These reports were submitted to, and annotated by, the medical board of the hospital, and subsequently laid before the Committee of Inquiry. The medical practitioners of Liverpool who had cases under their care which had been operated on in the hospital were invited to supply information respecting the progress of the cases after the operation; and between forty and fifty of the patients who had been made the subjects of abdominal section were personally visited by the Committee. The Committee also examined the register of the hospital, and questioned the lady superintendent and nurses.

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The following conclusions were arrived at: That the cases submitted to "ovariotomy" were fit and proper, and that the operation was done successfully; that the operations for "exploratory incision" were justifiable; that the operations for "oöphorrhaphy or the replacement and fixation of prolapsed ovaries" were insufficient in number to enable the Committee to form a strong opinion for or against the proceeding, but that the relief afforded by the operation was by no means clear and decided; that sufficient care and discrimination had not been exercised in the selection of cases for spaying, and that in many instances the gravity of the symptoms was not such as to have justified abdominal section of any kind; that in ordinary cases of pelvic hæmatocele spaying is not to be recommended; that the reports of the cases in which spaying was performed for "bleeding myoma" "signally fail in giving any description of the size and character of the myomata, or of the state of the uterus when the abdomen was opened at the time of the operation"; and that certain patients were reported as cured when the patients themselves stated that they still suffered from hæmorrhage. The Committee further finds that of ninety-two patients submitted to the operation of spaying, fifty-nine were between twenty and thirty years of age, and seven were only between seventeen and twenty years; that a considerable proportion of the subjects of it suffered a distinct loss of sexual feeling, and to such an extent as to cause serious domestic unhappiness in not a few instances; and that some of the patients complained of such a loss of physical energy and spirit as prevented them from discharging their ordinary household or other duties as they did before the operation. Many of the patients suffered from hernia in consequence of the operation. Many were distinctly and probably permanently benefited, while nearly an equal number experienced no decided and lasting benefit, while in some the operation proved injurious. The Committee finally recommends that no patient should be spayed by any officer without consultation with a colleague and that the patients should be clearly informed of the nature of the operation and its possible consequences; for the Committee say that the patients examined by them very generally denied that sufficient information—or, indeed, any information at all—was given them respecting what was proposed to be done to them.

The report of this Committee is calculated to do much good by throwing light upon the indiscriminate way in which spaying is had recourse to, and upon the results of cures effected by it. We have frequently pointed out these facts, and again and again stated that recovery from the operation is not a cure of the patient. It comes out clearly in the report that patients are spayed in cases in which it is not calculated to give relief, for about the half of those who were operated on obtained no decided or lasting benefit. The report is calculated to check indiscriminate spaying and to confine the operation to the few cases in which it is really indicated.

WORKHOUSES usually escape the keen criticism and amateur inspection that modern philanthropy bestows on the working of most institutions set apart for the benefit of the poor, and which, when properly conducted, provide a useful and efficient check on abuses. Workhouse visiting is not popular among ladies, and the consequence is that very little is known to the outside world of what takes place inside these institutions, so that when some scandal occurs blame is too often laid on the wrong shoulders. We ought, therefore, to be grateful to anyone who, having been behind the scenes and having become acquainted with details of workhouse life, gives us an impartial account of the state of affairs, and who also suggests practical remedies for existing evils. And this was done, and well done, by Miss LOUISA TWINING, in the last number of the *Nineteenth Century*. Miss TWINING admits that great improvements have taken place within the last thirty years, since THE LANCET, with the aid of its Special Commission, of which the late Dr. ANSTIE was the head, exposed the horrors of the London Workhouse Infirmaries, an exposure which resulted in the movement that ultimately led to the passing of the "Gathorne Hardy Act," which brought about the amalgamation of several unions to found the noble sick asylums now distributed over the metropolis. Nevertheless, from time to time, in spite of improved regulations, instances of gross cruelty become public which lead us to doubt whether, after all, the improvement is more than what appears on the surface. So long as aged and infirm paupers continue to be scalded to death in hot baths, or epileptics and imbeciles to be roasted or beaten to death by their imbecile attendants, we must feel that, in spite of the good intentions of the Poor-law Board, guardians do not always obey the wholesome provisions laid down for their guidance, and that workhouses in this country are sometimes the scenes of abominable neglect, if not of direct cruelty.

And, again, there are cruelties that never come to light. The class from which the workhouse officials are drawn is certainly not one to which much power ought to be given. Dealing with an admittedly refractory and troublesome race, the callousness which the administraton of an iron discipline engenders often tends to convert these officials into petty tyrants rather than intelligent administrators of State charity. We will give one instance only, which has come under our notice, and which occurred in one of our admittedly best-managed workhouses. A poor woman, aged seventy, who for years had kept a small lodging-house till her husband died, had a stroke of paralysis, and, being no longer able to work, went into the workhouse. She begged hard to be allowed to retain her under flannel petticoat, which had been given her by a charitable lady, but to no purpose. It was taken from her, and she had to wear the ordinary thin garments served out by the authorities. Now, the deprivation in this case was decidedly an act of uncalled-for tyranny, for although uniformity in dress may be one of the laws of the workhouse, still the authorities in special circumstances can order additional garments for the conspicuously infirm. In this case the leg that was paralysed, owing to deficient circulation in it, was subject to severe sciatic pains in cold weather. So this poor woman was condemned to suffer every winter to satisfy the master's or matron's love of uniformity, for if she is allowed her petticoat, "all the old women in the ward will be clamouring for one too!" Besides such acts of indirect cruelty, there is sufficient evidence to show that drunkenness, peculation, and other evil practices are, especially in provincial unions, more common among the workhouse

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officials than is generally supposed; whilst the supposition that anything is good enough for the pauper leads to negligence among the officials in the selection and preparation of the food, of which, of late, numerous complaints (mouldy bread, carbolised broth, &c.) have appeared in the daily press.

Miss TWINING proclaims the urgent need for a higher class of workhouse officials, and points out that the posts are worthy of the intelligence, love, and zeal of the many educated men and women who are now seeking remunerative work, and who will find in the administration of these large institutions an occupation worthy of their best energies. Miss TWINING is equally strong in advocating the admission of students of medicine into Poor-law infirmaries, a point our Commissioners insisted on in their Report on Workhouse Infirmaries in 1880. When it is considered that 600 or even a larger number of patients are often under the care of only two medical officers, it cannot be but that many of the minor attentions which add so much to the comfort of the sick must be dispensed with, whilst with such an inadequate medical staff the due supervision of the nursing becomes a difficulty. Lastly, a cruelty of the worst kind is in constant operation in the promiscuous mixing of all classes of paupers in common wards. The present system calls loudly for revision and alteration, for what can be more painful than for respectable men and women to find themselves thrust into the society of sturdy ruffians who make use of the workhouse as a convenient hotel, and who, being able to take their discharge with twenty-four hours' notice, can claim readmission whenever it suits them, whether drunk or sober.

INQUESTS and police-courts afford from time to time abundant evidence not only of the unsatisfactory condition of the law governing the burial of still-born children, but also of general ignorance of the law as it exists at present, and of consequent neglect of its enactments. The burial of still-born children is regulated by the 18th Section of the Births and Deaths Registration Act of 1874, which enacts that no person "who has control over or ordinarily buries bodies in any burial-ground" may permit the burial of the body of any deceased child as if it were still-born, or may permit the burial of any still-born child except on the production of one or other of certain certificates. To render legal the burial of a still-born child in any burial-ground there must be produced to the sexton: (1) a written certificate purporting that the child was not born alive, signed by a registered medical practitioner who was in attendance at the birth, or who has examined the body of such child; or (2) a declaration signed by some person who, had the child been born alive, would have been legally qualified by the Registration Act to give information concerning the birth, to the effect that no registered medical practitioner was present at the birth, or that his certificate cannot be obtained, and that the child was not born alive; or (3) an order of the coroner in case an inquest has been held. It is further enacted that anyone acting in contravention of this section is liable to a penalty not exceeding ten pounds. Such being the legal enactments on the subject, it follows that unless a medical certificate of still-birth can be obtained, the furnishing of which is optional on the part of the medical practitioner, the written declaration of still-birth may be given by the father or the mother of the child, by the occupier of the house in which the child was born, or by any person who was present at the birth of the child—these being the persons who would have been legal informants of the birth for registration purposes had the child been born alive. It is patent that declarations of still-birth may in certain cases be produced with dangerous facility—more especially bearing in mind that these declarations pass direct from the hands of the person whose interest it is to get the body buried, into the hands of the person whose interest it is to effect as many of such burials as possible. The Registration Act, moreover, omits to schedule the forms of these certificates and declarations, and it is useless to expect the ordinary sexton of a burial-ground to be an efficient judge of the legality of such documents as are produced to him in justification of his right to bury still-born children. There seems to be no sufficient reason why these forms should not be supplied by the Registrar-General through his local registrars, and that the use of such recognised forms should be insisted upon by the Home Office. It would, moreover, afford a greater security against malpractices if the certificates and declarations were furnished to the local registrar, who, if they duly complied with the law, should issue an order for burial. The use of such authorised forms might also be made the means of supplying information as to the number of still-births in England, of which no record now exists, and in which respect our vital statistics are inferior to those of almost every other country in Europe.

A recent inquest case in Yorkshire accentuates the necessity for the dissemination of more accurate knowledge of the present state of the law on this subject, even among those whose especial duty it is to inform themselves thereof. The sexton admitted having buried several so-called "still-born" children without the production of any certificate or declaration of still-birth; and in the case which was the subject of the inquest referred to, the declaration was entirely informal. This declaration was informal because it was signed by a woman who was not present at the birth and would not, therefore, have been a qualified informant of the birth had the child been born alive; and, secondly, because it did not state that no registered medical practitioner was present at the birth, or that his certificate could not be obtained. The coroner, moreover, although fully alive to the dangerous tendencies of the facilities which now exist for burying deceased children as still-born, appears to have been but partially informed as to the actual state of the law on the subject. We hope, however, that other coroners will follow his example by holding inquests in all such cases in which laxity prevails with regard to the burial of still-born children.

AT a meeting of the Council of University College, Dundee, held on the 12th inst., a letter was read from Mr. T. H. Cox, offering a donation of £12,000 for the endowment and equipment of a chair of Anatomy in connexion with the College. Mr. Cox, in his letter, states that the people of Dundee should now show they have taken up seriously the proposal to establish a medical school in the town. He adds that he wishes this donation to be received as his gift to Dundee to commemorate the Queen's Jubilee. The Council thanked Mr. Cox for his gift.

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Annotations.

"Ne quid nimis."

THE TEACHING UNIVERSITY FOR LONDON.

THE meeting held at King's College on the 15th inst. for promoting the movement in favour of a Teaching University was very sparsely attended, only thirty or forty out of the 400 members of the Association being present. From the report which was presented and the speeches that were made, it would seem that the professoriate and councils of King's and University Colleges were mostly in favour of the scheme, and that it had the support of many London physicians and surgeons, Guy's Hospital being especially mentioned. Very little encouragement is anticipated from the University of London, although a final reply has not yet been obtained from the Senate. The Colleges of Physicians and Surgeons have merely acknowledged the receipt of a communication proposing a conference, but have taken no action thereon. Power was granted by the members of the Association who were present at the meeting to the Executive Committee to "approach Her Majesty's Government for the purpose of obtaining from the Government and Legislature the necessary measures for forming a teaching university in London." It was clearly apparent that the Association, whilst not opposing the granting of a degree in medicine and surgery under the authorities of the combined Colleges, would use all its influence towards turning such a degree from a strictly professional into an academic one, and would strive to widen the basis of the collegiate movement, so as to secure, if possible, the admission of faculties of arts and science as well as of medicine. This might be successful, if we could really believe in the vigour and earnestness of purpose of the members as well as of the executive; but Wednesday's meeting makes us doubt whether, notwithstanding the lengthy reports and the conferences, there is any real interest taken in the movement by the teachers of arts and science, or even of medicine, in London.

PROMOTION IN THE ARMY MEDICAL SERVICE.

WHEN we lately brought under the notice of our readers the great want in the Army Medical Service of any acknowledgment of or reward for meritorious professional services, we did not anticipate that we should so soon have occasion to comment upon the very unsatisfactory results of the system now in operation. In a supplement to the *Gazette* of Nov. 26th, Surgeon-Major W. H. A. Mackinnon was promoted to the rank of brigade surgeon in recognition of his services in Burmah. He happened to be the senior medical officer with the British Force at Mandalay, and was in consequence selected for a reward. But his position as one of the most junior of the grade of surgeons-major ranking with lieutenant-colonels involved his superseding more than ninety officers senior to him in the Department, many of whom have done right good service without reward, and who would have been delighted to have had a chance of being employed on active service. In addition to the injustice done to so many officers by his promotion, there was another point of great importance involved in it. From his position on the list, it is doubtful whether he has been called upon to undergo the qualifying examination laid down in the Army Regulations as imperatively required to be passed before a surgeon-major is eligible for the post of brigade surgeon, and if so the promotion was contrary to the regulations of the service. Possibly from a consideration of these circumstances the *Gazette* of Dec. 14th intimates that "The promotion of Surgeon-Major W. H. A. Mackinnon to the rank of brigade surgeon, as stated in the *Gazette* of Nov. 26th, 1886, is cancelled, this officer having been granted the distinction of Companion of the Distinguished Service Order." We congratulate the medical officers senior to Mr. Mackinnon upon this reversal of an act of manifest injustice, and Mr. Mackinnon himself upon the acknowledgment of his services by an honorary reward. But the whole proceeding seems to us to raise an important question. By whom was the original mistake committed? Bearing in mind the history of the Army Medical Department, the difficulties it has experienced in getting a sufficient supply of eligible candidates to fill its ranks, and the care with which the present regulations were drawn up with a view to promote efficiency and allay discontent, it is of the utmost importance that anything like injustice should be prevented. Drawing our conclusions from the statements which Sir T. Crawford has repeatedly made to the officers of his department of the principles upon which his selections for promotion are to be based, and from the sound judgment and fairness which have hitherto characterised his rule, we do not believe that the promotion was made on his recommendation, and on this point we think that the Secretary of State for War should institute an inquiry and take steps to prevent the possibility of a similar mistake. It seems most desirable that in all cases the recommendation for a reward for meritorious service should emanate from the head of the department to which the officer belongs, and that all reports bearing upon the subject should be submitted to him for his consideration. In this way there would be a fair chance of valuable and meritorious professional work, which is now overlooked, being rewarded, and of injustice to the other officers being prevented. At present rewards to medical officers are apparently dependent, in most instances, upon the recommendation of general officers commanding; but it may be fairly assumed, without any disparagement to them, that they are scarcely fit judges of the value of professional work or of the manner in which it is done; it requires the knowledge of an expert to appreciate it at its true value. And yet it is of far more importance to the well-being of the soldier than the quasi-military duty for which, under the existing system, the rewards and decorations are bestowed. Hitherto it has been too much the practice of the military authorities to over-rule recommendations of the Director-General for the reward of professional work, and the case now under notice shows how rewards may be conferred contrary to the principles of justice and in defiance of the regulations of the service. We believe the existing system only requires to be brought under the notice of Mr. W. H. Smith to undergo a much-needed and judicious modification.

TYPHOID EPIDEMIC IN YORK.

A CONSIDERABLE epidemic of typhoid fever is prevailing in York. Towards the end of September cases of this disease rapidly augmented in number, the largest increase taking place in October. The disease was maintained throughout November, and in the three months ending Dec. 4th there had been 185 cases. Mr. North, the medical officer of health has the matter under consideration; and he has already made a number of inquiries which lead him to conclude that the epidemic is mainly due to contaminated milk. Indeed, he says that there are very few places near York from which milk can be safely distributed if typhoid fever existed on the premises. This, unfortunately, whilst explaining how the distribution of the disease has, in great part, been effected, by no means gets over the difficulty as to the origin of the infection and the process by which it got into the dairy or dairies affected; neither does milk-distribution account for more than a preponderating number of the attacks. It will be remembered that in 1884 no less than 315 people were attacked in York with typhoid fever, and

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that about fifty of these, or one in six, died. The outbreak was carefully investigated and reported on both by Mr. North and Dr. Airy of the Local Government Board, and advice was given to the sanitary authority as to such matters as the strict supervision of milk-supplies, the systematic removal by the corporation of night-soil and refuse, and the ventilation and flushing of the sewers. We shall look with interest to Mr. North's forthcoming report to see what progress has been made in these matters. In 1884 both Dr. Airy and Mr. North seemed convinced that the water-supply did not cause the epidemic, although it is drawn from the Ouse at a point below which it and its tributaries receive the sewage of a number of towns and villages. And, in the present instance, Mr. North provisionally expresses the opinion that the consumption of this river water is not the cause of the epidemic. This may be so, but the arguments with which this view is backed by some persons are not altogether satisfactory. Thus it is stated that 75,000 people drink this water, and that if the supply had been in fault the epidemic would have been more extensive. We agree that the epidemic as a whole does not support the view of a single cause in the form of water. But the typhoid poison must be regarded as particulate, and its occasional presence in the river as it passes the pumping-station might produce very different results from those following on the existence of the same infection in a well. In short, such a river-supply could easily initiate an epidemic, which would afterwards be spread by milk, sewers, and privies. It is locally suggested that chemical analysis of the water should be made. We have no objection, except in so far as any judgment as to the absence of a particulate infection from a given sample of an ever-varying supply may be formed from the negative results of the chemist. Chemistry serves most valuable purposes in connexion with water analysis, especially in so far as positive results are concerned; but hitherto the chemist has failed to detect typhoid excreta even when deliberately added to the sample of water submitted to him, and it cannot be expected that he can judge of the absence of such means of infection as a cause of this long-continued epidemic from samples taken now, or even at an earlier date, from the river service.

THE METROPOLITAN HOSPITAL SUNDAY FUND.

THE harmony and success of the annual meeting of the constituents of the Hospital Sunday Fund are a matter for sincere congratulation. Now, when a fierce criticism beats upon every institution, it is not to be wondered at that even hospitals for giving a temporary home to the sick, the lame, and the blind should have their critics. Many of these critics are perfectly honest in their criticism, and deserve to have their views well considered. The hospitals might add to their enormous and unequalled claims on the benevolent a yet further claim by co-operating with those who would eliminate all abuse from them, and help the development of those provident medical institutions which encourage the thrift of the people. This would tend to reserve the funds of the hospitals for cases of magnitude and misery, which in our population of four millions are still scantily provided for. One reason why the Hospital Sunday Fund enjoys the confidence of the public so much is that the Council contains many members who are deeply anxious to see hospitals do all the good they can and no harm at all, either to the poor or to the medical profession. The new members of the Council—to wit, the Rev. Prebendary Eyton, the Rev. C. J. Ridgway, the Rev. John Clifford, the Rev. J. R. Wood, the Right Hon. Earl Strafford, Sir Andrew Clark, Lionel Cohen, Esq., M.P., Alderman F. de Keyser, Richard Foster, Esq., and Thos. Wakley, Esq., F.R.C.S. Eng.—will be a further guarantee to the public that the Hospital Fund will be wisely administered. It is in the constitution of the Council and the harmony of the constituents that the best promise lies of good work and large collections. The sum raised this year (£40,399), however, is in itself a very gratifying one, being £6000 more than in 1885, and £8000 more than the average of preceding years. Finally, we may heartily congratulate the Fund on the succession of another Lord Mayor in full sympathy with the cause of hospitals and of Hospital Sunday. Sunday, June 19th, is fixed for the collection of 1887.

ALCOHOL IN DISEASE.

OUR teetotal friends have had such a set of the tide in their favour of late years that they take badly any little sign in the opposite direction. They have seen medical and physiological authorities one after another admitting that alcohol was dispensable in a large number of diseases, and that for ordinary purposes of health those fare best who take it with extreme moderation. Great physicians have taken their brandy or even their sherry in *petits verres*, and have declared the inability of people with healthy organs to appropriate more than a very small quantity. More than this is discharged as at best useless and often injurious. All casual drinking, drinking at odd times and on empty stomachs, and for the mere sake of drinking, has been denounced as treason to the finest organs of the body, and fraught for the mass of the people with future and not remote mischief and trouble. Intelligent lay people of both sexes have been quietly dropping the habit of taking much alcohol, partly from moral considerations, but largely from the report of science as to its action, and largely too from the fact that their own sensations and experience concurred with the teachings of science. All this was surely enough to satisfy temperate abstainers. But there are intemperate teetotalers, as we have always said. They will allow no virtue in alcohol. It is evil, and only evil, and that continually and in all cases. They usurp the place of the physician, and dogmatise where doctors deliberate. The true friends of temperance should disown such advocates. They do immense harm; they exclude thousands from the great army that is available against excess, and they put into an attitude of opposition the medical profession, which has enormous power to help all true social and dietetic reform. Our own attitude in this matter is well known. We take the evidence of every witness who has common sense or special knowledge, and try to weigh it. Two witnesses are before us as we write. One (Dr. Collie, medical superintendent of the Eastern Hospitals), who has been courageous in advocating good wine, in proper quantities, in those hospitals. He has defined his views in a paper in the *Practitioner*, vol. xxxvii., No. 5. He admits that alcohol is not required in the mildest cases of fevers, nor in the severe if the patient be taking a sufficiency of food, nor generally in young adults of the well-to-do classes. These are great admissions for Dr. Collie to make; but in opposite circumstances he maintains it is more or less necessary, and we advise our readers to consider his opinions. Briefly, in the chief fevers, to which his authority applies, they are as follows: In *typhus*, alcohol is rarely required for children or adults under thirty; but after this age it is required, and often in considerable quantities. It may be dispensed with early in convalescence, as solid food can be taken as soon as the temperature falls. In *scarlet fever*, alcohol is not required, as a rule, at any period of the disease. But in very poor children in early convalescence, with abscesses or brawny neck, alcohol in the form of port wine is indicated. He considers port, say four to eight ounces, good for children of the age of from four to six. For procuring sleep it is better than opium. In enteric fever the chief value of alcohol is during convalescence, where solid food

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cannot safely be taken for from ten to fourteen days from the return to normal temperatures. Alcohol is contra-indicated in cases of hæmorrhage unless collapse has resulted. Burgundies and champagne of well-approved brands are, he thinks, the best forms. Let Dr. Collie's opinions be considered in their entirety, and before our teetotal friends reject them contemptuously, let them pass through six weeks of the diarrhœa and fever of typhoid. The Bishop of Manchester is the other witness. He declares that after two years' experience of total abstinence he broke down utterly. His medical man gave him the choice of giving up work or taking a *slight stimulus with his meals*. The result justified the prescription, and the Bishop, instead of being a total abstainer, is a member of the Church of England Temperance Society, discontinuing all but the measured and medical use of alcohol at meals. Those who exclude him as a fellow-worker would have excluded the Apostle Paul for his prescription to Timothy, forgetting his other great prescription to all men—to "live soberly, righteously, and godly."

THE SANITARY STATE OF WEST COWES.

WE are glad to note that the Local Board of West Cowes have engaged the services of Mr. James Lemon, M.Inst.C.E., with regard to their system of sewerage. Mr. Lemon's report fully confirms the complaints as to the serious defects in the existing system. He states that the present system drains by means of fourteen outfalls upon the foreshore at all states of the tide, the result being deposits of sewage and annoyance to the inhabitants. Then there are tide-locked sewers generating noxious gases in the streets, to the detriment of the health of those living in houses connected with them. Indeed, such culverts were only constructed to receive surface and rain water, and Mr. Lemon points out that a perfectly water-tight, self-cleansing, and well-ventilating system is needed. This is, indeed, what official and other reports have before indicated; and now that the advice comes from a skilled engineer of their own choice, it is to be hoped the Local Board will face the situation, and free their charming seaside resort from the stigma now attaching to it. Mr. Lemon enters into details as to his scheme, and he says that if the local authority will carry it out, Cowes will be rendered one of the most attractive seaside places in the south of England, and that its trade and prosperity will be greatly increased.

JUDICIAL STATISTICS OF VACCINATION.

A LETTER from Mr. William Tebb appeared in *The Times* of Monday, calling attention to the large number of persons who, during the year ending Sept. 29th, 1885, have been prosecuted in England and Wales for non-compliance with the Vaccination Acts. It refers also to the so-called house-to-house census which has been conducted by an anti-vaccination society, and quotes these returns as evidence of the large number of persons who are opposed to vaccination. Mr. Tebb urges the appointment of a Royal Commission of Inquiry, and speaks of this as an expedient now approved by the leading medical journals and by about a hundred Members of Parliament. If this record be correct, it is evidence of the extreme mischief which can be done by a small number of mistaken enthusiasts; it is no difficult matter to stir up feeling amongst the more ignorant of the population against any existing legislative measure, and especially when such law entails even a trifling inconvenience upon those who have to submit to its dictum. Dr. Buchanan, in the last report which he presented to the Local Government Board, clearly expressed the opinion of the profession with regard to the enforcement of vaccination: "To the physician who realises the powers of vaccination, and who knows the malignancy of the disease against which it protects, the notion of enforcing the acceptance of such a boon is distressful. But the distress is akin to that with which he himself has at times to force nourishment down the throat of a lunatic who is starving himself; and in the case of vaccination he sees that it is for the security of children otherwise helpless, not of the recalcitrant himself, that compulsion is wanted." With reference to a Royal Commission of Inquiry, we cannot for a moment see that it would serve any useful purpose. Vaccination is in no sense of the word on its trial; the accumulative evidence of past years points conclusively to the fact that, with an infinitesimal amount of risk, it affords protection against one of the most terrible diseases that has ever destroyed mankind. Certainly the advocates of vaccination have nothing to fear from such an inquiry, but it would entail considerable trouble and expense, and no case has been shown for its necessity; moreover, however clearly a Commission reported in its favour, the decision would have no influence upon those who decline to be convinced by the teachings of the past.

THE DENSITY OF THE TEETH AS INFLUENCED BY THE FOOD, ETC.

DR. W. D. MILLER of Berlin has recently communicated to the American Dental Society of Europe the results of his experiments upon dogs, to show the effect upon the teeth produced by the absence or presence of lime salts in the their food. Every dental surgeon knows that the hardness of the teeth may vary greatly in the same individuals at different periods; the most marked, although by no means the only cases, are those of pregnant women; and this cannot be explained solely on the ground that the secretions of the mouth are vitiated by reduced acid from gastric disturbance. There is undoubtedly an absolute softening of the whole tooth substance, due, probably, to the robbing of the teeth of the mother of their lime salts in order to build up the osseous system of the fœtus. Dr. Miller is endeavouring to show experimentally how far changes can be produced in teeth. His *modus operandi* is to extract a tooth from a healthy dog, and then to feed the animal upon food containing but little lime salts for three months; a second tooth being now removed, the food is changed to one containing an excess of salts. This is continued for four months, when a third tooth is extracted. From the results of chemical analysis, he finds that there is an appreciable loss of lime salts in the first stage, amounting in one case to more than 1 per cent., and during the second stages that the proportion of lime salts rises to normal. The number of experiments has not been sufficient to give absolutely conclusive results, and no microscopic examinations have been made. Dr. Miller himself points out that Zalesky and Hoppe-Seyler, in their similar researches, maintain that the bones are not only deficient in lime salts, but that there is an absolute rarefaction, so we should expect some similar change in the teeth. We should also like to hear of some experiments on pregnant animals.

TREATMENT OF WHOOPING-COUGH.

THE following method of disinfection of sleeping and dwelling apartments and clothes is recommended by M. Mohn in the treatment of whooping-cough. It is said to cure the cases immediately. The children are washed and clothed in clean articles of dress and removed to another part of the town. The bedroom and sitting-room or nursery are then hermetically sealed; all the bedding, playthings, and other articles that cannot be washed are exposed freely in the room, in which sulphur is burnt in the proportion of twenty-five grammes to the cubic metre of space. The room remains thus charged with sulphurous acid for five hours, and is then freely ventilated. The children return the same day, and may sleep and play in the disinfected rooms.

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BACKWARD DISLOCATION OF THE FINGERS UPON THE METACARPUS.

IN an article which appeared in the *Boston Medical and Surgical Journal*, and which has been reprinted in pamphlet form, Dr. E. O. Otis discusses the above-named question. The author has taken as his text two cases of dorsal dislocation of the first finger backwards, which were unsuccessfully treated by him, but which led him to consider the subject thoughtfully and investigate the literature. The fact that such difficulty was met with in two consecutive cases led him to the opinion that the obstacles to reduction present were not such as are generally recognised. He reviews the anatomy of the joint, mentions numerous experiments which have been made by M. Farabœuf, and some by himself and others, in the majority of which the glenoid or anterior ligament of the joint ruptured at its attachment to the metacarpal bone, when the phalanx was forcibly displaced backwards, and comes to the conclusion that in the majority of cases it is this ligament which is the obstacle to reduction. If the proper procedures be employed to bring the phalanx into position again, this torn ligament is no obstacle to reduction. But if improper manipulation be used, by first flexing the phalanx and then making traction upon it, the ligament becomes completely reversed, its palmar surface resting on the metacarpal bone, and the dislocation becomes "complex" and irreducible. The author quotes largely from Jalagnier on the subject (*Archives Générales de Médecine*, Feb. 1886), and mentions the treatment to be adopted under such circumstances. Firstly, an attempt by extreme dorsal flexion to get the base of the phalanx behind the torn ligament, and thus convert the condition into that of simple dislocation. Secondly, on the failure of this, subcutaneous division of the ligament as it lies on the head of the metacarpal bone, the puncture being made to the outer side of the tendon. This latter is stated by MM. Farabœuf and Jalagnier to be both simple and absolutely efficacious. Other views as to the cause of difficulty in reducing these dislocations are mentioned, as also other methods of treatment; but Dr. Otis is inclined to look upon this as the usual cause of the difficulty in reducing these dislocations.

INSANITARY HOUSES.

A CASE of some importance to landlords and tenants has been decided during the past week in the Court of Appeal. The plaintiff let an unfurnished house to the defendant through an agent, who verbally informed the defendant that it was in good sanitary condition and fit for habitation. Subsequently the defendant alleged that he discovered that the statement as to its condition was incorrect — that the drains, water-supply, and ventilation were dangerous and defective. He therefore left the house and declined to pay the rent. At the first trial, before Mr. Justice Smith without a jury, a decision was given that the house was in an insanitary condition, that the plaintiff's agent gave the warranty upon which the defendant relied, and that the defendant left the house "within a reasonable time." Judgment for the defendant was accordingly given as to a claim for rent, and also upon a counter-claim for damages. On appeal it was argued that the law which implies a warranty of fitness for human habitation in the case of furnished houses could not be strained to apply to unfurnished houses; but for the defendant it was pleaded that the warranty was a condition of the agreement of tenancy, and that a breach of that warranty entitled the tenant to void the contract. The court found that in this case there was a warranty given by the agent, and that this was binding upon the plaintiff. The question of implied warranty was not, therefore, discussed, and the appeal was dismissed. The statement of an agent as to the condition of houses may now be held to be a warranty, which enables tenants to recover damages from landlords if any misrepresentation is made. The result of this case will be doubtless good, for it will tend to check the habit adopted by many house-agents of making inexact statements as to the condition of premises they are desirous of letting.

A NEW LOCAL ANÆSTHETIC.

DRUMINE is the title of a new Australian local anæsthetic discovered and described by Dr. John Reid of Port Germein, South Australia. Euphorbia Drummondii is the species from the milky juice of which the alkaloid drumine was prepared. Cocaine is known to have a mixed action on sensory and motor nerves, and causes preliminary excitement; whilst drumine is said to have an almost purely sensory paralysing effect, and does not cause excitement. Experiments were made on cats and on the observer's tongue. It was injected into the legs of the former animals and caused general dulness, with marked impairment apparently of all forms of sensibility. Placed on the tongue, nostrils, and hand of the observer, the resulting anæsthesia was most marked. The alkaloid has no action on the pupil, and small doses given internally produce no constitutional effect. It has been employed successfully in subcutaneous injections for sciatica and sprains. The experimentation has so far been imperfect and incomplete. We hope soon to have a fuller account of this new alkaloid, and to be able to give further information thereon. The amount injected subcutaneously was four minims of a 4 per cent. solution. Dr. Reid anticipates a brilliant future for the drug in the domain of nervous and cerebral diseases.

COCAINE IN DENTAL SURGERY.

OUR Paris Correspondent mentions in his letter in our last issue that M. Georges Vian claims to have solved the problem of local anæsthesia in dental extractions by means of the injection of one grain of cocaine hydrochlorate. Now this method has been in use for some considerable time in this country, the first published account being by Mr. Hunt of Yeovil in the *Journal of the British Dental Association* in January last, and a large number of other dental surgeons have been making experiments in the same direction. Cocaine is a most valuable adjunct to the Dental Pharmacopœia, but we think that its qualities have been somewhat exaggerated. For the production of local anæsthesia in dental cases, the solution which gives the best results is undoubtedly that made at the time by dissolving one grain of the hydrochlorate in ten minims of water; where it is kept for any length of time, even if carbolic acid, salicylic, or perchloride of mercury be added, it loses its anæsthetic properties. All are agreed that painting the gums with a solution, of no matter what strength, is useless, for the gums, unlike the conjunctiva, do not absorb it, and also the mucus which coats them forms an efficient barrier. The results of injecting cocaine have not been by any means uniformly successful, and even its warmest advocates admit that patients often say that they experience some pain, though not so much as when no anæsthetic has been used. Its disadvantages are many. The prick of the needle (which, however, may be masked by painting the gum first with a solution of cocaine), the mental suspense of waiting from three to five minutes, and the consciousness of the operation being performed, are all attended with pain; but there is a much more serious aspect—the after-consequences. There are reported a large number of cases of syncope lasting for from ten minutes to an hour after its use. We know of no case where the "cocaine habit" has been formed after its

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use in dental cases. In judging of the value of all local anæsthetics, the effect of imagination has to be eliminated; and we know of more than one case where patients have been told that they would feel no pain, and only water has been injected, yet they declared they felt nothing. In cases where the administration of nitrous oxide gas is objected to by the patient, or for other reasons not admissible, the injection of cocaine may be resorted to with advantage; but we do not think that it can ever compete with the gas. Apart from extractions, its use in dental surgery is manifold and great, in the treatment of exposed pulps, applications of the rubber dam where the gums are tender, lancing abscesses, and in many other circumstances.

THE NEW EXAMINATION BUILDINGS.

THE New Examination Hall on the Thames Embankment is rapidly nearing completion, and the question as to the uses to which the vacant plot of land not required for the building should be applied must soon be determined by the authorities of the combined Colleges. If pecuniary reasons are not urgent (and, considering the large incomes now derived by the two Colleges from their examinations, we should not suppose they could be), we would recommend that it should be left as it is, and should not be built on until the requirements of the examining board have been fully tested by one or two years' experience. It will then be time enough to decide whether class-rooms and laboratories for elementary or advanced scientific teaching and work could be added with the greater advantage. If, as is rumoured, there is a great divergence of opinion on this point, there is the more reason for delay, and for not taking any definite step which cannot be subsequently retraced if such a course should then seem expedient.

THE PROGRESS OF CHOLERA.

CHOLERA has again shown signs of activity, and its progress is further in the direction of eastern Europe. Several deaths from this disease are stated to have occurred in a village in the vicinity of Tirnova, in Bulgaria, the infection being alleged to have resulted from the importation of some clothing belonging to a man who had died of cholera in Hungary, where there have already been 966 cases and 499 deaths. The disease still lingers in certain parts of Hungary and Galicia, and if we have a recurrence of the epidemic next year, it is by no means improbable that it may take its start from some of the localities more recently infected in the Austro-Hungarian Empire. The east of Europe is probably much less prepared to withstand its progress than was the west.

CIRCULATION IN GANGLION CELLS.

PROFESSOR ADAMKIEWICZ of Cracow has recently published some observations on the circulation in ganglion cells, which, if confirmed, certainly adds to our knowledge of the physiology of nervous tissue. The ganglia chosen for observation were the intervertebral ganglia connected with the cords forming the brachial plexus. Carmine injections were made by means of the spinal arteries, and examination showed that each cell has a special arterial twig, which is distended so that its walls surround the ganglion cell, which consequently is situated in the lumen of the vessel, and is bathed completely by the arterial stream somewhat in the same way as the placental tufts are bathed by the blood in the maternal sinuses. This, however, is not all; for the cell itself contains a number of exceedingly minute vessels or passages from the circumference to the centre, which of course admit serum only; and this, which enters the cell in an arterial condition through numberless peripheral orifices, is collected at its centre as venous serum—forming, indeed, what has hitherto been looked upon as the cell nucleus,—which therefore, instead of being solid, is liquid, or rather a cell containing liquid, the only solid part being the nucleolus. This venous serum is conveyed away by a single vessel or vein which runs into the general venous circulation. Besides all this, it appears that the whole bloodvessel apparatus of the ganglion cell is surrounded by special lymph vessels, so that the arrangement is highly complicated, and offers an interesting field for further research.

THE EDUCATION AND REGISTRATION OF ARCHITECTS.

IN a paper read before the Society of Architects on the 14th inst. by one of the Vice-Presidents, Mr. D. Howard Seth-Smith, is to be found the first outline publicly announced of the Bill which is proposed for "closing" the architectural profession—a step of great importance in many ways to the whole country, but especially from the standpoint of health. The leading provisions of the proposed Bill are (1) the establishment of a Council similar in objects and duties to the General Medical Council; (2) the payment of fees for registration, which are to go to defray the expenses of carrying the Act into execution; and (3) the regulation of qualifications for registration. At the present time, in the eye of the law everyone has an equal right to practise as an architect, and consequently every man who has fairly entered on practice has a right to a place on the register. Immediately, however, the Act comes into force the compulsory education of the entire profession will commence, and imperfectly qualified men will be stimulated to self-improvement by increasing competition, and will be gradually supplanted by a race of cultivated practitioners. The plumbers are registering themselves as competent under a severe test, and intend to apply for an Act of Parliament to render that test compulsory; and although it would perhaps have been more fitting for the architects to have led the way in such a step, that fact does not prevent us from congratulating them upon so promptly following the good example set them.

FARTHING DINNERS.

THE cheap dinner movement appears to have reached its climax in Birmingham, where a bowl of soup sufficient to satisfy some appetites at least, and capable of producing an evident nutritive result, is sold to poor school-children at the cost of one farthing. Full details respecting this new departure in dietetics are to be found in an interesting and practical paper on the subject by Mr. G. H. Sargant. The fact that any measure of real success can attend an outlay so trifling is significant. It amounts to proof, which ought to be convincing, that there are in this system principles and methods in diet which have long lacked application, but are most happily adapted to meet the requirements of almost any depth of poverty, in some degree at least. In looking through the history of the farthing dinner three noteworthy points present themselves. It is evident, in the first place, that a successful result depends greatly on the number of diners; 400 or 500 are more easily fed at this cost than 100. Secondly, it is not without reason taken as an axiom that the digestive function, like every other, is depressed by hunger, and that therefore the fittest food for a child in this condition consists of light vegetable or mixed diet well diluted with water to form a soup. In the third place, the highly nitrogenous leguminous products, such as peas and lentils, even when used as a scanty thickening for hot water, are shown to have a nutrient value which is distinctly recognisable. Look at the matter as we may, we cannot, of course, pretend that children thus nourished are well fed, but there is sound theory as well as good practice

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in the system, and when the wolf of hunger is at so many doors every form of succour is welcome. Those who, like ourselves, are interested in this question of the time will do well to read Mr. Sargant's paper, which abounds in shrewd and experimental suggestions.

PROPOSED TESTIMONIAL TO DR. ARCHIBALD H. JACOB.

IT has been suggested by many medical practitioners residing in Dublin, as well as in various parts of the country, that the present is a fitting time for the members of the medical profession throughout Ireland, and especially those holding public appointments, to present to Dr. Jacob a testimonial as a recognition of the esteem in which he is personally held, as well as of the important services he has for the past twenty years rendered for their benefit. As an active member of the Irish Medical Association, Dr. Jacob has devoted much valuable time and energy to matters affecting the interests of the medical profession. His recent candidature for the office of direct representative has, moreover, entailed a considerable expenditure on his part. It has been arranged that a preliminary meeting of Dr. Jacob's friends shall be held to-day (Saturday), at the Royal College of Surgeons, Dublin, when the arrangements best calculated to promote the success of the proposal will be discussed.

CONTAGION OF TETANUS?

AT the Société de Chirurgie an interesting paper, followed by discussion, was read by M. Larger, which seemed to show clearly that there were good grounds for believing in the contagiousness of tetanus. Four patients who had been treated in the Colmar Hospital were seized with tetanus at different intervals, and all died. The nature and severity of the wounds varied in each case from an amputation to a simple incised wound. The only thing common to them all was that the cases had all occupied contiguous beds. Tetanus is rare at Colmar. None of the patients had had anything to do with horses. A veterinary surgeon, M. Cagnat, had practised castration on horses for twenty-five years without a single case of tetanus. At the end of 1884 he removed with an écraseur a tumour of the testicle in a horse; the animal died of tetanus. Operations for castration practised with the same écraseur on five horses afterwards were followed by tetanus and death in all the animals. The écraseur was then submitted to disinfection by being heated to a high temperature. The instrument was afterwards used for fresh castrations, and without tetanus resulting in any of the animals operated on.

PANTOMIME CHILDREN.

CERTAIN abuses connected with the employment of young children in pantomimes have lately attracted public attention. At a meeting of the London School Board held last week the subject was examined at considerable length by various speakers, in its moral, intellectual, and physical aspects. We cannot now discuss exhaustively each of these considerations. If, however, we may rely upon the evidence of quoted cases which seem to have satisfied the Board, there is reason to believe that the allegations which have been brought against the present system of theatrical management in this particular are not unfounded. Instances are given in which children under ten years of age were employed in pantomime performances, in which the work of rehearsal has interfered with school attendance; and illness, as we may well believe, has been traceable to the late nightly exhibitions carried on for a length of time by such young children, who afterwards have had to walk in any kind of weather, indifferently clad, to homes at the best not very comfortable. Without assuming any censorship of the pantomime as a social custom, we may remind our readers that such abuses, when they exist under the veil of public service, must not be excused by their intention or suffered to continue when they can be removed. This being the case, it clearly behoves managers of theatres and other interested persons either to amend the evils complained of or to disprove their existence.

OPPOSING AUTHORITIES.

ON Monday a conference of Metropolitan Poor-law guardians was held at the offices of the City of London Union to discuss the proposal of the Asylums Board to expend £84,000 in the erection of a permanent hospital at Darenth. A resolution was passed expressing surprise that the managers had again proposed to erect permanent buildings, and a further resolution that the Local Government Board be again asked to receive a deputation on the subject. These proceedings are interesting for the reason that the guardians of the metropolis have, on the one hand, elected representatives who have determined to spend money in a particular way, and, on the other, have appointed certain delegates to prevent such expenditure. If it were intended that the members of the Metropolitan Asylums Board should represent the views of boards of guardians, it is perfectly clear that their election should take place annually. Whether any satisfactory work would be carried on under these circumstances may be a matter for question. But if this intention did not exist, the actions of the boards of guardians in appointing delegates for the purposes of opposition is to be deprecated. It has become too much the custom for different authorities to attempt to interfere with each other's work, and this constant friction between the various boards is distinctly prejudicial to the public interest. There is, we fear, no probability of any diminution in this custom until the constitution of the several authorities is altered, and they are brought into more intimate relation with each other.

NEW METHOD OF EMPLOYING ELECTRICITY IN NEURALGIA.

DR. ADAMKIEWICZ describes in the Polish journal *Przelad lekarski* an exceedingly effective way of applying electricity for the relief of neuralgia of various kinds. The apparatus he uses is a constant current battery, the cathode being a concave metal plate lined with electrical carbon, which is saturated with chloroform. This is then applied over the painful spot, and a current, weak at first but gradually increasing in strength, passed. One or two applications of this kind were found, says the author, sufficient entirely to relieve the severest cases.

PRESCRIBING CHEMISTS.

MR. MORTON-YORK, the city coroner of Gloucester, lately held an inquest on a poor woman who had been recently confined. Her only obstetric attention was from a kindly neighbour, Mrs. Etheridge. The child was born before she arrived. The mother did very well for a day or two; then she seems to have suffered from emphysema and weak heart, ascertained post mortem by Dr. Peacock. She refused to have a medical man, as her husband wished, and the only medicine she had was a draught prescribed by a chemist. The chemist acted quite straightforwardly, but the coroner very properly explained the state of the law under the Apothecaries Act. Under this Act, he said, it was the province of medical men, and medical men only, to prescribe. We commend this case and the view of the coroner to chemists. Surely, the case of a lying-in woman is too

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serious a matter to be dealt with by a prescription from a chemist. It is to be regretted, too, that the husband did not disregard the wife's feeling and bring a medical man. Dr. Peacock thought the death due to failure of the heart's action, arising from diseased lung and enfeebled heart and recent delivery, and that even under medical care the result could scarcely have been different. But clearly such a case would have stood a better chance had a medical man been in attendance to direct the administration of suitable food and medicine.

PRACTICE IN RUSSIA BY GERMANS.

SOME discussion has been going on in the German and Russian journals about the possibility of German doctors practising in Russian Poland, it having been affirmed in a Berlin medical journal that a mere formal examination at Dorpat only was required, together with a knowledge of the Russian alphabet and the ability to sign one's name in Russian characters! This, however, is declared by the *St. Petersburger Medicinische Wochenschrift* to be quite a mistake, the Dorpat examinations being very thorough, and it being necessary to remain there under the professor's eyes for a considerable period. It is intimated, too, that the theoretical examinations are even more stringent in Russia than the German Staatsexamen. The University of Dorpat is the only one in Russia where the German language is used. It is, besides, the only one where the M.D. degree can be taken at the time of qualification, all others requiring a year at least to elapse between the qualifying State examination and the higher examination for this degree.

THE EAST MIDDLESEX CORONERSHIP.

THE declaration of the result of the polling which took place in East Middlesex on the 13th inst. for a coroner in the place of Sir John Humphreys, deceased, was made on the 15th inst. The numbers were announced as follows: Mr. Wynne E. Baxter, 1458; Dr. Macdonald, M.P., 1106; Mr. T. Beard, 254; Mr. G. H. Young, 727; and Dr. Porter, 55. The successful candidate proposed a vote of thanks to the returning officer, which was seconded by Mr. Beard and supported by Dr. Macdonald, who stated that he had that day made arrangements for bringing in a Bill making election of a coroner similar to that for a member of Parliament, in consequence of the disgraceful scenes he had witnessed on the polling day.

BOOKS FOR HOSPITALS.

THE Rev. Henry Constable has issued an appeal for periodicals or other literature of a light and wholesome character on behalf of the patients in Victoria Park Chest Hospital. His request will, we hope, be answered by a wide and generous contribution. Everyone can understand the value of such gifts to the sick poor. Debarred by illness from active exercise, and confined in-doors by our uncertain weather, they are still in a great many cases capable of enjoying such quieter intellectual diversions as they safely may. The conversation of fellow-sufferers, each eloquent perhaps on his own complaint, or the consolatory visits of friends, are not sufficient for minds which need all the encouragement they can find to make them happy. In-door amusements are not very numerous, and most of them tend to lose interest by repetition. Of books it may be said that they are unusually free from this disqualification. Their great variety of subject and frequent excellence of illustration render them the almost indispensable companions of the sick at any age. Much depends, however, on the choice of books. There is little reason to fear that works of a serious character will not find their way to a hospital. We would not advocate their exclusion, or even that of studious volumes of a purely secular kind; but the books which will undoubtedly be most useful and by far most eagerly sought after are those which, though sound in tone, are not deep in any way, but light and cheerful in theme and treatment. We need hardly add that other hospitals besides that at Victoria Park are equally in need of these Christmas contributions, and that what is sent should be prepaid.

ITALY AND HYGIENE.

ITALY seems resolved to be no longer behind Europe in sanitary investigation and practice. In view of the International Hygienic Congress to be held at Vienna in the September of 1887, she is already bestirring herself so as to take a prominent and effective part in its proceedings. Through the President of her Royal Society of Hygiene, she is urgently appealing to all Italians engaged, directly or indirectly, on that subject to assemble in force at the Congress, and by their contributions to its discussions, written or oral, to demonstrate the advance she has made in hygienic and demographic science. The President published last year a volume entitled "Les Institutions Sanitaires en Italie," and for 1887 he will issue a sequel to it, showing what Italy has done in practical hygiene from 1882 to that year. Appended to this volume will be a *catalogue raisonné* of all Italian literature on the science which has seen the light between 1881 and 1887; and, to make it as complete as possible, the President invites every compatriot author of a sanitary treatise, memoir, or article to send him a full note of the same. The bibliography of Italy on pellagra, malaria, and cholera is extensive enough, and ought to contain much that is of interest to the hygienists of all countries.

THE CONJOINT SCHEME.

THE Apothecaries' Society have asked from their licentiates an expression of approval of the steps which they propose to take to enable the Society to combine with some other corporation, or to become an independent examining body. No doubt this approval will be readily accorded, and it may be regarded as an indication of a conscientious desire of the Society to obtain the fullest information of the licentiates' wishes, and to give them some share in shaping the policy of the Court of Assistants.

SACCHARINE.

SACCHARINE, which has recently been introduced into therapeutics as an excessively sweet material, three hundred times sweeter than glucose, is likely to prove of considerable service. According to Aducco and Mosso it has very high antifermentative and antiseptic properties. It is recommended for internal administration to diabetics, with a view to rendering their food more palatable. It passes unchanged through the organism, and may be detected in the urine in its original condition. In cases of indigestion or where the intestines are the seat of abnormal fermentations and acidity, it is extolled as an antiseptic.

EFFECTS OF PETROLEUM ON HEALTH.

DR. BIELCZYK publishes in a Polish medical journal the result of his experiences among the workers in petroleum wells. Very violent mental symptoms are produced by acute poisoning by the gaseous exhalations existing in the shafts of the wells, amounting to delirium of a maniacal character. These, however, always quickly cease when the patient is brought up to the earth's surface. Speaking generally, the mortality amongst the workmen is not particularly high; they seem to be remarkably free from

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diseases of the respiratory organs, both of an inflammatory and a tubercular character, and also from infectious diseases. They are, however, subject to an eruption, like acne, affecting the extremities. Dr. Bielczyk mentions that he has found raw petroleum an excellent application for fresh as well as for old and foul or torpid wounds.

THE MEETING OF THE MEDICAL COUNCIL.

THE General Medical Council is expected to meet on Tuesday, the 15th of February next, at 2 P.M.

FOREIGN UNIVERSITY INTELLIGENCE.

Berlin.—Dr. Carl Friedländer, Privat Docent in Pathological Histology, has been granted the title of Professor.

Erlangen.—The number of medical students is now 260, against 233 last winter. A course of dental surgery is now being given to medical students for the first time.

Königsberg.—The nominees for the Professorship of Surgery vacated by Professor Schönborn, who has gone to Würzburg, are Professor Madelung of Rostock, and Professor Mikulicz of Cracow.

Würzburg.—Dr. Kirchener has been appointed to the charge of the Otological clinic.

Tubingen.—Dr. v. Rapp, a former professor, who became a homœopath and was latterly private physician to the Queen of Würtemburg, has just died at Stuttgart.

WE regret to record the death, on the 8th inst., at Ryton-on-Tyne, of Dr. Walter Fergus, until recently resident medical officer at Marlborough College, a post which he had occupied for thirty-seven years. It will be remembered that on his retirement the Council of Marlborough College marked their high sense of Dr. Fergus's services by the grant of a handsome life pension and the placing of his portrait in the College hall, while old Marlburians added a purse of £500, and present Marlburians a silver tea-service. From his long and arduous work at Marlborough Dr. Fergus had recently suffered in health, and his last illness was sudden and brief. The funeral took place at Marlborough on the 14th inst.

THE directors of the Istituto Antirabico (the Anti-rabies Institute) of Milan announce that their bacteriological studies have enabled them actually to diagnose in the dog-bitten the presence of the poison of rabies, and to apply the Pasteur method of cure, with results superior to those hitherto attained by Pasteur himself. They are about to publish a statistical report of the first 500 cases that have come under treatment.

FROM Turin the death is announced of the eminent surgeon, Fedele Margary, known far beyond the circuit of that city for his brilliant operations in its Ospedale di San Giovanni. At his funeral an *éloge* of him was pronounced by the senator, Dr. Bruno, who dwelt on his skill as an operator and his success as a teacher.

THE *Rangoon Gazette* states that General Sir Frederick Roberts, the Commander-in-Chief in India, inspected the European and Native Base Hospitals at Rangoon *en route* to Upper Burmah, and expressed himself well satisfied with the arrangements made there for the care and treatment of the sick and wounded.

A SERIOUS epidemic of diphtheria is reported to have broken out at Ash, near Sandwich, Kent. The village schools have been closed, and every effort is being made by the district authorities to subdue the epidemic.

ON the 13th inst. the death of Dr. Ebenezer Watson occurred at his residence in Glasgow, the result of what he himself regarded as malarial poisoning, contracted at a country house in the early months of 1885. Dr. Watson took a great interest in medical legislation, and his death will be a great loss to the various medical institutions and societies with which he was connected. We purpose publishing a more detailed account of his career in our next issue.

MR. J. W. SCARTH, a Leeds surgeon, was on the 14th inst. fined seven guineas and costs by the stipendiary magistrate for having given a certificate of the death of a child which, it was alleged, he had never visited, but for which he had prescribed, on his son, who had attended the patient, telling him the nature of the illness.

IT is announced that an unexpectedly favourable change has taken place in the condition of Professor von Arlt, the veteran Vienna ophthalmologist, and that an eminent firm of instrument makers have received an order for an artificial leg to replace the limb which was amputated for gangrene.

THE Vienna professorial body, having been asked by the Minister of Education whether it would not be well to place a limit on the number of students of medicine received, has unanimously pronounced against the adoption of any rule of this kind.

THE Wolverhampton Board of Guardians, in appointing a new medical officer, have decided to make all extra fees inclusive of salary. This practice is stated to be followed by the whole of the other unions in Staffordshire.

DEGREES FOR LONDON MEDICAL STUDENTS: REPORT OF THE DELEGATES.

THE following report, dated Dec. 6th, 1886, of the Committee of Delegates, appointed by the Royal College of Physicians of London and the Royal College of Surgeons of England, to consider the question of the desirability and practicability of granting degrees in medicine and surgery to persons who have passed the conjoint examinations of the two Colleges, was presented at the special meetings summoned for the 16th inst.

On July 7th, 1885, a preliminary report to the two Colleges was adopted by the Committee of Delegates, expressive of their opinion that it was both desirable and practicable that persons examined by the two Colleges, acting conjointly, should, in virtue of that examination, have a degree in medicine and surgery conferred upon them. That preliminary report was referred by the Royal College of Physicians to their Council, and by the Council of the Royal College of Surgeons to a Committee, to consider the same and to report thereon to the respective Colleges; and the Council of the College of Physicians and the Committee of the College of Surgeons having duly reported thereon, the two reports were referred to the Committee of Delegates.

The two reports having been duly considered, the Committee of Delegates have now to recommend to the two Colleges the approval and adoption of the following resolutions—viz.:

1. That candidates who have passed the examinations of the examining board in England for the licence of the Royal College of Physicians of London and the diploma of member of the Royal College of Surgeons of England should have a degree in medicine and surgery conferred upon them, provided that they have passed such examination in arts and science as may hereafter be defined; and have pursued clinical studies in London—or in other medical school or schools if the governing body should so determine—for at least two years after having passed the second professional examination.

2. That an application be made to the Crown by the

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Royal College of Physicians of London and the Royal College of Surgeons of England, acting conjointly, for power to confer degrees in medicine and surgery.

The Committee of Delegates have further to recommend to the two Colleges the approval and adoption of the following statement, setting forth the reasons for granting to the Colleges, acting conjointly, the power of conferring degrees in medicine and surgery—viz.:

I. It is a reasonable demand that London students should be able to obtain medical degrees in London, provided that their course of study, their opportunities for practical instruction, and the examinations to which they are subjected are commensurate with those which prevail in the majority of the universities of the United Kingdom.

II. The natural way of meeting this demand would seem to be that the Royal College of Physicians of London and the Royal College of Surgeons of England, acting conjointly, should acquire the power of conferring medical degrees, so that they and the schools associated with them should become *de jure*, as they already are *de facto*, a medical university.

III. The essentials of a university as regards teaching and the means of study in medicine exist in London more fully than anywhere else in England—viz.: (*a*) The teachers in London include men of the highest eminence in the several branches of medicine. (*b*) London possesses unrivalled clinical advantages for medical education in its large and well-appointed general hospitals, containing upwards of 5000 beds, occupied by about 60,000 patients a year, with out-patient departments attended by not less than 350,000 persons; its special hospitals, with more than 3000 beds; and its lunatic asylums with upwards of 5000 beds. (*c*) What has been stated of the advantages for clinical teaching applies in an equal degree to the study of morbid anatomy and pathology. (*d*) As regards the teaching of the preliminary subjects of medical study, advantages equal to those of universities exist in the London medical schools. (*e*) The organisation of the London medical schools, and the intercourse of the students with one another and with their teachers, constitute a further condition of university life, which has a marked and important educational influence.

IV. The examinations of the Colleges in the subjects of study comprised in their curriculum are on a level with those of the majority of the universities of the United Kingdom.

V. Whilst the essential conditions of university education in medicine exist in London, it would lead to their fuller and more complete development, and to the encouragement of higher education, if degrees—which are the recognised proof of the completion of a university course—were conferred upon the students who have virtually passed through such a course.

VI. It is contrary to the interest of the public that students should be induced to go from London to places where the opportunities for clinical studies are necessarily far inferior, merely because university degrees can there be obtained.

VII. There seems to be no just ground for objecting to the creation of a new university, seeing that a university has just been founded—which confers a power, such as that now claimed for London, on Manchester and Liverpool. Other possible objections may be made and answered as follows—viz.:

It may be objected—(*a*) That there would be two universities in one city. The case of Dublin may be cited which has its two universities. (*b*) Or that the new university would consist of one faculty only. Precedents may be found—notably in the case of Montpellier—in which a university originally consisted of a medical faculty only; and in the universities of the United Kingdom, in which, at their foundation, rarely more than two faculties were included. (*c*) Or that other medical corporations would seek similar powers. In other cities in which medical corporations exist, local universities are already established, affording means of graduation such as are not available for the great majority of students in London. (*d*) Or that it would be difficult to find an appropriate title for the new university. The new university would naturally receive a distinctive designation—for example, University of Westminster.

VIII. It may be said that the students educated in London can obtain degrees from the University of London, but, for reasons into which it is not here necessary to enter, the University of London does not supply the present want, as is obvious from the following fact: of 16,192 medical men practising in England, 5219 possess M.D. or M.B. degrees; but of these, only 622 derive their titles from the University of London.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

THE following is a copy of the circular sent to every Fellow of the College:—

SIR,—You are doubtless aware that by the Charter of the College, dated the 14th of September, 1843, "a new class of Members" was created "to be called Fellows," and in that Charter it was provided that none but Fellows should thenceforth become members of the Council, and that the right of election of members of the Council should vest in the Fellows alone.

The Council having decided to seek alterations in the Charters to enable Fellows to vote by voting-papers, without personal attendance, at the election of the Council, and to effect other changes therein, an application has been addressed to the Council by some Members of the College requesting the Council to seek further alterations in the Charters so as to enable Members to take part in the election of the Council and to be themselves eligible for seats on the Council.

The Council will be glad if you will answer the questions printed on the fly-leaf of this circular, appending thereto your signature and address, which will be treated as confidential, and return the same to me, not later than Friday, the 31st inst., in the enclosed stamped envelope.

I am, Sir, your obedient servant,
EDWARD TRIMMER, Secretary.

Lincoln's-inn-fields, W.C., Dec. 9th, 1886.

Circular to Fellows.

	Answer.
(*a*) In your opinion should Members of the College be allowed to vote for Fellows as members of the Council?	
(*b*) In your opinion should Members of the College be eligible for seats on the Council?	

Signature of Fellow _____

Address _____

To Edward Trimmer, Esq., Secretary, Royal College of Surgeons of England, Lincoln's-inn-fields, W.C.

ADDRESS BY PROFESSOR BOTKIN ON THE CIRCUMSTANCES ATTENDING THE SUICIDE OF THE LATE PROFESSOR KOLOMNIN.

THE following is an outline of an address delivered by Professor Botkin at a meeting of the St. Petersburg Society of Russian Medical Practitioners, held in honour of the memory of the late Professor Pirogoff, at which the deceased Professor Kolomnin himself was to have delivered the address.

On the 11th (23rd) of November, at 12 o'clock, Professor Sergei Petrovich Kolomnin terminated an irreproachable career by a shot in the right temple. The deceased left the following letter addressed to the Senate of the (Military Medical) Academy:—"Last week people's minds seemed to have become clouded over on account of the disastrous result of an operation. I am not to blame. I wished to do what was right. I desire that Dr. Morozoff and others may not be considered to blame.—S. KOLOMNIN." On the 6th (18th) of November the operation which ended so unfortunately was performed. Five days later S. P. Kolomnin was no more. All who knew Sergei Petrovich as a man humane in the highest degree, holding, too, a foremost place in the ranks of science, found it impossible to believe that he could have committed an error so grave as to call for such severe self-condemnation. Scientific men and the public were shocked by the occurrence, and different views were expressed concerning it. While some looked upon it as a heroic action others stigmatised it as cowardice. Having known Sergei Petrovich for more than ten years as a colleague in the Academy and as the best adviser on surgical matters, being also well acquainted with his character, it is gratifying to me to be able to throw some light on the case, the more so as he came to me in the clinic on

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Nov. 10th (22nd) and asked me to supply his place at the present "Pirogoff meeting" of the Society, at which he had to deliver an address, but did not feel sufficiently well after his misfortune to fulfil his engagement. On Oct. 27th (Nov. 8th) a female patient, aged twenty-three, was seen in my out-patient department by Dr. Pokrovski, ordinator (chief assistant) in my clinic. He diagnosed an affection of the rectum, and sent her into the surgical clinic, where Sergei Petrovich (Kolomnin) examined her, finding an ulcer as large as half the palm of the hand, of a tuberculous character, as he believed, this view being upheld by the presence of some tumours. He decided to scrape and subsequently to cauterise the lesion. In order to produce anæsthesia he had fifty grammes of a 5 per cent. solution of hydrochlorate of cocaine prepared; of this thirty grammes were brought into use, containing exactly twenty-four Russian grains of the salt, or twenty-three English grains [the Russian grain is exactly one-sixteenth of a gramme], six grains being injected at a time into the rectum. After the third of these injections it was found on examination that the part was still sensitive. A speculum was then introduced, the ulcer dabbed with a dry sponge, and then the fourth injection given, making twenty-four grains in all. After this the parts were tolerably anæsthetic. The ulcer was scraped, and a tampon saturated with oil inserted. The pulse was then accelerated. During the operation the patient groaned, so that even the twenty-four grains had not produced complete anæsthesia. After the operation Sergei Petrovich (Kolomnin) went round his ward, and in three-quarters of an hour a message was sent to him that the patient was very low. He found the pulse very weak, the face and hands cyanotic, and the respiration laboured. He considered that she was in a toxic state, and used every means to bring her round, Prof. Sushchinski being also invited to a consultation. Faradisation, artificial respiration, hypodermic injection of ether, administration of ammonia, tracheotomy for the inhalation of oxygen, stimulating and nutrient enemata—all were tried, but without success. Sergei Petrovich (Kolomnin) had no doubt that death was due to cocaine. To what extent was he to be blamed for introducing so large a dose as twenty-four grains into the body? Some time before the operation he asked Professor Sushchinski about the dose of cocaine, and he told him that he considered two grains as the maximum. He however collected a number of special papers on the subject in which some thirty cases of cocaine anæsthesia were reported where from six to eighty, and even ninety grains had been administered. Most of them were cases of lithotripsy. Of course he knew that the bladder, when healthy, cannot absorb such a quantity of cocaine, but some cases of diseased bladder were mentioned where there must have been absorption. Finally, Dieulafoy had performed an operation similar to Kolomnin's, introducing into the rectum forty-eight grains all at once with complete success, and this served as a guide. He, however, observed additional precautions, employing only half the quantity and introducing it in divided doses. How far was he to blame? He certainly put too much faith in Dieulafoy's case, but anyone else might have done the same.....It is difficult to account for the French surgeon's success. It is indeed possible that, as his operation was performed at a time when cocaine was dearer than gold itself, being two shillings a grain, it may have been adulterated, and therefore the proper effect was not produced. At all events, whatever blame is due to Sergei Petrovich is greatly lessened by the records in medical literature. He himself, besides, said that he was not to blame regarding the operation, but only with reference to his therapeutics. "I blame myself," he said, "most of all for making an incorrect diagnosis; the diagnosis of tubercle was not confirmed. I ought not to have operated at all, and the patient would have been still living. In spite of my not being to blame, I cannot help feeling at times that I killed her."

Gentlemen, you know that diagnosis during life is always only a hypothesis of a more or less correct nature. There may always be a mistake, and only a serious blunder is inexcusable. In the present case the ulcer was scraped and cleaned, and it was impossible to show during life that it was not tuberculous. But even if the diagnosis had been incorrect, why did he blame himself so seriously and then punish himself in such a way? As the circumstances do not supply a sufficient answer to this question, we must look for it in the condition of Sergei Petrovich himself. He was a remarkably reserved man, confining himself entirely to his scientific work, so that he made no intimate friends. Whether it was from his personal condition or from surrounding circumstances, his character grew year by year more reserved, and for the last few years he lived quite in seclusion. He was very strict, both with other people and with himself. He was highly sensitive, and no doubt had a pathological nervous system. He had consulted me for palpitation and sleeplessness. When I saw him after the vacation he was restless and irritable. He was constantly alone and showed great tendency to impatience, and after the unfortunate occurrence his equilibrium seemed to be quite upset. On the Sunday he attended the post-mortem examination, expecting to find some disease of the internal organs. None, however, was discovered, and he satisfied himself that the cocaine must have been the cause of death. On the Monday he came to me in a very depressed condition, with a pile of reports of cases of cocaine anæsthesia. I begged him not to lay this case so much to heart, and after a time he became more composed, and promised to come to this meeting and explain the whole of the circumstances to the Society, but he added, "I can't promise for certain." He was repeatedly moved to tears when talking over the case.....Taking into consideration all these things, we must conclude that when he committed suicide he was not fully responsible for his actions. Indeed, I think that I myself, and all of us, are really to blame for his death, because in the time of his dire distress we did not sufficiently hold out the hand of sympathy to him.

The meeting broke up in solemn silence.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 5553 births and 3984 deaths were registered during the week ending Dec. 11th. The annual death-rate in these towns, which had been 19·1, 20·1, and 21·0 per 1000 in the preceding three weeks, further rose last week to 22·9. During the first ten weeks of the current quarter the death-rate in these towns averaged 19·7 per 1000, and was 2·1 below the mean rate in the corresponding periods of the ten years 1876-85. The lowest rates in these towns last week were 12·1 in Brighton, 17·0 in Birkenhead, 17·7 in Hull, and 18·0 in Birmingham. The rates in the other towns ranged upwards to 29·2 in Manchester, 30·1 in Derby, 30·5 in Blackburn, and 33·3 in Wolverhampton. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had been 399 and 379 in the preceding two weeks, rose again last week to 424; they included 181 from measles, 65 from scarlet fever, 60 from whooping-cough, 50 from "fever" (principally enteric), 35 from diarrhœa, 32 from diphtheria, and 1 from small-pox. The lowest death-rates from these zymotic diseases last week were registered in Bolton and Birkenhead, and the highest rates in Halifax, Leeds, and Wolverhampton. The greatest mortality from measles occurred in Huddersfield, Leeds, Halifax, and Wolverhampton; from whooping-cough in Bristol and Huddersfield; from scarlet fever, in Leicester, Salford, and Bristol; and from "fever," in Preston and Salford. The 32 deaths from diphtheria in the twenty-eight towns included 14 in London, 7 in Liverpool, 3 in Portsmouth, and 2 in Huddersfield. Small-pox caused no death in London and its outer ring, 1 in Leeds, and not one in any of the twenty-six other large provincial towns. Only 2 cases of small-pox were under treatment on Saturday last in the metropolitan hospitals receiving cases of this disease. The deaths referred to diseases of the respiratory organs in London, which had increased in the preceding five weeks from 293 to 444, further rose last week to 494, and exceeded the corrected weekly average by 25. The causes of 97, or 2·4 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Newcastle-upon-Tyne, Nottingham, Cardiff, Birkenhead, and Plymouth. The largest proportions of uncertified deaths were registered in Halifax, Oldham, Sheffield, and Salford.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 21·4 and 23·1 per 1000 in the preceding two

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weeks, declined again to 22·0 in the week ending Dec. 11th; this rate was 0·9 below the mean rate during the same week in the twenty-eight large English towns. The rates in the Scotch towns last week ranged from 14·8 and 17·0 in Leith and Edinburgh, to 22·8 in Dundee and 26·8 in Glasgow. The 544 deaths in the eight towns last week showed a decline of 26 from the number in the previous week, and included 17 which were referred to scarlet fever, 15 to whooping-cough, 15 to diarrhœa, 6 to diphtheria, 5 to measles, 5 to "fever" (typhus, enteric, or simple), and not one to small-pox; in all, 63 deaths resulted from these principal zymotic diseases, against 64 and 81 in the preceding two weeks. These 63 deaths were equal to an annual rate of 2·6 per 1000, which exceeded by 0·2 the mean rate from the same diseases in the twenty-eight English towns. The fatal cases of scarlet fever, which had been 14 and 25 in the previous two weeks, declined again last week to 17, of which 12 occurred in Glasgow and 3 in Edinburgh. The 15 deaths from whooping-cough also showed a decline from the numbers in recent weeks, and included 9 in Glasgow and 4 in Edinburgh. The deaths attributed to diarrhœa, which had declined in the seven preceding weeks from 46 to 17, further fell last week to 15; 7 were returned in Glasgow, 4 in Aberdeen, and 3 in Dundee. The 5 deaths referred to "fever" (of which 2 occurred in Glasgow) showed an increase of 2 upon the low number in the previous week; whereas the fatal cases, both of diphtheria and measles, had declined. Four of the 5 deaths from measles occurred in Glasgow; and 2 deaths from diphtheria were returned both in Glasgow and Dundee. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 125 and 142 in the preceding two weeks, further rose last week to 144, but were 34 below the number in the corresponding week of last year. The causes of 59, or nearly 11 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had increased in the preceding four weeks from 23·6 to 28·1, further rose to 35·6 in the week ending Dec. 11th. During the first ten weeks of the current quarter the death-rate in the city averaged 25·1; the mean rate during the same period did not exceed 18·2 in London and 19·0 in Edinburgh. The 241 deaths in Dublin last week showed a further increase of 51 upon the numbers returned in recent weeks, and included 8 which were referred to scarlet fever, 8 to diarrhœa, 4 to "fever," (typhus, enteric, or simple), 3 to whooping-cough, and not one either to small-pox, measles, or diphtheria. Thus 23 deaths resulted from these principal zymotic diseases, against 22 and 21 in the previous two weeks; they were equal to an annual rate of 3·4 per 1000, the rates from the same diseases last week being but 2·1 in London and 1·6 in Edinburgh. The fatal cases of scarlet fever corresponded with the number in the previous week; those of diarrhœa and whooping-cough showed an increase, while those of "fever" had declined. Five inquest cases and three deaths from violence were registered; and 58, or nearly a quarter, of the deaths occurred in public institutions. The deaths both of infants and of elderly persons showed a further increase upon recent weekly numbers. The causes of 50, or nearly 21 per cent., of the deaths registered during the week were not certified.

THE SERVICES.

BURMAH.

IN THE LANCET last week, in enumerating the medical officers serving in Upper Burmah, we inadvertently omitted mention of the name of Mr. Mackinnon, of the Army Medical Department, who was for some time the principal medical officer in Upper Burmah. Mr. Mackinnon remained at Mandalay in administrative charge until August, when he was replaced by Mr. Farrel, of the Indian Medical Service.

WAR OFFICE.—Army Medical Staff: Brigade Surgeon Philip Broke Smith, M.D., to be Deputy Surgeon-General, vice S. Fuller, retired; Brigade Surgeon William O'Halloran, from half-pay, to be Brigade Surgeon, vice P. B. Smith, M.D. The promotion of Surgeon-Major Henry William Alexander Mackinnon to the rank of Brigade Surgeon is cancelled, this officer having been granted the distinction of Companion of the Distinguished Service Order.

ADMIRALTY. — The following appointment has been made: Walker John E. Sumpter, M.R.C.S., L.S.A., to be Surgeon and Agent at Sherringham, Norfolk.

ARTILLERY VOLUNTEERS.—1st Fifeshire: Surgeon David Archibald resigns his commission; also is granted the honorary rank of Surgeon-Major, and is permitted to continue to wear the uniform of the corps on his retirement.

RIFLE VOLUNTEERS.—3rd Volunteer Battalion, the Lancashire Fusiliers: Surgeon G. G. Tatham, M.D., resigns his commission.—2nd Volunteer Battalion, the Norfolk Regiment: David Chadwick Smith, Gent., to be Acting Surgeon.—5th Surrey: Surgeon G. F. White resigns his commission.

THE VOLUNTEER MEDICAL STAFF CORPS.—The Edinburgh Division: German Sims Woodhead, Gent., M.B., to be Surgeon.

Correspondence.

"Audi alteram partem."

THE FELLOW, THE MEMBER, AND THE FRANCHISE.

To the Editor of THE LANCET.

SIR,—I must be excused from attempting to follow your correspondent "Historicus" in an inquiry into my "motives" for taking the course I have felt it my duty to pursue in reference to the questions now at issue at the College of Surgeons, as well as into an explanation of "the part" which, according to him, I am "now playing." His remarks on these points I leave with confidence to be dealt with by the good taste of your readers—as I do his criticisms by their good sense. Nor have I any "personal justification" to offer or any "apology" to make to any man or to any body of men. In freely and openly stating my views at a public meeting on a public question, and in addressing my brother Fellows through the press on a matter that closely affects my and their collegiate interests, I need no justification, and most certainly will offer no apology.

But to pass from this personal question which your correspondent has raised, he asserts that there is scarcely a statement I make or an inference I draw that may not be controverted. But yet he altogether fails to disprove statements such as these: that the College of Surgeons has, under its present form of government, attained an unparalleled prosperity; that the value of its diploma is rising in professional and in public estimation; that so little importance does the great body of its Members appear to attach to the franchise, that out of more than 4000 who could five years ago have easily acquired it only nine availed themselves of that privilege; that the Council as at present constituted is a thoroughly representative body; and that the Members of the College have never possessed the elective franchise, the self-election of the Council up to the period of the institution of the Fellowship being a Charter right. These are a few of my statements that he has not succeeded in controverting.

Your correspondent misquotes me in respect to the questions of the Fellowship of the Royal Society. What I say is this: "Many of the Fellows possess the coveted distinction of the F.R.S.; how many, if any, of the Members *who have not sunk the Membership in some higher university degree* I know not." He omits the sentence I now put in italics. But this comprises the whole gist of the matter Many of the leading physicians in London who now possess the F.R.S. took the Membership of the College on the completion of their studies, in order to have a qualification whilst working and waiting for the M.D. degree. But they have so effectually sunk the M.R.C.S. under the degree that they never append it to their names in their publications or in the rolls of the Societies, and the only clue to their connexion with the College of Surgeons is to be found in the list published in the Calendar of that institution.

In conclusion both of this letter and of this correspondence, let me say this, in justice to others, that the publication of my pamphlet at the time that the Council was about to issue its circular to the Fellows was an accident, determined solely by the date of the late meeting, for the pamphlet is simply

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an amplification of what I said on Nov. 4th; and further, that I alone am responsible for every opinion, statement, and inference contained in it; not a single member of Council or official connected with the College had the faintest idea that such a pamphlet would appear. With me rests the sole responsibility of its publication, and of its circulation amongst the Fellows. "*Laudatur ab his, damnatur ab illis*," might well be its motto; for if, unhappily, it has provoked the hostility of "Historicus" and his allies, I am consoled by the commendations it has called forth from those whose opinions I most value.

I am, Sir, yours faithfully,

Dec. 14th, 1886. JOHN ERIC ERICHSEN.

To the Editor of THE LANCET.

SIR,—The thanks of every Member of the College of Surgeons are due to "Historicus" for his brilliant rejoinder to Mr. Erichsen in your last issue. No more opportune moment could have been chosen for this reply than the eve of the poll that the Council of the College is taking of its Fellows, on the subject of what is now popularly called the "Members' Franchise." Mr. Erichsen has, we understand, in a mistaken sense of duty, sent to every Fellow a copy of his speech at the College on the 4th, or rather of what that speech might have been if time had permitted on that occasion; and now that the other side of the question is thus clearly brought home to them, the Fellows will have an opportunity of forming an unbiased judgment; attack and defence are each set forth, and for the present the matter is in the hands of the Fellows. The Association of Members has not thought it to be becoming to go cap in hand to beg for the votes of the Fellows; but what a body of men cannot gracefully ask for itself may, without loss of dignity, be asked for by others. If the result of the poll is adverse to our claims—as it may be from the fact that the College Council has not seen fit to lay the entire resolution adopted at the general meeting before the Fellows,—we have still the Privy Council to approach, and, if that body should not grant our petition, we have, beyond that, the Houses of Parliament. We trust, however, that in the College itself this reform may be carried out, and that when the Privy Council is approached it may be by a united body, the President and Council praying that the new Charter may contain the provisions we desire. For our own part, we have always endeavoured to keep the issue simple, and, leaving aside all questions of change in other corporations and colleges, shall continue to ask for reform in our own College of Surgeons, and that alone. When that is accomplished, it may be that other corporations will be only too anxious to follow a good example, and their councils, anticipating the desires of their diplomates, themselves throw open the portals. But one door is sufficient for us to knock at.

We are, Sir, your obedient servants,

WARWICK C. STEELE,
WM. ASHTON ELLIS,
Hon. Secs. Association of Members of the Royal College of Surgeons.

THE FELLOWS, MEMBERS, AND COUNCIL OF THE ROYAL COLLEGE OF SURGEONS.

To the Editor of THE LANCET.

SIR,—As a Fellow of the Royal College of Surgeons, I have been asked to answer two questions: 1. Whether in my opinion, Members should have a vote for the election of the Council? 2. Whether, in my opinion, Members ought to have seats on the Council? I have answered the latter question by a decided "Yes." The Members are a highly educated and able body of surgeons. The average Member of to-day is probably the equal to, or perhaps the superior, of the average Fellow of twenty years ago (about my own standing). From their ranks many able men of ripe experience might be picked whose services on the Council might be invaluable to the College. The other question I have answered in as decided a negative. "Historicus" argues, in your columns, from the history of the College prior to the present century that the Members have a "moral right" to the so-called "franchise." This is beside the question. The real question is: "What is the best way of electing the Council of the great College which has charge of the interests of the profession of surgery?" I do not think that, although from what I have already said as to the propriety of Members having seats on the Council it will be understand that I cordially admit their fitness to exercise the franchise, the proposed concession would give them real *representation*, or that it would tend to improve the quality of the Council. In such a constituency as is proposed, an election would be followed by one of two results: either the seats on the Council would be placed at the disposal of the larger medical schools, or they would be at the mercy of some powerful association. As a matter of fact, a recent experiment in what is practically an almost identical constituency has proved that the latter of the two alternatives would operate. Reference to page 1172 in the current number of the *Journal* of the British Medical Association will show that such a result was actually calculated upon by the moving spirits of the Association. I find no fault with the list of able men who have been, through the influence of the Association, selected to represent the profession in the Medical Council. I am prepared to go further, and say that no other body than the British Medical Association, *as at present constituted*, could be better entrusted with the appointment of representatives of the profession. I submit, however, that the appointments of so-called representatives through the influence of a powerful Association is not *representation* at all. I am a member of the Association; I cordially acknowledge the useful work it has done and is doing, and I believe that it still has much useful work before it; but the life history of all Associations should teach us that the day will come when it will not be safe to entrust the control of the affairs of a great institution like the College of Surgeons to its waning vitality. In framing its new Charter, the College will have to legislate not only for to-day but for the future. The remedy for the alleged abuses in the present constitution of the College will not be found in direct (so-called) representation. I must confess to a feeling that to a certain extent the grievances of the Members are more sentimental than real. Those who are out of office look on things with very different eyes to those that are in. I can remember the time when some of those now on the Council were clamouring for reforms of which riper experience and a closer insight into the affairs of the College have convinced them of the inexpediency. Thus the reformers of yesterday become the Conservatives of to-day. Still there may be room for reform. Certainly the Council is not infallible; witness its present mistaken attitude towards the Apothecaries' Company. Something ought to be done to make things pleasanter between the Council and the Members. The admission of Members to seats on the Council would do something. To supplement this, I think that a scheme of *indirect* representation might be devised, which, while respecting the "moral rights" of the Members, would secure the election of a fairly representative Council. I would suggest that under the new Charter Members should take part in the formation of the elective constituency. Thus: let the Honours Examination for the Fellowship continue, as at present, to entitle to the franchise, but let the Members have the privilege of electing, *honoris causâ*, a certain number of Members of not less than ten years' standing to the Fellowship. With such a provision, and the concession to the Members of the privilege of sitting on the Council, a sound representation would, I think, be secured.

I remain, Sir, yours faithfully,

Rowlands, St. Mary Cray, Dec. 13th, 1886. C. H. ALLFREY.

To the Editor of THE LANCET.

SIR,—The circular addressed to the Fellows of the Royal College of Surgeons does not fairly place before them the issue upon which their opinion is asked. In answering it, however, it may be put right by adding the words "if of ten years' standing" to the first question, and "if of twenty years' standing" to the second. Whilst I have no doubt as to the propriety of admitting the Members to the franchise, I do not think it at all necessary to give them the privilege of a seat on the Council. There are a great many Fellows scattered all over the country, occupying a high scientific as well as social position, who are general practitioners, and quite competent to safeguard the interests of the professica

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in all respects, if elected to the Council; and in my opinion it would not be wise so greatly to enlarge the area of selection as would be the case were the second proposition carried into effect.—I am, Sir, yours obediently,

Norwich, Dec. 15th, 1886. THOS. W. CROSSE, F.R.C.S.

To the Editor of THE LANCET.

SIR, — The circular from the College of Surgeons to ascertain the opinion of the Fellows upon the vital principle of representation of Members upon the Council has been issued, and I venture to say is found by most of an unsatisfactory character. These are the questions asked:—(*a*) In your opinion should Members of the College be allowed to vote for Fellows as members of the Council? (*b*) In your opinion should Members of the College be eligible for seats on the Council? In answering them I hope each Fellow will ignore the unqualified nature of the questions, and state his views more broadly, and rather with reference to the resolution submitted and carried at the last general meeting of the Fellows and Members on Nov. 4th—viz., "That it would conduce to the welfare of the College, and tend to promote the interests of medical polity and education—(*a*) if Members of ten or more years' standing were empowered to vote (separately or conjointly with Fellows) in the election of the Council; and (*b*) if Members of twenty or more years' standing were eligible to sit in the Council to the extent of not more than one-fourth of the Council." I would also ask the Fellows to take this opportunity of expressing their opinion on the action of the Council in lowering and depreciating the status of the Fellowship, by the adoption of a modified examination to Members of a certain standing—a measure inflicting great injustice upon the younger Fellows (especially the provincial ones) in many ways, though perhaps of little moment to those senior ones who hold seats on the Council. The Fellowship was an evidence of a thorough anatomical and surgical knowledge, and to obtain it extra years of study were required, often involving no little sacrifice. The profession and the public relied upon it. It will be so no longer. By their action in this, and by their conjoint action with the College of Physicians in refusing to-coperate with the Apothecaries' Society to bring about practically a one-portal system for London (so much to be desired by all who have the welfare of the profession at heart)—by these two acts alone the Council have shown their inability "to read the signs of the times," and have forfeited the confidence of not a few of their present constituents. The time has come when a radical change in the management of the College is not only desirable, but absolutely necessary. I could have said much more on both the above topics, but fear to trespass on your valuable space. The legal right of Members has been so fully discussed that further comment is unnecessary. In conclusion, I will mention briefly a few of the alterations that might fairly be conceded, and which would probably benefit the College, its Fellows, and Members. (*a*) The Council to consist of three-fourths Fellows elected by Fellows only, and one-fourth either Fellows or Members elected by Members only. Voting-papers to be permitted. (*b*) The president of the College to be a Fellow or Member of a certain standing, and elected annually at a general meeting of Fellows and Members. (*c*) The recent modifications affecting the status of the Fellowship to be abolished. The Council to have the privilege of recommending not more than two members of the profession distinguished in surgery for election to the Fellowship at each annual meeting. (*d*) No alteration to be made in the Charter without consulting the Fellows and Members at a general meeting to be called for that purpose.

I am, Sir, your obedient servant,

December 16th, 1886. F.R.C.S.

To the Editor of THE LANCET.

SIR,—Your leading article in this week's issue must echo the sentiments of many provincial Fellows. For some years the academic status of the diploma has degenerated. Not only has the preliminary educational standard been lowered, but even the Primary has been rendered easier by giving a selection of questions to be answered instead of the compulsory "all four" as formerly obtained. Now the Council, without consulting the general mass of Fellows, propose to still further depreciate the title by admitting, without any test of their fitness for such an academic distinction, a certain number of Members annually, and, secondly, to admit any Members of fifteen years' standing to the Pass without subjecting them to what you have justly called the *pons asinorum* of aspirants—the dreaded Primary. What privileges have the general mass of provincial Fellows? They care little about the rights of voting, and a seat on the Council, as is rightly urged in your leader, is within the reach of a very small minority. Have they ever been consulted on vital questions relating to the College till this last week? The chief privileges, then, of provincial Fellows are the academic distinction and status the title gives them. However wisely and delicately the proposals of the Council are carried out, many an injustice would be done to Fellows in small provincial towns, where the value of the Fellowship has begun to be appreciated. An imaginary case may easily be drawn. An M.R.C.S., through hard work and local influence, has acquired a large practice; he is a good all-round man, but not in any way well read or of any scientific learning. He is acquainted with many London Fellows from having sent them cases up from the country periodically. Without the slightest trouble he would receive the highest honour the College could confer on him, without ever having read for or passed anything but a minimum examination. Not only does he suddenly become the academic equal of the man who has devoted three or four years to the acquisition of the title, but he really becomes his superior, for it cannot but get bruited abroad that the Fellowship was conferred on him because he merited it, whilst the other man only got it by examination, and any man can pass examinations who has (not necessarily brains) but time, money, and applicability. Where then would be Sir Benjamin Brodie's explanation of the origin and institution of Fellows? It seems as if the London Fellows (as represented by the mass of the Council) hope to retain their vested interests by simply diluting them with a batch of new Fellows. The provincial Fellows, on the other hand, wish the integrity of the title to be maintained, or, if possible, made more select still. Let the Members have their electoral rights, and let them even have a chance of a seat on the Council under certain restrictions, and what have the Council to fear? The following two paragraphs, taken from a letter signed "Historicus," in your issue of Dec. 11th, deserve repetition and re-repetition: "The academic status (of the Fellowship) is being persistently debased in the silly hope of allaying the disaffection of a few Members by the offer of a cheap but degraded Fellowship"; and "The truth is, that the intellectual and professional prestige of the Fellowship is being seriously prejudiced by its forced association with an exclusive and obnoxious electoral privilege—a privilege, be it remembered, which is also an usurpation."

I am, Sir, yours faithfully,

Dec. 13th, 1886. A PROVINCIAL FELLOW.

THE HOSPITAL FOR WOMEN, LIVERPOOL.

To the Editor of THE LANCET.

SIR,—I shall feel much obliged by an early insertion of the enclosed in THE LANCET.

I am, Sir, yours faithfully,

Rodney-st., Liverpool, Dec. 12th, 1886. J. CAMERON, M.D.

4, Rodney-st., Liverpool, Dec. 12th, 1886.

DEAR SIR,—In a letter addressed to you by Dr. Imlach, and published in THE LANCET of the 11th inst., my resignation as a member of the "Hospital Inquiry Committee" is referred to in the following ambiguous terms: — "On March 8th, Dr. Cameron visited the Hospital for Women as one of the delegates from the Inquiry Committee. In the presence of yourself and the vice-president, the case-books, hospital registers, and various memoranda were examined, and the lady superintendent and nursing staff subjected to a severe cross-examination. At the next meeting of the Medical Institution, he resigned from the Inquiry Committee, declining to serve any longer." To prevent any misunderstanding, I venture to trouble you with an explanation of the cause (omitted by the writer) of my resignation. After my visit with Dr. Alexander to your hospital, Dr. Imlach was taken seriously ill, and for a time his life was in extreme danger, and I was reluctant, under these circumstances, to continue an inquiry which, by the anxiety it was likely to occasion, I feared would aggravate his condition. I

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availed myself of the first opportunity (the meeting of the Medical Institution alluded to by Dr. Imlach) to tender my resignation, stating publicly to the members the grounds of that step. I should wish to add that I highly approve of the report of the Inquiry Committee, which, I consider, takes a very moderate view of the objections to the operation in question. I remain, dear Sir, yours faithfully,

J. CAMERON, M.D., &c.

The President, Hospital for Women, Shaw-street.

P.S.—I am sending a copy of this letter to THE LANCET.

ARE SMALL-POX AND COW-POX ONE AND THE SAME DISEASE?

To the Editor of THE LANCET.

SIR,—In reply to Mr. Fleming's query, I would remind him of the following points:—The physical characters of the microbes both of small-pox and vaccinia are identical, if we neglect difference of size. In both diseases the micrococci tend to arrange themselves in groups of four, and in the early stages the Malpighian mucosus is the site selected for the development of each. Pincus's description of the microscopical changes in vaccinia corresponds closely with that by Weigert of the early development of the small-pox pustule. Localisation in vaccinia probably results from the local nature of the inoculating process, the irritated parts offering the most eligible sites for exhaustion of the local manifestations. If these were excised within forty-eight hours of inoculation a more generalised exanthem would show itself (Chauveau). Infection in variola is general, not local. Constitutional symptoms consequently precede the rash. The process is centrifugal. In vaccinia the process is centripetal, and general symptoms, when present, come late. When variola is *inoculated* the same thing happens, but then the infective process is sufficiently vigorous to induce secondary general infection and a disseminated eruption. Mr. Fleming can scarcely question the identity of cow-pox and vaccinia. He, however, dislikes the term "attenuation," though he will scarcely deny that Pasteur and Toussaint have independently proved the possibility of attenuating the virus of charbon by the aid of altered temperature, or that they have *fixed* the attenuation thus obtained, so constituting of it a generic character. If this be possible with other microbes, why not with that of variola? Man's temperature is about 37·5°C: ¾°C higher in the horse, and as much higher still in the cow. These conditions, judging from analogy, are those favourable to attenuation. Virus from horse-pox or from cow-pox induces in man a characteristic eruption; the former sometimes causing marked constitutional symptoms with stray vesicles; the latter is less active, and seldom develops to so great an extent. But, after passing through the cow, horse virus loses its excessive activity, and acquires the name of cow-pox, which, when used for inoculating man, causes no general symptoms. Repeated inoculations of cow-pox on other cows tend to fix the character of the virus—corresponding thus to the fixed attenuations of charbon virus mentioned above. In plants, modifications corresponding to such attenuations are possible. Why not with microbes? Many authors have deemed it right to affirm that variola, horse-pox, and cow-pox are not only interchangeable, but that infection with one of them is necessary to the production of the disease itself in the others. May we not go a step further, and suggest that the *same cause*—a specific virus floating in the atmosphere—may account for all of them, any differences being satisfactorily explained by variations of soil and temperature? In this way so-called "spontaneous cow-pox" would be easily accounted for; the protective power of any one disease as against infection with the others would be more easy to understand, and it would be unnecessary to say, with Mr. Fleming, "that small-pox and cow-pox were different and antagonistic diseases." Though man may as yet have been unable to accomplish the artificial transmutation of small-pox into cow-pox, nature has methods with which we are unacquainted, but whose results Jenner's great discovery has enabled medical science to utilise. If Mr. Fleming will refer to Warlomont's Manual of Animal Vaccination, he will find more extensive reference to the subject than your columns can admit from,

Yours obediently,

Pall Mall East, S.W., Dec. 1886. ARTHUR HARRIES.

DEATH OF A NIECE OF HARVEY.

To the Editor of THE LANCET.

SIR,—In the obituary column of to-day's newspapers is recorded an event which is suggestive of interest to our profession. "On the 1st inst. at Upp Hall, Braughing, Mrs. Towers, in the ninety-eighth year of her age, the last surviving daughter of the late Admiral Sir Eliab Harvey, of Rolls Park, Essex." In the press and hurry of our day's work, the notice is likely enough to pass unheeded; but that it refers to the last of the seventh generation in direct descent from that prosperous city merchant, Eliab Harvey of London and Chigwell-park, brother of the discoverer of the circulation of the blood, should be enough to claim a moment's attention from anyone who has the slightest reverence for the past. From time to time, outside our special professional life, the public interest is awakened by the overthrow of some fresh pretender to the rightful glory of the immortal physiologist and physician, by the erection of a statue in his native place, by the reverent re-entombment of his remains, or by the publication in facsimile of the note-book in which he himself recorded his observations and his labours. But gratifying as these events may be, they lack the living breathing kinship that the above simple announcement awakens. The deceased lady was the last of nine children of Admiral Sir Eliab Harvey and Lady Louisa, daughter of Earl Nugent. Her three brothers died childless in their father's lifetime, and, in that line at least, with her the name of Harvey ends. How the gallant old admiral, who for forty years fought the battles of his country, and ended by commanding the *Téméraire* at Trafalgar, is duly set forth on the marble tablet in Hempstead Church, where he sleeps with fifty of his kindred. His birth in 1758 takes us back a century ago, and those who are curious in such matters may fill in the steps 'twixt him and his first namesake, if they consult the pedigree of the Harvey family as set forth in Wilson's History of S. Laurence Pountney, London, 1831, at page 228, and the coffin inscriptions in the Harvey vault, lately published in the Miscellanea Genealogica et Heraldica, vol. i., series 2.

I am, Sir, yours faithfully,

W. H. ALLCHIN.

Chandos-street, Cavendish-square, W., Dec. 4th, 1886.

A "NEW" METHOD OF EXCISING THE KNEE-JOINT.

To the Editor of THE LANCET.

SIR,—I see by your report that at the Medical Society on Monday night Mr. Herbert Allingham described as such the method of making a long vertical incision and dividing the patella into two lateral halves. I have twice within the last three or four years shown such a case at the West London Medico-Chirurgical Society, and the method was not new then. Anyone who will refer to my "Index of Surgery," third edition, p. 128, will see it briefly noticed there. I believe the priority of performance of this operation is due to Professor Ollier, and I am certainly of his opinion that it ought to be reserved for cases of injury to the knee-joint. It does not, according to my experience, possess a single one of the advantages which your report states that Mr. Allingham claims for it. On the contrary, it gives comparatively limited and incommodious access to the joint, and especially to its posterior and lateral recesses. In any case which proved, when the joint was opened, to be one in which the bone was very little affected, it would still be impossible, through this perpendicular section, to erase the back of the joint properly without excising much healthy bone, and thus making the prospect of restoration of mobility practically hopeless. Compare with this the plan, originated by Volkmann and adopted by Ollier and others, of opening the joint by transverse division of the patella. Surely no one who has tried both can doubt the superiority of the latter. The quadriceps is no more weakened by one than by the other. There is no ligamentous or fascial structure divided in the operation which cannot be reunited by buried sutures just as effectually as can the patella itself. On the other hand, when the case to be dealt with is one of *injury*, the indications are quite different, and the longitudinal incision, from its possessing, although in a small degree, the advantages common to all longitudinal incisions as com-

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pared with transverse, may be reasonably preferred, for after injury there is no tubercle to be ferreted out of corners, but simply the indication to remove just as much and just as little injured bone as will suffice, and to cleanse the joint of blood and dirt.

I remain, Sir, your obedient servant.

Dec. 1886. C. B. KEETLEY.

NOTE ON THE EXISTENCE OF IODINE IN THE FREE STATE IN A MINERAL WATER.

To the Editor of THE LANCET.

SIR,—It has been known for many years that the water of the Woodhall Spa, near Lincoln, is exceptionally rich in bromides and iodides. In the course of an investigation recently conducted by me, I have made an observation which appears to be important. I find that there is free iodine in the water—not a mere trace of free iodine, but sufficient to impart to the water a brown colour of considerable depth of tint. The proof of the presence of the free iodine in this water is very striking. There is the formation of the blue iodide of starch when a little starch paste is simply poured into the water. Another very striking characteristic is that when the water is shaken up with one-twentieth of its volume of bisulphuret of carbon it loses its brown colour, whilst the bisulphuret of carbon assumes a pink-violet colour, owing to the solution of iodine by the bisulphuret of carbon. So far as I am aware, this is the first instance in which free iodine has been found in appreciable quantity in a natural water. For many years the Woodhall Spa has been celebrated as a valuable remedy in skin diseases. The fact that it is a solution of free iodine is interesting in this connexion, and is well worthy of the attention of the medical profession.

I am, Sir, yours obediently,

Dec. 15th, 1886. J. ALFRED WANKLYN.

THE TREATMENT OF ALCOHOLISM BY STRYCHNINE.

To the Editor of THE LANCET.

SIR,—*A propos* of your interesting leader on the above subject published in THE LANCET of the 16th ult., I should like to be allowed to make a few passing remarks. The treatment in question, as recommended from theoretical and clinical researches by Luton, Giacomini, Magnus Huss, and other continental *savants* of the medical profession, and now tried by Russian practitioners, notably by Drs. Popoff and Talvinski, was extensively experimented upon, so far back as 1869, by Deputy Surgeon-General F. G. Joynt, who was at the time medical officer in charge of the European General Hospital, Bombay. I am not aware if any other army medical officer followed his method of treatment; but suffice it to say that the drug proved in his hands a sheet-anchor in cases of ebriositas (now termed alcoholism) and delirium tremens. I may *en passant* mention that Dr. Joynt's solution of strychnia was, unlike the British Pharmacopœial preparation, made with dilute nitric acid and a smaller proportion of the alkaloid, and the dose usually exhibited was twenty-four minims two or three times a day.

I am, Sir, yours faithfully,

Aden, Nov. 25th, 1886. A. LYON MERCADO, S.M.D.

ST. ANDREWS UNIVERSITY.

(*From a Correspondent.*)

THE Senatus Academicus of the University of St. Andrews has presented a memorial to the Right Hon. the Secretary of State for Scotland, praying for two additional chairs for its medical faculty—viz., a chair of anatomy and a chair of botany. The St. Andrews Graduates Association are also moving in the same direction. About six weeks ago a deputation appointed by the University had an interview with the Right Hon. the Secretary of State for Scotland and the Right Hon. the Lord Advocate, urging the propriety of augmenting the medical chairs to the extent indicated, by introducing a clause or clauses to that effect into the forthcoming "Universities (Scotland) Bill." St. Andrews has always felt the necessity of increasing its teaching medical staff, and attempts have been made from time to time in this direction for very many years past. The present seems a favourable opportunity for attaining the desired end. The University is desirous of increasing its teaching staff to enable it to give two *anni medici*, the period of residence required for medical graduation at the Scottish universities. With two additional medical chairs, St. Andrews would not only be able to give the first two years of the medical curriculum, but it would be enabled to draw upon the Extra Academical and Hospital Schools of the United Kingdom for the last two years, an arrangement which could not fail to be very convenient to many aiming at a university medical degree. St. Andrews has now a seat at the General Council of Medical Education and Registration of the United Kingdom, and is splendidly equipped as regards the teaching of chemistry, physiology, and zoology. It has also a very fine medical library and museum, and the amenities of St. Andrews as a place of study are everywhere recognised. Of late years St. Andrews has made great strides in science teaching, and if it only succeeds, by public or private endowment, in obtaining its present quest, it may in the future become as well known for its medical teaching as it has in the past been for its divinity and arts teaching.

LIVERPOOL.

(*From our own Correspondent.*)

THE MEDICAL INSTITUTION AND THE HOSPITAL INQUIRY COMMITTEE.

THE special general meeting of the members of the Medical Institution, which was held on the 3rd inst., to receive the report of the Hospital Inquiry Committee, was largely attended, there being more than a hundred gentlemen present. The President (Dr. Nevins) was in the chair. The report was read by Dr. Wm. Alexander, the secretary to the Committee, and was listened to with the deepest interest by all present, each of whom was furnished with a printed copy of the report. At its conclusion the adoption of the report and a vote of thanks to the Committee were moved by Mr. McCheane, consulting surgeon to the Lock Hospital, and a former president of the institution. This was seconded by Mr. C. B. Wilson, consulting surgeon to the Lying-in Hospital, and after some discussion it was carried by a large majority. Dr. Imlach spoke at considerable length, and as some of his statements were repeated in a letter which he addressed to the President of the Hospital for Women (a copy of which appeared in THE LANCET of the 11th inst.) it appears desirable to notice some points in detail. Dr. Cameron's reason for resigning his seat on the Committee was a purely personal one. He had been called in consultation with Dr. Glynn to see Dr. Imlach when the latter was dangerously ill, and expressed an opinion that the inquiry should not proceed; but as this did not meet with the views of the other members of the Committee he resigned his seat. Mr. Bickersteth's reason for ceasing to attend was because he found himself quite unable to devote the time which he considered necessary to so important an inquiry. The primary object of the Committee was not to prepare a scientific report for the profession, but a report on the management of the Hospital for Women to the Medical Institution. The Committee were only asked to go into the cases which were the subject of operations during the year 1885. Between the early summer and the month of October the Committee held no meeting on account of the trial of Casey *v.* Imlach. The only thing done by the Committee was to request information from medical practitioners as to cases which they had seen of patients who had come under their care before and after being patients of the hospital. This information was given quite impartially and in confidence. That it could have had any prejudice against Dr. Imlach in the trial was disproved by the jury giving a verdict in his favour, without waiting for the judge's summing up. The general opinion of the profession here is that the report is a most admirable one, being exhaustive, fair, impartial, and most moderate. Too much praise cannot be given to the members of the Committee for their prolonged and self-denying devotion to the extremely invidious duty cast upon them.

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DEATH OF DR. RICHARD JOHN LUPTON.

This gentleman, whose death was noticed in last week's LANCET, will be well remembered by many an old fellow-student. He commenced his medical studies in 1860 at the Liverpool Royal Infirmary School of Medicine, where he studied for three years, becoming subsequently a student at University College, London, and at Aberdeen, where he graduated with honours. He returned to Liverpool in 1866, and commenced practice in the neighbourhood wherein he resided until his death. He held office formerly as honorary assistant surgeon to the Ladies' Charity and Lying-in Hospital, and at the time of his death was one of the honorary medical officers of the Hospital for Women. For the vacancy thus created there are already many candidates.

THE ROYAL INFIRMARY.

At a special general meeting of the trustees just held, Dr. Waters was elected consulting physician to the Royal Infirmary, having recently resigned the office of physician; and to the vacancy thus created Dr. Richard Caton, physician to the Northern Hospital, was elected without opposition. Dr. Waters is well and favourably known as an authority on chest diseases, and it is hoped that he has many years of useful work before him.

LOCAL HOSPITAL CHANGES.

At the Northern Hospital there is a vacancy for a physician, in place of Dr. Caton, appointed to the infirmary, and Dr. James Barr is a candidate. At the Stanley Hospital there are vacancies for a physician and a surgeon, owing to the resignation of Dr. Costine and Mr. Sheldon, who have each held office for the full period of twenty years. For these vacancies Dr. Whitford and Mr. Robert Jones are already candidates, and others will probably be forthcoming.

Liverpool, Dec. 15th.

NORTHERN COUNTIES NOTES.

(From our own Correspondent.)

GATESHEAD WORKHOUSE CHILDREN'S HOSPITAL.

MR. KNOLLYS, the Local Government Board Inspector for the district, has made some serious statements as to the condition of the children in the hospital of the workhouse at Gateshead. The statements have excited much public attention, and our local press has been also much occupied with the matter. Mr. Knollys says that on the occasion of his visit to the hospital he found twenty-eight boys and girls, ranging from thirteen years of age downwards, all suffering from some disease of the skin. It is practically impossible, from the structure of the building, to keep the sexes separate; that the floor was damp, and the underclothing on the beds was rendered foul by discharge; that on the day of his visit twenty-two out of twenty-eight children slept two in a bed; that the pillows were dirty, and that the sheets were little better than a patchwork of rags; that the straw of the beds actually came in contact with the skin of the little patients, which from the nature of their diseases was naturally tender; that four or six, and on one occasion eight, boys had washed in the same water; that eight or nine, and on one occasion only four, towels had been used for drying the skins of twenty-seven children; that in one room he found a woman suffering from a syphilitic disorder, that three children suffering from measles were in the same room, and that the room, which could not be ventilated as it should be, had a most offensive smell. He further stated that he had again and again complained of the dirty and uncared-for appearance of the children in the building. Mr. Knollys made also suggestions to the guardians that a competent nurse should be appointed instead of the present pauper nurse, and that the building be no further used for its present purpose. The guardians have been highly indignant at Mr. Knollys' charges, some of which they have denied, but some of the minor ones have been admitted. Some of the more indignant guardians admitted that they had not visited the hospital in question. Dr. Cook, the medical officer of the workhouse, explained that the wooden building condemned by the inspector was intended only to last ten years, and was only regarded as a temporary building for the reception of patients during the fever epidemic which existed when it was erected. The number in the house had increased, but the accommodation had not increased in proportion. Dr. Cook further explained that the accommodation he had formerly at the "house" for isolation purposes had been taken from him, and he had to take on himself responsibilities which he did not feel justified in taking. He had to use the best means he had at hand, and to take into the hospital a number of cases suffering from very infectious ailments of the eye. The hospital was full, and he had no means of isolating disease. The feeling here is that a state of things such as described by the inspector and their own medical officer is not creditable to the intelligence, to say nothing of the humanity, of the guardians of an important and wealthy borough like Gateshead.

NEWCASTLE HOSPITAL SUNDAY.

The returns on Hospital Sunday and Saturday collections continue to show a decided improvement on last year's. The fourth list shows that £2000 12*s.* 9*d.* has been received from places of worship, as against £1898 last year. From workshops £1580, as against £1231 last year. This improvement is all the more gratifying taking into account that many of our industries are far from busy this winter.

SCARBOROUGH HOSPITAL.

The report of the house-surgeon, Dr. Kenneth Fraser, shows that during the month of November he made 107 visits to patients' houses in connexion with dispensary work. There has been an epidemic of measles in the district, I believe.

NEWCASTLE INFIRMARY.

In view of the financial position of the Newcastle Infirmary, a special committee has been appointed to take evidence, and the public is invited to take part in the matter and to offer any evidence likely to conduce to the object in view—namely, the placing of the institution in a more satisfactory financial position.

Newcastle-on-Tyne, Dec. 13th.

IRELAND.

(From our own Correspondent.)

ROYAL COLLEGE OF SURGEONS IN IRELAND.

THOSE candidates who failed in one subject only at the recent First and Second Professional Examinations will be permitted to take out lectures and hospital practice this year and go up in July next for the examination they missed. Those who fail in more than one subject lose an entire year of their medical studies, and no credit will be given for hospital and lectures taken out. There will be a supplemental examination for the Third Professional Examination, but not for the First and Second, and candidates who are allowed in for examination will pay, instead of three guineas for re-examination, a fee of eight guineas. At present there are three lady students attending the lectures on Chemistry now being delivered by Sir Charles Cameron at the Medical School of the College. There will be two candidates for the Vice-Presidency of the College at the election in June next—viz., Mr. Henry Fitzgibbon and Mr. H. Gray Croly, both being visiting surgeons to the City of Dublin Hospital.

THE EPIDEMIC OF ENTERIC FEVER IN CORK.

Although the epidemic of fever recently referred to in these columns may mainly be attributed to the defective sanitary condition of the town, yet undoubtedly the water-supply is not all that could be desired. For example, at Macroom the sewer matter is discharged into the river from which the supply of water for the citizens is obtained, and no doubt there are other possible sources of pollution. At the suggestion of the public analyst monthly analyses of the water will be made for the future, as is the practice in all large cities. During November over seventy cases of enteric fever were under treatment in the hospitals or by the various dispensary medical officers, with a mortality of about 3 per cent.

THE SANITARY CONDITION OF THE DUBLIN BARRACKS.

On several occasions attention has been drawn to the alleged insanitary condition of some of the Dublin barracks, more particularly the Royal Barracks; and it was a matter of surprise, considering the number of deaths from enteric

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fever occurring in the latter institution, that a thorough investigation was not at once ordered by the military authorities. At last, however, they appear to have awakened from their lethargy, and I am informed that the Commander-in-Chief has appointed a commission to investigate and report on the subject. Grave doubts have existed for years as to the sanitary state of the Royal Barracks, and the commission, by a thorough overhauling of the sewerage arrangements, will carry out an investigation, which is urgently required.

MUSCULAR ANOMALY.

There is at present in the dissecting-room of the Ledwich School of Medicine an example of the biceps flexor cubiti taking its origin by three heads instead of two, so that it might be designated an anterior triceps. The third head came off close to the insertion of the lower part of the coraco-brachialis muscle, on its outer aspect, and passed to the posterior part of the muscle. Each head was well defined. This anomaly I believe to be extremely rare.

Dublin, Dec. 14th.

BELFAST.

(From our own Correspondent.)

THE VACANT SENATORSHIP OF THE ROYAL UNIVERSITY.

A LARGE number of the northern graduates, who are Presbyterians, had agreed to support the candidature of Professor O'Sullivan of Cork, as they believed that Cork should get a share of the representation on the Senate of the Royal University, and, further, as the vacancy was caused by the death of the Rev. Dr. Kavanagh, they thought that it was but just that another member of the Catholic body should be elected. However, owing to the recent action of the Government in appointing Dr. O'Dyer, the Catholic Bishop of Limerick, a senator of the Royal University in room of the late Dr. Fleming Stevenson, a leading Presbyterian, the coming contest has assumed a new phase. The members of the Presbyterian Church consider they had a hereditary right to Dr. Stevenson's seat, and they urged the Lord-Lieutenant to appoint Dr. Todd-Martin, a very distinguished graduate of the late Queen's University. As this recommendation has not been attended to, it is feared by many that Professor O'Sullivan may at the eleventh hour lose his expected northern support.

THE LAGAN NUISANCE.

At the present time a great deal of discussion is taking place, both in the public press and in private circles, in reference to the Lagan nuisance. This river is always greatly polluted by receiving the abominable Blackstaff, as well as many other sewers, and at certain times of the year, especially in summer, the smell arising from it is simply intolerable. The Town Council propose building two main sewers, one on each side of the Lagan, which would intercept all the various drains which now open into that river as well as into the Blackstaff, and which are planned to discharge their contents in deep water far beyond the harbour. Further, it is arranged to narrow and deepen the channel of the Lagan and to construct substantial banks. A section of the public are supporting another scheme, which aims at purifying the river by the construction of locks. By this plan the present offensive mud-banks would be placed permanently under water, thus rendering them innocuous; an ornamental pond suitable for boating would be formed; and the flow of the Lagan would be used to increase the velocity, dilute, and direct the flow of the Blackstaff and sewers at present discharging above the Albert Bridge, so that the sewage would be carried out to sea and not returned by the flow tide. It is satisfactory to find that public opinion is being aroused to the necessity of having this terrible nuisance abated.

THE ROYAL HOSPITAL.

As the financial condition of this charity is again in an unsatisfactory state, it has been suggested that, in commemoration of the Queen's Jubilee, a sum of money should be subscribed, the interest of which could be devoted to this institution; and a very energetic member of the board of management writes to the press advising that the hospital should be removed to the place where the old charitable society is at present located. This would be a most desirable change, as there is a grave suspicion that the hospital is placed in anything but a good sanitary situation, and its present size is not adequate to the requirements of such a rapidly increasing town as Belfast. During the present session there are 130 students receiving clinical instruction, while last winter there were 162. The appointment of a new matron took place on Saturday, when Miss Isbitt (Canterbury) was unanimously chosen out of twenty-six candidates.

LISBURN DISPENSARY.

At a meeting of the Committee of the Lisburn Dispensary district held on Monday, Dr. James Jefferson, the brother of the late medical officer of the district, was appointed dispensary doctor. The salary of the late Dr. John Jefferson was £100 per annum, but the Lisburn Board of Guardians decided, in view of the present agricultural depression, to reduce the income to £80, and at this salary Dr. Jefferson was elected.

DEATH BY SUFFOCATION.

Two women, mother and daughter, were found dead in a house in Belfast on Monday. The discovery was made by another daughter who slept with them, and who was so overcome that she did not awake until twelve o'clock, seven hours after her usual time. On the police being informed, they searched the house, and found a quantity of smouldering cinders in a vessel under the bed. The vapour from this vessel in a small and badly ventilated room is supposed to have suffocated the women, although there is a supposition that the deceased may have been injured by eating tinned meat, which, it is said, constituted the supper.

Belfast, Dec. 7th.

PARIS.

(From our own Correspondent.)

PROFESSOR PETER'S INAUGURAL LECTURE.

ON Dec. 8th Professor Peter delivered his first lecture on Clinical Medicine at the Hôpital Necker before a crowded audience, composed of students and practitioners, selecting "The Clinical Aspect of Contemporary Medical Doctrines" as his subject. Sixty-seven years ago, said the lecturer, a weak, shy, and sickly man, alone in the hospital, without assistants or appliances, made a discovery that was to revolutionise the medical world. The man was Laennec; the discovery, mediate auscultation. Mediate percussion had been discovered towards the middle of the previous century by Avenbrugger, but it has passed unnoticed except for a curt mention by Stoll and Van Swieten, and remained unknown until the treatise of the Viennese physician was translated and commented on by Corvisart. Corvisart, the pupil of Avenbrugger and Morgagni, was the teacher of Laennec, and bent his mind in the direction of his subsequent inquiries, to which inquiries the medicine of today owes much of its precision. But precision in medicine is only possible for the recognition of the accomplished fact—that is, the physical change in living matter, the lesion and its signs. The *morbid act*, disease in its evolution, escapes precision; for the act, which is the *to become* is subordinate to the vitality of the affected organism, dependent upon the forces of the organism, and, like these forces, infinitely variable. Laennec definitely introduced into medicine pathological anatomy and semeiology, and showed the relationship between the symptoms and the lesion. He taught us to be localisers. To take, for example, pneumonia. The old doctrine of *febris peri-pneumonica* was set aside, and inflammation of the lung is treated as a local disease, of which the accompanying pyrexia is only a symptom. The *disease* in its pathological anatomy and physical signs is discussed at length, but the *patient*, as revealed in the general symptoms and the type of the malady, comes in for but scant consideration. From the stethoscope of Laennec have sprung numerous other instruments of precision; and thus we have the opthalmoscope, the laryngoscope, the otoscope, and the microscope, which, together with chemical analysis, enable us to make the necropsy, as it were, of the living body. From precision to prelesion, in the diseased organs we have sought the diseased tissue, and in the tissue the morbid element. It might have been thought that beyond this there was nothing, but this were to reckon without the microbe, the

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universal cause of parasitic disease. For the new school the microbe is not the lesion, but its agent. For instance, pneumonia, the local inflammation of the lungs, is produced by the pneumococcus, but the pathogenic agent can only accomplish its mission by infecting the organism. Thus we have the work of Laennec upset by his followers, localisation *à outrance* leading to generalisation; and thus the histologists, become parasitists, have returned to the old idea of pneumonia, a general disease. The lecturer reminded his hearers that he had professed this opinion seventeen years ago, and that he had said in his clinical lectures, "The lesion is to the tissue what the symptoms are to the forces. The fever is the disease, of which the lung affection is a consequence; and as the type of the fever, whether inflammatory, nervous, or bilious, &c., varied, so should the treatment. We have not to do with pneumonias, but with pneumonic patients." M. Peter then alluded to Virchow's magnificent conceptions in cellular pathology, and his explanation of heterologous formations by heterochronism and heterotopism, and the final overthrow of these views by the discovery of the bacillus. For a time Koch was triumphant, but the supreme reign of the bacillus has not been long. It has been shown that the extent of the disease does not coincide with the quantity of the bacilli, and the partisans of these microorganisms now say, "It is not the bacillus that makes the disease, it causes it only indirectly by the secretion of a ptomaine." At the present time the whole of pathology is dominated by pathogeny, and this by bacteriology. Bacteria here, bacteria there, bacteria everywhere. Every day we learn with stupefaction that yet another disease is parasitical. As with pneumonia, so with rheumatism and malignant pustule. There are bacteria in the saliva, which are useful in the mouth, but morbiferous in the lungs, where they manufacture pneumonia. There are bacteria to make us feverish in typhoid, others to produce algidity in cholera; some blow hot, others cold. The lecturer passed on to the consideration of the treatments which these views have suggested, some considering that in typhoid the microbe gives rise to fermentation, and this to pyrexia Hence the system of treatment by cold baths, which, although irrational as a general practice, has its applications in certain cases. It is the recognition of suitable cases, which we have learnt from the exclusive practice of Brandt, that forms a real progress. Others, always with an eye to the destruction of the morbiferous microbe, would make injections into the lung without considering that, if even one microbe alone were to escape, it would quickly reinfect the organism by its reproduction. We have learnt, however, that our patients have often a far greater power of resistance than might be imagined. A third therapeutic attempt was prompted by the observation that the cholera bacillus did not reproduce itself in a dry medium, and Koch in consequence advised the people of Marseilles to abstain from watering their streets. The microbic theories have led to attempts of medical antisepsis, but this, although well meant, is chimerical. In surgery the case is different. The patient is supposed to be a healthy man who has received an accidental injury; but in medicine disease already exists, and the enemy is in the stronghold. The anti-rabic inoculations are as well meant, but no less chimerical. Irrational in principle, they are inefficacious in practice. They are irrational, inasmuch as they are supposed, contrary to experience, to prevent the development of a disease in incubation, and holding the organism in its power. Vaccine has not this power over incubating variola, and when we seek to prevent the development of variola in an organism in which it is incubating by vaccination, we find that both appear at their appointed time and run their course simultaneously. These so-called anti-rabic inoculations, after having been proclaimed with *éclat*, have failed lamentably. The mortality has been the same in France this year, as in average years—namely, thirty deaths from hydrophobia, fourteen of which occurred in persons having undergone the preservative inoculations. Pathogeny, said M. Peter, in conclusion, is the romance of disease, and pathology is its general history. Study at the bedside teaches us the special history of the patient, and although our flights are less high than in questions of pathogeny, they are more fruitful.

THE FASTING MEN.

Since the appearance of my last letter on Merlatti my sphygmographic researches have met with less favour. The last time I offered to take a tracing of Merlatti's pulse it was pointed out to me that he was in a condition of irritability, which rendered the proposed examination undesirable. Contrary to my anticipations, the fiftieth day of the fast has been attained without serious accident. Yesterday there was some congestion about the head, which terminated with epistaxis. Merlatti is to break his fast at a public banquet to be held this evening. As to Succi, he has got half way through his allotted period, and does not appear to be any the worse for his abstinence.

TRANSPLANTATION.

M. Dubousquet recently related a case at the Biological Society in which he had used grafts from the epidermis of a frog to heal the ulcers resulting from severe burns on the foot caused by molten metal. For the sake of comparison one ulcer was treated with grafts taken from the patient's own skin, the other from that of the frog. In both cases four cuttings were applied, about the size of a half-franc piece each. Cicatrisation took place more rapidly in the ulcer treated with the skin of the frog, and the scar is more supple than the other.

HYDROCARBONS IN HYPODERMIC INJECTION.

Dr. Albin Meunier has made a communication to the Société des Sciences Médicales of Lyons, to which the *Semaine Médicale* calls attention, on the use of vaseline as a vehicle for the hypodermic injection of different essences. Eucalyptol, menthol, essence of cubebs, of sandal, of copaiba, and other substances may be so administered, without untoward symptoms. It is said that these injections give rise to no local troubles and very little pain. For the drugs mentioned one part in five of vaseline is used after filtration repeated three times. For thymol the proportion is one in ten. It has also been found that vaseline dissolves creasote, iodine, camphor, sulphide of carbon, carbolic acid, iodoform (when in previous solution with the essences), and even the alkaloids. For some of these the quantities given are as follows: iodoform, one to eighty; sulphide of carbon, one to fifteen; creasote, one to twenty; iodine, one to twenty; cocaine, one to fifty; digitaline, one to a thousand.

Paris, Dec. 15th.

EGYPT.

(From our own Correspondent.)

COCAINE FOR MORPHIOMANIA.

Two cases have recently been observed in Cairo of temporary hallucinations after prolonged subcutaneous use of cocaine, as recommended for abuse of morphia injections. The second case occurred in the person of a European doctor, and only lasted two days, during which it was believed that some harmless servants were persecuting him. It now appears that he was accustomed to take morphia injections himself, and was invited to take charge of the first case during his temporary restraint. This first case has been reported by a Greek, Dr. Comanos, in the *Berliner Klin. Wochenschrift* (No. 38), who watched the patient throughout. After being addicted to the morphia habit for several years he recommended his patient, a middle-aged European of excitable temperament, to take as a substitute three-quarters of a grain of cocaine, hypodermically, three times a day. The pain and distress occasioned by the lack of morphia were relieved by this, but the patient gradually and privately increased the dose until he took every day eight and even twelve grains. This induced great mental irritability, singing in the ears, dyspnœa, and hallucinations, which all disappeared upon returning to injections of morphia. But, unfortunately, a painful attack of herpes zoster ensued, and the patient doubled his former cocaine injections to sixteen and afterwards twenty-three grains a day. The symptoms produced by these large doses were trembling of the limbs, lassitude, incontinence of urine, loss of sleep and appetite, excitement, hallucinations, injected conjunctivæ, and a very fixed expression. He believed that burglars lurked in his garden, and he fired revolver shots at imaginary figures by night, eventually nearly strangling one of his servants because he believed he had swallowed a lantern. He was then removed to a hospital, and, on being searched, cocaine, morphia, and many hypodermic syringes were found on him. His drug treatment consisted of three-

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quarters of a grain of morphia subcutaneously injected three times a day, and in forty-eight hours he was perfectly sane again, and prepared to explain away his hallucinations, especially those of sight and smell.

KASR-EL-AINI HOSPITAL.

The out-patient department, which has been taken over by Dr. Sandwith, continues to supply many interesting cases to the hospital, including those requiring surgical interference, in which the natives have great faith. During the last week, Dr. Milton removed a mass of strumous glands from the neck, excised a portion of the tunica vaginalis for chronic hydrocele, and amputated a breast for a fungating lobular tumour, which protruded entirely outside the skin. These cases were dressed with corrosive sublimate lotion, oiled paper next the wound, and then dry cotton-wool and bandage outside. Many cases of union by first intention have followed this simple dressing, and one of the cases shown to the students was a boy whose knee had been excised for strumous disease, and afterwards dressed in this way. Primary union followed, and in a fort-night the boy was on crutches, with his diseased leg kept off the ground by a high heel on the other foot. The following three operations have been done during the week by the native surgeons. A median perineal lithotomy in a man with chronic bladder disease, but without bilharzia; a supra-pubic lithotomy for a stone weighing 4·9 oz., this being the fourth similar operation which has lately been done by the same surgeon; and the removal of elephantiasis of the scrotum which had followed on an old urinary fistula. Upon the same day a long Guinea worm was extracted from the leg of a native who had lived some years in the Soudan, and stated that similar worms were common there, and often appeared near the genital parts of women. A Guinea worm had been extracted slowly from his other leg last year, but on the present occasion the whole worm was found lying coiled up in the cyst of a chronic fistulous tract. These worms are rare in Egypt.

EXPLOSION OF A SHELL.

Two days ago three British soldiers found an unexploded Krupp shell in the desert, and took it to the armourers' shop in barracks to see what was inside it. It will hardly be believed that they placed it in an anvil and struck it with a sledge-hammer, when it at once burst. One man's skull was badly fractured, with brain protruding, and he died instantly; another also died at once, having received a portion of the shell in his abdomen; and the third required amputation of one arm and one hip-joint, and died during the day. An unfortunate corporal, walking near, lost half his forearm; and a fifth man was bruised in the leg by a bit of the shell, which whistled by him. There are many stories of soldiers using heavy shells as garden-rollers and garden ornaments; and once, after the battle of Tel-el-Kebir, of men being found lighting a fire with a pile of shells to form the hearth.

Cairo, Oct. 29th.

ROYAL COLLEGE OF PHYSICIANS.

A COMITIA of the Fellows was held on Thursday, the 16th inst., Sir W. Jenner, Bart., President, in the chair. The copies of Harvey's "Prælectiones," suitably bound for presentation to Her Majesty the Queen and to His Royal Highness the Prince of Wales, were laid on the table by the President.

A communication from the General Medical Council respecting the length of the curriculum was referred to the Committee of Management. A report from this Committee was adopted.

The report of the Committee of Delegates (see page 1194) appointed by the Royal College of Physicians and the Royal College of Surgeons, to consider the desirability and practicability of granting degrees in medicine and surgery to persons who have passed the Conjoint Examinations of the two Colleges, was presented. Its adoption was moved by Dr. Wilson Fox and seconded by Dr. Handfield Jones. Dr. Allchin moved, and Dr. Norman Moore seconded, an amendment, stating that no scheme shall be deemed satisfactory unless it provide for the conferring of degrees by some University body outside the Colleges themselves, but on which they could be represented. Sir W. Gull urged that the degrees should be confined to clinical medicine and surgery, and he subsequently moved an amendment to that effect. Drs. Curnow, Wilson Fox, Chambers, and Quain also spoke, when the debate was adjourned on the motion of Sir H. Pitman, seconded by Sir G. Paget.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

AT an extraordinary meeting of the Council of the above College, held on Thursday, the 16th inst., a report from the Delegates of the two Colleges on the expediency of granting the title of Doctor to the holders of the diplomas of the two Colleges was received. After a lengthened discussion certain verbal alterations were suggested, and the report was referred back for the further consideration of the Delegates.

Obituary.

NORMAN CHEVERS, C.I.E., M.D., F.R.C.S.,

DEPUTY SURGEON-GENERAL, BENGAL MEDICAL SERVICE.

ON Tuesday, Dec. 7th, 1886, a number of Indian medical officers, with other friends, assembled at Kensal-green to pay the last tribute of respect to a much-valued and deeply regretted brother officer, whose sudden and unexpected death (from cardiac failure) on Dec. 2nd had caused profound sorrow and surprise; for to observers generally he seemed but quite lately to be in good health, with the prospect of continuance of his valuable life for many years to come. Though he had not lived to attain the allotted duration of human life, having only reached his sixty-eighth year, Norman Chevers lived long enough to do work of an enduring nature such as falls to the lot of few to accomplish, whilst the tenour of his whole career has been, to those who knew him well, a striking illustration of a life lived and ruled by the highest principles. His was, indeed, a blameless and noble life—one in which commanding intellect and vast stores of learning of many and varied aspects were devoted to the advancement of knowledge, the relief of suffering, and the welfare of his fellow-men, especially of those of the great Indian Empire, in which his lot had been cast, his best work done, and his well-merited reputation acquired.

His early career, before proceeding to India in 1848, has been referred to by one who knew him well. He had even then acquired a marked reputation in pathology and medicine, and when he arrived in Bengal was somewhat older than was usual with newly-joined medical officers; but his matured powers and already large experience were soon brought into requisition for the duties of civil medical charge of the important stations of Chittagong and Howrah, and ere long in the very onerous and responsible post of secretary to the Bengal Medical Department. How well those duties were performed was shown by the fact that throughout the whole of the trying time of the Mutiny, when the medical, like other departments, was submitted to great strain, no failure took place in the Medical Department, which was administered by Forsyth and Chevers. But it was during his tenure of the important offices of officiating Inspector-General of Gaols, member of the Senate of Calcutta University, and in that of Principal of the Medical College of Bengal and Professor of Medicine, that the writer of this memoir became really acquainted and continually associated with him during many years of intimate co-operation as colleagues in those institutions, and thus had full opportunity of knowing the great worth and manifold excellencies of the accomplished medical officer whose loss is now deplored.

To no one is the British or native soldier, or the civil population generally, more indebted than to Chevers for the light he has thrown on, and the practical instructions he has laid down for guidance in reference to, those great sanitary

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questions which so materially influence the health, and consequently the well-being, of all in India.

His able administration of the Medical College raised it to a high standard of efficiency; his teaching of medicine, hygiene, and other cognate subjects was of the greatest public benefit; whilst his writings are regarded as authority of the highest repute: such, for example, are his "Preservation of Health of Soldiers in India"; his "Removable and Mitigable causes of Death"; his great work on "Medical Jurisprudence in India," which won for him the Swiney Prize; that on "Diseases of the Pulmonary Artery" also his many admirable lectures and monographs on subjects directly or indirectly connected with public health; lastly, his work on Indian Diseases, which was completed only just before his lamented death. But it was not in medicine only that his powers were manifested; his acquaintance with literature, archæology, history, and art were equally remarkable, and delighted the friends with whom he conversed, an additional charm being communicated by the keen sense of humour which often found vent in the course of even his most impressive utterances. A fluent and graceful speaker, his addresses always attracted attention, and left a deep impression on those who heard them; no one could be long with him without feeling the influence of his well-stored and highly cultivated mind. But all this was perhaps the least attractive side of his character. It was the simple, loyal, chivalrous nature which charmed. He was incapable of anything mean. In all senses in which the word can be applied he was a gentleman. All he did was directed by a high sense of principle and honour. If he erred, it was not from lack of these guides; it might have been from an overestimate of their claims. He did what he thought was right, guided by that which to him was the highest light, and few men have come nearer to the mark aimed at than he did!

Chevers retired from the service in 1876 with the rank of Deputy Surgeon-General, and it was not until 1881 that Government, in recognition of his services, conferred on him the dignity of Companion of the Indian Empire. His labours were not, however, completed, for he was doing much good work up to the last; and he was making notes but a few hours before he died.

As President of the Epidemiological Society, he rendered further service to the subjects of epidemiology and disease, whilst his lectures and addresses on matters connected with sanitary science all betoken the unceasing interest and mental activity he continued to devote to these subjects. The crowning work of his life was his important "Treatise on Disease in India"—a book of great value, containing a comprehensive view of the whole subject of Indian disease. Other and fuller details of all he did, of the books he wrote, the appointments he filled, and the honours he held, will doubtless be given; it is needless, therefore, to dilate on them here, in a mere passing tribute to his worth, by one of many who knew him well and honoured him greatly. His memory will long be cherished, both in his service here and in the East, with affection and respect, and his name will live in their annals as a benefactor of India, and as one of the brightest ornaments of the old Indian Medical Service.

Medical News.

UNIVERSITY OF DURHAM.—At the recent examinations for degrees in Medicine and Surgery the following candidates satisfied the examiners:—

DOCTOR IN MEDICINE, FOR PRACTITIONERS OF FIFTEEN YEARS' STANDING.

Deane, John, M.R.C.S., L.S.A.
Denziloe, W. Le Gros, M.R.C.S., L.S.A., M.R.C.P. Ed.
Hardyman, C. E., F.R.C.S. Ed., L.S.A.
Hedley, John, M.R.C.S., L.S.A.
Smith, T. S., L.R.C.S. Ed., L.S.A.
Wood, T. Outterson, F.R.C.S. Ed., F.R.C.P. Ed.

DOCTOR IN MEDICINE (Essay).

Dixon, H. W., M.B., L.R.C.S. Ed.
Richards, G. W., M.B., M.R.C.S.
Rumboll, C. F., M.B., M.R.C.S.
Slater, W., M.B., L.R.C.S. Ed.

The Gold Medal for the best essay for the year 1886 was awarded to John Valentine Salvage, M.B., L.R.C.P., M.R.C.S.

BACHELOR IN MEDICINE.

Abbot-Anderson, W. Maurice.
Arnison, William Drewett.
Bradbury, Arnold Francis.
Cranstoun, George.
Crosby, Robert, M.R.C.S.
*Dalgliesh, John William.
Giddings, George Thomas.
Green, Arthur.
*Hadley, W. J., M.R.C.S., L.S.A.
Hewkley, Frank, M.R.C.S.
*Honey, Thomas Edward.
Howitt, George Grahamsley.
Jalland, R. Wallace, L.R.C.P., M.R.C.S., L.S.A.
Lansdale, William, M.R.C.S.
McInerney, T., L.K.Q.C.P.I., L.R.C.S.I.
Montague, A. J. Helm, L.R.C.P., M.R.C.S., L.S.A.
Orton, F. J. Johnson, M.R.C.S., L.S.A.
Packman, A. C. A., M.R.C.S.
Ramsay, Frank Winson, L.S.A.
Renney, Henry.
Robson, Robert Barker.
Robson, Tom Alfred.
Steele, William Frederick.
Winter, Frank.
Yeoman, William Metcalfe.

* Second-class Honours.

BACHELOR IN SURGERY.

Abbot-Anderson, W. M.
Arnison, W. D.
Balgent, William, M.B.
Blacker, A. B., M.B., M.R.C.S.
Bradbury, A. F.
Crosby, R., M.R.C.S.
Dalgliesh, J. W.
Dove, A. C., M.B., M.R.C.S.
Garrett, John Henry, M.B.
Openshaw, T. H., M.B., M.R.C.S.
Paige, Horace Bennett W., M.B.
Race, William, M.B.
Ramsay, F. W., L.S.A.
Renney, H.
Richardson, William G., M.B.
Robson, T. A.
Rumboll, C. F., M.B., M.R.C.S.
Steele, W. F.
Straughan, John, M.B.
Turnbull, William, M.B., L.S.A.
Winter, F.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—The following gentlemen, having passed the Fourth and Final Examination for the Letters Testimonial under the new scheme, have been admitted Licentiates:—

Samuel Boake, Patrick Thomas Bolger, Thomas N. Frood, William A. Kelly, Samson Hoos Newland, Everard M. Power, Michael Lane Riordan, William John Scott, Thomas H. Strangman, William Joseph Taylor, Percival J. W. Ternan, and John Toppin.

The undermentioned gentlemen, having passed their Final Examination under the old scheme regulation, have been admitted Licentiates of the College:—

James H. Atkin, Thomas Bertram, James Butler, George J. Burke, Eugene Byrne, Patrick Carney, Charles Casey, Norbert Durrant, Richard L. Fitzgerald, Thomas Keough, James Joseph McGrath, Patrick Joseph Power, Edmund B. Russell, and Charles James Rutledge.

BEQUEST.—Mr. John Hunt has left £500 to the Adelaide Hospital, Dublin.

THE Hospital Saturday collection at Nottingham has been fixed for the 29th prox.

IT has been decided to hold on the 18th inst. a Hospital Saturday collection in aid of the Ilkeston Cottage Hospital.

PLANS have been accepted for the proposed General Hospital for Merthyr. The subscriptions and donations already promised amount to £3900.

VACCINATION GRANT.—Mr. R. Istance, Risca district, Newport (Mon.) Union, has received the Government grant for efficient vaccination in his district (seventh time).

SEAMEN'S HOSPITAL SOCIETY.—Sir Andrew Clark, Bart., M.D., will preside at the sixty-seventh annual court of this Society, to be held in February next.

AT a well-attended meeting of the Maidstone branch of the Kent Volunteer Medical Association recently held, it was unanimously resolved that the corps be put into uniform at once.

THE bazaar which was recently held at Manchester in aid of the extension fund of St. Mary's Hospital proved a gratifying success, a net sum of £420 having been paid to the account of the institution.

THE amount of the proceeds of Hospital Saturday, held a few weeks ago in Torquay and the neighbourhood, on behalf of the Torbay Hospital, has been ascertained to be £83.

ONE of the conductors of stores in the commissariat and transport corps has been poisoned by swallowing cyanide of potassium in mistake, as is supposed, for gin. The drug was kept, it seems, for the purpose of cleaning gold lace.

AT a meeting on the 14th inst. of the City Commission of Sewers, instructions were given that the Streets Committee report without delay on the subject of sinking artesian wells in the City with a view to supplying the inhabitants with water.

NEW GENERAL HOSPITAL FOR BOMBAY.—We understand that the Government of Bombay have just sanctioned the expenditure of ten lakhs of rupees for the erection of a new General Hospital for that city on the site of Fort St. George, recently demolished.

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HOSPITAL SATURDAY AT WOLVERHAMPTON.—Last Saturday the collection for the Wolverhampton and Staffordshire General Hospital realised £1514 11s. 7d.; for the Eye Infirmary, £224.

THE COUNTESS OF DUFFERIN'S FUND.—The receipts in the Bombay Presidency towards this fund amounts now to 64,616 rupees, a sum large enough to indicate that the movement is gaining upon public sympathy and support.

ON the 8th inst., in consequence of the prevalence of rabies in the borough, the watch committee of the Nottingham town council passed regulations for the muzzling of dogs and the destruction of stray dogs and such as were not muzzled.

EIGHTEEN female medical students have been expelled from St. Petersburg for taking part in a meeting which had been forbidden by the police. The female medical school has long been considered a nursery of nihilists, and attempts have been made to close it altogether.

PERTHSHIRE MEDICAL ASSOCIATION.—The monthly meeting of this Association took place in the directors' room in the infirmary on Dec. 3rd. Dr. J. P. Bramwell, Perth, read a paper on "Hyper-arterial Tension," the discussion of which was adjourned till the next meeting.

SMALL-POX IN JAMAICA.—Advices received at Plymouth on the 12th inst. from the West Indies report that small-pox is raging furiously in Jamaica. On the departure of the mail there had been 1000 cases and 100 deaths, and 500 patients were under treatment.

THE PHARMACY ACT.—The Pharmaceutical Society of Great Britain on the 13th inst. obtained a verdict for £10 claimed as penalties from a person who had sold laudanum, and called himself a druggist when he was not registered as such, contrary to the provisions of the Pharmacy Act.

AT the final meeting of the Committee of the Exeter Hospital Saturday Fund on the 11th inst, it was reported that the total amount received was £471. The next collection will be held in the summer of next year, about the time of the celebration of the Queen's Jubilee.

CHOLERA IN CALCUTTA.—We learn from an Indian contemporary that cholera has been epidemic in Calcutta. During the week ending October 30th there were registered 73 deaths, against 63 and 98 in the preceding two weeks. The number, we learn, is higher than the average of the past quinquennium by 49. Recent advices, however, report a diminution of the outbreak.

INTERNATIONAL HEALTH CONGRESS.—This congress, which is to be held in Vienna in September of next year, promises to be successful. The Hereditary Prince of Austria, Crown Prince Rudolphus, has consented to act as the patron of the congress, and the Chief of the Cabinet, Count Traffe, has been chosen as honorary president. The committee, with Hofrath Schneider at its head, is working energetically.

POISONED BY TINNED SALMON.—Three members of a family at Great Bowden, having last week partaken of tinned salmon for supper, symptoms of poisoning were soon afterwards manifested, all being seized with cramp and vomiting. Dr. Lee, of Market Harborough, was summoned, and antidotes were administered, and the sufferers were eventually relieved. A cat, to which a small portion of the salmon was given, showed like symptoms.

DORSET COUNTY LUNATIC ASYLUM.—At a meeting of the Cerne Board of Guardians on the 8th inst., it was unanimously resolved that the authorities having control over the superannuation allowance of the relieving medical superintendent of this asylum be memorialised to recommend that only a minimum pension be granted. The Visiting Committee of the institution have recommended that the allowance should be £600 per annum.

HOSPITALS ASSOCIATION.—On the 15th inst. Sir William Mac Cormac presided at a meeting of this Association, when a paper on "Foundling Hospitals at Home and Abroad" was read by Mr. Samuel Osborn, F.R.C.S., who confined his observations on foreign hospitals almost entirely to those of St. Petersburg and Moscow, which he visited this year, and concluded by giving a detailed account of the institution in Guildford-street. A short discussion followed the reading of the paper.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

BARKNDT, FRANK H., M.R.C.S., L.R.C.P.Lond., has been appointed Senior House-Surgeon to the Bootle Borough Hospital.

BLUMER, G. ALDER, M.D., L.R.C.P., L.R.C.S.Ed., has been appointed Medical Superintendent to the State Lunatic Asylum, Utica, New York, U.S.A., vice John P. Gray, M.D., LL.D., deceased.

COCKING, W. T., M.B.Lond., has been appointed Obstetric Assistant to University College Hospital.

HOUGHTON, F. E. CAULFEILD, M.R.C.S., L.R.C.P.Ed., has been appointed Surgeon to the Royal Small Arms Factory, Birmingham, vice Popham, resigned.

HUGHES, S., M.B., C.M.Edin., M.R.C.S., L.S.A., late House-Surgeon to the Royal Infirmary, Liverpool, has been appointed Senior House-Surgeon to the Borough Hospital, Birkenhead, vice Richardson, resigned.

KERR, DANIEL O., M.B., C.M.Ed., has been appointed Medical Officer for the Keelby District of the Caistor Union.

KEYWORTH, ARTHUR F., L.K.Q.C.P.I., L.M., has been appointed Medical Officer to the Manchester, Sheffield, and Lincolnshire Railway Mutual Provident Society for the Marple and Hayfield District, vice John Howe, M.R.C.S., L.S.A., deceased.

KINSEY-MORGAN, A., M.R.C.S., L.S.A., has been appointed Medical Officer of Health for Bournemouth.

MANTON, J. L., M.R.C.S., L.R.C.P.Lond., has been appointed Assistant Medical Officer to the Nottingham Friendly Societies' Medical Institution.

MARRIOTT, HYDE, B.Sc.Lond., M.R.C.S., has been appointed Obstetric Assistant to University College Hospital.

MUGFORD, SIDNEY A., M.R.C.S., L.R.C.P.Lond., has been appointed Resident Medical Officer to the Kensington Dispensary, vice Buck, resigned.

RODGERS, J. H., L.R.C.P., L.R.C.S., has been appointed Resident Medical Officer to the Nottingham Friendly Societies' Medical Institution.

WARD, J. O., M.R.C.S., L.S.A., has been appointed Medical Officer to the Fourth District of the Pontefract Union.

WILKINSON, GEORGE T., L.R.C.S.I., L.R.C.P.Ed., has been appointed Assistant Rural Medical Officer for the Scalby District of the Scarborough Union.

Births, Marriages, and Deaths.

BIRTHS.

CHAMBERS.—On the 7th inst., at Amwell-street, E.C., the wife of E. Chambers, M.B., of a daughter.

COCKERILL.—On the 8th inst., at Netley Abbey, Southampton, the wife of John W. Cockerill, Army Medical Staff, of a daughter.

GILBERTSON.—On the 9th inst., at The Limes, Hitchin, the wife of James Henry Gilbertson, L.R.C.P.Lond., M.R.C.S., of a son.

INMAN.—On the 14th inst., at Hackney-road, E., the wife of R. E. Inman, M.R.C.S., of a daughter.

OPIE.—On the 8th inst., at Hartington-villas, Beckenham, Kent, the wife of Edward A. Opie, M.B., of a son.

MARRIAGES.

ANDERSON—MOON.—On the 8th inst., at Edenfield, Cupar, Fifeshire, Alexander M. Anderson, M.D., of Dundee, to Margaret Robertson, eldest daughter of the late William Moon, J.P., and of Mrs. Moon, of Edenfield.

KNOWLES—LONG.—On the 30th ult., at St. James's, Southbroom, Devizes, John Knowles, M.R.C.S., of Maidstone, to Annie Ada, daughter of William Long, of Devizes.

WALKER—MOXON.—On the 14th inst., at St. Giles', Northampton, by the Rev. John Brooke, Vicar of St. Katharine's, assisted by the Rev. R. A. White, Vicar of St. Giles', Norman Hendrie Walker, M.B., of Stalham, Norfolk, to Florence Katharine, eldest daughter of William Moxon, M.R.C.S., of Derngate, Northampton.

DEATHS.

BURY.—On the 9th inst., at his residence, Whetstone, N., George Bury, F.R.C.S.Eng., aged 77.

CATTLIN.—On the 13th ult., at Glendale, Surrey-road, Bournemouth, William Alfred Newman Cattlin, F.R.C.S.E. (Friends will kindly accept this intimation.)

DAVIES.—On the 8th inst., at Borroweop, Lichfield, Robert Alexander Davies, M.D., formerly Medical Superintendent of Burntwood Asylum, co. Stafford.

FERGUS.—On the 8th inst., at Ryton-on-Tyne, Walter Fergus, M.D., M.R.C.S., late Medical Officer at Marlborough College.

GREAVES.—On the 10th inst., at Burton-on-Trent, George Greaves, L.S.A., in his 82nd year.

WATSON.—On the 13th inst., at Woodside-terrace, Glasgow, Eben. Watson, M.D.

N.B.—*A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.*

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METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, December 16th, 1886.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Dec. 10	29·22	N.W.	37	36	...	45	35	·07	Overcast
,, 11	29·46	S.W.	45	44	...	52	38	·03	Overcast
,, 12	29·33	W.	47	46	...	49	43	·10	Cloudy
,, 13	29·73	W.	46	44	...	47	43	...	Overcast
,, 14	29·54	E.	43	41	...	49	41	·06	Overcast
,, 15	29·11	S.W.	42	42	...	47	41	·67	Cloudy
,, 16	29·39	W.	41	39	...	...	39	·02	Foggy

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

We cannot undertake to return MSS. not used.

THE ABERDEEN CHAIR OF MATERIA MEDICA.

A CORRESPONDENT—graduate of Aberdeen—is somewhat surprised at receiving a circular from a number of gentlemen asking for the expression of approval of Dr. Bridger's candidature for the chair of Materia Medica in Aberdeen University. The appointment is in the gift of the Crown, and our correspondent evidently thinks it a somewhat bold thing to think of influencing the Crown. But in actual practice the Crown is not so inaccessible nor so independent of information as he seems to think. In the contest for Crown chairs, though we see no objection to any fair pressure of any man's claims, we should deprecate general and promiscuous appeals to the profession.

Mr. Waye (Millom).—There are so many good books on hygiene that selection is difficult and advice invidious. The well-known works of Parkes, Wynter Blyth, Cornelius Fox, Wanklyn, Frankland, Bell, and Hassall would all be useful to our correspondent, and others might be mentioned.

J. R. I. R.—Our correspondent would do well to forward the advertisement to the Royal College of Surgeons, from whom the diploma has been obtained, in virtue of which registration is claimed. There is nothing in the announcement absolutely to show that the surgeon was the author of it.

Mr. F. W. Gibbon, L.R.C.P.Ed., L.S.A.Lond., &c.—We have no knowledge of any proposed establishment of pupilage in the medical curriculum.

Dr. Popow.—We cannot exchange.

FRIENDLY SOCIETIES AND THEIR MEDICAL OFFICERS.

To the Editor of THE LANCET.

SIR,—If you will kindly insert the following lines some of your readers may be able to tell me the rights of this question.

I have been surgeon to a Court of Foresters for more than ten years. A man, who was a member before I became the surgeon, has during the whole of my tenure of the appointment lived out of the district and paid his doctor's contribution to the surgeon of a court elsewhere. Having been ill for some months he now returns to his native place and expects to have my attendance, though he has never paid the usual contribution to me. He would of course during residence in the district pay like the others to the proper court surgeon (myself), but I, in a wholly amicable way, object to be responsible for him, as he is likely to be on the books for some time. Am I responsible? I am, Sir, yours faithfully,

Dec. 14th, 1886. A.

MEDICINAL PRODUCTS OF AFGHANISTAN.

A PAPER was read on the 8th inst. before the Pharmaceutical Society of Great Britain by Dr. Aitchison, C.I.E., F.R.S., late naturalist with the Afghan Delimitation Commission, upon "Some Plants of Afghanistan, and their Medicinal Products." It appears that in Afghanistan umbelliferous plants form the characteristic type of the vegetation, the country in which they flourish consisting of great shingle and conglomerate plains lying between hills and river beds. Only about 1 out of 100 plants bear a flowering stem, and a native will assert that such a flower-bearing plant has nothing to do with the plants that yield asafœtida. The Dorema ammoniacum grows along with the asafœtida plant, and is equally abundant. Dr. Aitchison also describes as a new species (Ferula suaveolens, Aitch. and Helmsley) a plant the scented root of which, under the name of "sambal," is exported through Persia to the coast. Several kinds of manna are also produced, which are largely eaten by the people as a sweetmeat and exported in quantity to Persia and India. Among other plants and plant products met with by Dr. Aitchison were a very handsome species of Rheum, the ripe fruit of which is used by the natives as a purgative, and Orchis latifolia (Linn.), the dried tubes of which are known as "salep."

Dr. R. Neale.—The transliteration of Russian words and names into Roman characters is carried out under numerous systems, and often puzzles highly educated Russians themselves. The system adopted in THE LANCET, when referring to an author who writes in Russian, is much the same as that employed in the catalogue of the British Museum. When, however, reference is made to quotations from Russian authors in French or German publications the orthography employed in the latter is usually retained. Thus, taking the name mentioned by our correspondent, Cheltsoff or Tschelzoff, the Russian letter *che*, which has the sound of the *ch* in *change*, has to be written *tsch* in German, and *tch* in French, as *ch* in those languages would convey erroneous impressions of the sound. Again, the *tse* is equivalent to the German *z*, but not to the English or French *z*. It is the initial letter of the well-known word "Czar," or "Tsar." All this, as well as a great deal more, which would require a long essay to discuss, makes the compilation of an index containing Russian names a very difficult matter, which may be illustrated by the annoyances caused by the numerous ways of spelling and cataloguing the names of Indian towns.

M.R.C.S., L.R.C.P.—Our correspondent may with advantage refer to THE LANCET of April 18th, 1885, p. 735.

CASEINE IN HUMAN MILK.

To the Editor of THE LANCET.

SIR,—In view of the recent discussion upon infant feeding which has been carried on in your columns, may I be allowed to draw attention to the question, How much caseine is contained in human milk? Now, without mentioning earlier writings, I find that Dr. Eustace Smith, Dr. Goodhart, and Dr. Galabin, all of whose text-books are very modern, agree in accepting (or, at any rate, in offering for their readers' acceptance) analyses which represent human milk as containing from 3 to 4 per cent. of caseine. On turning, however, to the chapter on Food in Drs. Meigs and Pepper's work on the Diseases of Children I find that these authors reject as untrustworthy all such analyses, and accept as substantially correct an analysis which gives 1·5 per cent. of caseine. In support of this preference they quote Dr. A. Meigs, who declares that no specimen of human milk which he had examined contained so much as 2 per cent. of caseine. Other analyses giving very similar results are quoted by Dr. Ashby in an article in the *Medical Chronicle* for May in the present year. The question whether the older analyses, which are still current even in the most recently issued text-books, or the newer analyses to which I have here alluded, are correct is one of great practical importance. For, however fully we may believe that clinical experience counts for more than chemistry, we cannot afford to neglect any aid which may be derived from analysis when we set ourselves to produce with the use of cow's milk an imitation of an infant's natural diet. For example, when the question of the appropriate degree of dilution for cow's milk is under consideration, are we to take it as true that human milk contains more than 3 or less than 2 per cent. of caseine? If the more recent analyses are to be received, is it not time that they should be finding their way into English text-books?

I am, Sir, yours truly,

Dec. 7th, 1886. R. J. R.

RELIGIOUS RESTRICTIONS ON A NEW MEDICAL SCHOLARSHIP.

A SUBSCRIPTION amounting to £400 has been raised by the colleagues and admirers of Prof. Karavayeff, the eminent Kieff surgeon, for the purpose of founding a scholarship in his honour for students in the medical faculty. It appears, however, that candidates must be of the "orthodox" faith; so that Lutherans, Dissenters, and Jews are debarred the chance of obtaining either the honour or emolument attaching to the possession of a Karavayeff scholarship.

Mr. W. Curran.—Yes.

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ROYAL UNIVERSITY WORK IN IRELAND.

Audi alteram partem is thanked for his letter, though it is too long for insertion. He vindicates the work of the Royal University. He admits it is not perfect, owing to lack of properly equipped laboratories and some defects of method, but thinks it is, on the whole, worthy of encouragement. He praises especially the Arts Examination, which, he says, is as good as Cambridge, requiring a good honest year's work, and alleges that the medical curriculum is improved in many respects—viz., the enforcement of adequate study of lunacy, fever, gynæcology, and ophthalmology, following in this respect the example of all progressive institutions here and on the Continent.

Mr. H. H. Sturge.—There is no publisher's name on the title-page. Our correspondent had better write to the author of the pamphlet.

HOSPITAL APPOINTMENTS.

To the Editor of THE LANCET.

SIR,—I am pleased to find that in your issue of Dec. 11th your powerful voice has been raised in protest against the monopoly at present existing in hospital appointments. Your remarks upon hospital appointments and degrees in surgery apply with even greater force to medical degrees and appointments; though I am afraid that in neither case is your suggested remedy of "addressing the bodies whose licentiates and graduates are injured" practicable, or at all likely to lead to any good result. The Fellows and Members of these same bodies are themselves either directly or indirectly interested in maintaining the *status quo*. The value of their diplomas is distinctly enhanced by the privileges they carry of rendering their happy possessors alone capable of applying for hospital appointments, and as they form the governing power of the bodies in question, it can hardly be expected that they will be very active in the matter. To a certain extent members of the College of Surgeons are in a much better position in this respect than the licentiates of the College of Physicians. In the former case any Member on passing the required examination is admitted to the Fellowship without let or hindrance; in the latter, not only must an examination be passed, but such restrictions are placed upon the would-be members as practically to render the diploma untenable except by those whose means are to a greater or less extent independent of the practice of their profession I need hardly point out in detail how injuriously such a system acts, not only upon the profession itself, but also upon the public at large, closing as it does the door of professional advancement upon a body of highly-trained and experienced members of the profession, who from want of means or some similar cause, not from want of ability, are effectually precluded from competing with their more favoured brethren.

I am, Sir, yours obediently,

Dec. 13th, 1886. REFORM.

SIR WM. MACCORMAC'S CASES OF RUPTURED BLADDER.

In the account of the cases of ruptured bladder under the care of Sir William Mac Cormac which was published in our last issue, on page 1118, paragraph 2, line 4, the date should be 1886, not, as printed, 1885. The two cases were admitted during Sir William's two consecutive "taking in" weeks, rare cases not infrequently occurring in pairs. The second patient, we may add, is perfectly well and shortly about to resume his occupation. Each man was provided with a fitted abdominal support to prevent any yielding along the line of cicatrix and the formation of ventral hernia.

Mr. C. S. Jeaffreson (Newcastle-on-Tyne).—Yes, if not too long.

TRIPLETS.

To the Editor of THE LANCET.

SIR,—The following case seems of some interest.

Mrs. C——, wife of the gardener of this hospital, was delivered of triplets on Sept. 10th last. The children were all males. There were three amniotic sacs and three placentæ, two of which were slightly attached. The first child and also the last presented by the shoulder; the second was a face presentation. The children were small and feeble. One died twenty-four hours after birth; another lived three days; the third lived seven days.—I am, Sir, yours faithfully,

M. JOHNSTON, House-Surgeon.

County Hospital, Lincoln, Nov. 17th, 1886.

RECTAL MEDICATION.

Dr. C. F. Knight (Dublin) calls our attention to the fact that he sent to us in 1878 a communication regarding "Medication per Rectum," in 1880 a second, and in 1883 a third communication on the same subject, but under the above heading. In these articles he advocated the administration of certain therapeutic agents in the form of vapours in particular diseases, as cholera, fevers, phthisis, &c. In 1883 he devised an instrument for such medication, and the method is, he understands, now followed at many of the continental hospitals, and has still more recently been introduced into one or two London hospitals. (See THE LANCET, Aug. 7th, 1886.)

X. Y. Z.—We cannot reply with certainty, but should advise our correspondent to ask the authority in charge of the failure for a direction for payment in full.

EXAMINATIONS AT THE ROYAL COLLEGE OF SURGEONS.

THE following were the questions on Anatomy submitted to the candidates at the first examination for the diploma of Fellow of the College on the 19th ult., when they were required to answer at least three of the four questions between 11 A.M. and 2 P.M.:—

1. Describe the soft palate; and (*a*) mention in their order, from above downwards, the several structures met with in its dissection; (*b*) state the sources of its arterial and sensory nerve-supply; (*c*) give the extrinsic attachments and the motor-nerve of each muscle.
2. Give the origin, course, and distribution of the branches of artery supplying the various parts of the brain and its membranes.
3. Describe the position and shape of the first rib. Give its relations and the muscular and ligamentous attachments to it. How is it developed?
4. Describe fully the levator ani muscle, giving its relations and nerve-supply.

The following were the questions on Physiology, of which it was necessary to answer three of the four between 3 and 6 P.M.:—

1. Name the proteids which occur in the human organism. State their general properties, and the special characteristics by which the different varieties may be distinguished.
2. Explain the effect upon the blood, blood-pressure, and excretions of diminishing the volume of the blood by bleeding, and of increasing it by the transfusion of normal living and of whipped blood.
3. What is meant by the cortical motor centres, and in what region of the brain are they situated? What do you know by experiment or otherwise of their use?
4. Describe the mode of origin and state the destination of the Wolffian and Müllerian ducts.

The following were the questions on Pathology, Therapeutics, and Surgery submitted to the candidates at the second examination for the diploma of Fellow on the 24th ult., when all four questions had to be answered between 1.30 and 5.30 P.M.:—

1. Describe, and contrast clinically and pathologically, the conditions known as (*a*) pulpy degeneration of synovial membrane, (*b*) Charcot's joint-disease, (*c*) chronic rheumatoid arthritis.
2. Give the symptoms, diagnosis, and treatment of tetanus, and discuss the causes and pathology of the disease.
3. Give the pathology, symptoms, and treatment, general and operative, of malignant disease of the rectum.
4. Describe the various forms of gangrene of the lower extremity, and state fully the treatment appropriate to each.

Mr. T. Laffan.—We have no knowledge of any prize for an essay on Diphtheria save that given by the Empress of Germany some three or four years ago.

Messrs. J. & A. Churchill.—Dr. D. Pi y Molist's work on "Don Quixote from a Medical Point of View" could probably be obtained from "La Redaccion de la Independencia Médica, Carmen 34, Barcelona."

PERSISTENT DIARRHŒA.

To the Editor of THE LANCET.

SIR,—May I be permitted to ask for advice through your columns in the treatment of the following case.

I was consulted a few weeks ago by a young lady who looked the picture of health, but who complained that for the last two years she had continually suffered from diarrhœa, accompanied by considerable griping pain in the abdomen. The causes which seem to have produced the diarrhœa were any deviation from the most simple diet and excitement. For two years she had scarcely tasted vegetables, and whenever she had done so she suffered from pain and diarrhœa. She stated that potato, even in small quantities, produced as unpleasant effects as anything. When going to a dance or dinner party she invariably suffered pain, and frequently had to return home on account of diarrhœa coming on. She had been under treatment by another practitioner for some time, and had always kept a mixture containing chlorodyne in the house, a dose of which she had taken whenever she was going out to any entertainment likely to cause the diarrhœa. I commenced treating her with ten grains of bromide of potassium and five minims of tincture of belladonna three times a day, and after a few days increased the dose of bromide to twenty grains. The only apparent effect of this was that she complained of feeling very low-spirited. After about ten days of this treatment I discontinued the bromide and belladonna, and ordered her mineral acids and nux vomica. I also advised her to commence trying to eat very small quantities of well-cooked floury potato with her food, and to have a cold sponge-bath every morning. She now feels very well, except that she has pain and looseness of the bowels after the potato, as before. There is thoroughly good reaction after the cold bath. Her friends tell me that she has never shown any symptoms of hysteria, nor does she appear to be hysterical. Her manner is always quiet and self-possessed. She is naturally very anxious to get rid of the constant discomfort and annoyance, and I am unwilling that she should continue the practice of taking opiates and avoiding vegetables. I shall be very thankful for any suggestions in the treatment of this case.

I am, Sir, yours truly,

Dec. 14th, 1886. A. H.

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LIFE ASSURANCE.

WE quite agree with the opinion expressed in a leader of the last issue of the *Policyholder*, that parents could not spend money to greater advantage upon their sons than by insuring their lives when they had reached about fifteen years of age. Such policies would be sure to be kept up, and would prove of great value either as a family provision or to meet business requirements.

Mr. Browning.—The matter is discussed in our current number.

COMMUNICATIONS, LETTERS, &c., have been received from—Sir Dyce Duckworth, London; Mr. Teale, Leeds; Sir J. Paget, London; Mr. O. Pemberton, Birmingham; Mr. W. S. Savory, London; Dr. Grally Hewitt, London; Prof. Annandale, Edinburgh; Mr. J. E. Erichsen, London; Sir Wm. Stokes, Dublin; Dr. John Ince; Dr. Braxton Hicks, London; Prof. Humphry, Cambridge; Sir James Sawyer, Birmingham; Mr. M. Gamgee, Birmingham; Prof. Rutherford, Edinburgh; Dr. Thursfield, Shrewsbury; Dr. Collins, London; Dr. M'Kenzie Davidson, Aberdeen; Mr. T. W. Crosse, Norwich; Mr. J. Thompson; Mr. Cantlie; Dr. Allchin; Dr. J. W. Fraser; Dr. D. Hood, London; Sir J. Fayrer, London; Dr. Harries, London; Dr. Cosgrave; Dr. Wilson Fox, London; Dr. Newell, Macclesfield; Mr. R. Boyd; Mr. H. Percy Dunn, London; Mr. W. Rivington, London; Mr. Trinder, Burton-on-Trent; Mr. A. Neve, Kashmir; Mr. Waye, Millom; Mr. A. F. Clay, Birmingham; Dr. Auld, Wick; Mr. Newnham, Bristol; Dr. John Lucas; Mr. F. Sherlock, London; Mr. Shelswell, London; Mr. E. R. Dale, London; Mr. S. Snell, Sheffield; Dr. Buzzard, London; Dr R. Neale, London; Mr. Paul Swain, Plymouth; Dr. Cameron, Liverpool; Mr. T. B. Crosby, London; Mr. Bradden, Lewes; Dr. Grainger Stewart, Edinburgh; Dr. Allfrey, Rowlands; Mr. J. Harris, Leighton Buzzard; Mr. Liebwood, London; Mr. Williams; Messrs. Bullock and Co., London; Mr. Byles, Eccleshall; Mr. Middleton; Mr. Greig Smith, Bristol; Dr. Jacob, Leeds; Mr. Fuge, Taunton; Mr. Sydney Jones, London; Dr. Vanderstraaten, Colombo; Messrs. Bogie and Co., Texas; Mr. Pillay, Madras; Mr. F. O. Smith, London; Dr. Oscar Jennings, Paris; Dr. C. F. Knight, Dublin; Dr. T. W. Hime, Bradford; Dr. Alexander, Liverpool; Dr. Hicks, Hendon; Mr. Tunmer, Harrogate; Mr. Killham, Sheffield; Mr. Winsor, Exeter; Dr. Smellie, Glasgow; Mr. Twyford, Hanley; Mr. Cripps, London; Messrs. Harris and Co., Birmingham; Dr. Popow, St. Petersburg; Mr. Whitehurst, Burton-on-Trent; Dr. Browne, Belfast; Mr. Shaw, St. Leonards-on-Sea; Mr. Oldham, Monsall; Mr. Mackay, Edinburgh; Mr. Lomas, Edinburgh; Dr. McNab, Stirling; Mr. Proctor, Shifnal; Mr. Taylor, Leicester; Dr. Caulfield, Cork; Mr. Keetley, London; Mr. C. F. Goode, London; Mr. A. J. Ellis, London; Messrs. Ettlinger and Co., London; Messrs. Farwig and Co., London; Mr. Naylor, London; Mr. J. Chisholm; Mr. H. Ffennell; Fairplay; B. D.; A Grumbler; Lady Superintendent, Southend-on-Sea; J. B.; A Student of Medicine; P. H. W.; J. R. I. R.; A. H.; Reform; L S.A.; A Provincial Fellow; E.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Dawson, Southbourne-on-Sea; Mr. Atkinson, Madley; Mr. Sheppard, Sutton Bonnington; Mr. Wills, Crewkerne; Mrs. Corwen; Messrs. Hill and Co., Hull; Mr. Skrimshire, Abergavenny; Messrs. Hopkinson and Co., Notts; Mr. Wootton, Leeds; Dr. Price, Nellore; Mr. Trubshaw, Mold; Mr. Keeley, Notts; Miss Hart, Painswick; Mr. Woodcock, Old Trafford; Dr. Horne, Scarboro'; Mr. Evans, Chelsea; Messrs. Clubbe and Co., Lowestoft; Mrs. Hitch, St. Leonards; Mr. Chadwick, Llansaintffraid; Mr. Turner, Finsbury; Mr. Miller, London; Mr. Joslen, Workington; Mr. Robson, Leeds; Mr. Milner, Dalston; Mr. Gallaher, West Leigh; Mr. Barton, South Kensington; W. B. B., Manchester; Trebor; G. A. M., Guernsey; Matron, Dorchester; S.W.; H., Ramsgate; W. M.; Dr.; C. D., Preston; Z.; Alpha, Glamorgan; Omega, Brighton; Matron, Preston.

Weston-super-Mare Gazette, Manchester Examiner, Preston Herald, The Coral, The Sanitary Engineer, &c., have been received.

Medical Diary for the ensuing Week.

Monday, December 20.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesdays, same hour.
CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2.30.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.
MEDICAL SOCIETY OF LONDON.—8.30 P.M. Clinical Evening. Dr. Ord: Hypertrophic Cervical Pachymeningitis.—Dr. Orwin: (1) Lupus of Larynx; (2) Hereditary Specific Disease of the Tongue.—Mr. Marmaduke Sheild: Ulcer of Face.—Mr. Bull: Enlargement of Thigh in a Boy.—Mr. Noble Smith: Club-foot. And other cases.

Tuesday, December 21.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.
CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
PATHOLOGICAL SOCIETY OF LONDON.—8.30 P.M. Dr. Hale White: Ulceration and Endocarditis of the Right Side of Heart.—Dr. Pasteur: Syphiloma of Heart.—Dr. A. Money: Rare Aneurysm of Undefended Space.—Dr. Handford: Fatty Tumour of Heart.—Dr. Hadden: Fatal cases of Alcoholic Paralysis.—Dr. Barlow: Ulcers of Stomach in case of Tuberculosis.—Mr. Bruce Clarke: Epithelioma of Bladder.—Mr. Swinford Edwards: Tumours of Testis and of Spermatic Cord. Card Specimens by Mr. S. Paget, Dr. Handford, and Mr. Shattock.

Wednesday, December 22.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesdays and Thursdays, 1.30 P.M.
ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department, Mondays and Thursdays, 9.30 A.M.
ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.
LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.
GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.
KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; and on Friday, 2 P.M.; and Saturday, 1 P.M.
CHILDREN'S HOSPITAL, GREAT ORMOND-STREET.—Operations, 9 A.M.; Saturday, same hour.

Thursday, December 23.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

Friday, December 24.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Saturday, December 25.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.

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ABSTRACT OF THE

Brown Lectures.

Delivered at the University of London,

BY VICTOR HORSLEY, F.R.C.S., F.R.S.

EPILEPSY.

LECTURE III.

MR. VICTOR HORSLEY said that he intended to give in detail an account of recent experimental research into the nature and pathology of epilepsy. The first of the three lectures was devoted to classification, and he proposed only to deal with epilepsy so far as it could be studied experimentally, though the results of experimental science had been somewhat ridiculed by clinical physicians. Experimental results were, however, infinitely more exact than those of clinical observation. A passage from Dr. Gowers' work on Epilepsy and other Chronic Convulsive Disorders, quoting Dr. Russell Reynolds, was read to show that the experimental work had been dragged into a false position. The lecturer next asked the question, "What do we mean by epilepsy?" and proceeded to give the classifications in vogue. Dr. Hughlings Jackson distinguished epilepsia gravior, epilepsy from discharges in the bulb and pons, and epileptiform seizures (Jacksonian Epilepsy). Dr. Russell Reynolds divided epilepsia gravior into those cases with loss and those without loss of consciousness, and also divided epilepsia mitior into those with and those without spasm. Dr. Gowers and Dr. Ross described as functional epilepsia gravior and mitior, and as organic epileptiform seizures. It was customary to consider hystero-epilepsy, epileptiform seizures, laryngismus stridulus, and eclampsia as altogether apart from epilepsy. Mr. Horsley thought that the omission to consider these diseases or conditions under epilepsy was unwarrantable. Experimental research showed that epilepsy could originate from discharges in the motor cortex of the brain and from discharges in the bulbo-spinal centres. For the present the hypothesis of Nothnagel, that there existed a special convulsive centre in the bulb and pons, as well as the views of others as to the convulsive centre of the bulb alone, must be set aside. Ferrier believes that movements may be evoked by stimulation of the corpus striatum, but Mr. Horsley had been unable to corroborate this. Nothnagel, in Ziemssen's Cyclopædia, in one and the same sentence, allows that the same mechanism in the brain may produce both epileptiform seizures and epileptic convulsions. This confusion of terminology must always remain until an exact division of symptoms is arrived at, and this coupled with an exact anatomical knowledge of the locality where the discharge begins and its mode of spread. The two essentials of epilepsy, according to Dr. Russell Reynolds, were diminution of intelligence and muscular spasm. An anatomical classification of epilepsy demands that we should know the locality of origin of disturbance, the locality of source of spasm, and the locality of the whole disturbance, which may or may not be the whole of the central nervous system. The disturbance might begin in any part of the encephalon, and, if in the perceptive centres, would readily explain the affection of intelligence. The next possible anatomical means of classification was in determining the locality of the source of spasm. Experimental stimulation of the motor cerebral cortex gave rise to definite movements, for in this region the representation of movement was, so far as is known, the most localised. Epilepsy induced from the cortex of the brain was characterised by tonic spasm followed by clonic spasm, as in epilepsia gravior. Epilepsy excited from bulbo-spinal centres was generally simply tonic, but might be clonic; the sequence of clonic on tonic was wanting. Tetanus and ankle clonus were of bulbo-spinal source, and possibly laryngismus also. Hystero-epilepsy was probably a cortical disease, as epileptiform seizures dependent on organic lesions undoubtedly were. Possibly eclampsia, epilepsia mitior, and laryngismus stridulus were of cortical origin. Mr. Horsley and Dr. Semon have discovered cortical centres for the adductor action of the vocal cords. It must remain doubtful whether tumours of the pons cause epilepsy by discharging a local mechanism (Nothnagel). The spasms in hystero-epilepsy at the onset of the attack were of the tonic followed by the clonic character, as graphic records showed. This fact, together with the remarkable coördinated movements in the later stage, were sufficient to prove hystero-epilepsy to be, at least primarily, a cortical affection.

LECTURE IV.

The second lecture on epilepsy was devoted to the question of the existence of special convulsive centres either in the pons Varolii or medulla oblongata. Mr. Horsley gave a detailed account of the various investigations, and showed that neither taken singly nor collectively could the results of these experiments be accepted as proving the existence of special convulsive centres. Such a hypothesis as that of Nothnagel and others was entirely unnecessary, for all the ascertained facts could be perfectly and harmoniously interpreted without it. Mr. Horsley believes that all the convulsive, tonic and clonic, phenomena may originate from the ordinary bulbo-spinal centres such as exist for carrying out normal mechanisms. Tonic or clonic spasm, then, may be produced by any motor nerve centre, but the combination and sequence of tonic-clonic could originate only from the cerebral motor cortex. It was an interesting and important but unsolved problem whether the clonic spasm of cortical epilepsy was the effect of cortical or bulbo-spinal discharges. Conceivably the cortical centre may discharge the energy pent up in the bulbo-spinal centre, but the violent rush of energy from the cortex might be simply passed along by the bulbo-spinal centre, which thus would act as a mere conductor. The tonic spasm resulting from cortical stimulation was a tetanus compounded of a series of muscular contractions, which, though fused in the tetanus, could yet be seen as waves on the continued curve, which had a definite rate of twelve to thirteen per second. The rate of discharge from the spinal motor centres is about eight to ten per second.[1] What was really wanted was a knowledge of the rate of nerve impulses passing along the pyramidal tracts. This might be ascertained by the use of Lippmann's electrometer and observing the variations of the electric potential. This was a point for future investigation. It has been proved experimentally that the only seats of motor nerve discharge in monkeys and dogs were the cortical and bulbo-spinal. Attention must next be turned to rodents, and in these animals, with but very imperfectly evolved nervous systems, the representation of movements in the cortex of the brain appeared to be of a very imperfect kind. In rodents the most careful work had been done by Franck and Pitres. They could not obtain the sequence of tonic-clonic from exciting the cortex of the brain of rabbits and guinea-pigs. Mr. Horsley had confirmed their observations; the spasm resulting from electrical excitation was sometimes tonic and sometimes clonic—i.e., of a mixed type. But the subject requires further investigation. The differences between these lower and the other higher mammalia might be explained as the result of imperfect evolution of centres, and, above all, imperfect differentiation between the cortical and bulbo-spinal systems. The problem was as follows: Given a convulsion in the rabbit or guinea-pig composed of tonic and clonic spasms, what is the locality of the motor disturbance?

Nothnagel's experiments were made by—1. Injections of chromic acid into the substance of the brain. These were so inexact as to need no further discussion. 2. Puncture with a needle. Punctures were made—(*a*) about the posterior end of the only sulcus that exists in the hemisphere of the rabbit; (*b*) about the bulb, in a region between the acoustic nucleus on the outside, the eminentia teres on the inside, and the calamus behind. In most cases the needle was driven through the floor of the ventricle nearly to the bone. Mr. Horsley showed that both of these punctures necessarily damaged the motor tracts going from the cortex down to the cord. When the puncture was made in the hemisphere, there was opisthotonos, contraction of pupil, tonic spasm alternating with violent clonic spasm, and ending in tetanus; the jaw and face showed tonic spasm. When the puncture was made through the floor of the fourth ventricle, the face and jaw

[1] THE LANCET, vol. ii. 1886, p. 359.

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were not affected, and the pupil was dilated, but the other phenomena remained the same. After the convulsions had been induced by this puncture it was found that the attacks recurred spontaneously. Now, in these experiments a lesion of the motor tracts was produced, and there was no definite series of muscular movements. The work of Kussmaul and Tenner, of Brown-Séquard, of Prevost of Geneva, Landois, Hermann, and Escher, constituted a series of experimental production of convulsions by vascular disturbance. Kussmaul and Tenner caused anæmia of the brain by ligature of both arteries going to the brain or by bleeding. The series of phenomena they observed were given in detail, and it was noted that considerable confusion existed as to the sequence and combination of tonic and clonic spasm. By compressing the aorta of rabbits, as had been done by Brown-Séquard and Prevost, muscular twitching and clonic spasms in the legs were evoked. These could not be explained as the result of anæmia of the legs, for ligature of the arteries going to them caused no such clonic movements. There was no doubt that they were due to anæmia of the lower end of the spinal cord, which received its chief blood-supply from the abdominal aorta by branches through the intervertebral foramina.

The next series of observations were those in which the convulsions were elicited by reflex irritation. Brown-Séquard had two methods of doing this—(1) hemisection of the cord, and especially of the posterior columns; (2) production of injury to the sciatic nerve. Westphal rendered guinea-pigs "epileptic" also by percussion of the frontal region, which doubtless caused minute hæmorrhages in the fourth ventricle as the effect of a kind of *contrecoup*. It was important to know, as Mr. Horsley had definitely determined, that there was no need in Brown-Séquard's methods that the wounds should suppurate, or even inflame much; even if primary union were obtained by antiseptic methods, the nervous effects followed equally well. In this so-called "epilepsy" of guinea-pigs it was most important to observe that the convulsive movements did not commence immediately after the operation. In France there was an "incubation period" of two weeks; in England and the United States a longer period of six weeks. Was it too much to suppose that there were racial differences even in animals, bearing in mind the greater frequency of hystero-epilepsy with the French? A fully developed fit was not the first thing to be observed; there was always a gradual development. The fits were evoked by touching the epileptogenous zone, which in the guinea-pig was on the same side of the head as the hemisection of the cord, or injury to the sciatic nerve. At first nothing more than a slight tonic spasm, causing the head to deviate to the same side as the lesion, would be observed. Later a complete fit would occur, and the phenomena were, in order, (1) slight period of latency after stroking the region of the angle of the jaw and behind the ear; (2) lateral tonic spasm as above, followed by complete pleurosthotonos, and spreading movements of the toes from tonic spasm in the limbs; (3) loss of consciousness, as inferred by the insensitivity of the conjunctiva, and the animal's falling over on its back. (4) then rapid clonic spasm of the whole four limbs, with genuine opisthotonos and opening of the mouth, so that the head and trunk was in a tonic and the belly and limbs in a clonic state. There seemed to be little doubt that the induced epilepsy was a pure neurosis. The incubation period and the slow development of the disease were very important features. The matter was still under investigation. Mr. Horsley considered that there was nothing in the results of the experimental researches that necessitated the hypothesis of a special coördinating convulsive centre. Coördination was effected by the functional and structural union of all bulbo-spinal centres. The so-called respiratory centres, probably brought into play the lower centres, innervating the respiratory muscles. In Landois', Hermann's, and Escher's experiments of ligaturing the veins returning blood from the head, the venous stagnation and plethora thus produced were followed by coma and convulsions; the fact was interesting, but too much stress could not be laid on it as proving any theory, vaso-motor or other, of epilepsy.

LECTURE V.

This lecture was occupied with the discussion of the convulsions evoked by discharge from the motor part of the cortex cerebri. It was possible that the part of the cortex producing the convulsion might be sensory (Ferrier) as well as motor. Ferrier had evoked convulsions by stimulating the temporo-sphenoidal lobe. The convulsion in which tonic spasm followed by clonic spasm was the essential feature was clearly shown by experiment to be dependent on the cortex cerebri. Stimulation of the fibres of the corona radiata, after cutting away the cortex, did not produce the typical series of events—tonic, clonic. Mr. Horsley had observed that there was a great difference between different monkeys and different parts of the motor cortex in respect of the facility with which convulsions could be evoked. The conditions of the cerebrum under which epileptogenous states are excitable were very numerous. Individual peculiarity was an important factor; so also were age, illness, and drugs, like absinthe and alcohol. If a monkey were lowered in health as the result of diarrhœa, a convulsion was more easily elicited than in the same animal when well. Old people and animals were less liable to cortical epilepsy, and, generally, very young animals also. Absinthe and alcohol injected into the venous circulation might spontaneously originate convulsions of cortical type. Coarse disease, such as septic meningitis, traumatisms, and new growths, could also excite true cortical convulsions, and of course electricity, employed experimentally. The general characteristics of the convulsion were the presence of a period of latency, then tonic spasm, then clonic spasm, arrest of respiration, with cyanosis and salivation, though the precise relationship of these phenomena to one another could not be proved as yet. There was also an effect on the heart. Paralysis and mania followed not only in man but in the lower animals.

Dr. Hughlings Jackson's views of the representation of movements in the hemispheres were sketched, and the chief point in them, so far as the present subject went, was that each hemisphere represented both sides of the body. The representation of the opposite side was most marked, but still there was a degree of representation of the same side of the body in the same cerebral hemisphere. According to these theoretical views of Dr. Hughlings Jackson, it would be possible to evoke convulsions of the whole of the body by stimulating one motor centre. The upper arm centre, for example, if stimulated, would produce movements in the opposite shoulder, but theoretically it could cause spasm down the opposite arm, down the opposite leg, the trunk, head, neck, and face, and then invade the muscles of the same side of the body as the stimulated centre, and in the same order above mentioned. In such a fashion is this representation imagined that the left lower part of the face would be represented, but the least so in the left upper arm centre. However probable these views might be theoretically, Mr. Horsley said that they obtained no proof, either clinically or experimentally. Clinical and experimental evidence simply showed that one half of the body was represented in the opposite hemisphere, with but few exceptions. Experiments, moreover, did not support Broadbent's hypothesis.[2] It was important to determine whether a passage of nervous energy or discharge could take place across from one hemisphere to another by way of the corpus callosum. Mr. Horsley quoted an observation made on a boy who was the victim of tubercular meningitis. The right arm was paralysed and rigid; on flexing it forcibly, it was found that the left arm became adducted. There was no doubt of the causal relationship between the two phenomena. The interval that elapsed between the cause in the right arm and the contraction in the left was always a second, and sometimes longer. This time was far longer than would be necessary for the passage of energy from one anterior spinal horn to the other. Mr. Horsley suggested that the nerve impulse from forcible flexion of the rigid arm passed upwards to the left hemisphere, and then discharged the energy in the right hemisphere by way of the corpus callosum. At the necropsy a conglomeration of tubercles was found in the left motor cortex, which explained the palsy and rigidity. The diagnosis of the lesion was made during life. Tracings of the convulsions in cortical epilepsy proved also that there must be a passage of nervous energy though the corpus callosum. It has been shown that the sequence of tonic-clonic spasm can only occur when the cortex is discharging. If the convulsion be bilateral when the cause is unilateral, and if the bilateral convulsion have the cortical character, it is clear in the light of experimental evidence

[2] See article on Substitutions in THE LANCET, vol. ii. 1884, p. 3.

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that the two hemispheres must have been discharging. The march of the spasm in cortical epilepsy is explained on the facts of experimentation as discovered by Ferrier, Schäfer, and Horsley. If the spasm begins in the right face, it passes to the arm, then to the leg, and then to the trunk of the same side; the convulsions, as a rule, begin later in the left limbs. The experimental evidence on this matter was detailed. Albertoni operated on dogs and ablated one motor area, and some days later exposed the opposite hemisphere, and on excitation he obtained generalised bilateral fits. This would seem to be contrary to the above views, but Mr. Horsley said that it was doubtful whether all the motor areas on one side had been removed. Franck and Pitres had operated on one cat by dividing the corpus callosum, and found that a cortical convulsion (i.e., tonic followed by clonic) could be obtained in all four limbs. It may be that these adverse facts can be explained on the knowledge that in the carnivora and some human beings the course taken by the fibres of the pyramidal tracts would seem to be bilateral in the cord for each hemisphere. So that anatomically there is some ground for expecting some bilateral effect when one hemisphere discharged. What, however, is the clinical and experimental fact? Mr. Horsley next gave in detail certain experimental and clinical evidence which seemed to show conclusively that, as a rule, each hemisphere convulsed its own (the opposite) side of the body. In hemiplegia, if the motor cortex was completely cut off the limbs remained permanently paralysed. Then, again, in unilateral fits there was no necessary spread to the opposite side of the body. In one monkey with unilateral cortical fits induced by electricity the muscles of the back and belly were convulsed only on the one side, showing that even such muscles as are supposed to act bilaterally and to be closely united spinally, did not do so in cortical fits—a strong argument against Broadbent's explanation of the escape of certain groups of muscles in ordinary hemiplegia. A case of Obeke's was also narrated as bearing on the point.[3] It was a case of con-

[3] Berlin. Klin. Wochen., 1880, p. 534, No. 37.

genital epilepsy and mental enfeeblement; the epilepsy was bilateral. Late in life a hæmorrhage occurred into the right internal capsule, destroying it and producing complete left hemiplegia and hemianæsthesia. After this attack, whenever the epilepsy appeared, it did not affect the left side of the body. The conclusion to be arrived at was that the bilateral representation, if it exists, is very imperfect.

Mr. Horsley next gave an account of experiments made by him which seemed to prove the same conclusion. In the first group of experiments the corpus callosum was completely divided. In the first dog the division was found to be complete, and a slight injury had been done to the right internal capsule. Stimulation of either cortex caused tonic spasm only, no "cortical" epilepsy, in the opposite side of the body. In the second dog there was, besides division of the corpus callosum, slight injury to its anterior end; in this case there was epilepsy, but only in the side of the body opposite to the hemisphere stimulated. In the third dog the division of the corpus callosum was perfect, save at the lower border of the rostrum. Stimulation of one cortex produced tonic spasm in the proximal segments of all four limbs, but genuine epilepsy only in the opposite limbs. In a monkey, the corpus callosum, anterior commissure, median commissure, and fornix were all completely divided, with the result that cortical stimulation caused epilepsy only in the opposite limbs. In the second group of experiments the motor centres were excised and the electrical stimulation practised on both hemispheres. In a monkey, the right motor centres were freely excised, with consequent left hemiplegia. Excitation of either hemisphere produced generally epilepsy, provided a very strong current were used. When the right hemisphere was alone stimulated by a moderate current, the convulsions were very marked, but only in the *right* limbs; there were practically no convulsions in the *left* limbs. It should be said that the whole of the right motor region was not entirely removed. When the left hemisphere was stimulated, the convulsions were very well marked in the right limbs, but absent from the left. Munk and Luciani had worked at the same subject. In the third class of experiments means were taken to depress the activity of the cortex of the brain on one side. A monkey was trephined on the right side and the wound allowed to become septic, with consequent meningitis; and at the end of two days the left limbs were found to be paralysed, but not completely. Excitation of the right hemisphere produced generalised epilepsy, but almost absolutely right-sided. In this case the passage of energy through the corpus callosum must have taken place, but the stimulated right cortex was unable to respond in the form of cortical epilepsy of the left limbs owing to its depressed state, it being the seat of septic meningitis with venous stagnation and consequent innutrition. In the fourth class of experiments an artificial tumour was produced in the subcortical region, and therefore damaging the fibres of the corona radiata. An injection was made of thin plaster-of-Paris by means of a syringe plunged through a part of the motor cortex. This was done in a monkey on the left side of the brain. Excitation of this left hemisphere caused no effect on the right limbs of the body, but evoked powerful epilepsy, which affected both eyelids and eyes, but only the left side of the face, trunk, and left limbs. Here it would seem that the artificial tumour in the left corona radiata had cut off the path leading from the left cortex to the right half of the body, but had not destroyed the fibres that passed from the left to the right motor cortex. The mere presence of the tumour did not appear to excite any epileptic effect. It would appear, therefore, that something other than mechanical pressure is necessary to put the nerve cells in that condition in which they discharge energy convulsively. The conclusions all round, therefore, were very emphatic, to the effect that convulsions due to cortical discharge are evoked in various groups of muscles by nerve energy proceeding from that centre in each hemisphere which is in relation to each group of muscles, and that in generalised epileptic convulsions both cerebral hemispheres are involved.

LITHOLAPAXY IN MALE CHILDREN AND MALE ADULTS.

BY SURGEON-MAJOR D. F. KEEGAN, M.D. DUB.,
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(*Concluded from page 1170.*)

AT the close of the year 1883 a young man, aged twenty, was admitted into the Indore Hospital with stone in the bladder. The stone, which consisted of uric acid and weighed 1140 grains, was disposed of by litholapaxy, and he left the hospital perfectly well twenty days after the operation. Indeed, he might have returned to his home very much sooner, but it was considered wise to keep him for some days under observation in hospital. The notes of this case I have left behind me in India, and am not in a position at present to state how long the operation lasted, or the size of the lithotrite or evacuating catheters employed.

S. M——, aged sixty-seven, an inhabitant of Indore, was admitted into hospital on May 18th, 1884, suffering from symptoms of stone, which had existed for fifteen years. His face bore the traces of great suffering. The pain on passing urine was so great that sometimes he used to strike his forehead against the ground or against the wall of his room in paroxysms of despair. The urine was alkaline in reaction, and its specific gravity 1015. The same day I passed a No. 15 fenestrated lithotrite into the bladder and readily seized a very large stone. The bladder was healthy and roomy, and the urethra very capacious. The stone, however, I found too large to permit of its being cracked across with the lithotrite, and I had not a larger one in my possession. To have cut an old man with a large stone would almost certainly have killed him, and I therefore determined to chip away at the stone until I could so reduce it as to get the lithotrite to lock on it. I was obliged to spend a very long time in chipping away at the outer shell of the stone, and when nearly half an hour had elapsed I had the satisfaction of finding that I was able to lock the lithotrite. Once the stone was cracked across, the operation presented no remarkable features except its great tediousness. At the end of two hours I had only extracted half the stone, and I almost began to despair of success. But my old patient's pulse improved, his breathing was perfectly regular, and he required but little chloroform to keep him in a condition of perfect anæsthesia, and so I was determined to extract the entire stone at one sitting if possible. I was obliged to introduce the lithotrite fourteen different times, and applied the aspirator an equal number

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of times. The evacuating catheter which I employed was a No. 29 (French scale). At the end of the fourth hour I had nearly extracted the entire stone, and the last quarter of an hour of the operation was spent in sounding and in disposing of the last few fragments. The stone consisted of urate of lime, and when damp weighed 1600 grs. I have weighed it recently, and after two hot weathers in India its weight is 1470 grs.—May 18th: Evening temperature 102·4°; pulse 96.—19th: Feels slight pain over bladder region: urine somewhat red; not much pain in micturition; has almost recovered from the effects of chloroform.—21st: Patient feels quite well; walks about his room; is anxious to go home.—23rd: A small lithotrite having been introduced into the bladder, a small fragment of stone was detected lying close to its neck, and was removed between the blades of the lithotrite.—24th: Urine perfectly clear: no pain in micturition. Allowed to return home.

The above case is a good example of the results which can be achieved by Bigelow's operation. Compare the history of this case after the operation of litholapaxy with what it would have been had I extracted the stone by supra-pubic cystotomy, and the superiority of Bigelow's method over other systems of treatment becomes very striking. This man was in the enjoyment of excellent health when I left India in March last, and was perfectly free from all bladder trouble. I may here mention that his testicles have never descended into the scrotum, or even into the inguinal canal. He affirms that he has had two children, and suffered once from syphilis and once from gonorrhœa, proving that a man may be the subject of retained abdominal testicles and still possess undiminished virile power.

M. S——, aged thirty years, admitted into the Indore Hospital on Feb. 1st, 1885, with symptoms of stone in the bladder. A No. 15 fenestrated lithotrite having been passed into the bladder, a large stone was easily seized and crushed. The lithotrite was introduced into the bladder eight times, and the débris evacuated through a No. 29 catheter (French scale). The operation lasted one hour and thirty-seven minutes, and the débris of the stone, which consisted of mixed uric acid and urate of ammonia, weighed 770 grs. The patient left the hospital quite well on the twelfth day succeeding the operation.

L——, aged thirty years, admitted into the Indore Hospital on May 20th, 1885, with stone symptoms, which had existed for twelve or fifteen years. A No. 15 fenestrated lithotrite being passed into the bladder, a stone was readily seized. The stone I found was a very hard one, and tested the strength of the lithotrite employed, one of Weiss and Son's make. The male blade seemed to me to sink into the stone. The lithotrite was introduced eleven different times, and the evacuating catheters employed were No. 16 English and No. 25 French scale. The operation lasted two hours and four minutes, and the stone extracted weighed 550 grains. It consisted of oxalate of lime, was quite black in colour, and was the hardest stone I have yet crushed. The man made an excellent recovery, and left the hospital quite well ten days after the operation. The lithotrite on this occasion did its work splendidly. The amount of pressure I was obliged to exert in screwing up the lithotrite was represented by the whole strength of my wrist and forearm. In attacking stones of this description, I screw up the lithotrite as tightly as I think I can do with safety, and then wait for some seconds before endeavouring to give the handle of the screw an extra half turn, and I generally find that in the interim the stone gives way with a snap under the continuous pressure exerted by the blades of the lithotrite. The screw power of the lithotrite should be worked judiciously and carefully when one meets with very hard stones. The inexperienced litholapaxist who, so to speak, "rushes" a hard mulberry calculus is not acting fairly either towards his patient or the surgical instrument maker. The blades of the best made lithotrite are liable to break if the whole power of the screw is rapidly brought into play against a very hard and tough stone.

M——, a man aged forty, was admitted into the Indore Hospital on July 3rd, 1885, suffering from stone symptoms, which had existed for some years. On introducing a No. 15 fenestrated lithotrite into the bladder, a large stone was readily seized and crushed. The stone was a very hard one. The lithotrite was introduced on six different occasions, and the débris extracted by a No. 16 evacuating catheter. The operation lasted eighty-eight minutes, and the stone, which consisted principally of oxalate of lime with some mixture of lithic acid, weighed 1100 grs.—July 4th: Urine clear; has some pain in passing urine.—5th: Pain much less; feels quite well. Sir Henry Thompson's sound being passed into the bladder, no particle of stone could be detected.—6th: Went home quite well.

M. S——, aged twenty-five years, admitted into the Indore Hospital on July 11th, 1885, with symptoms of stone, which had existed for some years. Next day, being placed under chloroform, a stone, consisting of lithic acid and oxalate of lime and weighing 787 grs., was evacuated from the bladder in seventy-five minutes. The lithotrites employed were Nos. 11 and 15, and the evacuating catheter used was a No. 16 (English scale). The patient made an excellent recovery, and left the hospital quite well on the seventh day succeeding the operation.

S. B——, aged thirty years, was admitted into the Indore Hospital on March 12th, 1886, suffering from stone in the bladder. This man's stone had been diagnosed by a native practitioner in the city of Iaora, who sent him to me for treatment. He had suffered for seven years from stone symptoms, and several hakims had treated him for gonorrhœa. He was most anxious to be relieved from his sufferings as speedily as possible, and next day, being placed under chloroform, I passed into his bladder a No. 15 fenestrated lithotrite, and at once seized a very large stone. I at once perceived that the stone was far too large for such a lithotrite. I then introduced with great facility a No. 32 fenestrated lithotrite (French scale), which Messrs. Weiss and Son had sent me out in September, 1885. My patient had a wonderfully capacious urethra, for it was not found necessary to slit up the meatus before introducing this powerful lithotrite. The bladder I found also very roomy, and not disposed to spasmodic contraction. I seized the stone, but could not lock the lithotrite. I therefore began to chip away at the stone, and gradually wore away some of its shell. After working in this fashion for about five minutes, I withdrew the lithotrite from the bladder, introduced a No. 31 evacuating catheter (French scale), and then applied the aspirator. I then brought away a quantity of white fine débris, proving at any rate that the covering of the stone was phosphatic. I therefore made up my mind to crush the stone at one sitting if possible, for I had many of the conditions necessary to success on my side. I had a powerful and trusty lithotrite and a large evacuating catheter to hand; a very capacious urethra and a roomy bladder to work in; my patient was young; the stone to be attacked was not, I believed, abnormally hard; and last, though not least, I had gained a considerable experience in performing litholapaxy. I therefore reintroduced the large lithotrite, and started afresh. After further chipping away at the stone I eventually wore it down, and soon I was able to lock the lithorite on it, and crushed it at the rim. Once having crushed it, I felt confident of ultimate success, and not to enter into weary details, I may at once state that after three hours and a half of hard work I had extracted a stone, principally phosphatic, weighing over six ounces avoirdupois. The last half hour of the operation was passed in disposing of the nucleus, which I found composed of oxalate of lime, and in searching for pieces of débris lying in the trigone of the bladder. My patient took the chloroform well, and I had no anxiety on this score during the operation. Next day, I found the stone, when dried, to weigh exactly 2804 grs. The nucleus, which I easily picked out from the mass of débris, weighed 100 grs. During the operation I introduced the lithotrite thirteen different times into the bladder, and the evacuating catheter an equal number of times. I exhibited the débris of this stone at the meeting of the British Medical Association held at Brighton in August last. It is, as far as I know, the largest stone which has ever been removed from the bladder by Bigelow's method. To perform an operation of this kind with success is a great strain on the resources of the surgeon who attempts it. He must be ever gentle in his movements, and at the same time persevering and courageous in attack. He must have implicit confidence in the lithotrite which he employs, and he must of all things be patient and in no hurry to finish the operation. Portions of this stone I found extremely hard. On one or two occasions I screwed up the lithotrite with almost the whole strength of my wrist and kept up the pressure. I patiently awaited the result, and soon I had the satisfaction of hearing the snap of the stone as it gave way under the continued pressure of the blades of the lithotrite. I would not, however, recommend an inexperienced litholapaxist to attack such a stone. Had this stone been composed of hard lithic acid or oxalate

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of lime, the correct operation for its removal would, I think, have been supra-pubic cystotomy, but being what it was the course which I pursued was doubtless the correct one. The subsequent history of this case was the following:—March 13th (evening): Had completely recovered from the effects of chloroform at 3.45 P.M. One drop of nitro-glycerine was then given. Passed urine at 4.30 and again at 6.20 P.M.; slight pain over bladder and urethra; feels better than before the operation. Evening temperature 102·6°; pulse 96.—14th: Morning temperature 100·2°; pulse 90; slept well; some pain on pressure over bladder and urethra; pain on micturition less than yesterday; colour of urine brown; large deposit of phosphates in urine on cooling; feels much better. Evening temperature 102·2°.—15th: Morning temperature 99·2°; slept well; feels much better. Evening temperature 99·0°.—16th: Pain over bladder and urethra less; passed some small bits of stone along with the urine during the night; sat out in the verandah of the hospital for about half an hour to-day.—17th: Passed some more small portions of stone. Morning temperature 98·4°; evening temperature 99°.—18th: Passed some very fine phosphatic sand; sits out in the verandah daily.—20th: Patient's general health improving; pain in urethra and over bladder on pressure much less.—21st: Passes urine freely and without much pain; has some slight purulent discharge from urethra; has some pain over descending colon.—22nd: Some pain in the left testicle. Placed under chloroform, and bladder washed out with saturated solution of boracic acid. No particle of stone could be detected by Sir H. Thompson's sound. No click on using aspirator.—23rd: Had four motions during the night; pain in left testicle much less. Morning temperature 98·4°; pulse 96; sits out in verandah.—25th; Has some pain in region of left kidney; morphia injected.—26th: Pain disappeared from region of left kidney; looks quite cheerful; urine still continues to deposit phosphates on cooling.—27th: Slight pain in passing urine; walks about the hospital grounds. Evening temperature 98·4°.—28th: No urinary symptoms of any importance, except very slight pain in passing urine; urine, however, continues to deposit phosphates; general health much improved.

Remarks.—I left Indore on March 28th on furlough. A letter lately received from India tells me that this patient left Indore for his home the day on which I started for Bombay. When I showed the débris of this man's stone at Brighton in August last, I was under the impression that he had remained in hospital until April 3rd.

That litholapaxy is capable of successfully dealing with stones of considerable size occurring in females, the following case will go to prove.

B——, an old woman aged eighty, was admitted into the Indore Hospital on March 17th, 1886, with stone symptoms which had existed for two years. She had lost control over the bladder for more than one year, and had suffered much from irritability of the same. A stone being found, she was next day placed under chloroform and a uric acid calculus weighing 395 grains removed from the bladder in sixty-seven minutes. The evacuating catheter used was No. 16 (English scale), and the lithotrite employed was No. 14 (English scale). The operation presented no features of difficulty, and the evacuating catheter and lithotrite passed with the greatest ease. When working the aspirator an assistant's finger pressed the meatus of the urethra against the catheter, and thus very little water leaked out between the wall of the urethra and the catheter.—March 19th: Colour of urine pale; it still dribbles away.—20th: Pulse 84; colour of urine brown; no pain over bladder; feels much better.—21st: Has some pain after micturition; passes urine involuntarily only when she moves about in bed; no pain over bladder.—22nd: Is able to retain her urine for two hours at a time; feels very weak.—23rd: Is now able to retain her urine for three hours at a time; she passed some this morning at 6 A.M., at 8 A.M., and again at 11 A.M.—24th: Feels much better; is fast regaining complete power over the bladder.—25th: Allowed to go home to-day, feeling quite well.

Remarks.—Had the stone in this case been twice the weight it proved to be, I do not think there would have been any difficulty in removing it at one sitting.

Were it necessary or profitable to do so, I might relate the history of several more cases wherein I have disposed of stones weighing between 700 and 800 grains by litholapaxy. The cases, however, which I have now recorded, together with many others already reported by Freyer, wherein he has successfully removed very large calculi from the bladder by litholapaxy prove how wide indeed is the legitimate sphere of Bigelow's operation. Sir Henry Thompson is of opinion that a surgeon who is not practically familiar with lithotrity, on meeting with a hard calculus which he cannot readily seize with a lithotrite, will be more likely to achieve a lasting success for his patient by adopting supra-pubic cystotomy in preference to litholapaxy. This may be a wise and sound rule for those who at rare intervals meet with a case of stone, looking at the question from the standpoints of the patient's safety and the surgeon's reputation. But there is another standpoint from which this subject must be viewed, and it is this: Given a patient labouring under the presence of a hard and large stone lying in a healthy and roomy bladder, and an experienced and skilled litholapaxist at hand to treat him, what for the patient is the safest and most satisfactory method of getting rid of such a stone? The record of cases which I have now laid before my readers may supply the answer to this important question. For my part, I think that recourse to Bigelow's operation will best fulfil the requirements of such a patient. Believing, as I do, that litholapaxy is the best method of dealing with the vast majority of stones we meet with in men, women, and children, I must confess that I view with considerable apprehension and misgiving the attempts which are now being made in England by the advocates of supra-pubic cystotomy to apply this revived surgical procedure to the treatment of many cases of stone which would be more appropriately and expeditiously disposed of by Bigelow's operation. And now I leave to the judgment of practical surgeons in Great Britain this record of fifty-eight litholapaxies performed on male children.

St. James's-square.

NOTE ON THE

RELATIVE DIGESTIBILITY OF THE CHIEF ALBUMINOID PROXIMATE PRINCIPLES,

WITH REMARKS ON ITS BEARING ON INVALID DIET.

BY JAMES W. FRASER, M.D., C.M. ED., M.R.C.S.

IN the course of some experiments on peptic and pancreatic digestion, I had to work with small quantities of more or less pure albuminoid proximate principles, digesting them with peptic and pancreatic fluids. In estimating the results of these experiments, I was struck by the varying digestibility of the albuminoids, and thought that an account of the results obtained might be valuable.

The experiments were performed with a peptic fluid, consisting of Benger's liquor pepticus, diluted with a ·1 per cent. hydrochloric acid solution, and a pancreatic fluid consisting of the liquor pancreaticus of Benger. The digestion took place in small dialysers suspended each in a beaker containing ·1 per cent. hydrochloric acid solution for peptic digestion; the beaker, dialyser, and contents were kept at a temperature of 37·7° C. (100° F.), and peptic digestion continued for six hours; the liquids, both inside and out of the dialyser being kept in constant slight motion by suitable apparatus. At the end of peptic digestion, the contents of the dialyser were neutralised, and then made alkaline with carbonate of soda, so as to contain ·1 per cent. by weight of the salt, and liquor pancreaticus was added; the ·1 per cent. hydrochloric acid in the beaker was replaced by ·1 per cent. carbonate of soda solution, and pancreatic digestion was allowed to proceed for six hours at 37·7° C. At the end of this time the carbonate of soda solution was replaced by distilled water, and the beaker and contents heated till the temperature in the dialyser was raised to 80° C., so as to kill the ferment. Dialysis was then allowed to proceed for twenty-four hours. Of course, definite and fixed quantities of digestive fluids and external liquids were employed in all cases, and in most an equal quantity of the proximate principle was used. The level of the liquid in the dialyser and in the beaker was kept the same. The dialysed liquids from these periods of the experiment were preserved unmixed, and the results of each are noted under the heads of "peptic digestion," "pancreatic digestion," and "dialysis" respectively. The dialysed liquids were evaporated to dryness in the presence of a small quan-

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tity of purified chloride of sodium to make the residue a more manageable substance, and the amount of peptone dialysed estimated as nitrogen by a modified Nessler process, of which full details may be found in a paper on the Action of Infused Beverages on Peptic Digestion.[1] The results in these tables, unless otherwise stated, are expressed as nitrogen; and the amount of nitrogen passing through the dialysers from self-digestion of the peptic and pancreatic fluids, having been previously ascertained by experiment, has been deducted from these results.

Table I. shows the amount and condition of each albuminoid subjected to experiment, the amount of nitrogen and of dry solid contained, whether ascertained by experiment or calculated from the formulæ of former experimenters. Myosin gave so much trouble in preparation that only a very small quantity was used in the experiment with it in the cooked state, and the cooked myosin was prepared by boiling some of the samples contained much less dry solid than others; this depended partly on their physical condition, whether solution or damp solid. The very small amount of cooked myosin has been explained, and that in the case of alkali-albumen depended on the fact that the alkali-albumen had to be in acid solution for peptic digestion, and that this solution had to be rapidly prepared at the last moment to prevent the alkali-albumen changing into syntonin. Cooked serum-albumen was prepared from a solution of purified albumen concentrated at 37·7° C. till it was sufficiently strong to solidify on boiling. It was then heated to boiling in a water-bath and formed a pultaceous mass of granules of coagulated albumen held together by a more liquid substance. It was, therefore, more easily acted on by the digestive fluids than hard-boiled white of egg, as the latter forms a fairly homogeneous substance. No experiment was performed with fibrin, as this forms but a small element

TABLE I.—*Amount and Condition of the Proximate Principles used in each Experiment, the Amount of Dry Solid each represents, the Amount of Nitrogen in each, and its Percentage.*

	Condition and amount used.	Dry solid.	Nitrogen in grammes.	Nitrogen per cent.
Albumens:				
Serum	Solution, 10 ccs.	·288 grm.	·044 grm.†	15·5 per cent.†
Egg	Solution, 10 ccs.	·169 ,,	·026 ,, †	15·5 ,, †
Albumens, cooked:				
Serum	Damp solid, 2 grms.	·224 ,,	·035 ,, †	15·5 ,, †
Egg	Damp solid, 2 grms.	·408 ,, *	·063 ,, †	15·5 ,, †
Globulins:				
Myosin, raw	Solution, 10 ccs.	·137 ,,	·027 ,,	19·7 ,,
Myosin, cooked	Damp solid, ·35 grm.	·034 ,,	·0067 ,,	19·7 ,,
Derived albumens:				
Syntonin	Solution, 10 ccs.	·253 ,,	·039 ,,	15·5 ,,
Alkali-albumen	Solution, 10 ccs.	·095 ,,	·014 ,,	14·3 ,,
Casein	Damp solid, 2 grms.	·541 ,,	·080 ,,	14·9 ,,
Vegetable albumen:				
Gluten, impure	Damp solid, 2 grms.	·726 ,,	·087 ,,	11·98 ,,

* Calculated from composition of white of egg. † Calculated from Mulder's analysis of albumen.

TABLE II.—*Nutritive Values of Albuminoid Proximate Principles.*

	A. Peptic digestion.	B. Pancreatic digestion.	C. Dialysis.	D. Total of A, B, and C.	E. Nitrogen value of amount of principle used in the experiment.
Albumens:	Grammes.	Grammes.	Grammes.	Grammes.	Grammes.
Serum (Experiment 1)	·00087	·00342	·01122	·01551	·044
Serum (Experiment 2)	·00073	·00299	·00858	·01230	·044*
Egg	·00051	·00178	·00315	·00544	·026
Albumens, cooked:					
Serum	·00020	·00139	·00438	·00597	·035
Egg (Experiment 1)	·00043	·00053	·01029	·01125	·063
Egg (Experiment 2)	·00030	·00052	·00499	·00581	·063
Globulins:					
Myosin, raw	·00028	·00089	·00259	·00376	·027
Myosin, cooked	·00007	·00106	·00203	·00316	·0067
Derived albumens:					
Syntonin	·00049	·00219	·00765	·01033	·039
Alkali albumen	·00002	·00105	·00203	·00310	·014
Casein	·00053	·00246	·01071	·01370	·080
Vegetable albumens:					
Gluten	·00053	·00134	·00650	·00837	·087

* This result is rather too large, on account of the separation of the fibrinous clot noted in the text.

a solution of the raw substance in salt solution, filtering off the precipitated flakes and using them after pressing between folds of linen. The gluten used was a mere mixture of albuminoids, obtained by washing flour, and was not perfectly free from starch. The uncooked egg-albumen was a filtered solution of white of egg, and therefore contained the salts; and the cooked egg-albumen was hard-boiled white of egg. The raw serum-albumen experiments were performed with measured quantities of ascitic fluid rich in albumen, but containing salts, and in the first experiment a little fibrin. This latter had clotted out in the second experiment, and therefore the figures in Table I. are rather too large for the second case. The other proximate principles used were fairly pure samples. As will be seen from the table, of diet, and alkali-albumen was only introduced on account of its close resemblance to casein.

Table II. shows the amount of the proximate principle (expressed as nitrogen) peptonised and dialysed in each of the three periods of the experiment, and the total of the three. Table III. shows the percentage relation between the amounts dialysed and the amount of albuminoid actually used. In no case did 50 per cent. of the dry solids pass through the dialyser; this depending rather, it is to be believed, on the short period of dialysis than on imperfect peptonisation, for when solids were used in the experiment, in almost every case they were entirely dissolved, and no precipitate was caused by the heating to 80° C. at the commencement of dialysis. The nearest case to 50 per cent. passing through the dialysers is that of cooked myosin (47·15 per cent.), but this seems rather to depend on the

[1] Journal of Anatomy and Physiology, vol. xx., p. 361.

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small amount used than on the special digestibility of the substance, for it is to be noticed that during peptic digestion only one quarter as much passed through the dialysers, as in the case of raw myosin, and that it is in the stage of dialysis that the amount is made up[2]. After this the most digestible albuminoid is raw serum-albumen, which in two experiments gave to dialysis 35·24 per cent. and 27·95 per cent. respectively, and the others follow in order: syntonin, 26·47 per cent.; alkali-albumen, 22·14 per cent.; raw egg-albumen, 20·91 per cent.; casein, 17·11 per cent.; cooked egg-albumen (first experiment), 17·9 per cent.; cooked serum-albumen, 17·05 per cent.; raw myosin, 13·91 per cent.; gluten, 9·61 per cent.; and cooked egg-albumen (second experiment), 9·21 per cent. It might have been expected that syntonin, whose digestion is already half done, would head the list, but this is not the case though only raw serum-albumen is fairly ahead of it.

in one case slightly the highest; then follows syntonin—a result which, here especially, might be expected to head the list, and whose secondary position has no apparent reason. The others in order are cooked myosin, raw myosin, cooked egg-albumen (first experiment), casein, gluten, cooked serum-albumen, cooked egg-albumen (second experiment), and alkali-albumen. Therefore the raw albumens appear most susceptible of peptic digestion, and syntonin next.

Turning next to tryptic digestion, cooked myosin heads the list; but the same reasons for regarding the total result of this experiment as doubtful apply to the partial result. Of the more certain experiments, the first, raw serum-albumen, is the highest, with 7·77 per cent.; next comes alkali-albumen, with 7·50 per cent.; followed in order by raw egg-albumen, raw serum-albumen (second experiment), syntonin, cooked serum-albumen, raw myosin, casein, gluten, and the two cooked egg-albumens, these last two not getting

TABLE III.—*Percentage of Albuminoid Proximate Principles Digested and Dialysed in each Stage of the Experiments.*

	A. Peptic digestion.	B. Pancreatic digestion.	C. Dialysis.	D. Total of A, B, and C.
Albumens:				
Serum (Experiment 1)	1·97 per cent.	7·77 per cent.	25·50 per cent.	35·24 per cent.
Serum (Experiment 2)*	1·66 ,,	6·79 ,,	19·50 ,,	27·95 ,,
Egg	1·96 ,,	6·84 ,,	12·11 ,,	20·91 ,,
Albumens, cooked:				
Serum	0·57 ,,	3·97 ,,	12·51 ,,	17·05 ,,
Egg (Experiment 1)	0·68 ,,	0·84 ,,	16·30 ,,	17·92 ,,
Egg (Experiment 2)	0·47 ,,	0·82 ,,	7·92 ,,	9·21 ,,
Globulins:				
Myosin, raw	1·03 ,,	3·29 ,,	9·59 ,,	13·91 ,,
Myosin, cooked	1·04 ,,	15·82 ,,	30·29 ,,	47·15 ,,
Derived albumens:				
Syntonin	1·25 ,,	5·61 ,,	19·61 ,,	26·47 ,,
Alkali albumen	0·14 ,,	7·50 ,,	14·50 ,,	22·14 ,,
Casein	0·66 ,,	3·07 ,,	13·38 ,,	17·11 ,,
Vegetable albumens:				
Gluten	0·60 ,,	1·54 ,,	7·47 ,,	9·61 ,,

* All the results of this experiment are probably rather too small, for the reason noted in Table II.

TABLE IV.—*Beef-tea Experiments.*

	A. Peptic digestion.	B. Pancreatic digestion.	C. Dialysis.	D. Total of A, B, and C.	E. Albuminoid nitrogen (obtained by deducting the nitrogen dialysable without digestion, from D).
	Grammes.	Grammes.	Grammes.	Grammes.	Grammes.
Beef-tea	·00409	·00425	·00802	·01636	·00918
Ditto with white of egg	·00357	·00402	·01156	·01915	·01197
Ditto with serum-albumen	·00335	·00381	·01112	·01828	·01110
Hydrochloric acid beef-tea	·00195	·00187	·00504	·00886	—

TABLE V.—*Nitrogen contained in Dialysable Matters in Undigested Beef-tea.*

A. Dialysed in first 6 hours.	B. Dialysed in second 6 hours.	C. Dialysed from 12th to 36th hour.	D. Total of A, B, and C.
·00130 grm.	·00132 grm.	·00456 grm.	·00718 grm.

Examining next the amounts of nitrogen dialysed in each stage of the experiment, it is seen that in the peptic digestion stage in no case did 2 per cent. pass through, a small result, amply accounted for by the short period of dialysis (six hours), and by the fact that the dialysable matters had to start from zero and be formed until a sufficient pressure, so to speak, to cause dialysis was obtained. The highest peptic results are with the uncooked albumens, serum being up to 1 per cent. Here the substances most easily soluble in an alkaline menstruum have naturally an advantage in digestion, which accounts for the high positions of the raw albumens, of the alkali-albumen, and of syntonin.

During these two stages peptones had been forming more rapidly than they could pass away through the parchment paper, and had accumulated in the dialysers; and hence, when, the ferment having been killed by heating to 80° C., dialysis was continued for twenty-four hours, a larger proportion of crystalloid matter passed through than in the former stages. These peptones are both of peptic and tryptic formation, as is also the case with those under the head of pancreatic digestion. The largest proportionate result is here again found in the doubtful case of cooked myosin, but it is not very far ahead of raw serum-albumen (first experiment), with 25·50 percent.; and this is followed by

[2] The relative digestibility of raw and cooked meat cannot be considered settled. E. Jessen (Zeitschrift fur Biologie, 1883) states that 25 grms. of cooked beef left a residue of 17 grms. to 18 grms. after twenty-four hours' artificial peptic digestion, while 25 grms. of raw beef only left 5·5 grms. Lehman (Physiological Chemistry, vol. iii., p. 318) distinctly states that raw meat is more difficult to digest than cooked. The digestibility of meat no doubt depends on other effects of cooking, softening gelatinous elements, &c., but the experiment above, though doubtful, points to the greater digestibility of cooked myosin as having a bearing on the matter.

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syntonin, the second raw serum-albumen experiment, cooked egg-albumen (first experiment), alkali-albumen, casein, cooked serum-albumen, raw egg-albumen, raw myosin, cooked egg-albumen (second experiment), and gluten. All these substances, therefore, have valuable dietetic qualities—as was known in many of the cases, indeed, ages before the substances themselves had been distinguished; but their susceptibility to the various digestive fluids varies. Several of them are not ordinarily used as foods at all, as, for example, serum-albumen, raw myosin, syntonin, or alkali-albumen. But among these are the most digestible of the albuminoids, and though they may not be required in every-day diet in that of invalids, some of them would be invaluable.

A formula has been in use for preparing a meat-tea, in which by macerating raw meat with water containing a few drops of hydrochloric acid and some salt a solution containing myosin and syntonin was prepared, but, as it cannot be heated for fear of precipitating the myosin, it forms an unpleasant blood-red liquid, with the taste and odour of raw flesh, and therefore has not become a very popular article of invalid diet. With this exception, and that of foods more or less entirely peptonised, the more soluble albuminoids have been little used for dietetic purposes. Beef-tea, as ordinarily prepared, contains principally extractive matters, and owes the greater part of its nutritive qualities to the deposit of finely divided coagulated albumen and of small portions of muscular fibre which it contains. Now it would be a matter of no very great difficulty to make it almost as nutritious as an equal bulk of solid meat by the addition of roughly prepared albuminoid principles. The white of egg might be added to beef-tea warmed not above the coagulating point of egg-albumen (160° F.)—say not scalding hot. This, indeed, is frequently done, and greatly adds to the value of the beef-tea. But egg-albumen is not the most easily digested of these principles. Dried blood-serum is a commercial article, being easily obtained at the price of about 3*s.* a pound. The preparation of serum-albumen from this mixed substance is easy enough, but it is not to be bought, though possibly if there were a demand the supply would be forthcoming. But the crude article, though only partially soluble, will add greatly to the amount of albumen contained in beef-tea, if macerated in it at a moderate warmth and the undissolved part strained off. Paraglobulin will also be dissolved from the dried serum, if the beef-tea is made fairly salt. The taste of the tea is hardly altered by the serum. Again, if minced raw beef be just covered with very weak hydrochloric acid (four drops of acid to a pint of water) and left to macerate for a night, the liquid strained off and squeezed out of the flesh by wringing in a cloth contains so much syntonin as to become nearly solid on neutralising. Such a solution will remain clear after boiling to remove the raw flavour, and may be used either alone or added to beef-tea or beef extract.

For the sake of showing the advantages of such additions to beef-tea, four experiments were performed, rather roughly, but on the same principles as those detailed above, and in them 10 ccs. of ordinary beef-tea (made with a pound of lean beef to a pint of water), 7·5 ccs. of beef-tea, mixed with 2·5 ccs. of white of egg, 10 ccs. of beef-tea, containing the soluble part of 1 grm. of dried serum and 10 ccs. of hydrochloric acid beef-tea, were respectively digested with the same amounts of peptic and pancreatic fluids as in the other experiments. The results are shown in Table IV. The amounts of nitrogen found are larger than in the other experiments, this depending on the diffusible nature of the extractives in beef-tea and their high nitrogenous equivalents. In the peptic and pancreatic stages plain beef-tea heads the list, and this depends on the less quantity of extractives in the cases where albumens were mixed with the tea, but in the dialysis stage very considerably larger quantities of nitrogen passed through in the cases where egg-albumen and serum-albumen had been added—the egg-albumen slightly leading because more albumen was added in this case than could be dissolved from the 1 grm. of dried serum in that of the serum-albumen. Ten ccs. of beef-tea, with the addition of 20 ccs. of distilled water were subjected to dialysis into similar quantities of distilled water for similar periods to those in the digestion experiments, so as to ascertain if possible how much of the dialysed nitrogenous matter of the beef-tea was derived from extractives. The experiment was performed in the cold,[3] and this, and the absence of the acid liquid in the peptic, and of the alkaline in the pancreatic stage, probably combine to make the result smaller than it would have otherwise been. These results are shown in Table V., and what remains after deducting the total in Table V. from the totals of the beef-tea experiments in Table IV. is shown under the heading lettered E as albuminoid nitrogen—i.e., derived from digested albuminoids not extractives. The hydrochloric acid beef-tea follows far behind the ordinary form, though if all its nitrogen is albuminoid, it is probably more nutritious than ordinary beef-tea, though considerably behind that made nutritive by the addition of albumens.

A few practical hints from these experimental results may be worth noting. First, let it be said, that it is assumed that the digestive powers are not in entire abeyance; for such cases the food given by the mouth or by enemata requires to be in a digested form, and there are many forms of peptonised foods in the market, and many peptonising fluids more or less powerful. But in cases where the digestive powers are impaired but not extinguished, where they may be lost in the stomach but retained in the intestine, or, again, where some obstruction to the passage of solid food into the stomach is causing death by starvation the above experiments may give hints for treatment.

Taking the last first, a case of œsophageal stenosis, malignant or otherwise, in which operation is contra-indicated or declined, and the patient, unable to swallow solids, is sinking. Besides the ordinary endeavours at feeding by the mouth with soups, milk, stimulants, &c., and by the bowel with peptonised enemata, we can add greatly to the nutriment taken by the patient, as long as he can swallow fluids, by simply adding white of egg to his beef-tea at a temperature below that of the coagulation of albumen, or by dissolving in it the albumen of dried blood-serum and filtering off the insoluble part. By this latter means it would not be difficult to dissolve as much as 20 per cent. by weight of albumen in the soup, and so make it as nutritious as an equal weight of meat. Again, syntonin might be made and used alone or dissolved in the soup, and has the advantage that it can be heated to boiling and the raw flavour of the uncooked albumens avoided. Then, when the stomach digestion is impaired and our desire is to stimulate a somewhat lazy organ to action, not to humour it in its laziness by giving it predigested food only requiring absorption, in such a case the raw albumens stand pre-eminent as feeding substances, all of them easily acted upon by the stomach, but all requiring full digestion. They may be given in beef-tea or soups, or in coffee or chocolate, or raw eggs may be eaten, when, as Dr. Hodges said in a lecture recently delivered before the Boston Medical Improvement Society, they should be sucked out of the shell or broken into a glass and drunk out of it: not beaten up into a froth, as they usually are, which carries down entangled air into the stomach, causing flatulence and preventing that free mixture of the digestive fluid with the albumen which is so desirable for perfect digestion. But if the stomach be weaker and require some humouring, the syntonin solution will still give it enough work to do to avoid entire inactivity. The beef-tea, in which the albuminoids are recommended to be dissolved, has been shown to have peptogenetic properties, and would therefore stimulate the stomach secretion; and though Sir W. Roberts[4] has shown that it retards artificial digestion, yet he has also shown that this can be avoided by using a little additional acid in digestion or by removing the organic salts of the beef-tea by dialysis, and one or both of these conditions will be fulfilled in stomach digestion.

The experiments with casein and gluten appear to show that there are very few worse foods for a delicate stomach than the usual bread and milk, for, as has been seen, the stomach only dissolves about 6 per cent. of these principles in the same time that it dissolves nearly 2 per cent. of serum-albumen. And the casein in the experiment was in an easier form for digestion than that in which it is usually presented to the stomach, for as used it was in a fine granular form practically freed from fat with alcohol and ether: while cows' milk in the stomach forms dense solid clots, rendered all the more insoluble by the fat, which forms the greater part of their bulk. True, the bread acts as a diluent to the clots, breaking them up, with passages for the gastric juice; but still it is evident that for digestion by a delicate stomach bread and milk does not form an ideal food. Whey.

[3] The dialysis of crystalloids through animal membranes increases proportionately with the temperature (Loewy, Zeitsch. für Physiolog. Chemie, Band ix., p. 537).

[4] Dietetics and Dyspepsia, pp. 49 and 56.

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which contains all the lact-albumen and also a globulin, is a mildly nutritive fluid and easily digested, for the lact-albumen is the same as serum-albumen. When the stomach digestion is paralysed in acute diseases—a state which, as Sir W. Roberts states,[5] may be diagnosed by the inability to take solid food—the pancreas often retains its power of secreting a peptonising fluid, and the stomach becomes a mere conduit to the duodenum. When such a state occurs, it may not be desirable, for other reasons, to get much nitrogenous food assimilated, for as Auerbach[6] has shown, a nitrogenised diet increases the acidity of the body, and might, in such a case, tend to produce an attack of gout, as was mentioned by Dr. Allchin.[7] But in cases where it is desired to feed the patient through the intestine, the substances noted above as soluble in alkaline fluids, and therefore easily acted on by the pancreatic juice—viz., raw albumens, syntonin, or alkali-albumen,—may be used alone or dissolved in some meat tea.

Hull.

TWO RARE CASES OF ACUTE INTUSSUSCEPTION.

BY JOHN THOMAS, M.R.C.S., L.R.C.P. LOND.,
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THE following cases I attended whilst assisting Dr. Smith, of Lewisham-road, London.

CASE 1.—On February 11th, 1886, at 11 P.M., I was summoned to see a child described as suffering from "fits from teething." The history given by the mother was briefly as follows: John C——, aged sixteen months, in good health, was suddenly attacked with great pain in the abdomen and diarrhœa on the 7th whilst at dinner. The diarrhœa, heedless of domestic remedies, continued until the 9th, when the little boy was better for some hours, and then relapsed into a worse condition. On the 10th he strained and passed nothing but slime. Towards the evening vomiting set in, and continued all night and next day until seen by me. In the afternoon of the 11th blood poured out from the body, whereupon the mother wrapped up the child from fright. I found the boy looking collapsed; pulse 146, and not compressible; abdomen empty and asymmetrical; a distinct hollowness to the right, and fulness to the left, of the median line. The infantile buttock garment was soddened with much dry and moist blood. A smooth resisting cylindrical tumour was felt beginning abruptly a little above and to the left of the umbilicus, and passing to the left became indistinct; another tumour passed downwards from the splenic region towards the pelvis—in short, corresponding to the anatomical tract of the colon. Per rectum, within easy reach of my finger was a smooth hard tumour unconnected with the walls, and bimanually impulses were conveyed to the iliac abdominal tumour. I reversed the child's position in bed, placing the pelvis high on the pillow, then kneaded the tumour from above downwards for about fifteen minutes, and administered a draught containing two minims of laudanum. I failed to improvise an insufflating apparatus.

On the 12th, at 9 A.M., I arrived with instruments for active interference, but was surprised to find the little one strongly resenting my interest in him. He had just passed a small liquid motion, clayey in colour. The abdomen was symmetrical and slightly tympanitic.

Remarks.—I trust the extreme rarity of natural subsidence of an intussusception of any magnitude is sufficient excuse for a contribution on a subject fairly thrashed out. "I have not found any case recorded in which spontaneous return of a well-recognised intussusception occurred" are the words of Mr. Jonathan Hutchinson,[1] and are fully endorsed by Mr. George Pollock in Holmes' "System of Surgery" (1883). I am not aware of any other recorded case. The hollowness of the right flank, *signe de Dance*, "is of little or no value."[2] In this case it tends to support the view that the first portion of the colon is displaced. The factors which co-operated in bringing about cure are probably the following:—(*a*) prostrate condition of the child; (*b*) impulses given to the intussusceptum in the rectum by the finger simulating more or less the obsolete treatment with bougies; (*c*) descending or downward kneading probably played an important *rôle* in undoing a folded sheath, so that the two outer layers of the intussusception came into a nearly plane contact—clearing the course, so to speak, for the muscular element; (*d*) laudanum; and (*e*) pre-eminently the smooth muscle of the gut acting under favourable circumstances. Had I continued the kneading the intussusception might have been reduced when first seen. *Experientia docet.*

CASE 2.—E. R——, a fine healthy boy, aged five months, was suddenly seized with an unusual fit of crying and vomiting on March 29th, 1886, at 6 A.M.; straining and passing scanty motions tinged with blood soon followed. Castor oil was given by the mouth and rectum, and the child's abdomen became swollen from the onset of the symptoms. The preceding is the mother's story.

When seen on March 31st, I found the child's abdomen greatly swollen and tympanitic, globular in form, and the greatest measurement was around the pit of the stomach. The child cried and strained violently and simultaneously; in the intermission he was quite calm and did not object to any manipulation. Per rectum, I indistinctly felt something. The anus was dilated with two teaspoon blades, and when the child strained a darkly congested body like the os uteri (this is not a new simile, but a good one) appeared, and quickly retreated when straining ceased. Temperature 99°; pulse 140, fairly full. With a six-ounce injection bottle which was at hand I cautiously injected lukewarm water, some of which returned. I filled the bottle a second time, and when half emptied under moderate pressure a rumbling noise was heard in the abdomen. No water returned, and half a teaspoonful of brandy was given to the child. I felt hopeful, but far from confident, there being no straining and the infant taking the breast without vomiting. In an hour and a half death supervened, sixty-six hours from the onset of the attack.



Necropsy.—Enormously distended coils of intestine protruded as soon as the abdominal cavity was opened; the adjacent surfaces of the coils were adherent through small greyish patches of lymph. In the pelvis was about half a tumblerful of water. It was most difficult to reach the intussusception, and manipulation of it was almost impossible without first letting the gas out of the intestine. There was a descending meso-colon. There were no adhesions in the intussusception, which extended from the spleen to the first portion of the rectum. The sheath was considerably folded, especially near the neck of the intussusception; it (the sheath) was thickened in the part most distant from, and thinned in the part next to, the meso-colic attachment; there was a rent in the thinned portion. The middle layer was three-eighths of an inch thick opposite to its fold, and of the thinness of paper near its fold. The inner layer was deeply congested.

Remarks.—The involution commenced in the ileum and passed through the ileo-cæcal valve; the cæcum and the ascending and the transverse colon then contributed to the growth of the invagination. This form of intussusception is the most rare, and has been termed "the ilaca-ileo-colica" by Leichtenstern.[3] Miss Lane very kindly made for me the appended sketch, which shows well the one-sided apical os and the ileo-cæcal aperture higher up. Post-mortem

[5] Op. cit., p. 68. [6] Arch. f. Path. u. Phys. Anat., xcviii., 3, p. 512. [7] THE LANCET, vol. i. 1885, p. 418.

[1] Med. Chir. Trans., vol. lvii., p. 42.

[2] Mr. Treves on Intestinal Obstruction.

[3] Ibid.

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examination again taught the advisability of emptying the bowel of its gases as soon as the peritoneal cavity is reached, had laparotomy been performed in such a case. Emptying the bowel with an aspirator, such as Dieulafoy's, would ensure rapid evacuation and bottling up of the obnoxious gases. Traction on the entering layer of the intussusception would not reduce it, but by fixing the entering layer with one hand and unfolding the wrinkles of the sheath with the other, beginning from below and finishing with the wrinkles of the "neck," reduction became possible and easy. Rupture of the gut must have occurred early in the case during one of the peristaltic squalls, and the position of the rent is highly suggestive. The attenuated condition of the sheath in the neighbourhood of the meso-colic attachment—the most fixed part—is hardly due to circular stretching of the walls of the gut, for the intussusceptum is not enough to fill it; it is probably not due to longitudinal stretching, for the folds could have so easily supplied the need. The thickening of the part most distant from the meso-colon, I need hardly remind the reader, is accounted for by œdema and hæmorrhage; but where is the muscle fibre of the thinned portion gone to? In the gravid uterus at term, when it cannot get rid of its contents in due time, it is well known that retraction of the smooth muscle towards the fundus uteri takes place to a dangerous degree, and during one of the uterine contractions "snap" goes a rent in the attenuated part below the "ring of Bandl," unless art or nature brings the case to another issue. Now, if the thinning of the one side of the bowel has contributed to the thickening of the other side, it is a parallel to what obtains in the uterus.

Llanberis, North Wales.

IMPERFORATE ANUS AND RECTUM; RECOVERY.

BY R. HERBERT BARKWELL, M.D.

THE subject of this malformation, an ill-nourished male child, had been born twenty-four hours when, on June 18th, I was called to see it. The case being complicated, instruments had been used at the birth, causing facial paralysis. I was informed that there had been no evacuation from the bowels. I found the anus imperforate, and proceeded to operate in the following manner. The infant being held in the lithotomy position, I dissected along the mesial line, in the natural position of the anus, to the depth of 2⅛ in.; then with a trocar and cannula I perforated ½ in. further without encountering the bowel. Failing here, I decided to perform colotomy on the following day; in the meantime the perineal incision was washed with a solution of carbolic acid, and dressed with carbolic lint. On June 19th, chloroform having been administered, I made a transverse incision about one finger's breadth above and parallel to the crest of the ilium of the left side, and 2 in. in length. The skin and superficial and muscular tissues were successively divided on a grooved director, and the peritoneum incised to the same extent. The hæmorrhage was copious, and required a sponge soaked in a solution of carbolic to be constantly used, the instruments being also kept wet with it. Recognising the descending colon by its large, dark-greenish, and distended appearance, as compared with the small and light appearance of the smaller intestine, with a polypus forceps I picked and brought it up, outwards and backwards, to the margin of the incision at its posterior part; four curved needles with silver wire fixed the intestine to the abdominal wall; the colon, together with the peritoneum, was sutured at four points to the margin of the wound to prevent it from slipping back and to prevent meconium from escaping into the abdominal cavity. The most projecting part of the colon was now opened; no meconium having escaped, I introduced the broad end of a director and brought away some of a dark-green colour. The abdominal incision being larger than was necessary, I used, to close it up to its margin, three sutures, two anteriorly and one posteriorly. The infant was now given a warm bath, wiped perfectly dry, and placed before the fire, after which it revived considerably from the effect of the chloroform, which had been continued from the commencement to the close of the operation, its movements causing some meconium to escape. The wounded parts were then washed with a 1 in 80 carbolic lotion and dressed with carbolic lint.

During the first few days, the mother's supply of milk being deficient, goat's milk was substituted.—June 20th: Wound looks well; washed and dressed with carbolic lotion and lint; infant vomited at intervals during night, colour greenish yellow; prescribed three grains of nitrate of potash, six grains of bicarbonate of soda, ten minims of tincture of digitalis, six of tincture of belladonna, with one ounce of water, half-teaspoonful doses to be taken every three hours. At 10.30 P.M. the vomiting had ceased, and a little milk given was retained; motion passed of a dark-green colour; re-dressed the wound; no sign of pus. 21st: No motion during night; introduced a grooved director, and, holding the child with left side downwards, a fair quantity came away; commenced taking mother's milk; goes on favourably.—22nd: Meconium continues to discharge freely, but in the evening director again required to render discharge free; vomiting returned.—23rd: Condition the same as on the 22nd.—24th: Two sutures removed; there continues a healthy discharge of fæces each time wound is dressed, which I continue twice a day; margin of wound looks inflamed, due probably to irritation of sutures.—26th: One suture removed; wound improved. At 10.30 P.M. another suture was removed; wound looks well. 27th: Infant improves in every way.—28th: Removed remaining suture; re-dressed wound.—29th: Wound looks well and healthy; no discharge; washed and dressed as usual.—30th: Fæces have become small and solid; wound assuming an elliptical form; perineal wound quite healed.—July 1st: Infant photographed; bowels moved freely.

July 3rd.—Finding the bowels inactive, I prescribed liquor sennæ dulce (two drachms), liquor hydrarg. perchlor. (one drachm), and an ounce of water; one half-teaspoonful p. r. n. —4th: No motion passed; one drachm of castor oil given; not succeeding, I removed the fæces again with director, and ordered one drachm of castor oil at 11 P.M.—5th: No motion; repeated castor oil (one drachm and a half) and liquor sennæ dulce (twenty minims); bowels acted slightly. In the evening repeated castor oil (one drachm).—6th: Milk slightly returns; bowels acting better, but not freely. Gave liquor sennæ dulce again. Has not taken the breast during the day; skin looks drawn; infant peevish and ill.—7th: Infant somewhat better; resumed the breast; still vomiting. The bowels not acting freely, I ordered calomel in one-grain doses to be given night and morning. Wound is now perfectly healed.—8th to 12th: Infant is progressing favourably; calomel, with castor oil, continued at intervals.—12th to 15th: Less aperients required; half-grain doses of calomel to be repeated at night only. From the 15th I commenced giving twenty-minim doses of cod-liver oil, and also continued to have the chest rubbed with it daily. From this date everything has gone on satisfactorily, the infant gaining strength rapidly.

The temperature never exceeded 100° F., and to the end of the convalescence remained nearly normal. The strictest antiseptic precautions were observed throughout the case. I have been somewhat prolix in details of the after-treatment, because I consider that the ultimate success of an operation chiefly depends upon this being carried out. In conclusion, I have to observe my operation is a repetition of Amussat's, slightly modified on the method of Littre, being more adapted to suit the exigency of this case. I wish to acknowledge my indebtedness to Dr. Richardson, who during the operation kindly gave me every assistance.

Lavender-hill, S.W.

HOSPITAL SUNDAY.—The Lord Mayor has received from Sir P. Cunliffe Owen a letter stating that he was requested by the Prince of Wales, Executive President of the Royal Commission for the Colonial and Indian Exhibition, to enclose a cheque for £104 5s. 8d., being the amount received from Oct. 8th to Nov. 10th in Dr. James Aveling's "Mechanical Begging Boxes" at the Exhibition for the Hospital Sunday Fund. This makes a total of £404 5s. 8d., resulting from this ingenious mode of collection.

NORTH-WESTERN ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.—The monthly meeting of the members of this Association was held on the 17th inst., Dr. Kenyon in the chair, when it was resolved that Dr. Vacher, Dr. Kenyon, and Dr. Hope be appointed a subcommittee to consider a letter from the President of the Metropolitan Society of Medical Officers of Health inviting medical officers to form themselves into one general society, and to report thereon at a future meeting.

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A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Procemium.

POPLAR AND STEPNEY SICK ASYLUM.

AN UNUSUAL CAUSE OF EMPHYSEMA; NECROPSY; REMARKS.

(Under the care of Mr. W. H. PEARCE.)

SURGICAL emphysema is usually produced by injury to the respiratory or alimentary tracts, and of these wound of the former, as is well known, is by far the most common cause. In connexion with the digestive tract, the situations in which it has been met with are, over the abdomen after wound of the intestine, and in the pelvic region after damage to the rectum or perforation of its wall by ulceration. Emphysema is also found in other conditions, such as wounds of a crushing or lacerating character, chiefly in the limbs, and also accompanying decomposition of parts. In the following case a most unusual condition was found at the post-mortem examination (*q. v.*), and the extravasated air had followed the course taken by the escaped air in some instances of injury to the root of the lung.

Wm. P——, aged forty-four, was admitted in a dying state on Monday, Oct. 25th, at 5 P.M. From the little information that could be gathered from the man himself or his friends, it was learned that he had always enjoyed good health and had followed his usual employment until the previous Saturday. He admitted being a "free drinker," and on Saturday night he had been "the worse for liquor," but, so far as he knew, he was not injured in any way. He did not feel well on the Sunday, and remained in bed until late in the afternoon, when he dressed and went out for half an hour. Soon after his return he "began to swell, and his breathing got bad." He had urgent dyspnœa, his skin and mucous membranes being very blue, and his pulse quick and feeble. His face and neck were much swollen, especially on the left side, and on palpation this was found to be due to emphysema of the subcutaneous connective tissue, which on further examination could be traced all over the trunk as low down as the hips, and for some distance down the arms. He denied having sustained an injury, and on careful examination by Mr. Bostock and Mr. Pearce, no injury to the ribs or respiratory tract could be made out. The chest wall moved very little in respiration, the breathing being for the most part diaphragmatic. Percussion elicited a resonant note all over the chest, though at the bases and in the axillæ the note was flatter than that obtained at the anterior and upper part of the lungs. In the former situations there was almost an entire absence of breath sounds on both sides in the lower half of the chest, but in the former air entered freely. The heart's apex could not be made out. His breathing gradually became worse, and he died somewhat suddenly three hours and a half after admission.

Necropsy, forty hours after death.—The body was that of a stoutly-built, well-nourished man, of middle age. On opening the chest there was no fracture or other injury to the chest wall, but both pleural cavities contained a considerable quantity of fluid, the lower lobes of both lungs being compressed and airless. Much recently effused lymph covered the surfaces of the visceral and parietal pleuræ on both sides. On clearing away this, and separating the lower part of the left lung from the pericardium, a collection of undigested food was found outside the œsophagus, occupying the posterior mediastinum and surrounded by emphysematous connective tissue, which could be traced up the spine to the root of the neck. The food had escaped through a ragged slit-like opening of an inch long, and situated vertically in the œsophageal wall about an inch and a half from its lower end. Passing downwards in the substance of the wall of the œsophagus was a sinus, which connected the opening with a small circumscribed abscess (about the size of a hazel-nut) situated in the wall of the stomach along the lesser curvature close to the cardiac orifice; this again opened into the cavity of the stomach by a small opening, so that gas or air could pass in freely from the œsophagus or stomach. A small quantity of pus was found in the small abscess in the stomach, but there was no sign of any in the mediastinum. There was no trace of ulcer in the œsophagus, the opening being a mere ragged slit, with black unhealthy-looking edges, outside which the gullet appeared healthy; but here doubtless the mischief must have begun and an abscess formed, the pus burrowing down and finally discharging into the stomach, the œsophageal wall giving way either at the same time or later.

Remarks by Mr. PEARCE.—As to the cause of the abscess, the only thing that suggests itself to my mind is the lodgment of a foreign body, such as a spicule of bone; but there seems to have been no symptoms up to the time when the œsophageal wall gave way, and gas or swallowed air escaped into the mediastinal connective tissue. I did not make out before the necropsy the considerable amount of double pleuritic effusion, believing as I did that the cause of the emphysema must be due to injured lung from obscure fracture of the ribs, and that the compression was being exercised by internal hæmorrhage.

ROYAL HOSPITAL, PORTSMOUTH.

LACERATED WOUND OF THE KNEE, FOLLOWED BY TETANUS TWENTY-TWO DAYS AFTER THE ACCIDENT; TREATMENT BY CHLORAL HYDRATE; RECOVERY; REMARKS.

(Under the care of Mr. HENRY RUNDLE.)

W. C——, aged fifteen, a healthy lad, was admitted on Dec. 8th, 1885. Whilst holding on to the back of a cart he slipped and was dragged along the ground, sustaining a lacerated wound, about four inches in length, over the left knee. There was no fracture. The wound was washed clean from gravel and dirt, and dressed with carbolised oil. Five days after admission suppuration occurred; openings were made, and a drainage-tube inserted for twenty-four hours. The wound was granulating healthily, when on Dec. 30th symptoms of tetanus appeared, well-marked risus sardonicus, and seven or eight attacks of clonic spasms during the day. He swallowed with some difficulty. Breathing easy. Temperature 99°; pulse 130. He was ordered a free purge and chloral hydrate in ten-grain doses every four hours, and removed to a quiet and darkened part of the ward.

Jan. 1st.—Experienced great relief after medicine. Spasms less frequent; abdominal muscles hard; wound suppurating; poultices applied. Milk, beef-tea, and juice of raw meat to be given between the spasms.

2nd.—A quiet sleep after each dose of medicine, which he asks for to "keep off spasms." Temperature 98·2°. Three or four spasms during the day. Complained of difficulty in passing urine, which was relieved by hot fomentations.

3rd.—Improved. Three spasms during the day. Abdominal muscles still hard and contracted.

During the next six days the spasms diminished both in frequency and severity, and ceased on Jan. 9th. The chloral hydrate was continued, but less often, up to Jan. 19th. From this time the wound continued to heal, and he was discharged well on March 16th.

Remarks by Mr. RUNDLE.—The boy being able to swallow, although with difficulty, was a favourable symptom. In the treatment of tetanus, it is essential to keep up the strength by giving nourishment with a liberal hand, milk and juice of raw meat being the best food. I think there can be no doubt that the medicine aided materially in the recovery of the patient, for the chloral hydrate not only induced sleep, but, by diminishing the reflex irritability of the spinal cord, lessened the frequency and violence of the spasmodic attacks. The boy asked for this medicine before it became due, as he was afraid of the spasms recurring, and he was so convinced of its efficiency to keep them off. The other points of treatment were free purgation and keeping the patient as quiet as possible, free from any cause of excitement, including light and sound. A point worth noting was the low temperature; once only did it reach 99°, being at other times normal.

MULTIPLE MELANOTIC SARCOMATA; DEATH; NECROPSY.

(Under the care of Mr. RUNDLE.)

E. Y——, aged forty-five, was admitted on Feb. 4th, 1886. There was no history of tumours or malignant disease in the family. Has always been delicate. Has had eight children

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The present illness commenced six months ago, when she first noticed a lump like a pea in the skin under the right breast. This grew rapidly, but as it did not give her any pain she delayed seeking advice until a week before admission. In the right breast there is a semi-fluctuating, purplish tumour, movable on the thorax, the size of a large orange. The left breast has the appearance of extravasated blood, evidently containing a growth. Other small tumours, six in number, ranging in size from a walnut to a pea, and having the same bruised appearance, exist over the sternum and in the abdominal wall.

Feb. 11th.—The right breast was excised, and three small tumours on the abdomen. Free hæmorrhage during the operation.

16th.—Wound of small tumours healed, but that of breast breaking down and discharging. Patient weaker and losing flesh.

The progress of the case was unsatisfactory. The granulations over the right breast became gelatinous in appearance, and the other growths increased in size, and fresh ones appeared on the abdomen. The patient sank gradually, and died from asthenia on April 20th. A microscopical examination of the growth removed showed spindle and fusiform cells pigmented.

Necropsy, forty-eight hours after death (from notes by Mr. C. C. Claremont).—Body emaciated. In the situation of the right mamma is a well-defined fungating tumour, covering an area of about six inches square, and reaching to the middle line. The tumour at the surface is black, softened, and seems to be mainly slough. The deeper part, reaching down to the periosteum, is white, soft, and brain-like The ribs are unaffected. There is a tumour in the left mamma. Under the skin of the trunk and thighs are fourteen tumours, soft, sharply defined, and some fluctuating. Dissection shows some of them to be of the same white, soft material as the large tumour; others are more or less pigmented with black material, and some contain broken-down blood-clot. They vary from the size of a hazel-nut to that of a walnut. Abdomen: The transverse colon, being distended and translucent, exhibits several black patches the size of a finger-nail. In connexion with the omentum are four or five tumours, more or less pigmented, and similar to the subcutaneous ones. The mesentery presents at least a dozen of these small tumours, which appear to be covered by peritoneum; some are free from pigment. In front of the left kidney is a tumour the size of the fist, mottled white and black, and containing a cavity of broken-down blood-clot; similar but smaller tumours were found at the lower end of each kidney. A small patch of pigment in left supra-renal capsule. Liver and kidneys markedly fatty in appearance. Thorax: Small, partially pigmented tumour in the anterior mediastinum. Lungs emphysematous and congested posteriorly. Heart walls fatty: valves healthy. Skull not opened. All the tumours examined were encapsuled.

CRUSH OF LEGS BY TRAM-CAR; DOUBLE AMPUTATION BELOW THE KNEES; RECOVERY.

(Under the care of Mr. RUNDLE.)

Henry D——, aged ten, was admitted on Oct. 17th, 1886. Whilst crossing the road he was run over by a tram-car and sustained extensive compound comminuted fractures of both legs, the soft parts being much lacerated. On admission the boy was conscious, but much collapsed. Both legs were removed at once a hand's breadth below the knee, by circular operation on the right and flap operation on the left.

Oct. 18th.—Restless night. Pulse 140; temperature 103°. Very sick.

19th.—Still very sick. Pulse 130; temperature 103·2°. Very restless and delirious in the night. Hypodermic injection of morphia (one-sixth of a grain) at 9 P.M.

20th.—Slept fairly well. Pulse 112; temperature 100°. Retains food. Some of the stitches separated, and stumps discharging and inclined to slough.

26th.—Pulse 112; temperature 99·3°. Constitutional disturbance much less. Sloughs from flaps removed.

From this date he went on well. The flaps were brought together by strapping, and iodoform dusted over them, and by Nov. 30th the stumps were nearly healed.

AT an inquest held at Newport, on the 7th inst., on the body of a woman who had died from taking a dose of liniment instead of the mixture which had been prescribed for her, the jury returned a verdict of accidental death.

Medical Societies.

MEDICAL SOCIETY OF LONDON.

Hypertrophy of Thigh and Leg.—Cervical Pachymeningitis.—Lupus of Larynx.—Syphilis of Tongue.—Rare Syphilis of Face.—Talipes Equinus.

A CLINICAL meeting of this Society was held on Monday last, Mr. R. Brudenell Carter, F.R.C.S., President, in the chair.

Mr. BULL showed a boy with great enlargement of the left thigh and leg, which began six months ago. There was no evidence of tumour, phlebitis, or arterial disease. The thigh measured two inches more in circumference than the right side. The swelling was probably due to lymphangiectasis. There was no evidence of chyluria or albuminuria. It was not a case of asymmetry. The patient had never had any deep-seated phlebitis or attacks of erysipelas or erythemata.—The PRESIDENT asked whether there was any difference in the temperature of the two sides.—Mr. MARMADUKE SHEILD remarked that there seemed to be an elongation of the femur. Was this so?—Mr. J. H. MORGAN considered with Mr. Sheild that the case was of congenital origin.—Dr. A. MONRY inquired for filariæ sanguinis hominis.—Mr. NOBLE SMITH inclined to the view that the hypertrophy was congenital.—Mr. BULL said there was no difference in length or temperature in the two limbs.

Dr. ORD showed a specimen of Chronic Hypertrophic Cervical Pachymeningitis, in a footman aged twenty-six. Last Christmas (1885) he was seized with pain, stiffness of neck, sickness, and constipation. Temperature 103°; pulse 95. At another time the temperature was 101·2°; pulse 72. He had some shivering fits, which bore a resemblance to ague. He had delirium at times, and was very much weakened. Later he gained flesh and strength. In May of this year there was no fever, but great loss of power and wasting of muscle, and loss of sensation in the arms. The legs were in a state of spasmodic paraplegia. Two muscles have escaped to a large extent—the anterior part of the deltoid, and the biceps. There was some exaggeration of extensor tendon reflexes. Mechanical irritability of the muscles was excessive. The electrical state of the muscles was that of the reaction of degeneration. Sensation has improved, and there was some improvement in the power of the arms and legs. A claw-shape of the hands had developed since May. There was considerable curvature of the spine. Distressing attacks of diaphragmatic paralysis (?) had occurred of late. The skin of the fingers was wasted and smooth—somewhat glossy. A gradual osteo-arthritis had developed in several joints in the hand. There was no history of a chill, or injury, or syphilis. He advanced this case as an illustration of the hypothesis that a good many cases of chronic progressive affections of joints are dependent on altered states of nutrition of the spinal cord.—The PRESIDENT inquired whether the optic discs were affected.—Dr. BEEVOR thought it threw some light on the localisation of groups of muscles in the spinal cord. The facts of this case strengthened the results of experimental observations.—Dr. A. MONRY remarked on paralysis and dilatation of pupil; associated with atrophy of interossei.—In reply, Dr. ORD said the optic discs were natural, the pupils were somewhat dilated, and the left larger than the right. There were no evidences of abnormality in the pulse.

Dr. ORWIN showed a case of Lupus of the Larynx in a woman, associated with the same disease of face and nose.

Dr. COLCOTT FOX showed a case of Lupus of the Larynx associated with lupus of the face, palate, and scalp, in a boy aged seven years. Kaposi said that autochthonous affection of the larynx with lupus was unknown.—Dr. FELIX SEMON said that papillary excrescences and ulceration of the epiglottis were to be seen. He did not think lupus of the larynx so rare. Chiari had collected forty cases. In perhaps 5 to 8 per cent. of cases of lupus the larynx had been involved.—Mr. LENNOX BROWNE agreed with the remarks of Dr. Semon.—Dr. MORELL MACKENZIE had noticed the stridor in Dr. Orwin's case a month or more ago, and could not therefore set it down to the treatment by dilatation.

Dr. ORWIN showed a specimen of Syphilitic Affection of the Tongue in a boy aged nine, in whom there were no other evidences of congenital syphilis.

Mr. NOBLE SMITH showed severe cases of Talipes Equinus, in which he divided the tendo Achillis; and rapid extension,

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with immediate reduction was followed by better results than obtained when the tedious method was adopted. The rapid method was one of tenotomy and immediate stretching.—Mr. J. H. MORGAN said he had been accustomed to treat cases in this fashion for many years past.

Mr. MARMADUKE SHEILD showed a case of Syphilis in a woman with a large fungating mass about the angle of the nose, which was believed to be the source of infection, but it had no resemblance to an ordinary chancre.

ACADEMY OF MEDICINE IN IRELAND.

Ovariotomy.—Nephro-lithotomy.

AT a meeting of the Surgical Section on Nov. 12th, the President, Sir WILLIAM STOKES, delivered the inaugural address, which was published in our issue of the 20th ult.

Mr. F. V. MACDOWELL read notes of a cases of Ovariotomy performed by him in Baltinglass Infirmary. The operation was performed by making an incision from the umbilicus to the pubes. The cyst was found so dense that the trocar would not enter it. An incision was made into the tumour, and the cannula, being connected with indiarubber tubing, was well embedded in the cyst, and secured in the usual way with spring hooks. Owing to the numerous adhesions, it was found necessary to enlarge the abdominal opening by three inches around and above the umbilicus. Twelve pints of amber-coloured fluid were drawn off. The pedicle was clamped, divided, treated with actual cautery, and, by a modification of the extra-peritoneal method, secured in the lower part of the abdominal opening, and retained there by harelip pins passing through it as well as the abdominal wall, the pins being retained *in situ* by carbolised catgut. The wound and pedicle were maintained perfectly aseptic by means of regular applications of iodoform. The operation was performed on March 31st, 1886. The patient moved about the ward within three weeks from that date, and in the sixth week walked one mile to the operator's residence on her way home.—Sir WM. STOKES congratulated Mr. MacDowell on his success, and hoped that many of his colleagues in the country would in like manner bring before the Academy the results of their practice.

Mr. KENDAL FRANKS read a paper on Nephro-lithotomy, and reported the case of a man aged twenty-eight from whose left kidney he had excised a large stone on the 6th of May last. The case made a satisfactory recovery, and was the first case of the kind in which the operation of nephro-lithotomy had been performed in Ireland. The history of the case dated back six years, when the patient, after a severe febrile attack, had hæmaturia, which lasted for three months. The symptoms he presented, from which the diagnosis was made, were: pain over the lower part of the left side of the thorax, and over the region of the left kidney, shooting downwards to the crest of the ilium and to the left groin. There was no testicular pain; tenderness existed over the last rib and below it on the left side on pressure; there were large quantities of pus in the urine, which, though fetid, was always acid. Added to these symptoms, the history of the case, the absence of bladder symptoms, and the absence of pyriform cells in the urine assisted in the diagnosis. The kidney was reached by the lumbar incision; the stone was felt, completely filling the pelvis, and was excised through an incision in the substance of the kidney. The calculus was friable, composed of phosphate of calcium, carbonate of calcium and ammonium magnesium phosphate, and weighed 171·3 grs. when washed and dried. It was removed piecemeal, being too large to extract entire. The lumbar wound healed by first intention, the site of the drainage-tube continuing to discharge urine for four weeks. The patient had returned to work several months ago; he was free from pain and in good health. He still passed some pus with the urine.—Mr. BARTON, having assisted in the operation, was impressed with the fact that it marked a new era in the progress of urinary surgery. Where a satisfactory diagnosis was established, it was the surgeon's duty to open the loin and expose the kidney, and then follow the lines of procedure indicated by Mr. Franks. The diagnosis was the first point of practical interest. He emphasised Mr. Franks' observation that the pain located in the loin was most reliable. The condition of the urine, too, left no doubt of calculus being present, surrounded by inflammatory exudation and pus.—Mr. THOMSON said the difficulty that must always present itself in such cases was that of diagnosis, and not the removal of the calculus, once its presence was made clear. He had seen two operations on the kidney, and he had another case under observation. In one there was a large distinct tumour on the left side. All the symptoms referable to stone in the kidney were present; but the organ was too large for removal through the lumbar incision. The tumour was removed and the stone found; but there was also a stone in the other kidney, and the result was fatal. In a proportion of those cases there was a great tendency to infection of the second kidney, and when one was removed it was not always certain that all the mischief had departed; indeed, the patient might be worse off than before. Another point of importance was in reference to the incision. Where the kidney was not specially enlarged so as to present a tumour in the abdominal cavity, the lumbar incision was attended with least risk. In one case of stone which he saw, the kidney was so large that there could be no question of the futility of attempting to remove it through the lumbar incision. The only proper course would be that adopted by Knowsley Thornton of removing the tumour by abdominal section and draining the abdominal cavity through the loin. —Mr. FRANKS, in reply, said of course Mr. Thomson referred to cases of nephrectomy, and not of nephro-lithotomy.

GLASGOW OBSTETRICAL AND GYNÆCOLOGICAL SOCIETY.

THE second Meeting of the session was held in the Faculty Hall on Nov. 17th. It was agreed that the meetings be held hereafter on the fourth Wednesday in each month.

Fomentation Bag.—Dr. SLOAN exhibited an indiarubber bag with an afferent and efferent tube, whereby uterine and vaginal fomentation might be maintained during pleasure. He said the invention was due to Dr. Alexander Robertson, one of the physicians to the Royal Infirmary. Water from 110° to 115° could be used, and for as long as half an hour at a time. The effect was found to be very grateful in inflamed conditions.

Blighted Ovum.—Dr. ABRAM WALLACE exhibited a blighted ovum, which old authors might have called a mole. The patient from whom it had come menstruated in June last, from which time she dated her pregnancy. At the end of August she noted a slight brown discharge. In September and October this recurred, and at the latter date she had ergot. About the beginning of November she returned to town, and soon after she aborted. The aborted mass corresponded very closely in appearance to that figured on page 278 of Playfair's "Science and Practice" as illustrative of oviminal apoplexy. In Dr. Wallace's case there was no history of syphilis. The lady had had five living and healthy children, but between the third and fourth there was a history of an abortion. In June the patient had rowed occasionally, which was an unaccustomed exercise for her; and later on in the autumn she had a serious shock to her nervous system on the occasion of the Crarae Quarry disaster.—Dr. SLOAN thought the presence of a brownish discharge occurring during pregnancy invariably indicated the fact of a clot having been thrown out between the utero-ovarian surfaces, and being in process of decompositon.

Puerperal Eclampsia.—Dr. MALCOLM BLACK read a paper on Puerperal Eclampsia, recording an experience of thirty-nine cases, of which four had occurred in his own private practice and the rest in the practice of the Maternity Hospital or otherwise. He said the proportional mortality was reckoned by Lusk as 1 in 500 cases, and by Churchill 1 in 600 cases, of confinement. He went deeply into the etiology, pathology, and treatment of eclampsia, and the paper was listened to with great attention, and followed by an interesting debate, in which nearly all the members present joined.

HOSPITAL SATURDAY FUND.—At a meeting of the board of delegates of this fund held on the 18th inst., the awards for the present year were agreed to. The following are the principal amounts:—Brompton, £589; London, £586; Victoria-park (Chest), £288; Middlesex, £276; St. George's, £267; St. Mary's, £224; Metropolitan Convalescent Home, £211; Westminster, £208; University College Hospital, £204; North London, £176; King's College, £175; Royal London Ophthalmic, £174; Royal Free, £168; Charing-cross, £162; and West London, £134.

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Reviews and Notices of Books.

Diseases of Tropical Climates. By WILLIAM CAMPBELL MACLEAN, C.B., formerly Professor of Military Medicine to the Army Medical School, Netley.

THERE can be no doubt of the want of a treatise, brought down to date, on the subject of diseases of tropical climates, and there can be no question that the person to whom all would look for such a work would be the Netley Professor of Military Medicine.

In his introductory lecture Surgeon-General Maclean recalls most forcibly the immense saving of both human life and public money which has been achieved by the sanitary labours of the Imperial Medical Service, and while exhorting all to continue these efforts the lecturer adds a word of judicious warning to young surgeons, that when making suggestions to those "who have the responsibility of military command on their shoulders," they should not do so bumptiously, but rather modestly, and points out that memoranda not written as becomes "an educated gentleman" will fail to command attention. It is with some disappointment that on turning to the lectures on the vexed subject of cholera we find certain passages which show Dr. Maclean to be a little wanting in that toleration which he so wisely inculcates.

The author's views on the cause of the spread of the disease we find formulated in propositions lettered from *a* to *n*, which, when condensed, are as follows:—*a*. Bryden's endemic area of cholera is true, but not the only one. *b*. The force which gives epidemic energy is unknown. *c*. The south-west monsoon is the indirect cause of the dissemination of cholera, especially because it is before this wind that the large fleet of country boats moves up the Ganges—cholera thus spreading no faster than man moves. *d*. Cholera when raging in Burmah has never been carried to the Andamans. It can travel as fast against the wind as with it. *e*. The infective property of cholera is in the stools which have undergone change. *f*. These stools convey disease through drinking-water. *g*. Dried cholera stools may be carried by the wind and infect through the lungs. *h*. Food polluted with cholera stools induces the disease. *i*. Clothing soiled with the same may communicate it. *j*. Bodies of men may carry and propagate disease. *k*. A healthy regiment meeting and communicating with an infected one will certainly be affected. *l*. A regiment entering a tainted district will almost certainly be infected. *m*. If it occupies a used cholera camp it will certainly be infected. *n*. An outbreak on board ship will be found coincident with the opening up of some infected cargo.

In support of these conclusions Dr. Maclean offers the three following instances narrated by independent observers In the first, "a small quantity of fresh cholera stool was mixed with five gallons of water, and exposed to the sun for twelve hours. Nineteen persons partook of an ounce each; within thirty-six hours five of these had cholera." Again, "an epidemic in fifteen days carried off more than 100 of the high caste population, who drank only from two wells which were reserved in the centre of the village for their use, while not a single person of low caste whose drinking-water had to be procured elsewhere died; a street only separating the two castes, and in some places their abodes were continuous." Lastly, an account is given of a number of native prisoners who had been lately employed near the Moolah river being attacked with cholera; only those who drank below a certain dam were affected. Cholera prevailed a little at the time, and two cholera corpses had been washed below the dam."

While agreeing with Dr. Maclean that the balance of evidence at present justifies the belief that water is the chief means by which the disease spreads, we at the same time consider that his position as the instructor of those upon whom the future investigation of the source of cholera must devolve rendered it more than ever imperative that he should have also pointed out the arguments which favour the opposing view: for instance, the significance of the negative fact that fourteen persons swallowed with perfect impunity exactly the same dose of the same mixture which proved fatal to the other five, and the complicating factor that all were living within the choleraic field of an existing epidemic. Again, in the second instance the propinquity, and in some cases the continuity, of the abodes of the affected and unaffected would, while strengthening the contention in favour of its diffusion by drinking water, exemplify most strikingly the mysterious nature of the disease, which would appear at times to decline all other means of propagation. For the refutation of the "locomotive power" of wind in cholera epidemics Dr. Maclean relies apparently on proposition *d*, at the same time forgetting that, as a bimonthly mail, frequent trading steamers, and a large fleet of cargo boats keep up incessant communication between Burmah and the Andamans, his proposition (*c*) of boat-carriage is equally cancelled. Such easy disposal of the theory of wind locomotion is scarcely in keeping with the suitable tribute paid in his introductory lecture by Dr. Maclean to Dr. Bryden, "an officer of whom it is not too much to say that he was one of the ablest vital statists the medical profession has ever produced."

To the earnest seeker after truth there can be no such thing as hostile opinion, since every conclusion honestly arrived at by another should, by putting restraint on too hasty generalisation, prove a welcome assistance. We therefore regret the omission of all reference to the researches of Drs. Klein and Gibbes into the water-supply of the villages in the neighbourhood of Calcutta, and that from first to last there is no allusion whatever to the labours of the Cholera Commission, which published its report more than a year ago; and this is the more unaccountable as three of the author's colleagues formed part of that Commission. As it now stands, the young surgeons on probation may, as far as they can learn from the perusal of this work, remain in ignorance that such a Commission ever sat.

Passing to the excellent lectures on Malaria and the diseases produced thereby, we find that Dr. Maclean, while unable to entertain the proposition of cholera being "earth-born and air-borne," defines malaria as an "earth-born poison, for the most part generated in soils the energies of which are not expended in the growth and sustenance of healthy vegetation." This is scarcely less indefinite than the "certain electrical conditions" of Surgeon-General Munro, which the author summarily rejects. The directions for treatment will be of great use to young surgeons commencing practice in a foreign climate. One suggestion with reference to the use of quinine we miss—viz., the marked effect attainable by the hourly administration of even one grain for eight or ten doses. This was first pointed out by the medical officers who were in such straits during the Mauritius epidemic to economise the drug.

The lecture on Enteric Fever we can unhesitatingly commend to the careful study of every medical officer. It is clear and liberal, and points out the value of the "filth factor" in the production of the disease, while at the same time recounting the cases which occurred in South Africa and in the Soudan, in which the poison appeared to have been either autogenetic in the individual, or to have arisen *de novo* in the locality. In the directions given for the treatment of dysentery, the dose of tincture of opium (fifteen minims) with which it is proposed to prepare the stomach for retaining the half-drachm of ipecacuanha appears to be rather small; at least double that quantity has been found advantageous. The rules laid down for the

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diagnosis and treatment of both acute congestion and suppurative inflammation of the liver must prove very helpful to the beginner, and we entirely concur with Dr. Maclean in his desire that the words "hepatitis, acute and chronic," should cease to form a cloak for slovenly diagnosis.

We regret that so many paragraphs of the lectures on malarious fevers, insolatio, and diseases of the liver should be devoted to warnings against antiphlogistic methods of a bygone period, and that Dr. Maclean should have thereby subjected himself to his own very apt criticism of "pulpit exercise, putting up a man of straw for the satisfaction of knocking him down again." We are also jealous of the space given to various extracts from writers whose labours we must always venerate, but whose teachings are not abreast of the discoveries of to-day. At the same time it is but fair to note that Dr. Maclean says that the regulation "that all lectures delivered here should be submitted to the Secretary of State for War, has acted as a check on him, as he cannot publish under a censorship."

We have long held that the young surgeons sent to Netley are the only State-aided men of science in the department of biology in the empire, and we are accordingly of opinion that it is incumbent on them, wherever their executive duties permit, to avail themselves of the opportunities of travel to seek the explanations of many obscure influences which materially affect life. Such a course produced a Darwin. But at the same time these young surgeons have every reason to expect that at Netley they shall be brought up to the latest date in the most recent advances of every science which bears upon their special calling. We would even venture to think that, as the professors of this school have the last word with the departing investigators, they might, having laid a solid basis for military medical practice, be a little bold with the theory, and, on the principle that "even a false theory, instead of hinderling, hastens the advance of knowledge," might, like Professor Aitken at page 77, project their ideas into regions where the scientific use of the imagination may be their chief guide. A little more robustness in the Netley teaching would not depreciate its value.

OUR LIBRARY TABLE.

Clinical Manual for the Study of Medical Cases. Edited by JAMES FINLAYSON, M.D. Second Edition. London: Smith, Elder, and Co.—The appearance of a new edition of this very complete guide to clinical investigation is significant of the increased attention that is being paid to practical study and ward work. The volume before us has the merit of being contributed to by several physicians, and is consequently thorough in its treatment of the various subjects. The editor is responsible for the main bulk—the sections on case-taking and on the symptomatology of disorders of the various systems; but Dr. Alexander Robertson contributes the chapter on Insanity, Dr. Joseph Coats that on Examination of the Fauces, Larynx, and Nose, Dr. W. Stephenson that on Disorders of the Female Organs, and Dr. Sampson Gemmell that on the Physical Examination of the Chest and Abdomen; whilst Dr. Gairdner introduces the volume with an interesting essay on the Physiognomy of Disease. The student could hardly wish for better guides, and the manner in which the subjects are dealt with proves the high standard of excellence in clinical teaching at Glasgow. In this new edition there have been several additions to the text, and many fresh illustrations have been introduced. A commendable feature is the bibliography appended to each section.

Knight's Manual relating to Dairies, Cowsheds, and Milkshops. London: Knight and Co.—In this manual all the provisions of the law and of the Orders of the Privy Council and Local Government Board which relate to the sanitary condition of dairies, cowsheds, and milkshops are collected and explained; and as the change that has been made by the Act of last session has had the effect of making sanitary authorities throughout the kingdom the bodies to administer the law as now altered, the local officials who are concerned in the work will be in need of such guidance as is here supplied. The supervision of dairies, cowsheds, and milkshops is a matter of no slight importance to a community like our own; and although the requirements of the Order issued by the Privy Council in 1885 are, from a sanitary point of view, by no means as complete as could be desired, one is able, with the assistance of the well-edited edition of the Order, which is comprised in this manual, to see exactly how far the application of any provision extends. Some useful hints are given as to the regulations that may be made by sanitary authorities under the Order; and a set of model clauses, which, it is stated, have been prepared with great care so as to meet all the requirements of the Local Goverment Board, as well as those of local authorities, is added for the guidance of such authorities. The book is throughout replete with useful and instructive notes in explanation of the requirements of the statutory provisions and the Orders. In one case, "dangerous infectious disorder" is stated to have been interpreted to mean "cholera, diphtheria, erysipelas, measles, scarlatina, small-pox, typhoid or enteric fever, and typhus fever," and the importance of such an explanation as this cannot be denied, for it so frequently happens that dairymen and others are under the impression that the regulations prohibiting infected persons from being concerned in the distribution or storage of milk apply only to some specially virulent forms of disease. In another note the important fact is brought out that the terms of the Order of 1885 are not sufficiently wide to prohibit the milk of cows suffering from disease during a milk-scarlatinal epidemic such as that which recently occurred in Hendon and London from being sold or used for human food, although such a prohibition exists where the animal is suffering from cattle-plague, contagious pleuro-pneumonia, or foot-and-mouth disease. Other instances might be given of the helpful character of the notes that are plentifully scattered throughout the book; but enough has been said to show that the work is likely to be extremely useful, and may be accepted as containing authoritative information which will be really helpful to all who are concerned in the administration of the Act and Orders with which it deals.

Vorlesungen über die Diagnostik der Gehornkrankheiten. Von W. R. GOWERS, M.D., F.R.C.P.—This is a German translation of the author's work on the Diagnosis of Diseases of the Brain. The translator, Dr. J. Mommsen, appears to us and to the medical press of Germany to have accomplished his task in a satisfactory manner. The demand that exists on the Continent and in America for Dr. Gowers' books proves his claim, should he care to establish it, to the title and designation of a successful and distinguished medical author of European and American reputation. Dr. Gowers' books are read in the English, French, German, and Russian tongues, and his other contributions to medical science are eagerly translated into the language of every country that can boast an acquaintance with the arts and sciences of the civilised world.

Leitfaden zum Gebrauch des Augenspiegels für Studente und Aerzte. Von Dr. ADOLF VOSSIUS. Mit 22 Holzschnitten. Berlin, 1886. Pamphlet. Pp. 78.—This is a short introduction to the use of the ophthalmoscope, and contains the substance of the author's lectures to his class. Thus he describes the nature and action of lenses, the refractive constants of the eye, the blackness of the pupil, the mode of illuminating the fundus, the appearances presented by the fundus, the diagnosis of astigmatism, and so on. Two or three chapters are devoted to the diseases of the choroid

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and retina. The accounts given are good as far as they go, but are, of course, very brief—mere diagnosis, in fact.

On Heat considered as the Retinal Intermediate of Light and Colour Sensation. By L. WEBSTER FOX and GEORGE GOULD. Pamphlet. Pp. 23.—The authors accept Wundt's theory that light and colour sensations are modifications of a photochemical process, but propose to substitute the term thermal for that of photochemical; and they endeavour to show, with some success, that the conditions present are favourable to the preservation of heat and the conversion of light into heat.

Whitaker's Almanack, 1887.—This Almanack has this year been entirely recast and very greatly enlarged, extending now to no less than 632 closely printed pages. All its usual contents have undergone complete revision, much has been amplified and enlarged, and many fresh subjects of great public interest have been incorporated. Amongst the special articles are—an Analysis of the Irish Government and Land Bills; the Merchant Marine; the Navy as compared with the Naval Forces of Europe; and Annals of Her Majesty's Reign. The Almanack contains a greater amount of general information than it has ever done in past years, and is beyond question the best publication of the sort with which we are acquainted.

Diaries, &c.—We have received several specimens of these useful publications.—Messrs. C. Letts and Co., 3, Royal Exchange, have forwarded us copies of their improved *Office Diary* and *Note-book, Continuous Diaries*, and *Rough Diary*. These books are all well got up, some of them being interleaved with blotting-paper, and fully maintain the standard of excellence reached by this firm in past years.—*Pettit's Shilling Folio Scribbling Diary* will be found useful to those who desire to obtain at a trifling expense a volume for the record of their engagements and occupations during 1887.—*Blackwood's Diary* is published in an extremely convenient form and contains maps of some of the principal cities of Great Britain, together with information respecting cab fares, postal arrangements in various parts of the country, &c.—*Family Records* is intended to be what its name implies—viz., a record of all that is most notable: birthdays, marriage days, and death days, removals, agreements, engagements, &c., occurring in a family during a generation. It is published by Houlston and Sons, Paternoster-square, and will, without doubt, deservedly command success.

RUPTURE OF THE URINARY BLADDER.

To the Editor of THE LANCET.

SIR,—Whilst cordially congratulating Sir William Mac Cormac on an operative success, the importance of which can scarcely be over-estimated, I shall be obliged if you will allow me to make some remarks arising out of his references to my article in "Heath's Surgical Dictionary." 1. The remark quoted by Sir William was not, as he puts it, that "no indubitable case of recovery after intra-peritoneal rupture of the bladder is on record," but "no indubitable case of *spontaneous* recovery." The omission of the word *spontaneous* might make me chargeable with the rejection of Dr. Walter's case of successful abdominal section ten hours after the injury without suture of the rent in the bladder. I am not prepared for this. 2. Sir William says, "As regards the interval after the injury at which the operation may be successfully undertaken, this may possibly prove greater than has hitherto been held. Mr. Rivington speaks of some period within the first twenty-four hours. In one of my cases twenty-six hours had elapsed." I did not say that an operation could not be successfully undertaken after the first twenty-four hours. My words were, "abdominal section ought to be performed within the first twenty-four hours to have *a good prospect of success*." This observation was founded partly, perhaps, on Dr. Walter's case, but mainly on Dr. Vincent's experiments on dogs, which resulted in constant failure from urinary intoxication when performed twenty-four or twenty-five hours after the bladder was wounded. My object was to lay stress on the extreme value of early interference, in order to make sure of success. I sincerely trust that it will be found that the human peritoneum absorbs less rapidly than the canine, and that an operation done, say, within the first forty-eight hours may prove more often successful than the reverse, but I think that the prognosis becomes less favourable with every hour of delay. 3. Sir William says, "In ordinary traumatic cases of intra-peritoneal rupture of the bladder, the margins of the rent are generally lacerated in appearance, and soon become swollen. Mr. Rivington recommends paring these edges off, but when they are fully inverted by the method of suture, paring becomes unnecessary, and needlessly adds to the difficulty and duration of the operation." My words were: "Prevention of further accumulation and transmission of urine into the peritoneal sac in the male may be secured by sewing up the rent in the bladder with carbolised silk sutures, *with or without paring the edges of the ragged rent*. If this procedure be adopted, the bladder should be injected with water before the abdominal wound is closed, to make sure that leakage is not possible." It will be seen that I recommended not paring the edges as much as I recommended paring them. The fact is, that I was really uncertain which procedure absolutely to *recommend*. In my monograph on "Rupture of the Urinary Bladder" I rather leaned to the idea of not suturing the rent at all, owing to the lacerated and contused condition of the edges and to Walter's successful case. In the Dictionary, I had in my mind, when I used the expression "with or without paring the edges," either the adoption of Vincent's method of suture, or what is called with regard to the intestine the Lembert method adopted by Sir William Mac Cormac—a method which would not involve paring,—or else the adoption of paring to remove all spoiled tissue not likely to unite by first intention, followed by accurate adjustment of the edges of the opening. Experience had been so limited, and authorities so widely differed, that I added in the monograph: "Whether the rent in the bladder should be sewn up or not with or without paring the edges must be left to be determined by future experience"; and in the article "further experience is required to test the value of *all operative measures*." Owing to the very limited space at my disposal for my article in the Dictionary, I omitted the description of Vincent's method given in the monograph. These remarks will show that I did not write in that spirit of dogmatism which, however necessary it may be for instructing children, patients, and students, is in scientific matters unendurable, and, like the haughty spirit, often precedes a fall. Sir William Mac Cormac's fortunate experience must be taken as the guide in future operations, and proves the following points:—1. The advantage of operating as early as possible. 2. The advantage of thoroughly cleansing the peritoneal cavity by means of a mild antiseptic solution. 3. The superiority of carbolised silk to catgut for suturing the rent in the bladder. 4. The reliability and value of Vincent's *sero-muscular* (but *not serous*) sutures. 5. The reliability of the catheter as a means of removing urine from the bladder after *efficient* suturing of the rent in the bladder. My belief is that Sir William Mac Cormac's success is the prelude to similar success, not only in cases of rupture of the bladder, but in cases of ruptured intestine, and even of ruptured stomach. Dr. Blundell, who certainly preceded his American namesake in proposing to suture a ruptured bladder (see THE LANCET, Feb. 21st, 1829, p. 646) mentions (*in loco*) that "Mr. Travers, so well known by his excellent writings, has tied up with success a small aperture in the stomach." Celerity of operation would be absolutely essential in a case of ruptured stomach, and even more necessary in cases of ruptured intestine than in cases of ruptured bladder. Under these circumstances, I wish to suggest that house-surgeons should be instructed to take in and watch carefully all patients who had been subjected to such violence applied to the abdomen as would suffice to rupture one of the hollow viscera, whether exhibiting any immediate symptoms or not. It not unfrequently happens that cases of ruptured bowel and bladder are allowed to go home because at the outset the patients do not appear to have been seriously injured.—I am, Sir, yours, &c.,

Finsbury-square, Dec. 18th, 1886. WALTER RIVINGTON.

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THE LANCET.

LONDON: SATURDAY, DECEMBER 25, 1886.

THE ANNUS MEDICUS 1886.

THE year 1886 will be remembered amongst us rather for medico-political changes than for any striking advances in medical science, though the record which follows will show that there is no halting in the march of the medical art. Medical practice has been less arduous, and probably less profitable than usual. The prevailing depression has doubtless led the public to regard medical care more as a luxury and less as a necessity; and disease itself, owing to the moderation of the seasons and the development of sanitation, has been less prevalent and virulent. But we anticipate our history.

Physiology.

In the wide domain of biology, the Germans have shown themselves extraordinarily active, and the attention of numerous observers has been directed to the comparatively new subject of bacteriology. The best works that have been published are those of FLÜGGE, "Die Mikro-organismen," which deals with microbes both in their histological and their hygienic relation, and is remarkably complete; CORNIL and BABES' "Les Bacteries," which is likewise very perfect, and is beautifully illustrated; and KLEIN'S admirable little work on Micro-organisms. Other important works on the same subject are those of HUEPPE, entitled "The Methods of Investigation in Bacteriology," of MITTENZWEIG on the "Relations of Bacteria to Infectious Diseases," and of HUBER and BECKER on the "Pathological Relations of Bacteria"; whilst a year-book upon the "Advances in our Knowledge of Pathogenic Micro-organisms, including Bacteria, Fungi, and Protozoa," has been written by Dr. P. BAUMGARTEN, and forms a volume of very respectable size. Several of these works give photographic representations of the objects described in the text, and those who are interested in such methods of illustration may read with advantage Dr. COWLEY MALLEY'S little work on "Photomicrography," which includes a description of the wet collodion and gelatino-bromide processes, with the best methods of mounting and preparing microscopic objects for photomicrography. The works that have appeared on General Physiology have been few, and have consisted chiefly in the publication of new editions of well-known treatises: such as those of LANDOIS, translated by STIRLING, which is certainly one of the best works on physiology hitherto written; and GRUENHAGEN'S edition of the WAGNER-FUNKE'S Physiology, a standard German work. Dr. FERRIER has published a new and valuable treatise on the "Functions of the Brain," being a second edition of his well-known work. Dr. DALLINGER, in his presidential address, delivered before the Royal Microscopical Society, took occasion to describe in detail the chief results he had obtained in a long series of researches, showing the great importance of the nucleus in the process of fission amongst the lower organisms, and in the more complex process of generation of new cells and animals. Many separate memoirs of value have, however, of course appeared. LANGLEY and EDKINS have shown that pepsinogen precedes the formation of pepsin in the glands of the stomach, and that the change of the former into the latter probably takes place only during digestion, and under the influence of acids. Quantitative researches on the constituents of the bile in infants by JACUBOWITSCH, show that, notwithstanding the large relative size of the liver in them, the proportion of bile secreted is less than in adults, and there is a remarkable absence of glycocholic acid in the bile of infants under one year old. DRECHSEL has isolated a peculiar azotised and sulphur-holding organic substance, which is contained in the liver of young animals, to which he has applied the term "jecorin," the composition of which is highly complex. SCHOTTEN believes that human bile contains a special biliary acid, which he names Anthropocholalic. MINKOWSKI extirpated the liver or ligatured the afferent vessels of the gland in many birds, and found that the quantity of urine increased, whilst the excretion of nitrogen by this channel fell to one-half or two-thirds its previous amount; the elimination of uric acid was greatly diminished, whilst that of ammonia was correspondingly increased. CHITTENDEN and LAMBERT adduce evidence to show that the sugar found in the liver after death is derived from proteids rather than from glycogen. The difficulties attendant upon the study of the dynamics of the circulation are considerable, and there are many points on which our knowledge is defective. An attempt to supply some of these deficiencies will be found in a paper published in MICHAEL FOSTER'S *Journal of Physiology*, by S. DE JAGER of Utrecht, which is well deserving of careful study. Nothing can show better the very uncertain foundations on which some of the most generally received opinions in physiology rest than the fact that within the last month two memoirs have appeared on the physiology of the respiratory movements which are strongly opposed to each other. One is by MAX MARCKWALD, who admits the existence of two centres of respiration, one for inspiration and one, which is excited with greater difficulty, for expiration. Both are situated in the medulla oblongata, but as a rule the inspiratory centre alone acts. He shows, in opposition to generally received theories, that the stimulus to respiration is neither a deficiency of oxygen nor an excess of carbon dioxide in the blood, since animals are capable of breathing for a long time without circulation of any blood at all. He thinks the real stimulus may be the products of the disintegration of the intercellular juices. WERTHEIMER, on the other hand, thinks there are no special centres beyond the vagal nucleus in the medulla oblongata, but that there are special centres in the spinal cord, and the stimulus he believes to act on the peripheric extremities of the vagus, and to consist essentially of changes in the gases of the blood. A very long and carefully written article on the mode of termination of motor nerves has just been published by KÜHNE in the *Zeitschrift für Biologie*, in which he describes the results he has obtained in a long series of preparations made from all classes of vertebrata. The end plates are fully described and shown to be beneath the sarcolemma of the muscular fibres. The illustrative drawings are very numerous. The origin and nature of the pineal body has long been a subject of discussion amongst comparative anatomists, and

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various opinions have been propounded in regard to it: amongst others, suggestions have been made that it represents an eye formerly existing in saurians, and still existing in a rudimentary state in some reptiles. The subject has been carefully worked out in various lacertilia by W. BALDWIN SPENCER, who has brought forward much evidence in support of this view, and shows that the pineal eye was highly developed in ichthyosaurus and plesiosaurus, and may be regarded as peculiarly a sense organ of pre-tertiary periods. HORSLEY and SCHÄFER, from their investigations on muscles in contraction, have arrived at the conclusion that every prolonged contraction of the skeletal muscles which is provoked by excitation, whether natural or not, of any part of the nerve centres is a tetanic contraction which has been produced by a series of impulses generated in the nerve centres and passing along the motor nerves at an average rate of about ten per second. An excellent article has been published by W. H. GASKELL on the structure, distribution, and function of the nerves which innervate the visceral and vascular systems, which should be studied by every working physician, since it adds much to our knowledge on this difficult and obscure subject. Observations made by STEPANOW upon a case of aural disease, in which about the upper turn and a half of the cochlea were destroyed, has satisfied him that no positive statements can at present be made in regard to the functions of particular parts of the cochlea, since no defect in the perception of high and of low notes existed.

Pathology.

The most notable, or at least the most widely known, contribution to the pathology of the year is unquestionably the research of PASTEUR and his pupils into the nature of hydrophobia, and the practice of protective inoculation based on that research. The correctness of his experiments and the value of his discovery have been vouched for by independent observers, including a commission sent to Paris from this country in the spring; but, notwithstanding this, there still remains a degree of scepticism which will have to be met before the practice can be considered as established. A significant silence has been maintained on the subject in Berlin, where we naturally look for confirmation of facts of this class; whilst the very abundance of cases which have been treated by PASTEUR has rather obscured than elucidated the main issue, owing to the uncertainty of the bites inflicted being really those of rabid animals. Still, as has been justly remarked, if in only one case PASTEUR has succeeded in neutralising the effect of the virus, his method must be claimed as a real gain to our powers of prophylaxis. In connexion with this subject of rabies, it may be noted that Dr. DOWDESWELL announced in these columns the discovery of a microbe peculiar to the affection, which hitherto has evaded observation; but we are not aware that this discovery has been as yet confirmed. The transmission of disease to human beings through the medium of infected milk has received fresh and striking illustration in the investigations of Drs. POWER and KLEIN upon an epidemic of scarlatina traceable to milk and to the cows yielding it. The results of that inquiry point to a primary infection of the milk, and therefore to an actual transmission of this disease from the animal to man. The cognate subject of the transmission of tuberculosis by diseased milk has also during the past year received fresh substantiation. Bacteriology continues to be widely studied, and the extent to which it is pursued may be gathered from the fact that in Germany special journals have been started to be devoted solely to records of researches in this field. In this country owing mainly to the writings of WATSON CHEYNE, KLEIN, CROOKSHANK, and others, the methods of investigation pursued, and the characteristics of septic and pathogenic microbes have been made widely known; whilst the New Sydenham Society has done good service in publishing translations of many of the most important memoirs on the subject that have appeared on the Continent of late years. It would not be possible within the limits of a summary such as this to attempt anything like a detailed review of the advances made in bacteriology. Mr. WATSON CHEYNE has written on this subject in the pages of the *International Review of Medical Sciences*, to which we may refer our readers. But we may mention that the interesting subject of actinomycosis has been studied anew by Dr. T. ACLAND and others, and that the bacterium of pneumonia — the so-called pneumonococcus — has received a large share of attention; one interesting fact being its discovery in cerebro-spinal meningitis by FRÄNKEL, and another the differentiation of varieties of microbe by WEICHSELBAUM in the several kinds of pneumonia. Dr. DOWNES has continued his researches upon the influence of sunlight on micro-organisms; and Dr. PERCY FRANKLAND has studied the subject of the prevalence of bacteria in air and water, following up the well-known observations of MIQUEL. An important contribution to the etiology of endocarditis has been made by WYSSKOWITCH and ORTH, who were enabled to produce the disease experimentally by introducing streptococci into the circulation of animals whose valves had been injured. Fresh contributions to the subject of choleraic microbes have been made by Dr. CUNNINGHAM and Dr. KLEIN, the former to a certain extent retracting his previous opinions respecting the comma bacillus; but the past year has not, on the whole, produced much in the way of either confirming or disproving the alleged specificity of this microbe. The subject of ptomaines and leucomaines has been exhaustively treated by GAUTIER, and discussed at length in the French Academy. Early in the year CANTANI announced the successful treatment of phthisis by the bacterium termo, but not many months elapsed before this notion, wholly based on theoretical grounds of the antagonism between the tubercle bacillus and the putrefactive bacterium, was completely upset. Indeed, therapeutics have not yet been able to successfully keep up with the increase of knowledge upon the nature of many diseases. In the death of Surgeon-Major LEWIS we have lost one of the most painstaking investigators in bacterial pathology, whilst the English school of pathology has lost in Dr. MOXON one of its most brilliant and original exponents. The subject of evolution in pathology was ably treated by Mr. BLAND SUTTON in lectures delivered before the Royal College of Surgeons, based upon his investigations upon disease in animals. Dr. AITKEN also, dealing with the subject of evolution from another point of view, illustrated the relationship between febrile diseases. Prof. VIRCHOW,

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again, has discussed the Darwinian hypothesis in its bearings on pathology, especially in respect to the transmission of acquired defects by inheritance. The Pathological Society of London has continued to do good work, the most notable feature of its past session being the exhibition of specimens of intra-cranial tumours by numerous members of the Society, and, amongst other contributions to the year's work, may be cited Mr. LANE'S observations upon the causation of rheumatoid arthritis, and Dr. PAYNE'S paper on granuloma fungoides.

Therapeutics.

There has been activity in every department of therapeutics during the past year. Hygienic, prophylactic, surgical and medical therapeutics have been agitated by the introduction of new methods, principles, and details. PASTEUR'S prophylactic must occupy the first place, though some will claim for it a pathological rather than a therapeutical position. Brain surgery has had some remarkable developments, and no less remarkable successes—witness the work of HORSLEY, HULKE, BARKER, MACEWEN, and others. The surgical treatment of empyema has been illustrated by Mr. RICKMAN GODLEE'S lectures at Brompton, and by a new method of treatment by *perflation* by Dr. EWART. The appearance of two more volumes of Dr. VON ZIEMSSEN'S "Cyclopædia of General Therapeutics" must be welcomed as attempts to place on a firmer basis the rational treatment of disease by artificial, climatological, and balneological methods. In the literary field we have had also a new edition of Dr. RINGER'S work; a new volume on "Materia Medica and Therapeutics" by Dr. C. D. F. PHILLIPS; new editions of "Waring's Therapeutics" by Dr. DUDLEY BUXTON, and of MITCHELL BRUCE; a small book by Mr. A. W. GERRARD; besides numerous pamphlets dealing with special diseases. Our columns show that the treatment of whooping-cough has occupied considerable attention. Cardiac tonics have received much practical consideration from Dr. JAMES BARR and Dr. SANSOM; in this department we may perhaps note a permanent and highly useful acquisition in the form of some preparations of strophanthus and strophanthine, which appear to be valuable in place of digitalis, and chiefly because the blood-pressure is not raised by the contraction of the arterioles. But it is too soon yet to decide as to the final outcome of this innovation. We believe that convallaria and convallamarine have not maintained their positions in the race with digitalis, which still holds the chief position (see the articles by Dr. SANSOM and our leading article on cardiac tonics). Cocaine continues to hold an important place in therapeutics, and has been used in almost every region of the body. It is not too much to say that this wide extension in its application has not been unwarranted. In acute pharyngitis, in prostatitis, in vaginal affections, sea-sickness, nasal and other neuralgiæ, in cancer of the uterus, nymphomania, and in many diseases of the eyes (as we remark in another column), its use has been attended with good results. We have heard something also of the toxic effects of cocaine, but some of these may have been due to peculiarities in the patient or disease for which the drug was administered, and perhaps sometimes to impurity of the drug. By some lanoline will be considered as the greatest addition of the year, and there can be no doubt of its value, especially in its higher penetrating property, as compared with other ointment bases. Naphthaline is a valuable internal antiseptic agent for certain cases of cystitis and intestinal disorders; ulcers have been treated by external application with excellent results. For the relief of pain and for counter-irritation solidified liniments of menthol and other articles have been freely employed, and appear to have found favour with patients and practitioners. Antifebrin and antipyrin are new antipyretic agents; the latter has been in use for a few years but the former is a recent acquisition, and is said to be four times as powerful as the latter. Acetophenone and urethane are additions to our means for combating insomnia. Hypnotism, with suggestion during the hypnotic state, has been advocated as a curious method of treatment (see p. 1157). Intubation of the larynx in diphtheria does not seem to have found many advocates in this country. Peritoneoclysis, hypodermoclysis, and vesicoclysis formed the subject of a communication by Dr. MACDOWALL on the treatment of cholera. Dr. CHEADLE contributed some valuable articles on the treatment of constipation in childhood and infancy. Of salicylates we have had salicylate of lithia as a substitute for the soda salt in rheumatism, though it does not appear to have been much employed. Salicylate of bismuth would appear to possess some advantages over the trisnitrate in some gastro-enteric affections. Salol is another salicylate in which one atom of hydrogen in the salicin has been replaced by the monovalent phenol group; it has antipyretic and antiseptic properties, and has been freely used on the Continent as a substitute for the soda salicylate. In the treatment of phthisis attention has been drawn to the value of inhalations by the mouth and gaseous medication by the rectum. The inhalation of hydrofluoric acid has been said to effect much benefit. The rectal medication comes from France, but has been tried also at the Victoria Park Chest Hospital, though with what results we are unable at present to say. The principle of the treatment consists in the introduction into the system of sulphuretted hydrogen along with carbonic acid (see THE LANCET, p. 638). Terebene, internally and externally, has been tried in chronic bronchitis and many other diseases of the chest, at the suggestion of Dr. MURRELL. In some cases it does a great deal of good, but by no means in all. Other derivatives of turpentine have also been freely used, especially terpine, on the Continent. Pyridin has been prescribed freely in asthma. Calomel as a diuretic has formed the subject of several communications to our pages. Viburnum prunifolium has been extolled for the prevention of abortion. The insufflation of iodoform into the trachea after tracheotomy has been favourably alluded to. Mr. TWEEDY has written on the mydriatic properties of hydrobromate of hyoscine. Electricity has been praised by Dr. STEAVENSON and Mr. BRUCE CLARKE in the treatment of stricture of the urethra, in cystitis, and in sciatica. The publication of Dr. MURRELL'S book on "Massage as a Mode of Treatment" was made the occasion for the free expression of opinion on the differences between ordinary medical rubbing, shampooing, pétrissage, and effleurage.

Of disquisitions on foods and feeding we have had abundance. Sir WILLIAM ROBERTS' book of Lectures on Dietetics and Dyspepsia, Sir HENRY THOMPSON'S book, and numerous

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letters on infant feeding, with two leading articles in our columns, have formed the staple of this important department of therapeutics.

In the pharmaceutical region our progress has been uninterrupted. The various artificial foods, peptones, glutens, and the like, have further increased the resources of the practical physician. And there seems to be no end to the number of improvements in the art of manufacturing "elegant" preparations.

Surgery.

The introduction of what we know as the "antiseptic method" of treating wounds has revolutionised surgery in more senses than one. Previous to that time the treatment of wounds could not be said to be the subject of greatest interest and of paramount importance with all surgeons, and it was difficult to excite enthusiasm in a discussion as to the relative merits of poultices, ointments, lotions, and dry dressings. But to-day it is impossible to attempt any survey of the progress of surgical practice without at once speaking of the changes which are passing or have passed over what is now the universally received practice—antiseptic surgery. In reviewing the year's work, it is only fitting to chronicle at least two important changes—the abolition of the spray, and the substitution of simpler dressings for the old carbolised gauze. It is now some time since "*fort mit dem Spray*" formed the text for an able lecture which sent a thrill of horror through the more pious followers of Sir JOSEPH LISTER. To-day it is an accomplished fact, and there is now quiet and comfort where formerly hiss, bubble, and spurt, and wet irritating clouds made an operating theatre almost as terrible to surgeons as to patients. We are well aware that the spray is still extensively used by some operators, or for certain operations by others, but as a general adjunct to wound treatment it has distinctly, and we believe finally, fallen from the high position it once held. And this not because it has been found to be useless or harmful, so much as because it has been replaced by the safer, simpler, more handy, and more pleasant irrigation of wounds. Concurrently with this change we are witnessing the substitution of corrosive sublimate for carbolic acid as an antiseptic agent. For many years the original carbolic gauze has had serious rivals in salicylic and iodoform wool, and in thymol and eucalyptus gauze, but now it has been to a very large extent indeed replaced by salalembroth wool and gauze, although iodoform wool is still much used. Have these changes been attended with benefit? We believe that a distinct affirmative must be given to this question, and that there is a widespread feeling that the disuse of the spray and the substitution for it of corrosive sublimate irrigation has not only rendered the practice of antiseptic surgery simpler and pleasanter, but safer and more successful.

It would be impossible to refer here to every detail of surgical progress that has been chronicled in the year that is now closing, and we must content ourselves with mentioning some of the more prominent facts. In the front rank must be placed the increased and highly satisfactory results obtained in the department of cerebral surgery. Tumours of the brain have been successfully removed, traumatic epilepsy has been cured by operation, and cerebral abscess due to ear disease has been successfully brought within the dominion of the operating surgeon. Large sections of the skull have been removed with a freedom that recalls the practice so ruthlessly condemned by JOHN BELL. There is nothing special to chronicle in regard to pulmonary or thoracic surgery, and the completeness and success with which almost all abdominal affections have been submitted to operative treatment have left little room for improvement. Renal surgery has fully maintained its satisfactory position, and we can now speak of hepatic surgery. Incision and drainage of the gall-bladder, removal of biliary calculi, and drainage of cysts of the liver are all of them recognised and largely successful procedures. The most important facts in reference to the surgery of the bladder are two: that supra-pubic cystotomy has been frequently practised for the removal of tumours of the bladder, and that litholapaxy has been successfully practised upon boys for whom previously lithotomy would have been held to have been clearly indicated. Supra-pubic lithotomy has gained in favour in comparison with the perineal operation, and its greater safety is generally recognised. We must also direct attention to two cases of ruptured bladder which were recently successfully treated by suture by Sir W. MAC CORMAC. A revival of the old and discarded practice of the electrolytic treatment of stricture of the urethra must be mentioned. We need not venture on a prophecy of what this will effect, but some of those whose experience dates back for twenty years or more, to a time when electrolysis was as much lauded as now, are ill inclined to receive without question all the claims made for this revived method of treatment. Faith in its virtues has not been increased by some of the remarkable statements made as to the very speedy good effects of electricity upon chronic affections of the bladder. In the surgery of the limbs, it is to be noted that excisions of diseased joints are more and more unpopular, and that they are to a large extent superseded by the operation of erasion, which in suitable cases has given most excellent results. Our record of the year's advance would be very incomplete were we not to mention the growing popularity of cocaine as a local anæsthetic. The injection of one or two drops of a strong solution secures complete local anæsthesia, and permits of the painless removal of superficial tumours or of other slight operations, such as circumcision.

Such are the main points of interest in connexion with the surgery of 1886. The position now held by the surgeon's art is a very high and enviable one, and we may confidently anticipate that if at the end of next year we have to mention modifications of existing modes of practice, they will be improvements and developments as well. There never were so many good surgeons as there are to-day, and the combination which can now be often seen of manipulative skill, wide and varied experience, and scientific habit of mind is the surest guarantee of the future progress of surgery.

Obstetric Medicine.

In this department some excellent work has been done in the course of the year, and we would mention the following papers:—Dr. HERMAN on the production of the Shape of the Oblique Pelvis of Naegele; Dr. MATTHEWS DUNCAN on Contraction, Inhibition and Expansion of the Uterus, and on Elasticity, Retraction, and Polarity of the Uterus; Dr. JOHN

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PHILLIPS on Spurious Hemaphroditism; Mr. ALBAN DORAN on Malformations of the Fallopian Tube; Dr. CHAMPNEYS on the Uterine Bruit; Dr. DAKIN on Mercurialism in Lying-in Women after Injection with Sublimate Solution; Dr. BERRY HART on the Nature and Causes of the Movement of Internal Rotation; Dr. MILNE MURRAY on some of the Physiological and Therapeutical effects of Water at Different Temperatures, with special reference to Obstetric and Gynæcological Practice; and Dr. HALLIDAY CROOM on the Etiology of Hæmaturia. Dr. BARBOUR opened an interesting discussion before the Edinburgh Obstetrical Society on Micro-organisms in their relation to Puerperal Fever, with special reference to Antiseptics. The operation of "spaying" has been much discussed; the report of the Committee appointed by the Liverpool Medical Institute to inquire into the frequency of the performance of this operation at the Liverpool Hospital for Women may, however, conduce to the formation of accurate views on the subject.

Ophthalmology.

In ophthalmic surgery the use of cocaine in various operations upon the conjunctiva—as, for example, in peritomy and the opening of tarsal tumours—has become general. It is also almost universally employed in the operation for the extraction of the lens in cataract, and manifestly with the greatest possible advantage to the patient. It does away with the serious effects accompanying the use of chloroform, avoids the distressing and dangerous sickness so often attendant upon the use of that agent, permits the patient to fortify himself with a little food before the operation, and enables the operator to proceed leisurely and to extract the lens without iridectomy, thus preserving a round and active pupil. With fresh and pure solutions, in strength not exceeding 4 or 6 per cent., which are quite sufficient to produce complete anæsthesia, no ill effects have been observed from its use. A very good paper on cocaine and its action on the pupil was read before the Royal Society (and has been published in its proceedings) by Mr. JESSOP. The useful plan of setting aside a special evening for the consideration of some one important disease, and of collecting from many quarters facts and opinions in regard to such disease, has been followed out with advantage by the Ophthalmological Society, whose handsome volume of Transactions for the present year opens with a memoir on the obscure affection known as Graves' disease, which contains the histories, more or less complete, of a large number of cases. The Transactions contain also a memoir of equal importance on sympathetic ophthalmitis, which is based on the accounts by various observers of no less than 200 cases, and which affords many hints for treatment in this serious affection. Other interesting subjects which occupied evenings of this Society were meningitis after excision of the eyeball (brought forward by Mr. NETTLESHIP); and the irrigation operation for cataract (by Dr. M'KEOWN), which consists in washing away the cortical substance so often remaining after extraction with pure water—the objection to which seems to be the danger, unless the instruments are exceedingly carefully kept and sterilised, of introducing foreign bodies into the eye and setting up inflammation of an unhealthy character; and a case recorded by WICHERKIEWICZ, in which a solution of carbolic acid was inadvertently injected, though it did not prove fatal to vision, shows that great care requires to be exercised. The treatment of ulcers and infectious abscesses of the cornea by lightly touching the affected surface with the actual cautery has been strongly recommended by NIEDEN, who reports that he has had 88 per cent. of successes, with the trifling drawback of a cicatrix, which did not, however, interfere with vision. The existence of a special bacillus in syphilis, constituting the active agent in various syphilitic affections advanced by various microscopists, and especially by LUSTGARTEN, has been contested by ALVAREZ, who, in a communication made to GALEZOWSKI's *Recueil d'Ophthalmologie*, maintains that the supposed bacilli of syphilis are identical with those found in the smegma præputii. One of the most valuable works hitherto published on the hygiene of the eyes—that, namely, by HERMANN COHN—has just been translated by Mr. W. P. TURNBULL, and well deserves to be in the hands of every schoolmaster and pupil teacher. COHN advocates the institution of a special class of experts, to be called "school doctors," whose function should consist in regulating the hours of work, the length of the holidays, the structure, heating, ventilation, and lighting of all school buildings, the construction of desks and forms, the treatment of epidemics, and various other duties. There can be no doubt that such an officer is urgently needed in English schools, for at present not one of the defects mentioned by Professor COHN receives attention in any of our public schools; and if boys do not suffer seriously, it is rather because in England the hours of work are, in comparison with those of France and Germany, considerably fewer in number, and are intermingled with much more relaxation. Lastly, we may call attention to the excellent treatise on the Accommodation and Refraction of the Eye by LANDOLT, which is undoubtedly the best that has appeared on this subject since that by DONDERS, published by the Sydenham Society twenty years ago.

Royal College of Physicians.

The large share which the College of Physicians is now taking in the duty of examining candidates for the licence to practise has considerably increased the work annually transacted within its walls. The meetings of its Fellows are therefore occupied with matters of much wider interest than formerly, and questions of considerable moment come up for their judgment. As we write, the highly important matter of medical degrees being granted by the conjoined Colleges is under consideration, the resolution to take action in the matter having been passed fifteen months ago by a large majority. Before the close of another year we may, then, see this question solved in a manner which, without in any way trenching upon the cherished privileges of the College, will show that it is in earnest in furthering the cause of medical education in London. The erection of the new Examination Hall by the two Colleges, and the Royal ceremonial that inaugurated the work, render the past year a memorable one in their history, and it seems probable that a further extension of the work of the Colleges will follow upon their acquisition of the land adjoining this building. The College of Physicians has also during the past year been engaged in considering the clauses of the Medical Act, the effect of which has been to cement the

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bond of union with the sister College. Another result of this Act was the application from the Apothecaries' Society to join the Conjoint Board. This application, which the Act required the Society to make before it could take any further steps to get its diploma recognised as a full legal qualification, was declined by the Colleges on the ground that their examinations, as at present framed, provided a complete qualification. Opinions differ both as to the wisdom of that reply and as to the effect it will have upon the Apothecaries' Society, as well as upon the profession at large; but this is not the place to discuss these controversial questions. Passing to the internal affairs of the College, it may be noted that certain proposals for delegating the duties of the Comitia to standing committees, brought forward by Dr. WEST, were rejected. The Croonian Trust Fund having been greatly augmented, the scope of its foundation has been enlarged, and made to include the appointment of lecturers on subjects of anatomy, physiology, and pathology, and the prosecution of scientific investigations on these subjects. By the bequest of the late Dr. GAVIN MILROY, the College became possessed of a sum of money to found a lectureship in State Medicine. Nor should mention be omitted of the fact that this year Sir W. JENNER was elected President for the sixth time a mark of confidence which the profession at large heartily endorsed. The Harveian Oration was delivered by Dr. PAVY; the Bradshawe Lecture by Dr. DRESCHFELD, who chose for his address the subject of Diabetic Coma. The Lumleian Lectures by Dr. STONE dealt with the somewhat recondite subject of the Electrical Conditions of the Human Body. The Croonian Lectures were given by Dr. LATHAM, on some Points in the Pathology of Rheumatism; and the Gulstonian Lectures by Dr. SHARKEY dealt ably with the subject of Spasm in Chronic Nerve Disease.

Royal College of Surgeons.

Probably at no other period of its existence has the Royal College of Surgeons been so active as during the past year. Whether we understand the term "College" to signify the Council or the whole body corporate, the year which is just past will be memorable in its annals. The alliance entered into between this College and the Royal College of Physicians is significant of the times, and of a great change in the policy of the latter College especially, seeing that their licence included both medicine and surgery, and qualified for general practice, as well as for Poor-law and other appointments. The gain is therefore largely a one-sided one. On the other hand, a much larger number of candidates will henceforth seek the combined diploma, and so equalise matters. Moreover, the union effected will strengthen both Colleges, and can hardly fail to raise the status both of licences and of licensees. The two Colleges decided to build an Examination Hall suitable for the increased numbers of candidates which are expected; accordingly plans were prepared for a building capable of accommodating not less than 600 candidates at one time. After being approved by the joint committee of the two Colleges, and also by the Duchy of Lancaster, on whose freehold the hall is being built, the foundation stone was laid with great pomp by Her Majesty the QUEEN on March 24th. Since this date great progress has been made, and it is hoped that the hall will be ready early in the new year. Acting in accordance with the recommendation of the Committee of Delegates of the two Colleges, the Council of the College of Surgeons have practically accepted the principle that it is desirable that degrees in medicine be conferred on candidates who have passed the conjoint examinations. The event, perhaps, of next greatest interest aud importance that has occurred during the past year is the coming into possession by the College of money bequeathed by the late Sir ERASMUS WILSON—upwards of a quarter of a million sterling. We say "coming into possession": in reality, we believe, the College has no right to hold so much money, and will have to acquire that right by new charter. The importance of this wealth can hardly be over-estimated; if appropriately used, the College of Surgeons will be able to promote the science and study of surgery in a manner never before attempted in this country. The question of internal reform, however, is the one which has attracted most attention during the past year, and which has been urged on the Council with great force, with great persistency, and with equal moderation. To judge by the circular recently issued to the Fellows at large with a view to elicit their opinion on the two prominent questions of reform, we fear the Council, notwithstanding some show of concession, are as resolutely opposed to any change as when the agitation first began some years ago, and the Members themselves will probably have to petition Her Majesty for a new Charter and for a restitution of those privileges of membership which have gradually been withdrawn from them. How this has been done is briefly set forth in some articles we published on Oct. 30th and Dec. 11th, and in a letter of the latter date from an esteemed correspondent, "Historicus." A study of these articles is urged on every Member of the College. Here he will learn how the present College began, how it was originally constituted, the purposes it had to serve, and how the *status quo* (which deprives Members of all voice in College management) is a flagrant breach of the fundamental principle of corporation. The annual meeting of the Fellows and Members was largely attended, and some important resolutions, jointly agreed upon by the two Associations of Fellows and of Members respectively, were brought forward, discussed with great ability, and carried. These resolutions, demanding on behalf of Members of the College of a certain standing corporate rights, were practically a reiteration of similar demands which have been previously urged on the Council at different times. An important feature at this meeting was the great unanimity of both the Fellows and Members on the question of reform. Mr. TIMOTHY HOLMES, formerly a member of the Council, acted as the mouthpiece of the two Associations. And here the matter rests for the present.

Army, Navy, and Indian Medical Services.

The past year has not been marked by any important change in these branches of the public service. The supply of candidates has been such as to indicate that they are still considered desirable outlets for the young men who are joining the profession. There are, however, some matters deserving the careful consideration of the authorities if they wish to maintain this feeling. The first of these is the removal of the just ground of complaint on the part of the

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surgeons on probation for the army that their commissions are dated from the conclusion of the course of instruction at Netley, while those for the Indian service bear the date of their joining there. This is so obviously unjust that we hope it is only necesary to bring it under the notice of the Secretary of State for War to have it rectified. Unless this is done we fear the existing practice will seriously affect the supply of candidates for that branch. Another matter which calls loudly for redress is the position of brigade-surgeons in India, for although nominally recognised, they are denied the advantages of pay and allowances which ought in justice to attach to the rank. The position of medical officers in India, and the duties they are all called upon to perform, have been so modified by the introduction of the station hospital system in lieu of the regimental, that the whole question of their pay and allowances appears to require revision, and we trust that it may meet with early attention on the part of the authorities. There is still another point which merits the consideration of the Secretary of State for War—the system of conferring rewards and honours upon medical officers. The present system, by which the recommendation for rewards is almost exclusively in the hands of the military officers, while the head of the medical department is practically ignored in the selection, and his recommendations, when he thinks fit to make any, are too often set aside, is most unsatisfactory. We have so recently brought to notice this want of recognition of meritorious professional services that we think it unnecessary to say more than that we sincerely hope we may be able in our 'Annus Medicus for 1887" to announce that some more equitable system has been adopted, and that professional merit will no longer be left unnoticed and unrewarded in the medical branches of the public service.

The Medical Council.

The Medical Council met twice in the course of the year 1886. First on Tuesday, June 1st. The session lasted till Thursday, June 10th inclusive. The principal occupation of the Council during this sitting was the discussion of the reports of the visitors of all the Universities, or rather of their final examinations for medical degrees. These visitations cost the sum of £2256 9*s.* 2*d.*, or about twice as much as the visitations of corporations. The criticisms of University examinations were fairly faithful and satisfactory. The unsatisfactory part of it was that by the terms of the instructions given them the Visitors were restricted to ascertaining that the examinations were a test of mere *competence* to practise, instead of being required to see whether University examinations as such were fixed at a higher standard than those of corporations. The Council at the June meeting also resolved to institute a visitation of medical *schools*, subject to the permission of schools. The Council again met, very inconveniently, on Tuesday, November 16th, in the middle of the election of direct representatives under the new Medical Act, of which we shall have immediately to speak. They sat for five days. At this meeting little of importance was done, save to purge the Registers of two or three names. The only motion of any consequence discussed was one by Dr. MCVAIL, seconded by Dr. BANKS of Liverpool, to extend the term of medical education by one year, or rather to make five years compulsory if the subjects of Elementary Physics, Chemistry, and Biology are to be included in the period of medical study. An almost identical resolution had been passed the previous year, but had not been carried out. The Chairman put this resolution in a somewhat technical way, in supposed imitation of the forms of the House of Commons. The Council got into a terrible fog from which it never clearly emerged, though the resolution was declared carried by 10 to 3.

This may be considered a convenient place for noticing the passing of a Medical Bill to be known as the Medical Act, 1886. This Bill passed through its final stages in June. It is noticeable that, though the Medical Council sat in the middle of the progress of the measure through Parliament, it took no action in the matter. There was, indeed, on its part and on that of the medical authorities, a sort of conspiracy of silence to let it pass, no doubt in the belief that it affected their individual interests less than any measure could be expected to do. The silence of the Medical Council was the more questionable as it was contrary to its practice in regard to similar Bills, and the Bill, as the President of the Council has since pointed out has left the great reform unaccomplished—viz., a consolidation of the licensing authorities. It remains to be seen whether we shall not have a greater development than ever of competition of the licensing bodies, though under somewhat altered and veiled forms Another reason why the Medical Council should have been more concerned to give its opinion on the Bill than on former occasions is to be found in the free way in which the Privy Council is required to co-operate with the Council, and in some cases to override its decisions. We were the sole objectors to this feature of the Bill, and have to acknowledge the courtesy and consideration of the Government in the matter. Under the Act one good point has been gained—the admission of direct representatives of the profession to the Council. As the Bill was originally drawn by Sir LYON PLAYFAIR, two representatives were given to England, and one respectively to Ireland and Scotland. By the hearty efforts of Sir WALTER FOSTER a third representative for England was obtained, Sir LYON graciously giving up one of the Crown seats for the purpose. There is one other good feature of the Bill. It requires that the Medical Council shall appoint inspectors of the examinations. This provision, it may be hoped, will secure, at little more cost than that of the present system of visitations, a more regular and systematic report of the methods and work of our examining authorities than we have hitherto had. A serious feature of the new Medical Act is the provision for registering foreign and colonial degrees under certain important conditions. Under this Act the first election of Direct Representatives took place in November. The event is so recent that we need not trouble our readers with the particulars further than to record that after an election conducted on the whole quietly and in good humour, the following gentlemen were declared to be duly elected—viz.:

For England:
Mr. CLAUDIUS GALEN WHEELHOUSE, F.R.C.S.Eng., Leeds.
Sir B. WALTER FOSTER, M.D., F.R.C.P.L., Birmingham.
JAMES GREY GLOVER, M.D. Edin., London.
For Scotland: WILLIAM BRUCE, M.D. Edin., Dingwall.
For Ireland: Dr. GEORGE KIDD, F.R.C.S.I.

There is little else than the Medical Act in the work of

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our Legislature to record, if we except the repeal of the Contagious Diseases Act on the motion of Mr. STANSFELD.

The Medical Societies.

There have not been any striking changes in the work of the Medical Societies during the year now ending. Everyone regards the regular clinical meetings of the London Medical Society as far more interesting than the mere reading of papers, and this method of bringing members together is one to be recommended even more extensively. The interest is greater when living specimens of disease can be examined in a profession where the oldest is not too old to learn, and it is certain that practical demonstrations are more truly instructive than any amount of language, however graphic. We have only space enough to indicate the chief contributions that have been communicated to the various Societies, London and provincial: The Lettsomian Lectures on Some Moot Points in the Natural History of Syphilis, by Mr. JONATHAN HUTCHINSON, F.R.S. Diseases of Bones and Joints in Animals, by Mr. BLAND SUTTON. Spontaneous Fracture of Urinary Calculi, by Mr. S. G. SHATTOCK. Diffuse Sclerosis of Brain in an Infant, by Dr. ASHBY. The Surgery of the Suakim Expedition, by Mr. TOBIN, at the Academy of Medicine in Ireland. Mortality in the Medical Profession, by Dr. WILLIAM OGLE. Dr. OGLE showed the excessive Mortality of Medical Men from Epidemic Diseases, excepting Small-pox, from which they have the sense to protect themselves; also from Gout, Diseases of the Liver Urinary Diseases, &c. (an abstract of this paper will be found in THE LANCET of Jan. 30th). Intracranial Tumours, by various authors, at the Pathological Society. Papers on Pemphigus (?) of the Conjunctiva, by Dr. BRAILEY and Mr. LANG Mr. NETTLESHIP's paper on Meningitis after Excision of the Eyeball. Dr. HERMAN's communication to the Obstetrical Society on the Production of the Shape of the Oblique Pelvis of NAEGELE. Subperiosteal Resection for Acute Necrosis, by Mr. BERNARD PITTS. Enteric Fever at Suakim, by Dr. J. E. SQUIRE. Mr. ARTHUR BENSON's paper at the Irish Academy on Embolism of Retina and Chorea. Dr. TYSON's cases of Universal Alopecia at the Clinical Society. Dr. HALE WHITE's paper on "Hysterical" Pyrexia. Dr. ROBERT MAGUIRE's communication on Dystrophy of the Thumb-joints. Dr. CAYLEY's on Thoracic Aneurysm treated by the Introduction of Steel Wire into the Sac. A paper on Ovarian Displacements at the Irish Academy, by Dr. MORE MADDEN. Mr. B. POLLARD's specimen of Villous Tumour of the Accessory Thyroid. Mr. SHATTOCK's paper on Bilateral Cystic Disease of the Kidneys in the New-born. Papers on Aneurysm at the Clinical Society, by Mr. MANSELL MOULLIN and Mr. CHARTERS SYMONDS. Dr. GOODHART's case of Intussusception of the upper part of the Jejunum. Mr. BARKER's case of Acute Intestinal Obstruction treated successfully by Abdominal Section. Dr. PERCY KIDD's specimen of Diffused Symmetrical Cirrhosis of the Lungs. Dr. MACLAREN's case of Hernia Cerebri treated by Silver Plate closing the Opening in the Skull. Drs. WHIPHAM and MYERS' paper on the Nervous Sequelæ of Small-pox. The report of a committee of the Ophthalmological Society on Sympathetic Ophthalmia. Dr. BRISTOWE's case of Cerebral Hæmorrhage and Double Optic Neuritis. Dr. THEODORE WILLIAMS and Mr. R. J. GODLEE's paper on Bronchiectasis treated by Paracentesis. Mr. PEARCE GOULD's case of Alveolar Abscess with Thrombosis of the Cavernous Sinus. Papers and discussion at the Royal Medical and Chirurgical Society on Suprapubic Lithotomy, by Mr. BARWELL, Mr. JACOBSON, Mr. W. RIVINGTON, and Sir H. THOMPSON. Tubercular Ulceration of the Palate, by Mr. CLUTTON, and also by Dr. ABERCROMBIE and Dr. GAY. Mr. MEREDITH's paper on Successful Laparotomy for the relief of Acute Intestinal Obstruction following Ovariotomy. Dr. STEPHEN MACKENZIE's paper on Erythema Nodosum and Rheumatism. Dr. MATTHEWS DUNCAN's paper on Contraction, Inhibition, and Expansion of the Uterus. Dr. CLIFFORD ALLBUTT's suggestive paper on the Mountain Cure in Heart Disease at the Leeds and West Riding Society. Dr. CHAMPNEYS' paper on the Development of Mammary Functions of the Skin of Lying-in Women. Dr. F. W. MOTT's specimen of Malignant Melanotic Growth of the Lip. Mr. BALLANCE and Mr. W. EDMUNDS' most valuable paper on the Ligature of Larger Arteries in their Continuity. The various communications on Exophthalmic Goitre to the Ophthalmological Society. Many papers on Adenoma of the Palate, by Mr. HUTCHINSON, Mr. STEPHEN PAGET, and Mr. F. TREVES. Dr. A. MONEY's paper on Delirium and Fever in Pneumonia. Mr. BRUCE CLARKE and Dr. STEAVENSON's paper on Electrical Treatment of Urethral Stricture. Dr. ZEHENDER'S Bowman Lecture. Dr. HAMILTON's Complete Sections of Brain. Mr. F. TREVES' specimens of Malignant Cysts of the Neck. Mr. KNOWSLEY THORNTON's paper on 300 Complete Cases of Ovariotomy. Mr. CHARTERS SYMONDS' case of Removal of Scapula for Osteo-sarcoma. Dr. COUPLAND's paper on Ophthalmoplegia dependent on Thrombosis of Cavernous Sinuses. Dr. SHERRINGTON's specimens of the Ascending Antero-lateral Tract in the Embryo. Dr. BARLOW's case of Disseminated Myelitis and Measles. Dr. A. H. N. LEWERS' paper on Spontaneous Uterine Rupture. Dr. SEMON's, Mr. BUTLIN's, and Mr. MORRIS's papers on Extirpation of the Larynx for Epithelioma. Dr. HUGHLINGS JACKSON's rare case of Epilepsy like that of epilepsy in guinea-pigs. The Obstetrics of the Kyphotic Pelvis, by Dr. CHAMPNEYS. Dr. DRESCHFELD's and Dr. PAYNE's papers on Rhinoscleroma and Granuloma Fungoides. Mr. LANGTON and Mr. BOWLBY's paper on Embolic Aneurysms. Mr. HERBERT ALLINGHAM's new method of Excision or Erasion of Knee-joint. Dr. CROOKSHANK's specimens of Flagellated Organisms in the Blood of Healthy and Diseased Rats.

Medical Associations.

The meeting of the British Medical Association at Brighton was, in a medical respect, a great success. The attendance was good, and many of the addresses were of great interest. That of the President, Dr. WITHERS MOORE, was devoted to a consideration of the function of women, especially as regards Higher Education and Professional Pursuits. Dr. MOORE developed with great ability the argument that the great function of woman was to be the mother of good men, and that any departure from this line of duty was to be regarded with regret and doubt. His views supplied material for discussion of this great question for many days. Sir ANDREW CLARK's Address on Cases in which

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Disease of the Valves of the Heart has been known to exist for upwards of five years without serious symptoms, was a masterly and compact statement of a marvellous clinical experience, and very comforting to people with weak hearts. Other addresses of consequence were those of Dr. BILLINGS on the state of Medical Education in the United States, and of State Law as it affects Medicine as a Science and a Profession, Sir HENRY THOMPSON on Supra-pubic Lithotomy, Dr. BARNES on the Alternatives of Craniotomy, Dr. JULIUS DRESCHFELD on Pathology, Dr. ROSS on Peripheral Neuritis, Dr. LAUDER BRUNTON on Therapeutics, &c. With a view to the approaching election of Direct Representatives under the Medical Act, a proposal was made, at a general meeting, to instruct the Council to select three names of gentlemen and submit them to a future general meeting during the session. Dr. EYTON JONES, Dr. HUGH KER, Dr. DOLAN, Mr. MORRIS, Dr. BERNARD O'CONNOR, and others spoke; and finally it was agreed that the Association, as such, should take no action in the matter.

The Sanitary Institute of Great Britain met at York, and had the advantage of being presided over by Sir SPENCER T. WELLS, who, like most great surgeons, is much interested in the principles of sanitation, and has done much to enforce and apply them. In his address Sir SPENCER took a broad and statesmanlike view of the subject. He lamented the impotence of Parliament and its preoccupation with less practical and more sensational topics; but he descanted with much satisfaction on what had been achieved in the improvement of the people and the lengthening of the average of human life by almost twenty years in the last half century.

The proceedings of the Meeting of German Naturalists and Medical Men in Berlin were reported in abstract in our columns in October. At such meetings in Germany there is much more specialism and a greater number of sections than in England. Professor VIRCHOW, in an introductory address, alluded to the close connexion between the natural sciences and medicine, and observed that this connexion was much more recognised in Germany than with us.

Medical Jurisprudence.

The year that is just passing away has been signalised by one medico-legal case of surpassing interest. We refer to the charge brought against Mrs. BARTLETT and the Rev. GEORGE DYSON for the murder of Mr. BARTLETT by administering a fatal dose of liquid chloroform. The Crown prosecution withdrew the indictment drawn against Mr. DYSON, and the jury found Mrs. BARTLETT "Not guilty." There could be no doubt that deceased succumbed to the effects of liquid chloroform taken into the stomach, but it remains a mystery how this came about. In a leading article on the forensic bearings of the case we directed attention to the difficulty of surreptitiously giving chloroform vapour to a sleeping person, and we took exception to the theory that the cause of death from swallowing pure chloroform was mainly irritation of the stomach, contending that the shock from the irritant would be minimised by the stupor from the narcotic. Several other interesting cases of poison—and some of them curious and rare—have been recorded in our pages. A young woman named HUNT succumbed to the lethal effects of phosphorus, but the jury were unable to determine how the poison was administered. The motive appeared to arise from the fact that she was *enceinte*, but whether this worked through a suicidal or homicidal groove has not been ascertained. Perhaps the most curious—and curious mainly because it was equivocal—instance of supposed poisoning was that which occurred at Hackney, and was investigated toxicologically by Dr. TIDY. This jurist obtained an extract from the contents of the stomach like that derived from KEATING'S insect destroyer; the powder in question, however, failed in a three-ounce dose to kill a rabbit. At Clerkenwell a man was poisoned by carbonic anhydride whilst working in a disused well; and at about the same time a calamitous event happened near Glasgow, several persons losing their lives by the after-damp succeeding a huge explosion. Wild flowers of undetermined nature proved fatal to a child. A suspicious case of poisoning by wood sorrel was explained by us as probably due to the drinking of soap lees. Just recently a child aged two years and a half died in convulsions after eating sixty grains of camphor.

Turning now from the account of poisons, we must mention briefly the circumstances of a trial for murder, in which W. TURNBULL, a medical man, and MARY NOTTAGE, a certificated midwife, were charged with having procured abortion on a single woman named CLIFFORD. The prisoners were convicted of "unskilful treatment and criminal negligence," and were sentenced respectively to ten years' penal servitude and eighteen months' hard labour. The post-mortem phenomena observed in this and a similar case formed the basis of an article by us on the value of the corpus luteum as a sign of previous pregnancy.

A distressing case of death from rupture of the uterus during labour was brought to light at an inquest at Brighouse. The midwife in attendance was supposed to have acted injudiciously in making traction on a leg in a breech presentation, and so inadvertently causing the rupture. The evidence failed, however, to sustain the suspicion, and the jury returned an open verdict as to how the uterus was rent.

At an assize trial on the civil side, a dentist was sued for damages for the seduction and consequent impregnation of a female during the sleep of the latter. The jury disagreed. We took occasion to point out that unconscious impregnation was consistent with physiological laws.

As regards the value of post-mortem examinations, numerous occasions have presented themselves to illustrate and enforce our oft-repeated contention that in all cases where the cause of death is doubtful a necropsy should be made. Mr. Justice STEPHEN laid stress on the desirability—nay, necessity—of this being done whenever the death was the subject of a criminal charge. On one occasion a juryman, much to his credit and to the furtherance of justice, declined to sign an inquest form unless he heard medical evidence as to the cause of death. At Hull an inquiry into a supposed case of "irritant poisoning" was completed by the post-mortem examination revealing peritonitis from acute inflammation of the ovary.

"Impulsive homicide" has again elicited public and professional notice, notably by reason of two trials which occurred at the late Western Assizes. These were rendered still more prominent by the animadversions passed by

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Mr. Justice HUDDLESTON on medical witnesses—strictures which we felt compelled to challenge and resent.

A curious case of mistaken identity transpired at an inquest, where the subject of inquiry, though sworn to as dead, appeared in person to prove the contrary. The deceased and his counterfeit both had a peculiarity of the same finger of the same hand.

Public Health.

On the whole, the year 1886 has been a healthy one in so far as England and Wales are concerned, and there is every reason to believe that the general death-rate will indicate a distinct diminution as compared with the average for the preceding ten years. The decrease in the rate from the zymotic class of diseases was very marked during the first half of the year, and it was only an excessive prevalence of fatal diarrhœa during the third quarter that brought that rate at all near to the previous average. During that quarter the mean temperature was 1·5° above the average for the corresponding periods of 115 years, the largest excess occurring in September; the rainfall was also 2·46 inches below the average amounts in the corresponding periods of seventy-one years; and these are conditions with which excess of diarrhœa amongst infants has always shown itself in those localities with which the prevalence of this fatal malady is identified. The total diarrhœa deaths were 15,936 in number, corresponding with an annual rate of 2·27 per 1000, as opposed to a mean rate of 1·84 in the ten preceding third quarters; the highest local rates reaching 5·36 in Salford, 5·49 in Preston, 6·23 in Leicester, and 8·24 in Norwich. The study of this disease, especially as regards its etiology, is still being carried on by Dr. BALLARD on behalf of the Local Government Board, but since the principal opportunities for study are of such short duration and at such long intervals, some time must probably elapse before any definite views on the subject can be formulated. But, quite apart from this autumnal diarrhœa, we are from time to time learning of specially localised epidemics which appear to be due to the use of certain articles of food and drink. Water has been the means of producing the most widely-spread of these epidemics, and the latest record we have on this subject relates to an epidemic which suddenly attacked some 20,000 of the inhabitants of Hull in March, 1885, the epidemic being associated with a temporary and accidental pollution of the public water-service. The recurrence of these epidemics indicates more than ever the imperative necessity of placing all such services under maintained and skilled supervision. Small-pox, fever, and scarlet fever all show diminished death-rates, and, except in so far as the change may be affected by an improved diagnosis and differentiation between scarlet fever and diphtheria, it is satisfactory to observe that a steady diminution has for some time past been in progress in the deaths from the former of these two diseases. Diphtheria, on the contrary, has shown a tendency to increase, and the increase has for some years past exceeded anything that can be accounted for by reason of improved nomenclature. So far, however, although there is no diminution in the diphtheria fatality, the increase that has heretofore been in progress has not been further added to this year.

The recurrence of cholera on the continent of Europe has naturally occupied much of the attention of the Local Government Board and of the local sanitary authorities; and the general survey of districts running special risk, whether by reason of their position on the coast line or by reason of known or suspected sanitary defects, has been of extreme value. The Local Government Board, having selected a staff of their most experienced medical inspectors for the purpose, have by local counsel and correspondence indicated in several hundred sanitary districts where the weak points existed which could favour a cholera spread, and we have reason to believe that the interference and personal advice which have been such prominent features in this survey have, in by far the majority of instances, been appreciated by local sanitary bodies. The issue of Dr. BUCHANAN'S recent cholera report showed that some authorities preferred a mistaken economy to the improvement of the health of their districts. With them must be left the responsibility of failing to secure for their inhabitants the sanitary conditions best calculated to prevent the spread of disease. Such bodies will, at least, be unable to complain hat they were not made acquainted with the principles which govern the action taken in this country for the prevention of cholera, and which relate essentially to the removal of filth in all its forms and to the provision of means of isolation for those who are actually sick.

From time to time we have indicated the course of cholera in Europe during the present year. The fact of the disease being maintained during a portion of last winter in certain parts of Spain and in the north of France did not lead to any further extension of the disease in those two countries, both of which had suffered severely in 1884 and 1885. Italy was less fortunate. Throughout the early part of this year the disease was more or less prevalent in Venetia. It gradually extended to the provinces bordering on and to the south of the mouths of the Po, and it ultimately extended over a wide area in the north-eastern portion of the peninsula. Whilst this extension was in progress the disease appeared at Brindisi and Bari in the south, and from these places it spread to a large number of towns and villages near the Adriatic coast, and to others inland. The total number of attacks and deaths in Italy has not yet been officially certified, but from the commencement of the renewed epidemic early in the year to the end of September, when a considerable fatality was still in progress, the persons attacked had probably not been less than 50,000 in number, and amongst them there had since been some 15,000 deaths. When cholera was first prevalent in the neighbourhood of Venice, it spread inland and also extended to Trieste, the disease being maintained at the latter port and in its vicinity throughout the greater portion of the year. The whole province of Istria soon became infected, and extension of the disease took place in the direction of Croatia. Later on it became evident that villages in the southern part of Hungary were affected; then Pesth (the eastern portion of the capital) became for a time the seat of the epidemic; and at a still later date Galicia to the north and certain towns and villages to the south of Hungary became implicated. At the present date rumours are renewed as to the existence of cholera in several parts of Eastern Europe, and in all probability the greatest danger for the coming year will lie in this direction.

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The large amount of attention that has been this year devoted to perfecting our sanitary condition in view of the possible extension of cholera to this country has gone to diminish the amount of current work in the investigation of epidemic disease at home. But, even if this year's labours had been limited to a single piece of work, we should still be able to regard it as marking an epoch in our sanitary history in view of the proof that has at last been afforded as to the relation of a disease in the cow to scarlet fever in the human subject. Mr. POWER'S reports to the Local Government Board have at several intervals foreshadowed the possibility of the existence of such a relation, and his recent admirable piece of work, as embodied in his report and that of Dr. KLEIN on Milk Scarlatina in London, must be regarded as affording the proof hitherto needed, and as opening up a comparatively new and wide field for further scientific investigation. The sanitary legislation of the year has been but small in amount, and the only Act to which it is necessary to draw attention is the Contagious Diseases (Animals) Act, 1886, which definitely transfers powers as to dairies, milkshops, &c., to the sanitary authorities, who heretofore had no proper means of controlling establishments which may become potent for mischief as regards the public health.

Hospital Mirror.

In the Mirror of Hospital Practice during the past year cases from most of the departments of medical practice have been brought forward—many of them interesting from the rarity of the disease, and some on account of an unusual manifestation of symptoms or rare complication obscuring the diagnosis and rendering it difficult for the carrying out of skilled and successful treatment. Amongst others may be mentioned the following:—A fatal case of hydrophobia, hyperpyrexia in the course of acute rheumatism, enteric fever fatal on the seventieth day from perforation, unusual symptoms in connexion with locomotor ataxy, chorea associated with epilepsy, chorea gravidarum, tropical and other abscesses of the liver, and a series of cases of pyæmia. Contributions to toxicology include recovery after poisoning by oxalic acid (half an ounce), followed by acute nephritis, hydrochloric acid (one and a half ounce), liquid chloroform (two ounces), cyanide of potassium (40 grains), and one by phosphorus paste, fatal on the fifteenth day; also an account of the sufferers from the effects of the gases following the disastrous explosion at Crarae. Injuries to the skull and its contents have been several times brought before our readers, and the advantages of the present methods of treatment exemplified by the success which has attended the efforts of the surgeon; bullet wounds and compound fractures of the vault, with in some cases damage to the brain, requiring the use of the trephine or elevator; fractures of the base associated with multiple fractures of the bones of the face and others, as also a fatal case of trephining for traumatic epilepsy; and two cases of tetanus successfully treated, one by the excision of cicatrix, the other by chloral hydrate. Functional disease of the heart, aortic regurgitation, ulcerative endocarditis; several examples of aneurysm, with the ligature of arteries, the femorals, common iliac, and two cases of simultaneous ligature of the common carotid and subclavian; traumatic aneurysm of the gluteal; hæmorrhage from post-scarlatinal ulceration; and a case of hæmophilia, with the pedigree for five generations. In connexion with the digestive system: excision of the whole of the tongue for epithelioma, and of portions for tubercular ulceration; perforating ulcer of the duodenum; intestinal obstruction from fæcal accumulation; stricture of the rectum, simple and malignant (in one case simple stricture caused a complete block for two months); volvulus and acute intussusception, with the treatment in each. Examples of the treatment of the principal varieties of strangulated hernia by the improved method of excision of the sac, often combined with suture of the ring after reduction of the gut; also cases in which hernia was simulated by other diseases. Œsophagotomy for the removal of a tooth-plate; gastrostomy for malignant stricture of the œsophagus; the formation of an artificial anus where new growth obstructed the rectum, either by LITTRÉ'S or AMUSSAT'S operation; and the exploration of the gall-bladder for stone (when unusual conditions were found and the gall-bladder was removed); and this week we publish notes of a rare case of fatal general emphysema, due to perforation of the wall of the œsophagus. Accounts will be found illustrating the treatment of diseases of the generative organs in the female; operations for the removal of cyst, of the ovaries and broad ligaments, of hydro- and pyosalpinx and myo-fibromata of the uterus; hydramnios; pregnancy complicated by occluded vagina, by albuminuria, and by chorea and successful operation for extra-uterine fœtation. The revival of the operation of supra-pubic cystotomy has led to increased activity in the treatment of vesical disease, and cases are recorded of its employment in children for the removal of stone, and in the adult (with perineal incision) for the removal of tumour from the bladder. Other methods for removal of calculi and foreign bodies from this organ, and the treatment of stricture of the urethra, in one case by permanent supra-pubic drainage, and its rupture, also receive illustration. Three cases of rupture of the bladder, two intra-peritoneal, terminating fatally, and one into the vagina, with other severe injuries, treated successfully, are recorded, and a case of exploration of the kidney, and its incision for abscess or for the removal of a stone. Conservative surgery has been well exemplified in the record of compound fractures of the humerus, femur, patella, and astragalus, the ultimate result in the saving of life and a useful limb having been most satisfactory; dislocation of the knee; the removal of loose cartilages in a patient over eighty years of age; the course and treatment of cysts in connexion with this joint; excision of the elbow-joint and of the hip-joint; amputation at the hip, followed by recovery; diseases of the bones, acute and chronic, in one extensive removal of tarsal bones leaving a useful foot; new growths affecting the neck, jaw, inguinal region, vagina, popliteal nerve, and skeleton, including one of the femur, recovery following amputation at the hip-joint; excision of cyst of the thyroid and of the thyroid itself; penetrating wound of the abdomen, the wound being enlarged for diagnostic purposes; wound of the neck penetrating the air-passages, in which suture of the air-tube was practised. Also cases from more special departments—diseases of the eye, throat, and of the skin.

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Commissions.

One of the most useful pieces of work undertaken during the year was that which related to the pollution of the Thames at the Henley Regatta. Our Commissioner visited the river at the time the regatta was held, and, as the result of his inspection, publicity was given in our columns to the abundant opportunity for river pollution afforded by the numerous house-boats which are brought together on this occasion. The majority of these boats have closets on board which drain directly into the water. Direct drainage of houses into the Thames is prohibited, but the river receives from house-boats large quantities of matter of the same character as that which is forbidden from other sources. But this is not all; the whole of the animal and vegetable refuse and the débris of the kitchen is thrown into the water, and thus the Thames, which supplies many of the inhabitants of the metropolis with drinking-water, is periodically polluted to a serious extent, and is liable to become contaminated in a manner which would not only affect the health but even the lives of those who depend upon it for their water-supply. It was time that the attention of the responsible authorities was directed to this danger, and it may be hoped that the steps which are now being taken by the Thames Conservancy Board as the result of our report will be the means of preventing a grave calamity in the future. Our Commissioner has shown the need for a systematic scavenging and for the punishment of all persons who may, in their disposal of animal and vegetable refuse, pollute the water of the Thames. It is by the enforcement of these measures only that safety can be ensured.

The sanitary condition of Windsor, to which we had given much prominence during the previous year, again came under our notice owing to an outbreak of small-pox in those parts of the town which had been the subject of previous articles. The freedom of any community from this disease is doubtless dependent in the first instance upon the condition of the vaccination of the inhabitants, but there is much reason for believing that other conditions—such as overcrowding and absence of means of isolation—are important factors in leading to the dissemination of this disease, and Windsor appeared to afford special facilities in these directions for its propagation. At the present moment the reports of our Commissioners have led to an official inquiry by the Local Government Board into the sanitary condition of the borough, and as to its defences against infectious disease. We forbear, therefore, to discuss this matter more fully, but we shall rejoice to see effective measures put in force for making Windsor fit in every sense of the word to be a home for the QUEEN, and for those of her subjects who dwell in the neighbourhood of her castle.

A serious outbreak of measles at Marlborough College gave origin to a special report from one of our Commissioners. A similar inquiry was made a number of years ago, and the condition of the College at that time was fully considered. It was convenient therefore to learn how far the school authorities had kept pace with the requirements of more recent knowledge, and it was with pleasure we were able to report that they had to a large extent been mindful of the health of the boys. Nevertheless, certain defects were found which demanded remedy, and these, we are now glad to be able to say, have since received the careful attention of the governing body. All that we would desire to see done is not yet fully completed, but we willingly acknowledge the consideration which has been given to our Commissioner's report.

Another of our Commissioners in the course of the summer visited Leicester, with a view to ascertain whether the immunity of that town from small-pox is really as independent of vaccination as some would have us believe. He demonstrated, on the contrary, that the opposite is the case; that all the officials who have to deal directly with the small-pox of Leicester are vaccinated and revaccinated, and that very strong pressure is applied to all persons around those affected with actual small-pox to be revaccinated, and that apart from this prime precaution all other measures would be mere mockery.

Medical Honours.

The honour of knighthood has during the past year been conferred upon WILLIAM TURNER, M.B., DYCE DUCKWORTH, M.D., and B. W. FOSTER, M.D., and was offered to, but declined, by Mr. SAVORY, President of the Royal College of Surgeons, on the occasion of laying the foundation stone of the new Examination Hall on the Embankment; also upon Surgeon-General T. LONGMORE, Dr. E. H. SIEVEKING, the late Mr. W. WHITE COOPER, Dr. DOUGLAS MACLAGAN, and Mr. JOHN TOMES. Deputy Surgeon-General J. BY COLE READE, Brigade Surgeon GEORGE FARRELL, and Deputy Surgeon-General JOHN M'NEALE DONNELLY, M.D., were appointed members of the Third Class or Companions of the Order of the Bath; and ARTHUR MITCHELL, M.D., and WILLIAM ORANGE, M.D., were appointed members of the Civil Division of the Third Class of the said Order. Surgeon-General MICHAEL CUMMORE FURNELL, Deputy Surgeon-General ALEXANDER MORISON DALLAS, GEORGE WATT, M.D., and JOHN W. TYLER, M.D., were appointed Companions of the Order of the Indian Empire. Deputy Surgeon-General STEWART AARON LITHGOW was appointed a Companion of the Distinguished Service Order.

Obituary.

The painful part of the retrospect of a year is that which recalls those who have been taken away. Few years have been more cruel in this respect than the year 1886. The following names will suffice to justify this charge. They are taken from all branches of practice and all parts of the empire:—Mr. JOHN BLACKETT JEAFFRESON, Dr. F. G. JULIUS, Mr. WILLIAM BOUSFIELD PAGE, Dr. JAMES BALLS WOOLBY, Dr. R. ROBERTS MADDEN, Dr. ANGUS MACDONALD, Dr. GAVIN MILROY, Mr. COOPER FORSTER, Dr. JOHN STORRAR, Mr. C. LE VESCOMTE GODFRAY, Mr. JOHN S. STREATFIELD, Dr. E. O. P. CHARD, Dr. EVORY KENNEDY (Dublin), Dr. JOHN MATTHEWS, Dr. TIMOTHY LEWIS, Dr. SCOTT ORR (Glasgow), Dr. HENRY MACCORMAC (Belfast), Mr. FRANCIS MASON, Dr. JAMES APJOHN, Dr. WALTER MOXON, Mr. THOMAS WARD JESTON, Dr. ROBERT FOWLER, Dr. CHARLES CHADWICK, Mr. J. SAMPSON GAMGEE, Dr. SAMUEL WOODMAN, Mr. HIBBERT SULLIVAN PARKER (Ferozepore), Dr. J. PEARSON BELL, Dr. JOSEPH E. MILLER (Derry), Dr. FREDERIC JOHN FARRE, Dr. ARTHUR WYNN WILLIAMS, Dr. MORTIMER BALDING, Dr. NORMAN CHEVERS, Dr. WALTER FERGUS, Mr. W. A. N. CATTLIN, Dr. LYONS, and Dr. EBEN. WATSON. We dare not yield to the temptation to descant on

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medical life and its labours and risks as exemplified in the foregoing names. They do not exhaust the list of losses which our great profession has sustained even in our own country. But how suggestive they are! Some of the above had completed their course. Dr. MADDEN of Dublin, a great friend of the slaves when in Jamaica, was eighty-eight years old. Dr. APJOHN, also of Dublin, was ninety-one. Mr. JESTON of Henley-on-Thames was ninety-six, and his biography says he retired from active work about two years before his death, thus conveying a gentle rebuke to the young men of this degenerate age who begin to think of retiring twenty years before this. The life and character of Dr. MACCORMAC of Belfast were among the most useful and interesting which we have recorded. The writer of the notice thought him at his death the oldest medical practitioner in Ireland, but we have since recorded the death of Dr. JOSEPH E. MILLER of Derry, which occurred in his ninety-fourth year. This remarkable man graduated in Edinburgh seventy-one years ago. He had been Mayor of Derry seven times, and had been in actual practice sixty-seven years! It is impossible to begrudge rest to those who have worked so long. We may be thankful that so many of the deaths recorded were at an age when life is practically over. But not a few have come all too soon, and removed those who promised fair to hold high the light of medicine for many a year to come. The death of Dr. AUSTIN FLINT must be mentioned as almost a domestic event, so familiar had become his face and work at home—from which, indeed, his ancestors went out.

The year has had a very special grief for ourselves in the death of Dr. JAMES G. WAKLEY, for more than twenty years Editor of this Journal, and under whose rule it attained to a more extended influence than it possessed even in the time of its founder. Dr. WAKLEY had a wide view of the functions of a Medical Journal, and thought Medicine a very large word in its meaning. It will be the part of those of his family who assume his responsibilities in the conduct of THE LANCET to be faithful to its traditions, and to remember the independence and courage in which it had its origin. The customary announcement on the title-page issued with this number is absent, in consequence of Dr. WAKLEY'S lamented death on the 30th August last; but we may here state that THE LANCET is now edited jointly by the present proprietors, THOMAS WAKLEY, F.R.C.S. Eng., and THOMAS WAKLEY, junior, L.R.C.P. Lond.

Next to Dr. WAKLEY'S interest in THE LANCET was the interest he felt in Hospitals, and especially in Hospital Sunday, of which he was a chief promoter. It was no little consolation to him to have assisted, as he was able, to raise the collection of this year to the sum of £40,000—a much larger figure than had before been realised.

Conclusion.

We must now leave our readers to the more cheerful duties of the season, with every wish for their happiness and prosperity. If our penultimate words have lessons of sadness in them, our last words shall be words of good cheer. Many a life has been spared to brighten the Christmas which but for the medical art would have been lost. Thousands are now alive who but for Medicine in some of its branches would have passed over to the majority. It is no mean distinction to belong to a profession which has such satisfactions, and whose services to humanity are ever growing in fruitfulness and beneficence.

Annotations.

"Ne quid nimis."

THE CONJOINT COLLEGES AND MEDICAL DEGREES.

IN our last week's issue we published the report of the Committee of Delegates appointed by the Royal College of Physicians of London and the Royal College of Surgeons of England "to consider the question of the desirablity and practicability of granting degrees in medicine and surgery to persons who have passed the conjoint examinations of the two Colleges." We think that all our readers will agree that the report is a forcible and judicious statement of the singularly anomalous position in which the London student is placed, and that the demand for its removal is put forward on a sound basis, and in a strong but temperate manner. The only points in the report to which exception could be taken are (1) that residence in London for the whole clinical curriculum is not insisted on; (2) that the powers of granting degrees should be given to the Colleges acting conjointly, without any extraneous governing body; and (3) that the examinations of the Colleges in the subjects of study comprised in their curriculum are on a level with those of the majority of the universities of the United Kingdom. On the 16th inst. the report of the delegates was presented to the governing bodies of the two Colleges for adoption. The Council of the Royal College of Surgeons made some verbal alterations, and then referred it back for the further consideration of the delegates. At the comitia of the Royal College of Physicians of London, where the graduates of the existing Universities are in full strength, an interesting debate took place, and was resumed on the 23rd inst. During the course of the debate Sir George Paget demurred to the statement of the delegates as to the equality of the examinations; but it was pointed out that, besides Cambridge, Oxford, and London, there were many other Universities holding medical examinations in the provinces, in Scotland, and in Ireland, and these examinations were fully weighed by the delegates before the statement was passed by them. Moreover, professional examinations only are referred to, and a proviso was inserted into the first resolution for the institution of "such examinations in arts and science as may hereafter be defined;" and it is in arts and science that the examination requirements of the Conjoint Examining Board are inferior to the average University standard. The President, Sir William Jenner, ruled that the College, by its action on the 22nd of October, 1885, was pledged to grant degrees, acting conjointly with the College of Surgeons; for it then accepted the amendment of Dr. Wilks, "That it is desirable that persons examined by the Royal College of Physicians of England and the Royal College of Surgeons of England conjointly, and found duly qualified, either by the ordinary or by an additional examination, should have a degree in medicine and surgery conferred upon them." From this decision the College could not go back. The only question that remains for settlement is the "how," and the line taken by those who object to the Colleges giving a degree is indicated in Dr. Allchin's amendment to the first and practically all-important resolution—viz., "That no scheme for conferring degrees in medicine and surgery upon candidates who have passed the examinations of the Examining Board in England shall be deemed satisfactory *unless it provide for the conferring of degrees by some university body outside the Colleges themselves*, but on which they could be represented." In October, 1885, Sir Risdon Bennett moved an amendment by which the College would have pledged itself to support to the utmost of its power the scheme for a teaching university in London, and it was lost by a large majority. Dr. Allchin's recent amendment seems to us only a transformation of this old one. Had it been passed, the College would have stultified

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itself; its rejection has involved the College in a second and a fruitless debate on the same question. The postponement of the movement until a teaching university shall have been formed is impossible, for only the medical faculty—and that practically consists of the London teachers, well represented at both Colleges—has decided on its wants. Arts, science, and law, as distinct faculties, are non-existent—or shall we say *in nubibus*?—and must be composed in the two former faculties almost entirely of the professors and members of King's and University Colleges, and even these, *teste* Professor Lankester, do not too cordially assist in maturing a scheme which will embrace the proposals of those associated in promoting a teaching university. Eminent lawyers are conspicuously few. The basis on which the College degrees should be granted ought to be wide and academical, and powers should be carefully drawn up so that other faculties may join with and enlarge the new university; but to delay application for these powers through an amendment drawn up in behalf of a non-existent university, in whose support only about thirty members could be got together at the last meeting for its promotion, and many of those included in its executive, seems to us to be nothing less than simple obstruction.

We congratulate the Council of the Royal College of Surgeons of England and the Fellows of the Royal College of Physicians of London on having come to so speedy a decision in support of the movement for granting medical degrees to London students on terms similar to those on which they are obtained elsewhere. The disadvantages under which London teachers and those who study medicine in London have hitherto been placed are now in a fair way towards removal, and some progress can be reported. The next step will be an application to the Crown for powers to grant such degrees, and so a distinct advance towards the foundation of a new university in London will have been made. It remains with the teachers of science and arts to decide whether this is to be composed of one faculty or of more than one, and we recommend to their notice the business-like energy and promptitude which the combined Colleges have shown as an example which they might well imitate if they are to share in the movement.

THE MORAL OF THE DIFFICULTIES OF GUY'S.

THE meeting at the Mansion House to procure £100,000 for Guy's Hospital is a serious historical fact, and should be deeply pondered by all persons. All the speeches were good, but that of Cardinal Manning was the great statement of the case from the religious point of view. He was followed immediately by Mr. Leopold de Rothschild, and happily so; for this great duty rests with no religious community; it is enforced in no particular text, and is equally the burden of the Old Testament and the New; it binds both Jew and Christian, and he would almost be the better exponent of the principles of universal charity of the two who most showed that he felt the claims of hospitals to weigh upon his mind, forbidding him to enjoy rank or wealth till these are furnished with all that can lessen misery and heal disease. We may come at once to the solution of this great difficulty. It is very easy. It can only be done by great gifts; and these can only come out of great accumulations of wealth, such as philosophers condemn as bad for the State and bad for the individual, who is apt to get buried in them. No substantial relief will come to Guy's Hospital or to the other hospitals of London if Guy's generosity be not imitated. This sum is not to be raised in driblets, nor are the ever-accumulating debts of the unendowed hospitals to be so reduced. We want gifts like that of Guy's. We have been so stimulating of late years the art of getting money, and so glorifying those who keep what they get, that there is danger of soon having no hospitals available—a danger already realised by thousands of sick poor who ought to be in hospitals and are not. Is it not a most humbling fact that the poor of the south side of the Thames are dependent for their hospital accommodation mainly on a man who lived a hundred and fifty years ago, who kept a bookseller's shop, and who took his dinner off his counter covered with a newspaper for his tablecloth. Neither did he neglect or forget his friends, but within a fortnight of his death the hospital was open and sixty poor patients were resting on the beds which his kindness had provided. What a monument he has still! What a glory there is in such gifts, even as there was in the pagan world—"namque et titulis et fascibus olim major habebatur donandi gloria." There is no serious fault to find with the administration of Guy's Hospital, though if the public are to be asked to support it, the public must be admitted to the councils and the confidence of its authorities. We shall watch with some anxiety the result of the appeal of the Lord Mayor and his supporters. The times are critical for the great hospitals, and for the very system on which they exist. Wealth persists in increasing; if the *gloria donandi* increases with it, all will be well.

METROPOLITAN ASYLUMS BOARD.

AT their meeting on Saturday last the Metropolitan Asylums Board had again before them the question of building a permanent hospital at Darenth, the subject being brought under their consideration by various boards of guardians who had written protesting against the proposed expenditure. The chairman, Mr. Galsworthy, pointed out that the managers were not now seeking, as had been represented, to expend £84,000, but had adopted a resolution which did not specify any definite sum. Sir Edmund Currie made a final effort to induce the Board to depart from its previous decision, but without avail. We cannot but think that in these differences the managers are losing sight of the more important question of the planning and construction of the hospital. The desire of the Local Government Board that only temporary buildings should be erected can only mean that permanent buildings such as have been provided elsewhere have failed in their object, and that they are unwilling that the managers should incur the larger expenditure of a permanent hospital before a definite opinion has been formed as to the proper method of its construction. The Asylums Board at a later stage of the meeting adopted a report of their Ambulance Committee, which promises to confer a great benefit upon the metropolis. The ambulances of the managers are now limited in their use to the removal of infectious cases to their hospitals: they have now expressed their willingness, if the power be conferred upon them, to undertake the general removal of all such cases throughout the metropolis, whatever may be their destination. This is the only effectual method by which the use of public conveyances can be prevented, and the managers rightly point out that it would be then possible and necessary to constitute as an offence the use of any street cab for the removal of a person suffering from infectious disease.

THE LESSONS OF THE CAMPBELL CASE.

THERE is only one reflection to be made on the Campbell case which it seems worth while to offer for public consideration, at least at this conjuncture—namely, that the purity and consequent happiness of social life are not advanced by the law and custom which force these exposures of domestic infelicity on public attention. It is not for the good or improvement of the community that a large portion of the "news of the day" should consist of

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such recountals as the daily papers have contained during the last few weeks. Those who do not gloat over the least edifying of news columns must be heartily glad to find that the feast of unreason has at length come to an end. We congratulate Mr. Bird on his emancipation from a state of mental bondage which must have been worse than physical slavery, and we trust the wrong and humiliation through which this respected member of our profession has passed will soon be forgotten. It seems to be the too common lot of medical men to be maligned and tortured by those who owe them a debt of gratitude for services cheerfully rendered. This leads us to remark that one, and not the least forcible, lesson of the Campbell case is that which we have so often tried to teach in these columns—that medical practitioners act wisely when they do not make friends of their patients, but treat their friends strictly professionally. The several relationships of *friend* and *medical adviser* are not socially compatible. The one position ought to be abandoned when the other is assumed. It is in the confusion of the two characters that difficulty and scandal take their rise. Another lesson, scarcely less hard to learn, but not a whit less important, is the unwisdom, both from a personal and a professional point of view, of medical men appearing in court to support or oppose particular lines of evidence. When counsel pit one medical witness against another the prestige of the profession is sacrificed. It is so not only in cases of the class to which we are now alluding, but whenever and wherever medical evidence is produced to bolster up a plea or line of argument, whether of accusation or defence, that wrong is done. It is of course unavoidable that medical practitioners should appear in court; but when they do, we are strongly of opinion that it should be only as witnesses of scientific fact, and as far as possible fact known or ascertained, before a legal issue is raised. Otherwise there can scarcely fail to be *petitio principii* or *suppressio veri*, either or both; not, as is hastily and ignorantly assumed, because medical witnesses are unscrupulous, but because the forensic method and practice will have it so.

ACTION OF DRUGS IN ALBUMINURIA.

AN interesting communication on this subject was read in the Section of Therapeutics at the Brighton meeting of the British Medical Association by Dr. Robert Saundby. He pointed out the difficulty of foretelling what action drugs might possess on the renal processes in genuine albuminuria. The number of drugs with which he experimented was very large. The following are his chief conclusions:—Alkalies used in the form of diluents such as a quart of bitartrate of potash imperial (one ounce and a half to a pint), daily, gave distinctly favourable results in cases of chronic persistent and copious albuminuria. He has employed also citrate of lithia, bicarbonate of potash, ammonic benzoate, and bicarbonate of soda, and includes them in the favourable opinion. The beneficial effect was not due to the formation of alkali-albumen: for Esbach's fluid, which was the method employed, precipitates that form of albumen. Tannate of soda, or rather an ounce mixture of tannic acid and bicarbonate of soda, of each ten grains, with fifteen minims of glycerine, also gave good results. In one case the albuminaria was diminished nearly one-half. Nitroglycerine and fuchsin appeared to have no good effect. Digitalis and other heart tonics—caffeine, strophanthus, sulphate of sparteine, iron salts, acetate, sulphate, and perchloride—increase the amount of albumen passed. Apocynum was not found to have any diuretic action in drachm doses of the tincture, and it increased the albumen in two cases. Turpentine had no beneficial effect, though hæmaturia followed its employment in one-minim doses. Doses of the 1000th of a grain of bichloride of mercury were also inoperative.

TESTIMONIAL TO SIR ANDREW CLARK.

A TESTIMONIAL to Sir Andrew Clark is proposed, and will doubtless be carried to a successful issue. The proposal was occasioned by his recent retirement from the more active duties of the office of physician to the London Hospital. A committee was formed consisting of the President of the hospital, H.R.H. the Duke of Cambridge, members of the medical staff, governing body, and students of the hospital, to carry out the wishes of the promoters. Though the movement naturally emanates from the London Hospital and its medical school, with which Sir Andrew's name is so honourably and indissolubly associated, and the committee will consist of gentlemen connected with one or other of these bodies, yet it is believed that many of the public and of the profession, quite unconnected with the hospital, will be glad to contribute. Sir Andrew is not a mere physician or teacher of medicine. He is more than any other consultant a public man, who, with marvellously little consideration for his own convenience, meets the public for the discussion of current questions in which his special knowledge and experience may be of use; and on such occasions he is ready to take as well as give. He has an ear for public opinion as well as an opinion of his own, which he expresses with equal lucidity and conviction. His form and speech are among our familiar impressions, and his medical dogmas are tempered with a human element, which makes them more effective and acceptable. It may well be that the public will be glad to honour such a member of the profession, who considers not himself when he can be of any use to the public; and we have only to express our hope that the movement, of which Mr. John Henry Buxton is the treasurer, may be very successful.

QUEEN'S COLLEGE, BIRMINGHAM.

DR. SUCKLING concluded on Tuesday last his post-graduate lectures on the Diagnosis and Treatment of Diseases of the Central and Peripheral Nervous System. The delivery of such a course was more or less of an experiment, and, judging from the large attendance (averaging over seventy-five), may be considered as a complete success. The lectures have been rendered additionally interesting, as well as instructive, by the exhibition of forty living cases designed for the illustration of special portions of the course. These included cases of pseudo-hypertrophic paralysis in the child and adult, progressive muscular atrophy of various types, facial hemiatrophia with typical cases of locomotor ataxy, peripheral neuritis, writer's cramp, &c. During the course Mr. Wood-White, of the Eye Hospital, demonstrated the use of the ophthalmoscope and perimeter in the diagnosis of nervous diseases, and showed a number of illustrative cases. After the last lecture a demonstration of pathological specimens bearing upon the subject of the course was given. It is most probable that the success of this course will lead to its being the precursor of others from time to time.

RESCISSION OF THE MUZZLE ORDER.

HAS Sir Charles Warren acted with sound judgment in rescinding the police order for keeping the dogs of the metropolis under proper control? We doubt whether he has considered the matter with sufficient care. It is a popular fallacy to suppose that hydrophobia cannot be epidemic during the cold weather. The wolves of cold countries are not less harmful during periods of greatest depression of the thermometer; and the bite of a mad dog is likely to be as lethal in the winter as in the hotter months. Further, we are amongst those who think that the police order has not been carried out with sufficient stringency to effect any great

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and lasting result. Many stray dogs have disappeared from our streets, and for this partial clearance we must at least be thankful. But it would certainly have been more for the good of the greater number, not only of the canine but of the human race, if the police order had remained in force for some time longer. And still more would the utilitarian principle have prospered if the law were effectively enforced for a sufficient length of time in the whole of the dominions, states, and empires of the world wherein rabies had been known to occur. Does it not savour somewhat of the ridiculous that Nottingham should have recently adopted the muzzling order which in London has just been withdrawn.

LOCAL GOVERNMENT.

THE subject of Local Government has evidently been seriously considered by the Cabinet, for Mr. Ritchie has announced his intention of bringing before Parliament during the coming session this long-expected measure. The speech made at the annual dinner of the Melksham Agricultural Society by Mr. Walter Long, M.P., Parliamentary Secretary to the Local Government Board, gives some information with regard to the constitution of the authorities which are to be called into existence. These are of course to be representative, but by this word is meant that the various interests which will be affected by the action of the authorities are to be represented upon them. No more difficult task could be undertaken than to carry into effect this intention; the very proposal to constitute authorities upon these lines invites criticism which may be found to seriously imperil the safety of the Bill. It may be expected that the more Radical members of Parliament will desire to accept the present basis of election as that which should be adopted in any further legislation, but local authorities have in many districts disappointed those who hoped for efficient work, and some other change than the mere alteration of their powers and the boundaries of their districts is evidently needed. We shall await the publication of the Bill with much interest, but there is, we fear, little hope that the consideration of its provisions will this session receive the attention of the House. The more urgent questions of Procedure, of Irish Government, and of Supply will afford too many opportunities for the expenditure of time to warrant the existence of any hope that Parliament will be able so soon to express any opinion upon Mr. Ritchie's measure.

THALLIN IN TYPHOID FEVER.

THE introduction of such drugs as "kairin," "antipyrin," and "antifebrin" has somewhat diverted attention from a very powerful antipyretic agent—viz., thallin. Professor Ehrlich lately presented to the Clinical Society of Berlin the results of some researches he has been making with this last-named agent, especially in the treatment of typhoid fever. (*Münch. Med. Woch.*, No. 47.) From experiment, he had found that after administering the drug to animals it was not retained in the nerve centres, but mostly in the fatty tissue of the body. He also found that there was a marked difference in toxic action, according as to whether it was administered by the mouth or subcutaneously, the greater inertness of its effect in the former case being attributable to the hindrance to absorption from the presence of intestinal contents. The lesions induced by a toxic dose comprised fatty degeneration of the kidneys, necrosis of the salivary glands and pancreas, and hæmorrhagic infarcts in the renal pyramids. The chief action of thallin is antipyretic, but it is capable also of moderating inflammation. As regards typhoid fever, it was administered by Ehrlich in two different ways. The first plan consisted in commencing with doses of 0·06 gramme every hour, and reducing the dose to the minimum required to give any effect. The other plan was to commence with a minimum dose, and increase it until an effect was produced, and then to continue the prescription at the dose thus attained. The action of thallin is especially noticeable in its effect on the sensorium and general condition of the patient, who presents the appearance of convalescence, whilst the splenic swelling and roseola are still present; and if the drug be discontinued the temperature will rise again. It is not therefore surprising to learn that, whereas of twenty-eight cases treated by bathing the average stay in hospital was thirty-seven days, of seven cases treated by thallin (minimum doses) the duration of treatment was forty-seven days, and cases on a scale of progressive doses thirty-eight days. However, Professor Ehrlich claims advantages for the drug in the absolute control it exerts over the pyrexia, and the sense of well-being enjoyed by the patient. There were no intestinal hæmorrhages in these cases, and no instance of perforation. The kidneys were not affected, but sequelæ in the form of hyperæmia and œdematous swellings seemed due to the use of the drug. It was not thought that thallin had any specific action against the typhoid bacillus, but it did seem to limit the degree of intestinal ulceration. Professor Ehrlich considers it to be on a level with the bath treatment. Dr. Fränkel pointed out that if the statement were correct that thallin is not found in the nerve centres its action in reducing temperature was rather inexplicable. He had exhibited it in increasing doses, but could not say that the patients experienced any special benefit attributable to the diminished fever. Dr. Guttmann had not been favourably impressed by its use, and had noted the production of rigors.

THE GOOD SERVICE PENSIONS.

A MEDICAL good service pension of £100 a year has become vacant through the death of Sir James Salmon, I.G. It is one of three established in 1859, by warrant, "to be awarded to the most meritorious medical officers of the Royal Navy, under such regulations as shall from time to time be determined on." They have been hitherto awarded to a succession of retired officers of the rank of I.G., and the pension now vacant will in all probability fall to Sir William R. E. Smart, K.C.B., K.L.H., retired I.G., who has obtained his decorations and the appointment of honorary physician to the Queen in recognition of his meritorious services. Sir William is the author of important and interesting papers on epidemics and diseases prevalent in the Navy and in tropical climates, of which many are to be found, in full or in abstract, in our pages.

THE HIGHER EDUCATION OF THE BLIND.

AMONG the possible higher developments of education there still remains at least one neglected sphere for which no adequate provision has been made. This is the establishment of some system of instruction for blind youths of the upper classes. The sons of poorer men are in this respect comparatively fortunate, inasmuch as they possess in specially appointed institutions that stimulus to learn which comes of intercourse with fellow-learners. Public sympathy has naturally first attended to their needs. It is apt to forget that their wealthier brethren have need of the same companionship and scholastic method in prosecuting studies of a higher order. At present there exists but one school, Worcester College, which aims not unsuccessfully at meeting these requirements. Even this establishment is unendowed, and exists only as a private venture. That it ministers to a felt want is undoubted, and that it should remain possessed of no more certain means of maintenance is therefore the more to be regretted. At a meeting held last week in the church-room, St. Jude's, South Kensington, an important

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step was taken towards its surer foundation in the appointment of a committee entrusted with the work of raising £6000 required for this purpose. We are glad to add that a part of this sum has already been promised.

HYSTEROGENIC ZONES ON MUCOUS SURFACES.

ATTACKS of a spasmodic or of a lethargic nature in hysterical patients can often, as is well known, be excited by touching or pressing upon certain spots or zones on the surface of the body. These external "hysterogenic" zones were examined and described by M. Gaube, and later by M. Blanc-Fontenille. Quite recently, too, M. Lichtwitz, who had been asked by M. Pitres to examine a hysterical patient laryngoscopically, observed that a severe convulsive attack was produced by touching the epiglottis, and subsequently by examining the mucous membranes of half a dozen hysterical patients he has been able to show that hysterogenic zones exist there as well as on the external surface. In all the six cases the nasal fossæ were the seat of spasmogenic zones, which were bilateral except in one instance, in which touching the nasal mucous membrane on one side produced a hypnotic attack. In four cases either spasmogenic or lethargogenic zones were found in the laryngeal mucous membrane, the posterior wall of the pharynx presenting one instance of each kind. The mucous membrane of the gums, the conjunctivæ, and the external auditory meati also furnished "zones." In some of the cases the sensitiveness was obliterated by cocaine, so that necessary therapeutic applications could be made; in other cases the use of cocaine did not succeed. In one case, in which the leg was in a plaster bandage, where a violent attack might have proved serious, a convulsion, which was accidentally induced by touching the mucous membrane, was arrested immediately by a friend whom the patient had brought with her, who was acquainted with her external spasmo-inhibitory zones.

THE CHAIR OF MATERIA MEDICA AT ABERDEEN.

THE following gentlemen are, we understand, candidates for the above chair:—Dr. John G. Hall, assistant to the Professor of Materia Medica in the University; Dr. J. C. Ogilvie Will, surgeon to the Infirmary; Dr. Gordon, assistant-surgeon, Sick Children's Hospital; Dr. Robert M. Wilson, Old Deer, formerly Assessor Examiner in Materia Medica and Botany in the University; Dr. Leith Napier, assistant to the Professor of Materia Medica, University of Glasgow; Dr. R. Stockman, assistant to the Professor of Materia Medica, University of Edinburgh; Dr. Theodore Cash, assistant to Dr. Brunton, lecturer on Materia Medica, St. Bartholomew's Hospital, London; and Mr. Joshua Law Kerr, M.B., C.M. Aber., late assistant to the Professor of Midwifery in the University of Aberdeen.

MEDICAL EDUCATION IN MADAGASCAR.

IT is gratifying to learn from *Medical Missions* that an important advance has recently been made in the matter of medical education in Madagascar. There are now four medical missionaries in Antananarivo—Drs. Fox and Allen of the Society of Friends' mission, and Drs. Borchgrevink and Guldberg of the Norwegian mission. They have combined to form a board for medical education for the furtherance of the work of medical missions, and under the joint auspices of the missionary societies involved. A curriculum has been decided upon, and each student is to complete a five years' course. It is not to be supposed that hitherto no attempts have been made in the direction of medical instruction. Some of the pupils of Dr. Davidson, the first medical missionary to the Malagasy, are practising in Antananarivo and elsewhere. Dr. Fox himself during the last five years has admitted twenty-one students. Dr. Davidson during his residence in Antananarivo prepared manuals on therapeutics and systematic medicine, which are in regular use by the Malagasy students, and Dr. Fox is now preparing other manuals for their use.

SANITATION IN KILMARNOCK.

AN important report has been prepared by Dr. John C. McVail, the medical officer of health, on the proper disposal of the excreta and house refuse of the population of Kilmarnock. Dr. McVail very properly contends that excreta should, if possible, be removed from the vicinity of dwellings before decomposition sets in, and this condition would require removal every forty-eight hours. The danger of their detention for a longer period is naturally greater in the case of such diseases as enteric fever; and Dr. McVail holds the same view with regard to scarlatina. The evidence as to mischief from scarlatinal excreta is by no means clear, but we can well conceive that they may contain the poison of the disease, and it is certainly right to look with special suspicion on all diseased excreta. In Kilmarnock it is taken for granted that the watercloset system is not adapted to all classes of the population, and after acquiring experience as to the working of other systems in northern cities, the pail system is strongly recommended for adoption; one pail to receive excreta and to be frequently changed for a clean one by the scavengers, the other to receive house refuse only. In the case of the latter pail, and subject to the regular incineration of vegetable refuse in the ordinary fire-places, a less frequent removal is held to suffice than is necessary in the case of the excreta-pails. The alternative system of merely emptying the pails instead of substituting clean ones is referred to; but it is rightly condemned. Wherever it exists the excreta-pail soon becomes foul, and hence the main advantage of the system, in so far as the prevention of nuisance and risk to health is concerned, is practically lost. Such a report as that prepared on the subject by Dr. McVail deserves, and will doubtless receive, the careful attention of those to whom it is addressed.

AFTER-CARE FOR MENTAL CONVALESCENTS.

THERE is especially great difficulty in the management of convalescents from mental disease, and we are glad that the proposal to provide suitable half-way houses between the asylums and the world is taking a practicable shape. It is, however, of the very highest importance that what is done should have the sanction and support, and be benefited by the practical counsel, of the superintendents of asylums. We would therefore advise the committee of the "After-care Association for Poor and Friendless Female Mental Convalescents" to place itself in direct communication with the committee of the Medico-Psychological Society, and thus ensure that money may not be wasted or misapplied. The work must be thoroughly practical, or it will fail in usefulness.

DIPHTHERIA AT SHIRLEY.

AN outbreak of diphtheria has been prevailing in Shirley, a suburb of the newly created borough of Croydon, and by the inhabitants of the locality affected the disease is very generally attributed to the defective means of sewer ventilation. Indeed, the odours issuing from the man-holes are described as horrible; and at a public meeting a request was ordered to be conveyed to the Mayor, asking that an independent sanitary engineer might be appointed to inspect and to report upon the system of sewers. It is somewhat unfortunate that this request was not complied with, for whatever the cause of the diphtheria may be, it seems pretty clear that the existing arrangements as to sewer

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ventilation are faulty. There are, however, sanitary officials in Croydon who are quite able to investigate the source of the prevailing disease, and also to advise as to the proper remedies.

UNIVERSITY OF LONDON.

A MEETING of Convocation of the University of London has been summoned for January 18th, when no doubt an interesting statement as to the relations of the University to the present position of the question of medical degrees will be forthcoming.

AN ARTIFICIAL RAMUS AND CONDYLE.

DR. CUNNINGHAM, at the last meeting of the Odontological Society, showed a very ingenious apparatus invented by Herr Rosenthal, which was designed to meet the following difficulty. The ramus and condyle of the lower jaw having been removed for a sarcoma, it was subsequently found that the other side became dislocated, and, after reduction, for which an anæsthetic was required, slipped out again immediately. Gold bands were fitted accurately to the last molar of each jaw on the side where the bone had been removed, to the upper of which a thick slightly curved wire was soldered. This wire fitted loosely into a tube soldered to the band round the lower tooth, and the bands themselves were fixed to the teeth by screws tapped into them. The apparatus entirely prevents the dislocation, and although there is no lateral movement the patient can eat fairly well.

ST. ANDREWS UNIVERSITY.

A MEMORIAL from the Senatus Academicus of the University of St. Andrews has (as was stated in our last issue) been presented, setting forth the claims of the University to such an increase in the staff of its medical professors as would enable it to give two *anni medici*, the period of residence required by the Scottish Universities for medical graduation. A memorial to the same purpose is in course of preparation from the graduates of the University, and is being largely signed, some 800 having already appended their names.

BACTERIOLOGY IN BARCELONA.

THE municipality of Barcelona has arranged to establish a laboratory of bacteriology, and to furnish it with the requisite appliances for all classes of investigations. It is to be under the well-known Dr. Férran, whose views were accepted much more generally in Barcelona than in Madrid. The measure was agreed to in the Town Council by a majority of twenty-five to three.

ANOTHER LUNACY BILL.

THE Home Secretary is said to have under consideration a proposal to deal with the laws relating to lunatics. Will it find its way to the Statute-book; or, if it should, will it be worth anything? We have doubts, bred of too many disappointments.

ROYAL UNIVERSITY OF IRELAND.

OUR Dublin correspondent writes:—An election for a member of Senate will take place at a meeting of Convocation to be held on the 30th inst., when it is believed that Mr. Stephen O'Sullivan, Professor of Surgery in the Queen's College, Cork, will be successful. There are four candidates in the field for the vacancy. By the death of Dr. Lyons another vacancy on the Senate has arisen, that gentleman having been nominated by the Crown on the foundation of the University in 1860.

FOREIGN UNIVERSITY INTELLIGENCE.

Berlin.—Professor Westphal has just celebrated the completion of his twenty-fifth year as teacher in the University. The total number of students, including all the faculties, is the highest on record, being 5357. Of these 1297 are medical students.

Dorpat.—The unveiling of the Baer memorial has just taken place.

Gottingen.—The 150th anniversary of the founding of the University will be held next year.

Innsbruck.—The Government has promised to provide the funds for building a new Anatomical Institute.

Konigsberg.—The name of Professor Braun of Jena is now brought forward in addition to those of Drs. Madelung and Miculicz, as a candidate for the chair of Surgery. During the vacancy Dr. Stetter is performing both the clinical and the professorial duties.

Leipsig.—Professor Credé has intimated his desire to resign the charge of the Obstetric Institution, which he has held for thirty years.

Leyden.—Dr. Simon Thomas, Professor of Midwifery, has just died at the age of sixty-six, having held the professorship for nearly forty years.

Upsala.—An Extraordinary Professor of Anatomy is to be appointed, who is to occupy himself with Histology and Embryology.

St. Petersburg (Military Medical Academy).—Privat-docent Dr. A. Beltsoff has been appointed by the Conference (Senate) to take temporary charge of the Surgical Clinic of the late Professor Kolomnin. It is stated by the St. Petersburg correspondent of a Riga paper that Professor v. Bergmann of Berlin has declined an invitation to the St. Petersburg chair.

Granada.—Dr. Don Daniel de Zuloaga y Santoe, Professor of Midwifery, has died from cerebral hæmorrhage, which occurred just as he was proceeding to his morning lecture.

WE regret to announce the death on the 17th inst. at his residence near Gosport, of Sir James Salmon. The deceased was born at Irvine, Argyleshire, in 1811, and received his professional education at the University of Glasgow. At the age of twenty-two he entered the Royal Navy as assistant-surgeon, becoming surgeon in 1840, Deputy Inspector-General of Hospitals in 1855, and Inspector-General in 1868, in which year he was knighted. Sir James was an honorary physician to the Queen, and was in receipt of a pension for meritorious services.

SIR WILLIAM STOKES (President of the Irish College of Surgeons), Dr. William Moore (ex-President of the Irish College of Physicians), and Sir George Bowens (a Governor of the Apothecaries' Hall), are candidates for the position of Crown nominee on the General Medical Council, in the room of the late Dr. Lyons.

THE Lettsomian Lectures will be delivered at the rooms of the Medical Society of London on the 3rd, 17th, and 31st of next month by Dr. J. Langdon Down. The subject of the lectures is "On some of the Mental Affections of Childhood and Youth."

THE Madras Government is about to engage in the cultivation of jalap. The demand this year from the Madras Medical Department was for 1300 lb., and only 400 lb. could be obtained from private growers.

SIR WILLIAM TURNER has been elected by the University of Edinburgh to represent that body in the General Medical Council.

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As will be seen by a letter from Mr. Upton, published in another column, the Apothecaries' Society has appointed Mr. R. Brudenell Carter to be its representative in the General Medical Council, in place of Mr. Bradford, whose term of office had expired.

DR. MULES, of the Manchester Royal Eye Hospital, has been appointed one of the Vice-Presidents in the Ophthalmic Section of the International Congress to be held at Birmingham.

THE next President of the Pathological Society will probably be Sir James Paget, Bart.; and of the Clinical Society, Dr. W. H. Broadbent.

THE cholera is very prevalent in Buenos Ayres and its vicinity. In Cordova on Nov. 30th there were twelve new cases and five deaths.

THE ROYAL COLLEGE OF PHYSICIANS AND MEDICAL DEGREES.

THE following is a brief report of the debate which arose at the meeting of Fellows of the College of Physicians on the 16th inst., on the motion that the first resolution of the report of the delegates be adopted.

Sir W. GULL said the terms of the resolution were too vague, it not being indicated what degree should be conferred. The College and the spirit of the time had determined that there should be some recognition given to London students beyond that conferred by the Conjoint Board; but no decision had been come to as to what should be the nature of that recognition or on what terms it should be given. Believing as he did that the two Colleges constituted one of the most important medical examining boards in the world, he considered the condition named in the report, that candidates passing the present examinations should have a degree conferred on them, "provided that they have passed such examinations in arts and science as may hereafter be defined," to be weak and inadequate. The Colleges should advance clinical medicine and surgery, and their degree should be based on excellence in these subjects. It was the only degree which they were competent to give, for it embraced the subjects for which they alone were responsible.

Subsequently Sir William moved an amendment to the effect that candidates who have passed the examinations of the Conjoint Board shall be admitted to a further examination for a degree in clinical medicine and surgery.

Dr. ALLCHIN moved—"That no scheme for conferring degrees in medicine and surgery upon candidates who have passed the examinations of the Examining Board in England shall be deemed satisfactory unless it provide for the conferring of degrees by some university body outside the Colleges themselves, but upon which they may be represented." He admitted that the question whether such candidates should have a degree or not had been settled; but the question remained how that principle was to be carried out. The report suggested a means, but except in one of the later clauses the idea that the degree-conferring body should be a university was curiously concealed. It was clear, however, that a university was contemplated; but how was it to be established? The report was not the result of a unanimous vote, and he was unable to reconcile its tenour with the expressions of the report of the Teaching University Association deprecating the proposal that the Colleges should grant a degree. Yet seven of the delegates who are responsible for the report were members of the committee of that Association. He contended that the statements in the two reports were absolutely contradictory, and pointed out that Professor Marshall at the meeting of the Association on the previous day had stated that if the Colleges adopted a scheme outside the lines laid down by the Association, it would be their duty to oppose it. He (Dr. Allchin) failed to see any reason why the Colleges should constitute the proposed university; the expression in Clause 2, that it is "the natural way," being scarcely explicit; and in Clause 4, the statement that the curriculum of the Colleges is on a level with that of the majority of the universities is put forward as a reason why they should grant degrees. But there were very cogent reasons against this. In the first place, to convert the present Colleges as they stand into a university is against all precedent whatever. The mere fact of granting a degree is the least among the functions of a real university. Montpellier—which was cited as a precedent—existed as a teaching body. He contended that they had to deal in this question with the academic aspect of a university as distinguished from the corporation aspect. Further, the report was inconsistent in urging at one time the advantages of London as a place for clinical study, and therefrom arguing in favour of the scheme, and in the first resolution giving permission to the governing body to admit students who have pursued their work in other than London schools. Are the Colleges, he asked, to be merged in the university, or are they to go along side by side? Is the College of Physicians to grant the Fellowship with one hand and a degree with the other? Is its prestige to be buried in a new "University of Westminster"? The degree in contemplation must be an inferior degree, so that they were asked to constitute a second-rate university. He did not think he was bound to suggest an alternative scheme; but he maintained as a principle that the degrees should be conferred by a *bonâ-fide* university—an outside body. This, he could conceive, might be either the London University itself, or such a university as was contemplated by the Teaching University Association. It had not been suggested that any particularly higher standard should be insisted on; indeed, if it were, the object would be defeated. That object—viz., to keep students in London for clinical work—was minimised by the permissive clause of Resolution 1. The proposal was purely a professional one; and if the College took the steps demanded, it would detract from its honour and position.

Dr. NORMAN MOORE seconded the amendment. He said the report was the outcome of a very large number of compromises, and the delegates not being anxious to insist too much on their individual opinions, there was no minority report. There were two distinct views before the Committee—the one being that the public require a degree, and the other that the question of giving a degree should be based on the desire to improve medical learning. The minority held to the second view, the majority to the first. The College would have a difficulty in obtaining powers to get a degree upon the mere ground that practitioners are desirous of it; and he always held that the mere acquisition of a degree (e.g., that of Brussels) for its value as a title alone was a deception, making the public believe that there had been a university education behind it. A university consists of people who learn and people who teach; and the time has come when such a university can be established in London. When the Conjoint Board was formed, the College of Physicians entered into it on the ground that it was not competent to appoint examiners in surgery; and on the same ground how is it competent for a medical board to control examinations in arts and science? The Colleges should give the public something that is of value; but if that report were adopted, they would give what was worthless. On the other hand, the College had the power to play a great part in forming a university in London.

Dr. CURNOW said they had to remedy an acknowledged grievance. As to waiting for the institution of a teaching university, he believed that the first faculty of such a university would be established under the auspices of the two Colleges, and he hoped the basis would be widened. Were they to wait for the science and arts teachers in the metropolis to combine, when they had a concrete medical faculty already at hand? Universities differed all over the kingdom—e.g., Durham, Oxford, London, Edinburgh, Dublin; so that it was absurd to say that there was only one type of university.

Dr. BRISTOWE pointed out that the College decided last year that steps should be taken to give a degree.

Sir RISDON BENNETT differed from Dr. Bristowe. Last year's resolution empowered the delegates to suggest some mode of obtaining a degree, and did not bind the College to confer it.

The PRESIDENT stated that Dr. Moore was on the subcommittee which drew up the report, and with respect to the clause empowering the governing body to include other

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than London schools, it was felt that they ought to recognise any large clinical school outside London.

Dr. WILSON FOX pointed out that titles at present conferred by the Colleges were not regarded by the public as equivalent to degrees, although the profession were aware that they were not inferior. So long as a large body of English medical men were under that sense of inferiority, their profession suffered in dignity. The University of London for fifty years had been upholding the view that a degree in medicine is a stamp of knowledge; and, taking Edinburgh as the type of a medical university, he could not see that the relations under which students live there are at all different from those in London. It was entirely hopeless to appeal to the University of London, whose degrees were, as Sir James Paget had said, "honours degrees." The Edinburgh degree is a "pass degree," and what London wants is a good medical pass degree, to stamp a man as "learned in medicine." Turning to Dr. Allchin's speech, Dr. Fox asked whether the two Colleges were incapable and unfit to give degrees? It passed comprehension to see what the extraneous body suggested in the amendment is to do for the Colleges; and the alternative, that the Colleges would be merged in a university, was not necessary. He did not see why they should not retain their independence, and yet combine for this great purpose, and he could not see how they would be disgraced by so doing. This matter was very urgently demanded by medical students. They could hardly wait for the formation of a teaching university; but, at any rate, they could constitute a medical faculty, and leave the full development of the university to the future.

Dr. CHAMBERS disputed the statement in the report that the curriculum of the Colleges was on a level with those of the majority of universities, and showed by statistics that the best work was done by university graduates.

Dr. QUAIN asked how such degrees were to be conferred except by the Colleges. As to Sir W. Gull's objection, the scheme simply meant that the degree should not be inferior to a university test. The whole question of how it is to be done must be left over. He sympathised with the idea that the degree should be confined to London students, but saw difficulties in practically carrying it out. Dr. Allchin's amendment would set the two Colleges seeking for a body which has no existence.

Sir H. PITMAN moved, and Sir G. PAGET seconded, the adjournment of the debate.

The adjourned meeting took place on the 23rd inst., when there was again a very large attendance of Fellows.

Sir H. Pitman, in an eloquent and forcible speech, reminded the College of the steps previously taken in the matter, and pointed out that the opportunity was one which the College should not let go, for it would never recur. Dr. Matthews Duncan and Sir Risdon Bennett supported the amendment, which was opposed by Dr. Ord, Sir A. Clark, Dr. Quain, Dr. Dickinson, Dr. Latham, Dr. Barnes, Dr. Broadbent, and Dr. Priestley. On a division, nine voted for Dr. Allchin's amendment, which was negatived by a very large majority in a full comitia.

The second resolution on the agenda, "that an application be made to the Crown by the Royal College of Physicians of London and the Royal College of Surgeons of England, acting conjointly, for power to confer degrees in Medicine and Surgery," was then moved by Dr. Broadbent, seconded by Sir W. Gull, and carried unanimously.

The first resolution and Sir W. Gull's amendment were referred to the delegates of the two Colleges for further consideration.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 5371 births and 3605 deaths were registered during the week ending Dec. 18th. The annual death-rate in these towns, which had steadily increased in the preceding four weeks from 19·1 to 22·9, declined again last week to 20·7. During the first eleven weeks of the current quarter the death-rate in these towns averaged 19·8 per 1000, and was 2·0 below the mean rate in the corresponding periods of the ten years 1876–85. The lowest rates in these towns last week were 11·9 in Derby, 12·1 in Brighton, 14·8 in Birkenhead, and 17·1 in Birmingham. The rates in the other towns ranged upwards to 27·6 in Liverpool, 28·0 in Wolverhampton, 28·3 in Norwich, and 37·1 in Preston. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had been 379 and 424 in the preceding two weeks, declined again last week to 386; they included 141 from measles, 77 from scarlet fever, 54 from whooping-cough, 42 from "fever" (principally enteric), 37 from diphtheria, 34 from diarrhœa, and 1 from small-pox. No death from any of these zymotic diseases was registered last week in Derby; whereas they caused the highest death-rates in Bristol, Leeds, and Wolverhampton. The greatest mortality from measles occurred in Bristol, Halifax, Leeds, and Wolverhampton; from scarlet fever, in Liverpool, Salford, Bradford, and Sunderland; from whooping-cough, in Preston and Huddersfield; and from "fever," in Manchester, Preston, and Plymouth. The 37 deaths from diphtheria in the twenty-eight towns included 16 in London, 6 in Portsmouth, 3 in Birmingham, and 4 in Liverpool. Small-pox caused one death in London, but none in its outer ring, or in any of the twenty-seven large provincial towns. Only one case of small-pox was under treatment on Saturday last in the metropolitan hospitals receiving cases of this disease. The deaths referred to diseases of the respiratory organs in London, which had increased in the six preceding weeks from 293 to 494, declined again last week to 415, and were 114 below the corrected weekly average. The causes of 99, or 2·7 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Plymouth, Birkenhead, and Huddersfield. The largest proportions of uncertified deaths were registered in Derby, Halifax, Blackburn, Oldham, and Salford.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 23·1 and 22·0 per 1000 in the preceding two weeks, rose again to 22·5 in the week ending Dec. 18th; this rate was 1·8 above the mean rate during the same week in the twenty-eight large English towns. The rates in the Scotch towns last week ranged from 16·3 and 18·0 in Leith and Perth, to 26·9 in Glasgow and Paisley. The 556 deaths in the eight towns last week showed an increase of 12 upon the number in the previous week, and included 19 which were referred to whooping-cough, 16 to scarlet fever, 12 to diarrhœa, 11 to "fever" (typhus, enteric, or simple), 10 to measles, 6 to diphtheria, and 1 to small-pox; in all, 75 deaths resulted from these principal zymotic diseases, against 81 and 63 in the preceding two weeks. These 75 deaths were equal to an annual rate of 3·0 per 1000, which exceeded by 0·8 the mean rate from the same diseases in the twenty-eight English towns. The fatal cases of whooping-cough, which had been 19 and 15 in the previous two weeks, rose again last week to 19, of which no fewer than 16 occurred in Glasgow. The 16 deaths from scarlet fever showed a further decline from the 25 and 17 returned in the previous two weeks, and included 10 in Glasgow and 2 in Edinburgh. The 12 deaths attributed to diarrhœa (of which 7 occurred in Glasgow, 3 in Aberdeen, and 2 in Perth) showed a further decline from the numbers in recent weeks. The 11 deaths referred to "fever," however, showed a considerable increase upon recent weekly numbers, and included 8 in Glasgow, against but 2 in each of the preceding two weeks. All the 10 fatal cases of measles, exceeding the numbers in recent weeks, were returned in Glasgow; while of the 6 deaths from diphtheria, 4 occurred in Glasgow and 2 in Edinburgh. The death from small-pox was registered in Aberdeen. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 125, 142, and 144 in the preceding three weeks, further rose last week to 174, but were 1 below the number in the corresponding week of last year. The causes of 57, or more than 10 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had increased in the preceding five weeks from 23·6 to 35·6, declined again to 29·6 in the week ending Dec. 18th. During the first eleven weeks of the current quarter the death-rate in the city averaged 25·5; the mean rate during the same period did not exceed 18·2 in London and 18·9 in Edinburgh. The 290 deaths in Dublin last week showed a decline of 41 from the

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high number in the previous week, and included 9 which were referred to "fever" (typhus, enteric, or simple), 5 to scarlet fever, 5 to diarrhœa, 2 to whooping-cough, 1 to measles, and not one either to small-pox or diphtheria. Thus 22 deaths resulted from these principal zymotic diseases, against 21 and 23 in the previous two weeks; they were equal to an annual rate of 3·3 per 1000, the rates from the same diseases being but 1·7 in London and 1·0 in Edinburgh. The 9 deaths from "fever" showed a marked increase upon those returned in recent weeks, and exceeded the number in any week since the middle of February last. The fatal cases, however, of scarlet fever, diarrhœa, and whooping-cough were all fewer than those returned in the previous week. Four inquest cases and 2 deaths from violence were registered; and 41, or nearly a quarter, of the deaths occurred in public institutions. The deaths of infants exceeded the number in any recent week, while those of elderly persons showed a decline. The causes of 48, or 24 per cent., of the deaths registered during the week were not certified.

INFANT MORTALITY IN EGYPT.

The excessive mortality of infants and young children in Egypt, and especially in its largest towns, has recently been the subject of a special report by M. Engel, the medical superintendent of sanitary statistics, to the Inspector-General of Public Health in that country. It is pointed out that in Cairo the proportion of deaths under five years of age to total deaths was equal to 55·6 per cent. in Cairo, and to 52·2 per cent. in the three years 1882, 1884, and 1885. The political condition of the country broke the continuity of the statistics in 1883. In the fourteen largest towns of Lower Egypt the proportion was equal to 55·7 in the first and to 64·1 in the second quarters of the present year. These figures point conclusively to marked excesses of infant mortality, but the proportion of deaths of children to total deaths depends in great measure upon the proportion of children in the living population, which M. Engel has no means of ascertaining; and the high birth-rate in Egypt is a well-known fact. In order, therefore, to measure infant mortality by a more satisfactory standard, the proportion of these deaths to recorded births is also given. The mean proportion of deaths under one year to births in the last three years in Cairo was 31·4 per cent., and in four towns of Lower Egypt (Rosetta, Chibin-el-Kom, Guizet, and Benha) 26·8 per cent.; in Alexandria infant mortality, measured in this way was 21·5 in 1884 and 21·0 in 1885. Infant mortality, measured in this manner, did not exceed 15·1 per cent. in London during the ten years 1875-84, and during last year it was only 14·8; on the other hand, it must be remembered that in the five years 1870-4 this proportion of infant mortality was equal to 23·9 in Liverpool, whereas it fell to 18·8 in 1874-84. It is stated that the Egyptians show great affection for their children, but that only an insignificant proportion of them secure any medical attention in case of illness. M. Engel reports that in the smaller Egyptian towns not more than 1 per cent. of the deceased persons of all ages have been seen by a medical practitioner previous to death. Under these circumstances, and bearing in mind the fatal effect of the climate upon young children, the high rate of infant mortality in Egypt need cause no surprise.

THE SERVICES.

WAR OFFICE.—Army Medical Staff: Surgeon-General Sir Anthony Dickson Home, V.C., K.C.B., has been granted retired pay.

INDIA OFFICE.—The Queen has approved of the following promotions among the officers of the Staff Corps and Indian Military Forces made by the Governments in India:—Deputy Surgeon-General George Bidie, C.I.E., of the Madras Medical Establishment, to be Surgeon-General; Surgeon-Major Geo. Cochet Chesnaye, Surgeon-Major John Duncan, M.D., and Surgeon-Major Edward Ord Tandy, of the Bengal Medical Establishment, and Surgeon-Major Alexander Porter, M.D., and Surgeon-Major Samuel Bradshaw Hunt, of the Madras Medical Establishment, to be Brigade Surgeons; Surgeon Richard Nugent Stoker, Surgeon Gerald Bomford, M.D., Surgeon Arthur Barclay, and Surgeon Charles Joseph McCartie, M.D., of the Bengal Medical Establishment; Surgeon William O'Hara and Surgeon Thomas Hume, of the Madras Medical Establishment, and Surgeon Dhanjisha Navroji Parakh and Surgeon John Lucas, M.D., of the Bombay Medical Establishment, to be Surgeons-Major.

ARTILLERY VOLUNTEERS.—2nd Middlesex: James Hill Gibson, M.D., to be Acting Surgeon.

RIFLE VOLUNTEERS.—1st Volunteer Battalion, the King's Own Light Infantry (South Yorkshire Regiment): Acting Surgeon F. H. Wood resigns his appointment.

Correspondence.

"Audi alteram partem."

DISLOCATION OF THE HIP.

To the Editor of THE LANCET.

SIR,—In his remarks last week on my lecture on "Dislocation of the Hip" (THE LANCET, Nov. 27th), Mr. Morris confesses his inability to understand one of my conclusions, for he says, "I do not know how a dislocation can be other than *indirect* if the head of the bone is '*carried up to a variable extent*,' no matter by what force, *after it has left the acetabulum*." To which I must reply that I confess my inability to understand the difficulty. If the head of the bone is driven in one direction through the capsule onwards from the acetabulum, it is, I suppose, a direct dislocation, however variable may be the extent to which it is driven; and this is what I maintain occurs in many, at any rate, of the so-called backward dislocations of the hip. Force applied at the lower part of the thigh and knee, with the limb flexed, *ad*ducted, and inverted, drives the head of the thigh-bone through the lower and back part of the capsule between the obturator muscles to the back of the joint, or backwards and upwards, to an extent and in a direction varying with the amount and direction of the force. This, as I have said, may be shown in the dead body. Or, owing to somewhat more obliquity in the direction of the force, the head of the bone may be driven through the capsule at a correspondingly higher level under the obturator internus, tearing through that muscle with the gemellus superior, and coming into contact with, and perhaps tearing also, the pyriformis, and, it may be, one or more of the glutei. In these cases the course taken by the bone is in one direction, and is the resultant of force acting in one direction; though the course taken and the extent to which the head of the bone goes will, in different cases, vary according to variations in the line of action of the force and the amount of the force. The bone may be driven directly, backwards and upwards, through any part of the back of the capsule—the under, the middle, or upper part. Most commonly it appears to be the under part of the back of the capsule which gives way. The position of the limb—flexion, *ad*duction, inversion—is a usual or natural one, one of harmonious coördination, one therefore in which the limb is likely to be found when any shock occurs, which cannot be said of *ab*duction with inversion. Moreover, as in other dislocations, that under discussion is most easily reduced by the application of force in a direction (*ab*duction) the reverse of that by which the dislocation was produced.

Mr. Morris places side by side, in parallel columns, the accounts of the dissection of one of my cases and one of his to show the similarity between the two, the inference to be drawn being that in both the accident occurred during *ab*duction. But it is to be observed, first, that in my case the rent in the capsule extended higher than in his, reaching to near the attachment of the obturator externus; and, secondly, as we learn from the account of his case (Medico-Chirurg. Trans., vol. lx.), it is by no means clear that in it the accident did occur during abduction. Indeed, it seems as probable that, in both instances, it took place during *ad*duction as during *ab*duction.

I do not dispute the occasional occurrence of the accident in the manner for which Mr. Morris contends—viz., in the position of *ab*duction,—though, for the reasons given in the lecture, I do not think it is the usual manner. I fully appreciate also the good work which Mr. Morris has done in reference to this among other subjects; but I must submit that the greater facility and success in reducing dislocations of this and also of other joints in recent times is due, first and chiefly, to the introduction of anæsthetics;

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secondly, to the gentler methods of surgical treatment now generally adopted, of which the manipulatory proceedings are an example; and, thirdly, to the knowledge of the fact, for which we are much indebted to Mr. Morris, that the rent in the capsule is at a lower point than was formerly supposed.

I am, Sir, yours obediently,

Cambridge, Dec. 20th. G. M. HUMPHRY, F.R.S.

MR. SAVORY'S PAPER ON LIGATURE OF THE FEMORAL ARTERY.

To the Editor of THE LANCET.

SIR,—I think there must be some accidental inaccuracies in your report of Mr. Savory's paper on Ligature of the Femoral Artery at the Royal Medical and Chirurgical Society in your issue of to-day. I was unfortunately prevented from being at the meeting, and therefore can only trust to the report. In the abstract, quoted in your report, Mr. Savory is made to say that out of seventeen specimens of old ligature of the femoral in Scarpa's triangle, the artery was "pervious throughout in thirteen and partially closed in four." I suspect that what is meant is that in the thirteen cases only a small part of the artery—that immediately adjoining the spot where the ligature was applied—was found to be obliterated, while in the four the obliterated part was more extensive. Further, Mr. Savory is quoted as saying, in his reply to the observations made on his paper, that "he was not aware that any ordinary book stated that the artery was pervious from the ligature to the aneurysm." I had thought that this was stated in every text-book. Certainly, in my own book on the "Principles and Practice of Surgery," I state that in cases where considerable branches come off between the ligature and the aneurysm "there are two arches of anastomosis—one to convey the blood round the portion obliterated by the ligature, and the other to convey the blood round the obliterated aneurysmal sac, above which there is a pervious tract of artery," and I refer to a figure taken from a preparation in the museum of St. George's Hospital to prove this; while in another part of the book is another figure to show how small, in some cases, the obliterated part of the vessel is. The passage is on page 501, and the figures on page 502 and page 86 of the first edition of the book, and they remain unaltered in subsequent editions. Again, in the "System of Surgery," third edition, vol. iii., page 54, I say: "When the ligature has been applied far away from the disease, the blood returns into the vessel above the aneurysm"; and in the passage which follows I again describe the two arches of anastomosis. I have not looked at other text-books, but I should think it probable that they teach the same doctrine. I have taught it ever since I began to teach surgery, and, as far as I can recollect, have learnt it ever since I began to learn. I cannot but suspect, therefore, that the report is inaccurate. If I have misinterpreted Mr. Savory's meaning, I know that others have done the same, and a few words of explanation on so important and practical a subject might be useful.

I am, Sir, yours obediently,

Great Cumberland-place, Dec. 18th. T. HOLMES.

THE FELLOW, THE MEMBER, AND THE FRANCHISE.

To the Editor of THE LANCET.

SIR,—It is with considerable diffidence that we take up the gauntlet thrown down by Mr. Erichsen, and the more so as there is not one Member of the College who does not entertain feelings towards that gentleman approaching those of personal affection. But as the cause of the Members is at stake, Mr. Erichsen will, we trust, forgive us for remarks directed against his arguments, not himself. We had thought that one or two of the points to which Mr. Erichsen now draws special attention had been noted by him in the first instance in haste, and we are not a little surprised to see that he now treats them as *chevaux de bataille*. For example, his argument that the great body of Members of the College care little for the attainment of the electoral franchise he supports by instancing the fact that "out of 4000 Members who could five years ago have easily acquired it, only nine availed themselves of that privilege." This line of reasoning carries in itself its own condemnation, for surely Mr. Erichsen will not maintain that because the Members of the College were too honourable to covet a Fellowship without examination the origin of which had been so earnestly decried by them, they therefore cared nothing for the privilege of a voice in the management of College affairs. Why, Sir, if these very Members had had a vote for candidates for a seat on the Council they would have given it only to such men as would have seen that that evil was put down, and for this presumption we have very good grounds in letters received by us from men who were Members before 1843, and who have always set their faces against the Fellowship for the very reason that it had been originally obtained in the manner advocated by Mr. Erichsen, and the neglect of which he would hold up as a reproach to Members. Does he or anyone else imagine that the Council, the Fellows, or the Members would care to see the Fellowship swamped in the way suggested? As we have said elsewhere, the Members honour the Fellowship too much to wish to see its distinction lowered one iota, and are even more jealous of its reputation being sustained than is the Council itself, for that body would fain introduce a certain number of nominated Fellows into the ranks every year, but the Members will have none of this measure.

Mr. Erichsen's next point can be easily dismissed. He states that "the Council as at present constituted is a thoroughly representative body." We ask whether he uses the term in the loose manner of the day, or in its accurate sense. By the light of the latter, we can only concede that the Council is representative of the metropolitan Fellows, for it is elected by them alone; any wider representative principle is totally "unrepresented" on it. To Mr. Erichsen's succeeding argument—viz., that "the Members of the College have never possessed the elective franchise"—we can give no unqualified assent, as this is a point upon which legal opinions may possibly differ; but he knocks the bottom out of it by recalling the disgraceful history of a self-elected Council. The argument does not come forth unsullied from its partnership with the rest of the sentence. The final issue raised we would willingly have passed over in silence; for when a past president of the College talks of the Membership being "effectually sunk under a degree" it is indeed time that the Members hung their heads. Has it come to this, that a man can grow ashamed of belonging to the Royal College of Surgeons of England? and at what grade of a degree, of what university, is it that a Member makes haste to cover up his title of "surgeon"? We might almost answer that if these men renounce their Membership, then let the College renounce them; but those who are proud of their *alma mater* call for a system of representation by which no man shall feel that he has no interest in the doings of the College, and everyone who holds the title of M.R.C.S. shall be a real *Member*, not a mere exostosis. On this point we cannot do better than quote an extract from the speech of the late lamented Mr. Sampson Gamgee, delivered at the great College meeting of Oct. 29th, 1885, for it traverses the whole of the principle of this case: "Eight hundred and nineteen men had been sent out under the authority of this College to practise in Her Majesty's land and sea forces, and in sanitary charge of our merchant fleet throughout the world. Of the total of 819, only 41 were Fellows of the College, while 778 were Members; so that, in round numbers, the Members were 95 per cent. of the whole, and that immense proportion were denied the right of voting in the administration of the College. Practically the College disfranchised all those who, having obtained its diploma, devoted themselves to the public service, however high their station, however spotless—nay, glorious—their record. In proof of this statement he would trouble the meeting with a few more figures. Of 47 Military Companions of the Bath and Companions of the Indian Empire in the profession, 27, or more than three-fifths, belonged to that College; but of the 27, only 6, or one-eighth of the whole, were Fellows; while 17, or nearly one-third, were disqualified as Members from taking part in the College administration. Yet among those so disfranchised were K.C.B.'s, honorary physicians and surgeons to Her Majesty, inspectors-general of hospitals and fleets, and men who to scientific attainments and consummate surgical skill had added proof of heroes' mettle in the Victoria Cross on their breasts." But Mr. Erichsen himself admits that "the value of the College diploma is rising in professional and in public estimation." Why, then, should Members who have taken so high a diploma be excluded from

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the management of the College, while some few hundred of those who forty years ago took a diploma which must, according to Mr. Erichsen's own argument, have been lower in grade were nominated to a distinction which conferred the rights the more highly educated body now seeks? It is now full time that this anomaly ceased and the Members admitted to a position in which each one may take a personal interest, present or prospective, in the honour, dignity, and prosperity of the finest College in Europe.

With many apologies for our encroachment upon your space, We are, Sir, your obedient servants,

WARWICK C. STEELE,
WM. ASHTON ELLIS,
Hon. Secs. Association of Members of the Royal College of Surgeons, England.

THE PREVALENCE OF SHINGLES.

To the Editor of THE LANCET.

SIR,—I beg to endorse the observation in your issue of the 11th inst., by a "General Practitioner," on the present prevalence of shingles. During the last month I have seen three cases, and although I had not recognised the relationship between the heart trouble and the herpes, I may state that in one instance there was cardiac irregularity and the development of a basal souffle where the heart had previously been found normal. These symptoms have been greatly amended by treatment. In the other two cases my attention was not drawn to the heart. These three examples of herpes zoster had their distribution in the dorso-abdominal and lumbo-inguinal regions. In a fourth case, which has come under my notice, although not under my care, the three branches of the fifth nerves were the seat of pain, the eruption chiefly following the course of the ophthalmic division and consisting of large hæmorrhagic vesicles.

The house-physician of one of the Paris hospitals tells me that he also has seen several cases of herpes zoster quite recently in his out-patient department.

As regards the etiology of shingles, I have always considered it to be associated with gout. But the peculiarity of its distribution makes it difficult in this matter to give a categorical reply to the customary query of our patients, Is it in the nerves, or is it in the blood?

I am, Sir, yours faithfully,
Paris, Dec. 1886. OSCAR JENNINGS, M.D.

P.S.—Since writing the above I have seen a case of discrete generalised herpes, accompanied by headache, thirst, and fever—a typical example of what the French call *fièvre herpétique*. The subject was a little girl twelve years of age. It commenced with a sore throat (*angine herpétique*) which was followed by an eruption of pellucid vesicles, chiefly on the trunk, but also on the extremities, face, roots of the hair, and to an inconvenient extent around the anal and vulvar orifices. The symptoms have lasted three days, and have disappeared without any special treatment.

THE REPORT OF THE INQUIRY COMMITTEE OF THE LIVERPOOL MEDICAL INSTITUTION.

To the Editor of THE LANCET.

SIR,—I trust that, in fairness to Dr. Imlach, you will allow me to comment briefly on this remarkable document, and in some measure to reply to your own leading article upon it.

There are only two conclusions in this report of a positive kind. The first is to the effect that the Committee is very decided that no operative proceedings are required in ordinary cases of hæmatocele. No one has yet said anything to the contrary, and the insertion of this sentence can have only the effect of most unfairly prejudicing Dr. Imlach in the claim which is being made for a new trial in Casey *v.* Imlach. The second conclusion is that, in the opinion of the Committee, a body composed of officers of general hospitals, surgeons who are attached to special hospitals should refrain from certain lines of work which they have created, and resign them in favour of their less successful brethren of the general hospitals—a very generous proposal indeed, but not likely to be accepted. The whole of the rest of this impotent document is negative, and one omission is most suggestive. Preparations removed at the operations which were the subjects of investigation were offered to the Committee for examination, but not one word is said as to whether this examination was made, or as to its results. As to the pathological appearances which justify an operation for chronic ovaritis, for hydrosalpinx, or pyosalpinx, there cannot be a moment's hesitation in the pronouncement of an opinion by anyone at all conversant with these diseases. The Committee of the Liverpool Hospital for Women asked me to give them my opinion; I examined a number of specimens selected from the collection by myself at random, and in every instance the pathological appearances entirely justified the diagnosis and treatment of the case as recorded. That the Committee have failed either to assent to this proposition or to deny it is neither courteous to those who appointed them nor fair to those affected by their inquiry. Finally, it is perfectly evident from their method of inquiry — and it is also apparent in your article — that a little more judgment on one point would have been advisable. You say that "recovery from the operation is not a cure of the patient." That is precisely what we have been preaching for the last ten years. The cure of the patient, after suffering from pyosalpinx for ten years, as many have done, or from a bleeding myoma for twelve or fifteen years, like others, is often not effected by operation for three or four years. But the period of convalescence which had elapsed in any of these cases investigated by the Committee was, at the utmost, twenty months, and in many it was not more than eight months. The negative conclusions arrived at by the Committee are therefore quite unjustifiable and most unfair. Let us try any surgical operation by such a test and see how it will come out. I do not believe that a case of excision of the shoulder or elbow is ever cured under three years; whilst excisions of the wrist and knee take a still longer time to get satisfactory secondary results. Even an operation like cataract has a secondary convalescence to go through, which is often very protracted.—I am, Sir, yours truly,

Birmingham, Dec. 20th, 1886. LAWSON TAIT.

THE MEDICAL REGISTER.

To the Editor of THE LANCET.

SIR,—Great inconvenience has been caused by the refusal of the registrar of the Irish Branch of the Medical Council to register the degree of Master in Obstetrics until June next, and I am informed that the registrars for England and Scotland have also refused to register this qualification. As it is desirable to have an immediate decision, I have applied to the Branch for Ireland to direct the registrar to register all diplomas and degrees named in Section 20 that have been tendered to him.

The contention is that the Act does not come into force until June 1st, 1887. But certain provisions came into operation when the Act became law (June 25th, 1886), and have recently been carried out by the election of direct representatives; others, it is true, do not come into force until the "appointed" day (June 1st, 1887), but Section 20 has no reference to the "appointed" day, and therefore became law in June last. The section runs:—"The diploma of Members of the King and Queen's College of Physicians in Ireland, and the degree of Master in Obstetrics of any university in the United Kingdom, shall be deemed to be added to the qualifications described in Schedule A to the Medical Act, 1858."

In case the Irish Branch do not see their way to order these qualifications to be registered, I intend to test the legality of the refusal to register them, and bring the subject forward at the meeting of the General Medical Council in February. I am, Sir, very faithfully yours,

Dublin, Dec. 18th, 1886. CHAS. FREDK. KNIGHT, M.D.

THE ORIGIN OF TYPHOID.

To the Editor of THE LANCET.

SIR,—In your issue of Dec. 8th, 1883, you published a paper of mine on "The Genesis of Typhoid Fever from Cattle Manure in the Cape Colony," in which, after adducing cases in proof of the cattle origin of typhoid, I stated that I hoped similar evidence would ere long be brought forward by others. In an annotation in your issue of Nov. 20th, you refer to the very suggestive report of Dr. J. F. Allen of Pietermaritzburg on the cause of typhoid in that city. In his

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report Dr. Allen, apparently as an independent observer, also attributes cases of typhoid to the presence of cattle manure used in Natal as fuel, and so far supports the observations I had made. But Dr. Allen has advanced the question a step farther. He infers that the excretions of some calves affected with a specific enteritis, the lesions of which on post-mortem examination corresponded with those of typhoid fever in the human subject, were the infecting material. The question is an important one, and it is to be hoped will be elucidated by further observation.

As far as my own observations went, after some thirty years spent in South Africa amongst a widely-scattered population, I was led to the conclusion that typhoid would be a very rare disease in the colony were it not introduced to the human subject anew from horned cattle, by means of their excretions affecting the air, water, and milk.

Much has been accomplished in this country for preventing the spread of typhoid from one human subject to another by disinfecting the excretions of patients suffering from the disease, and by improved sanitary arangements; but unless the bovine origin of the disease, if true, be proved and sufficiently recognised, the danger resulting will not be met and opposed as it might be.

I am, Sir, yours faithfully,

HENRY LAWRENCE, L.R.C.P., M.R.C.S.

Tunbridge Wells, Nov. 23rd, 1886.

THE APOTHECARIES' SOCIETY.

To the Editor of THE LANCET.

SIR,—I shall be obliged if you will insert the following matter in THE LANCET this week. At a Court of Assistants of the Society of Apothecaries held yesterday, Mr. R. Brudenell Carter was elected the representative of the Society on the General Council under the provisions of the Medical Act of 1886. In electing Mr. Brudenell Carter as their representative, the Society have chosen a gentleman who is not a member of the governing body, *and not even a member of the Society*, but only one of their licentiates; and they could not have paid a greater compliment to their licentiates than by adopting such a course. I have also to inform you that the Society have received up to the present time, from nearly 3000 of their licentiates, the most cordial approval of the action taken by the Society of Apothecaries in endeavouring to form a combination with the two Royal Colleges, and the strongest expression on the part of the licentiates of their wish to support the Society in the assertion of their rights and privileges.

I am, dear Sir, yours truly,

Dec. 22nd, 1886. JAMES R. UPTON, Clerk to the Society.

A NEW METHOD OF EXCISING THE KNEE-JOINT.

To the Editor of THE LANCET.

SIR,—In your journal of last week I notice a letter from Mr. C. B. Keetley, commenting on my paper on a New Method of Excising the Knee-joint, read before the Medical Society of London. I may say that, when preparing my paper, I was fully aware that Prof. Ollier *suggested* that in comminuted fractures of the knee-joint the fragments might be removed by a vertical incision, splitting the patella; but in excision for knee-joint disease he strongly advocates the H incision. It is perhaps to be regretted that I was unable to avail myself of Mr. Keetley's experience in this method of operating, having failed to find any published report of his cases. With reference to Mr. Keetley's assertion that the operation gives "comparatively limited and incommodious access to the joint, and especially to its posterior and lateral recesses," in my two cases and in the experiments I made on the dead body, a perfectly complete view was obtained of the interior of the joint, and as an explanation I can only suggest that Mr. Keetley has never performed the operation in the manner I described. I am unable to understand Mr. Keetley's preference for Professor Volkman's operation, or to agree with him as to the advantage of the transverse over the vertical incision; to my mind an incision that unnecessarily divides all the structures across the joint, although they can be "reunited by buried sutures," is hardly preferable to an incision which leaves them intact as regards their line of action. Finally, the case I exhibited to the Fellows of the Society was considered by highly competent authorities a decided success.

I am, Sir, your obedient servant,

Grosvenor-street, W. HERBERT W. ALLINGHAM.

P.S. I am rather at a loss to know how Mr. Keetley could have seen the report in your paper, which appears simultaneously with his letter.

NORTHERN COUNTIES NOTES.

(From our own Correspondent.)

THE DARLINGTON WORKHOUSE DRINK BILL.

THE above has been the heading of many letters and leading articles in the Darlington papers this autumn, but as the controversy may now be considered settled, it is right I should let you know about it, especially as it affected the practice of the union workhouse surgeon, Mr. G. Middlemiss, rather unfairly, to say the least of it, in the matter of his prescribing alcohol for his workhouse patients. No one acquainted with the practice of medicine will think anything the worse or better of one practitioner using alcohol in his practice as compared with another practitioner. Circumstances, such as seasons, times of epidemics, to say nothing of individuals, will always, it is to be hoped, prevent a hard-and-fast line being drawn in the prescribing of alcohol. Mr. Middlemiss was publicly accused of being extravagant in ordering drink to the poor patients in the infirmary. He pointed out to the Board that the quarterly account, which is printed and circulated to each of its members every three months, did not show what beer, wine, and spirits were consumed by the patients, although it might indicate what was sent to the "house." Nine months after an apparent larger drink bill, Mr. Middlemiss had to explain that it did not go to his patients. The master prepared a report on the consumption of drink, and also took the liberty of giving a report as to the hospital consumption and number of patients and deaths for the three years preceding Mr. Middlemiss taking office, showing that there had been about £15 worth more used than by that gentleman's predecessor. It was resolved that a subcommittee should go into the matter with an accountant. The result showed that Mr. Middlemiss had merely used about £5 worth during the previous three years, while the officers (four in number) had consumed £40 worth in the same period. He is shown to be not at all extravagant in the prescribing of alcohol, and that while he treated more than a thousand patients with a drink bill of £37 in three years. Mr. Middlemiss has more than cleared his reputation as to extravagance, and the moral of the controversy is that before a charge is made against the practice of a medical officer accusers had better be quite sure of their facts.

EPIDEMICS OF MEASLES AND PNEUMONIA.

At Alston, in consequence of the prevalence of measles, all the day and Sunday schools have been closed, and will remain closed until the new year. There have been as many as 150 cases reported in one day. At Hexham also the disease is very prevalent; but at Wylam Dr. Foulis reports an epidemic of pneumonia, chiefly among children. He states that he has had upwards of 100 cases, many of which were of a serious character, also affecting adults.

ACTION UNDER THE PHARMACY ACT AT SUNDERLAND.

At the Sunderland County Court on Thursday last an action was brought against a person who was carrying on a business as a chemist without being legally qualified, and a conviction with a fine of £10 was obtained. It is a great pity that some law cannot be set in action against the horde of herbalists, bone-setters, *et hoc genus omne*, with which we are infested in the north. If a quack calls himself a "herbalist," "botanic practitioner," or "bone-setter," it is a passport to public favour, and he escapes "scot free."

Newcastle-on-Tyne, Dec. 20th.

BEDFORD GENERAL INFIRMARY LEGACIES.—The following notices of legacies bequeathed to this institution have recently been received by the weekly committee—viz., a legacy by the late Samuel Taylor, Esq., St. Mary's Lodge, Potter-street, Bedford, £1050 new 3 per cents.; and another by the late Mrs. Ann Goodman, Toddington, Dunstable, £100.

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EDINBURGH.

(From our own Correspondent.)

THE HEALTH OF CITY CHILDREN.

DR. J. B. RUSSELL of Glasgow, medical officer of health for that city, addressed a crowded audience last Saturday on "The Children of the City: what can we do for them?" He spoke in the first place of the crowded state of our cities and the tendency to rural depopulation, showing that in the last twenty-five years the town population in England has grown from 63 per cent. of the whole population to 68 per cent., and in Scotland from 61 per cent. to 69 per cent. This increased proportion is not fully explained by the more rapid rate of natural growth of population in towns, but is due to a large extent to a drafting in from rural districts of immigrants whose native robustness of constitution loses considerably by the transference. Referring to the conditions of city life which at present obtain, Dr. Russell commented on the general absence of open spaces and playgrounds, or of anything that makes a city look as though intended as a rearing-place for children. The modern idea of city life seemed to be to crowd together the adults as closely as they could be packed, and shake the children down into the chinks. Speaking of the vicious tendency exerted upon children by insanitation, parental delinquencies, and want of open space, he laid special stress on the desirability of providing playgrounds for their physical development and mental recreation. A child is impelled to play by a ceaseless natural instinct tending to its good, and not by the devil, as the landlord and policeman too often seem to think. He put these matters strongly to the artisan classes, who are the chief sufferers from the evils produced, and urged them to press these matters upon the attention of their municipal and Parliamentary representatives; and in the provision of spaces in cities for the purposes of recreation to see to it that the flower-bed did not too much encroach on space set apart for yet more important ends.

LORD WEMYSS ON UNIVERSITY REFORM.

On Monday a very influential gathering of Edinburgh graduates took place in the Royal Hotel at the annual general meeting of the Association of the General Council of the University of Edinburgh. Lord Wemyss, the President of the Association, occupied the chair, and gave an interesting address on the present phase of the question of University reform. He referred to the condition of Scottish Universities prior to reforms in which he had taken a warm interest from 1853 to 1858, and he sketched the rapid and extraordinary advances that have been made since the passing of the last Universities Bill in the latter year, referring to the increase in the number of professorial chairs, and to the amount of special University funds, endowments, &c., which have increased from £61,000 to over £300,000 in the last twenty-five years. That increase speaks well for the administration of these funds while solely in the hands of the Senatus; and on that account Lord Wemyss urged care and caution in the work of the Association, that it may result in reform, not in revolution. At the same time, it was evident that the graduates, numbering over 5000, should have some more direct influence in managing University matters than is at present the case. The General Council, their representative body, must have a greater voice than now in University government—to that principle he was fully committed,—but he was not quite prepared to say how far it should be extended. These remarks he made in the interests of the University above all. Nothing would be more unfortunate than that this should become a question of faction; and that success in obtaining their object, right though it were, should be looked on as a party victory. He hoped to see both sides agreeing to a reasonable solution of the matter in the best interests of all. The annual report of the Association was afterwards read. It was of an encouraging nature, and shows that the views of the Edinburgh and Glasgow Associations have been brought prominently before those interested in the matter, and that there is a greatly increased general feeling favourable to the line of action they have taken. Lord Wemyss has been elected President of the Association for the coming year, and Sir Risdon Bennett and Mr. R. W. Cochran-Patrick vice-presidents for the same period. On the motion of Dr. Heron Watson a committee was appointed to take charge of the interests of the Association in any legislation which may take place in regard to the Scottish Universities.

THE COLLEGE OF PHYSICIANS' LABORATORY.

The proposal made two years ago, and which has been under discussion twice since then, that a new experimental pathological laboratory should be established by the College of Physicians, seems at length to have a near prospect of consummation. A committee of the Fellows reported nearly a year ago as to the requirements of such an institution, and their suggestions, which are of a wise and practical character, will, if carried out, confer a considerable benefit upon the medical practitioners of Edinburgh. The object of the laboratory is to supply would-be workers in scientific subjects connected with medicine with facilities for carrying on original research in connexion with any interesting cases which occur in their practice or in dispensary work. The laboratory, which is to have a central situation, will be under the charge of a competent custodian, well trained in technical work, and ready to assist in, or to prepare materials for, any researches which may be in course of prosecution. A fine set of scientific apparatus for histological, physiological, and pathological investigations is also to be at the disposal of workers in the laboratory. The Royal College of Physicians have already conferred an incalculable boon on the Scottish medical world by the generous way in which their library is conducted and the care with which it is constantly kept up to date and maintained in a high degree of practical usefulness, and they certainly can find no better or more acceptable way of extending the useful work they are in a position to carry on than by establishing a laboratory such as that now about to take up an objective existence.

THE CHRISTMAS RECESS.

The lectures in the Edinburgh School closed on Wednesday, Dec. 22nd, and are to recommence on that day fortnight

Edinburgh, Dec. 22nd.

BELFAST.

(From our own Correspondent.)

THE ULSTER HOSPITAL FOR WOMEN AND CHILDREN.

A SALE of work, promoted on behalf of the funds of the above institution, was held on Dec. 9th and 10th. In consequence of the lease of the hospital buildings falling in, it became necessary for the executive to make internal alterations and improvements, the cost of which amounted to £300, and to defray this sum the bazaar was organised, the same ladies who had undertaken the arrangements on a former occasion again giving their services. The President of Queen's College (Rev. Dr. Porter) took the chair at the opening ceremony, and owing to the untiring exertions of Mrs. Porter the fête was a great success, and a considerable sum has been realised for the benefit of the hospital.

THE THRONE HOSPITALS, BELFAST.

On Tuesday, Dec. 14th, a large number of the friends of these charities assembled in the Throne Hospital to celebrate the first anniversary of the opening of the Consumption Hospital. From the reports I gather that the hospital has been opened since Dec. 19th, 1885, and since then all the beds have been continuously occupied, four for males and four for females, the number of patients treated being twenty-five. The board of management regret sorely that tenfold more accommodation is needed, as the number of applicants is out of all proportion to those admitted into the hospital. The board is profoundly anxious that Mr. Green's offer to build a new wing for consumptive patients should be made practicable by the generosity of friends in providing the endowment of £15,000. As the effect of the endowment fund was to provide for only six patients, it was moved that a subscription list be opened to meet the expenses of the two additional beds; this, however, was rendered unnecessary by Mr. Green giving another £1000. All present spoke of Dr. Lindsay, the physician in charge of the Throne Consumption Hospital, in the warmest terms.

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PARIS.

(From our own Correspondent.)

TYPHOID FEVER.

THE French authorities are beginning to realise that typhoid fever reigning in an endemic manner is neither a normal sanitary condition nor a special dispensation of Providence against which it is useless to struggle. They have awakened to the fact that an average weekly mortality of fifty persons from this cause is very little creditable to the capital of a nation which professes to be the centre of scientific progress, and the question has at length been submitted to the investigation of experts. In a communication recently made to the Academy of Sciences, M. Brouardel traced the origin of an epidemic at Pierrefonds to the contamination of drinking-water by the contents of neighbouring cesspools. In each house infected the bacilli said to be characteristic by Eberth, Gaffky, Cornil, and others were found in the water, and upon culture exhibited the typical sporulation. Difference of opinion as to the specificity of these micro-organisms having arisen, comparative cultures were made from the blood removed from the spleen of a patient suffering from typhoid, with identical results. It is perhaps somewhat late in the day to discover the danger of impure drinking-water—a fact which is familiar to every intelligent Londoner; but the specificity of these particular bacilli being still *sub judice*, M. Brouardel's contribution on the subject is not devoid of interest.

THE CURABILITY OF ALCOHOLIC CIRRHOSIS.

A short time since M. Troisier communicated a case to the Société Médicale des Hôpitaux in which the ascites resulting from cirrhosis of the liver had disappeared under the influence of iodide of potassium and strychnia, and the visceral lesion itself had seemed to be cured. In the discussion which ensued, it was pointed out that ascites sometimes passes away spontaneously in the course of a cirrhosis, and, on the other hand, the affection of the liver may go through all its phases without giving rise to peritoneal effusion. M. Troisier now goes further. He asks whether there does not exist a particular form of alcoholic cirrhosis in which the lesion, stopping short of destruction of the liver-cells, is susceptible of retrogression; and he relates another case in support of this hypothesis. A confirmed drinker, aged sixty-eight, was under the care of a colleague, and presented all the symptoms of hepatic cirrhosis. Between the months of December and September 165 litres of fluid were removed by tapping at different times. At the present time the peritoneal cavity is empty, the liver slightly enlarged, and the patient in excellent health. M. Bucquoy said that he had seen several similar cases, and he entertained no doubt that other members of the Society had had a like experience.

PLEURAL EFFUSION IN INFLUENZA.

A case was related by M. Roques at the same Society, in which influenza in a young girl, nine years of age, characterised by severe cerebral symptoms, headache, earache, stupor, and feverishness, was terminated on the tenth day by a pleural effusion, followed by speedy restoration to health. The child was not rheumatic, nor were her parents. In the discussion that followed, M. Dreyfus reminded his hearers that the late Professor Gubler was in the habit of calling the attention of students to the effusions which occur in the course of different inflammatory diseases of the respiratory passages. M. Guyot mentioned a publication by Dr. Gibert of Havre, on seven cases of pleuritic effusion complicating influenza. M. Desnos observed that during the war he had frequently seen pleurisy consecutive to influenza. M. Roques, in reply, said that he had not intended to discuss the pleuritic symptoms that sometimes complicate the affection under consideration. He wished to call attention to the transitory pleural effusions which are seen at the termination of the malady, and which he considers to be "critical" manifestations of the nature of a fluxion, and similar to what occurs in the respiratory tract.

The eminent anatomist, M. Sappey, has been elected a member of the Academy of Sciences in the place of the late M. H. Milne-Edwards.

NEW YORK.

(From our own Correspondent.)

AMERICAN PUBLIC HEALTH ASSOCIATION.

THIS Association held its annual meeting recently at Toronto, Canada. This is the first meeting of the Association beyond the bounds of the United States, and proved to be a very successful session. Sanitary administration is comparatively a new feature of State and municipal governments in Canada, and the discussions of the Association will undoubtedly give a new and vigorous impulse to the agitation for reform in the provinces. The frightful havoc which small-pox created in Montreal owing to the want of an efficient board of health, having suitable powers, was a lesson which has not passed unheeded. The citizens of Toronto, and the medical profession of Canada welcomed the Association, and it is believed that the influences of the meeting will greatly aid those who are labouring to establish throughout the Dominion sanitary government.

MEDICAL COLLEGES.

The Medical Colleges are now in full operation, and with increased numbers of students. So great is the pressure for sittings in two colleges that the struggle for seats has become very exciting. The methods of instruction still remain unchanged. The old practice of assigning a course of lectures on each branch to a single professor continues, notwithstanding the great expansion of each department of the medical sciences. Nor is the term of teaching lengthened except in one school; five months covers the year of instruction. It follows that the student has to gain a knowledge of his profession under great difficulties, and largely by dint of his own almost unaided efforts.

MEDICAL EDUCATION.

A propos of this subject is the appearance of the annual report of the Illinois State Board of Health, with its analysis of the medical colleges of the United States. The State of Illinois has taken a most enlightened view of its duties to the citizens, and by a special "Medical Practice Act" empowered the Board of Health to inquire as to the educational qualifications of medical practitioners, and to take compulsory measures to prevent the uneducated from engaging in practice. The Governor says of the law:—"It was to protect the lives, the health, the morals, and the property of the people of the State from the shameless depredations of swindlers and adventurers, who, by all manner of false representations and deceptive promises, were taking advantage of the misfortunes of the people in sickness and ailments of all kinds to still further injure their health, endanger their lives, and rob them of their money." The board has performed its duty faithfully. During the first two or three years not far from 2000 practitioners were found disqualified in about 7000, and forbidden to practise in the State. From the present report it appears that the annual increase of medical men in this country is over 5½ per cent., while the annual increase of population is less than 2 per cent. In answer to the question as to what becomes of this excess of medical men, the secretary shows, by reference to certain statistics of the profession in Illinois, that between the years 1880-86 7 per cent. of the physicians left the profession and engaged in other pursuits. He states that there are from 1500 to 2000 more physicians in Illinois than are necessary, and who are earning a livelihood legitimately. What is true of that State he believes is true of every State in the Union. The report as a whole is a complete exhibit of the present methods of instruction in the medical colleges of the entire country.

THE SURGEON-GENERAL OF THE ARMY.

There has been a severe struggle in the Army Medical Corps to secure the office of Surgeon-General, made vacant by the retirement of General Murray, who had reached the age required by law. The appointment rests with the President, who is not limited by seniority, but may select any one of the corps. The choice fell upon Surgeon John Moore, who was on duty at San Francisco, and hence far removed from the capital and the scene of active politics. Dr. Moore is a most capable and worthy officer, held high positions during the late war and his appointment is well received.

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THE ACADEMY OF MEDICINE.

Medical endowments are quite in order now in this country. Recently the Academy, the central medical society of the city, has received $100,000, of which $75,000 were given by the widow of the late Dr. Hosack, and $25,000 by the widow of the banker, Mr. Woelshoffer. The Academy has now one of the best of libraries, receives all the medical journals of the world, has eight sections actively at work as societies, and in every respect is the centre of medical interest. It is now proposed to build a new Academy better adapted to the future wants of the profession.

THE NEW YORK STATE MEDICAL ASSOCIATION.

This Association represents those medical men who are popularly termed the "old Coders," or those who stand firmly by the code of ethics of the American Medical Association. The meeting was well attended. One session was devoted to the discussion of shot and stab wounds of the abdomen, and excited great interest.

New York, Nov. 26th.

Obituary.

DR. EBEN. WATSON.

DURING the last few years some of the most eminent of old Glasgow practitioners have been gathered to their rest. John Gibson Fleming went first, the clear-headed, active representative of the Faculty in the General Medical Council. Andrew Buchanan next, in the evening of his days in learned leisure, ripe with wisdom and honour. Six months ago Robert Scott Orr, in seemingly perfect health, was suddenly struck down while reading the evening paper in his drawing-room. And now the west of Scotland mourns the loss of Eben. Watson, after an obscure and trying illness of eighteen months' duration.

Dr. Watson was the son of a well-known Glasgow practitioner—Dr. James Watson,—and early adopted medicine as his calling under his father's fostering care. Having attained his degree at the University of Glasgow, the subject of this notice specially studied surgery in Paris, and in London under Sir William Fergusson, with whom he kept up a life-long friendship. Returning to Glasgow in 1848, he joined his father in practice, and at an early stage of his career was elected a surgeon of the Royal Infirmary, a position which he held until within two years of his death. During these years he was known as a brilliant and fearless surgeon. Nature had gifted him with all the attributes for this. He was quick in the diagnosis of cases and eager to fulfil every duty to which he was called. He had a deft, neat hand, which guided the knife with skill and ease. In the operating-room he was seen at his best—calm, self-possessed, never timid, prepared for any emergency. He was regarded as a conservative surgeon, yet he never shrinked from large and grave operations; and when the patient was under chloroform dashed his hand through his hair and drew himself up for his task. His thorough confidence was shared by those who witnessed him, for all knew that, come what might, Watson would not fail. In his readiness of resource he seemed to equal Syme.

Dr. Watson held many public offices. He was for years an examiner in surgery for the Faculty, and occupied the president's chair in that body for two years. During his term of office, and after this had expired, he took a warm and keen interest in its welfare. By his wise administration he materially assisted in saving it from the doom of extinction, which some of its enemies openly desired. As a pleader for its existence he interviewed with tact Secretaries of State, and by his comprehensive and lucid statements made a favourable impression on those in authority. He was attached also to Anderson's College as Professor of Physiology, a position which he held for twenty-six years. He did not write out his lectures, but, from his thorough knowledge of the subject, was able with ease and fluency to interest and instruct the students.

When the Professorship of Surgery in the University became vacant by the removal of Mr. Lister to Edinburgh, he strove earnestly to obtain the chair. In this he was defeated by Dr. George Macleod; yet though a life's wish was thus frustrated, he ever took a warm interest in the University, and rejoiced in the growing prospects of his *alma mater*.

His contributions to the medical journals were many, his first communication being given to the Faculty, when he obtained the Fellowship in 1849, and its title was "On the Organ of the Human Voice." His researches on Calabar Bean and its utility in Tetanus were very thorough, and commanded the attention of leading therapeutists in this and other countries. His book "On Topical Medication of the Larnyx" was an interesting addition to the treatment of diseases of the throat. We believe that he left a half-finished article on Aneurysm, which was intended for publication in THE LANCET.

In his private life Dr. Watson was much respected and loved by those who knew him. He has left many friends, who will miss his practical advice and wise counsel. He was outspoken on his likes and dislikes, but no mean or underhand action characterised his life. He was a kind husband and an honoured father. He is survived by his widow, one son, and four daughters.

ROBERT DYER LYONS, M.D., D.L.

ON Friday morning, the 17th inst., Dr. Lyons, while on his way to the Richmond Hospital, Dublin, was seized with a sudden attack of illness. He was seen holding on to a railing in Molesworth-street by a physician who resided near him, who fortunately happened to be passing, and who had him conveyed to his residence in Merrion-square. It was then found that he was suffering from an attack of paralysis, due to cerebral hæmorrhage; and although at first his medical attendants, it is stated, entertained no serious apprehensions, yet early on Saturday morning he was considered to be in a most precarious state, and died the following day.

Dr. Lyons, who was in his sixty-first year, was a physician of eminence, and his sudden and untimely decease is a matter of sincere regret to a large circle of friends. He was the son of the late Sir William Lyons, mayor and high sheriff of Cork, and was born in 1826. He graduated in Arts and Medicine in the University of Dublin, and during the Crimean War held the appointment of pathologist-in-chief to the British Army. The deceased was a Fellow of the College of Physicians in Ireland, a member of the General Medical Council, physician to the Richmond Hospital, professor of the practice of medicine in the medical school of the Catholic University, visiting physician to Maynooth College, and a member of the Senate of the Royal University of Ireland. Dr. Lyons represented Dublin in Parliament, on Liberal principles, for several years, and was much respected by all parties in the House of Commons. He published a work on Fever in 1880, and contributed papers on medical subjects to various periodicals.

CRIDLAND CROCKER FIELD, M.D.

WE regret to record the death of Dr. C. C. Field, which occurred at his residence in Easton, Northampton Co., U.S.A., on the 26th ult. The deceased, who was born in 1817 received his professional education at the University of Pennsylvania, from which institution he graduated with honour in 1837. In 1838 he took up his residence in Northampton County, and shortly afterwards settled in Easton, where for the past fifty years he has attended to an extensive practice, surgical and medical. Dr. Field performed many of the most difficult and delicate operations in surgery, amongst them being the removal of a cervical tumour, with ligation and excision of a considerable part of the jugular vein; excision of the entire femur, an operation unique in the annals of surgery; excision of the entire radius, and extirpation of the parotid gland, the latter operation being performed several times. These achievements placed Dr. Field in the front rank of modern surgeons, and his death will be keenly felt, not only throughout the district in which he resided, but by the inhabitants of the whole county.

DR. J. EWART has been elected President of the Brighton, Hove, and Preston Dental Hospital, in the place of the late Mr. Alderman D. Smith, senior M.P. for the borough.

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Medical News.

UNIVERSITY OF LONDON.—The following candidates have passed the recent M.D. Examination:—

Batten, Rayner Derry, B.S., St. Bartholomew's Hospital.
Berry, Frederick Haycraft, Guy's Hospital.
Booth, Edward Hargrave, Guy's Hospital.
Boswell, John Irvine, Guy's Hospital.
Brock, James Harry Ernest, B.S., University College.
Calger, Frederick Foord, B.S., St. Thomas's Hospital.
Calvert, James, B.A., B.Sc., St. Bartholomew's Hospital.
*Cave, Edward John, St. Bartholomew's Hospital.
Claremont, Claude Clarke, B.S., University College.
Cockey, Edmund Percival, St. Mary's Hospital.
Elgood, Charles Reginald, B.S., University College.
Fox, Robert Fortescue, London Hospital.
Glover, John Philip, St. Thomas's Hospital.
Goodall, Edward Wilberforce, Guy's Hospital.
Gross, Charles, B.S., Guy's Hospital.
Handfield-Jones, Charles Montague, St. Mary's Hospital.
Hewer, Joseph Langton, B.S., St. Bartholomew's Hospital.
Hinds, Frank, B.S., University College.
Lankester, Herbert Henry, St. Thomas's Hospital.
Maddison, William Thomas, King's College.
Mott, Frederick Walker, B.S., University College.
Pearce, Walter, B.S., B.Sc., St. Mary's Hospital.
Powell, John Joseph (Gold Medal), University College.
Price, Alfred Edward, B.S., Guy's Hospital.
Purslow, Charles Edwin, Birmingham.
Rice, Edward, St. Bartholomew's Hospital.
Smith, Kenneth Rawlings, B.S., University College.
Spencer, Herbert Ritchie, B.S., University College.
Turner, Alfred Jefferis, University College.
Wooldridge, Leonard Charles, D.Sc., Guy's Hospital.
Worthington, Sidney, Guy's Hospital.

LOGIC AND PSYCHOLOGY ONLY.

Batterham, John Williams, B.S., Westminster Hospital.
Cook, Augustus Henry, University College.
Dingley, Arthur William, University College.
Forsbrook, William Henry Russell, Westminster Hospital.
Heath, William Lenton, B.S., St. Bartholomew's Hospital.
Jefferson, Arthur John, B.S., St. Thomas's Hospital.
Shove, Edith, London School of Medicine and Royal Free Hospital.
Slater, Druce John, St. Bartholomew's Hospital.
Williamson, Richard Thomas, B.S., Owens College.

* Obtained the number of marks qualifying for the Gold Medal.

The following passed the M.B. Examination for Honours:—

MEDICINE.

FIRST CLASS.

Washbourn, J. Wychenford (Scholarship and Gold Medal), Guy's Hospital.
†Gow, William John (Gold Medal), St. Bartholomew's Hospital.

SECOND CLASS.

Gardner, Henry Willoughby, St. Bartholomew's Hospital.
Wild, Robert Briggs, Manchester and Owens College.
Johnson, Raymond, University College.

THIRD CLASS.

Hutton, John Stuart, St. Thomas's Hospital.
Voelcker, Arthur Francis, University College.

OBSTETRIC MEDICINE.

FIRST CLASS.

Gardner, Henry Willoughby (Scholarship and Gold Medal), St. Bartholomew's Hospital.
Johnson, Raymond (Gold Medal), University College.
†Dobson, Leonard Charles Talbot, St. Bartholomew's Hospital.
Eq. { Gow, William John, St. Bartholomew's Hospital.
Eq. { Washbourn, John Wychenford, Guy's Hospital.
Carless, Albert, King's College.

SECOND CLASS.

Eq. { Gabriel, Leonard Maurice, St. Bartholomew's Hospital.
Eq. { Smith, John Anderson, St. Bartholomew's Hospital.
Eq. { Voelcker, Arthur Francis, University College.

FORENSIC MEDICINE.

FIRST CLASS.

Johnson, Raymond (Scholarship and Gold Medal), University College.
†Washbourn, John Wychenford (Gold Medal), Guy's Hospital.
Burghard, Frédéric François, Guy's Hospital.
Wild, Robert Briggs, Manchester and Owens College.
Jones, Samuel Cromwell, University College.
Halstead, George Ezra, B.A., B.Sc., Guy's Hospital.
Taylor, Alfred Ernest, Guy's Hospital.
Voelcker, Arthur Francis, University College.

SECOND CLASS.

Bahadhurji, Kaikhosro Nasarvanji, University College.
Eq. { Horrocks, William Henry, University College.
Eq. { Prall, Samuel Esmond, Guy's Hospital.
Gabriel, Leonard Maurice, St. Bartholomew's Hospital.
Muspratt, Charles Drummond, Guy's Hospital.

THIRD CLASS.

Carless, Albert, King's College.
Gow, William John, St. Bartholomew's Hospital.
Eq. { Bright, Eustace Frederick, University College.
Eq. { Young, Charles Wheeler Forrest, St. Bartholomew's Hospital.
Trevelyan, Edmond Fauriel, B.Sc., St. Bartholomew's Hospital.
Corbin, Eustace Rhodes St. Clair, University College.

† Obtained the number of marks qualifying for the University Scholarship.
‡ Obtained the number of marks qualifying for a Gold Medal.

The following have passed the M.S. Examination:—

LOGIC AND PSYCHOLOGY ONLY.

Roeckel, Waldemar Joseph, St. Bartholomew's Hospital.

The following have passed the B.S. Examination:—

FIRST DIVISION.

Burghard, Frédéric François, Guy's Hospital.
Elliott, John, B.Sc., St. Bartholomew's Hospital.
Goodall, Edwin, Guy's Hospital.
Halstead, George Ezra, B.A., B.Sc., Guy's Hospital.
Hart-Smith, Franke Chamberlain, University College.
Muspratt, Charles Drummond, Guy's Hospital.
Spencer, Walter George, St. Bartholomew's Hospital.
Swain, James, Westminster Hospital.
Vernon, John James Dean, Guy's Hospital.

SECOND DIVISION.

Bahadhurji, Kaikhosro Nasarvanji, University College.
Johnson, Raymond, University College.
Taylor, Alfred Ernest, Guy's Hospital.
Voelcker, Arthur Francis, University College.
Washbourn, John Wychenford, Guy's Hospital.

UNIVERSITY OF OXFORD.—At a congregation held on the 17th inst., the degree of M.D. was conferred on

Archibald Edward Garrod, Christ Church.

UNIVERSITY OF CAMBRIDGE.—The following degrees have been conferred:—

BACHELOR OF SURGERY.—Bond, John's; Burd, Caius; G. F. A. England, Caius; C. S. Evans, Clare; H. R. Jones, John's; Kerr, John's; Lipscomb, Caius; H. Manby, Cavendish; Shore, John's; Sibley, Pembroke; F. W. Smith, Caius; A. S. Taylor, Pembroke; Wilde, Clarke.

BACHELOR OF MEDICINE.—Bond, John's; Dickinson, Peterhouse; Evelyn, Caius; Fitzgerald, Caius; H. Fox, Cavendish; W. P. G. Graham, Caius; Hamer, Christ's; H. A. Haviland, Pembroke; W. J. Hill, Jesus; Jolly, Caius; A. L. Marshall, Clare; Morrice, Trinity; Nason, Downing; Nicholls, John's; Sidebotham, Caius; Skelding, Caius; Tatham, Clare; Thornton, Christ's; C. H. Walter, Jesus; Webster, Caius; M. S. Wilson, Pembroke; Winfield-Roll, Christ's.

UNIVERSITY OF DUBLIN.—The following degrees have been obtained at the recent examinations of the University:—

LICENTIATE IN MEDICINE.—Daniel Conway.

BACHELOR IN MEDICINE.—Thomas Guy Alexander, Alan Bell, Edmund B. Delacherois, Henry Disney, Benjamin Banks Ferrar, Edward Wallace Hamilton, John Patrick Henry, James Graham Hojel, Thomas Hopkins, Alfred Hancock Middleton, Robert L. McAdam, William E. C. Murphy, G. J. R. Nickson, John William O'Brien, John O'Conor, William M. Russell, John Simpson, Thomas Edward Smyth, John B. Walter, Richard M. Wilson.

BACHELOR IN SURGERY.—Alan Bell, Edmund B. Delacherois, William L'Estrange Eames, Benjamin Banks Ferrar, John P. Henry, James Graham Hojel, Thomas Hopkins (*stip. cond.*), Robert L. McAdam, L. M. McIntosh, Alfred Joseph McNally, William E. C. Murphy, G. J. R. Nickson, John William O'Brien, Thomas Edward Smyth, Richard Mervyn Wilson.

DOCTOR IN MEDICINE.—James De Burgh Griffith, Charles Nelson Gwynne, Thomas Lyndon, Charles Crawford Mayne, Robert L. McAdam, L. M. McIntosh, Alfred Hancock Middleton, Richard Nunn, John F. Tatham (*stip. cond.*), John Bellett Walter, Hugo Woods, Augustus Warren Woodroffe.

COLLEGE OF PHYSICIANS IN IRELAND.—At the December examinations the following obtained the licences in Medicine and Midwifery of the College:—

MEDICINE.—Thomas Downey Ambrose, Thomas George Barton, Christopher Venning Burgess, E. John Byrd, Thomas Augustus Connellan, Henry Grattan Day, Herbert Edward Bulman Dickson, St. Leger John Edmundson, Joseph Ellison, John Garth, William Greene, I. C. Hartford, Charles John Hastings, John Patrick Howe, William A. Kelly, Peter McSwiney, Joseph Edward Midgley, Andrew Edmund Murphy, Herbert Murray Norris, Bartholomew Bull Pattulo, Thomas Joseph Rossiter, Jeremiah B. Ryan, William Joseph Shee, Alfred Frederic Smith, George Herbert Spencer.

MIDWIFERY.—Thomas D. Ambrose, Thomas G. Barton, Edward J. Byrd, John Garth, William Greene, Charles J. Hastings, John P. Howe, Peter McSwiney, Joseph E. Midgley, Andrew E. Murphy, Herbert Murray Norris, Bartholomew B. Pattulo, Thomas J. Rossiter, Jeremiah B. Ryan, Ross Vincent Smyth, and George P. Williams.

The undernamed has been admitted a Member:—

William Hughes, Surgeon, R.N.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—The following gentlemen have passed the Third Professional Examination for the Letters Testimonial under the new scheme:—

Alfred Bewley, C. E. Boyce, J. J. Byrnes, Wm. Cremin, Edward Frazer, J. F. Greene, T. A. Goodchild, R. Hickie, C. Hughes, C. D. Jones, P. P. Keane, J. F. Mannix, J. Martin, J. McGinne, J. O'Connor, P. O'Dwyer, J. O'Sullivan, J. H. Swan, P. J. Ward.

Of fifty-three candidates, seventeen passed.

At a recent examination the following gentleman obtained the Fellowship of the College:—

William Dobbin.

SOCIETY OF APOTHECARIES.—The following gentlemen passed the examination in the Science and Practice of

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Medicine, Surgery, and Midwifery, and received certificates to practise, on the 9th inst.:—

Adams, Percy Targett, Ashford-road, Maidstone.
Brown, E. Vipont, M.R.C.S., Lady Margaret-road, Holloway.
Carey, Basil de Beauvoir, Tavitou-street, Gordon-square.
Challenor, William, Alfred-place, Gower-street.
McLean, W. Walker Laroche, Ellerslea, Fulham-park-gardens.
Smith, Alfred Alexander, L.R.C.P. Ed., Railton-road, Brixton.

Passed on the 16th inst.:—

Gravely, Harry, Gloucester-crescent, Regent's-park.
Naumann, John Chas. Francis, Woelman. Eilenburg, Germany.
Sunder, Charles Edward, M.R.C.S., The College, Regent's-park.
Williams, John Thomas Creswick, Dolgelly, North Wales.

LONDON HOSPITAL.—Mr. Robert Loder has contributed £500 to the funds of this hospital.

AT a meeting held at Leeds on the 8th inst., it was decided to form a local company of the Volunteer Medical Staff Corps.

THE Duke of Westminster has sent £500 to the funds of the Chester Infirmary, being the proceeds of the entrance fees paid at Eaton Hall by strangers for the privilege of inspecting the new hall.

The Christmas festival on behalf of Mr. Stevenson's Homes was held in Exeter Hall on the 22nd inst. Upwards of £300 was contributed towards a jubilee fund of £10,000 which it is proposed to raise.

THE Board schools and denominational elementary schools at Barnsley have been closed by order of the Sanitary Committee of the Town Council, on account of the prevalence of fever in that town.

MATER MISERICORDIÆ HOSPITAL, DUBLIN.—A fancy dress ball will be held in aid of the funds of this institution on the 19th prox., in the new Concert Hall, Dublin.

POISONING BY COAL GAS.—Owing to an escape of coal gas, five of a family at Carrick-on-Suir, consisting of eight persons, died this week, and the remaining three are in a critical condition.

EAST SUSSEX INFIRMARY.—The bazaar, opened at St. Leonards a few days since by Viscount Hampden has, it is stated, resulted in a net gain to the funds of the above infirmary of something like £1800.

THE Secretary of the Birmingham Hospital Sunday Fund reported on the 16th inst. that this year's collection amounted to £4612, as compared with £5145 at the collection for the General Hospital three years ago, and as compared with £4773 last year.

A VENERABLE PRACTITIONER.—According to Spanish journals there is at present in Logroño a medical man, Don Rosendo Recondo, still in considerable practice and in the enjoyment of good health, who if he lives till next February will be 100 years of age.

THE DRAINAGE OF RICHMOND.—The Richmond Select Vestry have received a communication from the Local Government Board, stating that their application for sanction to borrow £100,000 for the execution of a joint scheme of sewerage and sewage disposal for the parish and rural sanitary district (which includes Richmond, Mortlake, Barnes, Kew, and Petersham) has been granted.

THE GUILD OF ST. LUKE.—In St. Thomas's Hospital Chapel, on Tuesday, Dec. 7th, at 5.30 P.M., was held the first of a series of services, which the council are anxious to hold in the chapels of hospitals to which medical schools are attached, with a view to bring before medical men and medical students the objects of the Guild. There was a large congregation, composed for the most part, as was intended, of medical men and students.

PHONOGRAPHIC JUBILEE.—An International Shorthand Congress is to be held in London next year. The chief objects of the congress are to celebrate at once the jubilee of phonography (Pitman's system) and the tercentenary of modern shorthand. Mr. T. A. Reed is the chairman of the Jubilee Executive Committee, and Mr. Gurney-Salter the chairman of the Tercentenary Executive Committee. It is interesting to observe that Dr. Timothy Bright, a London physician, printed his "Characterie: an art of short, swift, and secret writing by character," in the year 1588. And he may be regarded as the founder of the modern method of shorthand.

CHEMISTRY OF THE ALKALOIDS AND ALBUMINOIDS.—At the City and Guilds of London Institute, Central Institution, Exhibition-road, S.W., Professor Armstrong, Ph.D., F.R.S., is about to deliver a course of some twenty lectures on the Chemistry of Nitrogen and its Compounds, with special reference to the recent Investigations of the Alkaloids, Albuminoids, &c. The course will commence on Jan. 27th next.

AN OVERCROWDED INFIRMARY.—At a meeting of the Lambeth Board of Guardians on the 15th inst. the medical officer reported that there were thirty-nine patients over the proper number in the men's side of the infirmary, and in the women's side there was a surplus of seven. The advisability of providing further accommodation was discussed, and the matter was ultimately referred to the Infirmary Committee.

VICTORIA UNIVERSITY.—The following appointments to vacant examinerships were made by the Council at a meeting held on December 16th, 1886:—External Examiner in Botany: W. R. M'Nab, M.D., M.R.C.P., F.L.S., Professor of Botany in the Royal College of Science, Ireland. External Examiner in Medicine: F. T. Roberts, M.D., F.R.C.P., M.R.C.S., B.Sc., Professor of Clinical Medicine in University College Hospital, London. External Examiner in Materia Medica and Pharmacy: Matthew Hay, M.D., C.M., F.R.P.S.E., Professor of Medical Jurisprudence in Aberdeen University.

DEATH FROM SEWER AIR.—An inquest was held at Liverpool on the 8th inst. on the body of a youth who had been employed as apprentice to a plumber. The deceased had in the previous week been engaged in repairing some pipes connected with other pipes which led into a sewer. A good deal of gas came through the pipes, and the deceased complained of pain and sickness. He went home, feeling ill, and died in forty hours. The medical evidence was to the effect that death was due to the inhalation of sewer air, and the jury returned a verdict in accordance with this estimony.

TOYS FOR HOSPITALS.—On the 18th and 20th inst., an exhibition was held at Willis's Rooms of the home-made and other toys sent by the readers of *Truth* for distribution among the children in the London hospitals, workhouses, district schools, orphanages, and other public institutions at Christmas. This is the seventh annual exhibition of the kind, and the number of exhibits this year was upwards of 15,000, as compared with 1000 in the first year. In addition to the toys, 9000 sixpences, 14,000 crackers, and 2000 pots of jam will be distributed. Claims have been sent in on behalf of 14,150 children.

PRESENTATIONS.—On the 22nd inst., at a meeting of the contributors to the local expenses fund in connexion with the British Medical Association's Congress at Brighton in August last, the Mayor of Brighton was presented with an engraved silver tea-tray, bearing a suitable inscription, in acknowledgment of his generous and valuable aid in promoting the success of the Congress. On the 20th inst. a deputation of nurses from the Edinburgh Royal Infirmary presented Dr. Joseph Bell with a handsome oak writing-table and chair, and a valuable silver candelabrum, subscribed for by nurses in the institution and also by nurses now in other places in Edinburgh and abroad, who were trained under Dr. Bell. The occasion of the presentation was the recent retirement of Dr. Bell after fifteen years' service on the surgical staff of the infirmary.

THE METROPOLITAN PROVIDENT MEDICAL ASSOCIATION.—The committee appointed at the recent conference at the Society of Arts have held a preliminary meeting, when Sir T. Spencer Wells, Bart., was appointed chairman, and it was resolved to invite the following to join the committee: Drs. Walker Smith, Gilbart Smith, Meadows, A. Carpenter, Steele, Ord, J. Gordon, Ford Anderson, G. Stoker, Steavenson, Dunbar Walker, Ducat, A. Grant, and Campbell Pope; Messrs. E. C. Barnes, Keele, Dickenson, and Ernest Hart. The committee will also include the following lay members: Sir T. Fowell Buxton, Mr. F. D. Mocatta, Mr. H. N. Hamilton-Hoare, and Mr. Claude Montefiore. The committee invite communications from medical men and others interested in the management of the Metropolitan Hospitals and the medical treatment of the industrial classes, which should be sent to Mr. W. G. Bunn, secretary of the Association, 5, Lamb's-conduit-street, W.C. The next meeting of the committee will be held on Jan. 11th, 1887.

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Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

BALFOUR, ANDREW, M.D.Ed., has been appointed Medical Officer for the Parish of Duddingston.

BOOTH, J. MACKENZIE, M.A., M.B., C.M.Aber., has been appointed Chloroformist to the Aberdeen Royal Infirmary, vice P. Blaikie Smith, M.D., resigned.

BRICKWELL, H. T., M.R.C.S., L.S.A., has been appointed Deputy Medical Officer for the Chigwell District of the Epping Union.

CONOLLY, STEPHEN F., M.R.C.S., L.S.A., has been appointed Medical Officer to the Kensal Town Branch of the Metropolitan Provident Medical Association, vice A. Dunbar Walker, M.D., resigned.

DAVIDSON, J. M'KENZIE, M.B., C.M.Aber., has been appointed Ophthalmic Surgeon to the Aberdeen Royal Infirmary, vice A. Dyce Davidson, M.D., deceased.

GARDNER, WILLIAM THOMAS, M.B.Lond., M.R.C.S., L.R.C.P., has been appointed House-Surgeon to the West London Hospital, Hammersmith.

HARPER, ALEXANDER, M.B.Dur., M.R.C.S., has been appointed Resident Medical Officer to the Victoria Hospital for Children, Chelsea.

HARRIES, J. FRAIL, L.R.C.P. Lond., M.R.C.S., L.S.A., has been appointed House-Surgeon to the Salop Infirmary, vice R. H. Russell, resigned.

HENRY, JOHN P., Med. Sch., B.A., M.B., B.Ch.Dub., has been appointed Demonstrator of Anatomy in Carmichael College of Medicine, Dublin.

LAWSON, G., F.R.C.S., has been appointed Consulting Ophthalmic Surgeon to the Hospital for Epilepsy and Paralysis, Regent's-park, vice White Cooper, deceased.

LYON, THOS. GLOVER, M.A., M.D.Cantab., M.R.C.P.Lond., has been appointed Physician to the North London Hospital for Consumption and Diseases of the Chest.

MORGAN, W. P., M.R.C.S., L.S.A., has been appointed Medical Officer and Public Vaccinator for the Third District of the Eastbourne Union, vice Tuck, deceased.

SCALLON, ERNEST O., M.R.C.S., L.S.A., has been appointed Medical Officer for the Templecombe District of the Wincanton Union.

TURNER, FREDERICK, M.R.C.S., L.S.A., has been reappointed Medical Officer of Health for Buxton.

WADE, CHARLES, M.R.C.S., L.S.A., has been appointed Medical Officer for the Chudleigh District of the Newton Abbot Union.

WHEATCROFT, SAMUEL H., M.R.C.S., L.R.C.P.Ed., has been appointed Medical Officer for the Brandesburton District of the Skirlaugh Union.

WRIGHT, ALFRED, M.R.C.S., L.S.A., has been reappointed Medical Officer of Health for Romford.

Births, Marriages, and Deaths.

BIRTHS.

BUCHANAN.—On the 17th inst., at High-street, Chatham, the wife of Arthur Buchanan, M.D., of a son.

CATON.—On the 16th inst., at Croxteth-road, Liverpool, the wife of Richard Caton, M.D., of a daughter.

CLARKE.—On the 15th inst., at Winona, Barrowgate-road, Chiswick, the wife of Fincastle G. B. Clarke, M.D., of a son.

DINGLE.—On the 20th inst., at Bunhill-row, E.C., the wife of William Alfred Dingle (prematurely), of a son, who survived his birth only a few hours.

JOHNSON.—On the 14th inst., at 7, Den-crescent, Teignmouth, South Devon, the wife of George Herbert Johnson, M.R.C.S., L.R.C.P.Ed., of a daughter.

MARRIAGES.

FENWICK—FENWICK.—On the 16th inst., at Holy Trinity Church, Wimbledon, by the Rev. Wm. Reed, M.A., Edwin Hurry Fenwick, F.R.C.S., to Annie, youngest daughter of Capt. John Fenwick, of Tudor Lodge, Wimbledon-park, Surrey.

WOODROFFE—LEWIS.—On the 14th inst., at Wrexham Parish Church, Augustus Warren Woodroffe, M.D. Trin. Col. Dub., of Crowle, Lincolnshire, to Florence, eldest daughter of John Lewis, Solicitor, of Beechley, Wrexham.

DEATHS.

AITKEN.—On the 20th inst., at San Niccolo da Tolentino, Rome, Lauchlan Aitken, M.D., aged 43.

BALFOUR.—On the 13th inst., at The Turret, Leven, Fife, John Balfour, L.R.C.S.Ed., Inspector-General of Hospitals, H.M. Indian Service, retired, aged 77.

JOHNSON.—On the 17th inst., at 7, Den-crescent, Teignmouth, South Devon, Mary Catherine, the wife of George Herbert Johnson, M.R.C.S., L.R.C.P.Ed.

LYONS.—On the 19th inst., at his residence, Merrion-square, Dublin, Robert Dyer Lyons, M.D., D.L.

SALMON.—On the 17th inst., at Anglesey-crescent, near Gosport, Sir James Salmon, Kt., M.D., R.N., Inspector-General of Hospitals and Fleets, Honorary Physician to the Queen, aged 75.

SPICER.—On the 9th inst., Mary Elizabeth Lavinia, wife of R. H. S. Spicer, M.D., of North Molton, Devon, aged 61.

WALKER.—On the 16th inst., at Peterborough, Thomas Walker, M.D., J.P., in his 91st year.

N.B.—*A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.*

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, December 23rd, 1886.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Dec. 17	29·67	E.	34	35	...	37	33	...	Foggy
,, 18	29·72	W.	29	Froz.	...	35	26	...	Overcast
,, 19	29·81	W.	31	Froz.	...	33	26	...	Fine
,, 20	29·99	N.	29	Froz.	...	35	23	...	Foggy
,, 21	30·42	W.	28	Froz.	...	37	26	...	Foggy
,, 22	30·01	S.W.	37	36	...	45	21	...	Fine
,, 23	29·69	W.	39	36	...	42	35	·02	Cloudy

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

We cannot undertake to return MSS. not used.

ALCOHOL IN DISEASE.

THE *Rev. Dr. Burns* is thanked for his letter, in which he observes that the fanaticism on this subject is not confined to one side. He also promises us an early report from the medical officers of the Temperance Hospital, which we shall be glad to receive, and to which we promise him that "friendly justice" shall be done.

Verax.—The matter is scarcely one for publication; but otherwise we agree with our correspondent. The removal of the boy in the manner described was inconsiderate and unjustifiable. We think it would have been better to have been satisfied with the expression of regret, and there to have left the assistant to have come to a just estimate of what was due to those in attendance.

L.S.A.—No doubt the treatment for gout must vary according to the habits and life of the individual patient; and a prolonged course of alkalies is not always advisable.

Enquirens might apply to the Director-General, 6, Craig's-court, S.W., for a schedule of the qualifications necessary for candidates for Commissions in the Army Medical Staff.

Mr. R. Rentoul is thanked for his communication. It shall have our attention.

THE LATE DR. ROBERT RIDDELL.

To the Editor of THE LANCET.

SIR,—Dr. Rogers having mentioned my name in THE LANCET as being willing to receive subscriptions for the widow of the late Dr. Riddell of Dunsford, Exeter, I think it only right that your readers should know something of the case they are called upon to subscribe to. About two years ago Dr. Riddell communicated with Dr. Rogers in regard to differences between himself and his guardians, arising, as he considered, from causes foreign to his appointment. Since that time complaints (as he said, without reason) had been continually made against him, when in a fit of desperation, he wrote an intemperate letter to his guardians who forwarded the same to the Local Government Board, which brought an answer requiring his resignation. The shock resulting from the letter was too great for his already enfeebled and worried brain, death by strychnine being the result; but immediately before taking this he wrote a heart-rending letter to Dr. Rogers expressive of his inability to bear up any longer against his troubles, thanking him for former kindness, and asking him to do what he could to assist his widow and children, who are left totally destitute. Dr. Rogers, I grieve to say, is too ill to move in the matter, and if no one else can be found better able to help the poor widow and children I will receive contributions for them, however small the amounts, and will insert them weekly in THE LANCET, with your kind permission.

The following subscriptions have already been received:—Jno. Woodman, M.D., Exeter, £1 1s.; H. Mallett, Esq., Dentist, Exeter, 10s.; Dr. Joseph Rogers, £1 1s.; J. Wickham Barnes, £1 1s.

I am, Sir, yours truly,

3, Bolt-court, Fleet-st., E.C., Dec. 18th, 1886. J. WICKHAM BARNES.

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THE CORONERSHIP FOR EAST MIDDLESEX.

Dr. Forbes Winslow writes to explain, in consequence of the numerous letters he has received in reference to his apparently sudden retirement from the candidature for this appointment, that when he first entered the field he was under the impression that there would have been two appointments, but on his discovering that this was not the case, he retired in favour of the late deputy, Mr. Collier, who had held his post for nine years.

Mr. G. Herblats Vos, M.B.—The pamphlet may be had of J. L. Allday, 39, Colmore-row, Birmingham.

Dr. Thomas Oliver.—We would endeavour to insert the reports from time to time.

THE BEAUFORT LIMBS.

To the Editor of THE LANCET.

SIR,—With reference to an article on Beaufort limbs, in THE LANCET of the 4th inst., I can fully endorse all that is stated there; also the remarks made on the subject in General Maxwell's pamphlet. The Provident Surgical Appliance Society, which has been established since the year 1872, is the only Society in England which supplies these limbs, and which makes them a speciality. Our experience of them during a trial of four years is very satisfactory, and out of about 220 supplied during that time, but few have been returned, and these are cases in which self-measurements have been taken by the patients, or where peg legs have previously been used for some considerable time. If, after an amputation, a patient would take directly to one of these limbs, I have no hesitation in stating that his movements and progression would be as fre and untrammelled as if he were supplied with a most costly instrument. Certainly the comfort derived from their extreme lightness and absence of shoulder-straps, their cheapness and general adaptability to almost any length of stump, are greatly in their favour. Below I give three cases out of the many which will show their utility. In conclusion, I may state that our consulting surgeon, Mr. Thomas Bond of the Westminster Hospital, greatly approves of them, and in suitable cases invariably recommends them.

The following are the cases:—William M——, formerly railway servant, has worn two for four years. He gets about well with them, and walks several miles daily. Amputation lower third of thigh, and upper third of the opposite leg. Harriet F. E——, nine years of age, has worn a Beaufort leg over two years. She skips and plays almost as easily and naturally as other children. General ——. Both legs amputated below the knee. The General states that he can ride better with a Beaufort limb than any other, and invariably uses it.

I beg to remain, Sir, your obedient servant,

F. OSBORNE SMITH,

December, 1886. Surgeon to the Surgical Appliance Society.

Dr. Dale (Scarborough).—The paper, if brief, will be acceptable.

Plato.—We do not prescribe.

MEDICAL ATTENDANCE ON THE POOR.

To the Editor of THE LANCET.

SIR,—Entire reform is sadly needed to remedy the existing evils which result from so-called charity—viz., the indiscriminate relief afforded at the out-patient departments of our metropolitan hospitals and dispensaries. It seems ridiculous, nevertheless it is a fact, that hundreds of people seek relief at hospitals annually, who could be better treated at their own homes, particularly medical cases, by local qualified medical men. In the parish in which I reside I have had ample reason to complain of the way in which letters are sent to the clergy for distribution by the so-called "visiting ladies" among the deserving poor—for example, a coachman in service, married, with two young children, earning from 30*s.* to 35*s.* a week, rent free, gas and water supplied, to say nothing of the so-called perquisites from the employers of the master. I maintain that such a case is not a proper one for "gratuitous relief." If persons were to provide for a rainy day, by being members of a well-organised provident dispensary, they would retain their self-respect.—I am, Sir, yours truly,

Dec. 11th, 1886. A PEDESTRIAN.

Mr. McK. Davidson.—Dr. Fayrer's pamphlet on the subject, published by Churchills.

HEMPSTEAD CHURCH.

To the Editor of THE LANCET.

SIR,—The members of the medical profession who kindly contributed the sum of £211 9*s.* 4*d.* towards the restoration of Hempstead Church, where the celebrated Dr. Harvey's remains rest, will be glad to learn that the rebuilding has commenced. The first contract is in the hands of Mr. W. Saint of Cambridge, and comprises the chancel arch, nave, north and south aisles, and the entire reseating; and will, it is hoped, be completed about midsummer next. The sum at present raised (about £1400) is inadequate for the rebuilding of the tower, which will require at the least another £1000; but it is hoped that, during the progress of the present work, additional subscriptions may be received; so that, before the builder's plant is removed, we may see the church and tower in their pristine beauty—a worthy memorial to the great physician's memory, and a house meet for the worship of the still greater Physician.

I am, Sir, yours gratefully,

Hempstead, Dec. 14th, 1886. JOHN ESCREET, Curate in charge.

Dr. J. B. Maurice (Marlborough).—Next week.

Mr. Sewill's letter will appear next week.

THE ARCHÆOLOGY OF ARTIFICIAL LIMBS.

THE history of medicine is all but silent on orthopædic surgery. And yet the Greeks and Romans, who, as archæology has shown, had anticipated much of modern dentistry, cannot have been without artificial substitutes for limbs lost in the vicissitudes of peace or war. Herodotus tells us of a captive who amputated his foot to free himself from the shackle, and thus escaped to his friends, who replaced the limb by a wooden one. The Elder Pliny (Nat. Hist., vii., 23, ed. Mayhoff) records the case of M. Sergius, great-grandfather of Catiline, who lost his right hand in his second campaign, was wounded twenty-three times in two campaigns, and thus had the complete use of neither hand nor foot. Twice made prisoner by Hannibal, he twice escaped, after twenty months spent in chains. He fought four battles with his left hand only, and then made himself a hand of iron, which he fastened on to fight with, and, thus accoutred, raised the siege of Cremona, protected Placentia, and took twelve camps of the enemy in Gaul. Similar substitutes for amputated arms or legs must have been in use even before the time of Sergius; so at least we may infer from the treasure-trove turned up at Capua in 1885, in a tufa-grave. Among the contents of this tomb was an artificial leg, made of bronze, wood, and iron, the skeleton being entire, save the bones represented by the artificial limb. This (probably unique) relic is now in the Museum of the Royal College of Surgeons of London, and is thus officially described: "Roman artificial leg. The artificial limb accurately represents the form of the leg. It is made with pieces of thin bronze, fastened by bronze nails to a wooden core. Two iron bars, having holes at their free ends, are attached to the upper extremity of the bronze. A quadrilateral piece of iron, found near the position of the foot, is thought to have given strength to it. There was no trace of the foot, and the wooden core had nearly all crumbled away. The skeleton had its waist surrounded by a belt of sheet bronze, edged with small rivets, probably used to fasten a leather lining. Three painted vases (red figures on a black ground) lay at the feet of the skeleton. The vases belonged to a rather advanced period of the decline in art (about 300 B.C.)." Commenting on the above, General H. H. Maxwell says: "It is important to add, from other sources, that the upper third of the leg was hollow, while the lower two-thirds were filled with wood."

Mr. C. F. Coombe.—Dr. Semon's instrument, which may be obtained of Weiss and Son, Oxford-street, London.

Ignoramus.—The attention of the Colleges should be called to the advertisement.

THE L.S.A. QUALIFICATION.

To the Editor of THE LANCET.

SIR—In the enumeration of degrees given by "L.S.A. (with no other qualification)," the holders of which, he insinuates, are mainly responsible for a large proportion of the cheap dispensaries, he forgets to make mention of one other title—namely, that of "Surgeon-Accoucheur," with a large-lettered "Surgeon" on the tablet or door-plate, and a comparatively small "Accoucheur," care being also taken to omit the conjunction. I find in this district (E.) about seven-tenths of the establishments mentioned by your correspondent are owned and worked by these so-called "surgeon-accoucheurs." On referring to the Medical Directory I find that this title is assumed only by those practitioners possessing the qualification L.S.A. Lond. or L.A.H. Dublin; and in no instance do I find anyone using it who holds a surgical degree, however moderate, or a medical degree other than those mentioned. Perhaps this may assist your correspondent in solving the problem as to "what proportion, &c. &c." I am, Sir, yours truly,

December, 1886. W. H. J.

GUY'S HOSPITAL.

To the Editor of THE LANCET.

SIR,—A meeting was held on Monday last to appeal to the public for assistance for Guy's Hospital in the shape of £100,000, to enable it to keep open its present number of beds. Its old motto "Dare quam accipere" should at such a time as this force itself upon the attention of all Guy's men who revere their *alma mater*, and are jealous of her good name. I write in the hope that steps will at once be taken to form a committee among ourselves, for the purpose of bringing the matter clearly before the minds of Guy's men everywhere. If each will do his part by contributing himself, and earnestly seeking donations from his friends, we ought to be able to bring to our old school a sufficient sum to tide her over her difficulties, and thus gratefully acknowledge all we owe to her teaching. I remain, Sir, yours obediently,

Dec., 1886. E. D.

THE VACANT ABERDEEN CHAIR.

To the Editor of THE LANCET.

SIR,—The remarks in your last issue relating to the action of certain gentlemen who support Dr. Bridger's candidature call for a short reply.

As the one responsible for the sending out of the circulars to which you refer, I beg to say that, with few exceptions, these were addressed solely to gentlemen whom we had good reason to think knew Dr. Bridger, either personally or by repute. Nothing in the shape of a general and promiscuous appeal to the profession was either contemplated or made.

I am, Sir, your obedient servant,

Inverness-terrace, W., Dec. 21st, 1886. J. WILLIAMS.

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THE BROWN LECTURES.

IN the third line of the second column of the report of Mr. Victor Horsley's lectures published last week the name "Weber" was by an oversight allowed to stand for *Baber*.

Mr. J. Thomson (Leith).—We do not give medical advice.

COMMUNICATIONS, LETTERS, &c., have been received from—Prof. Brown-Séquard, Paris; Prof. Humphry, Cambridge; Dr. Charteris, Glasgow; Lord Brabazon, London; Dr. O. Sturges, London; Prof. Pettigrew, St. Andrews; Mr. Grierson, London; Mr. Upton, London; Mr. H. Bramwell, Newcastle-on-Tyne; Mr. Keetley, London; Mr. Marmaduke Sheild; Mr. A. P. Green, Bechuanaland; Mr. C. S. Jeaffreson, Newcastle-on-Tyne; Dr. Illingworth; Dr. Glasier, Eastbourne; Dr. H. E. Armstrong; Dr. Maurice, Marlborough; Mr. Power, Peterborough; Mr. H. W. Allingham, London; Mr. J. Philipson; Mr. Wickham Barnes, London; Mr. W. Parker, Bath; Mr. R. H. Firth, Mecan Meer; Mr. Anderson, Llandudno; Mr. H. Sewill, London; Mr. Noble Smith, London; Dr. Smolsky, St. Petersburg; Messrs. Burgess and Co., London; Dr. Thos. Oliver, Newcastle-on-Tyne; Dr. Dawson Burns, London; Mr. W. Rivington, London; Messrs. Maclehose and Sons, Glasgow; Mr. MacDermott, Newry; Messrs. Mottershead and Co., Manchester; Dr. Percival Hunt, Sheerness; Messrs. Baiss and Co., London; Mr. Nixon, London; Dr. Gowers, London; Mr. Lawson Tait, Birmingham; Dr. W. A. Haman, Reading, Pa.; Mr. Ashton Ellis, London; Dr. Declat, Paris; Mr. Goulder, Dudley; Dr. Oscar Jennings, Paris; Mr. S. T. Smith, Peterborough; Messrs. Milner and Co., Edinburgh; Mr. F. Tebbitt, Heidelberg; Mr. Lowe; Dr. James Fraser; Mr. J. McLean, Otago; Mr. Kneebone, Bedford; Dr. Hope, Liverpool; Mr. T. Holmes; Mr. Harwood, Bristol; Dr. C. F. Knight, Dublin; Mr. W. G. Holloway, London; Mr. W. H. Penney, London; Mr. J. W. Teale, Scarborough; Mr. Fox, Birmingham; Messrs. Pegg and Co., London; Mr. Browne, London; Messrs. Kegan Paul and Co., London; Dr. Branthwaite, Twickenham; Messrs. Harris and Sons, Birmingham; Rev. W. Faulconer, Quebec; Messrs. Lee and Nightingale, Liverpool; Mr. Hamilton, Chesterton; Messrs. Ellis and Co., Birmingham; Miss Butten, Presteign; Mr. Abbs, Dewsbury; Mr. Bryan, Witheridge; Mr. Crassweller, London; Dr. Spicer, Hammersmith; Mrs. Robson, Tewkesbury; Mr. McClelland, Glasgow; Mr. Sargeant, London; Mr. Gibson, Bromley; Dr. Thomson, London; Mr. Cowan, Glasgow; Mr. McKenzie, Ryde; Messrs. Hooper and Batty, London; Dr. Tennant, Bathgate; Messrs. Slinger and Son, York; Mr. Coleman, Cardiff; Mr. F. Treves, London; Mr. Frewen; Ignoramus; A. B.; Sister Elizabeth, Woolwich; M., Fulham; Plato.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Stalker, Kaitanganta; Mr. Moore, Linkinhorne; Messrs. Mackay Bros., New Brompton; Mr. Whitehurst, Burton-on-Trent; Mr. Nourse, Morchard Bishop; Dr. Edmiston, Glasgow; Mr. Watson, Glasgow; Mr. Thomas, Christchurch; Mr. Gerrish, Portland, U.S.A.; Mr. Longley, New Cross; Mr. Kesteven, Holloway; Mr. Hawksley, London; Messrs. Sang and Barker, Edinburgh; Messrs. Mackay, Edinburgh; Dr. Macadam, Edinburgh; Dr. Laprade; Mr. Russell, Liverpool; Dr. Littlewood, Walsall; Mr. Rideal, London; Mr. Spornes, Fulham; Mr. Morgan, Morriston; Dr. Glover, London; Mrs. Hymus; Mr. Gates, Shoreditch; Dr. Walker, Middlesbro'; Mr. Dowker, Helmsley; Messrs. Hay and Sons, London; Mr Cowell, Sheffield; Mr. Davey, Eastbourne; Mr. Flower, Beverley; Mr. Mansell, Hastings; Mr. Spowart, Sheffield; Mr. Poole, Maldon; Dr.; A. B., Lynn; B.C.; Medicus, Sheffield; W., Market Drayton; Secretary, Oakhill; Nero; L. M. T.; Medicus, Liverpool; Beta; Q. P.; Matron, Grantham; X.; Alpha, Birmingham.

Islington Gazette, Dundee Advertiser, Western Daily Mercury, Manchester Examiner, Dundee Courier, New Zealand Times, Hour Glass, Philadelphia Public Ledger, Edinburgh Evening News, Richmond and Twickenham Times, Newcastle Daily Chronicle, &c., have been received.

Medical Diary for the ensuing Week.

Monday, December 27.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesdays, same hour.
CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2.30.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
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CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
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MIDDLESEX HOSPITAL.—Operations, 1 P.M.
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SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.
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CHILDREN'S HOSPITAL, GREAT ORMOND-STREET.—Operations, 9 A.M.; Saturday, same hour.

Thursday, December 30.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.
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Friday, December 31.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Saturday, January 1.

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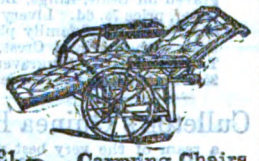
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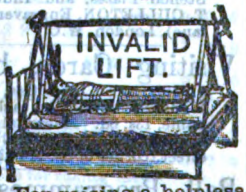
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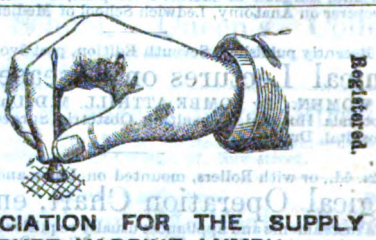
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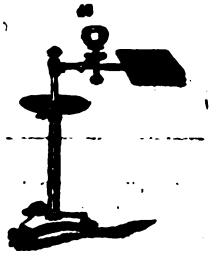
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This preparation, which we venture to hope may be at least accorded a trial by the medical profession, is obtained by an entirely new process in the production of Cod-liver Oil, which reduces it to a cream, without in the slightest degree altering its therapeutic value or effect.

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It is in fact Cod-liver Oil pure and simple, produced in a cream-like really pleasant form, instead of the oily unpalatable one.

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Knowing the unreliability and poor quality of many of the numerous Pepsine Compounds now in the market, after thoroughly testing the following formula:—

Saccharated Pepsine	10 Grains.
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Acid Lacto-phosphate of Lime	5 ,,
Exsiccated Extract of Malt equal to one teaspoonful of Liquid Extract of Malt	10 ,,

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EACH TEASPOONFUL (ONE FLUID DRACHM) CONTAINS:

Lime Hypophosphite	2 grains	Iron Hypophosphite	¼ grain
Sodium „	1½ „	Manganese „	¼ „
Potassium „	1 „	Quinine „	¼ „
Strychnia, ⅛th grain.			

Half & 1lb., Stamped, 24s. and 42s.; Unstamped, 21s. & 36s. doz. In Bulk for Dispensing, 2s. 6d. lb.

The Manufacturers claim for Lorimer's "Syr. Hypophosph. Co.":—

1st. That the *formula* is *original*. There is no other preparation of the Hypophosphites which contains the same proportions, or so large proportions of the various salts.

2nd. The formula is *definite and unvarying, and being stated on every label, is non-secret*. Hence the Practitioner knows what he is handling, can vary the dose according to the requirements of the case, and is not encouraging the trade in *secret* or *quack* nostrums.

3rd. It is pleasant to take.

4th. The *Strychnia* and other active ingredients are held permanently in solution; it does not precipitate, become cloudy, flocculent, or unsightly.

5th. It contains no free acid, but is neutral, or very slightly alkaline, and will not disagree with the most sensitive stomach.

6th. The price is not a fancy one.

7th. Lorimer's Hypophosphites are superior in chemical and therapeutical value to all other similar preparations; and *free trial samples are supplied to Members of the Medical Profession* on application, in order to enable them to judge as to the fairness of this claim.

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MESSRS. LORIMER & CO.

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Your Syrup of the Hypophosphites has proved of such *inestimable value* in my own case that I can hardly say too much in its favour as a remedial agent.

For five weeks I laboured under great nervous prostration, and was in a semi-anæmic condition, with debility of the digestive organs, and such torpor of the bowels as necessitated the constant use of aperient medicine (a very unusual want with me), which I aided by the Infusions of Columba, Gentian, &c., accompanied by preparations of Iron, with very little benefit, till I happened to see the formula of your Syrup in looking over the *British Medical Journal*.

The action of your preparation has been *all but magical*: by the time I had taken five doses, the obstinate constipation was relieved, my appetite returned, and I felt stronger than I had done for many months previously. I am happy to say these good results have proved to be permanent.

Yours faithfully,

A PHYSICIAN.

Birmingham, June 30th, 1885.

Dewsbury, April 25th, 1886.

An invaluable remedy in pulmonary tuberculosis. The patients like it, finding it an agreeable stimulant and tonic, and quickly improving the appetite. I shall in future use it more extensively. M.D.

Kirkburton, Yorkshire, April 21st, 1886.

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Kidderminster, March 23rd, 1886.

LORIMER'S HYPOPHOSPHITES.—I have given your Syrup Hypophosph. Co. in several cases, and always with marked benefit. I consider it an elegant compound, and superior to all others.

HONORARY SURGEON, Kidderminster Infirmary.

Clifton, July 20th, 1886.

I prefer it to any other. It appears to meet the desideratum long sought for—viz., an elegant preparation, definite and stated formula, and moderate price. M.D.

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COCAINE LOZENGES. 1-10th gr. in each, oz., 6d., decorated tin boxes, 9s. dozen.

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Distilled from the bark of the *Hamamelis Virginica*, and used in the treatment of cuts, bruises, inflammations, all irritated surfaces, and internal and external hæmorrhages. *It is identical with certain much* advertised *nostrums* under various fanciful names.

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LARGELY PRESCRIBED AS AN ARTICLE OF DIET
IN ALL CASES OF
CONSUMPTION, WASTING, LOSS OF APPETITE, STRENGTH, and DIGESTIVE POWER.

The special advantage of Pancreatic Emulsion is that it provides the NATURAL STABLE SOLID FATS OF FOOD, predigested by the action of the pancreatic secretion, so that they can be taken without the least disturbance of the digestive functions. As it provides SOLID fat, it is well to make it alternate with a liquid fat, like cod-liver oil, even where the latter agrees, and in many cases where cod-liver oil disagrees it may be permanently substituted with the greatest advantage, or it may be taken WITH the oil, the assimilation of which it actively promotes.

The Emulsion is of the consistence of Devonshire cream, easily miscible with fluids, and quite unobjectionable in taste. It may be given in milk or water, and with the addition of a little wine or brandy if desired.

In Bottles, 2s. 6d., 4s. 6d., and 8s.

SAVORY & MOORE, 143, NEW BOND STREET, W.



HORSFORD'S ACID PHOSPHATE,
(LIQUID.)

Prepared according to the directions of Prof. E. N. HORSFORD, of Cambridge, Mass., U.S.A.

FORMULA:—Its analysis shows that each fluid drachm contains 5 1-2 grains free Phosphoric Acid (P_2O_5), and nearly 5 grains Phosphate of Lime, Magnesia, Iron, and Potash.

Horsford's Acid Phosphate has been in use by the medical fraternity of the United States and elsewhere for several years, with the most satisfactory results, in

Dyspepsia, Indigestion, Mental and Physical Exhaustion, Insomnia, Nervousness, Diminished Vitality, &c.

It is a colourless liquid, acid to the taste, and contains no pyro-phosphate or meta-phosphate of any base whatever.

Among the numerous forms of phosphorus in combination, Horsford's Acid Phosphate seems best adapted for use as a medicinal remedy.

Especially serviceable as a menstruum for the administration of such alkaloids as strychnia, morphia, quinia, and other organic bases which are usually exhibited in acid combination.

It makes a refreshing and nutritious drink in fevers, and with water and sugar a delicious beverage.

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☞ PHYSICIANS who have not used Horsford's Acid Phosphate, and who wish to test it, will be furnished a sample on application to Corbyn, Stacey, & Co., Francis Newbery & Sons, Barclay & Sons, London; or John Thompson, Liverpool; and sample will be furnished free of charge, except the expense of packing and postage (sevenpence), which amount should accompany the application.

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This Company has now been in active operation for more than **Thirty Years.** It was established to supply the Medical Profession and Public Institutions with Drugs, Chemicals, and Pharmaceutical Preparations, &c., at the lowest prices compatible with maintaining the highest standard of quality, and to this principle it has always steadily adhered.

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SYR. HYPOPHOS. CO., FELLOWS.

CONTAINS THE ESSENTIAL ELEMENTS to the Animal Organisation—Potash and Lime;

THE OXIDISING AGENTS—Iron and Manganese;

THE TONICS—Quinine and Strychnine;

AND THE VITALISING CONSTITUENTS—Phosphorus, combined in the form of Syrup with **SLIGHT ALKALINE REACTION**.

IT DIFFERS IN EFFECT FROM ALL OTHERS, being highly susceptible to oxidation during respiration, pleasant to taste, acceptable to the stomach, and harmless under prolonged use.

IT HAS SUSTAINED A HIGH REPUTATION particularly in the treatment of Pulmonary Tuberculosis, Chronic Bronchitis, and other affections of the respiratory organs. Is employed also in various nervous and debilitating diseases with success.

ITS CURATIVE PROPERTIES are largely attributable to Stimulant, Tonic, and Nutritive Qualities, whereby the various organs are recruited.

ITS ACTION IS PROMPT. stimulating the appetite and the digestion; it promotes assimilation, and enters directly into the circulation with food products.

The prescribed dose produces a feeling of buoyancy, and removes depression and melancholy; hence it is of great value in the treatment of mental and nervous affections. From its exerting a double tonic effect, and influencing a healthy flow of the secretions, its use is indicated in a wide range of diseases.

NOTICE.—CAUTION.—The success of Fellows' Hypophosphites has prompted certain persons to utter substitutes. Mr. Fellows, having examined several of these, finds no two samples identical, and all differ from the veritable, in composition, in freedom from acid reaction, in susceptibility to the effects of oxygen when exposed to light or heat, in the property of retaining the strychnine in solution, and in the medicinal effects.

SPECIAL NOTICE.

Lest any Members of the Medical Profession may be misled by the many specious advertisements of imitators of Fellows' Syrup of Hypophosphites, Mr. Fellows begs to publish the following, viz.—

That he is the sole inventor of the formula of Fellows' Compound Syrup of Hypophosphites, which was discovered and prepared for the first time for his own use in 1865, when out of health;

That the testimonials bear date from the year 1868;

That the genuineness of the early testimonials was certified by Aaron Alward, Esq., M.D., Mayor of the City of St. John, Province of New Brunswick, Canada, and the great seal attached on 6th February, 1868; and

That the formula of the Syrup has never since been changed.

Mr. Fellows therefore refers to the printed form surrounding every bottle, where the letters may be found in detail.

As cheap substitutes are frequently dispensed instead of the genuine, Mr. Fellows can only advise that his Syrup should be prescribed in the original bottles, 4s. or 7s., where the distinguishing marks will prevent imposition.

WHOLESALE AGENTS—

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THE FILTER USED IN THE SOUDAN EXPEDITION!

"It filtered the water both quickly and well, and was much valued by our Soldiers." VISCOUNT WOLSELEY.

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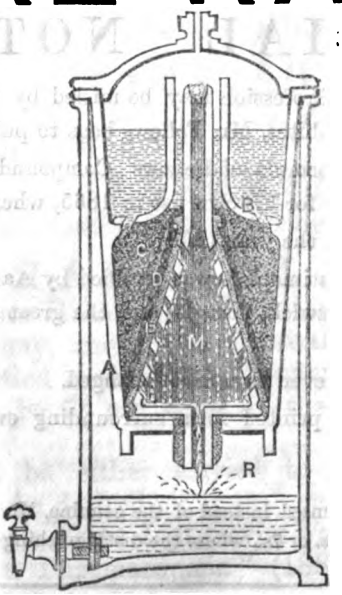
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MAIGNEN'S PATENT "FILTRE RAPIDE."

DESCRIPTION.

R Reservoir.
A Filter Case.
M Filtering Frame.
E Asbestos Cloth.
D Layer of Powdered Carbo-Calcis.
C Granular Carbo-Calcis.
B Screen.

ALL PARTS LOOSE.



POWER.

This Filter is guaranteed to remove from water not only the impurities in suspension, but also those in solution, such as Sewage or Lead.

☞ **The water is thoroughly aerated whilst issuing within the frame in a most minute state of division.**

Prices and full particulars in Pamphlet, "Water, Preventable Disease and Filtration," sent free on application to

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BENGER'S PREPARATIONS OF THE NATURAL DIGESTIVE FERMENTS.

GOLD MEDAL—International Health Exhibition, London.

"Mr. Benger's admirable preparations."—THE LANCET, March 25th, 1882.

"Deserving of the highest praise, and only require to be made known to the profession to ensure their extensive employment."—THE PRACTITIONER, Feb. 1883.

1. LIQUOR PANCREATICUS (BENGER).

(REGISTERED.)

An extract in which the digestive principles (proteolytic and amylolitic) of the pancreas exist in a state of great activity. It is used chiefly for preparation of peptonised or partially digested foods, such as milk, soups, beef-tea, &c., the administration of which has been attended with such great success in the treatment of various diseases. *Simple directions for preparing these accompany each bottle, and no special apparatus is required.* In 4, 8, and 16 oz. bottles.

"It is of this preparation that I must be understood to speak in what I have now to say on the production of artificially digested food."—Lumleian Lectures, by Sir WM. ROBERTS, M.D., F.R.S.

BENGER'S PEPTONISING POWDERS. *Pulvis Pancreaticus Alkalinus (Benger).* Colourless, odourless, soluble. One will peptonise a pint of milk, gruel, &c., in fifteen minutes. In boxes containing 12 powders.

2. LIQUOR PEPTICUS (BENGER).

AN EXCEEDINGLY ACTIVE FLUID PEPSINE. Dose: One or two teaspoonfuls in a wineglass of water, wine, or weak spirit and water, with meals. It is without disagreeable taste, and, being used to assist the natural digestive powers of the stomach, is best taken during the meal.

"Those of you who from past experience have lost faith in Pepsine may be encouraged to try again the more active preparations which are now within our reach. The Liquor Pepticus prepared by Mr. Benger is a digestive agent of extraordinary power."—Sir WM. ROBERTS, M.D., F.R.S., at the Northwich Meeting of the British Medical Association.

In 4, 8, and 16 oz. bottles.

PEPSIN (BENGER). In tasteless coated pills. Dose, one with each meal. Convenient where great portability is essential. In bottles containing 25, 50, and 100 pills.

3. BENGER'S PEPTONISED BEEF JELLY.

A DELICATELY FLAVOURED, CONCENTRATED, PARTIALLY DIGESTED, AND SOLIDIFIED BEEF-TEA, containing, besides the Salts and flavouring principles, much of the *fibrin* or *flesh-forming* elements of the beef in a soluble form, fit for immediate absorption. On this account it constitutes an exceedingly valuable and delicious quick restorative. It can be taken by teaspoonfuls, cold as a jelly, or dissolved in a little hot water, as a concentrated beef-tea. It is also used to fortify or enrich ordinary beef-tea, soups, &c. It affords to invalids, when travelling, a ready and convenient form of concentrated nutriment.

"It is a most valuable form of concentrated food."—THE LANCET, March 25th, 1882.

"We have found it invaluable for old people whose digestive powers are feeble, and also in convalescence from acute disease."—LONDON MEDICAL RECORD, March 15th, 1882.

Tins, which are sealed, and will keep in any climate, 2s. each.

4. BENGER'S FOOD (For CHILDREN, INVALIDS, and those of weak digestion.)

(PANCREATISED FARINACEOUS.)

NOTICE TO THE MEDICAL PROFESSION.—BENGER'S FOOD consists of a specially finely ground Hungarian wheaten flour, cooked, slightly alkalised, and impregnated with a suitable proportion of the natural digestive principles of the pancreas. When this Food is mixed with warm milk, or milk and water, as directed on each tin, the pancreatic enzymes become active; the casein of the milk is so modified thereby that firm indigestible curds cannot be formed in the stomach, and the farinaceous elements of the food are rendered soluble; hence, it will be found that BENGER'S FOOD can be enjoyed and assimilated when all other foods disagree. It forms a delicate and highly nutritious cream, entirely free from rough and indigestible particles, such as often produce irritation in delicate stomachs.—(See Medical Reports with each tin.)

THE LONDON MEDICAL RECORD, March 15th, 1882, says:—*"Undoubtedly a great advance on any previous attempt in this direction. It is palatable and excellent in every way. We have given it in very many cases with the most marked benefit, patients frequently retaining it after every other food had been rejected. For children who throw up their food in curdled masses it is invaluable."* Tins, 1s. 6d., 2s. 6d., and 5s. each.

N.B.—To guard against Imitations, Physicians should specify BENGER'S PREPARATIONS. above may be obtained through all leading Wholesale and Retail Houses at home and abroad, or they can be forwarded direct from the Manufacturers by Parcel Post.

MANUFACTURERS:

MOTTERSHEAD & CO., {S. PAINE and F. S. BENGER,} Pharmaceutical Chemists,

7, EXCHANGE STREET, MANCHESTER.

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BURROUGHS, WELLCOME & CO.'S PAGE.

[Fresh and Original Matter on this page every week.]

Burroughs, Wellcome & Co. claim the sole responsibility for everything that appears on this page.

It is not the design of this series to instruct or deal with open questions, but simply to note those facts which bear directly upon the practical application of recent developments in pharmacy.

Gastro-Intestinal Diseases.

CLINICAL REPORTS OF TREATMENT WITH FAIRCHILD'S PEPTONISING POWDERS.

"If a child is so weak and exhausted that it will not digest the mildest form of food prepared, and it is impossible to obtain breast milk—for this should be our first thought—it is useless to weaken the condensed milk, or whatever we use, to such a degree as to make it absolutely valueless as a nutriment. . . . . In such cases, and they are frequent in the summer months, the preparation of milk which has undergone partial digestion with Fairchild's Peptonising Powders I have found most useful."—*Excerpt from a clinical lecture by Dr. J. M. Keating.*

In Sir William Roberts' work on "Digestive Ferments" it is written:—"If we could change the casein of milk into peptone, *without materially altering the flavour and appearance of the milk*, [italics ours] such a result would go far towards solving the problem of supplying an artificially digested food for the use of the sick." It was with the definite object of preparing a Peptonising Powder that would uniformly afford a peptonised milk as sweet and assimilable as mothers' milk, that the scientific chemist, Mr. Fairchild, set out. The very general use of the Fairchild Peptonising Powders bespeaks how thoroughly he accomplished his task. These Peptonising Powders have now been used for some time by the profession, and with results that seem almost unparalleled in brilliancy. The following very interesting clinical reports, penned by painstaking parents, cannot do otherwise than further substantiate the usefulness of Fairchild's discovery.

CASE I.—The first is from Mr. H. Sadd, of New Jersey:—"I think it proper," he says, "that I should add my testimony regarding the value of Fairchild's 'Peptonising Powders'—in preparing food for infants, for the effect my experience might have in inducing others to try the preparation in a like emergency.

"From the time of his birth I was unable to find any food which suited my baby, and at the age of seven weeks he was taken sick with cholera infantum. His surroundings and the general care he had received were good, and the disease was directly caused by inappropriate food.

"In four days from the time the disease was noticed he was reduced to a skeleton, and was not expected to live from hour to hour. During that time a number of expedients were resorted to to provide him nourishment, but without success—cows' and goats' milk, and the different prepared foods, being rejected immediately.

"While life was at this low ebb, he was for three days kept alive by slight portions of [illegible] Food and brandy, but no progress towards recovery was noticeable until the eighth day of his illness, when the freshly peptonized milk was first used.

"A tablespoonful was given at intervals of two hours, and was retained in every instance. There was an improvement noticeable at once, and in twenty-four hours it was apparent that we had finally found a food adapted to him. The quantity given was increased gradually, until at the end of a week a full quantity was prepared each morning and night.

"During the week the baby gained one and a half pounds. Later double the quantity of peptonised milk was prepared morning and night, and its use was continued until he was seven months old. His gain in weight during the time was regular, and averaged two-thirds of a pound a week.

"I have gone to this length for the reason previously stated, and with the hope that the details of my experience with Fairchild's Peptonising Powders may induce others to give them a trial, thereby possibly saving some infant life."

CASE II.—The second report we would cite is from the well known Dr. J. L. Ludlow of Philadelphia, and nothing could be more convincing; he says of Fairchild's Peptonising Powder,—"Its value has come home to me in my own family. I believe the life of one of my little ones was saved by it."

CASE III.—The third report is from Mr. George Swift, of Melbourne, and is as conclusive as the preceding. Mr. Swift writes:—

"When about fourteen weeks had elapsed after my wife was confined, the natural milk supply began to fail, and by the end of the fourth month had entirely ceased. We had recourse to the usual substitute, cows' milk, which was attended with very indifferent success, from the little one's being unable to digest the excess of casein. The result was *diarrhœa and gradual wasting away.* Just at this time I took up the pamphlet on Fairchild's Peptonising Powders, made myself thoroughly master of its contents, and at once put into operation the instructions given for peptonising milk. I am happy to inform you that *the result was most surprising. In less than 24 hours our little one showed marked symptoms of improvement*, the stools becoming less frequent and watery, and containing fewer undigested lumps of casein; and so gradually improving that *at the end of the third day every bad symptom had disappeared*, and to day as I write, now a fortnight since commencing the use of the peptonised milk, she is as healthy as any parent could wish—a living monument to its use."

BURROUGHS, WELLCOME & CO.

SNOW HILL BUILDINGS, LONDON, E.C.

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Diarrhœal Diseases.

THEIR PREVENTION AND CURE.

INFANT MORTALITY.

"It may be asked whether the practical results of peptonising the casein of cows' milk are as beneficial in early infancy as the theory would indicate. As far as tried, the question can be answered in the affirmative."—NEW YORK MEDICAL RECORD.

After referring to Zymine, and the pancreatic method of pre-digestion, the BRITISH MEDICAL JOURNAL says:—"Its introduction has probably done more than any other measure of recent times to lessen infant mortality."

There is nothing physicians who have many children under their care dread more than the summer months. A great deal has been written about the dangers of the "second summer," but of course the second summer differs not from any other summer. It is well known that at certain periods of life certain diseases are most apt to appear. Diarrhœa is the scourge of infant life, and milk peptonised with Fairchild's Peptonising Powders is the best preventive.

STARTLING STATISTICS.

The disease of all diseases to carry off young infants is summer diarrhœa. In a prominent treatise on diseases of children, a record is given of the monthly deaths from diarrhœa and dysentery, in Philadelphia, during a period of seven years, and this record shows that just about two-thirds of the mortality of each year was in the months of July and August. In London and New York from 1-10th to 1-8th of all the deaths of the entire population is from diarrhœal diseases in children under five years of age; "in one town in New England the mortality reached nearly 15 per cent., and in one Southern city nearly 18 per cent." (Yale).

Of over 2000 cases of diarrhœa that came under the notice of Dr. West at the Children's Infirmary, "exactly half occurred in children between the ages of six months and two years," and during eight years in the same institution, from May to October inclusive of each year, diarrhœa formed 38·3 per cent. of all diseases. Of 14,773 deaths among children in New York, 13,000 were from diarrhœa in those under 5 years of age.

"In one of the three foundling hospitals of France, that at Rheims, the stay of the infant does not exceed a few days; but neither while there, nor afterwards when at nurse in the country, is it brought up at the breast. The mortality under one year of the children admitted reached 63·9 per cent. (authority of M. Villermé). At X———, where none of the children are suckled, but all are fed, of 224 new-born infants, 197 (or 80 per cent.) had died by the end of the first year" (West).

ARTIFICIAL FEEDING.

"Before the Foundling Asylum was established, the foundlings of New York, more than a thousand annually, were placed in the almshouse on Blackwell's Island, in charge of the pauper women. . . . To each of these women one or two foundlings were assigned, and they were expected to feed them with the milk and coarse bread of the almshouse made into pap. These waifs all died within three months." The writer of these words, Dr. Louis Smith, says that in one institution, "a ward is set aside for such infants as are from necessity deprived of breast milk, and it goes by the name of *the ward of the dying babies.*"

Dr. Thorpe, of Liverpool, states that of 634 deaths from infantile diarrhœa, only 28 were fed on mothers' milk.

A SURE PREVENTIVE.

With a due appreciation of all these facts, and after the most crucial tests by the greatest living authorities on Diseases of Children, we have introduced a preparation, Zymine (Extractum Pancreatis), Fairchild, of which Dr. Geo. Harley years ago affirmed, that if ever such a one were produced it would be the greatest boon ever conferred upon suffering humanity. At the Philadelphia Sanitary Convention in June, in an able article on "Artificial Feeding," Dr. Keating maintained that cows' milk, properly prepared, is *the next best thing to mothers' milk.* The council at Salsburg asserted the same.

The following from a leader in the NEW YORK MEDICAL RECORD on "Improvement n Infant Diet" is to the point:—"We have seen that cows' milk is the best substitute for human milk, but that the former is apt to disagree with the infant. . . . . Let ordinary pure cows' milk be diluted with water that has previously been boiled to destroy all germs, until its percentage of albuminoids has been reduced to the proper amount. Next add to it enough cream to make up the fat, and some sugar of milk. Then peptonise it with reliable extract of the pancreas [Fairchild's Peptonising Powders] for the alteration of casein, and there is produced the best physiological imitation of mothers' milk."

Milk peptonised with Fairchild Peptonising Powders* is used in the largest hospitals in the world, and has been the means of saving untold numbers of infant lives.

Dr. Ludlow says:—"I believe the life of one of my little ones was saved by it," and Dr. Keating says:—"I feel satisfied that the question of infant feeding is solved."

DIRECTIONS FOR PEPTONISING MILK.

FOR INFANTS UNDER SIX MONTHS.

Pour one Fairchild Peptonising Powder into the nursing bottle with ¼-pint of water and ¼-pint of milk; keep warm for 20 minutes before administration; sweeten a little.

FOR INFANTS OVER SIX MONTHS.

Add one-half Fairchild Peptonising Powder to ¼-pint of water, and half again or twice as much milk; keep warm for 20 minutes before feeding. It is then ready for use.

Pure milk sugar, Kepler Extract of Malt, or even loaf sugar may be added to the milk if deemed expedient; also a little fresh cream.

NOTE.—When not for immediate use, the peptonised milk should either be kept on ice or boiled for two or three minutes to prevent over-peptonisation.

When the age is reached at which farinaceous food is thought desirable, peptonised milk gruel may be given. It is prepared by having a teaspoonful of good wheat flour or other flour boiled with the water before adding to the milk.

BURROUGHS, WELLCOME & Co.

* Trial Specimens supplied to the profession free, upon request.

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A COMPLETE LIST OF

Burroughs, Wellcome & Co.'s New Preparations.

ANTIPYRIN TABLOIDS.
The new Antipyretic (a chinolin derivative).

EUCALYPTINE (BURROUGHS).
Powerfully antiseptic. For Strains, Sprains, Bruises, Scalds, Lameness, etc.

ZYMINE (EXTRACTUM PANCREATIS), FAIRCHILD.
For predigesting foods of all kinds, for Invalids and Infants.

ZYMINE TABLOIDS.
Prescribed in Intestinal Dyspepsia.

COMPOUND ZYMINE TABLOIDS.
Prescribed in Bilious Dyspepsia.

PEPSIN IN SCALES (FAIRCHILD).
One grain digests 1,000 grains of egg albumen.

PEPSIN TABLOIDS.
For Gastric Dyspepsia. Children like them as sweets.

PEPTONISING POWDERS (FAIRCHILD).
One of these predigests a pint of milk in a few minutes.

ARTIFICIAL SPONGES AND WOUND PADS.
Antiseptic or plain. One of them will absorb fifteen times its weight of water or blood.

TEST TABLETS.
For freshly preparing Fehling's Solution.

PURE TEREBENE (BURROUGHS).
The new remedy for Winter Cough and Flatulence.

TRYPSIN (FAIRCHILD).
For dissolving away the membrane in Diphtheria. A pancreatic digestive ferment.

CODMAN AND SHURTLEFF'S STEAM ATOMIZER.
The steam may be medicated as desired.

URETHANE TABLOIDS.
The new Hypnotic. (A salt of Carabamic Acid).

TRINITRINE TABLOIDS.
Discovered by Dr. Murrell to relieve Angina Pectoris.

TRINITRINE COMP. TABLOIDS.
(Nitro-Glycerine, Nitrite of Amyl, Capsicum, Menthol.)
Prescribed for fatty heart, and at the onset of an epileptic aura, but especially for angina pectoris.

STROPHANTHUS.
A cardiac tonic; it does not constringe the arterioles.

VALOIDS.
Equivalent fluid extracts of definite strength, for the immediate preparation of Tinctures, Syrups, Infusions, etc.

HYPODERMIC TABLOIDS.
The LANCET :—"They are very soluble and not at all irritating"

HAZELINE.
Anodyne, Sedative, Antiseptic, Hæmostatic, and Tonic.

BURROUGHS CHLORIDE OF AMMONIA INHALER.
VEREKER'S PATENT.
"It is the best I have used, and I think I have tried all."
—R. FRANKS, Dublin University.

MEDICAL POCKET CASES.
The best, most convenient, durable and economical.

COMPLETE HYPODERMIC POCKET CASES.
For Syringe, Needles, Tubes of Hypodermic Tabloids, etc.

VAGINAL TAMPONS.
Antiseptic. As recommended by Dr. FANCOURT BARNES.

ELIXOIDS.
They effectually disguise every unpleasant quality, and are most elegant and palatable preparations.

BURROUGHS, WELLCOME & CO., Manufacturing Chemists, Snow Hill Buildings, E.C.

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THE

KEPLER SOLUTION

OF

Cod Liver Oil in Extract of Malt.

The most powerful Fattening, "Tissue-Forming," "Force-Producing" Digestive Food ever produced.

"This is not an *Emulsion;* its constituents are in a condition of more intimate admixture, namely, that of *Solution.*"—E. GODWIN CLAYTON, F.C.S.

"An ideal form for administration of fat."—BRITISH MEDICAL JOURNAL.

"The taste of the oil is agreeably disguised, the nutritive powers are greatly increased, and it is rendered easy of digestion."—IBID.

"It has hardly any of the disagreeable repeats of the oil. Many could take it easily who could not take the oil."—The LANCET.

"Its superiority as a therapeutical agent, especially in cases of wasting diseases, is obvious."—IBID.

"It is the most palatable and easily digested of any form of cod liver oil."—The MEDICAL TIMES AND GAZETTE.

VOICE "TABLOIDS."

(COCAINE, CHLORATE OF POTASH AND BORAX.)

Cocaine relieves irritation and dryness of the throat, restores the tonicity of the vocal chords, and effects a grateful secretion.

TRADE "TABLETS." MARK.

COMPRESSED CHLORATE OF POTASH.

BEAUTIFUL LENTICULAR DISCS.

(Prepared by the "WYETH" Process.)

"Chlorate of Potash exercises great influence on mucous membranes."

"Infinitely superior to lozenges."—DR. LENNOX BROWN.

COMPRESSED CHLORATE OF POTASH AND BORAX.

The Borax enhances the action of Chlorate of Potash. It relieves hoarseness, irritation of the throat and bronchi, and is a preventive of diseases of the nares, throat and larynx. Purifies the breath.

BURROUGHS, WELLCOME & CO., Manufacturing Chemists, Snow Hill Buildings, E.C.

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J. & A. CHURCHILL'S PAGE.

The Medical Adviser in Life Assurance.

By Sir EDWARD SIEVEKING, M.D., F.R.C.P., Physician to St. Mary's and Lock Hospitals; Physician Extraordinary to the Queen; Physician-in-Ordinary to the Prince of Wales. Second Edition. Crown 8vo, 6s.

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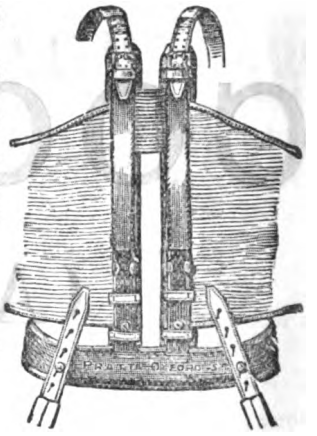
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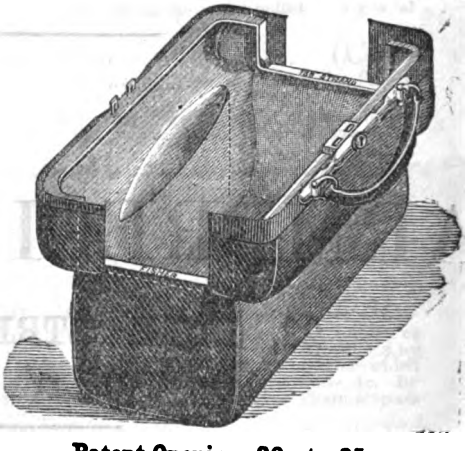
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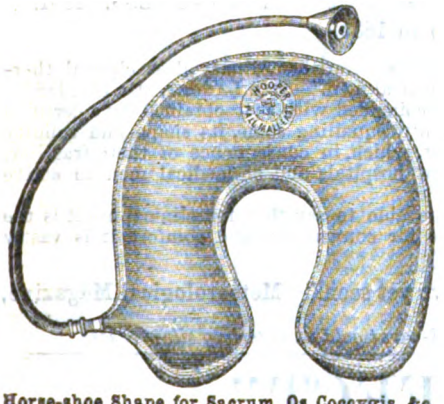
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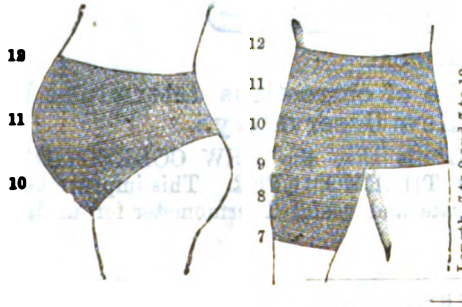
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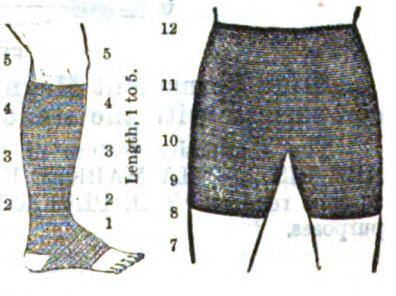
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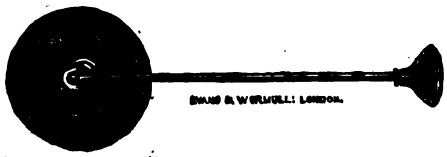
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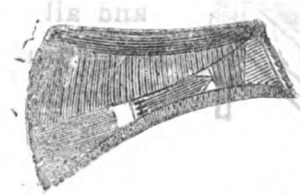
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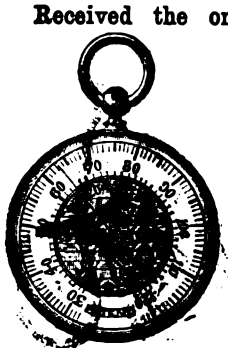


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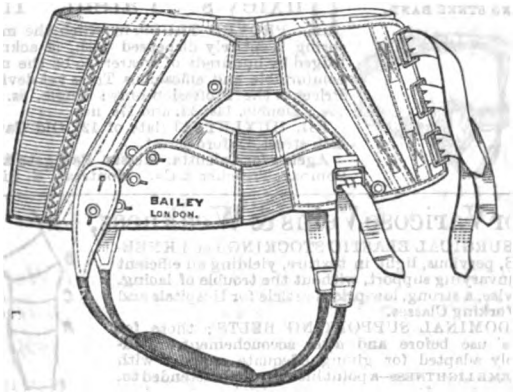
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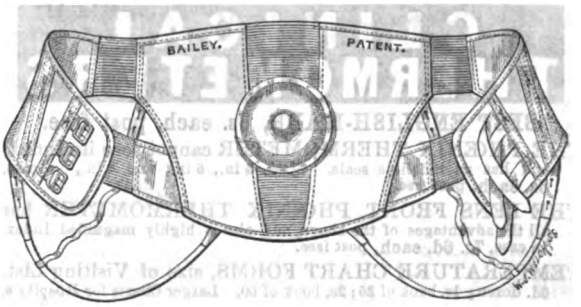
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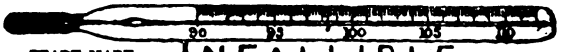
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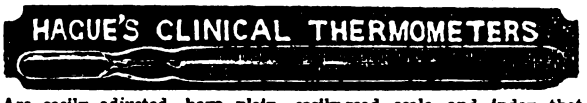
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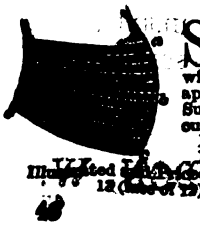


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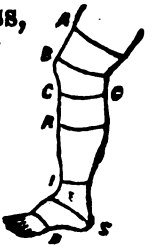
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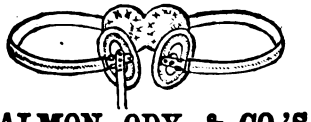


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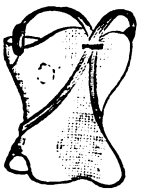
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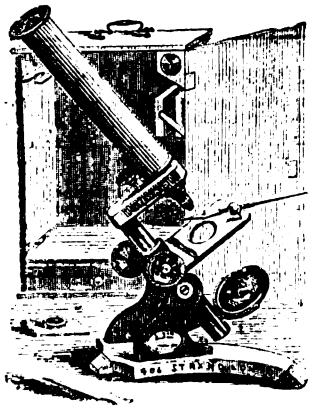
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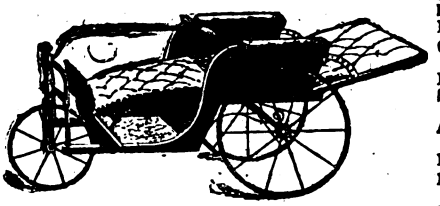






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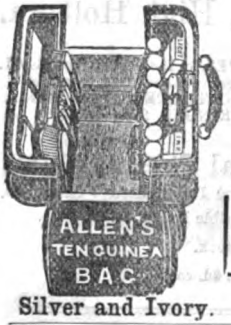
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H. BLATCHLEY, 167 (late 362), Oxford-street. P.O.O., Vere-street, W. (Importer of French Gluten Bread and Biscottes, at 3s. and 6s. per box. GLUTEN FLOUR.—1 lb. tins, 3s. 6d.; 6 lb. tins, 20s. PREPARED BRAN, 1 lb. tins, 1s. 6d., 7 lb. tins, 10s. BRAN BISCUITS, 1s. 6d. per lb., and in boxes at 5s., 10s., and 20s. The combined BRAN and GLUTEN LOAVES, 1s. 6d. each. The ALMOND BISCUITS, 2s. 6d. per lb. Combined BRAN and ALMOND BISCUITS, 2s. per lb., and in 5s. tins.

KREOCHYLE (BARFF & WIRE)
LIQUID MEAT.

FOOD AND STIMULANT FOR INVALIDS AND INFANTS.

THE LANCET says: "A most concentrated and active form of liquid food. Contains so much albumen as to become almost solid on heating."

Prices: Pints, 5s.; Half-pints, 2s. 9d.; Quarter-pints, 1s. 6d.

Sole Manufacturers of BARFF BORO-GLYCERIDE for Medical and Surgical Purposes.

BY ROYAL LETTERS PATENT.

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TO BE OBTAINED BY ORDER OF ALL CHEMISTS.

"Containing all the elements necessary for the sustenance and growth of the human frame."

MARSHALLS' PREPARATIONS OF WHEAT

Are "The FINEST of the WHEAT."

They have been recognised by the medical profession as reliable foods of a simple nourishing and palatable character. They are greatly superior to arrowroot, corn flour, &c., for use in the nursery and sick room, for, while they contain a abundance of nutriment quite independently of the milk used in cooking them, they are delicate in flavour and readily assimilated even by the feeblest digestion. They are pure products from a variety of wheat that is exceptionally rich in albuminoids, and are the results of mechanical processes only. They are also very moderate in price.

MARSHALLS' FAROLA

is an exquisite food, highly refined. Analysis shows no trace remaining of woody fibre or impurities of an irritating nature. It is superior to the finest arrowroot.

MARSHALLS' SEMOLINA

is the best part of the wheat grain in a free granular state. It has no equal as a substance for porridge and puddings. It is a perfect family food.

MARSHALLS' GRANOLA

is a hygienic wheaten food. It consists of the whole pure contents of the grain, in a free granular state, with the exception of the germ. This, by special appliances, is removed entire, and thus prevented from yielding its essential oils. These, when liberated, rapidly become rancid, and if in contact with the farinaceous parts, would impart to them their bitter flavour, and also induce decay. Granola, invaluable to the sedentary, produces a healthy regularity of digestive action, while it is palatable and nourishing.

"Prepared from the genuine wheat—contains good proportion of the most important constituent of wheat, albuminoids."—BRIT. MED. JOUR.

"We have given it a prolonged trial, and find it a most satisfactory food for children and invalids. SEMOLINA as prepared by Messrs. MARSHALL is an economical, palatable, and nutritious article of diet."—MEDICAL TIMES AND GAZETTE.

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"We believe it to be a wholesome, palatable, and cheap food. We can certify that it is pleasant, and easily digested."—GLASGOW MEDICAL JOURNAL.

The following Report is by the eminent Analytical Chemist, A. Wynter Blyth, M.R.C.S.

Analysis of a sample of FAROLA received from Messrs. James & Thomas Marshall, Glasgow, Feb. 22nd, 1886:—

	Per cent.
Hygroscopic moisture	13·60
Fatty matters...	·86
Albuminoids	7·27
Soluble in cold water	·70
Insoluble in cold water	6·57
Carbohydrates	78·27
	100·00

FAROLA is in the form of a fine granular powder, and is soluble in cold water to the extent of ·7 per cent. A microscopical examination shows that it is made of perfectly pure materials, and that the statements of the manufacturers are correct as to its preparation and properties.

(Signed) A. WYNTER BLYTH.

Court House, St. Marylebone, March 3rd, 1886.

Professor Ferguson, Chair of Chemistry, reports:—
University of Glasgow, July 11th, 1885.

The following is the Analysis of a sample of SEMOLINA sent me by Mr. James Marshall, Ibrox Flour Mills:—

Water	13·80
Oil	1·65
Albuminous compounds	14·96
Gum, starch, sugar	69·17
Fibre	Trace.
Ash	0·40
	100·00

Nitrogen, 2·39; Phosphoric Acid, 0·20.

This substance is pure and carefully prepared from Wheat of the best quality. It is rich in the constituents necessary to form a nutritious food, and it is very palatable and readily digested. It can be strongly recommended as an excellent article of diet.

(Signed) JOHN FERGUSON.

I have tried the SEMOLINA, and the last part of the Report is from personal experience. (Signed) J. P.

"MARSHALLS' SEMOLINA is very well made—absolutely free from adulteration—a highly valuable food."—THE LANCET.

Each packet contains the net weight marked thereon, irrespective of wrappings and bears our registered trade mark and signature.

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Samples and Descriptive Pamphlet, with full Tables of Analyses, post-free on application.

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Anti-dyspeptic Cocoa or Chocolate Powder.

GUARANTEED PURE SOLUBLE COCOA of the finest quality, without Sugar or admixture.

The high degree of Solubility and perfect Purity attained *is solely* due to the careful manipulation and delicate MECHANICAL treatment of the finest quality of Cocoa Beans, with the *excess* of fat extracted.

Four times the strength of Cocoas *thickened* yet *weakened* with starch, &c., and in reality cheaper than such mixtures.

In air-tight tins, at 1s. 6d., 3s., 5s. 6d., &c., by Chemists, Grocers, &c.

Adopted as a "Medical comfort" in the Hospitals and Ships of H.M. Royal Navy.

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ARTIFICIAL HUMAN MILK.

Prepared at the suggestion of an eminent Physician, who in writing to the "British Medical Journal," May 21st, 1881, says:—"I should like to direct the attention of practitioners to the ARTIFICIAL HUMAN MILK now prepared by the AYLESBURY DAIRY COMPANY at a cost a little over that of the best nursery milk."

Unsolicited Testimonials from eminent Members of the Medical Profession:—

"The infant, my nephew, has now (8.30 P.M.) had it in all four times. He has hardly cried at all, and has slept very well. I felt sure your ARTIFICIAL HUMAN MILK would suit him, but was hardly prepared for so IMMEDIATE and MARKED AN IMPROVEMENT. Previously he had been given Nestlé's food (not by me), cow's milk, and two kinds of condensed milk, but with each of these he had constant craving, frequent attacks of pain, and restlessness and flatulence, &c."

"The ARTIFICIAL HUMAN MILK you began to supply me with three weeks ago has been the MEANS, humanly speaking, of SAVING MY CHILD'S LIFE. All wet-nurses had failed, and nothing could be found to agree until I tried this. The child gained ten ounces in the first six days, and has continued to improve in strength and weight ever since."

"I may say that your ARTIFICIAL HUMAN MILK has agreed BEYOND EXPECTATION and where ALL OTHERS HAVE BEEN TOTALLY USELESS and UNDIGESTED. I am very pleased with it, and one of my boys, who was brought up as an infant entirely on it, is a LIVING WITNESS of its EMINENT SUITABILITY as a diet for infants."

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S. N. STOUT.



In Casks, 12/6 per 9 gals. In Bottle, 3/3 per doz. Impl. Pts.*

* Bottles, corks or stoppered, charged 1/6 per doz., stoppers 1/- per doz. extra, and allowed for at the same rates if returned; but bottles and stoppers must be paid for with the Beer.

Neither sugar, saccharum, nor any of the many new Brewing Materials are used in the manufacture of the "S.N." Stout; it is Brewed entirely from the finest Malt and Hops; it is, too, more hopped than Stout is generally; therefore, besides being very nutritious, it is an excellent Tonic and particularly suited for invalids, ladies nursing, or anyone requiring a good strengthening beverage. It is a "Sound Nutritious" Tonic, and very much recommended by Medical men.



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Allsopp's Pale or Bitter Ale.—Messrs. SAMUEL ALLSOPP and SONS beg to inform the TRADE that they are now Registering Orders for the SEASON-BREWED PALE ALE in casks of 9 gallons and upwards, at the BREWERY, BURTON-ON-TRENT, and at the undermentioned Branch Establishment:—

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ESPECIALLY ADAPTED for INVALIDS.

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BEST HAVANA CIGARS AT IMPORT PRICES.

Also regular Shipments of CHOICE FOREIGN CIGARS, same as supplied to Army and Navy Messes, Clubs, &c., 16s. to 22s. per 100. Samples five for 1s. (fourteen stamps). Rich and fragrant or mild cigars with character and flavour, to suit the most delicate palates and constitutions. Send for Catalogue and Treatise.

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SPECIALITIES FOR INVALIDS.

ESSENCE OF BEEF, &c.

In order to prove that our preparations are the best and cheapest now being sold, we will send, post free, a sample of them to any Medical Man on receipt of his card.

417, KING'S ROAD, CHELSEA, LONDON.

Ask for

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Guaranteed Pure and Soluble.

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Charing-Cross Hospital Medical School.

SESSION 1886-87.

The SESSION will commence on Friday, October 1st.

The Hospital contains 180 beds, making, with the 50 beds of the adjoining Royal Westminster Ophthalmic Hospital, to the practice of which general Students are admitted, a total of 230 beds available for Clinical teaching.

MEDICAL AND SURGICAL STAFF.

Consulting Physicians—Sir Joseph Fayrer, M.D., K.C.S.I., F.R.S.; Sir Guyer Hunter, M.D., K.C.M.G., M.P.
Consulting Surgeon—Francis Hird, F.R.C.S.
Physicians—A. J. Pollock, M.D., F.R.C.P.; T. Henry Green, M.D., F.R.C.P.; J. Mitchell Bruce, M.A., M.D., F.R.C.P.
Assistant-Physicians—J. Abercrombie, B.A., M.D., F.R.C.P.; M. Lubbock, M.D.; F. Willcocks, M.D.; H. M. Murray, M.D.
Physician-Accoucheur—J. Watt Black, M.A., M.D., F.R.C.P.
Assistant Physician-Accoucheur—Amand Routh, B.S., M.D.
Physician for Skin Diseases—A. Sangster, B.A., M.B., F.R.C.P.
Medical Registrar—H. M. Murray, M.D.
Surgeons—R. Barwell, F.R.C.S.; E. Bellamy, F.R.C.S.; J. Astley Bloxam, F.R.C.S.
Assistant-Surgeons—James Cantlie, M.A., M.B., F.R.C.S.; J. H. Morgan, M.A., F.R.C.S.; Stanley Boyd, B.S., M.B., F.R.C.S.
Dental Surgeon—John Fairbank, M.R.C.S.
Chloroformists—F. Woodhouse Braine, F.R.C.S.; F. Hewitt, M.D., M.R.C.S.
Surgical Registrar—W. J. Roeckel, M.B., B.S., F.R.C.S.

The Charing-cross Hospital occupies a position in the very centre of London, which is highly advantageous for the study of every variety of disease and injury. The Physicians and Surgeons give Clinical Instruction in the wards and out-patient rooms daily, and deliver Clinical Lectures regularly. Every student is required to serve as Clerk and Dresser under the direction of the staff. There are special departments for Diseases of Women and Midwifery, Diseases of Children, of the Skin, the Ear, and the Teeth; while the students are admitted free to the practice of the Royal Westminster Ophthalmic Hospital. Systematic courses of Practical Medicine and Surgery are now established.

LECTURES AND DEMONSTRATORS.

Anatomy—E. Bellamy, F.R.C.S.
Physiology, Theoretical and Practical—F. W. Mott, M.B.
Medicine—Dr. Pollock, F.R.C.P.
Surgery—R. Barwell, F.R.C.S.
Chemistry—C. W. Heaton, F.I.C., F.C.S.
Dissections—Jas. Cantlie, M.A., M.B., F.R.C.S.
Therapeutics—Dr. J. Mitchell Bruce, M.A., F.R.C.P.
Midwifery—Dr. Black, M.A., F.R.C.P.
Forensic Medicine: (*a*) Medical Jurisprudence—Dr. Abercrombie, B.A.; (*b*) Toxicology—Mr. Heaton, F.I.C., F.C.S.
Pathology—Dr. Green, F.R.C.P.
Materia Medica and Botany—Dr. Willcocks.
Practical Chemistry—Mr. Heaton, F.I.C., F.C.S., and Demonstrators.
Comparative Anatomy—Dr. Garson.
Hygiene and Public Health—Mr. Heaton, F.I.C., F.C.S.
Dental Surgery—John Fairbank, M.R.C.S.
Clinical Medicine—Dr. Pollock, Dr. Green, and Dr. Bruce.
Clinical Surgery—Mr. Barwell, Mr. Bellamy, and Mr. Bloxam.
Aural Surgery—Mr. Cantlie.
Practical Surgery: (*a*) Operations and Minor Surgery—Mr. Bloxam; (*b*) Surgical Pathology—Mr. Morgan.
Practical Medicine—Dr. Willcocks and Dr. Murray.
Skin Diseases—Dr. Sangster.

The Dissecting Room, Physiological Laboratory, and Chemical Laboratories are open daily from nine till four. In each department the students receive individual instruction from the lecturer, demonstrators, and assistant demonstrators, both practically and on a tutorial system. Written examinations are held regularly throughout the sessions. The students enjoy the advantages of the Museum, Library, and Reading Room.

UNIVERSITY OF LONDON.

Instruction for the Preliminary Scientific (M.B.) Examination of the University of London. See separate advertisement.

SCHOLARSHIPS, MEDALS, AND PRIZES.

Two Entrance Scholarships, of the value of £30 and £20 respectively, are awarded in October. The Golding Scholarship of £15 is awarded to first-year's Students.

The Llewellyn Scholarship of £25 to second-year's Students. The Governors' Gold Medal for Clinical Medicine and Surgery to Senior Students. The Pereira Prize of £5 for the best Clinical Reports. Silver and Bronze Medals and Certificates of Honour are awarded in the various classes.

APPOINTMENTS OPEN TO STUDENTS.

Medical Registrar (salary £40 per annum); Surgical Registrar (salary £40 per annum); House-Surgeons (4), House-Physicians (4), Resident Obstetrical Officers (2), Assistant Prosectors of Anatomy, Demonstrators of Anatomy, Chemistry, and Physiology, Clinical Clerks, Surgeons' Dressers, Pathological, Electrical, and Midwifery Assistants, &c.

FEES.—For the curriculum of study required by the various Examining Bodies and hospital practice, 90 guineas in one sum, or 100 guineas in five instalments.

The composition fee for Dental Surgery is £42 2s., which can be paid in two instalments. Practical Instruction in Dental Surgery is given three times a week.

***** The hours of Lectures have been specially rearranged to suit the convenience of Dental Students. Charing-cross Hospital is within three minutes' walk of the Dental Hospital of London.**

Gentlemen can enter to any course of Lectures, or to Hospital Practice only; and such occasional Students are allowed to compete for prizes and hold appointments with certain reservations.

A Prospectus, containing much additional information, will be forwarded on application to the Librarian and Secretary, Mr. J. F. Pink, who attends daily at the Office of the School, Chandos-street, Charing-cross, between the hours of 10 and 4.

J. MITCHELL BRUCE, M.A., M.D., Dean.

HOSPITAL STAFF OF THE ROYAL WESTMINSTER OPHTHALMIC HOSPITAL,

To whose practice the general Students are admitted free:—

Surgeons—Henry Power, M.B., F.R.C.S.; James Rouse, F.R.C.S.; George Cowell, F.R.C.S.; Charles Macnamara, F.R.C.S.; H. Juler, F.R.C.S.; J. Frost, F.R.C.S.; G. Harridge, F.R.C.S.

The Royal Westminster Ophthalmic

HOSPITAL, King William-street, Charing-cross.

The Practice of this Hospital is open to Practitioners and Students from 1 to 4 P.M. daily.

Special Instruction is given in the Diagnosis, Pathology, and Treatment of all EYE AFFECTIONS, including the Operations on the Eye, the Treatment of Errors of Refraction, and the use of the Ophthalmoscope.

The next Clinical Evening, Friday, Oct. 8th, at 8 P.M.: Mr. Power and Mr. Juler.

Terms for six months, £3 3s. Perpetual, £5 5s.

For particulars apply to Mr. Juler, 77, Wimpole-street, W.

Westminster Hospital Medical School

(opposite Westminster Abbey). Founded 1834.

HOSPITAL STAFF.

Consulting Physicians—Dr. Radcliffe, Dr. Fincham.
Physicians—Dr. Sturges, Dr. Allchin, Dr. Donkin.
Assistant-Physicians—Dr. de Havilland Hall, Dr. Hughes Bennett, Dr. Murrell.
Consulting Surgeons—Mr. Barnard Holt, Mr. Holthouse.
Surgeons—Mr. Cowell, Mr. Richard Davy, Mr. Macnamara.
Assistant-Surgeons—Mr. Cooke, Mr. Bond.
Obstetric Physician—Dr. Potter.
Assistant Obstetric Physician—Dr. Grigg.
Dental Surgeons—Dr. Walker, Mr. Morton Smale.
Surgeon in Charge of the Eye Department—Mr. Cowell.
Surgeon in Charge of the Orthopædic Department—Mr. R. Davy.
Surgeon in Charge of the Aural Department—
Physician in Charge of the Skin Department—Dr. Calcott Fox.
Physician in Charge of the Throat Department—Dr. de Havilland Hall.

LECTURES, &c.

Medicine—Dr. Sturges, Dr. Allchin. Surgery—Mr. Cowell, Mr. Macnamara. Practical and Operative Surgery—Mr. Richard Davy, F.R.S.E. Anatomy—Mr. James Black. Dissections—Mr. Hebbert. Pathology—Dr. Allchin, F.R.S.E. Physiology and Histology, Normal and Morbid—Dr. Heneage Gibbes. Chemistry, Practical Chemistry and Toxicology—Dr. Dupré, F.R.S., Dr. H. Wilson Hake, F.C.S. Materia Medica and Therapeutics—Dr. Murrell. Midwifery—Dr. Potter. Forensic Medicine and Hygiene—Dr. H. de Havilland Hall. Psychology—Dr. Sutherland. Ophthalmic Surgery—Mr. Cowell. Orthopædic Surgery—Mr. R. Davy. Dental Surgery—Dr. Walker. Skin Diseases—Dr. Colcott Fox. Aural Surgery— —— . Comparative Anatomy—Dr. Leslie Ogilvie. Experimental Physics—Dr. George Ogilvie. Botany—Mr. Worsley Benison. Tutors—Dr. Hall, Dr. Syers.

The Winter Session will commence on October 4th with an Introductory Address, at 3.30 P.M., by Mr. James Black, after which the distribution of the prizes for the past year will take place.

Two Entrance Scholarships (October 1st and 2nd), value £80 and £40 respectively. Subjects: Latin, Mathematics, French or German, and Chemistry and Natural Philosophy. The Latin books the same as the June examinations of the University of London Matriculation (Livy, Book XXII.).

There are also the Treasurer's Prize, value £10 10s., for first year's subjects; the President's Prize in Anatomy and Physiology, value £21, for second year's men, given by His Grace the Duke of Westminster; Prizes for Clinical Medicine and Surgery, of £5 each; the Frederick Bird Medal and Prize, value £15; the Chadwick Prize for General Proficiency, value £21; and Special Class Prizes; numerous Dresserships and Clerkships; the posts of Pathologist and Curator, 50 guineas a year; Medical and Surgical Registrar, each with £40 a year; and of House-Physicians (2), House-Surgeons (2), and House-Surgeons' Resident Obstetric Assistant.

FEES.—In one payment £100; in two payments £105; or in five payments £115. There are no extras, except parts for dissection and the class of Experimental Physics. Fees for the shorter periods, or for single courses, may be learned on application to the Dean. Fees for Dental Students £50 in one sum, or 50 guineas in two payments.

Tutorial Classes to afford special preparation for the Examining Bodies are held four times a week.

New school buildings have been erected, affording most complete accommodation for 150 students. The rooms and theatres are large and well lighted, and fitted with the most modern improvements.

A Prospectus forwarded, and all particulars to be obtained, on application to

Westminster Hospital, S.W. F. DE HAVILLAND HALL, M.D., Dean.

St. Peter's Hospital for Stone, Stricture,

AND URINARY DISEASES.

Post-graduate courses (similar to those held in Berlin and Vienna) are held at regular intervals throughout the year for Theoretical and Clinical Instruction in the diagnosis and treatment of the Diseases of the Bladder and Urethra.—For particulars, apply to the Hon. Secretary of the Medical Committee, St. Peter's Hospital, Henrietta-street, Covent-garden, W.C.

St. Peter's Hospital for Stone and

URINARY DISEASES.

The Pathologist (Mr. E. Hurry Fenwicke) will present his Report to the Medical Committee in November, in the form of three Demonstrations. The material comprises specimens of various tumours of the bladder and prostate; strictures, stones, foreign bodies, tubercular and hydatid disease, perforations and ruptures, &c.

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Association of Members of the Royal College of Surgeons (Eng.),

who have not as yet returned their copies of the "Petition to Her Majesty in Council," are begged to do so without delay, addressed to the Hon. Secs., 1, Florence-terrace, Ealing, W., previously obtaining as many signatures as possible. Those desirous of affording further support to the movement are also invited to join the Association by sending a subscription of 5s. for the current year.

By order,
WARWICK C. STEELE, WM. ASHTON ELLIS, } Hon. Secs.

King's College, London.

MEDICAL DEPARTMENT.

The WINTER SESSION will be opened on Friday, October 1st, at 4 P.M., when the Distribution of Prizes will take place, and an Address be given by Professor G. Johnson, M.D., F.R.S.

PROFESSORS.

Anatomy—Professor John Curnow, M.D., F.R.C.P.
Demonstrator—A. S. Kenny.
Physiology and Practical Physiology—Professor Gerald F. Yeo, M.D.
Demonstrators—J. W. Groves, F.C.S., T. W. Barrett, M.B., E. F. Herroun, and E. M. Crookshank, M.B.
Chemistry and Practical Chemistry—Professor C. L. Bloxam, F.C.S.
Demonstrators—J. M. Thomson, F.R.S.E., F.C.S., and G. S. Johnson.
Medicine (Principles and Practice of).—Professor L. S. Beale, M.B., F.R.S.
Surgery and Practical Surgery—Professor Henry Smith, F.R.C.S.
Demonstrators—W. Rose, B.S., M.B., F.R.C.S., W. W. Cheyne, F.R.C.S., C.M., A. B. Barrow, F.R.C.S., M.B.
Clinical Surgery—Professor Wood, F.R.S.; Professor Sir Joseph Lister, Bart., F.R.S.
Botany—Professor Bentley, F.L.S.
Materia Medica and Therapeutics—Professor N. I. C. Tirard, M.D.
Obstetric Medicine and the Diseases of Women and Children—Professor W. Playfair, M.D., F.R.C.P.
Forensic Medicine—Professor D. Ferrier, M.D., F.R.S.
Comparative Anatomy and Zoology—Professor F. Jeffrey Bell, M.A.
Pathological Anatomy—Professor A. B. Duffin, M.D., F.R.C.P.
Hygiene—Professor Charles Kelly, M.D., F.R.C.P.
Clinical Therapeutics—Professor Burney Yeo, M.D.
Dental Surgery—Professor S. Hamilton Cartwright, M.R.C.S.
Aural Surgery—U. Pritchard, M.D., F.R.S.
Ophthalmology—Prof. M. M. McHardy, F.R.C.S. Ed.
Psychological Medicine—Prof. Edgar Sheppard, M.D.
Dean of the Faculty—Professor Curnow, M.D.
Tutors—H. Jackson, E. F. Herroun, J. W. Groves.

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Special Courses of Lectures and Practical Instruction in the Chemical, Physical, and Physiological Laboratories have been arranged for Students preparing for these Examinations at the University of London.

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Clinical Lectures are given daily by the Physicians and Surgeons.
Clinical instruction is also given in Diseases of the Eye and Throat, in Skin Diseases, and in Diseases of the Ear.
Physicians—Dr. L. S. Beale, Dr. Duffin, Dr. Burney Yeo, Dr. Ferrier, Dr. Curnow.
Physicians for Diseases of Women and Children & Physician-Accoucheurs—Dr. W. Playfair, Dr. T. C. Haves.
Surgeons—John Wood, F.R.S.; Sir Joseph Lister, Bart., F.R.S.; H. Smith, F.R.C.S.; William Rose, F.R.C.S.
Assistant-Surgeons—W. W. Cheyne, F.R.C.S.; A. B. Barrow, F.R.C.S., M.B.
Assistant-Physicians—Dr. Tirard; Dr. N. Dalton.
Dental Surgeon—S. Hamilton Cartwright, M.R.C.S
Ophthalmic Surgeon—M. M. McHardy, F.R.C.S. Edin.
Aural Surgeon—Urban Pritchard, M.D., F.R.S.
Pathological Registrar—N. Dalton, M.D.
Chloroformist—Charles Moss, M.R.C.S.
Vaccinator—R. W. Dunn, M.R.C.S.

Dental, Aural, Skin, and Throat Departments, and Wards for Children and Ophthalmic Cases are attached to the Hospital.

The Physician's Assistant, Physician-Accoucheur's Assistant, and House-Surgeons, their Assistants, Clinical Clerks, and Dressers, are selected by examination from amongst the Students, without extra fees; the Resident Officers have rooms and commons free.

SCHOLARSHIPS, EXHIBITIONS, REGISTRARSHIPS, AND PRIZES.

WARNEFORD SCHOLARSHIPS.—Students entering the Medical Department of the College in October will have the exclusive privilege of contending for Two Scholarships of £75 each. These Scholarships are given for proficiency in Divinity, Classics, Mathematics, History, and English.

Five Medical Scholarships are awarded at the close of each Winter Session for proficiency in professional subjects—viz., one of £80, one of £30, and three of £20.

A Warneford Scholarship of £50 is also annually awarded for proficiency in Divinity, Medicine, Surgery, and Hospital Practice.

Sambrooke Registrarships: Two of £50, tenable for two years, are annually awarded to Matriculated Students of this department.

Sambrooke Exhibitions: Two annually, one of £60 and one of £40, are awarded for proficiency in Mathematics, Experimental Physics, Inorganic Chemistry, Botany, and Zoology.

Daniell Scholarship: One of £40, given for proficiency in Chemistry.

Rabbeth Scholarship: One of £20, given for early Scientific Training.

Science Exhibitions: Two annually, one of £100, and one of £50, given by the Clothworkers' Company.

Endowed Prizes of the value of £25, £15, £10, and £4 4s. each, and other College Prizes of the value of £60, are annually awarded.

For prospectuses or other information, apply, personally or by post-card, to J. W. Cunningham, Esq., Secretary, or to Professor Curnow, Dean of the Department.

Royal London Ophthalmic Hospital,

MOORFIELDS, E.C.

Gentlemen are admitted to the practice of this Hospital on application to the Secretary. Fee for Six Months, £3 3s.; perpetual £5 5s. The Hospital has 100 beds for in-patients, and the out-patients are yearly over 20,000. Operations daily from half-past ten o'clock to one o'clock P.M.

Students of the Hospital are eligible for the office of House-Surgeon, or may be appointed Clinical Assistants.

ROBERT J. NEWSTEAD, Secretary.

The London Hospital and Medical College.

HOSPITAL STAFF.

Consulting Physician—Dr. Ramskill.
Consulting Surgeons—Mr. Curling, F.R.S., Mr. Jonathan Hutchinson, F.R.S.
Physicians—Sir Andrew Clark, Bart., F.R.S.; Dr. Langdon Down, Dr. Hughlings Jackson, F.R.S., Dr. Sutton, Dr. Fenwick, Dr. Stephen Mackenzie, Dr. Sansom, Dr. Charlewood Turner, Dr. Gilbart Smith.
Assistant-Physicians—Dr. Warner, Dr. Ralfe.
Surgeons—Mr. Couper, Mr. Rivington, Mr. Waren Tay, Mr. McCarthy, Mr. Frederick Treves.
Assistant-Surgeons—Mr. Reeves, Mr. C. Mansell Moullin, Mr. Hurry Fenwick, Mr. F. S. Eve.
Obstetric Physician—Dr. Herman.
Assistant Obstetric Physician—Dr. Lewers.
Ophthalmic Surgeons—Mr. Waren Tay, Mr. F. S. Eve.
Physician to the Skin Department—Dr. Stephen Mackenzie.
Aural Surgeons—Dr. Edward Woakes, Mr. T. Mark Hovell.
Surgeon-Dentist—Mr. Barrett.

LECTURERS.

Medicine—Dr. Stephen Mackenzie.
Surgery—Mr. Rivington.
Operative Surgery—Mr. Rivington.
Practical Surgery—Mr. Reeves.
Anatomy—Mr. Fredk. Treves.
Practical Anatomy—Mr. Mansell Moullin.
Physiology and Practical Histology—Mr. McCarthy.
Chemistry—Dr. C. Meymott Tidy.
Chemical Physics—Mr. F. J. M. Page.
Comparative Anatomy—Mr. C. Mansell Moullin.
Pathology—Dr. Sutton.
Pathological Histology—Mr. Eve.
Midwifery—Dr. Herman.
Toxicology—Dr. C. Meymott Tidy.
Botany—Dr. F. Warner.
Medical Jurisprudence—Dr. Sansom.
Practical Chemistry—Mr. F. J. M. Page.
Materia Medica—Dr. Prosser James.
Diseases of the Eye—Mr. Waren Tay.
Diseases of the Ear—Dr. Edward Woakes.
Diseases of the Throat—Mr. T. Mark Hovell.
Anatomy and Pathology of the Teeth—Mr. Barrett.

As Emeritus Professor of Surgery, Mr. HUTCHINSON will give in the Winter and Summer Sessions short Courses of Lectures in Clinical Surgery, consisting of Six Lectures each. The Special Subjects and the dates will be announced in due course.

The SESSION 1886-87 will commence on Friday, October 1st, 1886; by that date the New College Buildings will be ready for occupation. The very extensive additions that have been made to the School Premises will afford complete provision for the teaching of all branches of Medical Science, the accommodation provided being more than double that which was provided in the Old Buildings. An inaugural ceremony will take place, of which due notice will be given.

Fee for Lectures and Hospital Practice, 90 guineas in one sum, or 100 guineas by three instalments.

The Hospital contains nearly 800 beds. Number of In-patients during 1885 was 8732; Out-patients 67,942.

The Resident and other Hospital Appointments are free to full Students. The Resident Appointments consist of five House-Physicianeies, five House-Surgeoncies, one Accoucheurship, and one Receiving-room Officer; four Dressers and four Maternity Assistants also reside in the hospital.

The holders of all the Resident Appointments are provided with rooms and board entirely free of expense.

Two Entrance Science Scholarships, value £60 and £40, and two Buxton Scholarships, value £30 and £20, will be offered for competition at the end of September to new Students.

The Letheby Prize, value £30, for proficiency in Chemistry.

A Scholarship, value £20, in Human Anatomy and Physiology, to first-year's Students.

A Scholarship, value £25, in Anatomy, Physiology, and Chemistry, to second-year's Students.

A Scholarship, value £20, in Clinical Medicine.
A Scholarship, value £20, in Clinical Surgery
A Scholarship, value £20, in Clinical Obstetrics.

A Duckworth Nelson Prize, value £10 (biennial), in Clinical Medicine and Surgery.

The Hutchinson Prize, value £35 (triennial), in Clinical Surgery.

Prizes, value £60, to Dressers of Out-patients in Minor Surgery.

Special Classes for the Preliminary Scientific and Intermediate M.B. Examinations of the University of London, and for the Primary and Pass Examinations for the Fellowship of the Royal College of Surgeons of England, are held throughout the year.

Special entries for Medical and Surgical Practice are made.

The London Hospital is now in direct communication by rail and tram with all parts of the metropolis, and the Metropolitan, Metropolitan District, East London, and South-Eastern Railways have stations within a minute's walk of the Hospital and College.

For prospectus and particulars apply, personally or by letter, to
Mile-end, E. MUNRO SCOTT, Warden.

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The Middlesex Hospital Medical SCHOOL.

The WINTER SESSION, 1886-7, will open on Monday, October 4th, at 3 P.M., with an Introductory Address by Dr. C. Y. Biss, M.A. After the Lecture the Prizes awarded during the previous Winter and Summer Sessions will be distributed.

The ANNUAL DINNER of the past and present Students and their friends will take place the same evening at the Holborn Restaurant, at 6.30, Andrew Clark, Esq., in the Chair.

HOSPITAL STAFF.

Consulting Physicians—Dr. Henry Thompson, Dr. Goodfellow, Dr. Greenhow, F.R.S.
Physicians—Dr. Cayley, Dr. Coupland, Dr. Douglas Powell, Dr. David W. Finlay.
Assistant Physicians—Dr. J. K. Fowler, Dr. C. Y. Biss, Dr. J. J. Pringle.
Obstetric Physician—Dr. Arthur W. Edis.
Physician to Skin Department—Dr. Robert Liveing.
Assistant Obstetric Physician—Dr. W. A. Duncan.
Consulting Surgeons—Mr. Shaw, Mr. Nunn.
Surgeons—Mr. J. W. Hulke, F.R.S., Mr. George Lawson, Mr. Henry Morris.
Assistant Surgeons—Mr. Andrew Clark, Mr. A. Pearce Gould, Mr. J. Bland Sutton.
Ophthalmic Surgeon—Mr. William Lang.
Aural Surgeon—Mr. Arthur Hensman.
Consulting Surgeon-Dentists—Sir John Tomes, F.R.S., Mr. J. S. Turner.
Dental Surgeon—Mr. Storer Bennett.
Assistant Dental Surgeon—Mr. W. Hern.
Curator of Museum and Pathologist—Dr. J. K. Fowler.
Registrars—Dr. W. Pasteur and Mr. W. Roger Williams, F.R.C.S.
Chloroformists—Mr. G. Everitt Norton, Mr. H. Davis.
Resident Medical Officer—Mr. E. A. Farlon.

LECTURERS.

Principles and Practice of Medicine—Dr. Cayley.
Principles and Practice of Surgery—Mr. Morris, M.A., M.B.
Practical Medicine—Dr. Coupland, Dr. Douglas Powell.
Practical Surgery—Mr. Andrew Clark.
Physiology and General Anatomy—Mr. B. Thompson Lowne, F.L.S.
Descriptive and Surgical Anatomy—Mr. Arthur Hensman.
Chemistry and Practical Chemistry—Mr. W. Foster, M.A.Cantab.
Pathological Anatomy—Dr. J. K. Fowler, M.A.
Dissecting-room—Mr. Hensman, Mr. J. B. Sutton, Mr. W. E. Wynter, and Mr. C. G. Brodie.
Midwifery and Diseases of Women and Children—Dr. A. W. Edis.
Practical Midwifery—Dr. W. A. Duncan.
Materia Medica and Therapeutics—Dr. Thorowgood.
Forensic Medicine—Dr. D. W. Finlay, B.A.
Botany—Dr. Biss, M.A.Cantab.
Practical Physiology and Histology—Mr. B. Thompson Lowne, F.L.S.
Public Health—Dr. D. W. Finlay, B.A.
Psychological Medicine—Mr. Henry Case.
Comparative Anatomy and Zoology—Mr. J. B. Sutton.
Dermatology—Dr. Liveing, M.A.Cantab.
Clinical Lectures on Medicine—Dr. Cayley, Dr. Coupland, Dr. Douglas Powell, Dr. D. W. Finlay, B.A.
Clinical Lectures on Surgery—Mr. Hulke, F.R.S., Mr. George Lawson, Mr. Morris.
Clinical Lectures on Diseases of Women and Children—Dr. Arthur W. Edis.
Clinical Lectures on Diseases of the Eye—Mr. William Lang.
Practical Demonstrations on Diseases of the Throat and Ear—Mr. Hensman.

The Hospital contains 310 beds. There are special Departments for Cancer, Diseases of the Eye, Diseases of Women and Children, and Syphilis. In the new Out-patients Department, in addition to Medical and Surgical cases, special days are devoted to Diseases of Children, the Throat and Ear, the Skin, and Cases requiring Electrical Treatment.

There are fourteen Resident Clinical Appointments open to Students of the Hospital annually. Two Entrance Scholarships of the annual value of £50 and £30 respectively, each tenable for two years, are awarded at the commencement of the Winter Session. Two Broderip Scholarships, of the annual value of £20 and £20 respectively, each tenable for two years, are also awarded every year for proficiency in clinical knowledge. The Hetley Prize, value £25, is awarded annually for proficiency in Clinical Medicine, Surgery, and Obstetrics. The Murray Scholarship in connexion with the University of Aberdeen will be awarded in May, 1889. The Lyell Medal, value 5 guineas, is awarded annually to second-year Students. An Exhibition, value 10 guineas, is open to Students at the end of their first year.

The Governor's Prize of 20 guineas is annually given to the Student who, at the end of his third winter, shall pass the best Clinical Examination in the Out-patient Department. Class Prizes are also given.

Clerkships and Dresserships are awarded without fee, and the Clerk or Dresser of the week dines at the board-room table to have the opportunity of seeing accidents that may be admitted during the evening.

The Tutors assist all general Students, especially those preparing for their Examinations, and thus the necessity of obtaining private instruction is obviated.

Composition Fee £100, or by Instalments.

Several members of the staff receive Students as boarders. For particulars apply to the Dean.

Special arrangements are made for the convenience of Dental Students.

University of London. Preliminary Science Instruction. Arrangements have been made for Students desirous of undergoing a Course of Instruction in Science, such as that required for the Preliminary Scientific (M.B.) Examination of the University of London, to attend at the Normal School of Science, South Kensington.

For prospectus and further information, apply to the Dean, or the Resident Medical Officer at the Hospital.

A. PEARCE GOULD, Dean.

St. Thomas's Hospital Medical School,

Albert Embankment, London, S.E.—The WINTER SESSION of 1886-87 will commence on October 1st, when an Introductory Address will be delivered by J. S. Bristowe, M.D. Lond., F.R.S., LL.D., at 3 P.M.

Two Entrance Science Scholarships, of £100 and £60 respectively, open to all First-year Students, will be offered for competition. The Examination will be held on the 4th, 5th, and 6th of October, and the subjects will be Chemistry and Physics, with either Botany or Zoology, at the option of Candidates.

Special Classes are held throughout the year for the Preliminary Scientific and Intermediate M.B. Examinations of the University of London.

All Hospital Appointments are open to Students without extra charge.

Scholarships and Money Prizes of considerable value are awarded at the Sessional Examinations, as also several Medals.

The fees may be paid in one sum or by instalments. Entries may be made to Lectures or to Hospital Practice, and special arrangements are made for Students entering in their second or subsequent years; also for Dental Students and for Qualified Practitioners.

Several Medical Practitioners and Private Families residing in the neighbourhood receive Students for residence and supervision, and a register of approved lodgings is kept in the Secretary's office.

Prospectuses and all particulars may be obtained from the Medical Secretary, Mr. George Rendle.

W. M. ORD, Dean.

University College, London.

The SESSION of the FACULTY OF MEDICINE will commence on October 4th. Introductory Lecture at 4 P.M. by A. E. Barker, Esq.

PROFESSORS.

H. Charlton Bastian, M.A., M.D., F.R.S.—Pathological Anatomy and Clinical Medicine.
Marcus Beck, M.S., M.B.—Surgery and Clinical Surgery.
W. H. Corfield, M.A., M.D.—Hygiene and Public Health.
Wilson Fox, M.D., F.R.S.—Clinical Medicine (Holme Professorship).
Christopher Heath.—Clinical Surgery (Holme Professorship).
W. M. Grailly Hewitt, M.D.—Obstetric Medicine.
M. Berkeley Hill, M.B.—Clinical Surgery.
E. Ray Lankester, M.A., LL.D., F.R.S.—Zoology and Comparative Anatomy (Jodrell Professorship).
D. Oliver, F.R.S., F.L.S.—Botany.
G. Vivian Poore, M.D., B.S.—Medical Jurisprudence.
Sydney Ringer, M.D., F.R.S.—Medicine and Clinical Medicine.
F. T. Roberts, M.D., B.Sc.—Materia Medica and Therapeutics; Clinical Medicine.
E. A. Schäfer, F.R.S.—Physiology (Jodrell Professorship).
G. D. Thane—Anatomy.
John Tweedy—Ophthalmic Medicine and Surgery.
A. W. Williamson, Ph.D., LL.D., F.R.S.—Chemistry.

SCHOLARSHIPS, EXHIBITIONS, and PRIZES of the value of £300 are awarded annually; among these are included Three Entrance Exhibitions of the value of £100, £60, and £40 respectively, the examination for which commences on September 29th.

UNIVERSITY COLLEGE HOSPITAL.

CONSULTING PHYSICIANS.

Walter H. Walshe, M.D., F.R.C.P.
Sir William Jenner, Bart., K.C.B., M.D., F.R.C.P., F.R.S., LL.D., Physician to the Queen and to H.R.H. the Prince of Wales.
J. Russell Reynolds, M.D., F.R.C.P., F.R.S., Physician to the Queen's Household.

CONSULTING SURGEONS.

Mr. Richard Quain, F.R.S., Surgeon Extraordinary to the Queen.
Mr. J. Eric Erichsen, F.R.S., LL.D., Surgeon Extraordinary to the Queen.
Mr. John Marshall, F.R.S., LL.D.
Sir Henry Thompson, M.B., Surgeon Extraordinary to the King of the Belgians.
Mr. T. Wharton Jones, F.R.S., Ophthalmic.
Mr. G. A. Ibbetson, Dental.

PHYSICIANS.

Dr. Wilson Fox, Dr. Sydney Ringer, Dr. H. Charlton Bastian, Dr. Frederick T. Roberts, Dr. Gowers, Dr. G. V. Poore, and Dr. Thomas Barlow; Dr. Grailly Hewitt and Dr. John Williams, Obstetric Physicians; Dr. H. R. Crocker, Skin Department.

SURGEONS.

Mr. Berkeley Hill, M.B., Mr. Christopher Heath, Mr. Marcus Beck, M.S., M.B., Professors of Clinical Surgery; Mr. Arthur E. Barker and Mr. R. J. Godlee, M.S., B.A., M.B.
Mr. Victor Horsley, M.B., B.S., Assistant-Surgeon.
Mr. J. Tweedy, Ophthalmic Surgeon, Professor of Ophthalmic Medicine and Surgery.
Mr. S. J. Hutchinson, Dental Surgeon and Clinical Lecturer on Dental Surgery.
Anæsthetist, Dudley W. Buxton, M.D.
Resident Medical Officer, Dr. H. Maudsley. Surgical Registrar, Dr. Bilton Pollard, B.S.

The Hospital has special Obstetric, Ophthalmic, Skin, Throat, Aural, and Dental Departments. About 3000 in-patients and 30,000 out-patients are treated during the year. Thirty-six appointments, eighteen being resident, as House-Surgeon, House-Physician, Obstetric Assistant, &c., are filled up by competition during the year, and these, as well as all Clerkships and Dresserships, are open to Students of the Hospital without extra fee. Fees from 60 to 125 guineas, according to requirements.

Prospectuses, with full information as to classes, prizes, &c., may be obtained from the College, Gower-street, W.C.

G. V. POORE, M.D., B.S., Dean of the Faculty.
TALFOURD ELY, M.A., Secretary.

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"SYSTEMA OMNIA VINCIT."

South London School of Pharmacy,

32), Kennington-road, S.E.

Director: Dr. JOHN MUTER, M.A., F.I.C., F.C.S., &c.
Established 1st October, 1868.
Eighteenth Session, 1885-6.

Private Instruction in Chemistry, Toxicology, &c., for Medical Gentlemen qualifying for the various University Examinations, Medical Officerships, or Sanitary Science, Cambridge, for long or short periods, at stated hours.

For fees, syllabus, &c., apply to

W. BAXTER, Secretary.

St. Mary's Hospital Medical School.—

The WINTER SESSION will open on October 1st with an Introductory Address by Mr. MALCOLM MORRIS.

The Annual Dinner of the Past and Present Students will take place the same evening. Mr. EDMUND OWEN in the chair.

ENTRANCE SCHOLARSHIPS.—The following will be offered for competition on September 30th and October 1st:—

ONE SCHOLARSHIP IN NATURAL SCIENCE of the value of 100 guineas, open to any gentleman who has not completed a Winter Session of Study at a Medical School.

THREE SCHOLARSHIPS IN NATURAL SCIENCE, each of the value of 50 guineas, under the same conditions.

ONE SCHOLARSHIP of the value of 100 guineas, open to Students from Epsom College, being sons of Medical Men, and who have not completed a Winter Session of Study at a Medical School.

TWO SCHOLARSHIPS, each of 50 guineas, open to Students from the Universities of Oxford, Cambridge, or other University, who have not entered at any London Medical School.

The Subjects of Examination for the Natural Science Scholarships will be Inorganic Chemistry, Experimental Physics, and Elementary Biology. The Examination will be conducted according to the Syllabus published in the London University Calendar of 1886, for the Preliminary Scientific M.B. Examination.

The Subjects of Examination for the two Scholarships open to Candidates from the Universities will be Chemistry (Organic and Inorganic), Physiology, and Histology.

In addition to the Open Entrance Scholarships, Class Prizes, and usual Appointments, Scholarships will be offered for competition at the end of each year, open to all pupils of the Hospital.

The Hospital contains 270 beds, is situated in one of the most pleasant districts of London, and is in direct communication by rail with all parts of the Metropolis.

The School buildings, to which large additions were made in 1883, especially as regards the laboratories for the teaching of Physiology and Chemistry, will be further enlarged this year, by the addition of a wing, containing a new Library, Pathological Laboratory, with arrangements for Bacteriological research, Materia Medica Museum, and various class-rooms for Anatomy, Physiology, and Chemistry. In the Students' Club a larger Dining Hall and Reading Room will be added. The building will be completed in time for the Winter Session.

HOSPITAL STAFF.

Consulting Physicians—Dr. T. K. Chambers, Dr. Handfield-Jones, F.R.S.
Consulting Surgeons—Mr. S. A. Lane, Mr. H. Spencer-Smith, Mr. James R. Lane, Mr. Walton.
Physicians—Sir Edward Sieveking, Dr. Broadbent, Dr. Cheadle.
Physicians in charge of Out-patients—Dr. Lees, Dr. S. Phillips, Dr. Maguire.
Surgeons—Mr. A. T. Norton, Mr. Edmund Owen, Mr. H. W. Page.
Surgeons in charge of Out-patients—Mr. W. Pye, Mr. A. J. Pepper, Mr. A. Q. Silcock.
Physician-Accoucheur—Dr. Alfred Meadows.
Physician-Accoucheur in charge of Out-patients—Dr. Montague Handfield-Jones.
Ophthalmic Surgeon—Mr. Critchett.
Junior Ophthalmic Surgeon—Mr. H. Juler.
Aural Surgeon—Mr. Field.
Surgeon in charge of the Department for Diseases of the Throat—Mr. Norton.
Surgeon in charge of the Department for Diseases of the Skin—Mr. Malcolm Morris.
Surgeon-Dentist—Mr. Howard Hayward.
Physician in charge of the Electrical Department—Dr. de Watteville.

OTHER LECTURERS.

Psychology—Sir J. Crichton Browne, F.R.S.
Physiology—Dr. Waller.
Chemistry—Dr. Alder Wright, F.R.S.
Medical Jurisprudence and Hygiene—Dr. Randall.
Botany—Rev. J. M. Crombie, M.A.
Comparative Anatomy—Mr. E. Poulton, M.A.

Special Classes are held for the Preliminary, Scientific, and Intermediate M.B. of the University of London, and for the F.R.C.S. Examinations.

All the Medical Appointments in Hospital, including the five House-Surgeoncies, are open to pupils without additional fee or expense of any kind.

For prospectus and further information, apply to

GEORGE P. FIELD, Dean.
SIDNEY PHILLIPS, M.D., Sub-Dean.

St. Mary's Hospital Residential College,

33, Westbourne-terrace, W.

Students may reside in the College under the supervision of the Warden, Dr. ROBERT MAGUIRE.

Terms, 90 guineas for the Academical year, including the assistance of the Demonstrators of the School on three evenings of the week.

Prospectus and Rules may be obtained from the Warden.

St. George's Hospital Medical School,

Hyde-park-corner, S.W.

The WINTER SESSION will Commence on Friday, October 1st, when an Introductory Address will be delivered by Dr. Waldham, at 4 P.M.

The following Entrance Scholarships will be offered for Competition in October.

1. A Scholarship, value £125, for the sons of medical men who have entered the school during the current year.

2. Two Scholarships, each of £50, open to all Students commencing their studies. The subjects for these three Scholarships will be Latin, French or German, and Elementary Physics, and the Examination wil be held on Monday, October 4th.

3. A Scholarship, value £90, open to all Students who have entered the school during the current year, and who have passed the Cambridge 1st M.B. since October, 1885. Subjects—Elementary Biology, Anatomy, Physiology, and Practical Chemistry.

4. A Scholarship, value £65, for students who have entered during the current year and have passed the Oxford 1st M.B. or the Cambridge 2nd M.B. Subjects—Anatomy and physiology. The examination for these scholarships will be held during the month of October.

The following Exhibitions and Prizes are also open to students:—The William Brown £100 Exhibition; the William Brown £40 Exhibition; the Brackenbury Prize in Medicine, value £32; the Brackenbury Prize in Surgery, value £32; the Pollock Prize in Physiology, value £18; the Johnson Prize in Anatomy, value £10 10s.; the Treasurer's Prize, value £10 10s.; General Proficiency Prizes for first, second, and third-year students, of £10 10s. each; the Brodie Prize in Surgery; the Acland Prize in Medicine; the Thompson Medal; and Sir Charles Clarke's Prize.

All hospital appointments, including the two House Physicianships and two House Surgeonships, are awarded as the result of competition, and are open to the students without additional expense of any kind.

Clerkships and dresserships, and all the minor appointments, are given without extra fees. Several paid appointments, including that of Obstetric Assistant, with a salary of £100 and board and lodging, are awarded yearly upon the recommendation of the Medical School Committee.

The new Physiological Laboratories and Class Rooms, now building, will be ready by October 1.

Prospectuses and fuller details may be obtained by application to

WILLIAM WADHAM, M.D., Dean.

St. Bartholomew's Hospital and

COLLEGE.

The WINTER SESSION will begin on Monday, October 4th, 1886.

Students can reside in the College within the Hospital walls, subject to the collegiate regulations. The Hospital comprises a service of 750 beds (including 75 for convalescents at Swanley). For further particulars, apply, personally or by letter, to the Warden of the College, St. Bartholomew's Hospital, E.C.

A handbook forwarded on application.

St. Bartholomew's Hospital and

COLLEGE.

CLASSES FOR THE UNIVERSITY OF LONDON MATRICULATION EXAMINATION.

Two Classes are held at St. Bartholomew's Hospital in each year for the convenience of gentlemen who are preparing for the Matriculation Examination at the University of London—from October to January, and from March to June. Fee for the Course of Three Months, £10 10s.

PRELIMINARY SCIENTIFIC EXAMINATION.

A Class (open to all Students, whether entered at the Hospital or not) is held from October 1st till July in preparation for the above examination as follows:—

Biology—T. W. Shore, M.D., B.Sc. Lond., Lecturer on Comparative Anatomy to the Hospital.
Physics and Chemistry—F. Womack, M.B., B.Sc. Lond., Demonstrator of Natural Philosophy and of Chemistry to the Hospital.

Fee, £12 12s.; to Students of the Hospital, £10 10s.

This Class is also suitable for Students entering for the Intermediate Science Examination and for the First M.B. of Cambridge.

Also a Special Class in preparation for the January Examination from September 1st till January. Fee, £10 10s.

For further particulars, apply to the Warden of the College, St. Bartholomew's Hospital, E.C.

A detailed Syllabus of the Classes forwarded on application.

St. Bartholomew's Hospital and

COLLEGE.

OPEN SCHOLARSHIPS IN SCIENCE.

Two Scholarships of the value of £130 each, tenable for one year, will be competed for on September 25th and following days. One of the value of £130 will be awarded to the best candidate at this examination under twenty years of age, if of sufficient merit. For the other, the candidates must be under twenty-five years of age.

The subjects of examination are Physics, Chemistry, Botany, Zoology, and Physiology. No candidate to take more than four subjects.

The Jeaffreson Exhibition will be competed for at the same time. The subjects of examination are Latin, Mathematics, and any two of the three following languages: Greek, French, and German.

The Classical subjects are those of the London University Matriculation Examination of July, 1886.

This is an open Exhibition of the value of £50.

Candidates must not have entered to the Medical or Surgical Practice of any Metropolitan Medical School.

The successful candidates will be required to enter at St. Bartholomew's Hospital in the October succeeding the Examination, and are eligible for the other Hospital Scholarships and Prizes.

For particulars, application may be made to the Warden of the College, at St. Bartholomew's Hospital, E.C.

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Guy's Hospital.—The Medical Session

commences on Monday, October 4th.

MEDICAL OFFICERS.

Consulting Physicians—Sir W. Gull, Bart., M.D., D.C.L., F.R.S.; G. Owen Rees, M.D., F.R.S.; S. Wilks, M.D., LL.D., F.R.S.
Physicians—F. W. Pavy, M.D., F.R.S.; P. H. Pye-Smith, M.D., F.R.S.; Frederick Taylor, M.D.
Assistant Physicians—James F. Goodhart, M.D.; R. E. Carrington, M.D.; W. Hale White, M.D.
Consulting Surgeons—E. Cock, Esq.; J. Birkett, Esq.
Surgeons—Thomas Bryant, Esq.; Arthur E. Durham, Esq.; H. G. Howse, M.S.; N. Davies-Colley, M.C.
Assistant Surgeons—R. Clement Lucas, B.S.; C. H. Golding-Bird, M.B.; W. H. A. Jacobson, Esq.; C. J. Symonds, M.S.
Consulting Obstetric Physicians—Henry Oldham, M.D.; J. Braxton-Hicks, M.D., F.R.S.
Obstetric Physician—A. L. Galabin, M.D.
Assistant Obstetric Physician—P. Horrocks, M.D.
Consulting Ophthalmic Surgeon—C. Bader, Esq.
Ophthalmic Surgeon—C. Higgens, Esq.
Assistant Ophthalmic Surgeon—W. A. Brailey, M.D.
Aural Surgeon—W. Laidlaw Purves, Esq.
Dental Surgeon—H. Moon, Esq.
Assistant Dental Surgeon—F. Newland Pedley, Esq.
Other Lecturers and Demonstrators—H. Debus, F.R.S.; T. Stevenson, M.D.; C. E. Groves, F.R.S.; A. W. Reinold, F.R.S.; F. E. Beddard, M.A., F.R.S.E.; G. H. Savage, M.D.; G. Turner, Esq.; Tom Bird, Esq.; W. A. Lane, M.S.; J. Poland, Esq.; L. A. Dunn, M.B.

The Hospital contains, besides the beds for Medical and Surgical cases, wards for Obstetric, Ophthalmic, and other special departments.

In connexion with the Lying-in Charity, about 2500 cases are annually attended by the Students.

Number of patients relieved during the year, about 80,000.

Special Classes are held in the Hospital for Students preparing for the Examinations of the University of London and of other examining boards.

APPOINTMENTS.—The House-Surgeons and House-Physicians, the Obstetric Residents, Clinical Assistants, and Dressers are selected from the Students according to merit and without payment. There are also a large number of Junior Appointments, every part of the Hospital Practice being systematically employed for instruction.

ENTRANCE SCHOLARSHIPS.—Open Scholarship of 125 guineas in Classics, Mathematics, and Modern Languages. Open Scholarship of 126 guineas, in Chemistry, Physics, Botany, and Zoology.

PRIZES, &c.—Six Scholarships, varying in value from £10 to £50 each, for general proficiency in Medical Study; the Treasurer's Gold Medal in Medicine; the Treasurer's Gold Medal in Surgery; the Gurney Hoare Prize of £25 for Clinical Study; the Beaney Prize of 30 guineas for Pathology; the Sands Cox Scholarship of £15 per annum for three years, for Physiology; the Joseph Hoare Prizes of £25 and £10; the Michael Harris Prize of £10 for Anatomy; the Mackenzie Bacon Prize of £10 for Ophthalmoscopy.

For prospectus and further information apply to the Dean, Dr. F. Taylor.

Guy's Hospital, London, S.E., August, 1886.

The Dental Hospital of London Medical

SCHOOL, Leicester-square. — The WINTER SESSION will commence on Monday, October 4th.

LECTURES.

Mechanical Dentistry—Dr. Walker, M.R.C.S., L.D.S., on Wednesdays, at 5 P.M., commencing on October 6th.
Metallurgy in its Application to Dental Purposes—Professor A. K. Huntington, F.C.S., on Tuesdays, at 12 A.M., commencing October 5th.

The SUMMER SESSION will commence in May, 1887.

Dental Surgery and Pathology—Mr. S. J. Hutchinson, M.R.C.S., L.D.S., on Tuesdays and Fridays, at 8 A.M.
Dental Anatomy and Physiology (Human and Comparative)—Mr. Arthur Underwood, M.R.C.S., L.D.S., on Wednesdays and Saturdays, at 8 A.M.
General fee for Special Lectures required by the curriculum, £15 15s.

DENTAL HOSPITAL OF LONDON.

Consulting Physician—Sir J. Risdon Bennett, M.D., LL.D., F.R.S.
Consulting Surgeon—Mr. Christopher Heath, F.R.C.S.
Consulting Dental Surgeons—Mr. S. Cartwright, F.R.C.S.; Sir John Tomes, F.R.S.

	Dental Surgeons.	*Assist. Dental Surgeons.*
Monday, 9 A.M. ...	Mr. D. Hepburn ...	L. Matheson.
Tuesday " ...	Mr. R. Woodhouse ...	Mr. W. Hern.
Wednesday " ...	Mr. Gregson	Mr. Claude Rogers.
Thursday " ...	Mr. Storer Bennett ...	Mr. G. Parkinson.
Friday " ...	Mr. A. S. Underwood.	Mr. L. Read.
Saturday " ...	Mr. F. Canton... ...	Mr. Truman.

Anæsthesists—Mr. Braine, Mr. Bailey, Mr. Bird, Mr. Mills.
Assistant-Anæsthesists—Dr. D. W. Buxton, Dr. F. Hewitt.
Medical Tutor—Mr. W. B. Paterson.
Demonstrators—Mr. E. Latchmore, and Mr. W. B. Ackland.
House-Surgeon—Mr. C. F. Rilot.
Assistant House-Surgeons—Mr. Wynne Rouw; Mr. T. F. Colyer.

The Medical Tutor holds Classes before each examination. The Demonstrator attends each day.

The House-Surgeon and Assistant House-Surgeons attend daily while the Hospital is open.

On every day during the Sessions the Surgeons of the day will, if practicable, give Demonstrations.

The Saunders Scholarship of £20 per annum and Prizes are open for competition.

Fee for two years' Hospital Practice required by the curriculum, £15 15s. Fees for Lectures and Practice, £31 10s. Additional fees for a General Hospital for the two years to fulfil the requirements of the curriculum vary from £40 to £50.

Further particulars may be obtained on application to the Dean, at the Hospital, where he will attend in the afternoons from September 20th to October 1st inclusive, from 5 till 5.30 o'clock, or on Wednesday mornings from 10.30 till 12. MORTON SMALE, Dean.

Lectures on Public Health.—A sys-

tematic course of lectures on, and practical instruction in, Public Health, commencing on Friday, October 1st, will be given by WM. ROBERT SMITH, M.D., D.Sc., F.R.S. Ed., Sanitary Science Certificate, Cambridge.

A course of Laboratory Instruction will also be given under the superintendence of HENRY SMITH, M.D. Lond., S.Sc. Cert. Camb., Public Analyst for the Districts of Woolwich and Plumstead.

The requirements for the various qualifications in Sanitary Science will be specially kept in view.

A syllabus and further information can be obtained on application.

74, Great Russell-street, Bloomsbury-square, W.C.

The Hospital for Women, Soho

Square, W.

THE LONDON SCHOOL OF GYNÆCOLOGY.

CLINICAL ASSISTANTS are appointed every three months to work with the Physicians and Surgeons in the In-patient and Out-patient Departments. These appointments are only open to qualified medical men and students after their third year. Every opportunity is afforded of obtaining a thoroughly practical acquaintance with the diagnosis and treatment of the Diseases of Women, and to ensure this more fully the number of assistants is strictly limited. Fee, Five Guineas.

Clinical Lectures are given on alternate Thursday afternoons, at 3.30 P.M.

Operation Days, Mondays and Thursdays, at 2 P.M.

For further information, apply by letter to the Dean, at the Hospital.

North London or University College

Hospital, Gower-street. Founded A.D. 1833.

Patron: The QUEEN. Vice-Patron: The PRINCE OF WALES.

RE-BUILDING FUND.

It has been decided that it is necessary to re-build the Hospital on a plan which will better provide for the increasing numbers of the sick poor in the densely populated districts around.

It is estimated that £50,000 will be needed in order to secure a Hospital satisfying modern requirements.

Building will not be begun until £30,000 has been received.

Meanwhile, Donations will be invested, the interest being added to the principal, and will be kept separate from the ordinary funds. "In Memoriam" Wards will be named in accordance with the wishes of Donors of £5000; Donors of £2000 may name beds or cots. These sums may be paid in instalments. Donors of one hundred guineas may recommend an unlimited number of patients. Donors of thirty, twenty, or ten guineas are entitled to a certain number of Patients' Letters.

The Committee earnestly appeal for help to carry out their undertaking.

KINNERLEY.

Contributions will be gratefully received by Sir Julian Goldsmid, Bart., M.P., Treasurer of the University College; Augustus Prevost, Esq., Treasurer of the Hospital; Messrs. Coutts, 59, Strand; or N. H. Nixon, Secretary.

The School of Dermatology,

ST. JOHN'S HOSPITAL for DISEASES of the SKIN.

The large number of cases of skin-disease which pass through this hospital during the year, together with the attendance upon the practice of many students and medical men, have suggested to the Board of Management and the medical staff the establishment of a School for the systematic teaching of Dermatology, so that the practice of the hospital may be educationally utilised.

The first session will commence on Thursday, Sept. 30th, when the introductory lecture will be given by Mr. J. L. Milton.

Lectures on the Anatomy, Physiology, Histology, and Pathology of the Skin will be given by C. M. Campbell, M.D.

Lectures on the Materia Medica and Therapeutics of Agents employed in the Treatment of Skin Diseases will be given by H. Boothby Dow, M.D.

Lectures on the Principles and Practice of Dermatology will be given by Tom Robinson, M.D., and Arthur Harries, M.D.

Clinical instruction in the Out-patient Department will be given every week-day afternoon at 2 o'clock.

Special Clinical Demonstrations will be given from time to time at 4 o'clock in the afternoon.

Pupils will be admitted to follow the out-patient practice whenever the medical officers are in attendance.

A fee of 2 guineas per term will be charged. The perpetual fee will be 5 guineas.

All information can be obtained from, and entries will be made by, Mr. St. Vincent Mercier, Secretary of the School, at St. John's Hospital, Leicester-square, W.C.

Bethlem Hospital.—With a view of

extending the experience requisite for the efficient Medical Treatment and Management of the Insane, this Hospital is open for the admission of Two RESIDENT MEDICAL STUDENTS who have recently obtained their diplomas to practise Medicine and Surgery.

They will be permitted to reside in the Hospital for a term generally not exceeding six months, and will be provided with such apartments, rations, and attendance as the Committee shall consider reasonable.

They will be under the direction of the Resident Physician, and will be elected by the Committee from candidates whose testimonials appear to be most satisfactory.

Applications for the appointment, with testimonials, to be forwarded to Bridewell Hospital, Blackfriars, E.C., addressed to John Baggallay, Esq., before 2 o'clock on Saturday, October 9th, 1886.

The election will take place on October 11th, at Bridewell Hospital, and the elected candidates will be expected to commence residence on November 1st.

Candidates must attend at Bridewell Hospital on Monday, the 11th of October, at 2 o'clock.

August 28th, 1886. JOHN BAGGALLAY, Clerk, &c.

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THE THROAT HOSPITAL,
GOLDEN-SQUARE, W.

PRESIDENT—LORD CALTHORPE.

HONORARY MEDICAL STAFF:—

CONSULTING PHYSICIAN—MORELL MACKENZIE, M.D. Lond.
PHYSICIANS R. NORRIS WOLFENDEN, M.D. Camb.; JAMES W. BOND, M.D. Lond.; GRENVILLE MACDONALD, M.D. Lond.
SURGEON—T. MARK HOVELL, F.R.C.S. Ed.

The Hospital contains accommodation for Eighteen In-patients, and has a very large Out-patient Department. Upwards of 4800 new patients were treated last year. Clinical Demonstrations and Instruction are given daily by the members of the Staff in attendance. Fee for Three Months' Clinical Instruction, including the Use of the Laryngoscope, 3 Guineas; Six Months', 5 Guineas. During October and November a Course of Lectures, illustrated by Clinical Cases, will be given by the Staff at the Hospital on Wednesday Evenings, at 5 o'clock, to which Medical Practitioners and past and present Students of the Hospital will be admitted free.

T. MARK HOVELL, Dean.

CENTRAL LONDON THROAT AND EAR HOSPITAL,
GRAY'S INN ROAD, W.C. (close to King's Cross Railway Station).

PRESIDENT—HIS GRACE THE ARCHBISHOP OF CANTERBURY.

HONORARY MEDICAL STAFF.

CONSULTING SURGEON—Sydney Jones, Esq., F.R.C.S.

SURGEONS.

Lennox Browne, Esq., F.R.C.S.E., attending every Monday and Thursday, at 2.30 P.M.
Arthur Orwin, Esq., M.D., attending every Wednesday and Saturday, at 2.30 P.M.
J. Dundas Grant, Esq., M.A., M.D., attending every Tuesday at 5.30 P.M., and Thursday at 2.30 P.M.

ASSISTANT-SURGEONS.

Percy Jakins, Esq., M.R.C.S., attending every Friday at 5.30 P.M., and with Surgeon every Monday and Wednesday at 2.30 P.M.
T. W. Carmalt Jones, Esq., M.A., F.R.C.S.E., attending with Surgeon every Monday, Thursday, and Saturday, at 2.30 P.M.

DENTAL SURGEON.—George Wallis, Esq., L.D.S., R.C.S.
DEFECTS OF SPEECH.—William Van Praagh, Esq.

The Hospital contains accommodation for seventeen In-Patients, and has a very extensive Out-Patient Department, which is open to all Medical Practitioners and Students for the purpose of Clinical Demonstration and Instruction during the hours of the Surgeons' visits. During the past year 4946 Out-patients and 237 In-patients were treated. Lime-light illumination is employed.

Fee for three months' attendance, two guineas; for six months, three guineas.

A Course of Lectures on the Special Diseases treated at this Hospital will be delivered during the winter months by members of the staff.

The date of these Lectures is announced in the medical journals prior to their commencement. They are free to qualified practitioners and advanced students of medicine.

RICHARD KERSHAW, Secretary.

The Royal Colleges of Physicians and SURGEONS.

Lectures for the first examination in CHEMISTRY, MATERIA MEDICA, CHEMICAL PHYSICS, and PHARMACY are now being held by Mr. J. WOODLAND, F.L.S., F.C.S., &c., at 173, Marylebone-road, N.W.

The City School of Chemistry,
27, CHANCERY-LANE, W.C.

"Patronised by the leading London Medical Men."
Result of this year's 1st L.R.C.P. Exams.: Seventy passed.
Further particulars on application.
Mr. MAURICE WILLIAMS, Principal.

University of London.—Preliminary

SCIENTIFIC (M.B.) EXAMINATION.—Instruction is given in all the subjects of the above examination at GUY'S HOSPITAL during the Winter and Summer Sessions. The Class is not confined to Students of the Hospital.—For further particulars apply to the Dean, Guy's Hospital, Southwark, S.E.

Classes for the Hygienic Physical

TRAINING OF GIRLS will be opened by Miss CHREIMAN and Staff early in October, at the Portman Rooms, Baker-street (late Madame Tussauds).

Arrangements also made at same place for the Remedial Exercise of Children and Ladies by means of adapted apparatus and otherwise.

Delicate girls and children are received in residence for short or longer periods, according to their physical requirements. Educational facilities being provided for them during such residence, and progress watched by their medical advisers.

The HYGIENIC-EXERCISE CLASSES at the Town Halls, &c., Kensington, Hampstead, Upper Norwood, Beckenham, Caterham, Brighton, &c., will be reopened on October 1st. Suburban, Country, and School Classes taken as formed, if arrangements permit.

20, Gwendwa-road, West Kensington.

Queen Charlotte's Lying-in Hospital

and MIDWIFERY TRAINING SCHOOL, Marylebone-road, London, N.W. Founded 1752. Incorporated by Royal Charter, 1885. Physicians to the In-patients, Dr. Hope and Dr. Chapman Grigg. This Hospital is in full operation, and has been recently enlarged by the construction of a New Wing, which was opened by their Royal Highnesses the Prince and Princess of Wales on 25th June last, and which has increased the number of beds from fifty-four to eighty-one. At the present time patients are being admitted at the rate of upwards of 1000 per annum, beside which there is a large out-patient maternity. The pupils are permitted to see the practice in both departments.

Medical pupils are received at all times of the year, and they enjoy unusual opportunities for seeing obstetric complications and operative midwifery, on account of the very large number of primiparous cases—upwards of three-fourths of the total admissions. Clinical instruction is given on the more important cases that present themselves in both departments. Certificates of attendance at this hospital are accepted by all universities, colleges, and licensing bodies, and a diploma is granted in midwifery. Monthly nurses and midwives are received for training. For further particulars, fees, &c., application should be made to the Secretary at the Hospital.

Normal School of Science and Royal

SCHOOL OF MINES, South Kensington and Jermyn-street.
Dean—Professor T. H. HUXLEY, F.R.S.

SESSION 1886-87.

From the 1st October, 1886, till about the end of June, 1887, the Laboratories will be open to Students in the following Sciences:—

CHEMISTRY AND AGRICULTURE.
PHYSICS.
BIOLOGY.
GEOLOGY.
MECHANICS AND MECHANICAL DRAWING.
METALLURGY, MINING, AND ASSAYING.

The following Courses of Lectures will be given during the Session:—4th October, 1886, Mechanics, Professor T. M. Goodeve, M.A.; Inorganic Chemistry, Professor Thorpe, F.R.S.; 5th October, 1886, Elementary Zoology, G. B. Howes, Esq.; 7th October, 1886, Principles of Agriculture, J. Wrightson, Esq.; 11th October, 1886, Metallurgy, Professor W. C. Roberts-Austen, F.R.S.; 8th November, 1886, Mining, Professor Warrington-Smyth, F.R.S.; 4th January, 1887, Elementary Botany, Dr. D. H. Scott; 15th February, 1887, Physics, Professor F. Guthrie, F.R.S.; Geology, Professor J. W. Judd, F.R.S.; Advanced Zoology, G. B. Howes, Esq.; Advanced Botany, Dr. D. H. Scott; Organic Chemistry, Dr. F. R. Japp, F.R.S.; Mineralogy, F. Rutley, Esq.; 15th June, 1887, Astronomical Physics, J. Norman Lockyer, Esq., F.R.S.

A course of Mine Surveying, conducted by Mr. B. H. Brough, will begin on the 15th February, 1887.

In addition to the above, lectures will be given in the Chemical Division by Drs. Hodgkinson and Percy Frankland; in the Physical Division by Messrs. Boys, Mitchell, Hoffert, and Captain W. de W. Abney, R.E., F.R.S.

For further particulars apply to the Registrar, Normal School of Science, South Kensington.

Bath Royal United Hospital.—

120 Beds.

Honorary Consulting Physician—Dr. Coates.
Honorary Physicians—Drs. Goodridge, Cole, and Fox.
Honorary Surgeons—Messrs. Stockwell, Fowler, and Freeman.
Honorary Medical Officers for Out-patients—Dr. Field, Messrs. Cowan and Craddock.
Honorary Assistant-Surgeons—Messrs. Green, Scott, and Ransford.
Dental Surgeon—Mr. Gaine.
Pathological Registrar and Curator—Mr. H. Culliford-Hopkins.

The Hospital is recognised by the Royal College of Physicians, Surgeons, &c., and licensed for dissections. It contains a Library and an excellent Museum, in which are a large number of interesting specimens both in Pathology and Comparative Anatomy. Fees for attendance, twelve months £10 10s., six months £5 5s. Number of patients admitted during the past year 1054, out-patients 8256, operations performed 156, anæsthetics recorded 148.—For further particulars, apply to the Registrar and Curator.

Education.—To Professional Men of

Limited Income.—A few BOYS, sons of the above, can be admitted into a well-known school on greatly reduced terms.—For full particulars, address, in strict confidence, Mu, care of Messrs. Rolfe Bros., 6, Charterhouse-buildings, Aldersgate, City, E.C.

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University of Durham College of Medicine, Newcastle-upon-Tyne.

The WINTER SESSION will be opened on October 1st, 1886, at 2 P.M., in the Wood Memorial Hall, when the Scholarships and Prizes will be presented.

LECTURES—WINTER SESSION.

Anatomy—Dr. Mears.
Physiology—Mr. Williamson, F.R.C.S., and Dr. Oliver.
Chemistry—Professor Bedson, D.Sc.Lond.
Medicine—Professor Philipson, M.A., M.D., D.C.L., F.R.C.P.
Surgery—Dr. Arnison and G. Y. Heath, M.D., M.B. Lond., D.C.L., F.R.C.S.
Hygiene—Mr. Henry E. Armstrong.
Psychology—Dr. Wickham, F.R.S.E.
Physics—Professor A. S. Herschel, M.A., F.R.S.
Zoology—Professor Brady, M.A., F.R.S.

SUMMER SESSION.

Botany—Dr. Murphy.
Materia Medica—Mr. McBean.
Practical Chemistry—Professor Bedson.
Practical Physiology—Dr. Oliver.
Midwifery—Dr. Nesham.
Diseases of Women—Dr. Gibson.
Medical Jurisprudence—Mr. Page.
Pathology—Dr. Drummond.
Operative Surgery—Dr. L. Armstrong.
Tutor in Arts—Rev. J. Bulmer, B.D.

LICENCES, DEGREES, AND CERTIFICATES IN MEDICINE, SURGERY, AND SANITARY SCIENCE.—Two Licences, three Degrees, and one Certificate are conferred by the University of Durham—viz., Licences in Medicine and in Surgery, the Degrees of Bachelor in Medicine, Master in Surgery, and Doctor in Medicine, and a Certificate of Proficiency in Sanitary Science.

Attendance at the University of Durham College of Medicine during one of the four years of professional study, or subsequently to qualification elsewhere, is required as part of the curriculum for the Degrees, except in the case of Practitioners of more than fifteen years' standing, and forty years of age, who can obtain the Degree after examination only.

There are three Examinations for the Degree of M.B.: the First, consisting of Elementary Anatomy and Physiology, Chemistry, with Physics, and Botany; the Second, of Anatomy, Physiology, Materia Medica, with Pharmacy; and the Third, of Medicine, Surgery, Midwifery, and the allied subjects. Candidates who shall have passed the First and Second Examinations for the Degree will be exempt from the First and Second Examinations of the Conjoint Board in England. Candidates who shall have passed the First Examination of the Conjoint Board in England will be exempt from the First Examination for the Degree, except in the subjects of Chemistry with Physics and Botany.

The First and Second Examinations for the Degree of M.B. may be passed prior to the commencement of attendance at Newcastle.

The extra Arts Examination must be passed previously to the Candidate's entry for the Third Examination for the Degree.

Lists of the questions of former Examinations, together with full particulars and synopses of the subjects, will be found in the Prospectus, which may be obtained by application to the Registrar.

SCHOLARSHIPS, &c.—The following Scholarships and Prizes are awarded annually:—A University of Durham Scholarship, value £100, for Proficiency in Arts, awarded to full Students in their first year. The Dickinson Scholarship, value £15, and a Gold Medal, for Medicine, Surgery, Midwifery, and Pathology. The Tulloch Scholarship, value £20, for Anatomy, Physiology, and Chemistry. The Charlton Scholarship, value about £35, for Medicine. The Gibb Scholarship, value £25, for Pathology. The Goyder Memorial Scholarship (at the Infirmary), value about £15 for Clinical Medicine and Clinical Surgery. At the end of each Session a Silver Medal and Certificates of Honour are awarded in each of the regular classes. Assistant Demonstrators of Anatomy, receiving each an honorarium of £5, two Prosectors, and two Assistant Physiologists are elected yearly. Two Pathological Assistants, two Assistants to the Dental Surgeon, and one Assistant in the Eye Department, are also elected every three months. Medical and Surgical Assistants, Clinical Clerks and Dressers, are appointed every three months.

NEWCASTLE-ON-TYNE INFIRMARY.

MEDICAL AND SURGICAL STAFF.

Physicians—Drs. Philipson, Drummond, Oliver, and Lindsay.
Surgeons—Drs. Arnison, L. Armstrong, Hume, and Mr. Page.
Assistant Surgeons—Mr. T. A. Dodd and Mr. Williamson.
Pathologist—Dr. Drummond.
Dental Surgeon—Mr. E. Fothergill.
House-Physician—Mr. J. Waldy.
Senior House-Surgeon—Dr. G. W. Ridley.
Junior House-Surgeon—Dr. F. Bramwell.

The Infirmary contains 260 beds. There are special Wards for the treatment of Children, and for Ophthalmic and Syphilitic Diseases. Clinical Lectures are delivered by the Physicians and Surgeons in rotation. Pathological Demonstrations are given as opportunity offers by the Pathologist. Practical Midwifery can be studied at the Newcastle Lying-in Hospital, where there is an out-door practice of about 300 cases annually. Lectures are given on Psychological Medicine at the Coxlodge Lunatic Asylum by Dr. R. H. B. Wickham, Medical Superintendent. A Special Course of Instruction is given in the Hospital for Infectious Diseases by the Superintendent and City Officer of Health, Dr. H. E. Armstrong.

FEES.

(a) A Combination Ticket for Lectures at the College may be obtained—
1. By payment of 60 guineas on entrance.
2. By payment of 35 guineas at the commencement of the first and second Winter Sessions.
3. By three annual instalments of 30, 25, and 20 guineas respectively, at the commencement of the sessional year.

(b) Fees for attendance on Hospital Practice—
For three months' Medical and Hospital Practice, 5 gs.
" six " " " 8 "
" one year's " " " 12 "
" perpetual " " " 25 "
or by three instalments at the commencement of the sessional year—viz., first year, 12 guineas; second year, 10 guineas; third year, 6 guineas. Or by two instalments—viz., first year, 14 guineas; second year, 12 guineas.

(c) Single Courses of Lectures, 5 guineas.

Fees for Lectures, &c., at College must be paid to the Registrar, and fees for Hospital Practice to the House-Physician at the time of entry.

Further particulars with regard to examinations may be obtained from Dr. Luke Armstrong, 1, Eldon-square, Newcastle-upon-Tyne; or, on all other matters connected with the College, from Mr. Henry E. Armstrong, 6, Wentworth-place, Newcastle-upon-Tyne.

University of Durham.—The next

Examination for the Certificate of Proficiency in Sanitary Science will begin on September 20th, 1886. The next First Examination for Degrees in Medicine and Surgery will begin on September 13th, 1886. The next Second Examination for the Degrees will begin on September 20th, 1886.

The next Examination for the Degree of M.D. for Practitioners of fifteen years' standing, and for the Degree of M.D. and the Final Examinations for the Degrees of M.B. and M.S., will begin on December 6th, 1886.

Intending Candidates must forward their names, together with the fee, at least twenty-eight days before the date of commencement of the Examination for which they wish to enter.

Full particulars, prospectuses, and examination papers may be obtained on application to the Registrar of the University of Durham College of Medicine, Dr. Luke Armstrong, Eldon-square, Newcastle-upon-Tyne.

The Mason College, Birmingham.

Session 1886-87.

FACULTIES OF ARTS AND SCIENCE.

The Session will commence on Friday, Oct. 1st, 1886.

Syllabuses, containing full information as to Entrance and other Scholarships, the various courses of instruction, lecture hours, fees, &c., may be obtained from Messrs. Cornish, New-street, Birmingham, price 3d., by post 4½d.

GEO. H. MORLEY, Secretary.

Owens College, Victoria University, Manchester.

MEDICAL DEPARTMENT.

Principal—J. G. GREENWOOD, LL.D.
Dean—Professor ALFRED H. YOUNG, M.B., F.R.C.S.

PROFESSORS AND LECTURERS.

Anatomy, Descriptive and Practical—Professor Alfred H. Young, M.B., F.R.C.S.
Physiology and Histology—Brackenbury Professor, William Stirling, M.D., D.Sc.
Chemistry—Vacant.
Organic Chemistry—Prof. C. Schorlemmer, F.R.S.
Botany—Prof. W. C. Williamson, LL.D., F.R.S.
Zoology and Comparative Anatomy—Professor A. Milnes Marshall, M.D., M.A., D.Sc., F.R.S.
Materia Medica and Therapeutics—Professor D. J. Leech, M.D., F.R.C.P.
Pharmacy—Professor D. J. Leech, M.D., F.R.C.P.
Medicine—Professor Sir William Roberts, M.D., F.R.S., F.R.C.P.; Professor J. E. Morgan, M.D., M.A., F.R.C.P.
Clinical Medicine—Henry Simpson, M.D., Professor J. E. Morgan, M.D., M.A., F.R.C.P.; Professor D. J. Leech, M.D., F.R.C.P.; Professor Julius Dreschfeld, M.D., F.R.C.P.; James Ross, M.D. LL.D., F.R.C.P.; Graham Steell, M.D., M.R.C.P.
General Pathology and Morbid Anatomy—Professor Julius Dreschfeld, M.D., F.R.C.P.
Surgery—Professor Edward Lund, F.R.C.S.; Assistant Lecturer, Fredk. A. Southam, M.B., M.A., F.R.C.S.
Clinical Surgery—Fredk. Ashton Heath, M.R.C.S.; Walter Whitehead, F.R.C.S.E., F.R.S.E.; Thomas Jones, M.B., B.S., F.R.C.S.; James Hardie, M.D., F.R.C.S.; Fredk. A. Southam, M.B., M.A., F.R.C.S.; George A. Wright, M.B., B.A., F.R.C.S.
Practical Surgery—Thomas Jones, M.B., B.S., F.R.C.S.
Surgical Pathology—Professor Alfred H. Young, M.B., F.R.C.S.
Obstetrics and Gynæcology—Professor Chas. J. Cullingworth, M.D., M.R.C.P.
Clinical Obstetrics and Gynæcology—D. Lloyd Roberts, M.D., F.R.C.P., F.R.S.E.; Professor Chas. J. Cullingworth, M.D., M.R.C.P.
Diseases of Children—Henry Ashby, M.D., M.R.C.P.
Medical Jurisprudence—J. Dixon Mann, M.D., M.R.C.P.
Hygiene—Arthur Ransome, M.D., M.A., F.R.S.
Mental Diseases—George William Mould, M.R.C.S.
Ophthalmology—David Little, M.D.
Clinical Ophthalmology—David Little, M.D.; Chas. E. Glascott, M.D.
With Assistant Lecturers in all the principal subjects.

SCHOOL OF DENTAL SURGERY.

Dental Surgery—Leonard Matheson, L.D.S.
Dental Anatomy and Physiology—A. M. Paterson, M.D., M.R.C.S.
Dental Mechanics—Thomas Tanner, L.D.S.
Dental Metallurgy—C. A. Burghardt, Ph.D.

The Classes at the College qualify for Degrees in the Victoria University, for many of the Degree Examinations of the University of London, and for the Diplomas of the Royal Colleges of Physicians and Surgeons of London, &c.

Prospectuses of the different Departments: I. Day Classes; II. Medical Department; III. Department for Women; IV. Evening Classes, will be forwarded on application to the Registrar.

HENRY W. HOLDER, M.A., Registrar.

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Queen's College, Birmingham.

President—Lord WINDSOR.
Vice-President—The Rev. W. WILKINSON, D.D., Hon. Canon of Worcester and Rural Dean.
Warden—The Rev. W. H. POULTON, M.A.
Hon. Secretary—Professor WINDLE, M.A., M.D.

SCHOOL OF MEDICINE.

The WINTER SESSION will commence on Friday, the 1st of Oct. next.

For the purpose of Medical Education, Queen's College is associated with Mason Science College. By this arrangement Medical Students of Queen's College receive their instruction in Physiology, Chemistry, Chemical Physics, and Botany in Mason College, and thus enjoy the advantages afforded by the well-appointed laboratories of the latter institution. In Queen's College during the past session a New Pathological Laboratory and Materia Medica Museum and Laboratory have been opened. The Anatomical Collection in the Museum has been considerably enlarged, and every endeavour has been made to render the course of Medical Education thorough and complete.

SCHOLARSHIPS and PRIZES are awarded annually, full particulars of which may be obtained by reference to the Prospectus of the College, or by application to the Warden, or to the Hon. Sec.

FEES.—The Composition Fee (not perpetual) for admission to Lectures required for ordinary medical qualifications is 60 guineas, payable in two equal annual instalments.

COLLEGE STAFF.

N.B.—The CLASSES marked * will be held in MASON SCIENCE COLLEGE.

Medicine—Sir Balthazar Foster, M.D., F.R.C.P.; Sir James Sawyer, M.D. Lond., F.R.C.P.
Surgery—Oliver Pemberton, F.R.C.S.; Furneaux Jordan, F.R.C.S.
Anatomy—Bertram C. A. Windle, M.A., M.D., B.Ch. Dub.
Demonstrators of Anatomy—Jordan Lloyd, M.B., M.S., F.R.C.S. Eng.; W. F. Haslam, F.R.C.S. Eng.; W. A. Foxwell, B.A., M.B., M.R.C.P. Lond.
*Systematic Physiology—John Berry Haycraft, M.B., B.Sc., F.R.S. Edin. Demonstrator: E. Teichelmann.
*Chemistry—William A. Tilden, D.Sc. Lond., F.R.S.
*Chemical Physics—W. Poynting, M.A. Cantab.
Pathology—Gilbert Barling, M.B., B.S. Lond., F.R.C.S. Eng.
*Histology and Practical Physiology—John Berry Haycraft, M.B., B.Sc., F.R.S. Edin.
*Botany and Vegetable Physiology—William Hillhouse, M.A. Cantab., F.L.S.
*Practical Chemistry—W. A. Tilden, D.Sc. Lond., F.R.S.
Materia Medica and Therapeutics—Edwin Rickards, M.A., M.B. Oxon., F.R.C.P.; C. W. Suckling, M.D. Lond., M.R.C.P.
Forensic Medicine—J. St. S. Wilders, M.R.C.S.
Toxicology—A. Bostock Hill, M.D., F.I.C.
Midwifery and the Diseases of Women—John Clay, M.R.C.S.; John Bassett, M.D.
Practical Surgery—Demonstrators: T. H. Bartleet, M.B. Lond., F.R.C.S.; Bennett May, M.B., B.S. Lond., F.R.C.S.
Ophthalmic Surgery—J. Vose Solomon, F.R.C.S.
Lunacy and Mental Diseases—E. B. Whitcombe, M.R.C.S.
Curator of the Museum—Bertram C. A. Windle, M.A., M.D., B.Ch. Dub.
Medical Tutor—E. Hogben, B.A., M.B., B.Ch. Dub.

HOSPITAL PRACTICE.

All students of Queen's College attend Clinical Lectures and Practice at both the General and the Queen's Hospitals for a common fee. These Hospitals comprise In-patient Departments of about 400 beds, and Out-patient Departments of about 70,000 cases annually.

Valuable Clinical Appointments are allotted to students on competitive examination.

Prizes for Clinical Medicine, Surgery, and Midwifery are awarded annually.

FEES:—The Composition Fee for the full Course of Hospital Practice (inclusive of Clinical Course and appointments of Clinical Clerk and Surgical Dresser) is 40 Guineas, payable in two equal annual instalments.

HOSPITAL STAFF.

The General Hospital.	*The Queen's Hospital.*
CONSULTING PHYSICIAN.	PHYSICIANS.
Dr. Bell Fletcher.	Sir James Sawyer.
PHYSICIANS.	Dr. Carter.
Dr. Wade.	Dr. Suckling.
Sir B. W. Foster.	CONSULTING OBSTETRIC OFFICERS.
Dr. Rickards.	Mr. S. Berry.
Dr. Saundby.	Mr. J. Clay.
CONSULTING SURGEONS.	CONSULTING SURGEON.
Mr. D. W. Crompton.	Mr. Sampson Gamgee.
Mr. Alfred Baker.	SURGEONS.
SURGEONS.	Mr. Furneaux Jordan.
Mr. Oliver Pemberton.	Mr. Wilders.
Mr. Bartleet.	Mr. Bennett May.
Mr. Jolly.	Mr. Jordan Lloyd.
Mr. Chavasse.	OBSTETRIC OFFICER.
OBSTETRIC OFFICER.	Mr. Alex. Hawkins.
Dr. Malins.	OPHTHALMIC SURGEON.
ASSISTANT PHYSICIANS.	Mr. Priestley Smith.
Dr. Simon.	DENTAL SURGEON.
Dr. Foxwell.	Mr. Charles Sims.
ASSISTANT SURGEONS.	CASUALTY PHYSICIAN.
Mr. Haslam.	Dr. Edgar Hogben.
Mr. H. G. Barling.	CASUALTY SURGEONS.
	Mr. A. F. Clay.
	Mr. F. Marsh.

LUNACY AND MENTAL DISEASES.

Courses can be attended at the Borough Lunatic Asylum. E. B. Whitcombe, M.R.C.S., Medical Superintendent.

DENTAL DEPARTMENT.

All instruction necessary for Dental qualifications can be obtained in this College for a fee of Sixty Guineas, inclusive of Hospital Practice.

Prospectuses and further information may be obtained by application to the Rev. the Warden or the Hon. Sec., at the College; or to the undersigned, 21, Paradise-street. JOSEPH LEWIS, Secretary.

University College, Bristol.—Medical

SCHOOL.—The WINTER SESSION will commence on Friday, October 1st.

LECTURERS.

Medicine—W. A. Spencer, M.A., M.D. Cantab., and E. Markham Skerritt, M.D. Lond., B.A., F.R.C.P.
Surgery—N. C. Dobson, F.R.C.S.
Anatomy—F. R. Cross, M.B. Lond., F.R.C.S.
Practical Anatomy—Demonstrator, W. H. Harsant, F.R.C.S.
Physiology—R. Shingleton Smith, M.D. Lond., B.Sc., F.R.C.P.
Chemistry—T. Coomber, F.C.S.
Hygiene—D. Davies, M.R.C.S.
Midwifery and Diseases of Women—J. G. Swayne, M.D. Lond., and A. E. Aust Lawrence, M.D.
Medical Jurisprudence—R. Bager, M.D. Lond., and A. J. Harrison, M.B. Lond.
Pathology and Morbid Anatomy—W. H. Spencer, M.A., M.D. Cantab., and B. Markham Skerritt, M.D. Lond., B.A., F.R.C.P.
Demonstrator—Barclay J. Baron, M.B., C.M. Edin.
Operative Surgery—W. P. Keall, M.R.C.S.
Practical Surgery—A. W. Prichard, M.R.C.S.
Materia Medica and Therapeutics—J. E. Shaw, M.B. Edin.
Practical Physiology and Histology—G. F. Atchley, M.B. Lond.
Demonstrators of Physiology—G. M. Smith, M.R.C.S., and J. Michell Clarke, M.A., M.B. Cantab.
Botany—Prof. A. Leipner.
Practical Chemistry—T. Coomber, F.C.S.
Comparative Anatomy—Prof. Lloyd Morgan.
Medical Tutor—A. L. Anderson, M.B.

Composition Fee for Lecture, 60 guineas.

Hospital Practice may be attended either at the Bristol Royal Infirmary or at the Bristol General Hospital.

Fees, including Clinical Lectures:—Infirmary: Perpetual Medical and Surgical Practice, 20 guineas each, or, in one payment, 35 guineas. Hospital: Perpetual Medical and Surgical Practice, £20 each, or, in one payment, 35 guineas.

Scholarships and Prizes.—Numerous valuable Scholarships and Prizes are offered by the Medical School and by the Infirmary and the Hospital.

For prospectus and particulars, apply to
E. MARKHAM SKERRITT, M.D., Dean.

Bristol General Hospital.—Scholarships

and PRIZES.—Two Entrance Scholarships, one of 30 guineas, one of £20; Clarke Surgical Scholarship, £15; Martyn Memorial Pathological Scholarships, two of £10 each; Sanders Scholarship, £22 10s.; Committee Gold and Silver Medals.

The regulations respecting the above may be obtained on application to
E. MARKHAM SKERRITT, M.D., Dean.

Bristol Royal Infirmary. — Founded

1735. 264 beds.

The WINTER SESSION begins Monday, October 4th, 1886.

Two Entrance Scholarships, 35 guineas and 10 guineas; examination in Latin, English, Physics, Chemistry, &c., on Oct. 30th, 1886. Two Gold Medals, with 7 guineas additional, for Medicine and Surgery respectively. Clark Prize, 15 guineas; Tibbits Surgical Prize, 9 guineas; Leonard Surgical Prize, 7 guineas. Three Pathological Prizes, 3 guineas each. Full particulars from
W. H. SPENCER, M.D., Dean.

VICTORIA UNIVERSITY.

University College, Liverpool.

MEDICAL DEPARTMENT.
SESSION 1886-87.

THE LECTURES AND CLASSES FOR THE WINTER SESSION OF THE MEDICAL FACULTY commence on MONDAY, OCTOBER 4th.

PROFESSORS AND LECTURERS IN THE MEDICAL FACULTY:

Medicine—T. R. Glynn, M.D., F.R.C.P.
Surgery—Rushton Parker, B.S., F.R.C.S.
Anatomy—W. Mitchell Banks, F.R.C.S.
Physiology—Richard Caton, M.D., M.R.C.P.
Pathology—A. Davidson, M.A., M.D., F.R.C.P.
Ophthalmology—H. A. Browne, M.R.C.S.
Chemistry—J. Campbell Brown, D.Sc.
Experimental Physics—Oliver Lodge, D.Sc.
Midwifery—J. Wallace, M.D.
Hygiene—E. W. Hope, M.D., B.Sc.
Materia Medica—W. Carter, LL.B., M.D., F.R.C.P.
Medical Jurisprudence—F. T. Paul, F.R.C.S.
Botany—G. Shearir, M.D., F.L.S.
Zoology—W. A. Herdman, D.Sc., F.L.S.
Clinical Medicine—A. T. M. Waters, M.D., F.R.C.P.
,, ,, T. R. Glynn, M.D., F.R.C.P.
,, ,, A. Davidson, M.A., M.D., F.R.C.P.
Clinical Surgery—E. R. Bickersteth, F.R.C.S.
,, ,, R. Harrison, F.R.C.S.
,, ,, W. Mitchell Banks, F.R.C.S.

The Medical and Surgical Tutors and the Demonstrators of Anatomy, Physiology, and Chemistry are in attendance daily at the Hospital and Medical School.

Numerous Prizes and Scholarships of the value of £325 are offered annually for competition.

The curriculum qualifies for the Victoria and London Universities and the Royal University of Ireland; for three years for the Universities of Edinburgh and Durham; and for all the Colleges of Physicians and Surgeons.

For prospectus and further information apply to the Vice-Dean, Mr. Paul, 38, Rodney-street, Liverpool.

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Northumberland, Durham, and New-

CASTLE INFIRMARY for DISEASES of the EYE.—Mr. Jeaffreson's Clinical Lectures and Ophthalmoscopic Demonstrations will be continued upon days which will be subsequently announced. Gentlemen desirous of attending must apply by letter for a card of admission.

Preparatory School of Medicine.

THE WOLVERHAMPTON AND STAFFORDSHIRE GENERAL HOSPITAL.

A Clinical and Training Institution for Gentlemen intended for the Medical Profession.

Beds, 224.

MEDICAL AND SURGICAL STAFF.

Dr. FOTHERICK. | Mr. VINCENT JACKSON.
Dr. MALCH. | Mr. J. O'B. KOUGH.
Mr. F. E. MANBY.

The Hospital contains large Male and Female Accident Wards, Wards for Cases of Burns; General Medical and Surgical Wards; a Ward for Diseases Peculiar to Women; a Children's Ward; a detached Fever Wing; and a Women's Surgical Infirmary; also a commodious semi-detached Out-patient Department. The General Wards have Clinical rooms attached in which the Analysis and Microscopic Inspection of the Urine are conducted, also Ophthalmoscopic and Laryngoscopic examinations.

The Hospital is an excellent institution for preparing and training gentlemen intended for the medical profession, and it offers to them unsurpassed opportunities of acquiring a complete professional groundwork, and an elementary knowledge of medical subjects, previously to their entering a medical college.

In the Hospital the Pupils are required to attend daily in the Casualty-room in the out-patient department and in the wards, the instruction afforded being of the most practical nature, including tooth-drawing, bandaging, the application of splints, and every kind of elementary professional detail; likewise how to observe and examine patients. The art of Dispensing, the preparation of drugs and of pharmaceutical compounds, can be learnt in the Hospital Dispensary and Laboratory.

Operations are performed on Thursday, at 11 o'clock, and practitioners are welcome.

The practice of the Hospital is recognised by all the Examining Boards

FEES.

For Hospital Practice.

Six months	6 guineas.
Twelve months	12 guineas.
Perpetual	21 guineas.

Some members of the Honorary Staff receive Resident Pupils.

For further particulars apply to the Honorary Secretary of the Medical Committee.

NOTICE.

The Preliminary Examinations of the

Royal Colleges of Physicians and Surgeons of Edinburgh, conducted by the Educational Institute of Scotland, will be held on

7th, 8th, and 9th October, 1886,
7th, 8th, and 9th April, 1887,
7th, 8th, and 9th July, 1887.

THOMAS MORRISON, LL.D., F.E.I.S.
(Principal of the Free Church Training College, Glasgow).
Secretary to the Board of Examiners.

The Institute will shortly issue a Calendar containing all necessary information about the Examinations.

Particulars on application to Mr. Alex. Mackay, 7, George-street, Edinburgh.

Edinburgh, 20th August, 1886.

Notice is hereby given, that the Periods

of EXAMINATION for the Licence and Fellowship of the Royal College of Surgeons of Edinburgh for 1886-87 will be as follows:—

1886. Thursday, October 7.
1887. ,, January 6.
,, ,, April 21.
,, ,, July 21.

and that the Examinations for the Licence in Dental Surgery will commence on the Tuesdays preceding the above dates.

JOSEPH BELL, Secretary and Treasurer, 2, Melville-crescent, Edinburgh

Notice is hereby given, that the Pro-

fessional EXAMINATION PERIODS for the Triple Qualification of the Royal Colleges of Physicians and Surgeons of Edinburgh, and Faculty of Physicians and Surgeons of Glasgow, for 1886-87, will commence as follows:—

In Edinburgh—

1886. Wednesday, October 13.
1887. ,, January 12.
,, ,, April 27.
,, ,, July 6.

In Glasgow—

1887. Wednesday, April 13.
,, ,, July 20.

JAMES ROBERTSON, 4, Lindsay-place (Geo. IV. Bridge), Edinburgh Inspector and Treasurer for Edinburgh.

ALEXANDER DUNCAN, Faculty Hall, 242, St. Vincent-street, Glasgow, Inspector and Treasurer for Glasgow.

Yorkshire College, Leeds.

MEDICAL DEPARTMENT.

The WINTER SESSION, being the Fifty-sixth of the LEEDS SCHOOL OF MEDICINE, will be opened on Friday, October 1st, when an Address will be delivered in the Chemical Lecture Theatre, College-road, at 4 P.M., by the Rev. F. J. JAYNE, M.A., Vicar of Leeds. Tickets of admission may be obtained from any of the Staff, or on application at the College.

PROFESSORS, LECTURERS, AND DEMONSTRATORS.

Medicine—Professor J. E. Eddison, M.D. Edin.; Thomas Churton, M.D.Aber.
Surgery and Practical Surgery—Professor T. R. Jessop, F.R.C.S.; Edward Atkinson, F.L.S.
Descriptive and Surgical Anatomy—Professor A. F. McGill, F.R.C.S.
Lecturer on Osteology—Edmund Robinson.
Practical Anatomy—Demonstrator: W. Owen Travis, M.B., M.S. Honorary Demonstrators: R. N. Hartley, M.B., B.S.Lond.; W. H. Brown; F. P. Flood; Herbert Rowe.
Physiology, Practical Physiology, and Histology—Professor De Burgh Birch, M.D.Edin., F.R.S.E.; A. G. Barrs, M.D.Edin., M.R.C.P.
Pathology and Morbid Histology—Ernest H. Jacob, M.A., M.D. Oxon.
Midwifery—Charles J. Wright.
Diseases of Women and Children—Jas. Braithwaite, M.D.Lond.
Forensic Medicine—Thomas Scattergood.
Demonstrator of Practical Toxicology—C. H. Bothamley, F.C.S.
Materia Medica—J. B. Hellier, M.D.Lond.
Chemistry and Practical Chemistry—Professor Arthur Smithells, B.Sc.Lond., F.C.S.
Demonstrator—C. H. Bothamley, F.C.S.
Botany—Professor L. C. Miall, F.L.S., F.G.S.
Operative Surgery—A. W. Mayo Robson, F.R.C.S.
Ophthalmology—J. A. Nunneley, M.B.Lond.
Mental Diseases—W. Bevan Lewis.
Hygiene—R. N. Hartley, M.B., B.S.Lond.
Comparative Anatomy and Biology—Professor L. C. Miall, F.L.S., F.G.S.
Hospital Instruction—By the Physicians and Surgeons to the General Infirmary.

The Leeds Public Dispensary, the Fever Hospital, the Hospital for Women and Children, and the West Riding Lunatic Asylum, are also available for the instruction of Students.

The Lectures and Hospital Practice qualify students for the various Examining Boards. Students can enter for the Hospital Practice, or the lectures, or for a single course of lectures, separately.

The prospectus and further information may be obtained from the Registrar of the College, to whom all fees are payable.

Glasgow Royal Infirmary and School

OF MEDICINE.

The WINTER SESSION, 1886-87, will commence on Tuesday, Oct. 27th. John Barlow, M.D., F.R.C.S., will give the Introductory Address.

WINTER SESSION.

Chemistry, 10 A.M.—James M. Milne, Ph.D.
Junior Anatomy, 11 A.M. } H. E. Clark, M.R.C.S.,
Anatomical Demonstrations, 4 P.M. } and John Macintyre,
Practical Anatomy, 10 A.M. to 5 P.M. } M.B. Demonstrator.
Surgery, 11 A.M.—Wm. Macewen, M.D.
Practice of Medicine, 12 noon—J. W. Anderson, M.D.
Materia Medica, 1 P.M.—John Dougall, M.D.
Physiology, 3 P.M.—John Barlow, F.R.C.S.
Midwifery and Diseases of Children, 3 P.M.—James Stirton, M.D.
Diseases of the Throat and Nose, 12 noon—D. Newman, M.D.

SUMMER SESSION.

Practical Pathology, 8 A.M. }
Pathology, 10 A.M. } D. Newman, M.D.
Medical Chemistry, 10.30 A.M.—Dr. James M. Milne.
Medical Jurisprudence, 11 A.M.—John Glaister, M.D.
Anatomy, 12 noon.—H. E. Clark, M.R.C.S.
Operative Surgery, 12 noon—W. Macewen, M.D.
Nervous and Mental Diseases, 12 noon—Alex. Robertson, M.D.
Midwifery, 3 P.M.—James Stirton, M.D.
Practical Physiology, 1 P.M.—J. Barlow, M.D., F.R.C.S.
Aural Surgery, 4 P.M.—Johnstone Macfie, M.D.
Dental Surgery, 3 P.M.—J. C. Woodburn, M.D.
Diseases of the Eye, 4 P.M.—H. E. Clark, M.R.C.S.
Diseases of the Skin, 12 noon—James Provan, M.D.
Diseases of the Throat and Nose, 3 P.M.—David Newman, M.D.

CLASS FEES.—For each Course: First Session, £2 2s.; Second Session and Perpetual, £1 1s. Anatomy: First Session, £4 4s.; Summer Session, £1 11s. 6d.; Second Winter Session, £4 4s. Afterwards the Fee for lectures and Practical Anatomy is £1 1s. per Session.

HOSPITAL STAFF.

Physicians—Dr. Wood Smith, Dr. Robert Perry, Dr. Robertson, Dr. Wallace Anderson.
Surgeons—Dr. Macewen, Dr. Dunlop, Mr. Clark, Dr. Lothian, Dr. Knox, Dr. Fleming.
Diseases of Women—Dr. Stirton.
Assistant Physicians—Dr. Dougall, Dr. Middleton, Dr. Henderson, Dr. Campbell Black, Dr. Macphee, Dr. Lindsay Steven.
Assistant Surgeons—Dr. Barlow, Dr. Adams, Dr. Muir, Dr. Shaw, Dr. Whitson, Dr. Macintyre.
Aural Surgeon—Dr. Macfie. Dental Surgeon—Dr. Woodburn.
Diseases of the Throat—Dr. Newman. Diseases of the Skin—Dr. Provan. Pathologist—Dr. Newman. Vaccinator—Dr. Tannahill.

Number of beds, 542. Number of in-patients last year, 5461.

FEES.—For Hospital Practice and Clinical Lectures—First Year, £10 10s.; Second and Perpetual, £10 10s.; Six Months, £6 6s.; Three Months, £4 4s.

Attendance on the above qualifies for the Universities in accordance with their regulations, and for all the other qualifying Boards.

Prospectus can be obtained from Dr. Thomas, the Superintendent of the Hospital.

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Royal College of Physicians of EDINBURGH.

REGULATIONS REGARDING THE FELLOWSHIP AND MEMBERSHIP OF THE COLLEGE.

I.—OF THE FELLOWSHIP.

1. No one shall be elected a Fellow of the College until he has been at least one year a Member thereof, and has attained the age of twenty-five years.

2. Every motion for the election of a Fellow shall be made at the quarterly meeting of Fellows by one of the Fellows present, and seconded by another; and this motion shall be determined by ballot at the next quarterly meeting of Fellows, a majority of three-fourths being necessary to carry it in the affirmative.

3. If an urgent reason satisfactory to the Council be assigned, a Candidate may be proposed at an extraordinary meeting of the Fellows summoned for the purpose, and his petition may be balloted for at an extraordinary meeting of the Fellows specially summoned for the purpose; provided that the holding of this special meeting be agreed to by a majority of five-sixths of the Fellows present at the meeting at which the Candidate was proposed; provided also that not less than one week intervene between the two meetings, and that due notice of the intended ballot be given in the billets summoning the second meeting. The Candidate shall in this case pay to the Treasurer a sum of Ten Guineas in addition to the ordinary Fees.

4. Every Fellow resident within five miles from the General Post-Office of Edinburgh shall, on his election, have his name placed on the Roll of Attendance, and shall pay the Annual Contribution, and be subject to all the Laws of the College regarding Fines. Fellows resident beyond five miles shall have the option of having their names on the Roll of Attendance or not; but if their names be on the Roll of Attendance, they shall pay the Annual Contribution and be subject to Fines.

II.—OF THE MEMBERSHIP.

1. Any Licentiate of a College of Physicians, or Graduate of a British or Irish University, with whose knowledge of Medical and General Science the College may be satisfied, may be admitted a Member of the College, provided he shall have attained the age of twenty-four years.

2. Every motion for the election of a Member shall be made at a quarterly meeting of Fellows by one of the Fellows present, and seconded by another; and this motion shall be determined by ballot at the next quarterly meeting, a majority of three-fourths being necessary to carry it in the affirmative.

3. Every Candidate for the Membership (except such as shall be admissible under the provisions of Section 6) shall be required to pass an Examination—

(1) On the Principles and Practice of Medicine, including Therapeutics.

(2) On one of the following subjects, to be selected by the Candidate:—(*a*) Pathology, including Morbid Anatomy; (*b*) Medical Jurisprudence and Public Health; (*c*) Midwifery and the Diseases of Women; (*d*) Psychological Medicine.

4. Application for the Membership shall be made through the Secretary, who shall transmit to the Candidate a copy of the Regulations and Plan of Examination, together with a Form of Petition.

5. The Candidate shall return the petition duly filled up to the Secretary, and shall at the same time transmit Testimonials of recent date from well-known members of the profession, certifying as to his professional and social standing. These documents shall be submitted to the Council, who shall also employ such other methods of scrutiny as they may deem necessary. If satisfied as to the eligibility of the Candidate, the Council shall authorise his examination by the Board of Examiners, who shall report the result of the examination to the Council. If the report of the Examiners be satisfactory, the Council shall report the same to the College at the next quarterly meeting, when it shall be competent for a motion to be made for the election of such Candidate to the Membership of the College.

6. If any Candidate who has attained the age of forty years, and has been a Registered Practitioner for not less than ten years, shall produce testimonials showing that he has been distinguished for his scientific attainments, or eminence as a Medical Practitioner, the Council may, if they see fit, exempt him from the whole or any part of the prescribed examination.

7. Every motion for the election of a Member shall be made at a quarterly meeting of the College by one of the Fellows present, and seconded by another, and the motion shall be determined by ballot at the next quarterly meeting, a majority of three-fourths of the Fellows present being necessary to carry it in the affirmative.

8. The dates of the Examinations for the year ending 30th July, 1887, shall be 12th and 13th October, 1886, the 11th and 12th January, the 12th and 13th April, and the 13th and 14th July, 1887; but application must be made to the Secretary not less than one month previous to the date of the Examination at which the Candidate proposes to appear.

III.—OF THE FEES.

1. The fee to be paid by a Member shall be Thirty Guineas.

2. A Licentiate who has obtained the Licence prior to the 1st August, 1875, when raised to the rank of Member, shall pay Twenty Guineas; a Licentiate obtaining the Licence subsequent to that date shall, when raised to the rank of Member, pay Fifteen Guineas.

3. When a Member shall be raised to the rank of Fellow he shall pay Thirty Guineas, exclusive of Stamp-duty.*

4. All Candidates for Fellowship or Membership must lodge their Fees, and the amount of Stamp-duty payable at the time to Government, with the Treasurer, previously to presenting their petitions.

Edinburgh, August 2nd, 1886. G. A. GIBSON, M.D., Hon. Sec.

* The Stamp-duty on the Fellowship payable to Government is £25.

Royal College of Physicians of EDINBURGH.

REGULATIONS TO BE OBSERVED BY CANDIDATES FOR THE CERTIFICATE OF QUALIFICATION IN PUBLIC HEALTH TO BE CONFERRED BY THE COLLEGE.

The Royal College of Physicians of Edinburgh, considering the great and rising importance of the Public Health Department of State Medicine, its natural and popular distinction from ordinary Medicine, and the number of Public Health appointments which already exist, has resolved to grant to all candidates who conform to the following regulations, and are declared by the Examiners to be duly qualified to practise as Public Health Officers or Medical Officers of Health, a Certificate of Qualification under the College seal and authority, which may be registered in the Medical Register, in terms of the Medical Act, 1886.

REGULATIONS.

I.—GENERAL REGULATIONS.

1. Candidates shall be already on the Medical Register, and be entered there as possessing a qualification in Medicine.

2. Candidates shall not, in the meantime, be required to attend any Special Courses of Instruction; but their attention is directed particularly to Courses of Lectures on State Medicine, and to the Practice of Analytical Chemistry.

3. Candidates shall be subjected to two Examinations. Such Examinations may be taken simultaneously, or with an interval not exceeding twelve months.

4. The Examinations shall be written, oral, and practical.

5. The Examinations shall be held in the Physicians' Hall, or elsewhere if found more convenient.

6. Rejected Candidates shall not be admitted for re-examination till after the expiry of six months.

7. Holders of the Certificate are briefly designated as "Public Health Cert. R.C.P.E."

II.—EXAMINATIONS.

1. THE FIRST EXAMINATION SHALL EMBRACE—
   1. *Physics.*—Especially Pneumatics, Hydrostatics, Hydraulics, and Engineering in relation to Sanitary Operations, including a knowledge of Architectural and other Plans.
   2. *Chemistry.*—Especially Analysis of Air, Water, Food, including the Biology of Putrefaction and allied processes, with easy Practical Chemical Analysis bearing on Public Health.
   3. *Meteorology.*—Including Climate, Topographical and Seasonal Influences in relation to Health and Disease.

2. THE SECOND EXAMINATION SHALL EMBRACE—
   1. *Epidemiology and Endemiology.*—Including the corresponding departments in the Diseases of Animals and Plants; Contagious Diseases; Diseases of Periods of Life, Professions, Trades, Seasons, and Climates.
   2. *Practical Hygiene.*—Duties of a Health Officer; Food; Water Supply; Sewerage and Drainage; Nuisances; Construction of Hospitals, Public Buildings; Dwellings; Manufactories; Cemeteries, including the explanation and drawing of Plans.
   3. *Sanitary Law and Vital Statistics.*

3. Meetings for both Examinations shall be held annually in April and October. The first Examination shall be held on the second Tuesday of the month, and shall occupy one day; the second Examination on the Wednesday of the same week, and shall occupy one day.

4. Candidates may enter for both Examinations in the same week, or for one only.

5. The Examinations must be passed in their order, first and second.

6. A Candidate remitted at his second Examination will be allowed to come up again after a further period of six months.

III.—FEES.

1. The fees for Examinations must be paid at least a week before the day of Examination.

2. The whole charges by the College for the certificate amount to Ten Guineas.

3. The fee for the first Examination is Five Guineas; and the fee for the second Examination is Five Guineas.

4. Candidates forfeit the fee for the Examination which they have been unsuccessful in passing.

5. If a Candidate who has offered himself for both Examinations fail to pass the first, he shall not be allowed to present himself for the second, and his fee for the second shall be returned to him.

Edinburgh, August 2nd, 1886. G. A. GIBSON, M.D., Hon. Secretary.

Post-Graduate Course in Edinburgh.—

It has now been definitely arranged that this Course shall be held during the last week of September (commencing on Monday, the 27th), and during the two first weeks of October.

All the Members of the Medical and Surgical Staff of the following Institutions have agreed to take part in it—viz., the Royal Infirmary, the Royal Hospital for Sick Children, the Royal Asylum, Morningside, the Dental Hospital, and the Throat and Ear Hospital.

Gentlemen who desire to attend the Course, but who have not yet intimated their wish to do so, are earnestly requested to communicate their intention, AT ONCE, to either of the Secretaries, Dr. MUIRHEAD or Professor CHIENE (Charlotte-square), in order that the final arrangements may be completed.

This Course is open to all Practitioners of Medicine.

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University of Edinburgh.

SESSION 1886-87.

Principal—Sir WILLIAM MUIR, K.C.S.I., D.C.L., LL.D., &c.

The SESSION will be opened on Tuesday, October 19th, 1886, at 2 P.M., with an Address by the Principal.

The Classes for the different Branches of Study will be opened as follows, and will meet daily (Saturdays excepted), unless otherwise specified.

MEDICINE.

Dean—Professor THOMAS R. FRASER, M.D.

Classes.	*Days of Opening and Hours of Attendance.*	*Professors.*
Practice of Physic	Wed., Oct. 20, 9	Prof. Grainger Stewart, M.D.
Chemistry	Wed., Oct. 20, 10	Prof. Crum Brown, M.D.
Surgery	Wed., Oct. 20, 10	Prof. Chiene, M.D.
Institutes of Medicine or Physiology	Wed., Oct. 20, 11	Prof. Rutherford, M.D.
Practical Physiology	Fri., Oct. 22, 9	
Midwifery and Diseases of Women and Children ...	Wed., Oct. 20, 11	Prof. Simpson, M.D.
Clinical Surgery (Royal Infirmary, Monday and Thursday)	Thurs., Oct. 21, 12 ...	Prof. Annandale, M.D.
Clinical Medicine (Royal Infirmary, Tuesday and Friday)	Fri., Oct. 22, 12 to 2 ...	Profs. Grainger Stewart, T. R. Fraser, and Greenfield; and Prof. Simpson on Diseases of Women.
Anatomy	Wed., Oct. 20, 1	Prof. Sir William Turner, M.B.
Practical Anatomy	Mon., Oct. 4, Daily ...	Prof. Sir William
Anatomical Demonstrations	Wed., Oct. 20, 4	Turner and Demonstrators.
Materia Medica	Wed., Oct. 20, 2	Prof. T. R. Fraser, M.D.
Practical Materia Medica (including Pharmacy) ...	Wed., Oct. 20, 10	
Practical Chemistry	Wed., Jan. 5, 2	Prof. Crum Brown.
General Pathology	Wed., Oct. 20, 3	Prof. Greenfield, M.D.
Practical Pathology	Wed., Oct. 20, Daily ...	
Botany (given in Summer Session)	... ...	Prof. Dickson, M.D.
Medical Jurisprudence (given in Summer Session)	... ...	Prof. Sir Douglas Maclagan.
Natural History	Wed., Oct. 20, 2	Prof. Ewart, M.D.
Practical Natural History	Wed., Oct. 20, 11	
Mental Diseases (given in Summer Session)	... ...	LECTURERS. T. S. Clouston, M.D.
Diseases of the Eye (given in Summer Session) ...	... ...	Douglas Argyll Robertson, M.D.
Clinical Instruction on Diseases of Children at Royal Hospital for Sick Children	Mon., Nov. 1, 10 ...	James Andrew, M.D. and James Carmichael, M.D.
Comparative Embryology	Tues., Nov. 2, 3	George Brook, 4, Morningside-place.
The Philosophy of Natural History	Nov.	G. J. Romanes, M.A.

ROYAL INFIRMARY at Noon, Daily.

The Classes in the Faculty of Medicine, except Botany, Natural History, Clinical Medicine, and Clinical Surgery, will meet in the University New Buildings.

The following means are afforded for Practical Instruction:—

WINTER AND SUMMER SESSIONS.

Practical Anatomy, under the superintendence of Professor Sir William Turner.

Anatomical Demonstrations, under the Superintendence of Professor Sir William Turner.

Anatomical Museum, under the superintendence of Professor Sir William Turner.

Practical Chemistry, under the superintendence of Professor Crum Brown.

Practical Physiology, under the superintendence of Professor Rutherford.

Practical Materia Medica, including Pharmacy, under the superintendence of Professor Thomas R. Fraser.

Morbid Anatomy and Practical Pathology, under the superintendence of Professor Greenfield.

Tutorial Class of Clinical Medicine, in the Royal Infirmary, under the superintendence of the Clinical Professors.

Tutorial Class of Clinical Surgery, in the Infirmary, under the superintendence of Professor Annandale.

Tutorial Class of Practice of Physic, under the superintendence of Professor Grainger Stewart.

Obstetrical and Gynæcological Operations, under the superintendence of Professor Simpson.

Chemical Laboratory, under the superintendence of Professor Crum Brown.

Public Health Laboratory, under the superintendence of Professor Sir Douglas Maclagan.

Physiological Laboratory and Museum, under the superintendence of Professor Rutherford.

Pathological Laboratory, under the superintendence of Professor Greenfield.

Natural History Laboratory, under the superintendence of Professor Ewart.

Royal Botanic Garden, Herbarium, Museum, and Laboratory, under the superintendence of Professor Dickson.

Materia Medica Museum and Laboratory, under the superintendence of Professor Thomas R. Fraser.

Surgical Laboratory and Museum, under the superintendence of Professor Chiene.

WINTER.

Bandaging and Surgical Appliances, under the superintendence of Professor Chiene.

SUMMER.

Practical Botany and Vegetable Histology, under the superintendence of Professor Dickson.

Practical Natural History, under the superintendence of Professor Ewart.

Operative Surgery and Surgical Appliances, under the superintendence of Professor Chiene.

Practical Materia Medica and Pharmacy, under the superintendence of Professor Thomas R. Fraser.

The Preliminary Examinations in Arts, for Degrees in Medicine, &c., commence on 5th October and 8th March.

The Classes will meet for the last time before the Christmas holidays on Wednesday, December 22nd, and will re-assemble for the first time after the Christmas holidays on Wednesday, January 5th.

The Classes in the Faculty of Medicine will close on Friday, 25th March.

Graduation Ceremonial in Medicine, &c., Monday, 1st August, 1887.

During the SUMMER SESSION Lectures will be given on the following subjects:—

Botany and Vegetable Histology, by Professor Dickson.

Medical Jurisprudence, for Students of Law and Medicine, by Professor Sir Douglas Maclagan.

Clinical Medicine, by Professors Grainger Stewart, T. R. Fraser, and Greenfield, and by Professor Simpson (on Diseases of Women).

Clinical Surgery, by Professor Annandale.

Chemistry (Advanced Class), by Professor Crum Brown.

Natural History, by Professor Ewart.

Operative Surgery, by Professor Chiene.

Anatomical Demonstrations, by Professor Sir William Turner, and David Hepburn, M.B.

Medical Psychology and Mental Diseases, with Practical Instruction at the Royal Edinburgh Asylum, by the Physician-Superintendent, Thomas S. Clouston, M.D.

Diseases of the Eye, by D. Argyll Robertson, M.D.

Clinical Instruction in Diseases of Children at Royal Hospital for Sick Children, by James Andrew, M.D., and James Carmichael, M.D.

Comparative Embryology, by George Brook.

Philosophy of Natural History, by G. J. Romanes, M.A.

MATRICULATION.—Every Student, before entering with any Professor, must produce a Matriculation Ticket for the current Session. Tickets will be issued at the Matriculation Office at the University, every lawful day, on and after 4th October, from 10 till 4 o'clock, except on Saturdays, when the office will be closed at 1. Enrolment in the General Album is the only legal record of attendance in the University.

The Students' Reading Library, in the University New Buildings, will be open daily, from 9 A.M. to 5 P.M., except on Saturdays, when it will be closed at 12 noon.

Information relative to Matriculation and the Curricula of Study for Degrees, Examinations, &c. &c., in the Faculties of Arts, Divinity, and Law, may be obtained on application to the Deans of the respective Faculties, or at the Secretary's Office; and, in the Faculty of Medicine, to the Dean. Full details are also given in the University Calendar, published by James Thin, 55, South Bridge.

By Authority of the Senatus.

Sept., 1886. JOHN KIRKPATRICK, Sec. Sen. Acad.

Royal College of Physicians of EDINBURGH.

REGULATIONS FOR THE LICENCE.

1. The College will grant its Single Qualification in Medicine to Candidates who already possess a recognised British or Irish Qualification in Surgery.

2. Candidates will be required to pass a written and oral Examination before the Examining Board of the College in Medicine, Clinical Medicine, Materia Medica, Midwifery, and Medical Jurisprudence.

3. The Examinations will be held on the first Wednesday and succeeding days of every month, except September and October.

4. No one is admissible to Examination who has within the previous three months been rejected by any Licensing Board, and every Candidate is required to sign and send in, along with his certificates, a declaration stating that he has not been rejected within that period.

5. The Fee for the Licence is Fifteen Guineas. In the event of a Candidate being unsuccessful the sum of Six Guineas will be retained; and this Regulation will also apply to cases in which the Candidate may have been previously rejected on one or more occasions.

6. Candidates may be admitted to Special Examination on days other than those appointed above, on bringing forward reasons satisfactory to the Council, and on paying an extra fee of Five Guineas. Should the Candidate be unsuccessful the sum of Eleven Guineas will be returned to him.

7. All Candidates for Examination are required to communicate with the Secretary to the College not less than eight days before the date of the Examination at which they propose to appear, and the fees must be lodged with the Secretary at *least four days* before the date of the Examination.

G. A. GIBSON, M.D., Hon. Secretary.

Edinburgh, 2nd August, 1886.

Laryngology and Rhinology, and the CLINICAL EXAMINATION of the SPUTUM.—Dr. HUNTER MACKENZIE will give a Post-Graduate Course of Practical Instruction in the above subjects to a limited number at the Eye, Ear, and Throat Hospital, Cambridge-street, Edinburgh, commencing on Tuesday, Sept. 21st, at 4 P.M., and extending to the end of October. Qualified Practitioners desirous of attending are requested to communicate with Dr. Mackenzie, from whom a Syllabus of the Course may be obtained.—1, Northumberland-street, Edinburgh.

Edinburgh.—Medical Students and Others.—A Physician, residing in a healthy locality within a short distance of the University and Hospitals, can Receive one or two Medical or other Students or Private Parties to Board during the winter session, commencing in October. Studies regulated, and an insight into the routine of general Medical Practice afforded.—Address, Physician, care of Messrs. Robertson & Scott, Advertising Agents, 13, Hanover-street, Edinburgh.

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University of Aberdeen.

SESSION 1886-87.

Chancellor—DUKE of RICHMOND and GORDON, K.G., D.C.L.
Lord Rector—ALEXANDER BAIN, LL.D.
Vice-Chancellor and Principal—WILLIAM DUGUID GEDDES, LL.D.

I.—FACULTY OF ARTS.

The SESSION commences on Wednesday, October 27th, 1886, and closes on Saturday, April 1st, 1887.

Junior Greek—Prof. Harrower, M.A., and Assistant. 9 to 10 A.M., and 11½ A.M. to 12½ P.M. Class fee, £3 3s.
Senior Greek—Prof. Harrower, M.A., and Assistant. 10 to 11 A.M. £2 2s.
Junior Latin—Prof. Ramsay, M.A., and Assistant. 10 to 11 A.M., and 12½ to 1½ P.M. £3 3s.
Senior Latin—Prof. Ramsay and Assistant. 11½ A.M. to 12½ P.M., £2 2s.
English Language and Composition—Prof. Minto, M.A. 1½ to 2½ P.M. on Monday, Wednesday, and Friday. £1 1s.
Logic—Prof. Minto, M.A. 11½ A.M. to 12½ P.M. on Tuesday and Thursday; 12½ to 1½ P.M. daily. £3 3s.
Junior Mathematics—Prof. Pirie, M.A., and Assistant. 9 to 10 A.M., and 12½ to 1½ P.M. £3 3s.
Senior Mathematics—Prof. Pirie, M.A., and Assistant. 10 to 11 A.M. £2 2s.
Junior Natural Philosophy—Prof. Niven, M.A., D.Sc., and Assistant. 9 to 10 A.M. daily; 11½ A.M. to 12½ P.M. on Monday, Wednesday, and Friday. £3 3s.
Senior Natural Philosophy. Div. I.—Prof. Niven, M.A., D.Sc., and Assistant. 10 to 11 A.M. on Monday, Wednesday, and Friday. £1 1s.
Ditto, ditto, Div. II.—Prof. Niven, and Assistant. 10 to 11 A.M. daily. £2 2s.
Ditto, Practical Class—Prof. Niven, M.A., D.Sc., and Assistant. 11½ A.M. to 12½ P.M. on Tuesdays and Thursdays.
Moral Philosophy—Prof. Fyfe, M.A. 9 to 10 A.M. daily; and 11½ A.M. to 12½ P.M. on Monday, Wednesday, and Friday. £3 3s.
Natural History—Prof. Alleyne Nicholson, M.D., D.Sc. 2 to 3 P.M. £3 3s.

The fee for Students taking a Senior Class in any subject, without previous attendance on the Junior Class in the same subject, is £3 3s. Matriculation fee, £1. For the degree of M.A., £1 1s. for each of three examinations, and £1 for General Council Registration.

The course of study for the degree of M.A. embraces two years' attendance on Greek, Latin, and Mathematics, and one on English Literature, Natural Philosophy, Logic, Moral Philosophy, and Natural History. Any Student who, at the time of his entrance to the University, shall, on examination, be found qualified to attend the Higher Classes of Latin, Greek, and Mathematics, or any of them, shall be admitted to such Higher Class or Classes without having attended the first or Junior Class or Classes.

BURSARIES.

The Bursary competition will begin on Thursday, October 14th, at 2 P.M.

Competitors will each, on application, receive from the Sacrist, University Buildings, Old Aberdeen, on and after Tuesday, the 5th October, a printed Schedule, which they are required to fill up and return to him not later than 2 P.M. on Tuesday, the 12th October, not, as in former years, on Saturday.

There will be offered 49 Bursaries, of which 36 are in the patronage of the University, and 13 in that of the Magistrates and Town Council of Aberdeen. All but 6 are open without restriction. They are tenable for four years of the curriculum, and are of the following annual values, viz.:—One of £35; four of £30; one of £25; two of £21; nine of £20; three of £18; three of £16; nine of £15; one of £14 10s.; three of £14; two of £13; nine of £10; and two of inferior value.

A Greenskares Bursary of £30, as also separately advertised, is included in the above.

Candidates are required, at least one month before the competition, to give the Secretary written intimation of the subjects selected by them, under Division II. of the Subjects of Examination. See "University Calendar."

Candidates are requested to bring with them certificates of their age, to be produced, if required, when the result of the examination is intimated.

Candidates for the Macpherson Bursaries of £20 are requested to lodge with the Secretary, on or before the 12th October, certificates from a Gaelic Minister as to their knowledge of the Gaelic language.

Candidates for restricted Bursaries must transmit to the Secretary, on or before the Saturday previous to the competition, Certificates that they fulfil the conditions of the Bursary.

The Bursaries will be assigned in the University Buildings, Old Aberdeen, on Saturday, 23rd October, at 2 P.M.; only competitors whose names are in the Order of Merit, or their representatives, being allowed to be present. Any competitor not appearing personally, or by representative, to accept a Bursary when offered to him shall be held as declining, and the Bursary so offered to him will fall to the next in order qualified for it.

Of Bursaries under private patronage, 18 were vacant at the close of the last Session, of the following annual values, viz.:—Five of £40; one of £30; one of £25; one of £21; three of £22 10s.; one of £18 16s.; two of £15; one of £14; one of £13 10s.; one of £12; and one of £11.

Presentees to these Bursaries will be examined on Saturday, the 16th October; and they must give notice and hand their Presentations to the Secretary not later than Tuesday, 12th October.

OTHER EXAMINATIONS.

For passing from Junior to Senior Classes of Latin, Greek, and Mathematics, on Saturday, the 23rd October, at 10 A.M. and 3 P.M.

For passing over the Junior Mathematical Class, on Saturday, the 23rd October, at 10 A.M.

For passing over the Junior Latin or Greek Classes, on Monday, the 25th October, at 10 A.M.

[Students intending to come forward for either of the three last-mentioned examinations are required to give in their names to the Secretary of the Faculty not later than the preceding day.]

For the degree of M.A., on the 23rd, 25th, 26th, 27th, 28th, and 29th October.

CLASS AND SPECIAL PRIZES.

Books of the value of £136 are awarded to the Students most distinguished in the Class Examinations. At the close of the curriculum the best Greek and Mathematical Scholars are entitled each to a Simpson Prize of £65 or thereby, the second in point of merit in Mathematics to a Boxill of £26, the best Latin Scholar to the Dr. Black Prize of £25 or thereby, the best scholar in Classical Literature and Mental Philosophy to the Hutton of £30, the best general Scholar to the Gold Medal of the Magistrates and Town Council of Aberdeen, the most distinguished candidate for Honours in the department of Natural Science to a prize of £10, the greatest proficient in Experimental Physics to the Neil Arnott Scholarship of £35 or thereby, the best English and Latin Scholars each to a Senfield Gold Medal, the best Student of the year who shall take First Class Honours in the department of Mental Philosophy to the Bain Gold Medal, and (in January, 1887) the best Student in the Tertian or Magistrand Class in the department of Classical Philology the Jenkyns Prize of £8.

SCHOLARSHIPS.

Masters of Arts of less than two years' standing may compete in December, 1886, for the Fullerton &c. Scholarships, which are now of the following values—viz.: One for Classics and one for Mental Philosophy, each of the annual value of £100, tenable for two years; and one for Mathematics, of the annual value of £75, tenable for three years; and Masters of Arts, if of under three years' standing, are eligible for the Murray Scholarship of £70, tenable for three years.

II.—FACULTY OF MEDICINE.

WINTER SESSION, commencing on Wednesday, 20th October, 1886.

Anatomy—Professor Struthers, M.D. 11 A.M. £3 3s.
Practical Anatomy and Demonstrations—Professor Struthers, M.D., and Assistant. 9 to 4, and 9 A.M. £2 2s.
Chemistry—Professor Brazier, F.C.S. 3 P.M. £3 3s.
Institutes of Medicine—Professor McWilliam, M.D. 2 P.M. £3 3s.
Surgery—Professor Alex. Ogston, C.M., M.D. 10 A.M. £3 3s.
Practical Surgery—Professor Alex. Ogston, C.M., M.D. 5 P.M.*
Practice of Medicine—Professor Smith-Shand, M.D. 3 P.M. £3 3s.
Midwifery and Diseases of Women and Children—Professor Stephenson, M.D., F.R.C.S.E. 4 P.M. £3 3s.
Natural History—Professor Alleyne Nicholson, M.D., D.Sc., F.L.S. 2 P.M. £3 3s.
Materia Medica—Professor Dyce Davidson, M.A., M.D. 4 P.M. £3 3s.
Practical Physiology—Professor McWilliam, M.D. £3 3s.
Pathological Anatomy (Sir Erasmus Wilson Chair).—Professor Hamilton, M.B., F.R.C.S.E. 9 P.M. £3 3s.
Practical Class—Professor Hamilton, M.B. £3 3s.

* Free to Students in Surgery.

SUMMER SESSION, commencing on Monday, 25th April, 1887.

Botany—Professor James W. H. Trail, M.A., M.D., F.L.S. 8 A.M. £3 3s.
Practical Botany—Professor James W. H. Trail.
Practical Pharmacy—Professor Dyce Davidson and Assistant. 4 P.M. £2 2s.
Practical Anatomy and Demonstrations—Professor Struthers, M.D., and Assistant. 9 to 4, and 9 A.M. £2 2s.
Practical Chemistry—Professor Brazier, F.C.S., and Assistant. 10 A.M. to 2 P.M. £3 3s.
Practical Physiology—Professor McWilliam, M.D. 2 P.M. £3 3s.
Natural History—Professor Alleyne Nicholson, M.D. 2 P.M. £3 3s.
Practical Natural History—Professor Alleyne Nicholson, M.D. 3 to 5 P.M. £3 3s.
Operative Surgery—Professor Alexander Ogston, C.M., M.D. 10 A.M. £2 2s.
Practical Midwifery and Gynæcology, and Clinical Diseases of Children—Professor Stephenson, M.D., F.R.C.S.E. 11 A.M. £2 2s.
Practical Pathological Anatomy—Professor Hamilton, M.B. 11 A.M. £3 3s.
Medical Logic and Medical Jurisprudence—Professor Matthew Hay, M.D. 9 A.M. £3 3s.
Practical Medical Jurisprudence and Hygiene—Professor Matthew Hay, M.D. £2 2s.

The Anatomical Course in Summer includes Instruction in Histology and in the Use of the Microscope, and Instruction in Osteology for Beginners.

Matriculation Fee (including all dues) for the Winter and Summer Sessions, £1. For the Summer Session alone, 10s.

The following additional Courses of Practical Instruction are delivered in the University or at the Institutions mentioned.

Practical Ophthalmology—Prof. A. D. Davidson. £1 1s.
Dental Surgery—Dr. Williamson. £1 1s.
Insanity—Dr. Reid, Royal Lunatic Asylum. £1 1s.
Diseases of the Ear and Larynx—Dr. McKenzie Booth, Dispensary. £1 1s.
Diseases of the Skin—Dr. Garden, Royal Infirmary and Sick Children's Hospital. £1 1s.
Royal Infirmary: Daily at noon. Perpetual fee to Hospital Practice, £6; or, first year, £3 10s.; second year, £3.
Clinical Medicine—Drs. Smith-Shand, Beveridge, and A. Fraser. £3 3s. Mondays and Thursdays, 1 P.M.
Clinical Surgery—Drs. A. Ogston, Ogilvie Will, and Garden. £3 3s. Tuesdays and Fridays, 1 P.M.
Pathological Demonstrations at the Hospital in Winter—Dr. Bodger.
Sick Children's Hospital. Daily at 11 A.M.
General Dispensary and Lying-in and Vaccine Institution: Daily, 10 A.M.
Eye Institution: Daily, 2.30 P.M.
Royal Lunatic Asylum: Physicians—Drs. Jamieson and Reid.

The Regulations relative to the Registration of Students of Medicine and the granting of Degrees in Medicine and Surgery may be had of J. Collie Smith, the Secretary to the Faculty of Medicine.

BURSARIES.

There will be offered for competition in this Faculty, within the University Buildings in Aberdeen, on a date early in November, 1886, to be fixed by the Faculty, the following Bursaries:—(1) To Students entering their First Winter Session who have passed all the Subjects imperative for registration in Medicine, Two Bursaries of £20 each, tenable for four years, and one of £20 or thereby, open to those who have passed through the Arts Classes of the University. (2) To Students about to commence their Second Winter Session at Medicine, Two of £25 each or thereby, Two of £22 10s. each, Two of £20, One of £15 15s.; and (3) to Students about to commence their Third Winter Session, One of £20, tenable for two years. For Subjects of Examination see "The University Calendar."

August, 1886. WM. MILLIGAN, Secretary.

N.B.—Further particulars, including information as to Faculties of Divinity and Law, are to be found in "The University Calendar," published by A. King and Co., Printers to the University, Aberdeen, price 2s., or 2s. 4d. by post.

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School of Medicine, Edinburgh.

Founded 1505.

The Lectures qualify for the University of Edinburgh and the other Universities; the Royal Colleges of Physicians and Surgeons of Edinburgh, London, and Dublin; and the other Medical and Public Boards.

WINTER SESSION, 1886-87.

On Monday, 4th October, the Practical Anatomy Rooms and Chemical Laboratories will be opened. On Wednesday, 20th October, the Lectures will be commenced.

Anatomy	Practical Anatomy	Dr. J. Symington.
	Course of Lectures	
	Course of Demonstrations	
Anatomy	Practical Anatomy	Mr. Macdonald Brown.
	Course of Lectures	
	Course of Demonstrations	
Chemistry	Lectures	Dr. Stevenson Macadam.
	Practical Chemistry	
	Analytical Chemistry	
Chemistry	Lectures	Mr. J. Falconer King.
	Practical Chemistry	
	Analytical Chemistry	
Chemistry	Practical Chemistry	Mr. Ivison Macadam.
	Analytical Chemistry...	
Chemistry	Lectures	Dr. Drinkwater.
	Practical Chemistry	
	Analytical Chemistry...	
Practice of Physic		Dr. John Wyllie.
Practice of Physic		Dr. J. O. Affleck.
Practice of Physic		Dr. Byrom Bramwell.
Practice of Physic		Dr. Graham Brown.
Surgery		Mr. A. G. Miller.
Surgery		Dr. C. W. MacGillivray.
Surgery		Mr. C. W. Cathcart.
Surgery		Mr. F. M. Caird.
Midwifery and Diseases of Women and Children		Dr. Charles Bell.
Midwifery and Diseases of Women and Children		Dr. Peter Young.
Midwifery and Diseases of Women		Dr. Milne Murray.
Institutes of Medicine		Dr. James.
Practical Physiology		
Institutes of Medicine		Mr. James Hunter.
Practical Physiology		
General Pathology		Dr. Alexander Bruce.
Royal Infirmary.		
Clinical Medicine		Drs. Claud Muirhead, Brackenridge, Wyllie, and Affleck. Dr. Halliday Croom (for Diseases of Women).
" "	Tutorial Class for Physical Diagnosis.*	
Clinical Surgery		Mr. Duncan.
" "	Tutorial Class for Practical Surgery.*	
Medical Jurisprudence and Public Health ...		Dr. Littlejohn.
Materia Medica and Therapeutics		Dr. William Craig.
Practical Materia Medica, including Practical Pharmacy		
Materia Medica and Therapeutics		Dr. G. A. Gibson.
Diseases of the Skin		Dr. Allan Jamieson.
Diseases of Children		Drs. Charles E. Underhill and Playfair.
Vaccination		Dr. Husband.
Public Vaccination (England)		Dr. J. B. Buist.
Natural History,	Lectures, Practical Class, Demonstrations,	Mr. J. Arthur Thomson.
Diseases of the Ear		Dr. Kirk Duncanson.
Diseases of the Eye		Dr. John Robertson.
Clinical Gynæcology		Dr. Charles Bell.
Practical Midwifery		
Practical Midwifery and Clinical Gynæcology ...		Dr. Peter Young.
Gynæcology		Dr. David Berry Hart.
Diseases of the Tropics and Climatology ...		Dr. R. W. Felkin.

* Under the superintendence of the Lecturers on Clinical Medicine and Surgery.

SUMMER SESSION, 1887.

On Monday, 2nd May, the Lectures will commence.

The minimum cost of the Education in this School of Medicine for the TRIPLE QUALIFICATION of PHYSICIAN and SURGEON from the ROYAL COLLEGES of PHYSICIANS and SURGEONS of EDINBURGH, and the FACULTY of PHYSICIANS and SURGEONS of GLASGOW, including the Fees for the Joint Examinations, is £100, which is payable by yearly instalments during the period of study.

STEVENSON MACADAM, Secretary.

A detailed Prospectus of the Classes will be forwarded on application to the Secretary, whose address is Surgeons' Hall, Edinburgh.

Royal (Dick's) Veterinary College,

Clyde-street, Edinburgh.

Founded by the late Professor DICK in 1823.

Trustees—Lord Provost, Magistrates, and Council of the City of Edinburgh.

Principal—Professor Thomas Walley, M.R.C.V.S.

Winter Session commences on October 27th.

Preliminary Examination, October 25th and 26th.

Prospectuses and full particulars on application.

Classes open to Amateurs.

Royal Infirmary, Edinburgh.—In this

Hospital a portion of the beds is set apart for Clinical Instruction by the Professors of the University of Edinburgh. Courses of Clinical Medicine and Surgery are also given by the ordinary Physicians and Surgeons. Special Instruction is given in the Medical Department on the Diseases of Women, of the Skin, Physical Diagnosis, &c., and in the Surgical Department on Diseases of the Eye, the Ear, and the Larynx. Separate Wards are devoted to Venereal Diseases, Diseases of Women, Diseases of the Eye; also to cases of Incidental Delirium or Insanity. Post-mortem Examinations are conducted in the Anatomical Theatre by the Pathologists, who also give Practical Instruction in Pathological Anatomy and Histology.

MEDICAL DEPARTMENT.

Consulting Physicians—Dr. D. B. Haldane, Dr. George W. Balfour, Professor Sir Douglas Maclagan.
Consulting Physician for Diseases of Women—Dr. Alexander Keiller.
Professors of Clinical Medicine—Dr. Alexander R. Simpson, Dr. T. Grainger Stewart, Dr. T. R. Fraser, Dr. W. S. Greenfield.
Ordinary Physicians and Lecturers on Clinical Medicine—Dr. Claud Muirhead, Dr. David J. Brakenridge, Dr. John Wylie, Dr. J. O. Affleck.
Extra Physician and Lecturer on Diseases peculiar to Women—Dr. J. Halliday Croom.
Assistant-Physicians—Dr. Andrew Smart, Dr. Alexander James, Dr. Byrom Bramwell.
Extra Assistant-Physicians for Diseases of Women—Dr. D. Berry Hart, Dr. A. H. F. Barbour.
Extra Physician for Diseases of the Skin—Dr. Allan Jamieson.

SURGICAL DEPARTMENT.

Consulting Surgeons—Dr. Dunsmure, Dr. J. D. Gillespie.
Professor of Clinical Surgery—Mr. Annandale.
Professor of Surgery—Mr. Chiene.
Ordinary Surgeons—Mr. Joseph Bell, Mr. John Duncan, Mr. A. G. Miller.
Ophthalmic Surgeons—Dr. Argyll Robertson, Mr. George A. Berry.
Extra Surgeon for Treatment of Ovarian Diseases—Dr. Thomas Keith.
Extra Surgeon—Dr. P. H. Watson.
Assistant-Surgeons—Dr. P. H. Maclaren, Dr. C. W. MacGillivray, Mr. J. M. Cotterill, Mr. Charles W. Cathcart, Mr. Francis M. Caird.
Assistant-Surgeon for Treatment of Ovarian Diseases—Mr. Skene Keith.
Dental Surgeon—Dr. John Smith.
Surgeon to the Ear and Throat Department—Dr. P. McBride.
Pathologists—Dr. G. Sims Woodhead, Mr. Alexander Bruce.

HOSPITAL TICKETS.—Perpetual Ticket, in one payment, £12; Annual Ticket, £6 6s.; Six Months, £3 4s.; Three Months, £2 2s.; One Month, £1 1s. Separate payments, amounting to £13 13s., entitle the Student to a Perpetual Ticket on production of previous Season Tickets.

APPOINTMENTS.

No fees are charged for any Medical or Surgical Appointments in this Hospital, which are as follows:—

1. Resident Physicians and Surgeons, who must be registered as legally qualified Practitioners, are from time to time appointed by the Managers on the recommendation of the Physicians and Surgeons. The holders of these offices live in the house free of charge. The appointment is for six months, but may be renewed at the end of that period by special recommendation.

2. Special Non-resident Clinical Clerks, who must also be registered as legally qualified Practitioners, are appointed by the Managers on the recommendation of the Physicians and Surgeons, for such periods and under such conditions as may be deemed expedient.

3. Clerks and Dressers are appointed by the Physicians and Surgeons. These appointments are open to all Students and Junior Practitioners holding Hospital Tickets.

4. Assistants in the Pathological Department are appointed by the Pathologists.

JAMES S. TRAINER, Treasurer and Clerk.

Glasgow Western Medical School.—

Within one minute of the University, and four minutes oft he Western Infirmary.

The Lectures of this School qualify for the University of Glasgow, in accordance with its regulations; the Faculty of Physicians and Surgeons, Glasgow; the Royal Colleges of Physicians and Surgeons, Edinburgh, London, Dublin; and the Apothecaries' Societies.

FEES.—Each course (except Anatomy), first session, £2 2s.; second session, £1 1s.; Anatomy, £3 3s.; Practical Anatomy, £1 1s.

Students of this School receive hospital instruction at the Western Infirmary.

Session begins October 26th, 1886.

For particulars, apply to Mr. J. T. Carter, at the School, University-avenue.

Anderson's College, Glasgow.—The

WINTER MEDICAL SESSION will be opened on Tuesday, 26th October, 1886, with an Introductory Address by Dr. WOLFE, Lecturer on Ophthalmic Medicine and Surgery. Lectures are delivered on the following subjects:—Anatomy, Dr. A. M. Buchanan; Chemistry, Mr. Dittmar; Physiology, Dr. Christie; Surgery, Dr. Dunlop; Practice of Medicine, Dr. Gemmell; Materia Medica, Dr. Morton; Midwifery (in summer), Dr. A. Wallace; Medical Jurisprudence (in summer), Dr. Lindsay; Botany (in summer), Mr. Wilson; Ophthalmic Surgery, Dr. Wolfe; Public Health (in summer), Dr. Christie; Aural Surgery (in summer), Dr. Barr. Hospital Practice and Clinical Lectures in Glasgow Royal Infirmary. The above Lectures qualify for all the Licensing Boards in the United Kingdom. Fees: First Course, £2 2s.; Second do., £1 1s.; afterwards free. The fees for all the Lectures and Hospital Practice required for the conjoint qualifications granted by the Royal Colleges of Physicians and Surgeons, Edinburgh, and the Faculty of Physicians and Surgeons, Glasgow, amount to £48. A Calendar may be obtained from Dr. A. M. Buchanan, 98, St. George's-road, Glasgow, Dean of the Medical Faculty.

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Glasgow Western Infirmary.

IN-DOOR DEPARTMENT.

This Hospital contains upwards of 400 Beds, and there are special wards for Diseases of Women and for Diseases of the Skin.

Students are enrolled for attendance in the Clinical Classes of any of the Physicians or Surgeons, instruction being given by Clinical Lectures and Demonstrations on specified days in each clinique. The visit hour is 9 A.M. daily.

The Clinical Lectures of the Physicians and Surgeons are recognised as qualifying for Graduation at the Glasgow University and other boards.

Visiting Physicians—Dr. W. T. Gairdner, Dr. M'Call Anderson, Dr. Jas. Finlayson, Dr. Gavin P. Tennent.

Visiting Surgeons—Dr. G. H. B. Macleod, Dr. George Buchanan, Dr. Alex. Patterson, Dr. Hector C. Cameron.

Assistant-Physicians—Dr. Joseph Coats, Dr. James Christie, Dr. D. C. M'Vail.

The Pathological Department is under the charge of Dr. Joseph Coats, Pathologist and Assistant-Physician to the Infirmary, who makes the post-mortem examinations, gives pathological demonstrations, and conducts a Class of Pathology in the Infirmary at 3 P.M. in the Winter Session, and he has a Class of Practical Pathology during the Summer. There is a Museum connected with this department, a catalogue of which is in course of preparation. Dr. C. O. Hawthorn is attached to this department as Pathological Chemist.

The Ward for Diseases of Women is under the care of Dr. Leishman, who visits on Tuesdays and Fridays at 3 P.M.

The Skin Wards are under the care of Dr. M'Call Anderson, the visit hour being the same as for the General Hospital.

OUT-PATIENT DEPARTMENT.

Dispensary Physicians—Dr. W. G. Dun, Dr. Samson Gemmell, Dr. John Alexander. Extra Dispensary Physicians—Dr. R. S. Thomson, Dr. G. Dickson.

Dispensary Surgeons—Dr. J. C. Renton, Dr. Geo. T. Beatson, Dr. David Newman. Extra Dispensary Surgeons—Dr. Maylard and Dr. James Parker.

Out-patients are seen daily at 2 P.M. by the Dispensary Physicians and Surgeons, and the students are admitted to see the practice, receive instruction, and assist at the dressing of cases, &c. Total number of patients last year in this department, 18,990.

Out-patient Department for Diseases of Women: Advice is given on Tuesdays and Fridays at 3 P.M. by Dr. W. L. Reid. Total number of patients last year, 1386.

The Midwifery Department is for attendance on patients at their own homes by Students connected with the Infirmary.

Consulting Physician-Accoucheur—Dr. Wm. Leishman. Out-door Physicians-Accoucheur—Dr. W. L. Reid, Dr. Robt. Kirk, and Dr. Murdoch Cameron.

The Department for Diseases of the Throat is at present under the charge of Dr. J. Alexander. Advice is given on Wednesdays at 11 A.M. Total number of patients last year, 647.

Aural Department: Dr. Thomas Barr gives advice on Wednesdays and Saturdays at 3.30 P.M., and Practical Instruction and Lectures, as arranged, on other days. Total number of patients last year, 1088.

Dental Department: Mr. J. R. Brownlie, Dentist. Advice on Mondays and Thursdays at 4.30 P.M. Total number of patients last year, 600.

Vaccination on Mondays at 1 P.M., by Dr. D. C. M'Vail, who also gives instruction and officially recognised certificates. Total cases last year, 727.

There are eight Resident Assistants in the Infirmary, one being attached to the wards of each of the Physicians and Surgeons. They are appointed at the beginning of each winter session from those who have completed their course. Clinical Clerks and Dressers are appointed by the Physicians and Surgeons from those attending their cliniques.

Fees: 20 guineas for a life ticket, admitting to the Infirmary and to the various courses of Clinical Instruction; or the fee may be paid in two equal instalments during the first and second years. Fee for six months, 7 guineas; and for three months, 4 guineas.

Further information may be obtained by applying to Dr. A. W. RUSSELL, Superintendent.

Queen's College, Cork. — Faculty of MEDICINE.

PROFESSORS.

Anatomy and Physiology—J. J. Charles, M.A., D.Sc., M.D., M.Ch.
Practice of Medicine—D. C. O'Connor, LL.D., M.D.
Surgery—Stephen O'Sullivan, M.D., M.Ch., F.R.C.S.I.
Materia Medica—C. Yelverton Pearson, M.D., M.Ch.
Midwifery—Henry Corby, B.A., M.D., M.Ch.
Chemistry and Practical Chemistry—Maxwell Simpson, LL.D., D.Sc., M.D., F.R.S.
Zoology and Botany—Marcus M. Hartog, M.A., D.Sc., F.L.S.
Modern Languages—Owen O'Ryan, D.Lit.
Logic—Geo. J. Stokes, M.A.
Practical Anatomy—By the Professor, assisted by the Demonstrators, Dr. Cotter, Dr. Hosford.

A Matriculation Examination, for such Students as may require to pass it (see Regulations, page 40), will be held on Oct. 19th.

The Lectures will commence on the 1st of November. Eight Scholarships will be awarded to Students in Medicine if qualified—viz., Two Junior Scholarships of £25 each, to Students commencing their first, second, third, and fourth years.

Clinical Medicine and Surgery at the North and South Infirmaries, and Clinical Midwifery at the Lying-in Hospital.

The Medical Buildings have been considerably enlarged by the addition of a Lecture-room, Laboratory, and Museum for the Materia Medica and Medical Jurisprudence Classes, by the extension to double its size of the Dissecting-room, and by the addition of a large Anatomical and Pathological Museum.

By order of the President.
ALEX JACK, M.A., Registrar.

Faculty of Physicians and Surgeons of GLASGOW.

Copies of the following Regulations may be had on application to the Secretary:—

1. Regulations regarding the Preliminary Examination.
2. Regulations regarding the Licence.
3. Regulations regarding the Fellowship.
4. Regulations regarding the Dental Licence.
5. Regulations regarding the Certificate in Public Health.
6. Regulations regarding the Scottish Triple Qualification.

ALEXANDER DUNCAN, B.A., Secretary.

Faculty Hall, St. Vincent-street, Glasgow.
August, 1886.

University of Glasgow.

SESSION 1886-87.

The MEDICAL SESSION will be opened with an Introductory Discourse by Professor MACLEOD, M.D., on Tuesday, the 26th October, 1886.

WINTER COURSES.

Zoology, 9 A.M.—Professor Young, M.D.
Clinical Medicine, 9 A.M.—Professor M'Call Anderson, M.D., and Professor Gairdner, M.D., LL.D.
Clinical Surgery, 9 A.M.—Professor George Buchanan, M.D., and Professor Macleod, M.D.
Chemistry, 10 A.M.; and Chemical Laboratory, 10 A.M. to 4 P.M.—Professor Ferguson, M.A.
Anatomy, Senior, 11 A.M.; Junior, 2 P.M.; and Practical Anatomy, 9 A.M. to 4 P.M.—Professor Cleland, M.D., D.Sc., LL.D., F.R.S., assisted by J. Yule Mackay, M.D., and other Demonstrators.
Practice of Physic, 11 A.M.—Professor Gairdner, M.D., LL.D.
Materia Medica, 12 noon, and Pharmaceutical Laboratory—Professor Charteris, M.D., and Dr. Napier.
Institutes of Medicine, 12 noon, and Physiological Laboratory—Professor M'Kendrick, M.D., LL.D., F.R.S., assisted by J. M'Gregor Robertson, M.A., M.B., the Muirhead Demonstrator.
Surgery, 1 P.M.—Professor Macleod, M.D.
Midwifery, 2 P.M.—Professor Leishman, M.D.

SUMMER SESSION.

During the Summer Session, which opens on 2nd May, the Courses of Botany (Professor Bower, F.L.S.), Practical Chemistry, Forensic Medicine (Professor Simpson, M.A. Cantab., M.D.), Public Health (Professor Simpson), and Clinical Medicine and Clinical Surgery are given. There are also Courses of Anatomy (Lectures on Embryology), Practical Anatomy, Zoology, Practical Zoology, Vegetable Histology and Practical Botany, Practical Physiology (including Histology), Practical Materia Medica, Practice of Physic, Practical Pathological Histology, Operative Surgery, and Lectures on Diseases of Women.

LECTURERS.

Pathology—The Courses of the Pathologist of the Western Infirmary, Dr. Joseph Coats, and of the Pathologist of the Royal Infirmary are recognised.
Diseases of the Eye—Thomas Reid, M.D., Waltonian Lecturer (Summer Course).
Insanity—Dr. David Yellowlees, Royal Asylum, Gartnavel (Summer Course).

WESTERN INFIRMARY.—This Hospital, near the University, contains 400 beds for Medical and Surgical patients, also Wards for Skin Diseases, and one for Diseases peculiar to Females.

DEGREES.—Three Medical Degrees are conferred—viz.: Bachelor of Medicine (M.B.) and Master of Surgery (C.M.), which must be taken together, and Doctor of Medicine (M.D.); all of which are recognised by the Medical Act as qualifying for practice throughout the British dominions.

COST OF EDUCATION.—The fee for each class is £3 3s., and the total minimum expenses for classes, hospital, and graduation fees for M.B. and C.M. amount to about £90. The fee for M.D. is £15 8s.

BURSARIES.—Bursaries to the annual amount of £1150 may be held by Students during their medical studies.

Full particulars as to the course of education and examination required for the Degrees, and the Preliminary Examination required to be passed by Students before beginning medical study, will be found in the University Calendar (by post 3s.); or a Syllabus of the regulations, fees, &c., may be obtained by applying to Mr. Young, M.A., Matriculation Office.

Royal College of Surgeons in Ireland.

SCHOOL OF SURGERY.

The Dissecting Rooms open Oct. 1st, and the Lectures commence on Monday, Oct. 25th.

Physiology—Prof. Mapother.
Anatomy—Profs. Stoker and Fraser.
Surgery—Profs. Sir W. Stokes and Hamilton.
Medicine—Prof. Foot.
Chemistry—Prof. Sir C. Cameron.
Midwifery—Prof. Roe.
Dentistry—Prof. Stack.

SUMMER SESSION.

Materia Medica—Prof. Macnamara.
Medical Jurisprudence—Prof. Davy.
Botany and Zoology—Prof. Minchin.
Practical Chemistry—Prof. Sir C. Cameron.
Ophthalmic and Aural Surgery—Prof. Jacob.
Practical Physiology—Profs. Mapother and Fraser.
Operative Surgery—Profs. Sir W. Stokes and Hamilton.
Hygiene—Prof. Sir C. Cameron.
Dentistry—Prof. Stack.

Prospectuses will be forwarded on application to the Registrar or any Professor.

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Queen's College, Belfast

FACULTY OF MEDICINE.

ANATOMY AND PHYSIOLOGY.—P. Redfern, M.D., F.R.C.S., F.R.U.I.
CHEMISTRY.—E. A. Letts, Ph.D., F.R.S.E., F.C.S.
PRACTICE OF MEDICINE.—James Cuming, M.A., M.D., F.K.Q.C.P.
PRACTICE OF SURGERY.—Vacant.
MATERIA MEDICA.—J. S. Reid, M.D.
MIDWIFERY.—R. F. Dill, M.D.
MEDICAL JURISPRUDENCE.—J. F. Hodges, M.D., F.C.S., F.I.C.
NATURAL PHILOSOPHY.—Joseph D. Everett, M.A., D.C.L., F.R.U.I., F.R.S.
ZOOLOGY AND BOTANY.—Robert O. Cunningham, M.D., F.R.U.I., F.L.S.

The Lectures of the Winter Session of 1886-87 will commence on Tuesday, November 2nd. The Lectures on Botany and Medical Jurisprudence, and the Summer Course of Practical Chemistry, will commence on May 2nd, 1887.

The Anatomical Rooms are open for the whole day, and Students are aided in their Dissections by the Professor of Anatomy and the Demonstrator.

The Examinations for Medical Scholarships, tenable for one year, and of which two are awarded to students in each year of the Medical course, will commence on October 26th.

FEES.—Anatomy and Physiology: 1st course, £3; each subsequent course, £2. Demonstrations and Practical Anatomy: Each course, £3. Practical Physiology and Histology, £3 3s. Practical Chemistry, £3. Other Medical Lectures: 1st course, £2; each subsequent course, £1.

BELFAST ROYAL HOSPITAL.—Clinical Fees: A Winter Session, £5 5s.; a Summer Session, £2 2s.; Perpetual Fee, payable in two instalments, £10 10s. Hospital Fee, half a guinea for each Winter or Summer Session.

ULSTER HOSPITAL FOR DISEASES OF WOMEN AND CHILDREN, AND MIDWIFERY DISPENSARY, 11, Fisherwick-place.—Fee for Winter or Summer, six months, £3 3s.

LYING-IN HOSPITAL.—Fee for six months, £2 2s.

BELFAST DISTRICT LUNATIC ASYLUM.—Fee for Summer Session, £3 3s.

By order of the President.
JOHN PURSER, M.A., Registrar.

DOVER COLLEGE.
Head Master: Rev. W. BELL, M.A.

A high-class Public School on moderate terms. Latest successes are three open Scholarships at Oxford and Cambridge in Classics and Mathematics in 1886; all (four) candidates passed into Sandhurst in 1885. Entrances to Indian Civil Service and Woolwich. Junior school. Excellent music, chapel, library, laboratory, workshop, gymnasium, fives-courts, sea-bathing.

Special classes for Woolwich, Sandhurst, and Army Preliminary.

Each boy has a separate bedroom.

Boarders are taken by the Head Master, by C. H. Sparke, M.A., and E. Thornton Littlewood, M.A.—Apply to the Head Master.

Little St. John's, Ditchling, Sussex.—

A Church of England School, preparatory to the larger ones. Parents will find this school everything to be desired for imparting a sound education, coupled with every attention to health and home comforts. From its situation, it is well suited for delicate children. The boys are all sons of gentlemen; the Clerical and Medical professions affording large patronage. Boys have passed direct into the Navy and other professions from the school, which speaks for the tone of instruction given. The next term begins September 16th. For terms, apply to A. E. Nickoll, Principal.

Appuldurcombe College, Isle of Wight,

for DELICATE BOYS. Noble mansion in magnificent park of 600 acres, ranging from 300 to 700 feet above the sea. Pure, bracing air. Dairy farm. Junior department under married clergyman and a lady. Senior branches separate. Classes for Legal, Medical, and Bar Prelims., and all Government Examinations. Army Coaching Department very successful, for Sandhurst and Woolwich. Junior Army Prelim. class also, fourteen to sixteen. Practical classes also in farming, carpentering, surveying, plan-drawing, bookkeeping, &c., for colonies. Terms moderate.—A. MORSE.

Epsom (Medical) College Preparatory

SCHOOL.—The following boys, under fourteen, who were pupils in the above-named school, have obtained the undermentioned scholarships:—

H. Candler, Repton School, £40 per annum.
R. Bradley, St. Paul's School, £30 per annum.
G. P. O'Connor, Epsom College, £21 per annum.
A. M. Low, Aldenham School, £30 per annum.
(1st of four Platt Scholarships.)

Prospectus on application to J. JEFFREY, Parade, Epsom.

Epsom College, Surrey.—

Head Master—The Rev. W. CECIL WOOD, M.A.

Boys are prepared for the Universities of Oxford, Cambridge, and London, and for the Preliminary Examinations for the Medical and other Professions. Special facilities are afforded for the study of natural science to those preparing for the Matriculation and Preliminary Scientific Examinations at the London University. Seven Medical Scholarships at the hospital schools in London, ranging in value from 90 to 125 guineas, an Exhibition to the Universities of £50 a year for three years, and six Scholarships tenable for a year in the College, are competed for annually.

Inclusive terms, £49 10s. or £52 10s. a year, according to age, for the sons of medical men; £70 a year for others.

The NEXT TERM will BEGIN on the 22nd September.

For particulars, apply to the Secretary of the College, at the office, No. 37, Soho-square, London. ROBERT FREEMAN, Secretary.

DIRECT MEDICAL REPRESENTATION.

TO THE REGISTERED MEDICAL PRACTITIONERS OF SCOTLAND.

Gentlemen,—I have had the honour to receive a numerously-signed requisition to become a Canditate for the Scottish representation in the Medical Council, conferred by the recent Medical Amendment Act. I have agreed to this request, and will take an early opportunity of explaining my views more fully than I can at present. Meantime I shall be glad to have the assurance of your assistance and support, and

I am, Gentlemen, your obedient servant,
WILLIAM BRUCE.

The Castle, Dingwall, September 2nd, 1886.

DIRECT REPRESENTATION ON THE MEDICAL COUNCIL.

TO THE MEMBERS OF THE MEDICAL PROFESSION IN ENGLAND AND WALES.

GENTLEMEN,

I respectfully beg to announce that I shall be a candidate for your support as a direct representative of the profession on the General Council of Medical Education and Registration.

I shall feel extremely obliged to those who are willing to vote for me, if they will send me a post card to that effect.

I remain, Gentlemen,
Your obedient servant,
R. P. B. TAAFFE, M.D., M.S.Lond., F.R.C.S.Eng. (Exam.), L.S.A., San. Sci. Cert. Lond. and Camb.; President of the Section of Public Medicine (at Brighton) British Medical Association; Medical Officer of Health for Brighton.

45, Old Steyne, Brighton, August 30th, 1886.

SCHOOL OF

ANATOMY, PHYSIOLOGY, SURGERY,

and all PROFESSIONAL SUBJECTS. Practically taught by different masters. DISSECTING-ROOM licensed under the Anatomy Act. PHYSIOLOGICAL, CHEMICAL, and PHARMACEUTICAL LABORATORY. MUSEUM of some 300 Medical, Surgical, and Normal Specimens. Prospectus on application to Mr. THOMAS COOKE, F.R.C.S., Senior Assistant-Surgeon to the Westminster Hospital, who conducts the Classes of Anatomy and Surgery. Private address—40, Brunswick-square. Classes in ELEMENTARY ANATOMY and PHYSIOLOGY. Special tuition of an evening for resident pupils.

Chemistry, Materia Medica, Pharmacy,

&c. Classes forming for October. Ample laboratory work.

Operative Surgery.—Recognised by the

London University, War Office, &c., fee £5 5s.

Fellowship of the R.C.S., H.M.'s Services.

Special Classes for the above.

Tablets of Anatomy, by Thomas Cooke,

F.R.C.S., Senior Assistant Surgeon to the Westminster Hospital, 4th ed., revised, now ready, price 7s. 6d. (Longmans & Co.), contain "in the fewest words and plainest language, and in about one-tenth the space, the matter which is found in the most accredited standard works. The author is evidently a sound teacher."—THE LANCET. "Probably no anatomical or physiological work is more universally appreciated."—STUDENT'S JOUR.

King Edward VI.'s School, Berkhamsted,

Herts, twenty-eight miles from Euston. Good Scholarships and Exhibitions. Laboratory, heated Swimming Bath, Fives Courts, Workshops, &c. £52 per annum.—Address, Head Master.

DEFECTS OF SPEECH.

Mr. WILLIAM VAN PRAAGH'S System for the Cure of all Defects of Speech, both ACQUIRED and CONGENITAL.

For information, apply to Mr. William Van Praagh, 11, Fitzroy-square, London, W. Personal interviews by appointment.

STAMMERING, STUTTERING, &c.

DR. ABBOTT'S (Physician, Institution for Affections of the Speech, and author of "Impediments of Speech, their Causes and Cure," Ninth Edition, published by G. Pitman, 140, Gower-street, W.C., price 2s.), now attends daily, from 11 A.M. to 2 P.M., at 61, Margaret-street, Cavendish-square, W. Vacancy for Resident Patient (with educational facilities if required) at private country house.

Deaf and Dumb Children of the

Higher Classes educated on the "Pure Oral" System. Private and select School for limited number. Special home comforts.—Address, Harry W. White (formerly Vice-Principal, Ealing Training College for Teachers of the Deaf), 115, Holland-road, Kensington. Next term, Sept. 20th.

"By this method alone is the intellect of the mute enabled to travel beyond the range of a few who are skilled in the manual sign language, and to converse freely with all."—THE LANCET, July 11th, 1885.

University of London Preliminary

SCIENTIFIC (M.B.) EXAMINATION.—Instruction is given in all the subjects of the above Examination at GUY'S HOSPITAL during the Winter and Summer Sessions. The Class is not confined to Students of the Hospital.—For further particulars apply to the Dean, Guy's Hospital, Southwark, S.E.

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DIRECT REPRESENTATION OF THE MEDICAL PROFESSION OF SCOTLAND IN THE GENERAL COUNCIL.

To the Registered Medical Practitioners of Scotland.

GENTLEMEN,—You are aware that the Medical Act, which recently received the Royal assent, empowers you to elect a Member of the General Council.

It would probably not have occurred to me to solicit your suffrages for the honour of representing you had I not been urged to do so by a number of influential friends and neighbours, who, knowing well the attention I have for many years given to medical reform, believe my acquaintance with the events which led up to the passing of the Medical Act of 1886 to be somewhat exceptional. This knowledge was mainly acquired during my seven years' tenure of the Secretaryship of the Forfarshire Medical Association, an association which has always been in the van of progress. After very careful consideration I have decided to become a candidate.

Important business will, from time to time, come before the Council in relation to education and examination. I have long held the opinion that a stringent entrance examination for all students who are not graduates in Arts is one of the best safeguards against the admission to the profession of men who are unsuited by nature and education for its practice. Judicious schemes for the improvement of the professional curriculum and examinations shall at all times have my best attention.

In the periodical revisions of the British Pharmacopœia it seems to me most important to have in the Council men who are familiar with the necessities of every-day practice.

The Registration of Foreign and Colonial Diplomas will be one of the most difficult duties of the Council, and one which, alike in the interest of the public and the profession, is of the utmost importance.

I am quite unconnected with the governing body of any university or corporation. Indeed, these institutions are already sufficiently represented in the Council. Like the great majority of you, I am engaged in family practice; and if you do me the honour to elect me, I will do my utmost to faithfully represent your views. In any questions that may arise between universities and corporations I will consider it my duty to listen to both sides, and to act according to what I conceive to be to the public advantage.

The relations of the public services to the Government and the local authorities shall have my constant and unremitting care.

A Scotchman by birth and education, I regard with pride the brilliant services which our country has rendered to the science and art of medicine, and to the advances of an enlightened system of education. But no local sympathies shall prevent me from using every endeavour to bring an unprejudiced mind to the consideration of every question that may come before the Council.

I annex a first list of my committee, which in the meantime is entirely composed of practitioners who reside in my own neighbourhood, and

I have the honour to be, Gentlemen, your obedient servant,

DUNDEE, September 1st, 1886. **ROBERT SINCLAIR, M.D.**

COMMITTEE.

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INDIAN MEDICAL SERVICE.
India Office, August 26th, 1886.

An Examination for at least twenty-five appointments as Surgeon in Her Majesty's Indian Medical Service will be held in London in February, 1887.

Copies of Regulations for the Examination, with information regarding the Pay and Retiring Allowances, &c., of Indian Medical Officers, may be obtained from the Military Secretary, India Office, London, S.W.

The exact date of the Examination will be announced hereafter.

ALLEN JOHNSON, Major-General,
Military Secretary.

Royal College of Physicians of London.

FIRST PROFESSIONAL EXAMINATION FOR THE LICENCE of candidates who shall have commenced their professional study before Oct. 1st, 1884. The next Examination will commence on Tuesday, Oct. 19th. The subjects of this Examination are Chemistry, including Chemical Physics, Materia Medica, Pharmacy, and Osteology. Registered Students are admitted to this Examination on producing satisfactory evidence of having received instruction on those subjects.

SECOND PROFESSIONAL EXAMINATION FOR THE LICENCE.—The next Examination will commence on Thursday, Oct. 7th. The subjects of this Examination are Anatomy and Physiology. Registered Students are admitted to this Examination after eighteen months of professional study at a recognised Medical School.

PASS EXAMINATION FOR THE LICENCE.—The next Examination will commence on Tuesday, Oct. 12th. Gentlemen who have completed four years of professional study, according to the College Regulations, are eligible for admission to this Examination.

Every candidate for the College Licence is required to produce a certificate of having acquired proficiency in Vaccination signed by a Vaccinator appointed or recognised by the Local Government Board.

No candidate will be admitted who has not given fourteen days' notice in writing to the Registrar of the College, with whom all certificates and testimonials required by the Bye-laws are to be left at the same time.

Pall Mall East. H. A. PITMAN, M.D., Registrar.

Royal College of Physicians of London.

The next PROFESSIONAL EXAMINATION for the MEMBERSHIP will commence on Thursday, Oct. 21st.

Candidates are required to give fourteen days' notice in writing to the Registrar of the College, with whom all certificates and testimonials required by the Bye-laws are to be left at the same time.

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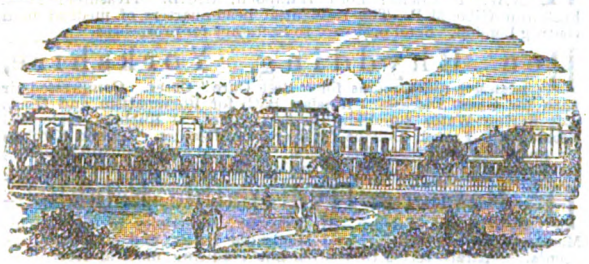
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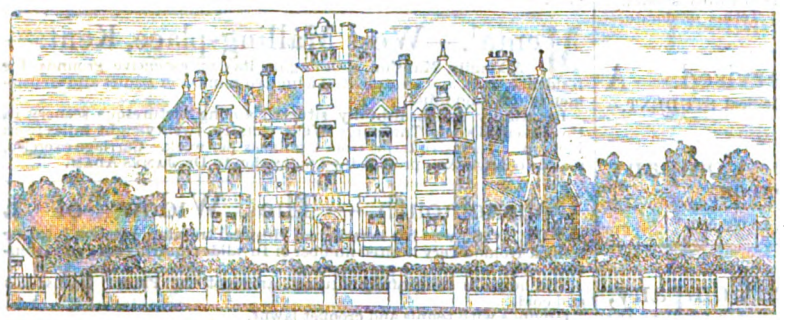
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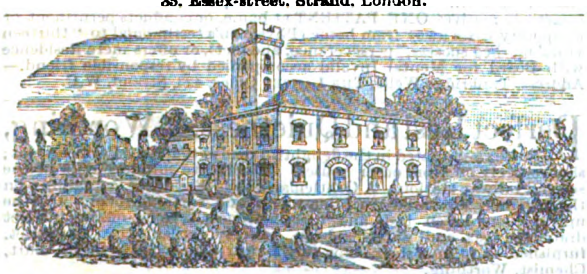
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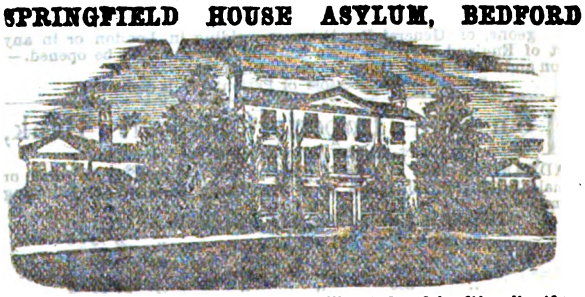
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A Private Home, established 1864, for the Treatment and Cure of Ladies of the Upper and Higher Middle Classes suffering from the above. Highly successful results. Carriage kept. Private sitting-rooms if required. Medical Attendant—DR. J. ST. T. CLARKE, Leicester.—For terms, &c., apply to the Principal, Mrs. THEOBALD, Tower House, Leicester.

74

Intemperance. — Private Home for Ladies, where only six are received. Terms from 1½ to 3 guineas weekly. Highest professional references given, for which, and other particulars, apply to Miss Pudney, Buxton House, Earl's Colne, Essex.

SPRINGFIELD HOUSE ASYLUM, BEDFORD



One hour from London by Midland. Elevated and healthy situation. Extensive grounds (30 acres). "Employment system." Carriage drives. Billiards, Tennis, Boating, &c.

Forms of admission from DAVID BOWER, M.D.

Terms, 2 Guineas. No extras.

N.B.—Two new wings having been erected on plans approved by the Commissioners in Lunacy, there are now Vacancies for both Ladies and Gentlemen.

A Suite of Rooms now vacant for a Lady Patient, 1880.

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INTEMPERANCE.

Colman Hill House Retreat,

HALESOWEN, WORCESTERSHIRE.

Licensed under the Act of 1879 for Ladies only.

Terms from £2 2s. per week. Apply to the Proprietors, KER & DE DENNE, Townsend House, Halesowen.

HIGH SHOT HOUSE, Twickenham, S.W.

FOR THE TREATMENT AND CURE OF INEBRIETY.

(Licensed under the Act.)

A limited number (Gentlemen only) taken. A good library, large billiard-room, lawn tennis court, bowls, &c.

The staff, male servants only, pledged abstainers.

Terms, 3 to 5 guineas.

For papers required for admission, address, H. BRANTHWAITE, F.R.C.S. Ed., Medical Superintendent.

A HOME FOR THE CURE OF INTEMPERANCE.

Old Park Hall, near Walsall, Staff.

(Licensed under the Habitual Drunkards Act),

for reception of Male and Female Patients, is a beautiful mansion situated in a park of thirty-six acres, in the centre of which is a lake well stocked with fish, and on which is a boat. There are lawns for Bowls, Cricket, and Tennis, a splendid Billiard-room and Smoking-rooms. Arrangements for several patients of the labouring class can be made.—Apply to Mr. Fred. John GRAY, Medical Licensee.

INTEMPERANCE.

Private and Select Home for a few

Ladies of the Higher Classes suffering from above, and anxious to establish a cure. Principal, a Medical Man of great experience. Beautiful country house, large grounds. Carriage exercise. Climate healthy and invigorating. Amusements provided. Good cuisine. Unusual advantages. Trained nurse. Highest references. Consulting Physician, Sir James Sawyer, M.D.—Apply, Lady Superintendent, Hall Court, Cannock, Staffordshire.

THE ILFRACOMBE HOTEL.

On the Sea Shore.

250 Rooms. New decorations and furniture.

Eight Lawn Tennis Courts.

Large Sea-water Swimming Bath. Private Baths.

Table d'Hôte Dinner from six to eight o'clock.

Telegraphic address, "Hotel, Ilfracombe."

Cheap Return Tickets to the East.—

The PENINSULAR and ORIENTAL COMPANY are now issuing RETURN TICKETS, at reduced fares, to India, China, Australia, and Egypt.

Full particulars can be obtained at the offices of the Company, 122, Leadenhall-st., E.C., and 25, Cockspur-st., London, S.W., or 30, Boulevard des Italiens (for passage only), and 57 and 59, Rue d'Hauteville, Paris.

Sea Voyages for Health's Sake, by the

fine Mail Steamers of the ROYAL MAIL STEAM PACKET COMPANY. Brazil, River Plate, Portugal, West Indies, and Pacific from Southampton. Return and tourist tickets.—Apply at the Offices of the Company, 18, Moorgate-street; or to Geo. W. Wheatley & Co., 23, Regent-street, Waterloo-place, London. N.B.—Passengers can proceed to the West Indies, and thence, vid the Isthmus of Panama, to San Francisco, under through tickets.

Excursions to Italy, Egypt, Australia,

New Zealand, and Tasmania, by ORIENT LINE. Return tickets at special reduced fares are issued by this line, with facilities to passengers for breaking the journey at all ports of call.—F. Green & Co., 13, Fenchurch-avenue, and Anderson, Anderson, & Co., 5, Fenchurch-avenue, London, E.C. For particulars of fares, &c., apply to the latter firm.

Health Voyages to Australia and back

Messrs. Greens' Blackwall Line.—The following splendid vessels sailing for Melbourne at the under-mentioned dates, offer unequalled advantages to passengers travelling for health or pleasure. Each vessel carries a surgeon:—

Ship.	Commander.	Date.
Sobraon	J. A. Elmslie	Sept. 28th.
Superb	H. O. Can	Oct. 20th.
Carlisle Castle	E. S. Low	Dec. 10.

For plans of accommodation and further particulars, apply to F. Green & Co., 13, Fenchurch-avenue.

Consumptive Girls.—A Sea Voyage and

two or three years in the dry and healthy climate of Victoria have been known to restore the health completely. A Lady, returning shortly, would undertake the CARE of TWO or THREE YOUNG LADIES; references exchanged.—Apply, R. H. A., 82, Maida-vale, W.

Private Home for the Treatment of

INSANE LADIES,

ASHBROOK HALL, HOLLINGTON,

within half an hour's walk of St. Leonards-on-Sea, conducted by the Widow of the late Samuel Hitch, M.D., formerly of Sandywell-park, near Cheltenham, for many years Physician to the General Lunatic Asylum for the County of Gloucester.

Station: Warrior-square, St. Leonards. Telegraph Office: Silverhill.

For particulars and terms, apply to Mrs. LETITIA A. HITCH.

Stretton House Private Asylum, Church

Stretton, Salop. (For Gentlemen only.)—This Asylum possesses many natural advantages: beautiful scenery, bracing atmosphere, extensive grounds, and facilities for every sort of recreation.

Special care and treatment of Insanity arising from or complicated with Inebriety. Apply to CAMPBELL HYSLOP, Supt.

Dr. CECIL A. P. OSBURNE, Medical Consultant.

Wye House Asylum, Buxton, Derby-

shire, for the Middle and Upper Classes of BOTH SEXES, is beautifully situated in the healthy and bracing climate of the Derbyshire hills, and is directly accessible by the Midland and the London and North-Western Railways.—For terms and other particulars address the Resident Physician and Propietor, Dr. F. K. DICKSON.

Harpenden Hall, Herts.—Twenty-five

miles from London, on the Midland Railway. Established 1846 for the treatment and cure of Ladies mentally afflicted. Carriage exercise, lawn tennis, and other amusements are provided. Terms from two guineas a week.—Apply to A. MacLean, Proprietor and Medical Superintendent.

Barnwood House Hospital for the

INSANE of the MIDDLE and UPPER CLASSES, Barnwood, near Gloucester.—An Institution for the care and treatment of Patients of both sexes, who can have private rooms and special attendants, as well as the use of general sitting-rooms, at moderate rates of payment.

Patients can also be accommodated in detached villas, and in the Branch Convalescent Establishment on the hills.

Information as to terms, &c., may be obtained on application to Dr. Needham, the Medical Superintendent.

Dundee Royal Asylum, West-green.—

This new and commodious building, recently erected about four miles from Dundee, in a healthy situation, and commanding extensive and beautiful views of the Valley of the Tay, affords superior accommodation for Private Patients, at low rates of board.

Dr. Mitchell, H.M. Commissioner in Lunacy, reports "the accommodation provided for Private Patients is excellent, both as regards those who pay from 15s. to 21s. per week and as regards those who pay higher rates, and the amusements are frequent and varied."

For further information, apply to Dr. Rorie at the Asylum.

St. Andrew's Hospital for Mental

DISEASES, NORTHAMPTON.

For the Middle and Upper Classes.

President—The Right Hon. the Earl SPENCER, K.G.

Chairman of Committee of Management—The Most Honourable the Marquis of NORTHAMPTON, K.G.

This Institution is devoted to the care and treatment of Patients of the Upper and Middle Classes only, the object of the Directors being to provide accommodation and comforts suitable to the former social and present mental condition of persons belonging to those classes, at moderate rates of payment.

Patients can have private rooms and special attendants, as well as the use of general sitting-rooms.

The alterations in the First-class Ladies' Rooms being now finished, there are several vacancies at two guineas a week.

For further information apply to the Medical Superintendent.

Crichton Royal Institution, Dumfries,

endowed by the late JAMES CRICHTON, Esq., of Friar's Carse, and Incorporated by Act of Parliament, as a Hospital for the Insane and a Home for Mental and Nervous Invalids of the Higher and Middle Classes.

The Trustees and Directors of the Crichton Royal Institution, in order to meet the requirements of a large section of the community, have instituted an INTERMEDIATE DEPARTMENT *for the care and treatment of persons of unsound mind, at rates of board of £40 and £52 per annum.*

Information regarding higher class rates to be had on application.

Communications to be addressed to Dr. Rutherford, Medical Superintendent.

THE COPPICE, NOTTINGHAM.

HOSPITAL FOR THE INSANE OF THE MIDDLE AND UPPER CLASSES.

President—The Right Hon. the Earl MANVERS.

This Institution having been considerably enlarged, there are now Vacancies for Patients of both sexes, at moderate rates of payment. Particulars as to terms, &c., may be obtained from Dr. TATE, Medical Superintendent.

Grove House, All Stretton, Church

STRETTON, SHROPSHIRE.

A Private Asylum for the Care and Treatment of a limited number of LADIES of the Middle and Upper Classes.

For terms and particulars apply to Mrs. McLintock (widow of the late Dr. McLintock), the Resident Proprietress, or to the Medical Superintendent.

Haydock Lodge Retreat, for the care

and cure of persons of unsound mind, Ashton, near Newton-le-Willows, Lancashire, about two miles from Newton-bridge Station on the London and North-Western Railway. Terms, &c.: First Class Patients, from £1 10s. to £3 6s. per week, according to accommodation, attendance, &c.; Middle Class, from £1 to £1 10s. per week, according to the nature of the case.—Apply to H. H. BRAMAN, M.R.C.S.E., and L.S.A.Lond., Medical Proprietor, or to J. SHAW, M.D., Medical Superintendent.

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An Experienced Surgeon and Physician going to Sydney, New South Wales, in a few weeks, would be glad to take charge of a delicate person going out, or act as Surgeon to a steamer.—Address, Dr. Finlay, Walsall.

An English Physician, about to pass the Winter in the Upper Engadine, would be happy to take Charge of a Patient desiring to do the same.—Address, in first instance, Medicus, care of Matron, the Infirmary, Tiverton, Devon.

Lady, residing in the country, desires CARE of a CHILD (or youth), mentally or otherwise afflicted. Refined home, with personal attention and every comfort.—For terms, address, M., THE LANCET Office, 423, Strand, W.C.

Widow Lady, very experienced in Mental Diseases, having charge of the son of a Medical man, wishes to receive another BOY, requiring special care and supervision. Healthy situation. Terms moderate. Highest references.—M.D., Mr. Wood, Chemist, High-street, Windsor.

A thoroughly comfortable Home offered to an Invalid, mental or nervous, in the house of a Medical Man in the Midlands. No children.—Address, H. H., THE LANCET Office, 423, Strand, W.C.

London, S.W.—A married Medical Man, residing in a large house with garden, has a vacancy for a RESIDENT PATIENT, mental or otherwise. Particularly good suite of rooms. Highest references.—For terms, &c., address M.B., THE LANCET Office, 423, Strand, W.C.

Somerset, on borders of Devon.—A married medical practitioner who for many years has received Patients into his house has now a Vacancy for a PATIENT (Lady or Gentleman). Pleasant gardens and grounds, beautiful scenery, hunting, shooting, and fishing. Access by two lines of railway.—Address, Chirurgus, Messrs. Gale & Co., Bouverie-street, Fleet-street, London.

The Son of a Medical Man offers Board and Residence, in his well-appointed house (standing in its own grounds, quite in the country), to a gentleman. Lovely spot. Carriage exercise. Three guineas per week without supervision; 4 guineas with. Medical Man visits frequently.—Address, Surgeon, Hyde Villa, near Chalford, Gloucestershire.

Very comfortable Home offered in the house of a retired medical man, residing in the healthiest part of Eastbourne. Three reception, five bed-rooms, and bath-room. Small garden. Desirable for anyone wishing to live near the sea. Highest references.—Address, Mrs. Pritchard, Kingsley, 9, Hartfield-road, Eastbourne.

A Lady of much experience, who receives only one patient, has now a Vacancy, and offers a refined HOME with every care to a Lady suffering from a nervous or mild mental disorder, or the unmanageable daughter of a gentleman. House commodious and detached, with good grounds, and near the sea. Terms moderate and inclusive.—Address, E. L., THE LANCET Office, 423, Strand, W.C.

Home offered, for Lady or Gentleman requiring Medical or Surgical Care, by experienced Physician, Catholic, abstainer, married (no children), residing ten miles north of London; large house, healthy neighbourhood, near churches and train. Good references. Terms moderate.—Particulars from Dr. L. B., 2, Park-road, High Barnet, Herts.

A married Medical Man, without family, is willing to receive a Resident PATIENT, mental or otherwise. Personal supervision; large and well-furnished house in London, S.W., with every convenience. Only one Patient taken, the last having left greatly benefited. Surroundings and social position of the best, and references the highest.—For further particulars address, M.P., THE LANCET Office, 423, Strand, W.C.

A married Medical Man, living in large house, with five acres of gardens and pleasure grounds, situated in a large pretty village in the Midlands, has a Vacancy for a RESIDENT PATIENT, either lady or gentleman, or a married couple. Good hunting with four packs of foxhounds. Separate suite of apartments if preferred. Use of carriages, &c. For further particulars address, Evelyn, THE LANCET Office, 423, Strand, W.C.

Situation wanted as Lunatic Attendant, in Private Family or Asylum, for a steady, respectable man of thirty-four. Has been attendant in asylums for four years. Good references. — Address, Rivers, care of Secretary, 134, High street, Poplar, E.

To Museum Curators.—The Advertiser, who for the last twelve years has been employed in the Museum of one of the chief London Hospitals, and who is well up in the work, is desirous of obtaining a similar situation. Good testimonials.—Address, A. B., care of Messrs. Ferguson & Co., West Smithfield, E.C.

To the Benevolent.—The Widow and Child of a young Medical Man, left totally unprovided for, earnestly solicit assistance from the wealthy and benevolent to enable her to pay off debts left by her late husband, and thus save her home from merciless creditors.—Smallest donations will be thankfully received by Dr. H. J. Dwelly, Rye-lane, Peckham, London.

As Locum Tenens or Travelling Companion.—A doubly-qualified man, age thirty-nine, desires an engagement in one of the above capacities, in both of which he has had experience. An Assistancy with a view to Partnership in a good-class Practice would be entertained. Interview in London if desired.—Address, Seismos, THE LANCET Office, 423, Strand, W.C.

Companion.—A Medical Man wishes to highly recommend a young gentleman, aged twenty-one, to act as Companion to an Aged or Infirm Person about to spend the winter abroad or on the Continent.—Apply to S. S. Hoyland, Cornhill, Ipswich.

A Physician wishes to strongly recommend a highly respectable MAN of experience, to attend on an invalid gentleman, or take a similar position of trust. Can use the catheter.—Address, J. F., 3, Straloch-terrace, Hurlingham-park, Fulham.

A Lady who has had seven years' experience in London Hospitals, as both Nurse and "Sister," is desirous of an appointment as MATRON or WARD SISTER, in or near London. Good testimonials.—Address, L., THE LANCET Office, 423, Strand, W.C.

General Lying-in Hospital, York-road, Lambeth.—Respectable WET NURSES and Certificated MONTHLY NURSES, also certificated MIDWIVES, supplied on application. Female Pupils are trained in Midwifery and Monthly Nursing.—Address, A. Atkinson, Matron.

The London Association of Nurses.
Chief Office—62, New Bond-street, W. Branch Office—86, Kennington-park-road, S.E. Supplies superior Hospital-trained Monthly, Mental, Medical, Surgical, Fever, and Small-pox Nurses. Also Male Attendants and Medical Rubbers. Rooms are provided for Invalids, and arrangements made for the reception of convalescents from infectious illnesses in country houses.

Trained Male Nurses for Medical, Surgical, and Mental cases (in town or country) supplied by the HAMILTON ASSOCIATION for PROMOTING the TRAINING and EMPLOYMENT of MEN as NURSES. Terms, One Guinea per week and upwards. — Apply to the Secretary, 50, South-street, Park-lane, London, W. Telegraphic address—"Hamilton Association, London."

General Nursing Institute,
5 and 4, Henrietta-street, Covent-garden, W.C.
Established 1862. Solely under Medical Direction.
HOSPITAL TRAINED NURSES for every description of disease—Medical, Surgical, Mental, and Midwifery—can be obtained at this Institute on application to the Secretary or Lady Superintendent at a moment's notice, being resident in the Home.
Male Attendants and Nurses specially for Fever cases sent to all parts Telegraphic address, "Nursing Institute, London."

Guy's Hospital Trained Nurses' Institution.—MEDICAL and SURGICAL NURSES supplied.—Address, Lady Superintendent, 12, St. Thomas's-street, S.E.

MR. D. E. WILSON'S

INSTITUTION FOR SUPPLYING THE MEDICAL PROFESSION AND THE PUBLIC WITH

HOSPITAL TRAINED NURSES

FOR MEDICAL, SURGICAL, MONTHLY, MENTAL, DIPSOMANIA, AND FEVER CASES.

The nature of the case and sex should be described personally, by letter or telegram, to Mr. WILSON or Lady Superintendent.

Nurses sent to all parts of England and abroad.

Having the largest and most experienced staff of Nurses in London, every application can be supplied at a moment's notice.

MALE ATTENDANTS.

Respectable and experienced Men for all cases.

Female and Male Nurses especially adapted for accompanying Ladies, Gentlemen, or Children to the Seaside or abroad.

ESTABLISHED 1867, since which period 39,000 families have been provided by Mr. Wilson with his own Resident Nurses, recommended by the most eminent of the Medical Profession, continually nursing under their instructions; guarantees of Efficiency and Respectability.

96, 97, 98a, WIMPOLE STREET,
CAVENDISH SQUARE, LONDON, W.

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The Hospital for Women, Soho-square, London, W.—A vacancy is hereby declared for a HOUSE-PHYSICIAN. He must have a recognised medical or surgical qualification. Salary £75 per annum, with board, &c. Residence on 1st October. Applications, with copies of testimonials, to be forwarded on or before 18th September, to the undersigned.

DAVID CANNON, Secretary.

St. Peter's Hospital for Stone and URINARY DISEASES, Henrietta-street, Covent-garden.

A HOUSE-SURGEON will be required from October 1st. Appointment to be made for six months. Honorarium 25 guineas, board, lodging, and washing. Candidates, who must be M.R.C.S. and have held the position of House-Surgeon at a public institution, are requested to send their applications, with testimonials, on or before Saturday, September 25th, to

WALTER E. SCOTT, Secretary.

Poplar Hospital for Accidents, E. — Well-trained Nurse, also Probationer, wanted immediately.—Apply to the Matron.

Nurses for Private Work in Eastbourne wanted. Must be experienced.—Apply, enclosing testimonials and stating salary, to Lady Superintendent, Nursing Institution, Eastbourne.

Ward Sister or Head Nurse wanted immediately. Must be well trained, active, industrious, and accustomed to train probationers. Testimonials and full particulars to be sent, first, to L. S., THE LANCET Office, 423, Strand, W.C.

Wanted, a Lady as Matron for the Darlington Hospital. Must have had experience in domestic management and nursing.—Apply (with copy of testimonials), stating age, experience, and salary required, to Hon. Secs., Union-street-chambers, Darlington.

Infirmary, Bury, Lancashire.—Wanted, a Thoroughly Trained Surgical STAFF NURSE. Hospital twenty-five beds. Wages £25 per annum, with board and uniform.—Apply, the Matron.

Norwich Friendly Societies Medical INSTITUTE.—Wanted for the above a MEDICAL OFFICER, to enter on duties Oct. 24th. Salary £250 per annum. Find own conveyance. Address, Secretary, Ivy House, Lady-lane, Norwich, not later than Sept. 30th, 1886.

Swansea Hospital.—Required imme- diately, trained NURSE for Medical and Surgical Female Ward. Wages £22, rising £25, and uniform.—Application, with recent testimonials, addressed to the Matron.

Wanted, by the Perth Trained Sick NURSE SOCIETY, a competent trained NURSE, to Visit the Sick Poor at their own homes, and to administer to their spiritual welfare. Salary £50 per annum.—Applications, with testimonials, to be lodged with the Treasurer, Baillie Cowan, Perth, on or before 30th September.

Royal United Hospital, Bath.—The Office of HOUSE-SURGEON will be vacant on the 1st of October next. Candidates must be M.R.C.S. and registered. Diplomas and testimonials of professional capacity and moral character to be forwarded to the Secretary-Superintendent, on or before Friday, the 17th September. The salary is £60 per annum, with board and lodging.

W. C. ORMOND, Major, Sec.-Superintendent.

Royal United Hospital, Bath, September 6th, 1886.

The Manchester Hospital for Con- SUMPTION and DISEASES of the THROAT.—Wanted a RESIDENT MEDICAL OFFICER for the above Institution. Must be registered. Salary £60 per annum, with board, apartments, and washing.—Applications, with copies of testimonials, to be sent in or before 27th instant.

Manchester. GEORGE KEATING, Secretary.

Borough Hospital, Birkenhead. — A JUNIOR HOUSE-SURGEON is required for the above Institution. The duties chiefly consist of Visiting Patients at their Homes.

Candidates must possess both registered medical and surgical qualifications of the United Kingdom.

Salary £60 per annum, with board and residence.

Applications, stating age, with testimonials, must be sent to the Chairman of the Weekly Board, before September 20th.

Eastern Dispensary of Bath.—A Resi- DENT MEDICAL OFFICER is required, who must possess the diplomas of Royal College of Surgeons and the Society of Apothecaries, the salary to be at the rate of £100 per annum for the first year, and afterwards to be raised to £120 if satisfaction be given to the Committee. Furnished apartments, with coals, gas, and domestic attendance, are provided. Testimonials, post paid, to be forwarded, before 10 A.M. on Monday, Sept. 20th, to T. H. Plowman, Esq., M.A., J, Russell-street, Bath, who will afford any information required.

Musical.—Alto, Tenor, and Bass Voices wanted, for a new Church in a lovely neighbourhood, eight miles from London Bridge. Small honorarium.—Apply, either at ½ to 11 A.M. or at 7 P.M., to Dr. Larkin, 44, Trinity-square, Borough, S.E.

Wanted, post as Attendant on an Invalid Gentleman—mental or otherwise. Six years' character. Aged forty; height 5 ft. 5 in. Experienced as a nurse.—Address, B. C., 2, Albert-terrace, Luther-road, Teddington, Middlesex.

Manchester Royal Infirmary.—Resi- DENT MEDICAL OFFICER.—The Board of the Manchester Royal Infirmary are prepared to receive applications for the above office. Applicants must not be less than twenty-five years of age, and unmarried. They must be registered, and hold a medical and surgical qualification. The appointment will be for a term of not less than two years, from 20th October next; the remuneration £150 per annum, with board and residence. Applications, with testimonials, and stating age, to be sent, directed to the Chairman of the Board, Royal Infirmary, Manchester, on or before the 18th September next.

By order.

W. L. SAUNDER, General Supt. and Secretary.

Manchester Royal Infirmary, August 30th, 1886.

Manchester Royal Infirmary.—Resi- DENT SURGICAL OFFICER. — The Board of the Manchester Royal Infirmary are prepared to receive applications for the above appointment. Applicants must not be less than twenty-five years of age, and unmarried; they must be registered, and hold a medical and surgical qualification. The appointment will be for twelve months, from 1st October next. Salary £150 per annum, with board and residence. Applications, with testimonials, and stating age, to be sent, directed to the Chairman of the Board, Royal Infirmary, Manchester, on or before the 18th September next.

By order.

W. L. SAUNDER, General Supt. and Secretary.

Manchester Royal Infirmary, August 30th, 1886.

Brecon Infirmary.—16 Beds and out- door Patients.—Wanted, to enter upon the duties at once, a Resident HOUSE-SURGEON (unmarried), who will also undertake dispensing. Candidates must be qualified in Medicine and Surgery. Salary £80 per annum, with board, furnished apartments, fire, and gas. Three months' notice.

Applications, accompanied with recent testimonials and photograph, to be sent to the undersigned, on or before Wednesday, the 15th day of September, 1886.

W. POWELL PRICE, Secretary, 6, Bulwark, Brecon.

Royal Surrey County Hospital, Guildford.—Wanted, a HOUSE-SURGEON. The Committee give notice that in consequence of the resignation of Mr. W. H. Horrocks, the office of House-Surgeon is now Vacant. Candidates must be unmarried, and qualified to practise in Medicine and Surgery, and duly registered under the Act. Salary £80 per annum, with board, lodging, and washing. The duties of the House-Surgeon will be to attend to the in-patients under the direction of the Honorary Medical Officers, and to visit a certain number of patients at their own homes within one mile of the Town Hall, Guildford, as provided for in Rule 91. The applicant selected will be required to enter upon his duties immediately. Applications with testimonials to be sent to the undersigned on or before Monday, October 4th, from whom any further particulars may be obtained.

By Order of the Committee.

THOMAS TAUNTON, Assistant-Secretary.

MEDICAL TRANSFER AND PARTNERSHIP,
32, Ludgate-hill.

Messrs. Orridge and Co., Medical Transfer Agents, Referees, and Valuers, in offering their services to the Profession have pleasure in referring to the fact that for ABOUT HALF A CENTURY the name of Mr. ORRIDGE has been known in the advertising columns of the leading medical journals as that of one to whom a very large proportion of the Medical Men throughout the kingdom have confided their interests in the adjustment of PARTNERSHIPS and TRANSFERS.

Purchasers who will communicate (confidentially) the NATURE and EXTENT of their wishes regarding investment can be apprised of appropriate opportunities as they occur.

On occasions where ADVICE is required in forming a correct conclusion as to the worth or eligibility of a Practice, Messrs. ORRIDGE and Co. trust that their familiarity with the various contingencies that govern value will be found of considerable service to those by whom they are employed.

Within easy distance of London.— Nucleus of good-class PRACTICE, with Poor-law appointments. Vendor has held the practice for many years. Premium required £350.—Particulars on application at

Messrs. ORRIDGE & Co.'s Offices, 32, Ludgate-hill, London, E.C.

Partnership. — Introduction for two years. In a very old established Rural Practice of good class. Distance from London about fifty miles. Good society, hunting, fishing, &c. Receipts nearly £1400 yearly. Premium required, £1000 on entry, and remainder as may be arranged. Full particulars on application at

Messrs. ORRIDGE & Co.'s Offices, 32, Ludgate-hill, London, E.C.

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Messrs. Wilson and Son,

26, CHARLES-STREET, ST. JAMES'S-SQUARE, S.W.

Established half a century.

LIST OF PRACTICES SEE LAST WEEK'S "LANCET."

MEDICAL VACANCIES.

QUALIFIED RESIDENT: Oxon., £30; Suffolk, £70; Yorks, £30; Mons., £90; Berks, £70; London, £60 to £70.

UNQUALIFIED. OUT-DOOR: S.W. district, salary £100; W.C. district, salary £100.

Personal application only.

Mrs. Needes' Medical Agency Offices,

9, EUSTON-ROAD, N.W.

(Opposite Great Northern Railway Station, King's-cross.)

Established 1860.

The Business carried on for the past seventeen years by Mrs. Needes (widow of J. W. Needes), at 17, Belgrave-street, has been removed to the above address, where it is conducted by her as usual. No connexion with any other agency advertised under the same name, this being the original business established by her late husband in 1860.

LOCUM TENENS.—Reliable Gentlemen always on the books.

ASSISTANTS provided free of expense to principals.

No charge made to purchasers.

Required a Qualified Gentleman of

Experience, about forty years of age, as VISITING ASSISTANT in a Good-class London Practice. Duties light, there being little night-work or Dispensing. Terms to commence at £140 per annum, out-doors.—Apply personally at 9, Euston-road, N.W.

THE USUAL LIST WILL APPEAR NEXT WEEK.

Notice.—Mr. J. C. Needes' usual List

of PRACTICES and PARTNERSHIPS will appear next week.

Established 1848.

MEDICAL AND PROFESSIONAL AGENCY,

50, Lincoln's-inn-fields, London.

J. Baxter Langley, LL.D., personally

conducts this business on the same principles as he has done for more than twenty-five years. SOUND PRACTICES always on hand.

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Chemist, established 16 years, with two businesses within a mile, where there is a splendid opening for speedily securing a valuable PRACTICE, wishes to meet with a Medical Man with a little cash, to convert one into a DISPENSARY. A chance seldom to be met with.—Apply, Marston, Chemist, East Dulwich, S.E.

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Nucleus of a Suburban Practice for Immediate Disposal, at Norwood. Established one and three-quarter year. Every chance of being worked up into a first-class Practice. Good reasons for leaving. Nearly £50 taken first year. 160 names on books. Within half an hour of London.—Address, Sternum, THE LANCET Office, 423, Strand, W.C.

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For Disposal.—Suburban Practice of £1500 per annum, capable of large increase by energetic man. Fair house and good garden in main thoroughfare. Ill-health the sole cause of relinquishing Practice. Price one year's purchase; half to be paid down, the remainder at end of introduction, or well secured.—Address, A. X., THE LANCET Office, 423, Strand, W.C.

To Chemists and Surgeons.—A Corner Open SURGERY, main road, opposite several turnings, established seventeen years, lease nineteen years unexpired, at £25 a year. Side entrance and garden. Returns between £300 and £400. Stock, fixtures, lease, and furniture, £230; part can remain; or any reasonable offer from an immediate purchaser.—Address, A. B., 130, Ialingword-road, Brighton, Sussex.

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Gentleman, unqualified, single, English-man and Churchman, with full curriculum, &c., is now at liberty and open to a re engagement as General Assistant or Dispenser and Bookkeeper. Sixteen years' experience. Is a good practical Accoucheur, a neat Dispenser, and has frequently acted as Locum Tenens. Height 5 ft. 9 in., weight 11½ stone. First-rate testimonials. Abstainer.—Please address, stating salary, &c., N. B., 1, King-street, Leicester.

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No. 20, Harley-street (only a few doors from Cavendish-square). This house, many years in occupation of the late Mr. Wordsworth, to be Sold or Let on moderate terms. One of the best professional houses in the West-end.—Apply to Elliott, Son, & Boyton, 6, Vere-street, W.

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To Medical Practitioners.—No Premium.—A twelve-roomed HOUSE, with bath, now being put in thorough decorative repair, large garden, tennis lawn, stabling, coach-house, and rooms; side entrance for surgery. Situated in the heart of an immense newly populated neighbourhood, being Stamford House, 18, St. Ann's-road, Stamford-hill, two minutes from station; rent on lease 70 guineas.

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Assistancy (in-door) wanted, by un-qualified Man (aged twenty-six), well up in Midwifery and General Practice, where full opportunities would be given for Lectures, &c., in exchange for night-work, Dispensing, &c. Small salary. Excellent references to late and present principals. Neighbourhood of Leeds, Manchester, or Newcastle preferred.—Address, C. B., THE LANCET Office, 423, Strand, W.C.

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Wanted, a qualified Medical Man. State qualifications, age, single or married, salary expected.—Address, Medicus, care of Clarke, Son, & Platt, 85, Gracechurch-street, E.C.

Wanted, Dispenser and Bookkeeper, occasional Midwifery, and a little Visiting. Must be able to commence duties at once. Photo necessary.—State particulars and salary to G. Whitehall, Darwen.

Wanted, an in-door unqualified Assist- ANT, able to Dispense, Visit, and attend Midwifery. Must have good references.—Address, stating age and salary required, also enclosing photo, Dr. Hollings, Grove House, Wakefield.

Wanted, a qualified Assistant, in-door, must be accustomed to General Practice.—Address, stating salary required, enclose carte and reference, Thos. H. Morton, M.D., Don House, Brightside, Sheffield.

Wanted, in November, by an un- qualified married ASSISTANT, an out-door Appointment with a country Surgeon. Fair stipend; ride and drive; forceps, &c.; a nine-years' reference from present principals.—Address, Genu, Post Office, Hadleigh, Suffolk.

Wanted, a qualified out-door Assistant in a Country Practice. Unmarried. Able to ride. A good Surgeon and Accoucheur. Age about twenty-eight.—Apply, sending references to two last principals, to William A. Loy, Great Ayton, Northallerton.

Wanted, in a manufacturing and mining town, a registered in-door ASSISTANT, to Visit, Dispense, and attend Midwifery. Must be industrious, strictly sober, and a good pedestrian.—Apply, stating experience, references, and salary required, Hartill & Hartill, Manor House, Willenhall.

Wanted, an out-door Assistant, with at least a single qualification, to Visit, Dispense, and attend Midwifery. Suitable for a man requiring time for reading. Must produce satisfactory references as to ability and moral character.—Address, with full particulars, A. R. P., THE LANCET Office, 423, Strand, W.C.

Wanted, an Assistant; one qualifi- cation essential. Must be a good Dispenser, and able to Keep Books. Suit gentleman wishing to read for second qualification, as only a few hours' work daily. Extensive Private, Club, and Hospital Practice. State salary required, out- and in-door.—Apply, B., 35, Bridge-street, Newport, Mon.

Wanted, in October, an unqualified in-door ASSISTANT, to Visit, Dispense, attend Midwifery, and keep Books. Able to ride, competent, steady, total abstainer, and able to speak Welsh. Good salary, permanent, and increase yearly.—Address, with references, salary required, with carte (to be returned), Tonic, THE LANCET Office, 423, Strand, W.C.

Wanted, an out-door qualified Assistant (Protestant), for a better-class practice in a purely agricultural district. Duties light, but applicants must be able to Dispense neatly and accurately. Superior accommodation (furnished), with coal and gas. Salary progressive.—Address, enclosing carte (to be returned), stating whether married or single, age, height, weight, qualifications, references, and salary expected to begin with, B. H. Herbert, Uttoxeter.

Wanted, an Unqualified Assistantship, London, if possible, by a Fourth Year's Man, aged twenty-two; in- or out-door. Able to Visit, Dispense, and attend an ordinary case of Midwifery. Good personal references.—Address, Medicus, The Elms, Avenue-road, Stoke Newington-road, N.

Wanted, by a doubly qualified Man, an in- or out-door ASSISTANTSHIP. Advertiser is a total abstainer, in twenty-third year, light weight, can ride and drive, and is experienced in General Practice. Highest references. Terms moderate. Address, F. H., THE LANCET Office, 423, Strand, W.C.

Wanted immediately, an in-door ASSISTANT (sine diploma), not under twenty-four years of age, to Visit, Dispense, attend Midwifery, and keep Books. Must be thoroughly steady, gentlemanly, and experienced. A Churchman preferred. State salary required, enclose carte, and give latest reference.—Address, A. M. Roberts, Surgeon, Attercliffe, Sheffield.

Wanted, by a Married Man, sine diploma, an appointment as ACCOUCHEUR and DISPENSER. Able to thoroughly manage Dispensary or Branch Practice. Last appointment twelve years. Locum Tenens or Temporary Assistantship preferred.—Apply, Ferrum, 3, Lebanon-gardens, Merton-road, Wandsworth.

Wanted, an Assistantship, Out-door, to Visit, Dispense, and attend Midwifery. Advertiser (sine diploma), aged thirty-four (married, no children), has full curriculum, passed Primary and Medical part of Final M.R.C.S.E. Well received by patients. Reference to present employer. Has furniture, and could take charge of a branch. Height 5 ft. 9 in. Ride and drive. Can be disengaged at once.—Address, stating terms, H. G. M., 20, Rayner-terrace, Leyton-road, Stratford, Essex.

Wanted, in-door Assistantship by Clergyman's Son. Doubly qualified and registered. Comfortable home essential.—Address, Cocaine, THE LANCET Office, 423, Strand, W.C.

Wanted, an Assistancy, by Gentleman, qualified. Good experience.—Apply, Medicus, Medical School, Leeds.

Wanted, by a Student reading for final, an ASSISTANCY in town, with time for attending hospital (London). Can Visit, Dispense, and attend ordinary Midwifery.—Address, X. Y., THE LANCET Office, 423, Strand, W.C.

Wanted, a Situation by a Senior Student, in or near London, to Visit, Dispense, and attend Midwifery. Experience and good references. — Address, C. E. A., 30A, Oxford-street, W.

Wanted an Assistantship by an un- qualified Man of great experience, married, country preferred. Has at times taken sole charge.—Address, F. G., THE LANCET Office, 423, Strand, W.C.

Wanted, by a qualified and registered gentleman (Bart.'s), an ASSISTANCY in London or large town. Experienced in the routine of General Practice. Would take charge until suited.—Address, stating terms, Medicus, 94, Manor-street, Clapham, London, S.W.

Wanted, by the Son of a Doctor, a SITUATION in London, as ASSISTANT. Is an experienced Dispenser; both General and Dispensary. Nominal salary, and time for reading. Has passed first College.—Address, Dr. Lovegrove, Hythe, Kent.

Wanted, an Assistancy. — A M.B., M.Ch., Royal University, registered, requires above appointment. Is well received by patients. Small salary, with a prospect of increase, expected.—Address, M.B. Medicus, THE LANCET Office, 423, Strand, W.C.

A Lady, medically qualified, desires engagement to Assist in Medical Electricity.—Address, Mrs. Higgs, 81, Haverstock-hill.

Assistantship wanted by a M.B., C.M. City Practice preferred. In twenty-fourth year.—Address, Surgeon, 3, Nicholl-street, Swansea.

A M.B. & C.M. Aberdeen, is desirous of obtaining an in-door ASSISTANTSHIP. South preferred. Good experience, references, and testimonials.—Address, E. G. C. Lockwood, Deal, Kent.

As Assistant.—Able to Dispense. Has visited occasionally, and has attended ordinary Midwifery. Age twenty-eight. Good references. Has had eight years' experience. Just passed Prelim.—Address, D. Edmund Jones, Llanfachreth, Anglesey.

Assistantship, to Visit, Dispense, and attend Midwifery, wanted by a gentleman, unqualified, but of several years' experience.—Address, Medicus, care of Dr. Burke, Monk-Bretton, Barnsley.

M.R.C.S. (Eng.), L.R.C.P. (Lond.), L.S.A. (Lond.), is desirous of offering his services during the day, without salary, to a Medical Man in good practice in London. West-end preferred.—Address, K., THE LANCET Office, 423, Strand, W.C.

As Dispenser and Book-keeper.—A gentleman, having had great experience. Aged thirty. Married. No family. Good reference. Country or Town no object.—Address, A. B. C., 12, Oswald-road, St. Albans, Herts.

Senior Student, aged 27, Oxford Graduate, winner of Scholarship, offers his services in return for comfortable home. Time for hospital attendance. Highest references. Address, J. P., THE LANCET Office, 423, Strand, W.C.

Out-door Assistant.—Wanted, a quali- fied GENTLEMAN to reside at Surgery. Salary £100 per annum, increasing £10 annually to £130, with furnished rooms, coal, gas, and attendance. Preference given to a gentleman seeking a permanency.—Address, Harry Lupton, Old Vicarage, Stratford-on-Avon.

Assistantship wanted in a Hospital town, with time to attend one or two classes; only final to pass. Age twenty-seven. Accustomed to Private and Club Practice, and well up in Midwifery (1000 cases). Good references.—Address, L., 27, Harrowgate-street, Wigan.

Assistancy required (Full Curriculum, Sine Diploma), to Visit, Dispense, and attend Midwifery (Forceps). Well received by all classes. Excellent references. Good horseman. Aged thirty; height 5 ft. 6 in. Permanency.—Address, R. H. Jones, Pyrocanth House, Ruthin, North Wales.

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THE BRITISH & COLONIAL MEDICAL AGENCY,
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Locum Tenency wanted by doubly- qualified, experienced Guy's Man. Disengaged after September 20th.—Address, Locum, 108, Grange-road, Bermondsey.

Locum Tenens.—Wanted, for a fort- night, a few miles south of London, 13th for 14th inst., a Middle-aged Gentleman and his Wife, who will receive board and residence in exchange for his services. Easy work. No Midwifery expecting. Open healthy situation.—Address, L. T., or apply personally, THE LANCET Office, 423, Strand, W.C.

Assistantship, out-door, or Manage- ment of a Branch, wanted by L.S.A., registered. Married. Used to Club, Union, and Private Practice. Good Accoucheur. Good testimonials and references.—Address, A. B. C., care of Mr. Jackson, 107, Higher Parr-street, St. Helen's, Lancashire.

Assistancy wanted by a qualified gentleman, registered. Age twenty-five. Considerable experience in General Practice, Midwifery, and Dispensing. First-class references and good testimonials. Can ride and drive.—Address, Physician, THE LANCET Office, 423, Strand, W.C.

Assistancy wanted by a Gentleman, aged twenty-seven. Is thoroughly well up in his work and equal to any emergency in Midwifery. Has frequently taken sole charge. Height 5 ft. 11 in. Ride and drive.—Apply, stating salary, K., 72, Ladbroke-grove, W.

M.A., M.D. (Aberdeen and Vienna), desires ASSISTANTSHIP in good Middle-class PRACTICE in London or Suburbs. Appointment with prospect of early Partnership, or succession preferred.—Address, Aberdeen, THE LANCET Office, 423, Strand, W.C.

A young Gentleman seeks an Assist- ANTSHIP, where he will give his services (Visit, Dispense, and attend Midwifery) in return for board and lodgings and time to attend lectures. Last twelve months Assistant in a Colliery Practice. Can ride and drive. Excellent reference.—Address, R. F. G., 5, Arundel-place, Whitby.

A Married Gentleman, used to all kinds of Practice, having disposed of his own, would be glad to hear of an elderly Practitioner who required assistance, and would be willing to ultimately relinquish in favour of advertiser on mutual terms. Would entertain succession to Practice if suitable, without introduction. Address, Dr. L., 20, Marple-street, Ardwick, Manchester.

A Medical Man wishes most highly to recommend his present ASSISTANT, who is leaving him solely on account of a change in the Practice. Advertiser has had many assistants, but none who served him so well as his present one.—Apply, with particulars as to requirements, &c., to A. M. D., Messrs. Reynolds & Branson, Leeds.

M.D., M.S., wishes the Management of a Branch PRACTICE or Dispensary, in or near London. He is strictly temperate and hardworking, and has first-class testimonials. Nearly thirty years of age. £140, rooms, attendance, and part Midwifery, required.—Address, Doctor, care of Mr. David Graham, Stanley-grove, Sale, near Manchester.

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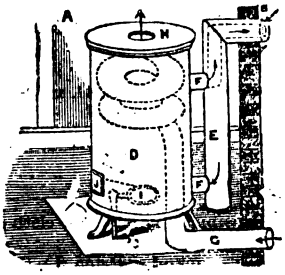
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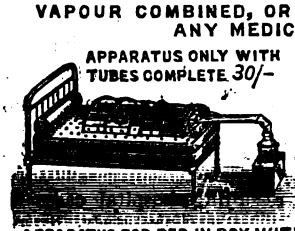
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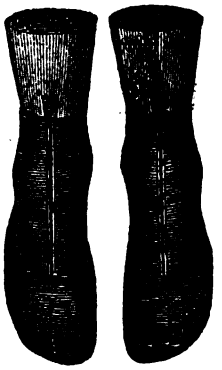
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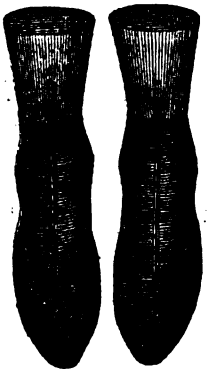
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FIG. 1.



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FIG. 2.



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